



NEW YORK CITY DEPARTMENT OF BUILDINGS
TESTIMONY BEFORE THE NEW YORK CITY COUNCIL
COMMITTEE ON HOUSING AND BUILDINGS
JUNE 14, 2021

Good morning Chair Cornegy and members of the Committee on Housing and Buildings. I am Melanie E. La Rocca, Commissioner of the New York City Department of Buildings (“the Department”). I am joined today by Joseph Ackroyd, Assistant Commissioner for Technical Affairs and Code Development. We are pleased to be here to offer testimony in support of Intro. 2261, which is the first comprehensive update of the New York City Construction Codes (“Construction Codes”) since 2014.

Before I discuss our Construction Code revision effort, I would like to thank the City Council, and this Committee in particular, for its ongoing partnership with the Department. Our work together ensures that this City, with its over one million buildings and tens of thousands of active construction sites, not only has the safest built environment, but that we continue to evolve and grow New York City’s leadership in the field of design and development. It is through this vital partnership that we keep those who live, build, and visit New York City safe. Together, this session, we have updated the Plumbing Code, and updated the Energy Code, which resulted in the most stringent Energy Code in the City’s history. We have also worked together on important issues, including to reduce greenhouse gas emissions from large buildings through the historic Climate Mobilization Act, to improve safety for tenants in their homes, to keep our construction workers safe on the job, and to improve the regulatory environment for small businesses.

The Construction Codes are the backbone of New York City’s built environment. They, coupled with the New York City Zoning Resolution, which we are responsible for interpreting and enforcing, physically make New York City the place it is today. The Construction Codes have

existed in some form since as early as the 17th century. Since that time, our codes have been revised periodically to ensure that they are up-to-date, and that they reflect advancements in technology, as well as the latest standards for life safety.

Today, the Committee has before it, Intro. 2261, which updates the Construction Codes, including the Administrative provisions of the Construction Codes, the Mechanical Code, the Fuel Gas Code, and the Building Code.

The Department began this Construction Code revision cycle in 2015. Our code revision process represents a true collaborative process on the part of our Code Development team and committee members. This public-private partnership involves over 650 industry professionals and stakeholders who volunteer their time and sit on 14 different committees, including a Managing Committee, and Technical and Advisory committees, which are organized by discipline. The Managing Committee is responsible for reviewing and accepting Technical Committee and Advisory Committee proposals regarding the technical and administrative provisions of the Construction Codes. Technical Committee members are subject matter experts in their respective committee. Advisory Committees are formed to consider issues that overlap the jurisdiction of Technical Committees or require a deeper level of analysis. This code revision effort resulted in over 40,000 hours of service by our committee members. Committee members included architects, engineers, attorneys, as well as representatives of construction, labor, real estate, other city agencies, and stakeholder organizations. I thank the volunteers who contributed their expertise and countless hours of service to produce the bill before you today.

The proposed revisions to the Construction Codes are based on the 2015 edition of the International Codes, which are developed by the International Code Council. The International Code Council is an association with over 64,000 members, which is dedicated to developing model codes. All 50 States, as well as 4 U.S. territories and the District of Columbia rely on the International Code Council model codes to form the basis of their construction codes. While the proposed revisions to the Construction Codes use the International Codes as a base, they also modify or add new language to the Construction Codes tailored to the unique needs and characteristics of the City's built environment.

This bill makes approximately 7,400 revisions to the Construction Codes, of which approximately 6,800 are minor in nature, which could include correcting cross-references, relocating requirements, or clarifications for ease of use. The remaining 600 changes represent new or expanded requirements. It should also be noted that approximately 45% of the revisions came directly from the International Code Council model codes. The remaining changes came from the Managing, Technical and Advisory Committees. Where the Committees did not come to consensus on an item, which only happened three times during this code revision cycle, the Department conducted mediation with relevant stakeholders and issued the final determination.

Highlights of the revisions being made to the Construction Codes by this bill include:

Emergency Response Enhancements

- Increases the minimum required dimensions of the elevator emergency hatch.
- Permits the use of batteries as the required secondary power source for the FDNY endorsed Auxiliary Radio Communication System (ARCS).
- Expands the number of high-rise residential buildings that require emergency voice communication systems.

Fire Protection Enhancements

- Mandates that whenever exits discharge directly outside, and not through a protected area or vestibule, that FDNY access be provided to the exit stairway either from the protected area or within a minimum distance of it.

Vertical Transportation and Accessibility Enhancements

- Establishes clear compliance criteria for elevator systems to ensure greater accessibility and usability for building occupants with physical and intellectual or developmental disabilities.
- Requires door locking monitoring in all Limited Use/Limited Application lifts (LULA) in order to minimize the risk of people and objects becoming caught.

Elevator Safety Enhancements

- Requires the same elevator-in-readiness to serve all floors to reduce building evacuation times in the event of an emergency.
- Amends inspection timeframes for elevators and boilers to bring them back into service faster.

Protecting Tenants, Streamlining Building Occupancy, and Promoting Creation of Affordable Housing

- Requires new special inspection of occupied residential buildings undergoing construction to further improve tenant protection.
- Clarifies what construction documentation is required to receive a Certificate of Occupancy.
- Reduces the required basement clearance height for two-family homes to 7 feet, from 8 feet, to increase affordable housing opportunities.

Construction Safety Enhancements

- Permits the use of netting, low barriers, and chain link fencing at construction sites in lieu of requiring only solid fencing that creates blind tunnels for pedestrians.
- Creates a new license type for advanced crane technology, such as articulating boom cranes and roto-telehandlers, to ensure such cranes are operated in a safe manner.
- Improves the safety and consistency of the underpinning of existing buildings.

Building System Construction and Inspection Enhancements

- Require smoke tests for special gas vents to ensure the safety of building occupants.
- Require all pipes, tubings, and fittings in the mechanical system to comply with the applicable reference safety standard.
- Codifies maintenance, condition assessment, and reporting requirements for parking structures.

Sustainability and Resiliency Enhancements

- Expands the applicability of flood zone requirements of the 100-year flood hazard area to all critical facilities (including fire, rescue, ambulance, police stations, and designated emergency shelters) located in the 500-year flood zone.
- Mandates annual visual inspections of dry floodproofing systems and triennial full-scale deployment of dry floodproofing in the presence of a special inspection agency.
- Permits and supports the use of alternative energy production processes, including hydrogen fuel cells.
- Increases the material choices available to builders by expanding the use of sustainable building materials, such as cross-laminated timber and structural composite lumber.

We thank the City Council for its continued support and look forward to continuing our work together to improve the Department for the benefit of all New Yorkers. We welcome any questions you may have.

Good morning Chairman Cornegy, Council Members, Commissioner and City staff, fellow panelists, and presenters. I am Lori Gold, Grace's older sister. Grace's horrific death at only 17, killed by mortar from a Columbia University building as her newly graduated friends watched, was the inspiration behind Local Laws 10 & 11/aka Façade Inspection Safety Program, FISP.

Before Grace's death, New Yorkers always looked at their feet when walking, to avoid obstacles left by their neighbor's pets. Immediately following Grace's death, New Yorkers instead began looking skyward, in anticipation of falling mortar.

Case in point: 2 years after Grace died, Stephen Sondheim premiered *Merrily We Roll Along*, a show about 3 friends who met as Columbia students. At graduation, they sang of their hopes and dreams:

Behold the hills of tomorrow!
Behold the limitless sky!
Fling wide the gates - To a world that waits!
As our journey starts,
Behold! Our hearts
Are high!

As real life eventually intrudes, Mary (the Barnard student) later sings:

All right, now you know:
Life is crummy.
Well, now you know.
I mean, big surprise:
People love you and tell you lies.
Bricks can fall out of clear blue skies.
Put your dimple down,
Now you know.

NYC's Council showed exemplary leadership by crafting and passing Laws that successfully stopped *further deaths*, through scheduled, pre-emptive repair of its crumbling inventory of aged buildings. When implemented and enforced, Grace's Law became the gold standard adapted by 11 additional US cities. But when ignored, the results have been **decay and death**.

This last pandemic year, the City that Never Sleeps was brought to a standstill – until that silence was pierced by a succession of July building collapses. Buildings fell in Brooklyn, in midtown, in the East Village.

And in Murray Hill, a **brick** fell out of the sky, killing Mario Salas Vittorio, a LL11 worker in the midst of performing FISP repairs. Think about it – a closed city, ground zero for Covid, people locked down in their homes, everyone wondering about their futures. And another brick falls. Again.

The Housing & Buildings Committee understands that urban sustainability merely *begins* with ongoing maintenance of NYC's existing building stock. Earlier today, this Committee pursued re-addressing obsolete building code, updating it to meet modern day needs. You have been looking backward to move the city forward. I applaud you! And, I implore you - to do the same to LL11/FISP – replace it with Grace's Law, and add it to your books. Enact Grace's Law to give meaning to the façade work, and the ubiquitous scaffolding and endless repairs. To every pedestrian who walks the streets – Grace's Law will aid older folks in *remembering why*, and Grace's Law will **inform** younger folks as to *how & why their environment is so encased*. Grace's Law should be the face of PUBLIC SAFETY.

Use Grace's Law as NYC's official, legal and codified name and beautiful face, for *public safety & education*: on all NYC and DOB paperwork: in every press release, at every meeting, for every conference, on every website, displayed in every window or wall to indicate proper permitting and work orders, by HPD and REBNY members, by every QUEI, engineer, architect, scaffolding company, attorney, union et al - and of course, in every newspaper story.

Grace's Law, Grace's story, Grace's face will provide common ground to any and all stakeholders - whatever their purpose or role - who use the city and walk on its streets. It's for **People. People.** To increase compliance with **Grace's Law** is to *lessen the fear* of "bricks falling out of clear blue skies", and *perhaps help people, to again "behold that limitless sky"*.

Thank you for your kind support and consideration.

Respectfully Submitted:
Lori E. Gold
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lorigold1504@gmail.com



Recipient: New York City Council, Members of the New York City Council, NYC Council Housing & Buildings Committee

Letter: Greetings,
Rename NYC's Local Law 11 (aka FISP) as the Grace Gold Law*/Grace's Law (*working names)

Signatures

Name	Location	Date
Lori E. Gold	Hollywood, FL	2021-05-24
Keith Powell	Appleton, WI	2021-05-24
Naomi Berger	Brooklyn, NY	2021-05-24
Diane Blank	San Antonio, TX	2021-05-24
Kevin Powell	Poughkeepsie, NY	2021-05-24
Johanna Henry	Brooklyn, NY	2021-05-24
Barbara Solomon-Speregen	Brooklyn, NY	2021-05-24
garry scharf	Overland Park, KS	2021-05-24
Penny Stiefel	Dresher, PA	2021-05-24
Jean Rosenthal	Castleton On Hudson, NY	2021-05-24
Robert Evans	Erie, PA	2021-05-24
Daniel Magill	Brooklyn, NY	2021-05-24
Andrea Assael	New York, NY	2021-05-24
Tirza Wahrman	Princeton Junction, NJ	2021-05-24
Ruth Berger	Brooklyn, NY	2021-05-24
Leah Baranov	Brooklyn, NY	2021-05-24
Annette Krell	Westfield, NJ	2021-05-24
Julie Maxwell	Woodinville, WA	2021-05-24
Howard Osterman	Westfield, NJ	2021-05-24
aerial barney	Bennington, US	2021-05-24

Name	Location	Date
Orlando Mendez	Brooklyn, NY	2021-05-24
Susan Guschel	Lindenhurst, NY	2021-05-24
Dana Mesh	New York, NY	2021-05-24
Janet Geida	Media, PA	2021-05-24
Janet Clinton	Altamonte Springs, FL	2021-05-24
Dorothy Hughes	Norfolk, VA	2021-05-24
Todd Lerner	Brooklyn, NY	2021-05-24
Deborah Goldman	Croton on Hudson, NY	2021-05-24
Dori Bernard	Brooklyn, NY	2021-05-24
Robert Coltun	Rockville, MD	2021-05-24
Anna Bush	Olean, NY	2021-05-24
Lisa Garbaty	Chicago, IL	2021-05-24
Barbara Bradford	Roanoke, NC	2021-05-24
Steve Mars	Plainview, NY	2021-05-24
Eileen Freeman	Brooklyn, NY	2021-05-24
Rhea Siers	Bethesda, MD	2021-05-24
Francine Serlin	Hightstown, NJ	2021-05-24
eric schisler	holbrook, NY	2021-05-24
Lori Abramson	Brooklyn, NY	2021-05-24
Diana Duchowny	Brooklyn, NY	2021-05-24
Amy Harris	Bellmore, NY	2021-05-24
Adrienne Grande	Brooklyn, NY	2021-05-24

Name	Location	Date
Barry Abramson	New York, NY	2021-05-24
David Winclair	Portland, OR	2021-05-24
Julie Pendergast	Miami Beach, FL	2021-05-24
Jean Pasternak	New York, NY	2021-05-24
Billy Cruz	Melbourne, FL	2021-05-24
Scott Apicella	Mount Vernon, NY	2021-05-24
Adrienne Abraham-Bonilla	Albany, NY	2021-05-24
John Shulman	Tel Aviv, Israel	2021-05-24
Sandy Poltarack	Miami, FL	2021-05-24
Gail Weisblat	Manalapan, NJ	2021-05-24
Gail Burkholder	Columbus, OH	2021-05-24
Gary Horowitz	New York, NY	2021-05-24
Ann Chervin	Freehold, NJ	2021-05-24
Carrie Rabinowitz Rabinowitz	Winter Springs, FL	2021-05-24
Ruby Chervin	Freehold, NJ	2021-05-24
Lesley Rosenthal	Del Mar, CA	2021-05-24
Rita Menkes	Brooklyn, US	2021-05-24
Alice Tram Tram	Raleigh, NC	2021-05-24
Toni Gerardi-Wofse	Brooklyn, NY	2021-05-24
Lesley Meersand	East Rockaway, NY	2021-05-24
William Maxwell	Woodinville, WA	2021-05-24
Michael Drillinger	Woodstock, NY	2021-05-24

Name	Location	Date
Heidi Sadowsky	New York, NY	2021-05-24
hilary Caroff	Plainview, NY	2021-05-24
Adam Kaluba	Burleson, TX	2021-05-24
Steven Dubner	New City, NY	2021-05-24
Nadine Duke	Los Angeles, CA	2021-05-24
Alise Loebelsohn	Brooklyn, NY	2021-05-24
Ira Gottlieb	Santa Monica, CA	2021-05-24
alice brown	loveland, CO	2021-05-24
Stephen Yacullo	Roslyn, NY	2021-05-24
Scott Sommer	Brooklyn, NY	2021-05-24
Daphne Davidson	Needham, MA	2021-05-24
Jill Netchinsky	Watertown, MA	2021-05-24
Gerri Carr	Silver Spring, MD	2021-05-24
Ilene Daddi	Brooklyn, NY	2021-05-24
Donna Kopecky	Columbus, OH	2021-05-24
Susan Foley	Forked River, NJ	2021-05-24
robert chervin	manalapan, NJ	2021-05-24
Paul Offenkrantz	Boynton Beach, FL	2021-05-24
Ruth Grinberg Krieger	Pequannock, NJ	2021-05-24
Molly Wolf	Edinboro, PA	2021-05-24
Michelle Katz	Freehold, NJ	2021-05-24
Erik Cohen	Reston, VA	2021-05-24

Name	Location	Date
Susan Lambiase	Brooklyn, NY	2021-05-24
Nancy Blaustein	Trenton, NJ	2021-05-25
Laura Favorule	Goshen, NY	2021-05-25
Susan Baier	Stamford, CT	2021-05-25
Randy Hockfeld	Las Vegas, NV	2021-05-25
Brenda Choi	Los Angeles, CA	2021-05-25
Scott Brooks	Homosassa, FL	2021-05-25
Sheryl Caroff	Virginia Beach, VA	2021-05-25
Debra Griffin	Augusta, GA	2021-05-25
Denise Goll	Pequannock, NJ	2021-05-25
Leonard Speregen	Kingston, NY	2021-05-25
Jen G	Kearny, NJ	2021-05-25
Jay Motola	Brooklyn, NY	2021-05-25
Michele Sacks	Manalapan, NJ	2021-05-25
Cheyenne Forsythe	Dania Beach, US	2021-05-25
Kirk Jackson	Washington, DC	2021-05-25
Catherine Intartaglia	Newport News, VA	2021-05-25
Catherine Schiffer	Pompton Plains, NJ	2021-05-25
Danielle Cironi	Pompton Lakes, NJ	2021-05-25
Estela Matta	Boston, MA	2021-05-25
Scott Frostbaum	Brooklyn, NY	2021-05-25
Ellen Sperling	Savannah, GA	2021-05-25

Name	Location	Date
Tamari Gruszow	Brooklyn, NY	2021-05-25
Kathleen Haffey	East Meadow, NY	2021-05-25
Sheryl Lewis	Brooklyn, NY	2021-05-25
Lauren Giliof	Plainview, NY	2021-05-25
Katie Geisik	Ogdensburg, NJ	2021-05-25
Sharon Mitchell	Salt Lake City, UT	2021-05-25
Theresa Mancini	Staten Island, NY	2021-05-25
Michael Vignapiano	Sag Harbor, NY	2021-05-25
Lori Posner	Holmdel, NJ	2021-05-25
David SHIMSHI	Brooklyn, NY	2021-05-25
Sharon Stern	Cortlandt Manor, NY	2021-05-25
Lori Loebelsohn	Glen Ridge, NJ	2021-05-25
Janet Convissar	Staten Island, NY	2021-05-25
Marc Orlick	Monsey, NY	2021-05-25
Rhonda Barry	Massapequa, NY	2021-05-25
David Lelonek	Bellmore, NY	2021-05-25
Mark Koenig Koenig	Miami, FL	2021-05-25
Annamaria Nieves	Brooklyn, NY	2021-05-25
Cora Losordo	Hoboken, NJ	2021-05-25
Paul Winnick	Staten Island, NY	2021-05-25
Myra Murray	Milwaukee, WI	2021-05-25
Lori Bernstein	Brooklyn, NY	2021-05-25

Name	Location	Date
Mia Lennon	Newton, NJ	2021-05-25
Elizabeth Brummitt	Gainesville, US	2021-05-25
Eric Henderson	New Orleans, US	2021-05-25
Ilya Oshman	New York, NY	2021-05-25
Michele Snell	West Milford, NJ	2021-05-25
Cathy Frankel	New York, NY	2021-05-25
JiggaBoy K	Madison Heights, US	2021-05-25
Jacki Duchowny-Dunn	Leavenworth, KS	2021-05-25
laced k	Charlotte, US	2021-05-25
Steve Reissman	Rockville, MD	2021-05-25
Jill Gordon	Brooklyn, NY	2021-05-25
Angela Cisternino	Staten Island, NY	2021-05-25
Derricka Blackshear	Jacksonville, US	2021-05-25
Christina Coscia	Brooklyn, NY	2021-05-25
Sherry Sudol	Phoenix, AZ	2021-05-25
Stacey Levine	Monroe twp, NJ	2021-05-25
Freda Broderick	Fort Lauderdale, FL	2021-05-25
Kelsey Hill	West Fargo, US	2021-05-26
McHone Marce	Monroe, MI	2021-05-26
Jill Miller	Valley Stream, US	2021-05-26
Claudia Shafto	Millington, NJ	2021-05-26
Georgene Snyder	Milford, PA	2021-05-26

Name	Location	Date
Susan Chapnick	Arlington, MA	2021-05-26
Roberta Chee (Rosenbaum)	Millstone Township, NJ	2021-05-26
LORI NILSSON	Syracuse, NY	2021-05-26
Marc Matsil	Maplewood, NJ	2021-05-26
Hillary Rivman	New York, NY	2021-05-26
Amz Amz	US	2021-05-26
Stanley & Rosalind Caroff	Moorestown, NJ	2021-05-26
Dina Artzt	San Francisco, CA	2021-05-26
pushpa Kothari	Far Rockaway, US	2021-05-26
Joy Williams	River ridge, US	2021-05-26
Deirdre Christiansen	White Plains, NY	2021-05-26
Henry Betancourt	York, PA	2021-05-26
avoid gif	Berkeley, US	2021-05-26
ellen gunty	berkeley, CA	2021-05-26
Jayne Wallace	Sarasota, FL	2021-05-26
Gladis Mejia	Arlington, US	2021-05-26
Penny Wild-Perkowski	Pequannock, NJ	2021-05-26
Sharon Rodden	Bridgewater, NJ	2021-05-26
Jacki Gordon	Bloomington, IN	2021-05-26
Donna Smiley	New York, NY	2021-05-26
Joanne Wolfe	Harrington park, NJ	2021-05-26
Jody Steinhardt	Brooklyn, NY	2021-05-26

Name	Location	Date
Ellen Gold	Berkeley, CA	2021-05-26
Caren Chabora	Westwood, NJ	2021-05-26
Peter Dippolito	Garfield, NJ	2021-05-27
Ronia Beecher	Great Neck, NY	2021-05-27
Kristi Pfister	Staten Island, NY	2021-05-27
Barbara Abramowitz	New York, NY	2021-05-27
Susan Pivnick	New York, NY	2021-05-27
Rena Kravitz	Brooklyn, NY	2021-05-27
Gary Ladka	Pompano Beach, FL	2021-05-27
Edward Salkin	Maywood, NJ	2021-05-27
Jim Giblin	Fort Lauderdale, FL	2021-05-27
Sandy Lange	Fort Lauderdale, FL	2021-05-27
Audrey Hayes	Brooklyn, NY	2021-05-27
Darren Pierrot	Albuquerque, NM	2021-05-27
John Shekitka	Fishkill, NY	2021-05-27
Erica Katz	Port Jefferson, NY	2021-05-27
Michael Ackerman	Pasadena, CA	2021-05-27
Cheryl Weisberg	Metuchen, NJ	2021-05-27
Mark Zaretsky	Rochester, NY	2021-05-27
Eileen Michaels	Neptune Township, NJ	2021-05-27
Carol Kornmehl	Morganville, NJ	2021-05-27
Robin Gasser	North Hollywood, CA	2021-05-27

Name	Location	Date
Lorraine Cohen	Brooklyn, NY	2021-05-27
Mary Mcmiller	Chicago, US	2021-05-27
Merrill Butler	Red Bank, NJ	2021-05-27
Sarah Sechan	New York, NY	2021-05-27
Karen Shearly	New York, NY	2021-05-27
Melissa Hager	Plainsboro, NJ	2021-05-27
Scott Narder	Homestead, FL	2021-05-27
Constantino Tobio	Hamden, CT	2021-05-27
Hyman Flicker	Wellington, FL	2021-05-27
Barry Goldberg	Ossining, NY	2021-05-27
Rebecca Emerel	Exton, PA	2021-05-27
Sarah Stiefel	Delmar, NY	2021-05-27
Beth Figman	Westwood, NJ	2021-05-27
Ed Ketchoyian	Hollywood, FL	2021-05-27
Cindy Gerlan	Carlsbad, CA	2021-05-27
Andrew Farber	Tarrytown, NY	2021-05-27
Anne Biswas	Johnston, RI	2021-05-27
Kaycee Kennedy	Garden Grove, CA	2021-05-27
Zachary Ryan	Chelsea, MA	2021-05-27
Kathleen Walsh	Culver City, CA	2021-05-27
Paul Richman	Alexandria, VA	2021-05-27
Tajlei Levis	Manchester Center, VT	2021-05-27

Name	Location	Date
Steven Greenfield	Castleton On Hudson, NY	2021-05-27
Cathy Yonek	Greensburg, PA	2021-05-27
Cara Algarin	Phoenix, AZ	2021-05-27
Amy Lem	Holmdel, NJ	2021-05-27
Myra Downey	Holmdel, NJ	2021-05-27
Arlene McCarthy	New Orleans, LA	2021-05-27
Diana Heller Friedman	New York, NY	2021-05-27
Madeline Gross	Brooklyn, NY	2021-05-27
Jake Hershkin	Boonton, US	2021-05-27
Chaya Staub-Krell	Florida	2021-05-27
Daniel Kestin	South Orange, NJ	2021-05-27
Neal Thomas	Manalapan, NJ	2021-05-27
Sherri Caruso	Hurst, TX	2021-05-27
Joan Shovlin	Bradenton, FL	2021-05-27
Adam Belanoff	Encino, CA	2021-05-27
Christopher Mingo	Holtsville, NY	2021-05-28
lisa borenstein	New York, NY	2021-05-28
Meriah Glass	Chickasha, US	2021-05-28
Dana Gary	Houston, TX	2021-05-28
Margaret McCarthy	Brooklyn, NY	2021-05-28
Wardle Katherine	Cambridge, MA	2021-05-28
lady reyes	Washington, DC	2021-05-28

Name	Location	Date
jonathan savrin	yardley, PA	2021-05-28
Nancy Gioielli	Lithia, FL	2021-05-28
Diana Szochet	Brooklyn, NY	2021-05-28
Barbara Senenman	Bellmore, NY	2021-05-28
Karen Kracov	Monroe, NY	2021-05-28
Diane Kasdan	Brooklyn, NY	2021-05-28
Lesia Rader-Giberson	White Plains, NY	2021-05-28
Maya Campbell	Portsmouth, NH	2021-05-28
Pamela Uptegraph	West Palm Beach, FL	2021-05-29
Barbara Gero	Lake Worth, FL	2021-05-29
Berta Szochet	Brooklyn, NY	2021-05-29
Michael Weiden	Greenvale, NY	2021-05-29
Sid Schlomann, Architect	New York, NY	2021-05-29
Linda Greenberg	Manasquan, NJ	2021-05-30
Bonnie Bonnie.rabin@gmail.com	Lafayette, CO	2021-05-31
John Mazzella	Staten Island, NY	2021-05-31
Bobby Chew	New York city, NY	2021-05-31
Cindy Gobillot	Newport, VT	2021-05-31
Aaliyah Colon	Bronx, US	2021-05-31
Camron Elise	Ada, US	2021-05-31
Bob Kent	Montclair, NJ	2021-05-31

Name	Location	Date
Poundie Burstein	New York, NY	2021-05-31
maansa theresias	Naples, US	2021-06-01
Dontaye Tye	Denver, US	2021-06-01
Rocio Rivero	Key Biscayne, US	2021-06-01
instant word	US	2021-06-01
Mitchell Halpern	Saint Louis, MO	2021-06-01
Paul Dodenhoff	Westwood, NJ	2021-06-01
Ilene Triestman	Delray Beach, FL	2021-06-01
Emilio Benitez	Hollywood, FL	2021-06-01
Joshua Ab Levinson	New York, NY	2021-06-01
Damian Sco	Arlington, VA	2021-06-01
Judy Coello	Brooklyn, NY	2021-06-01
Isabella Coello	Brooklyn, NY	2021-06-01
Cindy Diamond	Marlboro, NJ	2021-06-01
Debby Bowinski	Denver, CO	2021-06-01
Maria E Garcia	Fort Lauderdale, FL	2021-06-01
Iris Burgos	Miami, FL	2021-06-01
Dean Di Maggio	New York, NY	2021-06-01
Lori Parrish	Fort Lauderdale, FL	2021-06-01
Cindy Surdi	West Islip, NY	2021-06-01
Maxine Perchuk	Staten Island, NY	2021-06-01
Kathy Moss	US	2021-06-01

Name	Location	Date
Ines Garcia-Keim	Hoboken, NJ	2021-06-02
Charles Nathanson	Chicago, IL	2021-06-02
Sydney Di Maggio	New York, NY	2021-06-02
Michael Chase	Brooklyn, NY	2021-06-02
Hal Kessler	Matawan, NJ	2021-06-02
Rachel Call	Newark, NJ	2021-06-02
Luisa Fernandez	The Bronx, NY	2021-06-02
Justin Price	Manhattan, NY	2021-06-02
Ty Marius	The Bronx, NY	2021-06-02
Sandi caba	Brooklyn, NY	2021-06-02
Arielle Garron-Caine	Brooklyn, NY	2021-06-02
Anyi Rosario	The Bronx, NY	2021-06-02
Millie Maldonado	Vero Beach, FL	2021-06-02
Megan Dygon	New York, NY	2021-06-02
Nancy Rodriguez	The Bronx, NY	2021-06-02
Miriam Aviles	Brooklyn, NY	2021-06-02
Larry Gold	No Hollywood, CA	2021-06-02
Stephen Mayer	New York, NY	2021-06-02
Brittany Bruno	Ridgewood, NJ	2021-06-02
Charles LaFrance	New York, NY	2021-06-02
Naomi Albinder	New York, NY	2021-06-02
Gail Litwak	Valley Cottage, NY	2021-06-02

Name	Location	Date
Cassie Manzo	New York, NY	2021-06-02
Lauren Fedor	Sea Cliff, NY	2021-06-02
Emely Rodriguez	The Bronx, NY	2021-06-02
Susan Robinson	Manhattan, NY	2021-06-02
Ann Thurlow	MENDHAM, NJ	2021-06-02
Damicela Toro	Queens, NY	2021-06-02
Kristin Lamboy	Brooklyn, NY	2021-06-02
Barinia Caba	The Bronx, NY	2021-06-02
Kevin Cheung	Brooklyn, NY	2021-06-02
Yajaira Morel	Rockville Centre, NY	2021-06-02
DanniLivesAtZenHollywoodApartments LA	Tampa, US	2021-06-02
Theresa Lombardi	Staten Island, NY	2021-06-02
Olivia Devoti	Staten Island, NY	2021-06-02
Emily Lodmer	Beverly Hills, CA	2021-06-02
Caroline DiMaggio	Roslyn, NY	2021-06-02
Nitzeida Clare	Brooklyn, NY	2021-06-02
Matilde Reyes	New York, NY	2021-06-02
Rob Blank	Redfern, Australia	2021-06-02
Lesly Benitez	Queens, NY	2021-06-02
Blanca Morales	New York, NY	2021-06-02
beth Carr	New York, NY	2021-06-02

Name	Location	Date
Gail Gerzetic	New York, NY	2021-06-02
Wintana Haile-Massiah	Yonkers, NY	2021-06-02
Felicia Modeste	New York, NY	2021-06-02
Jessica Hofmann	Brooklyn, NY	2021-06-02
Leesha Meredith	The Bronx, NY	2021-06-02
Grace Huang	New York, NY	2021-06-02
Robert Jordan	New York, NY	2021-06-02
Daniel Glum	New York, NY	2021-06-02
Andrea Hamel	New York, NY	2021-06-02
Debe Brady	New York, NY	2021-06-02
Gregg Nathanson	Farmington, MI	2021-06-02
Sheryl Nathanson	Farmington, MI	2021-06-02
Suzanne Nathanson	Hamden, CT	2021-06-02
Emily Moss	Beacon, NY	2021-06-02
Kathy Kennedy-Gold	Escondido, CA	2021-06-02
Brian Benkel	West Lebanon, NH	2021-06-02
Grace Flisser	Philadelphia, PA	2021-06-02
Janet Hon	New York, NY	2021-06-02
Susan Collins	North Charleston, US	2021-06-02
Sara Fiedler	New York, NY	2021-06-02
Laura Mahsetky	Walters, US	2021-06-02
Kevin Gilkes	New York, NY	2021-06-02

Name	Location	Date
Zach Rice	Brooklyn, NY	2021-06-02
Izzy Busy	Moultrie, US	2021-06-02
Mary Jablonski	Queens, NY	2021-06-02
FRANK JACKMAN	New York, NY	2021-06-02
Danielle Nathanson	Chicago, IL	2021-06-03
Edward Houser	Brooklyn, NY	2021-06-03
Victor Houser	New York, NY	2021-06-03
Bob Goss	Troy, US	2021-06-03
Margarita Rabinovich	London, CA	2021-06-03
Teri Dalrymple	Brooklyn, NY	2021-06-03
Ian Kalafatis	Queens, NY	2021-06-03
Jennifer Schork	Queens, NY	2021-06-03
Jessica Brady	Queens, NY	2021-06-03
Carla Massey	Queens, NY	2021-06-03
Ulana Zakalak	Jersey City, NJ	2021-06-03
Catherine Webster	Oklahoma City, OK	2021-06-03
Cory Rouillard	Sunnyside, NY	2021-06-03
Shelah Getzenberg	Philadelphia, PA	2021-06-03
James Grizzard	Salisbury, US	2021-06-03
Alicia JanFrancisco	Phoenixville, PA	2021-06-03
Maya Painter	Forest City, US	2021-06-04
Kathleen Werthman	Hollywood, FL	2021-06-04

Name	Location	Date
Deardre Nadel	Scarsdale, NY	2021-06-04
arianna fitzgerald	Detroit, US	2021-06-04
Anneris Marmolejos	New York, NY	2021-06-04
Beti Garcia	New York, NY	2021-06-04
Caryna Cotto	Raleigh, US	2021-06-04
Sarah Padilla, Martinez	Minneapolis, US	2021-06-04
Madeleine Frey	Minneapolis, US	2021-06-04
Samiya Woods	Indianapolis, US	2021-06-04
Kyra Davis	Chicago, US	2021-06-04
Julie Machigashira	Honolulu, US	2021-06-04
Lucianna Wolfstone	Richfield, US	2021-06-04
Victoria Ferrarie	Queens, US	2021-06-04
Jen Wu	New York, NY	2021-06-04
Robert Rush	New York, NY	2021-06-04
Ronaldo Solano	Kennewick, US	2021-06-04
Stacy DeNatalie	Bay Shore, NY	2021-06-04
Yasha Gyunhum	Las Vegas, US	2021-06-04
Lillian E Astrachan	Waban, MA	2021-06-05
jasmine dykes	eagleville, US	2021-06-05
Destiny Hooper	Indianapolis, US	2021-06-05
Macy G	Jackson, US	2021-06-05
Jazmine Rivas Rivera	Brooklyn, US	2021-06-05

Name	Location	Date
Lynn Moffat	Tarrytown, NY	2021-06-05
Hugo Cortez	Mesa, US	2021-06-05
collin wolff	chico, CA	2021-06-05
Aileen Felix	Brooklyn, NY	2021-06-05
Kristyn Kennedy	San Diego, CA	2021-06-06
Stevie Kennedy-Gold	Pittsburgh, PA	2021-06-06
Corey Esoldi	Las Vegas, NV	2021-06-07
Benjamin Maltz	New York, NY	2021-06-07
Faith Grant	Key West, FL	2021-06-08
Vannessa Louchart	Washington, DC	2021-06-08
Nancy Zazzaro	Monroe, CT	2021-06-08
Marian Andeweg	Alpharetta, GA	2021-06-08
STEPHANIE LUKAC	WEST WARWICK, RI	2021-06-08
Judy Dulberg	Rhinebeck, NY	2021-06-08
Michael Fiordeliso	Bronx, NY	2021-06-08
Yanan Zhao	Washington, DC	2021-06-08
Janet Monte	Brooklyn, NY	2021-06-08
Janeen Blecker	Roswell, GA	2021-06-08
Jill Amy	US	2021-06-08
Sara Kamal	Arlington, VA	2021-06-08
Cathy Monblatt	New York, NY	2021-06-08
Heidi Aronin	New York, NY	2021-06-08

Name	Location	Date
Andrea Levy	Delray Beach, FL	2021-06-08
Leonard Marino	Pearl River, NY	2021-06-08
Barbara Schenk	Las Vegas, NV	2021-06-08
Yasemin Imirzalioglu	Howell, NJ	2021-06-08
Ira Leviton	New York, NY	2021-06-08
Barbara King	Oceanside, NY	2021-06-08
Nikki Dubner	Middletown, NY	2021-06-08
John Simino	Brooklyn, NY, NY	2021-06-08
Gregory Homatas	brooklyn, NY	2021-06-09
Tina Steinbeck	New York, NY	2021-06-09
Ron Alterman	Cambridge, MA	2021-06-09
Ann Dalessandro	Fair Lawn, NJ	2021-06-09
Debbie Orenstein	Minneapolis, MN	2021-06-09
STACEY ELIAS	Woodbridge, VA	2021-06-09
carlos merino	Port Washington, US	2021-06-09
Agim Demirovski	Staten island, US	2021-06-09
Craig Simmer	Mission Viejo, CA	2021-06-09
bella wilson	Seattle, US	2021-06-09
Shoyo Hinata	Bartlesville, US	2021-06-09
Kelly Starr	Brooklyn, NY	2021-06-09
David Preyor	Voorhees, NJ	2021-06-09
donna pizzi	Cambridge, MA	2021-06-09

Name	Location	Date
Caterina Bartha	New York, NY	2021-06-09
Sherry Gluskin	Las Vegas, NV	2021-06-09
Lynn Tinney	Staten Island, NY	2021-06-09
Monica Roth	NY, NY	2021-06-09
Bonnie Conde	Fort Lauderdale, FL	2021-06-09
jamie thomas	Englishtown, NJ	2021-06-09
David Silvey	Brooklyn, NY	2021-06-09
Eric Rutter	Englewood, CO	2021-06-09
Chuck Callan	New York, NY	2021-06-09
gail abramowitz	coral springs, FL	2021-06-09
Lisa Fortenberry	Baton Rouge, LA	2021-06-09
Allan Alter	Framingham, MA	2021-06-09
Laurence Lord	Staten Island, NY	2021-06-09
Selma Rondon	NY, NY	2021-06-09
John Smith	Groveland, FL	2021-06-09
Caspean Robinette	Portland, US	2021-06-09
Hetal Tamakuwala	Ridgefield, US	2021-06-09
Don Griffith	US	2021-06-09
Jacklyn Liu	Brooklyn, NY	2021-06-09
Sara Lampert Hoover	Catskill, NY	2021-06-09
aj puglisi	mt. crested butte, CO	2021-06-09
Stuart Kricun	Encino, CA	2021-06-09

Name	Location	Date
Charese Ferrer	Brooklyn, NY	2021-06-09
Gregg Laikin	Hyde Park, VT	2021-06-09
Dana Lorway	Princeton, MA	2021-06-09
Barbara Eisenstein	US	2021-06-09
Paula Lee	Bronx, NY	2021-06-09
Patricia Brech	Elkton, MD	2021-06-10
Ilene Morales	New York, NY	2021-06-10
Nadezda Stefanovic	Miami, FL	2021-06-10
Elizabeth Milian	Miami, FL	2021-06-10
Thomas Mariam	Port Chester, NY	2021-06-10
Mari Economides	Parkland, FL	2021-06-10
Wayne Simon	Ft.Lauderdale, FL	2021-06-10
Jean Kouch	Huron, SD	2021-06-10
Stanley Yu	Brooklyn, NY	2021-06-10
Ethan Wang	New York, US	2021-06-10
David Hankin	Brooklyn, NY	2021-06-10
Ellen Leibowitz	Highland Park, NJ	2021-06-10
Paul Hertzan	Livingston, NJ	2021-06-10
Joanne Goetz	Panama City Beach, FL	2021-06-10
Patricia O'Malley	Pearl River, NY	2021-06-10
Tiffany Grantham	Hollywood, FL	2021-06-11
Cindy Eisen	Pembroke Pines, FL	2021-06-11

Name	Location	Date
Audrey del Grosso	West Chester, PA	2021-06-11
Miriam Lopez	Miami Beach, FL	2021-06-11
Brian Mccarthy	Oceanside, NY	2021-06-11
D Jimenez	Lynbrook, NY	2021-06-11
Linda Walters	wyndmoor, PA	2021-06-11
Michele Hierholzer	New York, NY	2021-06-11
Leila Weinstein	Brooklyn, NY	2021-06-11
Stacey van Hooven	Munich, Germany	2021-06-11
Morrisa da Silva	Maplewood, NJ	2021-06-11
thyra busch	Andover, KS	2021-06-11
Margaux FitzGerald	Munich, Germany	2021-06-11
Susan Monda	Hoboken, NJ	2021-06-11
Jessica Kaley	Perryville, MD	2021-06-11
Norman Weiss	Brooklyn, NY	2021-06-11
Grace Owen- Weiss	Brooklyn, NY	2021-06-11
George Wheeler	New York, NY	2021-06-11
Diane Dias De Fazio	Brooklyn, NY	2021-06-11
John Walsh	Pleasantville, NY	2021-06-11
Joan Berkowitz	New York, NY	2021-06-11
Maeve Cooper	Hockessin, US	2021-06-11
J P	Coleman, US	2021-06-11
Shawn D	Panama city beach, US	2021-06-11

Name	Location	Date
Wow Chile	US	2021-06-11
Ida Moqim	Clifton, US	2021-06-11
Glenn Boornazian	Brooklyn, NY	2021-06-11
Ted Kinnari	Westport, MA	2021-06-11
Jayson Greene	Brooklyn, NY	2021-06-12
Rochelle Rodgers	Safety Harbor, FL	2021-06-12
DEBORA BARROS	New York, NY	2021-06-12
À. Brodt	Munich, Germany	2021-06-12
Amanda Trienens	Columbia, NY	2021-06-12
Lisa Sheridan	Brooklyn, NY	2021-06-12
Peter Janovsky	New York, NY	2021-06-12
Nadine Gardner	New York, NY	2021-06-13
Sydney Day	Mooresville, US	2021-06-13
ERIC SOLL	Edmonds, WA	2021-06-13
kathleen ryan	Edmonds, WA	2021-06-13
Robert Schweitzer	Staten Island, NY	2021-06-14
Günter Singer	US	2021-06-14
Irene Matteini	NYC, NY	2021-06-14
Maria Sherwin	Middletown, NJ	2021-06-14
Philip Savrin	Atlanta, GA	2021-06-14
Jill Miller-Horn, MD	Stony Brook, NY	2021-06-14
Linda Lee	East Patchogue, NY	2021-06-14

Name	Location	Date
Shelby Schrank	New York, NY	2021-06-14
Judy Acs	Arlington, VA	2021-06-14
Vishal Joshi	Queens, NY	2021-06-14
Julianne Wiesner-Chianese	New York, NY	2021-06-14
Leor Melamedov	Tel Aviv, Israel	2021-06-14
Diane Kaese	Jersey City, NJ	2021-06-14
kylee vanhoy	Bristol, US	2021-06-15
James Philbin	New York, NY	2021-06-15
Noelia Murray	Albuquerque, US	2021-06-15
Juliet Gauthier	Los Angeles, US	2021-06-15
John Lusaich	Cedar Falls, IA	2021-06-15
Gary Kroeger	Waterloo, IA	2021-06-15
Terry Sikula	Waterloo, IA	2021-06-15
Geoffrey Lacamilo	Winter Park, US	2021-06-16
سعيد إسماعيلي	Minneapolis, MN	2021-06-16
Shiloh Anonymous	Colorado Springs, US	2021-06-16
Linda Sharp	Winfield, IA	2021-06-16
Nate Piazza	Tampa, US	2021-06-16
emma benna	Madison, US	2021-06-16
randy sokolovsky	Seminole, FL	2021-06-16
Marcie Birnbaum	New York, NY	2021-06-16
Daniel Savrin	Needham, MA	2021-06-16

Name	Location	Date
Aki Fletcher	Reynoldsburg, US	2021-06-17



Recipient: New York City Council, Members of the New York City Council, NYC Council Housing & Buildings Committee

Letter: Greetings,
Rename NYC's Local Law 11 (aka FISP) as the Grace Gold Law*/Grace's Law (*working names)

Comments

Name	Location	Date	Comment
Lori E. Gold	Hollywood, FL	2021-05-24	"I am Grace's sister. Her death, and subsequent legislation, has saved lives. Please let's honor her by now calling it Grace's Law (or Grace Gold Law) instead of Local Law 11/FISP. And I am looking for 10,000 signatures."
Keith Powell	Appleton, WI	2021-05-24	"Grace Gold should be memorialized by renaming this law in her honor. When property owners are not held to account people die."
Annette Krell	Westfield, NJ	2021-05-24	"Grace Gold was a friend, neighbor, beautiful and brilliant young woman whose life was tragically cut short.It's time to honor her memory by naming the law that will continue to save future lives."
Howard Osterman	Westfield, NJ	2021-05-24	"I knew Grace and her family. Wonderful young lady; full of so much potential and hope and kindness. Tragically, horrifically struck down while walking along street not far from college, by a chunk of rooftop debris suddenly falling onto her. The"
Dorothy Hughes	Norfolk, VA	2021-05-24	"I graduated from Grace's Alma mater, John Dewey HS in Brooklyn, the year after she was killed, and was the first recipient of the Grace Gold Memorial Award established in her name. I have always cherished her memory and her name should be on the legislation so that we always remember that from the tragedy of her death, many lives have been and will be saved."
Lesley Rosenthal	Del Mar, CA	2021-05-24	"I was a friend of Grace while attending John Dewey. She was a very sweet person."
Lesley Meersand	East Rockaway, NY	2021-05-24	"I went to HS with Grace. A beautiful promising future snuffed out way to soon. May her memory be a blessing and protect others."
Ira Gottlieb	Santa Monica, CA	2021-05-24	"I'm signing because it's the right thing to do to honor Grace's memory."
Lori Posner	Holmdel, NJ	2021-05-25	"Grace and I were childhood friends. She was sweet, beautiful, and exceptionally smart. I think of her every day and especially when I would visit my son at Columbia and would look up at the buildings in the area with sadness and worry. I am signing this petition not just to honor Grace, but to help prevent another such tragedy."
Susan Epstein	Queens, NY	2021-05-25	"Graces name should be remembered."
ellen gunty	berkeley, CA	2021-05-26	"I may live in CA now but I'm a born & raised nyer. I lived on the *upper west side* so this has real meaning for me. It must be changed!"
Donna Smiley	New York, NY	2021-05-26	"She deserves this honor."
Chaya Staub-Krell	Florida	2021-05-27	"I left NY 25 years ago (but I'm still a NYer at heart!!) and I remember the scaffolding and sidewalks covered making a "tunnel" for you to walk through. I hated walking through those! Too easy for someone to commit a crime in there.Add to that the safety concerns

Name	Location	Date	Comment
			for pedestrians when buildings collapse or masonry or bricks falling on you and I'm glad was passed. This is the first I'm hearing of it.I am proudly signing to change the name of the law to Grace's Law as it should have been named that when the law was first passed."
Joan Showlin	Bradenton, FL	2021-05-27	"I went to High School with Grace and have very fond memories of her. She was a beautiful talented person whose life ended tragically much too soon."
Ilene Triestman	Delray Beach, FL	2021-06-01	"I care about this girl and her family. This was a senseless tragedy that should not have happened."
Richard Scott	Arlington, VA	2021-06-01	"To remember what an awful waste of a beautiful young woman occurred and to make sure it does not happen again."
Judy Coello	Brooklyn, NY	2021-06-01	"This is an important cause; please support"
Kathy Moss	US	2021-06-01	"This is an important law. It warrants the kind of attention that naming it can bring."
Rob Blank	Redfern, Australia	2021-06-02	"People should not die from walking down the street."
Jessica Brady	Queens, NY	2021-06-03	"NYC needs to get more caring,organized and clean"
Ira Leviton	New York, NY	2021-06-08	"I went to high school with Grace. I was two years ahead of her so I didn't know her, but I knew who she was because she was smart, well-spoken, and stood out. Any accidental death of somebody as young as she was age is a shocking and senseless tragedy, but hers was made more tragic for all the potential she had and the good she would have done in her lifetime."
Ann Dalessandro	Fair Lawn, NJ	2021-06-09	"God bless you Grace Dewey alumni"
Stacey Elias	Lake Ridge, VA	2021-06-09	"I went to high school with Grace (John Dewey). We were in the Repertory Company together. She was always sweet and funny. I remember reading about her death and thinking it was so random and senseless. The creation of Local Law 11 gave some meaning to her tragedy and has protected countless others. Naming it after Grace is the perfect tribute."
Kelly Starr	Brooklyn, NY	2021-06-09	"Please make sure this never happens again!"
David Silvey	Brooklyn, NY	2021-06-09	"Grace Gold's tragic, untimely death has some meaning when viewed as the catalyst for the laws which have doubtlessly saved other people's lives. Acknowledging her by naming this law after her is the right thing to do."
Cindy Eisen	Pembroke Pines, FL	2021-06-11	"Grace was a childhood friend of mine and I know she would have made a difference in the world! Let's never forget her and her name."
Jill Miller-Horn, MD	Stony Brook, NY	2021-06-14	"I care."
Marcie Birnbaum	New York, NY	2021-06-16	"I loved Grace Gold as a good friend."

COMBINED REVISION

6/11/21

Hello, I'm Steve Gold, first cousin to Grace and Lori Gold. *The Gold family wants to do all it can to ensure that a similar tragedy does not befall any other families in New York City.* Grace's tragic, untimely **and entirely preventable death** on the Columbia University campus in 1979, due to being struck on the head by a falling piece of masonry from **one of the University's improperly maintained buildings**, was devastating for the entire family, but particularly her immediate family. This tragedy cut short her young life and took with it all her hopes and dreams for the future.

I've been the property manager, for nearly 30 years, for my father's industrial buildings in Los Angeles. My responsibilities included overseeing maintenance and repairs, and the overall operations and applications of safety for these buildings by leasing tenants during my father's later years and after his death six years ago. I took my Property Manager responsibilities very seriously: no tenant, their staff or the general public was ever injured in our buildings over the nearly 60 years of family ownership. Tenants and the general public walking by have a right to expect such safety.

Grace's death prompted passage of LL10, later revised to LL11 and FISP – and should have prevented subsequent deaths. But yet – tragedy has happened already, and not just once. Greta Greene, Erica Tishman, Mario Salas Vittorio – are among the deaths that should have been prevented by LL11.

LL11 is a number. **We as a society have become dehumanized by identifying individuals as well as laws by numbers. Grace's Law would put a real name on this numbered law, and provide immediate recognition of a real person who died. Grace's Law reminds landlords, property owners, managers and construction companies of the importance of timely and appropriate building maintenance and safety.**

Grace's Law -- will help to **reinforce our humanity and the necessity to take timely and appropriate actions to prevent tragic and devastating losses**, such as the one experienced by our family, and regrettably, the families that suffered thereafter.

Thank you!



NYC Council Committee on Housing and Buildings

New York City Hall

New York, NY 10007

June 16, 2021

RE: Testimony on Recommended Updates to NYC Building Code

NYC Council Committee on Housing and Buildings:

National Grid would like to extend our support for the efforts and recommended updates made to the New York City Building Code (“Code”) by the New York City Department of Buildings (“DOB”). National Grid is thankful to have been invited by the DOB to serve on committees to collaborate on these updates, including the Plumbing Committee, the Flood-Resistant Construction Advisory Committee, and the Administrative and Enforcement Committee. The suggested revisions presented to you are the result of numerous meetings of subject matter experts from various construction-related disciplines.

The updates to the Code accurately reflect the changes that New York City has gone through over the past few years and anticipate future innovations, while continuing to enforce what is most important, public safety. During these uncertain times, it is important to have an up-to-date Code to safeguard the citizens of New York City and customers of National Grid. National Grid is supportive of the current proposed changes and is looking forward to a continued working relationship with the DOB to ensure that the Code reflects safety, savings, and innovation.

Regards,

Richard Mezic

Liaison to NYC Agencies

National Grid

One Metrotech Center

Brooklyn, NY 11201



Comments on Plumbing Code Revisions

Int. 2261

The Rent Stabilization Association of New York City represents 25,000 diverse owners and managers who collectively manage more than one million apartments in every neighborhood and community throughout the city. We thank the Committee for giving us the opportunity to submit these comments on Int. 2261, which amends the New York City Building, Fuel Gas, Mechanical and Plumbing Codes. Our comments today are directed towards specific provisions of the Plumbing Code.

This bill seeks to amend New York City's codes to implement the most recent International Code Council revisions with amendments to reflect the unique needs and characteristics of the New York City's built environment. The RSA commends the Departments and industry experts for engaging in a thorough, collaborative and participatory committee process that achieved consensus on this code revision to reflect the best practices for safe construction in the city.

There are, however, minor yet significant modifications which implemented would result in cost-saving and a more rational construction process, while maintaining the safety and efficiencies intended by the current model code.

We support the changes proposed by the Master Plumbers Council as they relate to §28-105.4.4 Ordinary Plumbing Work, §18-101.5 Definitions of Limited Alteration Applications and Limited Plumbing Alterations Category 1 and Category 2 and §28-105.4.1 Emergency Work. The changes would not only bring about cost savings to building owners in allowing routine and emergency work to proceed in a timely manner but they would also achieve clarity and eliminate inadvertent code violations in situations, for example, when one is unaware of other similar work being conducted elsewhere in a building by other plumbing professionals (Ordinary Plumbing Work). Also, monetary caps and other constraints, as contained in the Definition of Limited Alteration Applications and Limited Plumbing Alterations hamstring the ability to undertake work permitted and envisioned as part of the limited alteration process. Finally, allowing emergency plumbing and heating work to be completed in an expeditious manner is crucial for building owners to ensure only limited service interruptions and to minimize damages. Paperwork and permit applications should be allowed to follow and not be required to initiate or complete emergency work. These changes allow for savings and safety and promote a more rational construction environment.

In conclusion, RSA respectfully requests that the city code be amended to reflect the comments set forth above.



Testimony on Intro. 2261
New York City Council, Committee on Housing and Buildings
June 14, 2021

Testimony by:

Ed Bosco, PE LEED CEM

Vice Chair, American Council of Engineering Companies of New York

Managing Principal, M-E Engineers

(also a member of NYC DOB's Mechanical, HVAC & Boilers Technical Committee)

On behalf of the American Council of Engineering Companies of New York (ACEC New York), I would like to thank Chair Cornegy and the other members of the Committee for your efforts over the years to update New York City's Construction Codes.

I'm here today to testify on behalf of our association in support of Intro. 2261, which proposes to comprehensively update the Construction Codes, bringing them in line with the latest version of the International Code Council Codes as well as best practices for safety, sustainability and technical advancements.

Founded in New York City in 1921, ACEC New York is celebrating its 100th Anniversary this year. Our association is one of the oldest continuing organizations of professional consulting engineers in the United States. We represent close to 300 engineering and affiliate firms throughout New York State, with a concentrated presence in New York City. Our members plan and design the structural, mechanical, electrical, plumbing, civil, environmental, fire protection and technology systems for buildings and infrastructure across New York and the world.

During the City's 2017 – 2021 code revision cycle over 100 of our association's members supported the volunteer effort with time, knowledge and expertise by serving on the Technical Committees convened by the Department of Buildings (DOB).

Through this process, our members, DOB and various other stakeholder groups engaged in an intense and thorough collaboration. We want to thank the DOB for this high-level of engagement, and for continually improving the process for updating the Construction Codes based upon industry feedback.

The end result of this years-long effort is a true consensus document, embodied by Intro. 2261, which is before your Committee for consideration here today. The latest revision process continued a partnership that began in 2003 as an effort to replace the 1968 New York City Building Code with a model-based code. We suggest that the success of this effort should serve as an example for other City agencies working to align their requirements with New York City's progressive goals for safety and sustainability.

ACEC New York is proud to support Intro. 2261 and the round of updates to the Construction Codes that the legislation proposes. We urge the City Council to swiftly pass the bill.

Going forward, ACEC New York members will continue to serve as a resource and engage with the DOB and the City Council to ensure the City's Construction Codes reflect on-the-ground issues encountered by engineers, architects and builders every day, as well as best practices for safety and sustainability.



NEII

NATIONAL ELEVATOR INDUSTRY, INC.

SETTING STANDARDS IN MOTION

**Statement of the National Elevator Industry, Inc.
regarding Int. 2261-2021 an Act before the
New York City Council Committee on Housing and Buildings
June 14, 2021**

The National Elevator Industry, Inc. (NEII) is the leading trade association for companies that manufacture, install, and maintain elevators, escalators, moving walks, and other building transportation products. NEII members collectively represent over eighty-five percent of the work hours in the building transportation industry. NEII submits the following comments regarding Int. 2261-2021, a Local Law to amend the administrative code and various building codes of the city of New York.

NEII, our member companies, and the New York City Department of Buildings (DOB) continue to enjoy a cooperative and productive relationship to address matters of mutual concern. Similarly, members of the association participated in the Elevators and Conveyors Technical Committee that supported the development of the code recommendations currently before the Committee on Housing and Buildings. Int. 2261-2021 provides an extensive update to existing code and administrative procedures and represents a significant step in ensuring the safe and effective operation of building transportation systems in the city of New York.

NEII appreciates the constructive dialogue within the Elevators and Conveyors Technical Committee and the attention of DOB to the concerns expressed by the industry regarding the initial timelines proposed for a number of administrative actions contained in Article 304 of Chapter 3 of the legislation. The final result addressed several industry issues and represents a reasonable accommodation for all parties.

NEII also acknowledges the productive discussions that led to the preservation of language to allow machine room-less elevator systems to be utilized where they best meet the needs of building owners and operators, businesses, and the riding public.

Some NEII members have expressed reservations about the provisions governing elevators and destination dispatch contained in Section BC 1109.7 of Chapter 11 of the legislation. The accessibility requirements in this section may require extensive product re-design with a concomitant effect on the manufacturing process. The requirements in the city of New York, as recommended in Int. 2261-2021, are unlike any other similar regulatory provision in the United States and will require modifications to standard designs. As a result, there could be equipment delays, cost increases, and other impacts. We share the interest of the city and the Accessibility Technical Committee in a seamless transition to meet the new requirements. NEII will work with member companies to identify compliance and other issues that may arise.

Int. 2261-2021 resulted from an extensive code development process that included the views of all stakeholders. While NEII believes there remain opportunities to align the local codes more closely with the Safety Code for Elevators and Escalators, developed by the American Society of Mechanical Engineers (ASME 17.1), as well as other model codes, we do not have specific recommendations for amendment to the legislation before the Committee at this time. NEII and our member companies look forward to participating in the next code development cycle for the city of New York and to continuing to build an effective regulatory regime to ensure the safe and effective operation of building transportation systems.

NEII staff and member companies are available to provide any additional information as needed. Please contact Philip W. Grone, NEII Vice President for Government Affairs, at pgrone@neii.org if you have any questions.

June 10, 2021

To: New York City Council – Committee on Housing and Buildings

RE: Proposed NYC Building Code Revisions

The Air Barrier Association of America (ABAA) would like to provide comments to proposed changes to *Section 1406 Combustible materials on the Exterior Side of Exterior Walls* and allied code sections.

ABAA membership is comprised of design professionals, engineers, contractors, manufacturers and others who construct buildings in New York City. All members support revisions to the building codes that improve safety, produce a healthy environment for the occupants and reduce the environmental impact of those buildings. These high performing buildings would most certainly benefit all persons residing in New York City.

The ABAA strongly recommends New York City avoid changes to the model building code without thorough evaluation of their full impacts on the building performance. Although well-intended, some changes potentially undermine the integrated nature of the model code and are unnecessary given the proven efficacy of the NFPA 285 wall assembly fire testing provisions contained in the International Building Code (IBC) model code. One example is the revision to Section 14.6.2.3 requiring fireblocking in accordance with Section 718.2.6, which could create confusion when considered in conjunction with *Section 1403.5 Vertical and lateral flame propagation* which requires testing of assemblies in accordance with NFPA 285. Currently, only a few tested NFPA 285 assemblies have included the required fireblocking found in section 718.2.6. It is unclear whether the addition of such fireblocking will improve or reduce the NFPA 285 performance of assemblies.

Furthermore, as each building operates as a system, changes for one performance requirement, may impact the performance of other building performance criteria. We agree that buildings must protect occupants and emergency services from the risk of a fire. However, the protection of the occupants must include all aspects of the building's performance. Using the previous example of the revision to Section 1406.2.3. The prescriptive fireblocking in a drained space could have a negative impact on water management performance of the assembly, especially when the exterior cladding is designed to be drainable.

Buildings, not only in New York City but across the nation, are plagued with moisture problems which affect the building's performance and the health of all occupants. Water management must be considered during building construction and operation in order to protect the building and the occupants. Changes to the building envelope can significantly impact the building's ability to manage moisture. It is crucial that tested systems that have proven fire and water management performance be used to ensure health and safety for all. Our association would like to work with the Committee on Housing and Building and the Department of Buildings to develop solutions and an implementation plan that supports fire and moisture performance in a holistic manner, and therefore reduce any potential negative impact of the building and its occupants.

Thank you for your consideration,

Air Barrier Association of America

[www.airbarrier.org]

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June 14, 2021

Free Enterprise The Future of Construction

Robert Cornegy, Chair
Committee on Housing and Buildings
New York City Council
250 Broadway
New York, New York 10007

Re: Committee Testimony – Hearing 6/14/2021

Dear Chair Cornegy and Members of the Housing and Buildings Committee:

The Associated Builders and Contractors Empire State Chapter (ABC) and NYC Regional Leadership Committee, submits this testimony for the record to the Committee on Housing and Buildings of the New York City Council, Chaired by Councilman Robert Cornegy, at the hearing held on June 14, 2021 at 10:00 a.m., specific to agenda item **Intro 2261-2021**.

ABC represents hundreds of merit shop contractors employing thousands of workers throughout NYS, including NYC, and the surrounding regions. We are a national organization founded nearly 70 years ago with chapters across the country, and with a renowned national construction safety platform. Here in New York City, we represent some of the largest general contractors and sub-contractors, building some of the largest and most complex projects across the five boroughs. We seek to ensure that there is work for all, and that construction is done safe and with integrity. ABC was one of the first stakeholders to advance a comprehensive proposal to address construction safety when helping to draft landmark safety reforms in NYC leading to the passage of Local Law 196. Additionally, we participate on the NYC Department of Buildings Chapter 33 Construction Code Review Committee which continues to reform the way in which the industry builds in New York City. We thank Chair Cornegy and the Committee for the opportunity to provide this testimony on these important pieces of legislation meant to impact construction, the environment and communities across the NYC region.

The health, safety and quality of life of those that live and work in the communities in which the construction industry builds is important to recognize. The success and completion of projects depends largely on the industry working with neighbors, community boards, the community at large, as well as with various regulatory agencies. We recognize that construction projects impact communities. We remain conscientious in our efforts to safeguard not only the construction workforce, but the public at large. We know that we are building in communities that our fellow New Yorker's call home, and take that responsibility seriously. We encourage the Committee to continue to seek consultation from industry stakeholders as well as regulatory agencies when seeking to enact reforms and other legislation.

We respectfully submit this letter in support of Intro 2261-2021 which amends the administrative code of the City of New York.

This bill completes the most recent code revision cycle with amendments to the New York City Building, Fuel Gas, Mechanical and Plumbing Codes, based on the 2015 editions of the International Building, Fuel Gas, Mechanical and Plumbing Codes published by the International Code Council, where necessary, modifying or adding new text tailored to the unique needs and characteristics of the City's built environment. The bill also contains provisions to modify the General Administrative Provisions and New York City Electrical Code. The proposed legislation improves building construction standards for new buildings and resolves issues relating to the application of some provisions of the new codes to the alteration of existing buildings. Focused on preserving the principles of safety, savings, and innovation, this code revision cycle upgrades these concepts to include additional levels of enhancements, such as promoting sustainability along with resiliency, economizing resources, including affordable housing elements, and enhancing the tenant protection plan.

As a member of the Chapter 33 Code Revision Committee for Construction and Demolition we are proud to support this piece of legislation. The Department of Buildings and the Committees have worked diligently to ensure that this code revision cycle clarified industry questions, added guidance on new methods and equipment while ensuring that the safety of all workers is the top priority. The code changes that are contained in this legislation is the direct result of many conversations to ensure that all sides of the industry were heard. All of the respective code committees worked together to complete this Code Revision cycle, the results of which will enhance the safety of our industry and all workers. The changes that are being proposed are necessary to raise the industry standards to ensure that safety remains the top priority.

In closing, we thank the Council and Committee Members for their consideration of our comments related to the above proposed legislation.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'B. Sampson', written in a cursive style.

Brian Sampson, President
Associated Builders and Contractors
Empire State Chapter



AMCA International

Air Movement and Control Association International, Inc.
The International Authority on Air System Components Since 1917

30 West University Drive
Arlington Heights, IL 60004, USA
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communications@amca.org
www.amca.org

Date: June 11, 2021

To: New York City Council, Committee on Housing and Buildings

From: Air Movement and Control Association (AMCA) International

RE: Int. No. 2261-2021; Completion Bill amending the administrative code of the city of New York, the New York city plumbing code, the New York city building code, the New York city mechanical code and the New York city fuel gas code; available at

<https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=4920277&GUID=1F552D69-C99A-43D2-8203-EEB95C66203A&Options=&Search=>

Dear New York City Council, Committee on Housing and Buildings:

AMCA International thanks the Committee on Housing and Buildings for the opportunity to provide written testimony regarding Int. No. 2261-2021, the 'Completion Bill'. In short, **AMCA International urges the Committee's support of Int. No. 2261-2021 as presented and supports the development efforts of the New York City Department of Buildings which resulted in this bill.**

Founded in 1917, AMCA International is a not-for-profit association of manufacturers of fans, dampers, louvers, air curtains, airflow-measurement devices, ducts, acoustic attenuators, impellers, and other air-system components for commercial-building heating, ventilating, and air-conditioning; industrial-process; and power-generation applications. Its mission is to advance the knowledge of air systems and uphold industry integrity on behalf of its nearly 400 members worldwide. AMCA International has been leading the development and refinement of codes, standards, and regulations for air system products for more than a decade, working proactively and collaboratively with the U.S. Department of Energy (DOE), ASHRAE, the International Code Council, the California Energy Commission, several energy efficiency advocacy organizations, and other governmental and nongovernmental organizations.

Wherever possible and to the extent possible, AMCA International supports the development of codes and standards through processes based on consensus, such as those accredited by American National Standards Institute (ANSI), including those that are developed by engineering societies, such as ASHRAE, American Society of Mechanical Engineers (ASME), and Institute of Electrical and Electronics Engineers (IEEE), and manufacturers associations, such as Air-Conditioning, Heating, & Refrigeration Institute (AHRI), Association of Home Appliance

Manufacturers (AHAM), National Electrical Manufacturers Association (NEMA), and AMCA International itself. ANSI-accredited standards are developed using balanced committees that often have volunteers outside the organizations publishing the standards. For example, a very recently developed AMCA standard (AMCA 214-2021) included representatives from a federal U.S. national laboratory and multiple energy efficiency advocacy organizations.

Drawing a similar line to New York City codes, AMCA International believes that collaborative work between regulated parties, the Department of Buildings, and other interested parties ahead of rulemaking efforts can result in higher confidence that presented for the rulemaking effort will be an accurate and effective set of codes proposed for adoption that will serve the public interest of New York City and improve the safety, health, and operability of its buildings. Thus, a brief description of AMCA International's contribution to and involvement with the development of Int. No. 2261-2021 follows.

AMCA International is pleased to have worked with the New York City Department of Buildings during its code revision process, which resulted in Int. No. 2261-2021. AMCA International provided a guidance letter to the Department of Buildings in 2016 regarding louver requirements in the 2014 New York City Mechanical Code. AMCA International then provided an updated letter to the Department on December 20, 2019, which included clarifying code change recommendations for these louver requirements. A copy of either letter and any of the referenced AMCA standards or publications can be provided to the Committee upon request.

Following submission of the December 2019 letter, AMCA International was connected by the Department of Buildings to the Mechanical, HVAC & Boiler Technical Committee and the panel chair for the Mechanical Code's ventilation chapters. On February 18, 2020, a team of AMCA International members and staff met with members of this Technical Committee to discuss the details of the proposed changes to the New York City Mechanical Code as outlined in the December 2019 letter. A consensus was reached that largely accepted AMCA International's recommendations. AMCA International believes that these code changes will remove ambiguity and will assist architects, engineers, and other building professionals with application of louver requirements.

AMCA International appreciates having worked with all parties involved in the revision process of the New York City Mechanical Code as presented in Int. No. 2261-2021. Each party brought technical expertise and knowledge of the products and systems at issue. Though AMCA International cannot claim to have worked with the Department of Buildings and other stakeholders for code sections contained in other portions of this bill, AMCA International endorses the Department of Buildings and its code development procedures used in this code revision process.

Again, AMCA International thanks the New York City Council Committee on Housing and Buildings for the opportunity to provide written testimony in support of Int. No. 2261-2021. If you have questions or comments on this written testimony, please do not hesitate to contact the AMCA International staff person listed below. Please note that signatures of some AMCA

members who participated in discussions with the Mechanical Technical Committee are included below.

Respectfully Submitted,



Aaron Gunzner
Advocacy Manager, AMCA International
+1 (847) 704-6337
agunzner@amca.org



Russell Geist
Manager of R&D, Exteriors Division, Construction Specialties



Jon A. Jackson (Andy)
Product Manager-Louvers, Greenheck Fan Corp.

Mike Astourian, Architect, LEED AP^{BD+C}
Product Sales Manager, Ruskin



AMERICAN WOOD COUNCIL

June 15, 2021

Chairman Robert E. Cornegy, Jr.
New York City Council
Committee on Housing and Buildings
250 Broadway, Suite 1743
New York, NY, 10007

Dear Chairman Cornegy,

Pursuant to our verbal testimony provided via Zoom on 6/14/21, the American Wood Council (AWC) offers additional comments on the proposed NYC Building Code to successfully replicate the latest referenced standards published by the American Wood Council that are contained within the latest edition of the International Code Council's *International Building Code*.

AWC Reference Standards (p2068)

AWC STJR ~~2015~~ 2021. The current publication date should be 2021.

ANSI/AWC PWF publication date should be 2021. Add sections 1805.2 (currently cited for AWC TR7-2007, which is proposed for deletion in this document)

AWC SDPWS ~~2015~~ 2021. The current publication date is 2021. The new standard includes important design criteria for CLT.

AWC-TR7—~~2007~~ Strike reference to TR7 in its entirety.

Additional Recommended Modifications

p380. Definitions. The term *mass timber* is introduced in several locations. It should be defined as follows:

MASS TIMBER. Structural elements of Type IV construction primarily of solid, built-up, panelized or engineered wood products that meet minimum cross section dimensions of Type IV construction.

p618-619, 602.4 Type IV. ... (no changes)

Exceptions:

1. In Group I-1, R-1, and R-2 occupancies, all exterior walls, fire walls, exit passageways, and shaft enclosures shall be noncombustible.



AMERICAN WOOD COUNCIL

2. In Group F occupancies subject to Section 270(1) of the New York State Labor Law, all exterior wall assemblies and all structural elements shall meet the requirements for a "fireproof building" as defined in Section 264 of such law.
3. Inside the fire district, exterior load-bearing walls shall be constructed of noncombustible material, CLT complying with Section 602.4.2, unless otherwise prohibited by exception 1 or 2 above or 4. ~~Inside the fire district, exterior non-bearing walls may be constructed with fire-retardant-treated wood complying with Section 2303.2 where the building is equipped throughout with an automatic sprinkler system in accordance with Sections 903.3.1.1 through 903.3.1.3, unless otherwise prohibited by Exception 1 or 2 above.~~
- ~~5. Inside the fire district, exterior non-bearing walls are permitted to be constructed with cross-laminated timber (CLT) complying with Section 602.4.2, unless otherwise prohibited by Exception 1 or 2 above.~~

P731. Item 15-1.15. Bottom of Construction description cut off.

P802. 721.6.3 Design of fire-resistant exposed wood members. Most of these old provisions are shown as deleted, but not all. Need to make sure it is deleted in its entirety.

p1588. Table 2304.10.1. For item 21 "3-8d common (2-1/2" x 0.131"); or floor"...looks like "floor" does not belong.

p1589. Table 2304.10.1. For item 30 "...or RSR-01 (23/8" x 0.113"...) should be 2-3/8".

p1590. Table 2304.10.1. Footnote d says "...ATSM F1667." Should ASTM F1667.

p1591. 2304.10.8. The requirement for when to provide connection protection in Type IV construction is unclear. Is the intent to require all connections in Type IV to be one-hour or only those where Table 601 is requiring the building element to be FRR. The level of detail contained in this 2021 IBC provision is intended for the new types of mass timber construction that are introduced. Given the limited height, stories and area of current heavy timber buildings, the onerous analysis is not justified when heavy timber elements are connected.

The following revision to the proposed new section is recommended.

2304.10.8 Connection fire resistance rating. Wood structural connections, including connectors, fasteners, and portions of wood members included in the connection design, shall be protected from fire exposure ~~for the~~ and achieve the required fire resistance time when connecting building elements required to be fire resistance rated by Table 601. ~~For connections in Type IV construction, the required fire resistance time shall be at minimum one hour or as required for the building element by~~



AMERICAN WOOD COUNCIL

~~Table 601 and Section 602.4:~~ Fire resistance ratings for connections shall be determined by one of the following:

1. Testing in accordance with Section 703.2 where the connection is part of the fire resistance test.
2. Engineering analysis that demonstrates that the temperature rise at any portion of the connection is limited to an average temperature rise of 250°F (139°C), and a maximum temperature rise of 325°F (181°C), for a time corresponding to the required fire resistance rating of the structural element being connected. For the purposes of this analysis, the connection includes connectors, fasteners, and portions of wood members included in the structural design of the connection.

p1592. Table 2304.11. Table has a tabular value that's missing for minimum glued laminated net size, depth – from the 2018 IBC, this value appears as 6-7/8 (inches).

p1594. 2304.11.1.4 Cross-laminated timber design. The requirement for design seems out of place. What is meant by the last sentence?

p1602. Second term of the shear wall deflection equation – delete the number "4" in denominator. Check the SI conversions.

p1606. Strike the old figures at the bottom of Table 2306.2(1) on p1606. New figures have been included at the top of p1603.

p1600. Strike test as follows: $Gt =$...of panel width ϕ or depth...

p1605. Table 2306.1.4 – the character used for span in the table is different than the character used for span in footnote b (these should be consistent – look OK in 2015 IBC).

p1605. Table 2306.2(1) – "inches" missing from staple length and gage column does not indicate the staple length is inches so appears confusing "1-1/2 16 Gage". Table 2306.3(1) has a similar issue, but at least it includes "inches" in the column heading.

p1606. Strike the old figures at the bottom of Table 2306.2(1) on p1606. New figures have been included at the top of p1603.

p1609. Section reference may be incorrect in Section 2306.2.1 which refers to Section 2508.5, but this was changed in the 2018 IBC to refer to Section 2508.6.

p1600. Strike test as follows: $Gt =$...of panel width ϕ or depth...



AMERICAN WOOD COUNCIL

p1634. Should also probably show as stricken the figure and table on this page since everything else on these pages relating to braced wall lines look to have all been relocated elsewhere.

p1637. Should also show probably as stricken the figure on this page – since everything else pertaining to braced wall panels has been relocated elsewhere.

p1646. Table 2308.6.3(1) Footnote d a says "...Method LIB shall have gypsum board fastened to at least one side with nails or screws." 2018 IBC revises the highlighted section in this footnote to state "...one or more side(s) with nails or screws."

Should you or your staff have any questions regarding the aforementioned code change recommendations, please do not hesitate to reach out to me directly via phone or email. Thank you.

Regards,

A handwritten signature in black ink that reads "Matthew M. Hunter". The signature is fluid and cursive.

MATTHEW HUNTER, BCO

Northeast Regional Manager

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BILL EGAN GROUP

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June 12, 2021

New York City Council
Committee on Housing & Buildings
250 Broadway
New York, NY 10007

Subject: Int. No. 2261 - Amend the administrative code - NYC Building Code

Dear Housing and Building Committee Members,

As Principal of the Bill Egan Group, my business provides consulting services to the EIFS industry and for other construction products and systems. Exterior Insulation and Finish Systems (EIFS) are exterior wall claddings that are widely used on all types of buildings in New York City and across the United States. For decades, combustible foam plastic insulation such as Extruded Polystyrene (XPS) and Expanded Polystyrene (EPS) have been an integral component of many exterior wall coverings including EIFS. Foam plastics are used almost exclusively due to well-recognized benefits including energy efficiency and cost effectiveness.

We appreciate the opportunity to provide our view on the proposed changes to the NYC Building Code of which most are based upon the well vetted and time tested International Building Code (IBC). The EIFS industry is concerned, however, with the prescriptive requirement for fireblocking in section 718.2.6 that does not consider construction details and system performance based on large scale fire testing. This presents a deviation from the IBC that significantly impacts many construction industry stakeholders. Along with other industries, we have discussed this item previously with the Department of Buildings and through the mediation process.

As currently proposed, section 718.2.6 prescriptively requires fire blocking which effectively eliminates or drastically limits and impacts the use of combustible insulation materials such as EPS and XPS. As energy conservation awareness continues to increase, there will be a continued demand to build attractive walls with high performance, foam plastic insulation. While attributes such as energy performance or appearance are important, it is recognized that building and occupant safety is paramount and cannot be compromised.

EIFS and other exterior wall coverings that utilize foam plastic insulation are regulated by fire testing that is incorporated in the International Building Code (IBC). Fire testing includes ASTM E119 (fire resistance), NFPA 268 (ignitability), NFPA 285 (intermediate multi-story fire test), and others. Manufacturers have years of actual testing that demonstrate fire safety, long term durability and energy efficiency. The prescriptive limitations set forth in in proposed section 718.2.6 are not necessary nor supported by decades of performance across the United States.

The following highlights the impact of the proposed prescriptive fireblocking requirements in section 718.2.6:

- Increased cost of construction to building owners due to higher labor and material costs associated with non combustible insulation and fire blocking materials.
- Manufacturers will have to undertake significant development, testing, and marketing of new hybrid systems that incorporate foam plastic insulation and non-combustible insulation in the same wall plane and or develop new systems with non combustible insulation.
- Reduced design flexibility resulting from attributes of non combustible insulation and prescriptive fireblocking that will impact building appearance and architecture.
- Reconfiguration of accepted, long standing moisture management strategies that keep water out of buildings since exterior wall system drainage cavities will be blocked and interrupted by fire blocking.
- Most exterior wall systems are tested for fire safety and approved without fireblocking based on testing per NFPA 285. Prescriptive fire blocking will result in significant NFPA 285 retesting of previously tested assemblies to determine performance with fire blocking. This results in significant cost, cycle time, and number of NFPA 285 assemblies that will require retesting.
- The prescriptive requirements in section 718.2.6 requires fireblocking which diminishes innovation and the ability to develop more cost effective solutions that achieve the same fire performance.
- The proposed change is inconsistent with fire blocking requirements in the International Building Code (IBC) which provides an exception for exterior wall coverings that comply with the NFPA 285 fire test standard.
- While section 718.2.6 does not ban foam plastic insulation, it effectively eliminates or unnecessarily restricts use of insulation materials such as EPS and XPS that help achieve goals related to climate change and to reduce carbon emissions.

We respectfully request the following two sentence exception be added to proposed section 718.2.6 which allows systems without fireblocking based on successful, performance based fire testing. This resolves the above stated concerns, impacts and is consistent with the exception that is now and has been in the International Building Code (IBC) since 2012.

Exception:

Fireblocking shall not be required where the exterior wall covering has been tested in accordance with and complies with the acceptance criteria of NFPA 285. The exterior wall covering shall be installed as tested in accordance with NFPA 285.

Thank you for your consideration and attention.

Regards,

A handwritten signature in black ink that reads "William F. Egan". The signature is written in a cursive style with a large, stylized "W" and "E".

William F. Egan
Principal



The Building Owners and Managers Association of Greater New York's Testimony on Int. No. 2261, A Local Law to Amend the Administrative Code of the City of New York, the NYC Plumbing Code, the NYC Building Code, the NYC Mechanical Code and the NYC Fuel Gas Code

The Building Owners and Managers Association of Greater New York (BOMA New York) appreciates this opportunity to submit the below comments for the record. BOMA New York represents more than 750 property owners, managers, and building professionals who own or manage 529 million square feet of commercial space in New York City. We are an association within BOMA International, a federation of 90 US associations and 19 international affiliates that own and operate approximately 10.5 billion square feet of office space in the United States.

This bill represents the final stage of the most recent update to the various codes referenced above. These updates are based on the 2015 edition of the International Building, Fuel Gas, Mechanical, and Plumbing Codes, published by the International Codes Council, as modified to meet issues unique to New York City.

First and foremost, we would like to express our overall satisfaction with the proposed updates and with the process of developing them. As always, DOB staff responsible for managing this enormous task has done so with great professionalism and fairness. BOMA New York members served on most or all of the committees set up to craft these new codes, and the consensus-based approach employed by DOB was incredibly successful at sorting out the often very complicated technical issues that arose. Therefore, we would like to express our sincere gratitude to DOB staff for all of their hard work, as well as to the other stakeholders who put in so much time and effort to this challenge.

That said, we do have several concerns, as raised by the Master Plumbers Council. We feel that the changes they propose will lower costs and minimize violations without creating any negative outcomes.

§28-105.4.1 Emergency Work:

This section allows emergency work that would otherwise require a permit to be completed without that permit, provided such permit is applied for within two days of the commencement of work. It is vital that this section state clearly that the complete restoration of heating and hot water systems to full working order is covered under "emergency work." As written, it could be interpreted that, for example, merely turning off gas during a leak would mitigate the danger, and all other work would need a permit. We support additional language, as proposed by the Master Plumbers Council, that would clarify that "to restore the system to a good working order" is included as emergency work. In addition, we support language that clarifies that heating

systems can be restored in all occupancy classifications during the heating season, and that water heating systems can be restored throughout the year, again, regardless of occupancy classification.

§28-105.4.4 Ordinary Plumbing Work:

The “ordinary plumbing work” provisions allow for certain work to be completed without a permit or inspections, provided the licensed plumber performing the work reports it to the DOB, certifies it is code compliant, and pays any fees. BOMA New York supports the language changes proposed by the Master Plumbers Council that would clarify and expand the definition of “ordinary plumbing work.”

§28-101.5 Definitions:

A “limited alteration” permit allows licensed master plumbers, and not registered design professionals, to obtain permits for certain work. As written, the proposed definition might disallow the use of limited alteration permits for work being done in conjunction with work undertaken under an alteration permit. In addition, there is a monetary cap on certain work that can be done under these permits. Finally, DOB has added language that would require a licensee doing certain sprinkler work to show that existing sprinkler systems are legally installed.

BOMA New York supports the Master Plumber Council’s proposal to address the three issues listed above. The first change would modify the definition of “limited alteration application” to clarify that appropriate plumbing work can be done under limited alteration permit, even when in conjunction with other work being done under an alteration permit. The second proposal would modify the definition of “category 1” to remove the monetary cap, so that all work that falls within an allowed scope can be done under a limited alteration permit. The final change would remove the language “and provided further that all such sprinkler heads were legally installed off of a domestic water system” from three provisions under the definition of “Category 2.”

§28-417.1 Plumbing and Fire Suppression Piping Contractor License Board:

The purpose of this Board is to advise the DOB Commissioner on the fitness and character of those applying for a license or certificate of competence. The Commissioner appoints qualified people to the Board. DOB is proposing in the new code to disband this board.

BOMA New York Supports the Master Plumbers Council’s position that this Board plays a critical role in the vetting process, and that it should continue in its current function.

Once again, we thank DOB for the incredible work they do every code cycle to bring stakeholders together in a fair and comprehensive process. We look forward to continuing to work closely with DOB and the City Council on these critical issues.

Contact:

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11 June 2021

The Honorable Robert E. Cornegy
New York City Council
250 Broadway, Suite 1743
New York, NY 10007

Re: Intro. 2261 Testimony – Exterior Wall Code Changes Are Confusing

I am a registered architect, a LEED Accredited Professional in Building Design and Construction, and a Certified Passive House Designer. In addition to maintaining my own practice I am the chair of the Policy Subcommittee of the AIANY Committee on the Environment, a board member of New York Passive House, and I teach building science at Pratt Institute.

Elements of the proposed changes must not go into the code as currently written. I urge you to send this back to the committee. My colleagues and I are happy to meet with the code committee to share our recommendations. While I support many of the proposed changes in concept, as currently written these changes will result in confusion for design professionals and Department of Buildings examiners and inspectors, and negatively impact the ability of design professionals to assist building owners comply with the requirements of LL97/2019, and otherwise build healthy and safe buildings.

I support the significant curtailments in the use of combustible exterior wall coverings and foam insulation for exterior insulation these code changes intend. However, there are other components, such as weather resistant barriers and thermal break structural clips that satisfy the rigorous fire testing protocols of the National Fire Protection Association (NFPA) 285, that are potentially prohibited by these changes. Loss of these products and systems presents a major problem for design professionals. The design of contemporary building exteriors is a highly complex endeavor, especially for today's high-rise buildings. Designers must manage many forces: wind, rain, heat transfer, building movement and the possibility of fire to name a few. They must prevent moisture build up, mold, heat loss and gain, all while making the building aesthetically pleasing and providing light and air to occupants.

In particular, section 718.2 Fireblocking and its subsections needs a major overhaul. Section 202 Definitions, and 1401 does not clearly define terms used in this and other sections; for instance, combustible and combustibles construction require clear guidelines. 3202.2.5 Exterior wall covering systems for prior code buildings only permits 8 inches and required to comply with the energy code. To meet LL97/2019 buildings need to exceed the energy code, and 8 additional inches is insufficient.

As currently written, these code changes will either severely impact the design community's ability to help building owners comply with LL97/2019, or not sufficiently support efforts to create high performance, low energy consumption buildings.

Respectfully,



Caleb Crawford, RA, LEED AP BD+C, CPHD



Testimony before the City Council Committee on Finance:

T2020-6276: A Local Law in relation to the deferral of property tax liability on real property with an assessed value of two hundred fifty thousand dollars or less owned by certain property owners impacted by COVID-19

Good afternoon. My name is Ivy Perez, and I am a Policy and Research Manager at the Center for NYC Neighborhoods. I would like to thank Chair Dromm and the members of the Committee on Finance for holding today's hearing. I would also like to thank Council Members Moya and Chin for introducing this legislation and for recognizing the important part that property owners play in our communities.

About the Center for NYC Neighborhoods

The Center promotes and protects affordable homeownership in New York so that middle- and working-class families are able to live in strong, thriving communities. Established by public and private partners, the Center meets the diverse needs of homeowners throughout New York state by offering free, high-quality housing counseling and legal services. Since our founding in 2008, our network has assisted more than 250,000 homeowners. Our clients are over 60% people of color, with an average household income of \$44K. We have provided more than \$65 million to community-based partners throughout the City.

The Current Context

In the wake of the global coronavirus pandemic, New York's low- and moderate-income homeowner households face daunting challenges to staying in their homes and recovering from the effects of the pandemic. Thousands of New York's workers have faced unemployment and income loss, while those employed in essential businesses continue to work while exposed to greater risks of contracting infection.

As with many other ills, the effects of the COVID-19 pandemic are disproportionately felt among New York's black and brown communities. Majority minority communities have seen higher rates of COVID-19 infections and deaths, and as a result have faced greater economic losses. This disproportionate impact can be tied to decades of housing discrimination, segregation, and community under-investment which have negatively impacted access to sustainable, healthy homes and homeownership. Racialized policing policies, too, have added to the trauma felt by communities and individuals of color.

Although the lasting effects of the pandemic and its aftermath are uncertain, the experience of the Great Recession (2007-2009) teaches us that the economic effects are likely to exacerbate existing inequalities across racial and economic lines and to push sustainable homeownership even further out of reach for many of New York's working families. We must take proactive steps to proclaim that these communities matter, and that they do not lose even more due to COVID-19.

Property Tax Burdens Were a Problem Before COVID-19



Many low- and moderate-income NYC homeowners struggle to afford property tax, water, and other municipal charges. These charges can be a substantial burden for homeowners trying to keep their properties amidst rising real estate values and maintenance costs.

A 2018 report from the NYC Comptroller demonstrated that property taxes place a disproportionate burden on lower-income homeowners.¹ For homeowners making below \$50,000 per year, property tax burdens are as high as 12.7%, as compared to higher income homeowners, whose burdens are between 2% and 6%. The study also found that property taxes have soared since 2005 for homeowners across the income spectrum, while incomes have only risen moderately overall and have actually decreased for the lowest income homeowners.

Moreover, research by the NYU Furman center shows that thousands of renters throughout New York City have accrued arrears of more than \$10,000, reducing income for many homeowner-landlords that house them.² Without rental income, many of these homeowner-landlords are at risk of losing their homes, and in turn their tenants are at risk of being displaced.

LMI Homeowners and their Renters Need Continued Relief

While New York shows signs of recovering from the pandemic, homeowners of small homes and their tenants are in continued risk of losing their housing. New York's LMI homeowners, already in a tenuous position, are in even more risk of losing their homes as the economic fallout of the pandemic continues. Since the onset of the pandemic, more than **400** homeowners have called our hotline and reported being behind on property taxes. Nearly **40%** of those calls came from senior citizens.

Foreclosure moratoria, forbearance plans, and unemployment insurance are providing thousands of NYC families with critical relief, but this assistance is short-term and will not be enough to stabilize all homeowners in need.

Adopting a 0% interest rate for late payment of property taxes is a necessary and important step to provide relief for those hardest-hit by the pandemic. No homeowner affected by COVID-19 should have to choose between feeding their family or paying their mortgage and paying property taxes. The proposed legislation will allow those homeowners struggling to make ends meet to delay payment of property taxes without taking on large interest payments.

¹ "Growing Unfairness The Rising Burden of Property Taxes on Low-Income Households", Office of Comptroller Scott Stringer, September 6, 2018. Available at: <https://comptroller.nyc.gov/reports/growing-unfairness-the-rising-burden-of-property-taxes-on-low-income-households/>

² "More of New York City's Low Income Renters Face 'Extreme' Arrears Over \$10,000," NYU Furman Center, 2021. Available at: <https://furmancenter.org/news/press-release/more-of-new-york-citys-low-income-renters-facing-extreme-arrears-over-10000>



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**TESTIMONY BEFORE THE NEW YORK CITY COUNCIL
COMMITTEE ON HOUSING AND BUILDINGS
CITIZENS HOUSING AND PLANNING COUNCIL
KATHERINE LEITCH, SENIOR POLICY ANALYST
JUNE 14, 2021**

Chairman Cornegy and members of the Committee on Housing and Buildings:

Thank you for the opportunity to speak in support of Intro. 2261. My name is Katherine Leitch, and I am Senior Policy Analyst at the Citizens Housing and Planning Council (CHPC). CHPC is a non-profit, civic research organization dedicated to addressing the city’s housing and planning needs.

The code revision process is an extremely important on-going effort to ensure that the city is being built and maintained according to the latest scientific knowledge, best practices, and our shared vision for New York’s future. CHPC appreciates the scale of this undertaking and commends both the committee volunteers and city agencies involved. Through our work, we witness the broad impact these codes have on the lives of New Yorkers.

We are inclined to think of construction codes as a technical tool that imposes safety standards and consistency on the built environment. This is true, of course, but there are also human consequences to each specification of the code. Required dimensions, occupancy designations, and listed materials change where and how we live. One inch of ceiling height can determine whether your grandparents can live in an apartment below you or if you can rent an extra unit to make ends meet.

In this revision cycle, the technical and subject matter experts recommend an adjustment to the minimum ceiling height required for basements in two-family homes. Without this revision, two-family homes have a more onerous effective ceiling height requirement than both single-family homes and multiple dwellings. This rationalization of ceiling heights will also help enable the creation of accessory basement apartments, which are an important component of New York City’s housing stock. These units serve new entrants to the housing market, multi-generational households, seniors aging in place, and homeowners in need of extra income to pay their mortgage. This is just one example of how reexamining our technical prescriptions can have a significant human impact.

CHPC fully supports the regular and careful consideration of the codes that shape our lives.

Thank you.

Summary: In March of 2017 Vincent Scarcella was asked to be a member of a code revision committee to update the 2014 New York City Construction Code. Later that year (2017) the committee began to meet and I asked Alex Grau to join me in the event I would need an alternate or assistance with references. Our work was mostly contained to the Mechanical Code but at numerous times we were asked to give opinions of other areas of the code and to the best of my recollection I have summarized those areas. Committee work was finished by May of 2019. Work was supported by Ron Hien and Bill Boyd. I kept Bob Norum up to date on progress. Since May of 2019 our changes went through the process of legal review, review by the full committee, review by various other committees, review by the mayor's office's and beginning April 2021 review by city council committee.

Strategy: All of our contributions were to reduce exposure to all parties and add clarity. The mechanical code had several areas where conflicting language and references were confusing and could lead to faulty construction and inspections. In every instance possible we used current international building codes (IBC), ASME Construction Codes (CC), National Board Inspection Codes (NBIC) and New York State Labor law (NYSLL), Fire and Mechanical Codes.

History: The first time I wrote a request for clarity within the construction codes in NYC in 1987. Through several administrations in the department of buildings and the mayor's office those requests were ignored. In 2006 John Spizuoco and I took over leadership in the Northeast and took an active role in engaging jurisdictions with the intent of creating better compliance and reducing CNA exposure. The Technical Director at that time, Robert Daly, was very receptive and in 2008 had the mayor's office recruit me to the committee. Since that time, I have been active in assisting various committee members and the staff at the NYC Department of Buildings with code interpretations.

Scope: There are areas throughout the building code where at various times we were asked to contribute, most if not all involved fired equipment, ASME Codes and pressure vessels. The majority of our contributions are in the New York City Mechanical Code MC 1001-1012. Table 1 is provided to list those changes. Table 2 list areas where we were asked to address areas outside the mechanical code. These happened within committee and in some cases as conversations outside of the committee meetings and the table should not be construed to represent every conversation over a decade of work.

Table 1 of RE-Written or New Sections in Chapter 10 of the New York City Mechanical Code

Mechanical Code Section	Description of change	Reference/reason
1004.1	Struck entire paragraph in order to update to currently accepted codes	IBC, NYS LL, ASME and NFPA Codes
1004.3.1	Struck para. In favor of a table for clarity	NYS LL and OSHA
1004.8	Outdated requirements updated	ASME CSD-1 and NFPA 85
1005.2	Pushed to plumbing code/trade	PC Section 604.2
1006.1-1006.4	Added current code references	IBC ASME
1006.5	Added "non-hazardous" discharge	ASME, NBIC NYS LL
1006,6	Added support and containment for Safety valves	ASME, NYS LL

Mechanical Code Section	Description of change	Reference/reason
1006.8.1	Changes to meet current code and clarification	ASME CSD-1, NFPA 85
1006.9	Added new CO detectors reduce exposure	IBC, OSHA
1007.1	Expanded for clarification, change to 400,000 btu not submitted by or supported by CNA	ASME Construction Codes and CSD-1
1007.2	Edits for clarification/consistency	ASME CSD-1
1007.3	Added new Maintenance for LWCO reduce exposure	ASME Section VI & VII, ASME CSD-1
1008.1	Additional language for proper valve sequence	NYSLL
1008.3	Addition for maintenance due to exposure	ASME Section VII
1010.2.1	Added reference	ASME CC and CSD-1
1011.1	Added, already a practice without guidelines	NBIC II
1011.3	Added, defined to reduce exposure	NBIC II & NYC CC
1011.4	Added, exposure driven	NYS LL & OSHA
1011.5	Added, no previous guidelines	NBIC & ASME CC

Table 2 contributions outside of Mechanical Code Chapter 10

Article or Section	Comments
101 & 105	Permitting for repairs, alterations and new/replacement equipment
303	Inspection requirements, frequencies, repairs and hazardous condition
401	HP boiler definition
BC 915	Carbon Monoxide detection
BC 3502	Referenced standards
MC	Various areas throughout the Mechanical Code
FGC 631.1	Standards for the fuel gas code and boilers

Actual as written changes in Mechanical Code Chapter 10 under consideration by council
(Exact form as of 4/27/21)

1004.1 Standards. ~~[Oil fired boilers and their control systems shall be listed and labeled in accordance with UL 726. Electric boilers and their control systems shall be listed and labeled in accordance with UL 834. Boilers shall be designed and constructed in accordance with the requirements of ASME CSD-1 and as applicable: the ASME Boiler and Pressure Vessel Code; 12 NYCRR Parts 4 and 14; and NFPA 85. Approval for oil fired boilers 350,000 Btu/h input (1025 kW) and above shall be obtained from the New York City Department of Environmental Protection.]~~ Boilers shall be designed, constructed and certified in accordance with the ASME Boiler and Pressure Vessel Code, Section I or IV, and 12 NYCRR Parts 4 and 14. Controls and safety devices for boilers with fuel input ratings of 12,500,000 Btu/h (3663 kW) or less shall meet the requirements of ASME CSD-1. Controls and safety devices for boilers with inputs greater than 12,500,000 Btu/h (3663 kW) shall meet the requirements of NFPA 85. Packaged oil-fired boilers shall be listed and labeled in accordance with UL 726. Packaged electric boilers shall be listed and labeled in accordance with UL 834. Approval for oil-fired boilers 350,000 Btu/h input (103 kW) and above shall be obtained from the New York City Department of Environmental Protection.

1004.3.1 Top clearance. ~~[High pressure steam boilers having a steam generating capacity in excess of 5,000 pounds per hour (2268 kg/h) or having a heating surface in excess of 1,000 square feet (93 m²) or input in excess of 5,000,000 Btu/h (1465 kW) shall have a minimum clearance of 7 feet (2134 mm) from the top of the boiler to the ceiling. Steam heating boilers and hot water heating boilers that exceed one of the following limits: 5,000,000 Btu/h input (1465 kW); 5,000 pounds of steam per hour (2268 kg/h) capacity or a 1,000-square foot (93 m²) heating surface; and high pressure steam boilers that do not exceed one of the following limits: 5,000,000 Btu/h input (1465 kW); 5,000 pounds of steam per hour (2268 kg/h) capacity or a 1,000-square foot (93 m²) heating surface; and all boilers with manholes on top of the boiler, shall have a minimum clearance of 3 feet (914 mm) from the top of the boiler to the ceiling. Package boilers, steam heating boilers and hot water heating boilers without manholes on top of the shell and not exceeding one of the limits of this section shall have a minimum clearance of 2 feet (610 mm) from the ceiling.]~~

Clearances from the tops of boilers to the ceiling or other overhead obstruction shall be in accordance with Table 1004.3.1.

**TABLE 1004.3.1
BOILER TOP CLEARANCES**

<u>BOILER TYPE</u>	<u>MINIMUM CLEARANCES FROM TOP OF BOILER TO CEILING OR OTHER OVERHEAD OBSTRUCTION (feet)</u>
<u>All boilers with manholes on top of the boiler except where a greater clearance is required in this table.</u>	<u>3</u>
<u>All boilers without manholes on top of the boiler except high-pressure steam boilers and where a greater clearance is required in this table.</u>	<u>2</u>
<u>High-pressure steam boilers with steam generating capacity not exceeding 5,000 pounds per hour.</u>	<u>3</u>
<u>High-pressure steam boilers with steam generating capacity exceeding 5,000 pounds per hour.</u>	<u>7</u>
<u>High-pressure steam boilers having heating surface not exceeding 1,000 square feet.</u>	<u>3</u>
<u>High-pressure steam boilers having heating surface in excess of 1,000 square feet.</u>	<u>7</u>
<u>High-pressure steam boilers with input not exceeding 5,000,000 Btu/h.</u>	<u>3</u>
<u>High-pressure steam boilers with input in excess of 5,000,000 Btu/h.</u>	<u>7</u>
<u>Steam-heating boilers and hot water-heating boilers with input exceeding 5,000,000 Btu/h.</u>	<u>3</u>
<u>Steam-heating boilers exceeding 5,000 pounds of steam per hour.</u>	<u>3</u>
<u>Steam-heating boilers and hot water-heating boilers having heating surface exceeding 1,000 square feet.</u>	<u>3</u>

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m², 1 pound per hour = 0.4536 kg/h, 1 Btu/hr = 0.293 W.

1004.8 Burner controls. Gas and oil modulating burners shall be provided with burner controls (oil and gas equivalent ratings) in accordance with [Table 1004.8] ASME CSD-1 and NFPA 85.

**[TABLE 1004.8
MINIMUM CONTROL REQUIREMENTS**

TYPE OF CONTROL	GROSS OUTPUT FIRING RATE OF THE BOILER OR THE BURNER OIL DELIVERY RATE (gph), WHICHEVER IS GREATER		
	#6 Oil	#4 Oil	#2 Oil
On-Off	—	—	<10
Low-High-Off with low fire start	20 to <30	10 to <30	10 to <30
Low-High-Low-Off with proven low fire start	30 to <50	30 to <50	30 to <50
Full Modulation with proven low fire start	>50	>50	>50
Full Modulation with proven low fire start as well as cross-limited oxygen trim (dry cell electrochemical type)	>350	>350	>350

1005.2 Potable water supply. The water supply to all boilers, including but not limited to backflow prevention, shall be connected in accordance with the *New York City Plumbing Code*.

1006.1 Safety valves for steam boilers. ~~[All steam]~~ Steam boilers shall be protected with a safety valve in accordance with the *ASME Boiler and Pressure Vessel Code* or ASME CSD-1.

1006.2 Safety relief valves for hot water boilers. Hot water boilers shall be protected with a safety relief valve in accordance with the *ASME Boiler and Pressure Vessel Code* or ASME CSD-1.

1006.3 Pressure relief for pressure vessels. ~~[All pressure]~~ Pressure ves-sels shall be protected with a pressure relief valve or pres-sure-limiting device as required by the manufacturer’s ~~[installation]~~ instructions for the pressure vessel and in accordance with the *ASME Boiler and Pressure Vessel Code* or ASME CSD-1.

1006.4 Standards of safety and safety relief valves. Safety and safety relief valves shall be listed and labeled, and shall have a minimum rated capacity for the equipment or appliances served. Safety and safety relief valves shall be set at ~~[a maximum of]~~ not greater than the nameplate pressure rating of the boiler or pressure vessel and shall be in accordance with the ASME Boiler and Pressure Vessel Code or the ASME CSD-1.

1006.5 Installation. Safety or relief valves shall be installed directly into the safety or relief valve opening on the boiler or pressure vessel. Valves shall not be located on either side of a safety or relief valve connection. The ~~[safety or]~~ relief valve drain shall discharge by gravity to a nonhazardous point of discharge without obstruction ~~[to a nonhazardous point of discharge].~~ ~~[The discharge piping shall drain by gravity without traps.]~~

1006.6 Safety and relief valve discharge. Safety and relief valve discharge pipes shall be of rigid pipe that is approved for the temperature of the system. The discharge pipe shall, at a minimum, be the same diameter as the safety or relief valve outlet. Safety and relief valve discharge pipes shall be properly supported to prevent stress on the valve and vessel. Safety and relief valves shall not discharge so as to be a hazard, a potential cause of damage or otherwise a nuisance. Discharge of hazardous materials must be properly contained in a method approved by the department. High-pressure-steam safety valves shall be vented to the outside of the structure. Where a low-pressure safety valve or a relief valve discharges to the drainage system, the installation shall conform to the *New York City Plumbing Code*.

1006.8.1 Remote control (shutdown). A remote control shall be provided to stop the flow of oil and/or gas and combustion air to any burner or fuel-burning internal combustion equipment. Such a control shall be ~~[located outside all]~~ provided along every means of egress ~~[to]~~ from the room in which the burner or equipment is located ~~[and as close to such entrances as practicable, except that when an outside location is impracticable, such control may be located immediately inside the room in which the burner or equipment is located, provided such location is accessible at all times].~~ ~~[All such controls]~~ Each remote control shall be located outside of, but as close as practicable to the burner or equipment room itself and shall be labeled: "REMOTE CONTROL FOR BURNER."

Exception: Where an outside location is impracticable, the remote control shutdown may be provided immediately inside the room in which the burner or equipment is located. Such location must be accessible at all times.

1006.9 Carbon monoxide detectors. Carbon monoxide detectors shall be provided in all fuel-fired appliance rooms to detect the level of carbon monoxide in the room and signal an alarm. Such detectors shall be listed and installed in accordance with Chapter 9 of the *New York City Building Code*.

1007.1 General. ~~[All steam]~~ Steam and hot water boilers shall be protected with dual low-water cutoff control, with each control independently piped to the pressure vessel in accordance with ASME CSD-1. For hydronic boilers, the low-water cut out may be located in the supply piping above the boiler before any intervening valve. A flow-sensing control installed in accordance with ASME CSD-1 shall be considered a low-water cutoff for the purposes of this section.

1007.2 Operation. ~~[The low]~~ Low-water cutoff controls and flow-sensing controls required by Section 1007.1 shall automatically stop the combustion operation of the appliance when the water level drops below the lowest safe water level as established by the manufacturer and in accordance with ASME CSD-1, or when water circulation stops, respectively.

1007.3 Low-water cut out maintenance and testing. Low-water cut outs shall be maintained in accordance with ASME CSD-1 and the manufacturer's specifications. An operator shall test low-water cut outs as follows: (1) high pressure steam boilers every shift, (2) low pressure steam boilers daily and (3) hot water boilers monthly. Slow drain tests shall be conducted for steam boilers every six months. Every year, low-water cut outs and associated piping for steam boilers shall be opened, cleaned and inspected. Records of all testing, cleaning, and inspection required by this section shall be maintained, and made available to the department upon request.

Low-water cut outs shall be maintained in accordance with ASME CSD-1 and the manufacturer's specifications. Operators shall test low-water cut outs for high pressure steam boilers during every shift, and low pressure steam boilers shall be tested daily. Hot water boilers shall be tested monthly. Slow drain tests shall be documented for all steam boilers every six months. Steam boiler low-water cut outs and associated piping shall be opened annually, cleaned and inspected.

1008.1 General. Every boiler shall be equipped with blowoff/blowdown valve(s). The valve(s) shall be installed in the openings provided on the boiler. The minimum quantity and size of ~~[each valve]~~ the valve(s) and associated piping shall be the quantity and size specified by the boiler manufacturer or the quantity and size of the boiler blowoff/blowdown valve opening. Where the maximum allowable working pressure of the boiler exceeds 15 psig (103 kPa), two bottom blowoff valves shall be provided consisting of either two slow-opening valves in series or one quick-opening valve and one slow-opening valve in series, with the quick-opening valve installed closest to the boiler.

1008.3 Maintenance. Blowdown lines shall be inspected annually to verify they are free of deposits and in good working condition.

1011.1 Tests. Upon completion of the assembly and installation of boilers and pressure vessels, acceptance tests shall be conducted in accordance with the requirements of the *ASME Boiler and Pressure Vessel Code*. Boilers shall not be placed in operation upon completion of construction until they have been inspected and tested and a certificate of compliance has been issued by the commissioner. All final inspections and tests for boilers shall be ~~[made]~~ witnessed by a qualified boiler inspector in the employ of the department or a duly authorized insurance company as provided in Section 204 of the Labor Law of the State of New York. Equipment having an input of not more than 350,000 Btu/h (103 kW) shall be exempt from this requirement. Where field assembly of pressure vessels or boilers is required, a copy of the completed H-2, P-2 or U-1 Manufacturer's Data Report and the completed Appendix C of ASME CSD-1 required by the *ASME Boiler and Pressure Vessel Code* shall be submitted to the department.

1011.1.1 Fitness for service. When a boiler or pressure vessel has exceeded its useful life or has been subjected to an event that may have impacted the integrity of the pressure vessel, the department may require that a fitness for service study be completed. The study shall be completed in accordance with the *National Board Inspection Code* Part 2, Section 4, and documented in accordance with the National Board 403 form.

1011.3 Periodic boiler inspections. Periodic boiler inspections shall be performed in accordance with [~~Section 28-303~~] Article 303 of Chapter 3 of the *Administrative Code*. In addition, boiler inspections shall:

1. Be completed in accordance with the *National Board Inspection Code*.
2. Include the review of testing documentation for all controls and safety devices.
3. Verify that the flue connection from the boiler to the chimney is properly sealed and in good working condition.
4. Verify that the combustion air system as originally designed is operational.
5. Verify that the High Pressure Operators' licenses are current and that Low Pressure Operators are qualified per New York State requirements.
6. Include a permanent record of the visit.
7. Be subject to the quality control measures of the department.

1011.4 Pressurized systems containing hazardous materials. Any pressurized system that contains hazardous materials or presents a physical hazard by release shall be pre-approved for installation, subject to testing, and subject to inspection by the department.

1011.5 Nondestructive examination. When required by the department, the nondestructive examination (NDE) requirements, including technique, extent of coverage, procedures, personnel qualification, and acceptance criteria, shall be performed in accordance with the applicable provisions of the edition of the code of construction for the pressure-vessel in effect at the time of installation. Weld repairs and alterations shall be subject to the same nondestructive examination requirements. Where this is not possible or practicable, alternative NDE methods acceptable to the inspector and the department may be used.



TESTIMONY TO THE NEW YORK CITY COUNCIL BUILDINGS COMMITTEE

JUNE 14, 2021

BUILDING CODE AND EXTERIOR FINISHING SYSTEMS

Representing the various members and affiliates of the EIFS industry, EIMA speaks for these systems in jurisdictions across the country. There are numerous award-winning buildings across the five boroughs that have incorporated EIFS into their innovative designs. Regarding this process and outcome of the codes specifically, there are a number of key points related to the proposal. This process was allegedly a mediated compromise between partners and the City—this is not the case. Further, there are questions about the efficacy of those systems tested abroad and the standards on exterior systems produced in the United States, and the quality of codes in the United States. Ultimately, the role exterior systems play in energy efficiency will be key for the City to achieve future building standards. The solution to this process is a simple adjustment to the legislation and proposed code to account for the tested standards of the building material, the NFPA standards.

The process being discussed has been portrayed as a compromise between industries and the City, but this is simply not the case. The new rules being proposed are a defacto ban on the system as it exists and is applied. Many of our producers and partners would be unable to use the system here, and with this being a key market, there are concerns this would impact other jurisdictions in the country.

One point of contention was the testing of systems in the United States vs those manufactured in other countries like China. Comments have been made about a catastrophic fire in Shanghai, China involving a building clad with foam insulation. Partially in response to this incident, the People's Republic of China asked the International Code Council to visit the country to assess why the Chinese had problems the United States did not. EIMA was invited by the ICC to participate in a joint delegation to China, a meeting hosted by the Tianjin Fire Research Institute. In China, the TFRI personnel said foam would melt and float to the floor and catch fire. In the United States, the EIFS industry does 'backwrapping', encapsulating the melted foam in the system, and protecting the building. The standard of the system in the US is higher because of superior international code.

Keeping a new standard that is untested—replacing one that has been in-place for a number of decades—could result in more harm than good. NFPA code 285 has ensured strong fire protection through experience; this is why so many jurisdictions trust the codes. To keep this tested system in-place, adjusting the language of the legislation slightly to reflect that national codes would maintain safety and allow the technology to be utilized.



What makes EIFS unique and important component for New York City at this juncture are the impact they can have in the war on carbon. Exterior cladding is the most cost-effective, efficient way to reduce energy costs for small homes. There are examples of buildings in New York that operate as offices and affordable housing at 1/3 the cost of a traditional building of the same size. As building standards are extended to smaller square footage thresholds, EIFS will play a key solution for home and building owners making energy upgrades.

We applaud the City's efforts to update their building codes and are happy to play a proactive role. At this juncture, we cannot support this legislation sans changes that incorporate the NFPA 285 code. The issue is not the system but inspection and regulation of an otherwise reliable, efficient material.

Testimony of the
EIFS Industry Members Association to the
Committee on Housing & Buildings of the
New York City Council
June 14, 2021

On the Subject of New York City Council Bill No. 2261 and
Support for Code Compliant, Tested, and High Performing Building Materials and Systems

My name is David Johnston, and I am the Executive Director and CEO for the EIFS Industry Members Association. I thank you for the opportunity to present the views of the EIFS Industry Members Association, also known as EIMA. The welfare of and fire safety for building occupants, fire fighters and property is the highest priority of EIMA.

EIMA has 750 members, many of whom live and work in the City of New York. This membership includes EIFS manufacturers, EIFS distributors, contractors and architects. These New York City-based members as well as the entire Exterior Insulation and Finish Systems (EIFS) industry oppose the language being considered. In the last two years, over 452 EIFS projects, many of them award-winning, have been constructed within the City of New York, resulting in greater energy-efficiency and lessening damage to the New York City environment.

The EIFS industry prides itself on whole building performance. That means everything from providing green building technologies, the ability to reduce carbon emissions, successful fire safety tests, and sustainable designs. Unfortunately, language in Bill 2261 pertaining to fire-blocking will result in a de facto ban on EIFS industry if it passes.

EIMA opposes the fire-blocking requirements in the strongest possible terms for these reasons:

- Building owners will lose a cost-effective exterior wall cladding to achieve needed energy-efficient requirements that are established by the City of New York;
- Architects will lose a design solution to achieve energy-efficiency requirements, a solution that designers depend upon to achieve design excellence;
- New York City will lose a tool in the fight against carbon emissions and climate change. A tool that exceeds all of the stringent fire tests, is code-compliant, and is a proven high performing building system, and;
- With the introduction of Bill 2261, New York City has designed and is attempted to have used an altered EIFS systems that is totally untested. Registered design professionals will be authorized under this bill to use this untested system if they deem it safe in their professional judgement.

For the above reasons, the EIFS Industry Members Association respectfully requests the proposal to require use of the International Building Code language and to provide an exemption for those high performance building systems that have passed the stringent NFPA 285 test on fire safety.

Thank you for your time and your continual efforts on behalf of the wonderful residents of New York City.

Date: 06-11-21

Subject: Int. No. 2261

My name is Cory George and I represent Energex Wall Systems of Edison, NJ. We are a local Stucco & EIFS (Exterior Insulation & Finishing Systems) manufacturer who focuses on sustainable and ethical installation of continuous insulation systems in the greater Tri-State area.

I am writing this letter today to state our support for the proposed changes in today's hearing. In our over 40 years of experience, Energex Wall Systems feels that Fireblocking shall not be required where the exterior wall covering has been tested in accordance with, and complies with the acceptance criteria of, NFPA 285. The exterior wall coverings shall be installed as tested in accordance with NFPA 285. We feel very strongly about this position as the evidence of the real-world applications shows successful deployment of these types of systems time and time again.

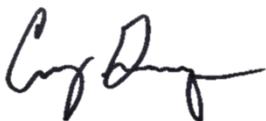
The NFPA(National Fire Protection Agency), being a worldwide leader in fire protection and safety, has developed NFPA 285 as the gold standard in evaluating the fire propagation characteristics of exterior non-load bearing wall assemblies. The NFPA 285 test takes a wall assembly and puts it through rigorous testing and thus has a very high bar for approval. It is this extra effort made by the manufacturers represented today and the National Fire & Protection Agency that provides a proven and tested level of performance.

The National Fire & Protection Agency utilizes real-world data from around the globe to inform their requirements. Their creation of the NFPA 285 is fueled by the knowledge gained from previous events and then brought together to ensure its members and design professionals that smart and ethical deployment of such systems are possible and in fact, paramount. NFPA 285 is constantly gaining worldwide acceptance as its track record is continuously being reinforced.

These struggles are born out of the immediate need for continuous insulation to help support the green initiatives being enacted across the world. In order to meet these energy efficiency challenges of the future, we need to ensure that we are deploying these materials in a thoughtful and mindful manner. The NFPA 285 is one of these litmus tests for our industry.

Being one of the manufacturers who has taken the time and effort to ensure that we comply with NFPA 285 fully, has allowed us to insure we supply wall systems that meet the highest standards in the industry. We do not just feel that our products are safe... we know they are. We know they are because that have been put through the most brutal sort of test imagined, designed by an organization of 50,000 members who takes data from real-world applications to create the standards and methods we are held by.

Sincerely,



Cory S George

Regional Sales Manager

Energex Wall Systems

Fireblocking Language in Int 2261-2021

The Rainscreen Association in North America is comprised of 80+ member companies. The members consist of designers, contractors, manufacturers, engineering firms, consultants, and more. The vast majority of our membership does consistent work in New York City and the surrounding areas. We are writing this letter to voice the problematic nature of the proposed language surrounding fireblocking in Int 2261 – 21. These are the proposed changes to the NYC Building Code Chapter 7, Chapter 14, Chapter 26, and various other places.

The Rainscreen Association in North America supports all changes to the building codes that will result in healthy, safe and high-performance buildings. It is not clear that the proposed language meets those standards when viewed in its entirety. The language appears to affect more than specific materials; it limits the use of an enclosure geometry that has been proven to work for more than 400 years. This geometry is referred to as a Rainscreen System.

While there are certain sections of the proposed language that we support for adoption, much of the language is unclear and confusing. There are many changes to construction practices, but the related performance requirements remain unchanged. Adoption of this language will further confuse already complex issues and make it more difficult to design and achieve compliant walls.

We depend upon our ability to understand, anticipate, design, and build compliant walls. As is, it is unclear how to design any separated cladding while maintaining water and thermal control as necessary to meet other NYC performance requirements like Local Law 97.

We request the Department of Buildings revisits the code language with public participation to secure a path forward to implementation of clear compliance requirements that can be anticipated, designed, and constructed. This will improve the overall health and safety of building in New York City. If adopted as currently written, the language will be problematic, cause enforcement confusion and could potentially have significant negative consequences to the health and safety of the building occupants. We understand the intent of the proposed changes and will work with the Department to develop an implementation process for the benefit of the building's owners and occupants.

THE NAME OF GRACE GOLD ADDED TO LOCAL LAW 11

I, Dr. Dolores Spivack, AIA, PhD, give testimony to have the name of Grace Gold added to NYC's Local Law 11, a.k.a. FISP.

I have been a practicing, licensed architect in New York for the past 40 years. Almost all of my practice has been in the repair and expert witness testimony for New York City facades, both in the private and public sectors. I have personally dropped down the facades of buildings from 7 stories to 100 stories to generate repair designs. My practice has also included working in the NYC Buildings Department in the Façade Unit.

My research into façade failure notes an important factor: the overwhelming majority of façade failure is known to building owners who wish to defer repair costs. This places the public at an enormous risk to enormous sorrow.

In connecting the name of a real person, who was tragically killed, to Local Law 11, the risk factor becomes real and personal. Forty years ago Grace Gold was killed, at just the start of her life, by deferred repair of masonry and its related costs. I implore the New York City Council to add the name of Grace Gold to Local Law 11. NYC has been at this country's forefront for façade safety. Please let this continue by adding the name of Grace Gold to LL11.



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June 14, 2021

Good morning Chairman, Members and Staff of the City Council Committee on Housing and Buildings. My name is Dottie Mazzarella. I am the Vice President of Government Relations for the International Code Council (ICC). The ICC is a member-focused association dedicated to helping the building community provide safe, resilient, and sustainable construction through the development and use of model codes (I-Codes) and standards used in the design, construction, and compliance processes. Most U.S. states and communities, federal agencies, and many global markets choose the I-Codes to set the standards for regulating construction, plumbing and sanitation, fire prevention, and energy conservation in the built environment.

I appreciate the opportunity to submit testimony in support of Int. 2261 to update the Administrative Code of the City of New York, the New York City Plumbing Code, the New York City Building Code, the New York City Mechanical Code and the New York City Fuel Gas Code, in relation to bringing such codes and related provisions of law up to date with the 2015 editions of the International Building, Mechanical, Fuel gas and Plumbing Codes, with differences that reflect the unique character of the City.

The I-Codes are currently adopted at the state or local level in all 50 States, the District of Columbia, Guam, Northern Mariana Islands, the U.S. Virgin Islands, Puerto Rico and here in New York City. The I-Codes are also used internationally in the Caribbean, Central America, the Middle East, Georgia, and Mexico.

The I-Codes are revised and updated every three years by a national consensus process that strikes a balance between the latest technology and new building products, economics and cost while providing for most recent advances in public and first responder safety and installation techniques. The I-Codes are correlated to work together without conflicts to eliminate confusion in building design or inconsistent code enforcement among different jurisdictions.

The ICC Code Development Process is an open, inclusive process that encourages input from all individuals and groups and allows those governmental members, including representatives from NYC, to determine the final code provisions. I am pleased that several members of the Buildings Department staff and other organizations in the City participated in the most recent ICC Code Hearings, and as a result, several provisions of the current NYC Construction Codes and other Local Laws have been incorporated into the 2015 I-Codes. This involvement and participation is critical to the success of future versions of the I-Codes. The technical and practical expertise of NYC building and fire officials, design professionals, builders, contractors, labor representatives and all organizations interested in building safety are vital to your adoption efforts as well as ours.

New York City is one of many jurisdictions that values public and first responder safety and the protection of our built environment by updating building, plumbing, mechanical, fuel gas, fire, and energy codes. By regularly updating your construction codes, the City provides the safest and economically prudent climate for its citizens since it will allow the use of new construction standards or methods. Accordingly, Int. 2261 will update the City's Construction Codes to reflect enhanced building, construction safety, accessibility, sustainability, and resiliency provisions. Lastly, I would like to commend the Department of Buildings for once again leading a transparent and inclusive process of code adoption - every affected organization was invited to participate in the process. In fact, the NYC Code adoption process and the "Code Revision Cycle Handbook" served as a model for the City of Chicago.

The International Code Council is honored to partner with the City of New York, and we look forward to continuing to serve your needs. Thank you for the opportunity to present testimony to you today in support of Int.2261, I hope the City Council will pass the code expeditiously. I am happy to answer any questions you may have or provide additional documentation.

Sincerely,

Dorothy Mazzarella
Vice President, Government Relations
International Code Council
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518-852-6025

Testimony of Janice Lintz, CEO/Founder Hearing Access & Innovations

June 14, 2021

Hello. My name is Janice Schacter Lintz, and I'm the CEO of Hearing Access Innovations; I spearheaded most of the city's hearing induction loops, including 3,000 taxis, 482 subway information booths/call boxes, museums, and theaters in NYC. As far as I am aware, I am also the only person tracking global best practices for people with hearing loss. I was appointed to various federal, state, and city committees, including the FCC's Consumer Advisory Committee and the US Access Board's Passenger Vessel and Rail Committees. I'm also the mother of a 27-year-old daughter who has hearing loss.

I am here today to discuss why the new requirements for elevators need more specificity for the 48M people with hearing loss. When they developed the standards, ASME failed to consult anyone with hearing loss and relied on allowing people to just comment, which is not an effective way to get appropriate input.

The standard of two-way communication that ASME created is unclear. In the absence of clear specificity, venues rely on vendors to select the access rather than choosing what is most suitable for the end users, people with hearing loss.

Elevators need to provide both auditory and visual forms of effective communication in order to reach the full spectrum of people with hearing loss. The auditory aspect can be met with induction loops, which countries such as Nigeria, England, and Azerbaijan offer in their elevators. NYC should do the same.

Thank you for your time.

Three-Prong Approach to Effective Communication

Effective Communication



Visual

Captioning



Auditory

Assistive Listening System / Devices



Qualified Interpreters

Sign Language



Some Hearing Loss / Deaf
No Hearing Aids or ASL

Moderate to Profound Hearing Loss
Hearing Aids or Cochlear Implant

Deaf / Signs

Case Study: NYC's Hearing Access



AMERICAN MUSEUM OF NATURAL HISTORY



eMOM Children's Museum of Manhattan



INTREPID SEA, AIR & SPACE MUSEUM COMPLEX



MoMA



NEW-YORK HISTORICAL SOCIETY MUSEUM & LIBRARY



NYBG NEW YORK BOTANICAL GARDEN



TENEMENT MUSEUM

Hearing Access in Elevators Globally

Azerbaijan



Nigeria



United Kingdom



Bird Home Automation launches accessible door communication add-on



To the Committee on Housing and Buildings,

As I stated during my public testimony today I am in favor of the above subject bill. I do have 2 suggested improvements for your consideration:

The first suggestion is regarding the proposed building code chapter 11. The suggested language shown below I believe would remove ambiguity and would result in better consistency in the implementation of the various manufacturers.

1109.7.2.2.4.2 Step scanner. Step scanners shall consist of three horizontally arranged buttons. The center button shall serve as the “select” button and may also serve as the accessibility function button. The button to the right of the center button shall be the “up” button and the button to the left of the center button shall be the “down” button. When the “up” and “down” buttons are pressed and released, the scanner shall announce the next floor above and below, respectively. When the user releases the “up” or “down” button, the system shall pause to allow the user to press the “select” button. If the “select” button is not chosen, the system shall resume at the next floor in the sequence when the button is again depressed. In buildings with more than ten floor levels, when the “up” or “down” buttons are depressed and held for more than three seconds, the scanner shall increment/decrement the floor announced by 10 present options for floor selection in groups of ten beginning with the next group of ten above or below the floor last announced. ~~An interval of silence, one second minimum and two seconds maximum, shall be provided between such announcements.~~

My second suggesting is regarding the requirement for occupant evacuation elevators that appear in Appendix K of the proposed building code. The attached document shows revisions to these requirements that are now published in ASME A17.1-2019. These revisions were the result of feedback from actual installations of occupant evacuation elevators. I believe that it would be beneficial for NYC to adopt these changes.

Thanks you for your consideration.

Best regards,

Jeffrey Blain
ewcg

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Record 16-2357

REVISED in response to 1st Consideration Ballot 17-2268

October 23, 2017

This record expands on the approved Record 15-636 that modifies A17.1/B44-2016.

Section 1.3 Definitions

elevator discharge level: the ~~floor~~ elevator lobby, served by an elevator or group of elevators, that occupants will use to evacuate using occupant evacuation operation. ~~leave the building during an emergency evacuation.~~

Rationale: To clarify that the elevator discharge level applies to both a single and a group of elevators and to indicate that the discharge level is the elevator lobby to which building occupants are evacuated and that it could also include a sky lobby level during occupant evacuation operation.

Section 2 Electric Elevators

2.27.3.1.2 An additional key-operated ~~“FIRE RECALL”~~ fire recall switch, with two positions that will not change position without a deliberate action by the user, marked “OFF” and “ON” (in that order), shall be permitted. ~~only at the fire command center.~~ It shall be labeled “FIRE RECALL” and identify the elevator(s) it controls.

~~NOTE (2.27.3.1.2): In jurisdictions enforcing NBCC, the Fire Command Center (FCC) is known as the Central Alarm and Control Facility (CACF).~~

NOTE (2.27.3.1.2): The building code or fire authority may require this switch at a specific location.

Rationale: To require labelling which recognizes the current industry practice of indicating the elevators which the switch controls. Revise Note (2.27.3.1.2) to make it consistent with the building code for the switch location and to clarify the local authority may specify a different switch location from IBC/NBCC. Change to lower case font to follow the same style as the rest of A17.1/B44 when referencing to these recall switches.

2.27.3.1.6 When a ~~“FIRE RECALL”~~ fire recall switch is in the “ON” position all cars controlled by the switch shall operate as follows:

(a) A car traveling ...

...

(j) Where an additional two-position ~~“FIRE RECALL”~~ fire recall switch (see 2.27.3.1.2) is provided, both ~~“FIRE RECALL”~~ fire recall switches shall be in the “ON” position to recall the elevator to the designated level if the elevator was recalled to the alternate level (see 2.27.3.2.4).

(k) To remove the elevator(s) from Phase I Emergency Recall Operation, the ~~“FIRE RECALL”~~ fire recall switch shall be rotated first to the “RESET,” and then to the “OFF” position, provided that

(1) the additional two-position ~~“FIRE RECALL”~~ fire recall switch and car fire recall switch(es) (see 2.27.11.1.2), where provided, ~~is~~ are in the “OFF” position

(2) no fire alarm initiating device is activated (see 2.27.3.2)

(l) Means used ...

...

(n) If the normal power supply, ...

(5) A car stopped at a landing shall not move until normal power, emergency power, or standby power becomes available.

NOTE [2.27.3.1.6(f)(2)]: In jurisdictions enforcing NBCC, the Fire Command Center (FCC) is known as the Central Alarm and Control Facility (CACF).

Rationale: To relocate the note with the first use of the term “fire command center” from after 2.27.3.1.2 to after 2.27.3.1.6(n)(5) where the term first appears in 2.27.3.1.6(f)(2). Change to lower case font to follow the same style as the rest of A17.1/B44 when referencing to these recall switches. To clarify the two-position fire recall switch. To allow the group fire recall switch to remove individual cars from fire service when placed on fire service by the car fire recall switch provided the switches are in the “OFF” position.

2.27.3.2.3 Phase I Emergency Recall Operation to the designated level shall conform to the following:

- (a) The activation of a fire alarm initiating device specified in 2.27.3.2.1(a) or 2.27.3.2.2(a) at any floor, other than at the designated level, shall cause all elevators that serve that ~~floor~~ lobby, and any associated elevator of a group automatic operation, to be returned nonstop to the designated level.
- (b) The activation ...

Rationale: To clarify the change made in A17.1-2013 by TN 10-1883 that an active FAID in one elevator group’s lobby shall recall only elevators associated with that lobby and not recall elevators that service the floor by a separate elevator lobby.

2.27.4.1 Phase I Emergency Recall Operation. A three-position key-operated switch shall be provided at the designated level for each single elevator or for each group of elevators. The three-position switch shall be labeled “FIRE RECALL” and its positions marked “RESET,” “OFF,” and “ON” (in that order), with the “OFF” position as the center position. The “FIRE RECALL” letters shall be a minimum of 5 mm (0.25 in.) high in red or a color contrasting with a red background. The three-position switch shall be located in the lobby within sight of the elevator or all elevators in that group and shall be readily accessible.

An additional key-operated “FIRE RECALL” fire recall switch, with two positions, that will not change position without a deliberate action by the user, marked “OFF” and “ON” (in that order), shall be permitted~~only at the fire command center.~~ It shall be labeled “FIRE RECALL” and identify the elevator(s) it controls.

The switch(es) ...

...

Where an additional two-position “FIRE RECALL” fire recall switch is provided, both ~~“FIRE RECALL” fire recall~~ switches must be in the “ON” position to recall the elevator to the designated level if the elevator was recalled to the alternate level.

Where an additional two-position “FIRE RECALL” fire recall switch is provided, it shall not affect the visual signal if the designated level fire alarm initiating device (see 2.27.3.2.4) has been activated.

To extinguish...

NOTE (2.27.4.1): The building code or fire authority may require this switch at a specific location.

Rationale: To capture the current industry standard practice of indicating the elevators which the switch controls. Add Note (2.27.4.1) to make it consistent with the building code and 2.27.3.1.2. Change to lower case font to follow the same style as the rest of A17.1/B44 when referencing to these recall switches. To clarify which additional fire recall switch.

2.27.7.1 Instructions for operation of elevators under Phase I Emergency Recall Operation shall only be incorporated with or adjacent to the ~~“FIRE RECALL” fire recall~~ switch required by 2.27.3.1.1 at the designated level. The instructions shall include only the wording shown in Fig. 2.27.7.1.

Rationale: To clarify that the instruction signage applies only to the group fire recall “red” switch (see 2.27.3.1.1(b)) and the instruction signage will not apply to the OEO per car fire recall “yellow” switch (see

2.27.11.1.2(b)). *The instruction signage for the “red” group fire recall switch is more than sufficient for a trained fire fighter to understand the use and operation of the “yellow” car fire recall switch(es) in a single elevator or a single group of elevators or multiple group of elevators operating on OEO. Change to lower case font to follow the same style as the rest of A17.1/B44 when referencing to these recall switches.*

2.27.11 Occupant Evacuation Operation Where elevators are designated as occupant evacuation elevators by the building code ~~provided for occupant evacuation~~, Occupant Evacuation Operation (OEO) shall be provided and to function prior to Firefighter’s Emergency Operation and shall conform to 2.27.11.1 through 2.27.11.6. See also Nonmandatory Appendix V.

NOTE (2.27.11): Where destination-oriented control for operation is used, “car destination demand” should be substituted for “car call” and “landing call demand” should be substituted for “landing call”.

***Rationale:** To clarify the difference between Occupant Evacuation Operation (OEO) of A17.1 and Occupant Evacuation Elevators (OEE) of the building code. To delete any implied operational requirement and instead reference the actual requirements. To clarify that when destination-oriented control systems are used for OEO and how to modify the terms car and landing call.*

2.27.11.1 Phase I Emergency Recall Operation with OEO. When OEO is provided, the ~~The~~ requirements of 2.27.3.1 shall be modified as follows.

***Rationale:** The items under 2.27.11.1 are modifications for FEO when OEO is provided. To clarify this affects the fire service operation of the elevators even if OEO is currently not active.*

2.27.11.1.1. ~~The three position switch in the lobby (2.27.3.1.1) and two position switch in the fire command center (2.27.3.1.2) shall be modified and labeled “GROUP FIRE RECALL” and indicate the elevator group that they control.~~ For groups of two or more elevators only, the label for the three-position switch in the lobby (2.27.3.1.1) and the two-position switch (2.27.3.1.2) shall be modified to “GROUP FIRE RECALL”.

***Rationale:** To clarify for a group of two or more cars, the modification only applies to the labelling of the group fire recall switch(es) and recognize the labelling for group that is controlled by the two position switch is now specified by 2.27.3.1.2. The modified labelling is not permitted for a single car, not in a group.*

2.27.11.1.2 ~~An additional three position key operated individual “CAR FIRE RECALL” switch per elevator, that will not change position without a deliberate action by the user, shall be located in the lobby at the elevator discharge level adjacent to the elevator it controls. Each switch shall be labeled “CAR — FIRE RECALL” (with the car identification, as specified in 2.29.1, inserted), and its positions marked “RESET,” “OFF,” and “ON” (in that order) in letters a minimum of 5 mm (0.25 in.) high. Text shall be black on a yellow background. Each switch shall~~ For groups of two or more elevators only, an additional three-position switch shall be provided for each elevator. This switch shall

(a) conform to 2.27.3.1 and 2.27.8, except 2.27.3.1.2, and as modified by 2.27.11.1.2(b) through (d)

(b) be labeled “CAR FIRE RECALL” or “CAR — FIRE RECALL” with black text on a yellow background. The elevator identification assigned in 2.29.1.1 shall be adjacent to the label “CAR FIRE RECALL” or inserted in the label “CAR — FIRE RECALL”. When the identification is not inserted in the label, the elevator identification shall be black text on a background that contrasts with black.

(c) be located at the elevator discharge level adjacent to the elevator it controls

(d) control the associated elevator in conformance with 2.27.3.1.6, but shall not control the other elevators controlled by the group fire recall “GROUP FIRE RECALL” switch (see 2.27.11.1.1).

NOTE (2.27.11.1.2(b)): For example, “CAR A1 FIRE RECALL”

Rationale: To clarify for a group of two or more cars, that an additional FEO key switch shall meet the requirements of 2.27.3.1 and 2.27.8. To clarify that the switch is required to be marked with the unique car number of 2.29.1.1 and “CAR FIRE RECALL” and provide an editorial change where “GROUP FIRE RECALL” changes to “group fire recall” to follow the same style as the rest of A17.1/B44. The additional “CAR FIRE RECALL” switch is not permitted for a single car, not in a group. To clarify the labelling requirements of the switch and car identification including an example as a NOTE.

2.27.11.1.3 Each individual ~~“CAR FIRE RECALL”~~ car fire recall switch shall initiate Phase I Emergency Recall Operation for the elevator it controls when placed in the “ON” position. Each ~~“GROUP FIRE RECALL”~~ group fire recall switch shall initiate Phase I Emergency Recall Operation for the elevators it controls when placed in the “ON” position.

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. Change to lower case font to follow the same style as the rest of A17.1/B44 when referencing to these recall switches.

2.27.11.1.4 Each individual ~~“CAR FIRE RECALL”~~ car fire recall switch shall be provided with an illuminated visual signal ~~to indicate when Phase I Emergency Recall Operation is in effect for that car (see in compliance with 2.27.3.1.5).~~

Rationale: To follow the same style as the rest of A17.1/B44 when referencing to fire recall switches and to reference the 2.27.3 requirement for the associated illuminated visual signal instead of repeating the requirement.

2.27.11.1.5 To remove an individual elevator from Phase I Emergency Recall Operation, the individual ~~“CAR FIRE RECALL”~~ car fire recall switch shall be rotated first to the “RESET,” and then to the “OFF” position, ~~provided that and the following conditions exist:~~

- (a) the ~~“GROUP FIRE RECALL”~~ group fire recall switch is in the “OFF” position
- (b) ~~and~~ the additional two-position ~~“GROUP FIRE RECALL”~~ group fire recall switch (see 2.27.3.1.2); where provided, ~~are~~ is in the “OFF” position
- (b) no fire alarm initiating device is activated (see 2.27.3.2).

When ~~the elevator(s) are an individual elevator is~~ removed from Phase I Emergency Recall Operation by its individual car fire recall switch per 2.27.11.1.5 while other elevators in the group are operating under OEO, the individual elevator shall return to OEO, OEO remains in effect.

NOTE (2.27.11.1.5(a)): See 2.27.3.1.6(k)

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. To clarify that the individual elevator will return to OEO with the rest of the elevators in the group when removed from Phase I Operation under these conditions. To follow the same style as the rest of A17.1/B44 when referencing to fire recall switches. The Note was added to provide clarification of the ~~group~~ car fire recall switch “RESET” operation.

2.27.11.1.6 ~~A car with its individual “CAR FIRE RECALL” switch in the “ON” position shall not be removed from Phase I Emergency Recall Operation when the.~~ An elevator in a group of two or more shall be removed from Phase I Emergency Recall Operation when the group fire recall “GROUP FIRE RECALL” switch is rotated to the “RESET” position and then to the “OFF” position and the following conditions exist:

- (a) the car fire recall switch (see 2.27.11.1.2), is in the “OFF” position
- (b) the additional two-position group fire recall switch (see 2.27.3.1.2), where provided, is in the “OFF” position
- (c) no fire alarm initiating device is activated (see 2.27.3.2)

NOTE (2.27.11.1.6): See 2.27.3.1.6(k)

Rationale: To follow the same style as the rest of A17.1/B44 when referencing to a fire recall switches. To simplify and clarify that the group fire recall switch cannot override the individual car fire recall switch when in the "ON" position. To allow the group fire recall switch to reset all cars in the group under the correct conditions. The Note was added to provide clarification of the group fire recall switch "RESET" operation.

2.27.11.1.7 The designated level shall be the same floor as the elevator discharge level. ~~At the elevator discharge level, only~~ Only the door(s) serving the lobby where the ~~"GROUP FIRE RECALL"~~ group fire recall switch is located shall open.

Rationale: Simplify the language and to follow the same style as the rest of A17.1/B44 when referencing to fire recall switches.

2.27.11.1.8 When firefighters' emergency operation, activated by key switch(es) in 2.27.3.1 or fire alarm initiating devices specified in 2.27.3.2, is in effect and signal(s) provided in 2.27.11.5 to initiate OEO are not actuated, the sign(s) required in 2.27.11.2.2 shall indicate that the elevator(s) in this group are not available.

NOTE (2.27.11.1.8): Example text for all floors served by this group: "Elevators not available"

Rationale: To require use the variable message sign when OEO is not active.

~~2.27.11.2 The sign required by 2.27.9 shall not be installed. A variable message sign, as defined in ANSI/ICC A117.1, shall be installed for each elevator group on each landing served. It shall be located not less than 2 130 mm (84 in.) and not more than 3 000 mm (120 in.) above the floor and in a central visible location within the elevator lobby. Message text shall be a minimum of 50 mm (2 in.) high and conform to ANSI/ICC A117.1 or Nonmandatory Appendix E, Clause E-20, whichever is applicable (see Part 9 and E-1). The variable message signs shall be powered by the same power supply as the elevator, including emergency or standby power. Where not prohibited by the building code, when the elevators are not on Occupant Evacuation Operation or Firefighters' Emergency Operation, the variable message signs shall be permitted to display other elevator system status messages.~~

~~NOTE: Sample text: "Elevators in normal operation"~~

2.27.11.2 OEO Lobby Signage

2.27.11.2.1 The sign required by 2.27.9 shall not be installed.

2.27.11.2.2 A variable message sign shall:

- (a) be installed for each elevator group or any single elevator not in a group at each landing served.
- (b) be located not less than 2 130 mm (84 in.) and not more than 3 000 mm (120 in.) above the floor and in a central visible location within the elevator lobby.
- (c) have message text a minimum of 50 mm (2 in.) high and conform to ANSI/ICC A117.1 or Nonmandatory Appendix E, Clause E-20, whichever is applicable (see Part 9 and E-1).
- (d) be powered by the same power supply as the elevator, including emergency or standby power.
- (e) when not on OEO or Firefighters' Emergency Operation, display an indication that it is powered.
- (f) when not prohibited by the building code or when not on OEO or Firefighters' Emergency Operation, be permitted to display information other than elevator system information, in lieu of an indication that it is powered.

Rationale: The requirement is renumbered for clarity. To clarify that the variable message sign is required to be on a single elevator that is not part of a group. To allow other everyday messaging or a power indicator, which would help identify when a variable message sign is active and to be consistent with other emergency communication

systems that permit dual usage of signage. To indicate that the variable message sign must display some message in order to comply with this requirement and 2.27.11.6.10 when OEO was terminated.

~~2.27.11.3 Where hoistway pressurization is provided, a car on Phase I Emergency Recall, after completing the requirements of 2.27.3.1.6, shall conform to the following:~~

~~(a) A car shall close its doors after 15 s.~~

~~(b) Door reopening devices, door force limiting devices, kinetic energy limiting devices, and the door open button shall remain active.~~

~~(c) At least one operating device normally used to call a car to the landing (e.g., hall call button, keypad) shall be located in the elevator lobby at the elevator discharge level. Actuating this device shall cause all recalled cars to open their doors for 30 s to 45 s, then reclose.~~

2.27.11.3 Reserved for Future Use

Rationale: For Occupant Evacuation Elevators, per the building code, the elevator lobbies are protected spaces that are pressurized, while the egress landing is likely an open lobby. After a FEO Phase I recall, the elevator hoistway doors in the protected lobbies are closed mitigating any smoke leakage into the pressurized lobbies from a lower pressure hoistway. This eliminates the need to close the doors at the Recall Level (egress landing) after a Phase I recall.

~~2.27.11.4 A-Where provided,~~ position indicators at the elevator discharge level shall remain operative ~~shall be provided at the elevator discharge level above or adjacent to the entrance for each car.~~ The position indicator shall be powered by the same power supply as the elevator, including emergency or standby power.

Rationale: Remove requirement for position indicators for OEO since the doors are not required to be closed by modification to 2.27.11.3 but if provided they are required to remain operative similar to position indicators during FEO, see 2.27.3.1.6(f)3(-b). An operational position indicator could aid firefighters in selecting an elevator for individual fire recall during OEO.

2.27.11.5 Fire Alarm System Interface

2.27.11.5.1 The fire alarm system interface shall conform with the requirements of 2.27.11.5.1(a) through (i).

(a) An active automatic fire alarm initiating device as specified by NFPA 72 ~~in the building in any area~~ that does not initiate Phase I Emergency Recall Operation in this group, shall cause the fire alarm system to provide signals(s) to the elevator system in conformance with NFPA 72 ~~indicating the floors to be evacuated.~~

(b) The floors to be evacuated shall be a contiguous block of floors, designated as “elevator evacuation zone”, consisting of at least the floor with an active alarm, two floors above and two floors below.

(c) When the discharge level falls within the contiguous block, it shall be included in the contiguous block of floors but shall not be evacuated by the elevator(s).

~~The elevator system shall initiate OEO in accordance with 2.27.11.6 for the indicated floors.~~

(d) If the active alarm is on the elevator discharge level for this group, automatic initiation of OEO in accordance with 2.27.11.6 shall not be permitted.

(e) If activation of an additional automatic fire alarm initiating device which does not initiate Phase I Emergency Recall Operation in this group occurs on an additional floor(s) including the discharge level at any time while OEO in accordance with 2.27.11.6 is in effect, the elevator evacuation zone shall be expanded.

(f) The expanded evacuation zone shall ~~to~~ include all floors with an active alarm, all floors between the highest and lowest floor with an active alarm plus two floors above the highest floor with an active alarm and two floors below the lowest floor with an active alarm. ~~If the active alarm is on the elevator discharge level automatic initiation of OEO in accordance with 2.27.11.6 shall not be permitted.~~

(g) Manual initiation of OEO by authorized or emergency personnel in conformance with NFPA 72 shall be permitted.

(h) The elevator group or any single elevator not in a group shall indicate to the fire alarm system the status of its availability for OEO.

(i) The elevator group or any single elevator not in a group shall indicate to the fire alarm system when OEO is active.

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. The requirement is renumbered for clarity. To not duplicate or conflict with signal interface requirements of NFPA 72, to clarify that the expansion of the zone is due to additional alarms, to clarify only alarms in this group's discharge level, and to add the requirement on the elevator system to provide status to the fire alarm system.

NOTE (2.27.11.5.1):

(1) An "active alarm" refers to the condition caused by the "activation of an automatic fire alarm initiating device" that does not initiate Phase I Emergency Recall Operation in this group or any single elevator not in a group as used in this requirement.

(2) Coordination ~~between needs to be provided between~~ the fire alarm system installer and the elevator system installer is required. For example, when a group of elevators do not service all the same floors.

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. To ensure that coordination between the elevator system and the fire alarm system is provided, but not provide specific requirements as to what coordination should be.

~~2.27.11.5.2 A means to initiate total building evacuation, labeled "ELEVATOR TOTAL BUILDING EVACUATION" shall be provided at the fire command center location and installed in accordance with NFPA 72. When this means is actuated, the fire alarm system shall provide a signal to the elevator system indicating that all floors are to be evacuated. The elevator system shall initiate elevator total building evacuation in response to a signal from the fire alarm system in accordance with NFPA 72.~~

NOTE (2.27.11.5.2): See NFPA 72 and applicable building code for the location of the activation means for elevator total building evacuation.

Rationale: To remove a duplicated requirement found in NFPA 72. Note (2.27.11.5.2) was added to provide guidance on where to find the location of the total building activation means.

2.27.11.6 When any of the signals provided in 2.27.11.5 actuate, ~~the elevators~~ for group(s) of elevators or any single elevator not in a group, that serve the elevator evacuation zone, OEO shall be in effect and shall conform to 2.27.11.6.1 through 2.27.11.6.10 in order to ~~move~~ evacuate occupants from the elevator evacuation zone floors ~~affected by the fire~~ to the elevator discharge level.

Rationale: Editorial changes to clarify the scope of OEO for each group of elevators or single elevator in the building. To clarify that 2.27.11.6.1 through 2.27.11.6.10 apply when OEO is in effect.

2.27.11.6.1 The variable message signs required by 2.27.11.2.2 shall indicate one of the following messages:

(a) On all floors in the elevator evacuation zone, with the exception of 2.27.11.6.1(d), they shall indicate that the elevators are available for evacuation and once a landing call is registered at the floor, the estimated time duration in minutes for the next elevator to arrive, including when the estimate time is less than a minute.

NOTE (2.27.11.6.1(a)): ~~Sample-Example~~ text: "Elevators and stairs available for evacuation. Next car in about 2 minutes."

(b) On all floors not in the elevator evacuation zone, excluding the elevator discharge level, they shall indicate that elevator service is not available.

NOTE (2.27.11.6.1(b)): ~~Sample-Example~~ text: “Elevators temporarily dedicated to other floors.”

(c) On the elevator discharge level, they shall indicate that the ~~cars~~ elevators are in ~~evacuation-mode~~ OEO and that ~~passengers-occupants~~ should not use elevators.

NOTE (2.27.11.6.1(c)): ~~Sample-Example~~ text: “Elevators dedicated to evacuation. Do not enter elevator.”

(d) If no elevator(s) for a group are available ~~for OEO to serve a floor(s) in the elevator evacuation zone (fire service, inspection, shut off, etc.)~~, they shall indicate that elevator service is not available ~~On all floors in the elevator evacuation zone they shall also indicate~~ and that occupants should use ~~the~~ stairs for the affected floor(s).

NOTE (2.27.11.6.1(d)): ~~Sample-Example~~ text for floors being evacuated: “Elevators ~~out of service~~ not available. Use stairs to evacuate.” ~~Sample text for other floors: “Elevators out of service.”~~

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. To clarify that the estimate time when less than one minutes must be displayed. To add missing code reference to each note. To clarify that only the elevators for this group need to be out of OEO to change the message and to clarify what message shall be displayed on each floor whether it be discharge, evacuation or other, and to distinguish “not available” from “out of service”. Deleted examples to ensure that no modes of operation are excluded. To use the terms (elevator, car, occupants, and passengers) in a consistent manner where “occupants” occupy the building and where “passengers” are using the elevators.

2.27.11.6.2 Automatic visual signal or variable message sign, and voice notification in each ~~car~~ elevator shall:

(a) indicate that the ~~car~~ elevator is being used for evacuation ~~to evacuate the building~~.

(b) ~~in~~ In the event that the ~~car~~ elevator stops to pick up passengers at a floor other than the elevator discharge level, ~~the signals shall~~ instruct the passengers to remain in the ~~car~~ elevator.

(c) ~~upon~~ Upon or prior to arrival at the elevator discharge level, instruct passengers ~~shall be notified~~ that they have arrived at the exit floor and to exit ~~quickly~~.

Where used, the variable message sign message text shall be a minimum of 25 mm (1 in.) high and conform to ANSI/ICC A117.1 or Nonmandatory Appendix E, Clause E-20, whichever is applicable (see Part 9 and E-1). Voice notification shall be at least 10 dBA above ambient but not more than 80 dBA measured 1 525 mm (60 in.) above the floor, at the center of the car.

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. Change “car” to “elevator” to be consistent with the usage in other parts of Section 2.27.11 and deleted “quickly” as it is an unenforceable term and displaying this extra term could delay the communication of the primary action to exit the elevator. To clarify that the text minimum height requirement only applies to the variable message sign. The requirement is renumbered for clarity.

NOTE (2.27.11.6.2): Example text for when the elevator stops at a floor other than the discharge level: “Remain in the Elevator.” Example text for when the elevators arrives at the discharge level: “Exit the Elevator.”

Rationale: To provide sample text inside the car for conditions where the car is stopped at a floor other than the discharge level or at the discharge level.

2.27.11.6.3 When OEO is in effect;

- (a) actuated-all landing calls outside of the elevator evacuation zone shall be canceled and disabled.
- (b) car calls for all floors, except for the elevator discharge level, shall be canceled and disabled.
- (c) building security systems that limit service to the elevator evacuation zone shall be overridden.
- ~~b) in effect any landing call within the elevator evacuation zone shall call an elevator(s) to that landing.~~
- (de) in effect-landing calls entered at the floor(s) with an active alarm shall be given higher priority than the calls at the floors without an active alarm.
- (ed) in effect, if a subsequent active alarm is received for a different floor, the evacuation priority shall be assigned in the sequence received.
- (fe) in effect, after answering a landing call and passengers have entered ~~an elevator~~, the elevator it:
 - (1) shall proceed towards the elevator discharge level, except as required by 8.4.10.1.3.
 - (2) is permitted to answer additional landing call(s).
- ~~f) in effect, building security systems that limit service to the elevator evacuation zone shall be overridden.~~

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. Restructured and changed sequence to eliminate redundant use of the term "in effect". Deleted requirement 2.27.11.6.3(b) as 2.27.11.6.3(a) defines the enabled landing calls and other parts define the operation when answering landing calls. Clarified that passenger enter an elevator on answering landing calls and that the travel direction is limited only with passengers. Clarify that answering additional landing call with passengers is permitted. Moved 2.27.11.6.4 to 2.27.11.6.3(b).

2.27.11.6.4 Reserved for future use~~Car calls for all floors, except for the elevator discharge level, shall be canceled and disabled.~~

Rationale: Based on approved R15-636 changes. Moved to 2.27.11.6.3(b).

2.27.11.6.5~~Cars~~ When OEO is initiated, elevators without car calls,~~when OEO is actuated shall;~~

- (a) move shall proceed without delay to a floor within the elevator evacuation zone,~~and park with the door(s) closed if no landing call is registered.~~
 - (b) If the car is in motion away from the elevator evacuation zone, it shall stop at or before the next available floor, without opening the doors, reverse direction, and move to a floor within the elevator evacuation zone. when traveling away from the elevator evacuation zone, shall reverse at or before the next available landing without opening its doors and proceed to the elevator evacuation zone.
- If no landing call is registered within the elevator evacuation zone, the elevator shall park with the door(s) closed and the ~~The~~ door open buttons(s) shall remain operative.

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. Change "car" to "elevator" to be consistent with the usage in other parts of Section 2.27.11. To clarify door operation when OEO is initiated for an elevator without car calls and that parking with the doors closed with the door open buttons(s) active applies to both scenarios only when there is no landing call. The term "without delay" is removed to recognize a car may be traveling away from the evacuation zone when OEO is initiated and the controller is permitted to determine where a car stops to reverse direction.

2.27.11.6.6~~Cars~~ When OEO is initiated, elevators with car calls,~~when OEO is actuated;~~

- (a) shall proceed without delay to the elevator discharge level.
- (b) If a reversal of travel direction is needed, it shall be done at or before the next available floor without opening the doors. when traveling away from the discharge level, shall reverse at or before the next available landing without opening its doors and proceed to the discharge level.

After opening and closing the doors at the elevator discharge level, ~~they~~ the elevator(s) shall proceed ~~without delay~~ to a floor within the elevator evacuation zone ~~and park with the doors closed if no landing call is registered.~~ If no landing call is registered within the elevator evacuation zone, the elevator shall park with the door(s) closed and the ~~The~~ door open buttons shall remain operative.

***Rationale:** The revisions are shown based on A17.1-2016 and the approved R15-636 changes. Editorial revision to clarify the subject is the elevators. Change “car” to “elevator” to be consistent with the usage in other parts of Section 2.27.11. To clarify door operation when OEO is initiated for an elevator with car calls and that parking with the doors closed with the door open buttons(s) active applies to both scenarios only when there is no landing call. The term “without delay” is removed to recognize a car may be traveling away from the evacuation zone when OEO is initiated and the controller is permitted to determine where a car stops to reverse direction.*

2.27.11.6.7 When ~~a car~~ the elevator answers a landing call at a floor within the elevator evacuation zone, a car call for the elevator discharge level shall be automatically registered. ~~The system shall accept a new landing call as soon as the doors have opened to permit loading at that floor, or sooner. If a new landing call is registered at this floor, it shall be assigned to another car, and not canceled until that car arrives. Actuation of the landing call device at this floor shall not prevent a loaded car.~~ Additional landing call(s) shall be accepted at a floor where an elevator is currently loading and shall not prevent the loading elevator from closing its doors and leaving the floor. Devices that determine the number of passengers waiting at the landing shall be permitted to be used to determine the number of elevators(s) to be assigned to the landing.

***Rationale:** The revisions are shown based on A17.1-2016 and the approved R15-636 changes. To clarify the concern that a new landing call shall not prevent a loading car from departing. For modern dispatching algorithms, call allocation to cars is optimized based on many variables, there is no need to specify how to allocate new call demand or when to dispatch additional cars to a floor. To permit new technology to be used for allocating elevator service to a landing such as based on number of people waiting at the landing. Change “car” to “elevator” to be consistent with the usage in other parts of Section 2.27.11.*

2.27.11.6.8 While passengers are entering the ~~car~~ elevator at a floor being evacuated,
(a) the door(s) shall operate in conformance with 2.13 and as modified in 2.27.11.6.8(b)
(b) ~~when the load reaches no greater than~~ at a load within the range of 60% to 80% of rated load ~~car capacity,~~ the door reopening device(s) shall be disabled and the doors shall initiate closing at reduced kinetic energy in accordance with 2.13.4.2.1(c). ~~If the doors stall while closing, they shall reopen fully, then close.~~ The in-car door open button(s) shall remain operative
(c) if doors are closing at reduced kinetic energy, the ~~An~~ audible signal shall sound until the doors are closed.
(d) ~~if~~ if the load exceeds 100% of capacity,
(1) the doors shall reopen and remain open and a voice notification and visual signal shall indicate that the ~~car~~ elevator is overloaded.
(2) if no additional landing call was entered at the floor while the elevator was loading (see 2.27.11.6.7) then a landing call shall be automatically entered for the floor of the overloaded elevator.

***Rationale:** A range of 60% to 80% is provided to prevent overloading the elevator. At 100% capacity doors are prevented from closing and voice notification is provided to prevent overloading the elevator. The door stalling sentence is not necessary because the reduced kinetic energy requirements (nudging) are covered in 2.13.4.2.1. To provide requirements for when the audible signal is to actuate (i.e., nudging). Change “car” to “elevator” to be consistent with the usage in other parts of Section 2.27.11.*

NOTE (2.27.11.6.8(d)): Example text for the visual signal when the elevator is overloaded: “Elevator is overloaded.”

Rationale: To provide sample text for when the elevator is overloaded at an evacuation floor while on OEO.

2.27.11.6.9 Once the floors within the elevator evacuation zone are evacuated, as indicated by a 60 s period in which no landing calls are registered, ~~one car~~ an available elevator shall park with its doors closed within at the lowest floor of the elevator evacuation zone for this group ready to answer subsequent landing calls within the elevator evacuation zone. The remaining ~~car~~ elevator(s) shall park with doors closed at the elevator discharge level. If additional demand is registered, calls shall be answered in accordance with 2.27.11.6.3. ~~A car parked at the elevator discharge level shall replace the car at the lowest floor of the elevator evacuation zone that has answered a landing call.~~

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. To be consistent in the use of the term elevator instead of car in this section, to clarify how parking is terminated by new demand and that it will return to parking only if no demand for a new 60 s period occurs. The parking floor was changed to a floor within the zone because all elevator lobbies are safe as no FAID has initiated Fire Phase I Recall, this allows for better positioning of parked cars if possible based on additional building population information.

2.27.11.6.10 OEO shall be terminated for this group of elevators or for any single elevator not in a group when (a) the fire alarm system is reset, or (b) the signals provided in 2.27.3.2 are actuated (see 2.27.11.1.3).

Rationale: The revisions are shown based on A17.1-2016 and the approved R15-636 changes. To clarify that the termination of OEO is per group.

Northeast District Council of Plasterers' & Cement Masons'

LOCAL UNIONS' 40, 262 & 780
of the O.P. & C.M.I.A. of United States and Canada
150-50 14TH ROAD, SUITE 4, WHITESTONE, NEW YORK 11357
Phone (718) 357-3750 Fax (718) 357-2057



June 14, 2021

New York City Buildings Committee

Dear Committee Member:

My name is Kenneth Delanty, I am a member of the Operative Plasterers' & Cement Masons' International Association Local Union 262 and employed by the Northeast District Council of the Operative Plasterers' & Cement Masons' International Association, located in Queens, NY. I represent more than 1,300 construction workers in the city of New York who make a living and support their families, New York City families, installing EIFS and materials like EIFS.

On behalf of those members and their families I ask you to reject these changes.

First, these changes will have a direct negative impact on the work that we perform to support our families.

Second, these changes are not based on any testing or science. In fact, adopting these changes requires that you ignore the current International Building Code (IBC) in favor of an untested design that may put citizens and property at risk.

These are just a couple of reasons why I oppose these changes. I also wonder which organizations are behind these proposed changes. Do they have a financial interest in promoting these untested design changes?

I respectfully ask that you do what's right for the citizens of New York City by sticking with the tested and proven International Building Code and rejecting these untested design changes.

Sincerely

A handwritten signature in black ink that reads "Kenneth Delanty". The signature is fluid and cursive.

Kenneth Delanty
Organizer

DALE ALLEYNE *President* • **DAVID GENTILE** *Vice-President* • **GINO CASTIGNOLI** *Fin. Secy/Bus. Manager*

Affiliated with the Building Trades Department of the American Federation of Labor, - New York State Building and Construction Trades Council, - Building and Construction Trades Council of Greater New York City and Vicinity, - Nassau and Suffolk Counties Building Trades, - Building and Construction Trades of Westchester and Putnam Counties, - The Bronx, Brooklyn, Manhattan, Queens and Staten Island Boards of Business Agents, - New York State Federation of Labor, - Concrete Trades Alliance of Greater New York, - New York State, Massachusetts, Rhode Island Conference of the O.P. & C.M.I.A., the NorthEast Conference of the O.P. & C.M.I.A. - Building and Construction Trades Council of Rockland County - The Concrete Alliance, Inc.

6/11/21

To: Chairman Mr. Robert E. Cornegy, Jr.
New York City Council
Committee on Housing and Buildings
250 Broadway, Suite 1743
New York, NY 10007

From: Matt Hunter, BCO-Northeast Region Manager, American Wood Council

The American Wood Council (AWC) is the voice of North American wood products manufacturing, an industry that provides over 450,000 men and women in the United States (including 13,152 residents of New York state) with family-wage jobs. AWC represents 86 percent of the structural wood products industry, and members make products that are essential to everyday life from a renewable resource that absorbs and sequesters carbon. Staff experts develop state-of-the-art engineering data, technology, and standards for wood products to assure their safe and efficient design, as well as provide information on wood design, green building, and environmental regulations. AWC also advocates for balanced government policies that affect wood products. The AWC is also a respected leader and go-to resource for design professionals and building and fire officials that require accredited continuing education regarding wood and its role in the building code and referenced standards.

Thank you for the opportunity to speak on the issue of code adoption for the City of New York. I would like to thank the Committee for their detailed review and incorporation of several noteworthy code change provisions related to wood design, wood construction, and the initial listing of terms related to cross laminated timber and structural composite lumber (hereafter CLT and SCL). The AWC urges the Committee to adopt the 2015 IBC provisions related to definitions for CLT, SCL, the reorganization of Chapter 23 (the wood Chapter) and various other code change provisions that relate to standards published by the American Wood Council and others like the National Design Specification (NDS), Special Provisions for Wind and Seismic (SDPWS), and the CLT manufacturing production standard, ANSI/APA PRG-320-18. These standards are of paramount importance for practicing design professionals to ensure they have the latest specifications to safely design modern Heavy Timber (HT) buildings. By aligning the NYC City Building Code with the most current edition of AWC and other standards, design professionals will have access to state-of-the-art design criteria.

In the interest of time and greater efficiency of the Committee, we have additional comments related to current editions of referenced standards, definitions, editorial considerations, and other minor, technical modifications to the proposed code which we will submit under a separate cover within the 72-hour window.

Thank you for your time regarding this important matter.

Regards,



Matthew M. Hunter, BCO
Northeast Regional Manager
American Wood Council



June 11, 2021

New York City Council
Committee on Housing and Buildings
250 Broadway
New York, NY 10007

Re: Int. No. 2261 – Amend the administrative code – NYCBC

Housing and Building Committee Members,

The Metal Construction Association (MCA) is a group of manufacturers, fabricators, and installers of metal cladding systems located and doing business throughout the United States and Canada. Founded in 1983, MCA members use many different installation methods including several different variations of rainscreen systems to install metal cladding on low-, mid-, and high-rise buildings. With this in mind, and after due consideration, MCA believes that the proposed changes to the New York City Building Code (NYCBC) will have a significantly negative impact on the ability of cladding installations to perform as required by the safety, energy, and building requirements identified in the proposed NYCBC. The changes being proposed introduce construction elements that do not allow for the construction and continued functioning of rainscreen systems in the areas of safety and sustainability.

While the proposed changes identified in Int. No. 2261 have been introduced primarily in the name of fire safety, the performance of the key elements, primarily fireblocking requirements and flashing details, brings into question whether rainscreen installations are even practical to install. There is no data to support that the proposed changes will provide any significant additional level of safety, however, these changes will, most likely, compromise many of the design, sustainability and energy performance aspects that are being called for in other sections of the NYCBC. Specifically, we share concerns with several other groups that the proposed changes in the NYC code Chapters 7, 14, and 26 will lead to potentially negative impacts to the fire safety, occupant health, moisture management, and energy efficiency of buildings in New York City. There is no apparent technical justification for these changes, either in the form of test data showing increased fire safety or in deficiencies of how the current NYC code regulates exterior wall systems. In addition, these proposed changes will most likely dramatically increase costs and reduce design options while creating challenges for permitting, enforcement, compliance, and speed of construction.



MCA has been involved in these proposed code discussions with New York City since 2017 and we will continue to be an information and design resource to improve safety and performance of new designs, however MCA does not support Int. No. 2261 as it is currently proposed. We will continue to work with the Department of Buildings to understand the potential impacts of these proposed changes and to identify alternative designs that will aid in the goal of safe and sustainable building design for New York City.

We respectfully urge the Department of Buildings to either maintain the well-established and coordinated provisions for exterior walls in the current NYC code that are in line with exterior wall provisions provided by the International Building Code (IBC) or include modifications that have been vetted through the International Building Code (IBC) by a diverse group of stakeholders including fire safety officials from across the country and other major jurisdictions.

Thank you for your time and consideration on this important issue and please feel free to contact me with any further considerations or questions.

Regards

Andrew F Williams

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Michael LeRoy's New York City Council Online Testimony

My name is Michael LeRoy I am the US Technical Manager for EQUITONE. At EQUITONE we manufacture high density fiber cement panels for the exterior cladding of a building. EQUITONE can only be used in what is called a ventilated rainscreen application. A ventilated rainscreen has an airspace behind the cladding of usually 1" to the insulation or substrate. That ventilation allows the panels to stay dry, allows for proper moisture control, and is a very popular system in NYC and all over the world.

The determination letter that came out in December of 2020 has many proposed changes, the one I would like to focus on today, and for my industry, is the solid fire blocking requirement at each floor slab. That means that the air cavity in the ventilated rainscreen system will now be closed off by this fire blocking. Below are what some in our industry believe to be the anticipated effects.

ANTICIPATED EFFECTS

- Architects will be limited regarding the materials and products they can use to achieve **high-performance** building enclosures.
- Environmental goals like those in Local Law 97 become more difficult to achieve.
- Competition will be reduced as barriers to entry become unnecessarily multiplied.
- Proposed geometry changes will present more opportunities for water ingress into walls and at slabs.
- Costs associated with designing and building enclosures will increase substantially.
- Contractors, whose workers have been trained and certified in the current applications, will lose opportunities to utilize their skills and ultimately must be retrained.
- Implications and confusion created by the current language proposal could potentially have serious negative effects on designers, contractors and building performance across NYC.

What this new change would also do is require us to re-test to NFPA285 using the solid fire blocking in the test assembly and pass the test meeting the same criteria we have already met and passed without the solid fire blocking, that does not make much sense to me.

If the fire blocking requirement is kept in the language can intumescent (activated fire blocking) be used instead of just solid fire blocking? That would allow the ventilated rainscreen to function properly, keep costs down, and keep the occupants safe in the case of a fire.



To: New York City Council Committee on Housing & Buildings

From: Patricia Brady on behalf of the Master Plumbers Council Code Revision Committee

Date: Wednesday, June 16, 2021

Re: Testimony on Intro. No. 2261

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Introduction

My name is Patricia Brady and I am the Deputy Director of the Master Plumbers Council (MPC). I submit the following testimony on behalf of our Code Revision Committee.

Today, over twenty percent of active NYC licensed Master Plumbers are represented by the MPC. The MPC strives to promote the licensed plumbing industry and the benefits of hiring licensed and insured firms. In addition, we provide trade education and clarification on a wide assortment of Code issues. This not only benefits the trade, but all NYC property owners who are concerned about a legal and safe plumbing installations.

We absolutely applaud the process DOB utilized for stakeholders to provide valuable input. In our testimony, we will present you with recommendations to reverse or modify some of the Department's proposed changes. For the most part, they are simple clarifications to ensure that the intent of a Code section is not misinterpreted by a future administration. Other proposed changes are being requested to provide a public benefit for all NYC residents. All of our proposed changes in regard to clarifications and provisions for public benefits are in strict accordance with the intent of the Construction Codes specifically "with due regard for building construction and maintenance costs." We believe our proposals will continue to maintain the highest safety standards while providing the lowest possible cost for regulatory compliance.

The Department is eliminating the License Board and along with it the advisory role the licensed plumber takes in providing peer review for candidate selection and disciplinary review. Industry members have participated on this committee for the over fifty years volunteering their time and providing expert advice to the Department. The Department has always made the final decisions. Just this week the License Board had a meeting and there was a robust dialogue on several important issues. It is a valuable Board to have with no downside.

In addition to this issue please review our comments on ordinary plumbing work; deceased licensees and how Licensed Master plumbers are properly qualified to perform fire suppression work. We ask the city council to remember when, about six months ago, the Department launched a proposal that would have allowed unlicensed and unqualified persons to replace gas appliances without obtaining a permit. It was presented to the industry stating that NYC residents need immediate financial relief from the pandemic. If enacted, the proposal could have made it possible for the person responsible for the work that caused a Bronx building to blow up, to continue their career of illegal plumbing work with the Department's blessing. We greatly appreciate the Council's intervention in that matter, and it has since been tabled. We have incorporated this proposal into our Ordinary Plumbing Work proposed changes. The work will be done by licensed Master Plumbers and their qualified employees. If you enact this specific change you will reduce costs for your constituents while continuing for public safety to be maintained. In fact none of our proposals would increase the cost of compliance for any NYC resident.

In our expert opinion, the Department has not provided adequate justification for some of their proposed changes. We are confident that, after reading our specific comments, you will agree that some Department proposals need to be further explained and show a true public interest or benefit. The public for which we all serve is depending on the Council to gather all of the facts and make the final determination on these safety issues.

Licensed plumbing is as important to public safety as oxygen is to the human body. It reduces risks that include water contamination, cross connections, scalding and thermal shock. Faulty repairs can lead to leaks that create mold and fungus. Licensed Master Plumbers have the proper qualifications, knowledge and, most importantly, the legal permission to do this work.

The MPC would like to thank the Chairmen and the committee for all of their time and efforts dedicated to helping keep NYC residents safe. This Code, with some minor revisions, along with the ten gas safety bills you passed, will continue to provide NYC residents with the very best processes to keep them safe.

During your review, if you have any questions or need clarification on any of the information provided please contact us.

Patricia Brady on behalf of The Master Plumbers Council Code Revision Committee
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§28-105.4.4 Ordinary plumbing work.

We propose that this section be overhauled to clarify the approved work scopes and to add work scopes that will provide relief to NYC residents.

Ordinary Plumbing Work (OPW) is the most important tool available to owners and plumbers to conduct repair and replacement plumbing work. The OPW process was adopted prior to the inception of the 2008 Code and was the Department's response to the need for owners to have plumbers get into a building to provide immediate repairs and avoid having to wait for a Code-required inspection. To accomplish this, a reporting system was created that allowed the Department to modify the standard permit fees and waive inspections for the completed work. The required reporting system also provides the Department with the ability to audit the completed work at any time.

The OPW was only modified once during the 2014 Code revision process. This process is presently underutilized by owners and the plumbing community. There are several reasons for this, the main one being the lack of clarity in the permissible work scopes. During this latest Code revision cycle, the Department declined to allow this section to be discussed. The committee was told that it would be included during the review of the proposed Existing Building Code (EBC). During the EBC revision process, the entire work scope section was revamped. In addition to clarifying the existing work scopes, there were some important additions. We are proposing to incorporate those changes into this Code, as the EBC may not go into effect for two more years. NYC residents and owners need the immediate relief that these proposed changes would provide.

Please find below a few of our proposed changes:

- Clarification of existing work scopes.
- Addition of fixtures that can be installed.
- Change of verbiage to eliminate confusion regarding permitted work scopes.
- Modification of building caps for branch piping work scopes.
- Additional permitting for the replacement of residential gas appliances.

Our proposed modifications and additions are commensurate with the intent of this section. If adopted, they will greatly enhance a licensed plumber's ability to conduct extensive repairs and appliance replacement, without the added expenses of obtaining a work permit and conducting an inspection. The work is performed by a licensed Master Plumber and their qualified employees. This maintains the high level of public safety that NYC residents have come to expect from licensed Master Plumbers. Today, when a *work without a permit* violation is issued, it will prohibit an owner's ability to obtain other permits. The correction process can be both long and expensive. In some cases, the Commissioner may deny a new permit application in that building for a year. These changes remove many of the incentives for owners to use unlicensed and unqualified persons to do these work scopes. At the same time, it also lowers the cost of compliance. We believe that these changes will increase the overall compliance rate for this work.

§28-417.1 Plumbing and fire suppression piping contractor license board.

We implore the Council to maintain the Plumbing and Fire Suppression Piping Contractor License Board, including all of its current duties.

The License Board is a panel of trade practitioners and others appointed by the Commissioner, with the purpose of advising the Commissioner regarding the character and fitness of applicants for a license or certificate of competence, allegations of illegal practices by persons licensed, or other matters as the Commissioner may see fit. The License Board serves a very important role in the Licensed Plumbing and Fire Suppression industry. It serves four basic functions:

1- *To advise the Commissioner regarding the character and fitness of applicants for certificates of competence and licensees who have passed the required examination.*

Passing a test measures a person's knowledge of subject matter. However, it does not measure the character and fitness of a candidate. Today, from the time a candidate submits their paperwork until it is reviewed by the Board is the fastest in history. Some applications are reviewed less than two weeks after they are received by the Department. The majority of the candidate applications submitted to the Board sail through the review process. These applicants checked off all the boxes, are approved and are issued a license. Every

once in a while a candidate comes along where something just doesn't seem to fit. It is at these times when the members of the Board are able to review the candidate and apply their professional trade knowledge to advise the Department how to move forward. Mind you that these candidates have already made it through the initial Department review. What would happen if there were no panel of professionals to advise on their findings?

The Department believes that their personnel who review all other licenses can handle the Plumbing and Fire Suppression candidates on their own. Plumbing candidates are not like any other candidates, as they perform a life safety trade that is at the forefront of protecting public safety. LL152 of 2016 provides licensed Master Plumbers and their qualified employees with the ability to inspect active gas piping systems. They are entrusted to conduct inspections of active gas piping systems. Peer review of candidates seeking to obtain a Master Plumbers license is essential to ensure the person has the requisite experience with no downside to evaluating the Boards advice.

2. To advise the Commissioner regarding allegations of illegal practices on the part of licensed master plumbers, licensed master fire suppression piping contractors, master plumber businesses or master fire suppression piping businesses.

During the process where a licensed Master Plumber is evaluated for a disciplinary action that can lead to fines; probation; suspension or revocation, shouldn't a panel of experts be asked to advise and consult on the issue first? Plumbing is a very technical trade. Even the administrative portions of the Code that govern the permitting and overall inspection process for the work plumbers do are complicated. A review of the stipulations for such disciplinary cases reveals that they are not always clear cut and the punishment for each level of offense is not always consistent. This illustrates just how important the advice, which is non-binding, could make the difference in a person's livelihood. At the same time, the advice if accepted could remove an unsafe licensee. This very issue occurred at the June 15, 2021 Board meeting. It is unfair for a licensed Master Plumber to be evaluated and judged by persons without plumbing knowledge or experience equal to their own.

In 2018, the Department started to discipline plumbers for failing an "excessive" number of requests for gas authorization and signoffs. Each plumber was offered to settle or go to trial and face a stiffer penalty. The Department, to this day, has never defined what "excessive" means. Had these actions been brought before the Licensed Board, the Department would have been advised that the entire inspection and signoff process was fraught with procedural and system issues. The Board members could have worked with the Department to help identify persons who were actually negligent, incompetent or disregarded the Code. The Department paused writing these violations. The systemic issues with procedures and the inspections system still exist today. Will licensed Master Plumbers face these violations again? While the MPC will advocate for our members, it is not a substitute for a panel of experts providing direct advice to the Department. The Board only operates in an advisory role. Why are they not willing to hear from experts?

3. To advise the Commissioner regarding plumbing and fire suppression piping practices, code applications, regulations, and legislation.

The industry holds vital quarterly meetings with the Department to discuss important industry issues. Up until 2021, these meetings were held on a monthly basis. An example of an issue that was recently discussed is the issuance of violations by the Department to contractors for failing an initial boiler inspection. This issue has the potential to easily lead to disciplinary actions and we wanted to discuss the root causes of the failures. The Department agreed to have a separate meeting with the industry and we are hopeful that by working together we can resolve this issue.

Removing the Board eliminates the written Code requirement for a future administration to conduct these important meetings. While we anticipate that these meetings will continue, we are concerned that without a Code-based requirement for them, a future administration could refuse to have them.

4. To perform such other responsibilities as may be requested by the Commissioner and as set forth in rules promulgated by the department.

Although this section is rarely utilized, there is a lot of potential for it. We believe that Master Plumbers and Fire Suppression Contractors should be involved in advising on the development and implementation of the master license testing process. When the gas work qualification exam was developed, the Department declined to take input from the industry or even the ICC Code authority who offered to provide written questions.

Another possible role would be to discuss and advise on issues that the Department perceives are problematic before they start to take blanket enforcement actions against contractors. We already pointed out two examples where this type of dialogue may have helped all parties involved in the process.

This is evidenced by the recent decision by the Department to audit Ordinary Plumbing Work reports and issue hundreds of violations to licensed Master Plumbers who performed work replacing existing gas appliances in one- and two-family residences. The Department claimed that because their system did not indicate a previous filing that the plumber was not replacing but in fact installing a new appliance. That work is not permissible under Ordinary Plumbing Work. The Department issued violations to the licensed Master Plumbers for work without a permit and some received an additional violation for filing a false statement. A review of Department records indicates that the vast majority of the buildings in question have no records listed whatsoever. The Department eventually rescinded the violations but never acknowledged they were issued in error. One plumber was issued over one hundred violations and if he lost his cases, he would have been out of business. When this occurred, the entire industry, and many owners, became aware of it. Owners and plumbers alike are concerned that even if they follow the Code, they can be violated. Can you blame them? This could have the very negative effect where owners to refuse to use a licensed Master Plumber to avoid scrutiny by the Department. If the Department had consulted a panel of professionals for advice this may have been prevented.

Measures that diminish the Master Plumbers License have the potential to erode public safety. Plumbing is an essential life safety trade that protects NYC residents from a multitude of potential hazards. We believe that we have laid out a compelling case for the Council to require the Department to keep the License Board active and require that they utilize the Board to its full potential.

§28-401.3 Definitions FIRE SUPPRESSION PIPING WORK.

We request that the Council strike the proposed new Code language in this definition.

Fire suppression piping work shall not include plumbing work.

The proposed Code defines a **Fire Suppression Piping System** as any system including any and all equipment and materials in connection therewith, the purpose of which is to control, contain, suppress or extinguish fire and shall include:

2. Up to thirty sprinkler heads off the domestic water in any one building; or

The proposed Code defines a **STANDPIPE SYSTEM** as a piping, installed in a building or structure that serves to supply water to hose connections at one or more locations in a building or structure, for firefighting purposes.

The Code defines **PLUMBING WORK** as the installation, maintenance, repair, modification, extension or alteration of plumbing, **standpipe** where a sprinkler is not connected or is not now being connected, domestic water, connections to the domestic water, combination domestic water and reserve standpipe supply tank up to and including the roof tank check valve, gas piping or any piping system referred to in the New York City plumbing code, and/or **up to thirty sprinkler heads off the domestic water** in any building in the city of New York.

The proposed Code defines a **Fire Suppression Piping Work** as the installation, maintenance, repair, modification, extension, or alteration or testing of a fire suppression piping system in any building in the city of New York. Fire suppression piping work shall not include plumbing work.

How is that possible since it is a direct contradiction of the other definitions?

While reading these definitions, it is evident that there is a major issue with the exclusion of plumbing work from the definition of Fire Suppression Piping Work. A plumbing standpipe meets the definition of a Fire Suppression Piping System and up to thirty sprinkler heads off the domestic water is included in the definition of *plumbing work*. The verbiage stating *Fire Suppression Piping Work shall not include plumbing work* is incorrect and should be stricken. Licensed Master Plumbers are permitted under the Code to perform Fire Suppression Piping Work. We believe this verbiage may have been added in order to justify the Department's proposed language in Section §28-410.4.1.1 Non-qualifying experience.

We request that the Council strike this incorrect verbiage.

§28-410.4.1.1 Non-qualifying experience.

We propose that this section be renamed and language be added that will permit a licensed Master Plumber to claim experience for the Fire Suppression Piping Work they are permitted under the Code to perform.

The 1968 Code (26-146) permitted an applicant for a Master Fire Suppression Piping contractor certificate with four years' experience in the design and installation of plumbing systems and three years in the design and installation of Fire Suppression Piping systems in the United States, for the class of license for which application was being made to qualify for a Master Fire Suppression license. This meant that an active NYC licensed Master Plumber could apply for a Master Fire Suppression license after obtaining an additional three years of experience. We are unsure as to why this was not continued into the 2008 Code and the Department has not provided us with an explanation. That provision was in effect for over sixteen years and, to the best of our knowledge, there were never any issues. As we have already established in our testimony, licensed Master Plumbers are permitted to perform work on Fire Suppression piping systems as defined by the Code. For an unknown reason, the Department has proposed not to consider this work as qualifying experience for a Master Fire Suppression License. We request that the Council require the Department to provide a fact-based reason as to why this change was made in direct opposition to the licensed professionals that are regularly engaged in this work.

While the current requirements do not make obtaining both licenses impossible, they do require a huge personal commitment to obtain the fourteen years of required work experience. Some licensed Master Plumbers do undertake this process because having a second license increases their ability to grow their business. Prior to the implementation of the Master Fire Suppression Piping Contractor License, it was mainly licensed Master Plumbers that did the majority of this work. Plumbers continue to do so today as almost three quarters of the Fire Suppression Licensees are also licensed Master Plumbers. We have already established that licensed master plumbers regularly engage in Fire Suppression Piping Work. Our proposed Code change would allow a NYC licensed Master Plumber to apply for a B license by working for a NYC licensed Master Fire Suppression Piping Contractor for three years. Two years of such experience must be as a registered journeyman fire suppression installer in accordance with the provision of Article 411.

We would never approach the Council and propose to relax any regulations simply to make it easier to create more licenses. This is a life safety trade and an emphasis should solely be placed on granting a license to the most qualified candidates. The changes we are proposing will not have any adverse effects to public safety. The reality is it may create public benefit. A licensed Master Plumber will still be required to obtain three additional years of experience and pass a written test. Nothing has changed since the inception of the 2008 Code to diminish a licensed Master Plumber's ability to successfully conduct fire suppression work provided they obtain additional experience. By the time a licensed Master Plumber is issued a license, they are generally well established and would be a valuable addition to the licensed Master Fire Suppression Piping Contractor community. If that extra experience benefits the consumer economically, that is just an added benefit.

We ask that the Council consider our proposed changes and if you also believe that licensed Master Plumbers already possess the basic experience and skills to be effective Master Fire Suppression Piping Contractors that you agree to adopt this revised language.

§28-411.2 Experience.

We propose to add language to this section that is needed for the proposed changes requested in 28-410.4.1.1.

This verbiage change is required to allow the proposed changes requested in 28-410.4.1.1. It would permit a licensed Master Plumber to apply for Journeyman fire suppression piping installer registration with a minimum of one year of full-time experience in the performance of fire suppression piping work under the direct and continuing supervision of a NYC Licensed Master Fire Suppression Piping Contractor or equivalent, where such experience shall have been in the City of New York.

We ask that if the Council is in agreement with our proposed changes to 28-410.4.1.1, that you also adopt this revised language.

§28-105.4.1 Emergency work.

We request that this section be modified to add verbiage that will clarify the intent of this section and remove proposed language that is potentially restrictive.

This section of the Code is the most important tool a plumber has in order to provide immediate relief to an owner with an emergency condition, as it provides them with the ability to respond to the site and make any required repairs to a system that is out of service. The plumber is not required to submit a permit application for two business days after the commencement of the work.

This section is the basis for the emergency gas restoration work procedures established by the Department in 2016. This section permits the licensee to perform work without a permit to the extent necessary to relieve an emergency condition and having the ability to restore essential service such as gas, heat, hot water and sanitary facilities. Recently, there have been assertions made by mid-level Department personnel that a hazard is mitigated when the gas or water is shut off. This was never the intent of this section. The NYC Administrative Code 28-301.1 requires owners to maintain their buildings and all of its systems in good working condition at all times. We are proposing to add in the verbiage to restore the system to a good working condition. This would ensure that the intent of this Code section would not be misinterpreted by a future administration.

Imagine finally getting your restaurant open and having an unwanted expense like your boiler breaking. What if your plumber told you that this did qualify as an emergency repair? The Department has proposed verbiage that would restrict a plumber's ability to repair or replace heating and domestic hot water appliances in other than educational and residential occupancies. While this section maintains that emergency work may include but shall not be limited to any specific items, we are concerned this may be interpreted differently in the future. We are proposing verbiage be modified to correct this unequitable provision. The last change is required to provide for emergency repair of any standpipe system.

The present Administration has never prohibited any type of emergency work nor limited heat or domestic water appliance work to a specific occupancy. At one point, they did try to enforce a prohibition against doing any emergency gas work for residential cooking on a building with less than nine units. The MPC protested that this was both unfair and contrary to this section and it was removed.

We respectfully request the Council to adopt these simple clarifications to ensure that this very important section continues to enable licensed Master Plumbers to provide immediate and fully effective relief to NYC residents during a time of an emergency.

§28-408.5 Surrender of license [~~plate~~] or seal.

We request that this section be modified to remove the verbiage the Department is proposing to add. Retired licensees and the legal representatives of deceased licensees shall schedule for inspection, withdraw or have another licensee re-file any open application filed under such license in accordance with department procedures.

The Department has proposed changes to this section that create a perhaps impossible requirement for a retired licensee or a deceased licensee's estate to be responsible for signing off any open work permits. Passage of this section would also create an unfair retroactive requirement for jobs permitted before the effective date of the new Code be included.

The MPC opposes this new requirement as written. While the Department has a reasonable expectation that all permits will be eventually signed off, the reality is that this is just not always possible. The Code is abundantly clear (28-105.12.1) that the applicant, the owner, their agents, employees, and contractors shall carry out the permitted work in accordance with the provisions of this Code. There is no Code basis for the Department to impose this requirement on the party with the least control over the process. We implore the Council to strike this language.

Licensed plumbers generally do not get paid without getting a sign-off. There are four reasons why a permit does not get signed off:

- 1- Plumbers
- 2- Owners
- 3- Registered Design Professionals
- 4- The Department

In the past, there were varied reasons why a plumber did not have a job signed off. In some cases, the plumber was culpable. In others, it may have been an owner's refusal to complete the work or make required changes to a project. Some of the required construction documents can only be provided by the registered design professional. In other cases, the Department may have imposed a condition that required the owner's or registered design professional's cooperation. Today, the launch of the BUILD filing systems has actually further complicated some of these issues. The MPC encourages all licensed Master Plumbers to make every effort to close out their permits and when they cannot continue, to submit a withdrawal request. Even though a withdrawal can be made at any time, a licensee is still associated with a permit and the Department seldom will remove that permit from the licensee's open permit portfolio. At our Industry meetings with the Department, we have requested a process be implemented to help increase the sign-off rate.

§28-401.13 Late renewal [and reinstatement].

We request that this section be modified to permit the continued use of the reinstatement portion of this section.

The removal of any reinstatement period potentially poses a huge hardship to contractors who suffer an unforeseen issue that could prevent them from applying for renewal for a year or more. A perfect example is the current pandemic. Last year, we had members who were hospitalized and this year we have members who may be forced to close their business, hopefully only temporarily, due to financial hardships. Maintaining reinstatement provides plumbers suffering hardship from having to suffer even further by starting the entire licensing process all over again. NYC Administrative Code §28-401.22 allows a plumber to apply for deactivation of their license. This would allow the licensee to reactivate the company pursuant to Department rules. The deactivation process can only be used if there are no open work permits on your license. That stipulation eliminates deactivation as a potential option for almost all licensees. The Department could refuse to reinstate a license or certificate of competence on any grounds on the basis of which it could deny, suspend or revoke such license.

We request that the Council prohibit the Department from removing the ability for a licensee to reinstate their license. Even with a period that is shortened to three years, it could help a licensee in the near future maintain the ability to one day continue their business.

§28-408.3.1 & §28-408.4.4 Experience.

We request that these two sections be modified to reflect the experience requirements for a licensed Master Plumber.

The proposed Code language, in regard to required experience, requires modification to clearly indicate that in addition to installation of new work, alterations and Ordinary Plumbing Work will qualify as satisfactory proof of the experience required to obtain a Master Plumbers license. The Department has stated that Ordinary Plumbing Work would count as required experience, but not for all of the seven years. How many years would it count for? Is a person who works at a repair and alteration shop less qualified than persons who only engaged in new work? All experience must be properly counted. The Department has proposed to deactivate the License Board and therefore remove the expert peer review that could accurately measure a person's true work experience. In the future, a person could be denied for "lack of experience" or in the opposite case, approved if the Department investigator does not pick up something in their application.

Applicants claiming experience after January 1, 2020, should be required to obtain a Full Gas Work Qualification. Without this requirement, it is possible that a person granted a Master Plumbers license has no gas work experience. The Department stated that the Master Plumbers license exam includes gas questions. However, the few questions that may appear on the exam do not measure a person's practical gas work experience. In 2008, the Department required all candidates to obtain a journeyman registration and made this a requirement to obtain a license. In 2020, it became a requirement to have a Gas Work Qualification to perform any gas work and this should also be a requirement to obtain a plumbing license.

It is imperative that the type of work that will count toward experience is clearly defined. A candidate for a Master Plumbers license dedicates between 8-12 months of their life and thousands of dollars to navigate the licensed Master Plumber process. The Department requires you to pass all of the exams before they review your final application and qualify your experience. Imagine going that far and finding out you do not have "proper" experience. We request the Council to modify this language to make the process more transparent and also help ensure that the licensed Master Plumbers of tomorrow continue to maintain the same high standards that exist today. The public safety of New York City residents depends on it.

§28-101.5 Definitions Limited Alteration Applications.

We request that a portion of the proposed language added to the new definition of a Limited Alteration Application (LAA) be either stricken or rewritten, so it does not have the potential to prohibit the use of an LAA in conjunction with an Alteration permit.

The verbiage Exception 1. Such work shall not include any associated work that would otherwise require an alteration permit including, but not limited to, any construction of fire rated partitions and enclosures should be removed or rewritten.

As proposed, this verbiage may be interpreted to preclude the use of an LAA permit in conjunction with an Alteration permit. A Limited Alteration Application should only be limited by the permitted work scopes. The fees for the permitted work as well as the installation and inspection processes are the same as for any Alteration permit. With an LAA permit, the plumber is in control of

the filing process and can easily make any changes. This could help to ensure that projects are signed off. The cost for filing an LAA may be one tenth or less of what an alteration permit can cost. Utilization of this permit in conjunction with an alteration permit does not negatively affect public safety in any way. It actually provides a public benefit.

Note: We requested that the Department clarify this language prior to testimony submission but have yet to receive a response.

We propose that the monetary cap associated with a Category 1 work scope be removed.

Today it is quite possible that some permitted work scopes would not be able to utilize this permit because the total cost of the work would exceed the monetary cap. The cap is based on fifty thousand dollars in any 12-month period versus on an annual basis. That is not the same as on an annual basis. That may be feasible for a five-family unit, it may not work in a three hundred-unit building or a commercial space. It is extremely difficult to monitor the amount of work being done in a specific building through the BUILD system. The BUILD system does not have a built-in system to identify when the cap is reached and does not prevent permit issuance if a building's cap is exceeded. This can cause a licensee to inadvertently violate the Code by submitting an application that exceeds the cap. Imagine two neighbors living in the same building trying to do a renovation project. One files first and hits the cap. The second is required to spend additional money for an engineer to file the work. If a work scope is permitted, why should it be limited by a monetary cap? What is the public benefit to this?

We propose that the verbiage and provided further that all such sprinkler heads were legally installed off of a domestic water system: from items 12,13,14 in a Category 2 Plumbing Limited Alteration Application be removed.

The Codes make a general assumption that existing work was legally installed. As written, it appears that the Department is adding an extra requirement for an owner to prove the legality of an existing installation. This may create an additional burden for owners and could have the unintended consequence them seeking to undertake this work without the required permits or qualified persons. If a plumber encounters a non-compliant installation, they are prohibited from doing any work on that system. This verbiage is not included for the same rearrangement work scope on a Sprinkler LAA. We anticipate that this verbiage will be removed when the Existing Building Code is adopted. We respectfully request that the Council requires the Department to strike this language. There is no threat posed to public safety by removing it.

§28-401.18 New York City location required.

We request that the phrase "dedicated to the licensee's" and "during usual business hours" be stricken from this section.

When this section was instituted into the Code, NYC was a much different place. Many plumbing businesses were located in the neighborhood in which they did the vast majority of their work. Some conducted their business using pushcarts instead of trucks because they could walk to their customers' houses. Customers would stop in to request a service call or to pay a bill. Today, there are only a handful of plumbers who still rely on their neighborhood office for their customer relationships. While times have changed, this section of the Code has remained consistent until now. This Code revision (NYC Administrative Code 28-103.34) will require a licensee to provide the Department with an active, electronic email address for the purpose of receiving communications from the Department. Another added section (NYC Administrative Code 28-401.18.1) requires licensees to notify the Department of any changes to their address, telephone number or email address within thirty days of the change. This Code revision (28-401.18.2) will also require licensed Master Plumbers with established places of business to post their plates conspicuously near the entrance to their place of business.

The MPC supports that a licensee must have an established place of business within the city of New York. The Department's proposed addition of *dedicated to the licensee's* business is troublesome for the fact that the Department has declined to specify exactly what that means. They also have not provided any justification for the requested change. The legal definition for *dedicated* refers to property and the dictionary version generally states *exclusively allocated to or intended for a particular service or purpose*. In the licensed plumbing industry, it has been a tradition that newly minted licensees generally lease space within an established plumbing business. Would this new verbiage prevent such an arrangement?

Entry into the plumbing industry requires a very large investment in both time and money. Passage of this verbiage could also create a retroactive requirement affecting hundreds of licensees that would have to come into compliance with a yet undefined term. The pandemic along with the astronomical inflation and material shortages facing our industry are putting enormous pressure on these businesses. Small businesses are the backbone of the City and the leading employer of NYC residents. We respectfully request that unless there is a clearly stated public benefit, that the Council rejects this proposed change.

The phrase “*during usual business hours*” should be stricken. If you ask a jobbing (repairs) plumber what their “normal” business hours are, you will be informed that there is no such thing. This term is also not defined and we request that it is stricken. Leaving this language in could lead to arbitrary interpretations in the future.

§28-401.19.4 Restriction on disciplined licensees.

We request that this section be modified to require the licensee to request permission prior to appointing a previously disciplined licensee.

We believe the intent of this section is to regulate the ability of a previously disciplined person from joining another licensed company and possibly continuing the illicit activities that led to their license being revoked. We request that the verbiage be amended to have the license holder of the company submit a notification to the Department that they intend to appoint any previously disciplined licensee from serving in one of the prohibited positions. It would then be incumbent on the Department to provide a reason for prohibiting this appointment. The way the section is written now, the Department may or may not approve the candidate, yet the licensee could be disciplined for the appointment.

§28-120.1 Tenant protection plan.

We request that this section have a specific exception added for Limited Alteration work permits.

The Code states that the registered design professional is responsible for preparing the document and filing it with the Department. A Limited Alteration work application does not require a registered design professional and is therefore exempt from this requirement. Tenant Protection plans are proposed to be excluded in the upcoming Existing Building Code.

§28-105.5.2 Application for permit where a building is occupied.

We request that this section have a specific exception added for Limited Alteration work permits.

We do not believe the intent of this section is to include Limited Alteration Applications. Limited Alteration Applications (LAA) are generally limited in scope and duration. This section requires the permit applicant to determine and list the total number of units in the building at the time of application and the number of units to be occupied during the course of the work. It also requires post approval amendments if occupancy changes during the course of the work. Strict compliance with this section will be extremely difficult and would add unnecessary costs and delays to the application process.

In support of industry partner positions:

Article 423 revisions.

We fully support the proposed changes to be made to this section of the Code.

These include:

- Renaming the Gas Work Qualification to Full Gas Work Qualification.
- The requirement to have held a Limited Gas Work Qualification as a condition of obtaining a Full Gas Work Qualification.
- Reducing the duration requirement for a limited application to three months.
- This change also requires a change to §28-401.3 Definitions.
- Recognizing that gas work should include periodic inspections required pursuant to Article 318 of Chapter 3 of Title 28 of the New York City Administrative Code.
- Elimination of supervision as qualified experience.

Article 419 Seizure and forfeiture.

The fact that this Article has not been amended to include all unlicensed work wherever it occurs is hard to comprehend. As written, it is limited to a very narrow work scope of new work. The real danger to public safety is in existing buildings during the repair and alteration process.

The DOB Marshals office presently investigates unlicensed plumbing complaints. We believe they would fully support this proposal. This modification would finally provide them with a tool they need to conduct effective enforcement of unlicensed and unregistered persons. A primary function of the Department is to enforce the Codes. This makes it easier for them to do that.

§28-408.1 Master plumber license required.

§28-410.1 Master fire suppression piping contractor license required.

These changes were proposed by the Department and opposed by the industry. The issue was mediated and the Department determined that their position was correct. The MPC respects the Code revision process which does not allow us to resubmit an issue after it has been mediated. That is the reason why we have not included it as one of our recommend changes. We respect that our industry partners felt strongly enough to reintroduce this issue. This issue was briefly discussed during oral testimony. We anticipate that it will be reviewed by the Council as part of this process and want to reaffirm our position on this proposed change.

We agree with the Department that a licensed Master Plumber should not have any restrictions placed upon the work they can perform. They have passed all of the required tests and were reviewed by the License Board. Why are we opposing this proposed change?

The Department's proposal would expand the ability of the city agency licensed Master Plumbers to undertake any plumbing or fuel gas work. The city agency licensed Master Plumbers are not in a position to provide effective supervision and are not in strict adherence with other aspects of the Code. This issue is not about whether a licensed plumber is qualified to perform a work scope; it is whether they are capable to do so. Under the present system they are not. They do not appear to maintain effective control over the work, fail to file reports for work, and the work is not inspected by the Department of Buildings. There may be city agencies employing plumbers that do not have a city agency licensed Master Plumber on staff. Recently, city agency plumbers were stopped by Department enforcement personnel from performing gas work without a required gas work qualification. To the best of our knowledge, no disciplinary actions were taken. If that were to happen to a private sector plumber, they would have been fined five thousand dollars per person found on the job. There are no city plumbers that maintain the required qualification to work on utility gas piping. How are they performing this work? In the past, city agency licensed Master Plumber candidates for a Master Plumber's license have been denied because the city agency licensed Master Plumber refused to provide a letter stating they supervised them thereby denying their experience. That is a perfect example of lack of effective supervision and in the private sector, could lead to disciplinary actions against the plumber. The reality is that without the ability to provide effective supervision city agency plumber should only be permitted to perform ordinary repair work. Please contact us if you require any additional information.

MPC PROPOSED CHANGES

15. §28-105.4.4 Ordinary plumbing work.

No proposed changes to the definition.

We request that the Council adopts the following work scopes as presented.

§28-105.4.4 Ordinary plumbing work. The following ordinary plumbing work may be performed without a permit, provided that the licensed plumber performing such work: (i) provides a monthly report listing completed work and work in progress during the preceding month, including the block, lot and address of each job, a description of the work performed or in progress at each address, and the location in each building where the work was performed or is in progress; (ii) pays the fees for such work in accordance with this code; and (iii) submits to the department a certification that the work was performed in accordance with this code and all applicable laws and rules. Ordinary plumbing work shall include:

1. The relocation of up to two plumbing fixtures within the same room to a maximum of 10 feet (3048 mm) distant from the original location, and the replacement or alteration of related supply, waste, and vent piping associated with the fixture relocation, except in health care facilities.
2. The installation, replacement or repair of a food waste grinder (food waste disposal); dishwasher; instant hot water dispenser; icemaker; coffee machine; secondary back flow preventer and the replacement or repair of a sump pump.
3. The repair or replacement of a plumbing fixture; faucet or fixture fitting from the exposed stop valve to the inlet side of a trap not constituting an ordinary repair.
4. The repair of components of a plumbing appliance or plumbing appurtenance.
5. The replacement of a plumbing appurtenance.
6. In residential buildings occupied by five families or fewer, the replacement of a gas water heater or a gas fired boiler with a capacity of 350,000 BTU or less where the existing appliance gas cock is not moved, provided that the plumber has inspected the chimney and found it to be in good operational condition.
7. In buildings classified in occupancy group R-3, the replacement of a gas furnace with a capacity of 350,000 BTU or less where the existing appliance gas cock is not moved, provided that the plumber has inspected the chimney and found it to be in good operational condition.
8. The repair or replacement of plumbing piping, except gas piping, not longer than 25 feet (7620mm), or connected piping previously repaired or replaced under this provision.
9. The repair or replacement of plumbing branch piping except gas piping, serving the dwelling unit and including the replacement of fixtures, limited to two bathrooms and one kitchen per dwelling unit.
10. The replacement of gas-burning domestic appliances limited to ranges, ovens, stoves, barbecues, and clothes dryers where the existing appliance valve remains and when such appliance replacement is in accordance with this code and the New York City Fuel Gas Code. The existing gas cock or appliance valve shall be accessible, in good working condition with no noticeable corrosion or deterioration, and in the closed off position.

11. The replacement of an appliance connector serving a domestic appliance where the existing appliance valve remains and when such appliance replacement is in accordance with this code and the New York City Fuel Gas Code. The existing gas cock or appliance valve shall be accessible, in good working condition with no noticeable corrosion or deterioration, and in the closed off position.

16. §28-417.1 Plumbing and fire suppression piping contractor license board.

We propose to have the Board remain with no changes.

17. §28-401.3 Definitions FIRE SUPPRESSION PIPING WORK

We propose to ~~strike~~ the proposed changes.

FIRE SUPPRESSION PIPING WORK. The installation, maintenance, repair, modification, extension, or alteration or testing of a fire suppression piping system in any building in the city of New York. [~~Fire suppression piping work shall not include plumbing work.~~]

18. §28-410.4.1.1 Non-qualifying experience

We propose to rename this section and modify the language. ~~Strikethrough~~ to be deleted. Underlined to be added.

~~**§28-410.4.1.1 Non-qualifying experience.** Notwithstanding section 28-410.4.1, work on 30 or fewer sprinkler heads off the domestic water shall not be considered qualifying experience for a master fire suppression piping contractor license.~~

28-410.4.1.1 Alternative qualifying experience: Active NYC licensed master plumbers applying for a B license must have at least (3) years total experience within a (7) years prior to application; in the performance of fire suppression piping work including the planning or design of fire suppression piping systems under the direct and continuing supervision of a NYC licensed master fire suppression piping contractor. Two of the years of such experience must be as a registered journeyman fire suppression installer in accordance with the provision of Article 411.

19. §28-411.2 Experience.

We propose to add the language below.

3. An active NYC licensed master plumber with a minimum of five (1) year of full-time experience in the performance of fire suppression piping work under the direct and continuing supervision of a NYC licensed master fire suppression piping contractor

20. §28-105.4.1 Emergency work

We propose to add language that is underlined and to remove language that is ~~strikethrough~~.

§28-105.4.1 Emergency work. Work that would otherwise require a permit may be performed without a permit to the extent necessary to relieve an emergency condition and to restore the system to a good working condition. An application for a permit shall be submitted within 2 business days after the commencement of the emergency work and shall include written description of the emergency condition and the measures undertaken to mitigate the hazard. Emergency work may include but shall not be limited to:

1. Erection of sidewalk sheds, fences, or other similar structures to protect the public from an unsafe condition.
2. Stabilization of unsafe structural conditions.
3. Repair of gas leaks.
4. ~~Repair or replacement of heating or hot water equipment servicing education or residential occupancies during the heating season, which is between October 1st and May 31st, as established by the New York city housing maintenance code [or education occupancies between [November 1st and May 1st].~~
4. Repair or replacement of heating equipment during the heating season, which is between October 1st and May 31st, as established by the New York city housing maintenance code and/or the repair or replacement of domestic water heating equipment at any time.
5. Replacement of parts required for the operation of a ~~combined~~ standpipe or sprinkler system.

21. §28-408.5 Surrender of license [~~plate~~] or seal.

We propose to add language that is underlined and to remove language that is ~~strikethrough~~.

§28-408.5 Surrender of license, plate or seal. Upon the death or the retirement of a licensed master plumber, or upon the surrender, revocation or suspension of his or her license, his or her license, plate and or seal shall immediately be surrendered to the commissioner. Any licensee associated with the business shall assume any open applications filed on or after the effective date of this Code by the retired or deceased licensee under such license in accordance with department procedures. Nothing contained herein shall be construed to prevent the legal representative of a deceased licensee, with the consent of the commissioner, from retaining such plate and seal for the purpose of completing all unfinished work of the deceased licensee for which plans have been approved and a permit issued, provided such work is performed by or under the direct and continuing supervision of a licensed master plumber and is completed within one (1) year from the date of the death of the original licensee.

22. §28-401.13 Late renewal [~~and reinstatement~~]

We propose to allow reinstatement to remain and limit it to three years. Add language that is underlined and to remove language that is ~~strikethrough~~.

§28-401.13 Late renewal and reinstatement. If a license or certificate of competence expires, the individual may apply for late renewal of the license or certificate of competence [~~;~~] within one (1) year of the date of its expiration without examination but subject to applicable late renewal fee. Thereafter, and up to three years after the date of expiration, the commissioner may reinstate the license or certificate of competence without examination upon the applicant's demonstration to the commissioner's satisfaction of continued competence in the respective trade and satisfaction of any applicable continuing education requirements but subject to applicable late renewal and reinstatement fees. Applicants for late renewal and reinstatement shall provide evidence satisfactory to the department

that he or she is fit to perform the work authorized by the particular license as provided by department rule. A license or certificate of competence shall not be reinstated after three years from date of expiration. The department may refuse to reinstate a license or certificate of competence on any grounds on the basis of which it could deny, suspend or revoke such license.

23. §28-408.3.1 & §28-408.4.4 Experience.

We propose to add the new language in *italic and underlined*.

§28-408.3.1 Experience. All applicants for a master plumber license shall submit satisfactory proof establishing that the applicant:

1. Has at least seven (7) years total experience, within the ten (10) years prior to application, in the *installation alteration and repair* of plumbing systems and the planning or design [~~and installation,~~] of plumbing systems under the direct and continuing supervision of a licensed master plumber in the United States, with at least two (2) years of such experience as a registered journeyman plumber *with gas work qualification* in accordance with the provisions of article 409 *and 423* [~~except that during the three years immediately following July 1, 2008, there shall be no requirement for such registered journeyman plumber experience~~];
2. Has received a bachelor's degree in mechanical engineering or appropriate engineering technology from an accredited college or university and has at least five (5) years total experience, within the seven (7) years prior to application, in the *installation; alteration and repair* of plumbing systems and the *planning or design* [~~and installation~~] of plumbing systems under the direct and continuing supervision of a licensed master plumber in the United States, where at least two (2) years of such experience were in New York city;
3. Is an architect or engineer with at least three (3) years of experience, within the five (5) years prior to application, in the *installation; alteration and repair* of plumbing systems and the *planning or design* [~~and installation,~~] of plumbing systems. *All required experience must be* under the direct and continuing supervision of a licensed master plumber in the United States, [~~where~~] *and* at least one (1) year of such experience [~~was~~] *must be* in New York city;
4. Has at least seven (7) years total experience, within the ten (10) years prior to application, with at least two (2) years of such experience working [~~in the~~] *with installation; alteration and repair* of plumbing systems and *in the* planning or design [~~and installation,~~] of plumbing systems under the direct and continuing supervision of a licensed master plumber in the United States. The balance of such required experience may be obtained by performing maintenance, replacement and repair plumbing work on existing buildings while in the employ of a city agency under the direct and continuing supervision of a licensed master plumber supervisor employed by the city agency. [~~Three years after July 1, 2008 the~~] *The two (2) years' experience in the installation; alteration and repair of plumbing systems and in the planning or design* [~~and installation,~~] of plumbing systems set forth above may only be satisfied by working as a registered journeyman plumber; or

§28-408.4.4 [~~Effect of failure~~] Failure to obtain [plate and/or] seal. If a holder of a certificate of competence has held the certificate for five (5) years without a [~~plate and/or~~] seal, then the commissioner may require said person to submit an affidavit and supporting documentation satisfactory to the department stating that over the five (5) year period the individual has been engaged in *the installation; alteration and repair* of plumbing systems and the *planning or the design* [~~and installation,~~] of plumbing systems in the United States under the direct and

24. §28-101.5 Definitions Limited Alteration Applications

We propose to add new language in *italic and underlined*.
~~Verbiage with strikethrough to be removed.~~

LIMITED ALTERATION APPLICATION. Application for limited oil-burning appliance alterations, limited plumbing alterations, limited sprinkler alterations, and limited standpipe alterations submitted pursuant to section 28-104.6. ~~[Exception 1. Such work shall not include any a] Associated work [that would otherwise require an alteration permit]~~ including, but not limited-to, any construction of fire rated partitions and enclosures *shall be filed under a separate alteration permit. Nothing contained herein shall prohibit the use of a limited alteration application in conjunction with a separate alteration permit.*

We propose that the ~~verbiage with strikethrough~~ be removed.

LIMITED PLUMBING ALTERATIONS. An installation, replacement, repair or alteration to a plumbing or fuel gas piping system, including fixtures and appliances, that is limited in scope, falling into one of the following categories:

Category 1. An ~~[alteration]~~ addition to [a] an existing plumbing or fuel gas piping system or service ~~[where the total cost of the proposed Category 1 work in the building does not exceed [thirty five] fifty thousand dollars in any 12 month period and]~~ where the proposed work is limited to the following:

Category 2 work scopes

We propose that the ~~verbiage with strikethrough~~ be removed.

12. Rearrangement of not more than 20 sprinkler heads in areas classified in light hazard occupancy, as such term is defined in NFPA 13 as amended by appendix Q of the New York city building code, provided such areas are already sprinklered and such areas will remain in such occupancy. ~~and provided further that all such sprinkler heads were legally installed off of a domestic water system;~~

13. Rearrangement of not more than 20 sprinkler heads in restaurant service areas classified in Group 1 ordinary hazard occupancy, as such term is defined by NFPA 13 as amended by appendix Q of the New York city building code, provided such areas are already sprinklered and such areas will remain in such occupancy. ~~and provided further that all such sprinkler heads were legally installed off of a domestic water system; and~~

14. Rearrangement of not more than 20 sprinkler heads in mercantile areas classified in Group 2 ordinary hazard occupancy, as such term is defined by NFPA 13 as amended by appendix Q of the New York city building code, provided such areas are already sprinklered and such areas will remain in such occupancy, ~~and provided further that all such sprinkler heads were legally installed off of a domestic water system.~~

25. §28-401.18 New York City location required

We propose the ~~verbiage with strikethrough~~ be removed.

§28-401.18 New York city location required. Except as otherwise noted for a particular license, the holder of a license, other than an employee of a city agency, shall have or be employed by a business entity that has an established place ~~[of] dedicated to the licensee's~~ business with an address within the city of New York at which such person can be contacted by the public and the department by mail, telephone, email or other modes of communication during usual business hours. A post office box ~~or virtual office~~ is not ~~[an]~~ acceptable ~~[address]~~.

26. §28-401.19.4 Restriction on disciplined licensees

§28-401.19.4 Restriction on disciplined licensees. Proposed Changes

We propose to add new language in *italic and underlined*.
~~Verbiage with strikethrough to be removed.~~

§28-401.19.4 Restriction on disciplined licensees. [A] *Prior approval from the Department is required before a* person who previously held a license that was surrendered subsequent to commencement of a Department disciplinary action, or had their license revoked or was denied renewal, ~~may be prohibited from~~ *may serve* ~~ing~~ as an officer, director, partner, manager, or licensed individual of a licensed business. ~~whether or not the individual had knowledge of or participated in the prohibited acts or omissions for which the license was surrendered, revoked or denied renewal.~~ The election or appointment of that person ~~by another licensee shall~~ *prior to Department approval may* constitute grounds for disciplinary action.

27. §28-120.1 Tenant protection plan

We propose to add the new language that is underlined.

Exception: In the following instances, the tenant protection plan may be prepared and filed by the registered design professional of record for the alteration, construction, or partial demolition work as part of the underlying application:

1. Work in occupied one- and two-family homes.
2. Work limited to the interior of a single dwelling unit of an occupied multiple dwelling with no disruption to the essential services of other units, where such dwelling is owner-occupied. For a dwelling unit within a property that is owned by a condominium or held by a shareholder of a cooperative corporation under a proprietary lease, the unit must be occupied by the owners of record for such unit.
3. Limited alteration applications are not required to comply with this section.

28. §28-105.5.2 Application for permit where a building is occupied

We propose to add the new language that is underlined.

~~§28-105.5.1~~ §28-105.5.2 Application for permit where a building is occupied. All applications for permits for work on a building having more than three dwelling units shall state (i) the total number of units in the building at the time the application is filed, ~~and~~ (ii) the number of units occupied at the time the application is filed, and (iii) the number of units to be occupied during the course of the work. The work permit application shall be amended prior to occupancy of any units that were not initially counted as being occupied during the course of the work.

Exception:

Limited alteration applications are not required to comply with this section.



Testimony to the New York City Council Committee on Housing and Buildings

June 14, 2021

Dear Committee Chair Cornegy and Members of the Committee:

The North American Modern Building Alliance (NAMBA) seeks to work with all parties involved in building and construction who are responsible for ensuring fire safety for the city's buildings and their occupants. Founded in 2020 as part of the American Chemistry Council, NAMBA* is a leading voice on the safe and effective use of plastic building materials in building envelopes. We believe having an informed public and robust codes and standards are an essential part of a multi-layered approach to building fire safety.

New York City's **current building code** has a strong track record of success and is based on nationally recognized requirements for the fire safety of buildings – from workplaces to schools, to hospitals and homes. The building code's provisions include fire safety standards that strictly regulate the testing and use of materials, including specific requirements for plastic building materials. NAMBA supports the continuous maintenance and enforcement of these provisions to allow for the safe and effective use of building materials and assemblies in New York City construction projects.

The American Chemistry Council and its North American Modern Building Alliance was a participant in the NYC Department of Buildings code revision process reviewing the 2015 IBC through the Construction Requirements & Materials Committee. Throughout the process, NAMBA has supported code changes that are technically substantiated, enforceable, and practical.

However, several proposed changes are included in the Int. No. 2261 effecting exterior walls that we do not support. We have respectfully urged the Department of Buildings to either maintain the well-established and coordinated provisions for exterior walls in the current NYC code or include modifications that have been vetted through the International Building Code (IBC) by a diverse group of stakeholders including fire safety officials from across the country and other major jurisdictions.

We are concerned that these proposed changes in the NYC code Chapters 7, 14, and 26 will lead to potentially negative impacts to the fire safety, occupant health, moisture management, and energy efficiency of buildings, including hospitals, schools, offices, hotels, high-rise condos and apartments, in New York City. There is



no technical justification for these changes, either in the form of test data showing increased fire safety with these new proposals, or in deficiencies of how the current NYC code regulates exterior wall systems. The proposed changes will dramatically increase costs and reduce design options while creating challenges for permitting, enforcement, compliance, and speed of construction.

As a result, NAMBA does not support Int. No. 2261, but will remain engaged with the Department of Buildings to understand the implications of and possible solutions for the implementation of this update should the Council choose to advance it.

Sincerely,

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*ACC's [North American Modern Building Alliance](#) (NAMBA) members include:

ACC Center for the Polyurethanes Industry
ACC North American Flame Retardant Alliance
Atlas Roofing Corp.
BASF Corporation
Carlisle Construction Materials
Covestro
DuPont
EPS Industry Alliance
EIFS Industry Members Association
GAF
Huntsman
Kingspan
Metal Construction Association
Owens Corning
Polyisocyanurate Insulation Manufacturers Association
Rmax – A Business Unit of the Sika Corporation

<https://www.modernbuildingalliance.us/>



Northeast District Council of Plasterers' & Cement Masons'

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June 14, 2021

New York City Buildings Committee

Dear Committee Member:

My name is Dale Alleyne. I am the President of the Northeast District Council of the Operative Plasterers' & Cement Masons' International Association Local Union 262. I represent more than 1,300 members and their families right here in New York city, who make a living and support their families installing EIFS and materials like EIFS.

On behalf of those members and their families I ask you to reject these changes.

EIFS have passed the major fire resistance tests that are required by the building codes. EIFS have passed fire resistance, ignitability, intermediate multi-story, and full-scale multi-story corner tests; meeting the standards set forth with each test.

The proposal that you are considering creates a new design for how EIFS and other exterior wall cladding systems should be constructed. This design change has not been tested, let me repeat that, this new design HAS NOT BEEN TESTED. As a result, we have no way of knowing how the new design will affects the other components and materials of the wall system and the structure as a whole.

The safe approach is to rely on the existing building codes that materials and products already have adhere to such as the International Building Code (IBC).

The proposal that you are considering ignores the International Building Code (IBC) and the New York City representatives who participated and contributed in the development of the International Building Code (IBC) along with other governmental officials and fire scientists.

Approving this untested design puts the safety of buildings and their inhabitants at risk.

I respectfully ask that you do what's right for the citizens of New York City by sticking with the tested and proven International Building Code and rejecting these untested design changes.

Sincerely

Dale Alleyne
President / Business Manager

DALE ALLEYNE *President* • **DAVID GENTILE** *Vice-President* • **GINO CASTIGNOLI** *Fin. Secy/Bus. Manager*

Affiliated with the Building Trades Department of the American Federation of Labor, - New York State Building and Construction Trades Council, - Building and Construction Trades Council of Greater New York City and Vicinity, - Nassau and Suffolk Counties Building Trades, - Building and Construction Trades of Westchester and Putnam Counties, - The Bronx, Brooklyn, Manhattan, Queens and Staten Island Boards of Business Agents, - New York State Federation of Labor, - Concrete Trades Alliance of Greater New York, - New York State, Massachusetts, Rhode Island Conference of the O.P. & C.M.I.A., the NorthEast Conference of the O.P. & C.M.I.A. - Building and Construction Trades Council of Rockland County - The Concrete Alliance, Inc.



June 17, 2020

Honorable Members of the Committee on Housing and Buildings
New York City Council
250 Broadway
New York, NY 10007

Subject: Int 2261-2021, Amendments to the New York City Building Code

Thank you for the opportunity to submit written testimony regarding Int 2261-2021, A Local Law to amend the New York City Building Code, among other codes, to bring the code and related provision up to date with the 2015 editions of the International Code Council (ICC) codes.

My name is Shamim Rashid-Sumar. I am a resident of New York City and a professional fire protection engineer working for the National Ready Mixed Concrete Association (NRMCA) on behalf of the Build with Strength (BWS) coalition nationwide. Our coalition members can be found at www.buildwithstrength.com.

The Build with Strength Coalition applauds the efforts of the Department of Buildings and the Building Code Committees in their efforts to develop the proposed updates to the New York City Building Code.

However, Build with Strength expresses its concerns related to the proposed provisions for new materials – cross laminated timber and structural composite timber – as well as proposed provisions for fireblocking for fire protection in combustible exterior walls.

Cross Laminated Timber and Structural Composite Timber

Proposed amendments to Section 602.4 of the New York City Building Code permit structural composite lumber (SCL) and cross-laminated timber (CLT) as acceptable materials for Type IV construction. It should be noted that engineered timber such as SCL and CLT present the following fire safety hazards:

- The timber is combustible.
- The timber will continue to burn until there is no structure remaining.
- The additional energy released due to the burning timber affects the fire dynamics.
- The additional energy released due to the burning timber affects the spread of fire from the compartment of origin.

These hazards are important considerations within the Fire District boundaries of New York City.

Additionally, with respect to the proposed provisions for CLT and SCL, the code updates reference the now outdated 2018 edition of ANSI/APA PRG 320 – Standard for Performance-Rated Cross Laminated Timber. However, the latest 2019 edition of PRG 320, which is referenced by the International Building Code (IBC), includes necessary revisions for the specification of FR adhesives to avoid delamination of CLT members in fire. This is a critical reference standard considering the above-mentioned hazards posed by engineered timber.

We urge the Department of Buildings and the Committee on Housing and Buildings to carefully reconsider SCL and CLT as allowed construction materials within the fire district boundaries and, at minimum, review the provisions for adhesives as well as connections for the new Heavy Timber materials and ensure the latest standards are referenced in the updated codes.

Fireblocking for Fire Protection Related to Combustible Exterior Walls

With respect to the proposed fire blocking requirements in Section 718.2.6.1, Build with Strength is concerned that these new provisions will unnecessarily be required in approved exterior wall assemblies such as Insulating Concrete Forms (ICF) construction, an exterior wall assembly approved by the ICC's International Evaluation Service under AC 353, that includes EPS insulation as part of the concrete exterior wall assembly construction for energy efficiency, among other benefits.

You may recall in 2014, a massive natural gas explosion in East Harlem destroyed two apartment buildings, vacated four neighboring properties, and shattered windows blocks away. Bricks, wood, and other debris landed on the adjacent elevated Metro railroad tracks, suspending service to and from Manhattan for most of the day. In total, the devastation caused 8 deaths, 70 injuries and displaced 100 families. Over 250 firefighters, paramedics, and police officers responded.

However, an adjacent concrete building stood strong, surviving the blast and the fire and reopened after minimal repairs. This adjacent building was constructed of Insulating Concrete Forms, and was not subject to ignition or flame spread, due to the robustness of this construction.

The New York Building Department engineer's report said that amazingly, "there was no structural damage at all," and the blast was located "inches, not feet" from the concrete walls, yet the building was in remarkably good shape.

Build with Strength is concerned that the increased provisions for fireblocking in this type of construction are unnecessary, difficult to implement, and threaten the viability of this construction, which is so vital to preserving fire safety, affordability and energy efficiency in New York City.

In Summary, the Build with Strength coalition welcomes updates to the New York City Building Code and urges the Department of Buildings and the Committee on Housing and Buildings to revisit the new provisions for engineered timber and fireblocking in the code updates to ensure the highest level of safety without sacrificing viability of construction for NYC residents and stakeholders.

Thank you for your consideration. Please do not hesitate to contact me at 917-484-1960 or ssumar@nrmca.org should you have any questions.

Respectfully,



Shamim Rashid-Sumar
Vice President, Fire Codes and Standards

To: Honorable Robert E. Cornegy, Jr., Chair
New York City Council Committee on Housing & Buildings

From: Melissa Barbour, Mechanical Contractors Association of New York
melissa@nymca.org

Date: June 14, 2021

Re: Testimony on Intro. 2261-2021

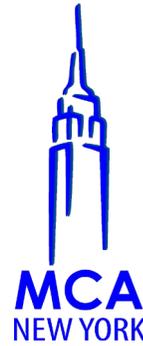
Building Code Sections:

Article 417 - BOARDS

§28-401.18 New York city location required.

§28-410.1 Master fire suppression piping contractor license required.

§28-101.5 Definitions. Limited Sprinkler Alteration.



Introduction:

My name is Melissa Barbour. I represent the Mechanical Contractors Association of New York, Inc. MCA represents licensed fire suppression contractors that are responsible for the installation, inspection, testing and maintenance of fire-suppression systems in tens of thousands of high-density residential, commercial, and industrial buildings, including hospitals, universities, power plants and water treatment facilities across the New York region. We represent the most competent, informed and highly skilled contractors in New York City and Long Island and regularly provide internal educational seminars and programs for our members that further the life-saving message of the importance of proper fire protection. I am currently a member of the Department of Buildings Sub-Operations Committee and a member of the Administrative & Enforcement Existing Building Code Committee. During the new building code revision cycle, I served as a member of the Department of Buildings Administrative & Enforcement Advisory Code Committee. The Department of Buildings and committee members spent a substantial amount of time thoroughly reviewing, updating, and making some significant positive changes to the Code including the expansion of work performed through Limited Alterations. We truly appreciated being a part of this process. While the Administrative and Enforcement Committee did solicit significant industry input, it was not a committee that needed to reach a consensus for changes to move forward in the process. Therefore, when the Department of Buildings felt strongly about something they wanted to change, the Department had the option to move that item along despite industry concerns or committee member objections. Today I ask for your reconsideration regarding three proposed changes that moved forward despite industry objections, and we ask the Council to consider the addition of one section. Everything I am discussing is found in General Administrative Provisions Chapters 1-4.

Item 1. DOB's Elimination of the Plumbing and Fire Suppression Piping Contractor License Board. Intro. 2216 completely strikes out the Plumbing and Fire Suppression Piping Contractor License Board.

ARTICLE 417-BOARDS

~~§28-417.1 Plumbing and fire suppression piping contractor license board. The commissioner shall appoint annually and may remove in his or her discretion each member of a plumbing and fire suppression piping contractor license board that shall have as its purpose the following:~~

~~1. To advise the commissioner regarding the character and fitness of applicants for certificates of competence and licenses who have passed the required examination.~~

~~2. To advise the commissioner regarding allegations of illegal practices on the part of licensed master plumbers, licensed master fire suppression piping contractors, master plumber businesses or master fire suppression piping businesses.~~

~~3. To advise the commissioner regarding plumbing and fire suppression piping practices, code applications, regulations and legislation.~~

~~4. To perform such other responsibilities as may be requested by the commissioner and as set forth in rules promulgated by the department.~~

The primary purpose of a licensing board is to protect the public by helping to ensure that people entering a certain field have met all qualifications; to advise the Department on certain industry practices; to advise on potential legislation, new regulations, or products; and make recommendations to the Department regarding disciplinary action against entities who have violated the building code.

When I began attending New York City Department of Buildings License Board meetings (over 25 years ago) the above practices took place. The Department looked to the industry as a partner and found that the input provided by licensed contractors, engineers, trade unions, the New York City Fire Department and others was a valuable resource. Slowly over the past several years, this has changed. The Department no longer seems receptive to License Board member feedback. This is evident in the Department's proposal to eliminate **Article 417**. Rather than abolish the License Board, the Department should reevaluate its perspective and utilize the knowledge and skill set of this talented pool of individuals willing to volunteer their time to improve the industry.

Plumbing & Fire Suppression License Boards are present in a significant number of jurisdictions in New York State. A quick google search will also demonstrate that they are found across the country. They are an industry norm.

Local governments are continually looking at how to improve the quality of life for their citizens. The best decision-making is a result of multiple perspectives, including the perspectives of community and industry members. The existence of licensing boards may help consumers to feel safe and secure with the knowledge that those providing a service are subject to oversight and regulation. Eliminating this established license board will eradicate an important Department resource and remove a vital layer of transparency.

We urge you to keep the License Board provision.

Item 2. Opposition to language change in §28-401.18 requiring “Dedicated” Office Space.

§28-401.18 New York city location required. *Except as otherwise noted for a particular license, the holder of a license, other than an employee of a city agency, shall have or be employed by a business entity that has an established place [of] dedicated to the licensee’s business with an address within the city of New York at which such person can be contacted by the public and the department by mail, telephone, email or other modes of communication during usual business hours. A post office box or virtual office is not [an] acceptable [address].*

We question the intent of adding the wording ‘dedicated to the licensee’s’. During the administrative code review, we were not able to obtain an answer from the Department as to the intent of this provision. We are supportive of the Department’s intent to have a permanent physical location where a licensee can be contacted. However, we also think that the City needs to be cognizant of the cost of New York City office space. Many New York City businesses share space and rent rooms from other businesses. In certain circumstances, a shared space or lease of a room may be the only feasible solution for a small mom and pop business, someone newly licensed, or a disadvantaged MWBE contractor. Especially one who spends the majority of his or her time in the field. We believe that the language “dedicated to the licensee’s” should be struck. The license holder will still be required to have a physical space located in New York City and meet the intent of the code.

Item 3. Opposition to Removing the Current Code Restrictions on Work Performed by Licensed City Employees

§28-410.1 Master fire suppression piping contractor license required. *It shall be unlawful for any person:*

1. To perform fire suppression piping work unless such person is a licensed master fire suppression piping contractor or working under the direct and continuing supervision of a licensed master fire suppression piping contractor, except that a city employee who holds a license may only perform [~~replacement, maintenance and repair~~] fire suppression piping work on existing buildings in the course of his or her employment.

The Department of Buildings is proposing to change the current law that limits city-employed persons with a fire suppression license to performing only replacement, maintenance, and repair work to now allow licensed city employees to conduct all fire sprinkler work including major alterations. Currently, major alteration work can only be performed by licensed fire sprinkler firms owned and operated by one or more licensed individuals who are in direct control of their company. In addition, anyone performing such work must be in the “direct employ” of the licensed firm. These licensed firms must provide insurance and be supervised, owned, and controlled by individuals who are licensed. Licensed firms have a strong financial incentive to properly train, require safe work practices and supervise those working under their license. Licensed Master Fire Suppression Contractors also have the authority to hire and fire the individuals working for them. The current licensing provisions help ensure the safety of the public. Since fire sprinkler systems are passive life safety systems it is essential that they are installed

correctly and operate properly when activated, not only to protect building property but also to allow occupants enough time to evacuate. City employed license holders will not have control of who performs work under his/her supervision. We believe that if the city utilizes its own employees to perform major fire sprinkler alteration or installation work and these systems are not installed properly, significant liability and safety concerns will arise. Fire sprinkler systems provide a critical role in providing safe conditions for occupants and property. Major alteration work should be limited to licensed individuals maintaining control and supervision of their business.

Item 4. Expand Limited Alteration Applications to Include a New Category of Work that Does Not Require DOB Inspections.

Our final recommendation is regarding **§28-101.5 Definitions. Limited Sprinkler Alteration**. The MCA of New York applauds all of the changes the Buildings Department is proposing regarding Limited Sprinkler Alterations Category 1 & 2. The Department and Industry worked many hours together to create positive changes that will benefit owners, the Department, and the industry. The Existing Building Code committee is also addressing Limited Sprinkler Alterations. The EBC will include a new Limited Alteration category of work, Category 3. Category 3 work does not require DOB inspections. This would allow the Department to capture work that is most likely not currently filed (but is supposed to be) at a minimal cost. Category 3 work has already been agreed to and accepted in the EBC process by the Department and the committees. Rather than wait for the Existing Building Code to come before the Council in a separate bill, we respectfully request the agreed to Category 3 work be included in Intro. 2261. It is found below:

Category 3. An alteration, repair, or replacement of components of an existing sprinkler system that may be performed without the requirement of associated department inspections and that are limited to:

- 1. Direct replacement of drain piping.*
- 2. Direct replacement of water flow, valve tamper, high-low pressure and similar switches, provided that any electrical wiring is performed in accordance with the provision of the New York City Electrical Code and this code.*
- 3. Direct replacement of fire suppression related valves, gauges and controls.*
- 4. Repair or replacement of fire pump system components of same type and capacity including seals and repacking of pump shafts.*
- 5. The emergency replacement of up to 6 defective sprinkler heads, provided that orifice sizes, type and deflector positions remains the same.*

Thank you for your consideration. Please contact me with any questions.



NEW YORK STATE ASSOCIATION FOR AFFORDABLE HOUSING

**NYSFAH Testimony to the New York City Council Housing and Buildings
Intro. 2261 – Updates to City Construction Codes
June 15, 2021**

Chairman Cornegy and members of the Housing and Buildings Committee, thank you for the opportunity to submit testimony on the proposed updates to the NYC Construction Codes. I would like to thank Mark Ginsberg, FAIA, LEED AP, a partner of Curtis + Ginsberg Architects for his review of the proposed code changes on behalf of NYSFAH.

NYSFAH is the trade association for New York’s affordable housing industry statewide. Its 375 members include for-profit and non-profit developers, lenders, investors, attorneys, architects, and others active in the financing, construction, and operation of affordable housing. Together, NYSFAH’s members are responsible for most of the housing built in New York State with federal, state, and local subsidies and incentives.

First, NYSFAH would like to compliment Commissioner La Rocca and all the staff at the Department of Buildings (DOB) for an inclusive, rigorous, and thoughtful process to update our code to keep it in conformance with National standards while adjusting for issues unique to New York City. It is critical that our Code is regularly updated to deal with new issues, products, and to keep us in alignment of national standards.

It is human nature that we want to create a higher quality building. However, this often raises costs. Cost has been thought about in this Code update. For example, Auxiliary Radio Communication (ARC) systems are only required for buildings greater than 125 feet tall. Previously two-way intercoms that meet FDNY were required for buildings greater than 75 feet tall. While changes like this are cost neutral, other changes have the potential to increase the cost of housing, hence increase the per unit subsidy that is required. We hope that future building code updates by DOB will take into consideration the added construction costs.

NYSFAH is committed to building sustainable, energy efficient housing in New York City and across the State. There are instances, however, related to combustible materials in the exterior façade of buildings, where New York City’s requirements are significantly higher, from a fire safety perspective, than what the national code requires. The increased requirements, because of New York City’s Code, will require more space for the walls to meet the energy code. To reduce the impact of this, we would ask the Department of City Planning work to allow for greater deduction for energy efficiency so that we do not lose usable area.

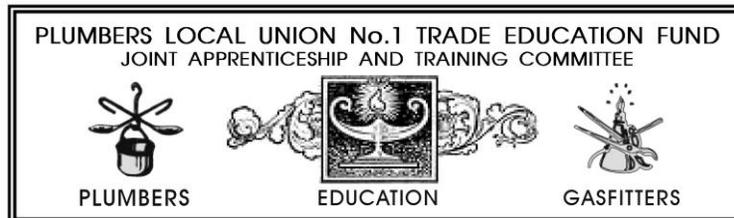
Finally, on the issue of adjacent chimneys, DOB is requiring more documentation and more up-front engineering to prevent unsafe conditions occurring where a newly constructed building is taller than the existing buildings. The proposed mediation makes sense, making it clear that it is the new building's developer who is responsible to adjust the exhaust of the existing building as long as the existing building provides access. If the existing building does not cooperate, it becomes their issue to resolve. However, this can create situations when the new building is complete and but the modifications on the existing building are not complete. It would seem that NYS legislation should be changed to make it easier for the new building to gain access to existing buildings to ensure timely coordination of those required modifications.

Thank you again for the opportunity to testify on Intro. 2261.

Contact: Chris Widelo, Director of External Affairs, at christopher@nysafah.org and (646) 473-1206.

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PLUMBERS & GAS-FITTERS TRAINING CENTER
UA LOCAL UNION No. 1 of NEW YORK CITY
37-11 47th Avenue, Long Island City, N.Y. 11101

ARTHUR O. KLOCK JR.
Director of Trade Education

To: NYC Council Committee on Housing & Buildings
From: Arthur O. Klock Jr. – Plumbers Local 1 Trade Education Fund Date: June 14, 2021

Re: Testimony on Intro. No. 2261

My name is Arthur Klock and I have worked in the Plumbing Industry in New York City for more than 40 years. I am the Director of Trade Education for the Plumbers Local Union No.1 Trade Education Fund.

I have had the good fortune to get a front row seat for many important legislative items at the NYC City Council over the years. The recent updates to our NYC Plumbing Code and NYC Fuel Gas Code have been a long and detailed process, but very worthwhile. Sitting on the Committee has been a great privilege. Working with Licensed Master Plumbers, Licensed Professional Engineers, representatives of FDNY, DEP, SCA, HPD, DOHMH, NYCHA, PANYNJ, Con Edison, National Grid, and of course all the dedicated professionals of the NYC Department of Buildings on this project has been enlightening. I want to express my admiration for the transparent and consensus-based approach DOB used to produce this important work in Intro. No. 2261.

All that being said, there are four issues that I feel should be brought to the attention of the NYC Council Committee on Housing & Buildings while considering Intro. No. 2261:

Item 1. Advocating for revisions to Article 423 of the NYC Administrative Code.

Article 423 of the NYC Administrative Code specifies the qualification requirements for persons who are permitted to engage in Fuel Gas Work. This is related to LL150 of 2016 and has overlapping issues with LL152 of 2016 and 103-10 of Title 1 of the Rules of the City of New York. The “Full” Gas Work Qualification created by LL150 of 2016 has been issued by the DOB to almost 2,000 Journeyman Plumbers, yet there are still unresolved issues. A coordinated effort to “clean up” the requirements of LL150, LL152, and the DOB rules applicable to these laws is needed to carry through on the spirit and intent of the important gas safety laws enacted by the Council after the tragic loss of life in East Harlem and Greenwich Village several years ago.

I urge the Council to address the unresolved issues plaguing Article 423 of the NYC Administrative Code, LL150 of 2016, LL152 of 2016, and the DOB rules (103-10 of Title 1) applicable to these laws. **I have attached proposed language revisions as a postscript to this testimony.**

Item 2. Opposition to the Elimination of the Master Plumber License Board.

Department of Buildings administrative units conduct all Master Plumber license application reviews and disciplinary investigations. Once those reviews and investigations are completed, DOB then presents its findings and recommendations to the License Board for input. The Master Plumber License Board is composed of members appointed by the DOB Commissioner, including one seat reserved for a representative of the thousands of Journeyman plumbers in the industry. The License Board's function is to "advise" the Commissioner regarding the fitness of applicants for licenses, and on allegations of improper or illegal practices, Code violations, etc. All decision-making authority ultimately remains solely with the Commissioner. The License Board meets once a month. The Master Plumber License Board has been in existence for over 50 years and has performed an important function for all that time. The Master Plumber License Board provides a level of transparency and independent review of DOB decisions in this area. Without the continued peer review function of the License Board, there will be no opportunity to inquire into the internal decisions and processes of the Department or to give input and "advise" the Department on these critical issues.

The DOB wants to eliminate the License Board based solely on its claim that elimination of the License Board will "speed up" the licensing process. As noted before, the License Board meets monthly, and frankly, the idea that the Department will act more expeditiously without the License Board is ludicrous. DOB's license application process typically takes several months, therefore waiting an additional week or two until the next monthly meeting of the License Board has never represented a significant delay to an applicant or to a charged individual.

There is no demonstrated reason to eliminate the License Board. DOB's proposal simply seeks to remove a level of transparency and professional engagement that has, for over 50 years, worked to pierce what can sometimes seem an opaque and monolithic cloud of bureaucracy.

I urge the Council to reject DOB's proposed removal of Article 417.

I ask that the Council prevent the elimination of the Master Plumber License Board.

Item 3. Advocating for Expanding the Seizure & Forfeiture Powers of the DOB.

Unlicensed and unqualified individuals conducting plumbing and gas-fitting work is a true threat to public health and safety. Disease and death through illegal work, which is non-compliant with our carefully considered codes, is an ever-present possibility motivated by greed and ignorance. Improperly installed plumbing can be as dangerous as improperly installed gas work.

Current law permits forfeiture of tools and vehicles when there is unlicensed work. The problem is that the law does not go far enough to cover many of the sites where these things can and do happen. In alteration work, there may be no requirement to obtain a new Certificate of Occupancy, and this is the fertile ground of plumbing and gas-fitting work being performed by unlicensed entities who have no valid training or qualifications to know safe work from dangerous work.

DOB's authority to seize tools and vehicles when they catch unlicensed work should be expanded to include all unlicensed and unpermitted work regardless of the size and scope of the job. If we allow unscrupulous so called "contractors" to roam freely about the five boroughs without real consequences to stop them from performing dangerous unlicensed work, the problem will continue to grow, and the health and safety of New Yorkers will be increasingly put at risk. Enforcement against unlicensed construction activity is an important safety matter that the City should be making a priority. Seizing tools and trucks puts real teeth into enforcement and puts a quick stop to bad actors doing dangerous illegal work for their "customers" who are really their victims.

I urge the Council to improve the Seizure & Forfeiture powers of the DOB.

Item 4. Advocating for overhaul of the Ordinary Plumbing Work process. (§28-105.4.4)

Ordinary Plumbing Work covers plumbing work which requires a Master Plumber to perform the work, but is allowed to be done without a Department-issued permit or Department inspection. The Master Plumber has been deemed responsible to execute the work in compliance with all relevant Codes and then report and certify to the Department in writing that the work was done correctly. The Ordinary Plumbing Work process is intended to cover common items of plumbing work which are, none the less, still complex enough in execution that only skilled professionals must be doing them. These are not things that an unlicensed individual should execute. The Ordinary Plumbing Work process is intended to streamline the paperwork and provide cost savings for property owners, while notifying the Department and maintaining the highest levels of public safety. This section of Code is presently underutilized. The reason is that the work scope is vague and this has created confusion for plumbers and property owners. The Department has indicated that the Ordinary Plumbing Work process may be overhauled in the upcoming Existing Building Code (EBC) which is still potentially years away. It is imperative that the Ordinary Plumbing Work process continue, and that corrections be made to increase its usefulness and utilization. The absolutely wrong approach would be to imply that these activities could be executed safely by unlicensed parties, or to do away with the obligation of the licensee to report and certify this work to the Department. Eliminating the reporting requirements will only encourage unscrupulous so called "contractors" and other bad actors to assume that nobody is watching and do dangerous illegal work for their "customers" who are really their victims.

In conclusion, I would like to thank the Chairman and the Committee for their time today. I also want to wholeheartedly commend all the Code Committee volunteers for their hard work and countless hours helping to bring these Codes up to date.

Arthur O. Klock Jr.
Director of Trade education
Plumbers Local Union No.1 Trade Education Fund

POSTSCRIPT:

Proposed language revisions to Article 423 of the NYC Administrative Code.

ARTICLE 423 QUALIFICATION FOR GAS WORK

§28-423.1 Qualification required. For the purposes of this article, “gas work” means work covered by section 101.2 of the New York city fuel gas code, where such work is required by this code to be performed under the direct and continuing supervision of a licensed master plumber [~~, provided that the term “gas work” shall not include periodic inspections required pursuant to article 318 of chapter 3 of title 28 of the administrative code~~]. On and after January 1, 2020, it shall be unlawful to perform gas work unless such work is performed by:

1. A licensed master plumber; or
2. A person working under the direct and continuing supervision of a licensed master plumber if such person:
 - 2.1. Holds a full gas work qualification pursuant to this article; or
 - 2.2. Holds a limited gas work qualification pursuant to this article and is performing such work under the [~~personal and immediate~~] direct supervision of (i) a person who holds a full gas work qualification pursuant to this article or (ii) a licensed master plumber.

Exception: The provisions of this article shall not apply to gas work performed, serviced and maintained by utility corporations and subject to the jurisdiction of the New York state public service commission.

§28-423.2 Applications for full gas work qualification. [~~The commissioner shall issue gas work qualifications in accordance with sections 28-423.2.1 and 28-423.2.2.~~]

~~[§28-423.2.1 Applications for gas work qualification submitted before January 1, 2019. The commissioner shall issue a gas work qualification to a person who before January 1, 2019, submits satisfactory proof establishing that such person is a registered journeyman plumber pursuant to article 409 of this chapter.]~~

~~[§28-423.2.2 Applications for gas work qualification submitted on or after January 1, 2019.]~~ The commissioner shall issue a full gas work qualification to a

person who ~~[on or after January 1, 2019,]~~ submits satisfactory proof establishing that such person:

1. Has demonstrated an understanding of and proficiency and competency with gas work, including (i) a working familiarity with the fuel gas code and the ability to apply the requirements of such code correctly, (ii) the application of skills relating to gas work on the job site, (iii) a working knowledge of the tools for gas work and the ability to utilize such tools properly and (iv) an ability to draft simple diagrams and interpret from drawings for the purpose of performing gas work, by satisfying a requirement that the commissioner shall establish by rule; and

2. Holds or has held a limited gas work qualification; and

~~[2]~~ 3. Satisfies one or more of the following:

~~[2]~~3.1. Such person is a registered journeyman plumber pursuant to article 409 of this chapter;

~~[2]~~3.2. Such person successfully completed an apprenticeship in plumbing through a program approved by the New York state department of labor and has at least one (1) year of full-time experience performing ~~[or supervising]~~ plumbing work under the direct and continuing supervision of a licensed master plumber; provided that such experience occurred in the city or

~~[2]~~3.3. Such person has at least five (5) years of full-time experience performing ~~[or supervising]~~ plumbing work under the direct and continuing supervision of a licensed master plumber, provided that at least one (1) year of such experience occurred in the city.

~~§[28-423.2.3]~~ 28-423.2.1 **Concurrent applications.** The commissioner shall establish a procedure for concurrently applying for a journeyman plumber registration pursuant to article 409 of this chapter and a full gas work qualification pursuant to this section. No application fee shall be charged to an applicant for a full gas work qualification if such applicant (i) is, at the time such application is filed, a registered journeyman plumber pursuant to such article or (ii) is applying concurrently for a journeyman plumber registration pursuant to such article and a full gas work qualification.

§28-423.3 Applications for limited gas work qualification. ~~[The commissioner shall issue limited gas work qualifications in accordance with sections 28-423.3.1 and 28-423.3.2.]~~

~~[§28-423.3.1 Applications for limited gas work qualification submitted before January 1, 2019. The commissioner shall issue a limited gas work qualification to a person who before January 1, 2019, submits satisfactory proof that such person has at least six months of full-time experience performing plumbing work under the direct and continuing supervision of a licensed master plumber.]~~

~~[§28-423.3.2 Applications for limited gas work qualification submitted on or after January 1, 2019.]~~ The commissioner shall issue a limited gas qualification to a

person who [~~on or after January 1, 2019~~] submits satisfactory proof establishing that such person:

1. Has at least [~~six~~] **three (3)** months of full-time experience performing plumbing work under the direct and continuing supervision of a licensed master plumber **provided that such experience occurred in the city** and;
2. Satisfies one or more of the following:
 - 2.1. Such person has successfully completed a training program that (i) relates to gas work, (ii) is at least 16 hours and (iii) is approved by the commissioner;
 - 2.2. Such person is an apprentice in plumbing registered in an apprenticeship program approved by the New York state department of labor; or
 - 2.3. Such person satisfies such other requirement for demonstrating competence with gas work as the commissioner may establish by rule.

§28-423.4 Expiration. The **full** gas work qualification shall have no expiration and need not be renewed or reissued. The limited gas work qualification shall expire five **(5)** years after issuance and may not be renewed **or reissued.**

NOTE: Requires change to 28-401.3

§28-401.3 Definitions. Proposed Changes

DIRECT SUPERVISION. Responsible control exercised by a licensed individual over individuals performing the actual work of the licensee's trade. Such control shall be evidenced by such licensee's signature, and seal where applicable, upon any required statements, applications and/or permits. Direct supervision includes field inspection, supervision of job sites, and the maintenance of records of such supervision and such other requirements as the commissioner may prescribe by rule for a particular license type. All work shall be performed under the guidance and direction of the licensed individual, or, for gas work, a person who holds a full gas work qualification pursuant to article 423, who shall be present at all times such trade work is conducted.

NOTE: Requested changes to 406.4.6

406.4.6 Conducting tests of gas-piping systems. Proposed Changes

406.4.6 Conducting tests of gas-piping systems. Tests of gas piping systems in accordance with this code shall be conducted by an individual [~~with not less than 5 years' experience in gas work~~] who holds a full gas work qualification pursuant to article 423 of the NYC Administrative Code] .

Reason for requested change to 406.4.6

Article 423 of the NYC Administrative Code already specifies the qualification requirement for a person testing gas piping systems. Five years' experience as noted is redundant to the full gas work qualification and also is by itself insufficient.



**PLUMBING
FOUNDATION
CITY OF NEW YORK**

To: NYC Council Committee on Housing & Buildings

From: April McIver, Executive Director, The Plumbing Foundation

Date: June 14, 2021

Re: Testimony on Intro. No. 2261

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Introduction

My name is April McIver, and I am the Executive Director of the Plumbing Foundation City of New York, Inc. The Plumbing Foundation was founded in 1986 and is a non-profit organization of small and large, union and non-union plumbing contractors, engineering associations, supply houses, and manufacturers whose mission is to protect the public health and safety of New York City through the enactment and enforcement of safe plumbing codes.

The Plumbing Foundation is honored to be a part of the NYC Department of Buildings (DOB) Code Revision process for the past 14 years. The Code Revision Committees are no doubt composed of well-known and respected experts in their fields who collectively volunteer thousands of hours towards the Code Revision process. We commend the DOB for its involvement of the stakeholder community and diligence in completing the revision. However, as may be expected, DOB has submitted legislation that the industry believes contains several alarming and impractical proposals, as detailed below.

I. Opposition to Allow City Employees to Perform All Plumbing Work¹

The NYC DOB is proposing to change the law to allow city-employed licensed plumbers to conduct all plumbing work, including major alterations, rather than the current allowance to conduct only limited repairs and replacements. **This presents safety and liability issues.**

All plumbing work (e.g. repairs, replacements, and alterations to water distribution, drainage, and installation of gas piping, medical gas) in New York City can only be performed by licensed plumbing firms owned, operated, and supervised by one or more individuals who are licensed and in control of the company.² Furthermore, anyone performing plumbing work must be in the “direct employ” of the licensed plumbing firm.³ These requirements are to assure the safety of plumbing and gas work. Licensed plumbing firms must provide multiple insurances, and be supervised, owned, and controlled by individuals who are licensed. These licensed individuals are **strictly liable for any mistake made by their firms.** Any mistake by an employee can jeopardize the entire firm owned by the licensee, thereby strongly encouraging safe work practices, adequate training, and supervision.

Licensees do not want to risk their entire business or major increases in insurance premiums by shoddy work practices. Furthermore, licensees often have to secure various bonds with personal guarantees, sometimes including their homes. To help assure the licensee’s ability to control his/her firm’s work, the Code also requires that any plumbing must be performed by people in the “direct employ” of the licensee.⁴ The licensee has the ability to hire and fire any of his/her workers, provide

¹ NYC Council Intro. No. 2261 (2021), at 269–70 (NYC Admin. Code § 28-408.1(1)).

² See NYC Administrative Code § 28-408.6.

³ *Id.* at 28-408.6(4).

⁴ See 28-408.6 (4) and 28-401.3.

raises, and grant safety bonuses. This system, a licensed firm supervising and controlling the plumbing work of its employees, has worked well for decades to protect the public.

However, DOB proposes to change that. The current code allows city-employed plumbing certificate holders to supervise “repair and replacement work” in their own agency’s buildings. This allows, for example, a City-employed license holder working for the Housing Authority to supervise the work of other Housing Authority employees to fix broken water pipes, replace toilets, and similar repairs. DOB’s proposal would allow these same Housing Authority employees to go well beyond “repairs” to essentially allow them to do “major alteration work” and in areas such as natural gas piping, medical gas piping (Health and Hospital buildings), and so forth. DOB’s proposal would allow the person supervising the work to be a city employee **who would not risk his/her business, home, or personal finances if another city employee makes a safety mistake.** Perhaps most importantly, the city plumbing license holder has **no control of who performs the work supposedly under his/her supervision.** Unlike licensed plumbing firms, city plumbing certificate holders cannot hire or fire the people who actually perform the plumbing work. DOB has demonstrated no benefit or practical justification to warrant changing the Code.⁵ Indeed, changing the Code would be **a severe risk to public safety** and is not warranted.

We urge the Council to reject the DOB’s revision to sec. 28-408.1(1) as there is no public safety benefit from this proposal and it exposes the public’s wellbeing.

II. Opposition to Removal of License Board⁶

The Master Plumber and Master Fire Suppression Piping Contractor License Board has been in service for the better of the industry for over 50 years. It is composed of 17 members, each of whom is appointed by the DOB Commissioner and each of whom can be removed at the Commissioner’s sole discretion. As is clearly delineated in sec. 28-417.1, the License Board’s function is to “advise” the Commissioner regarding the character and fitness of applicants for licenses and on allegations of illegal practices, including violations of Code and plumbing practices. However, DOB’s own administrative units conduct all license application reviews and disciplinary investigations. Once those reviews and investigations are completed, DOB then presents its findings and recommendations to the License Board for input. All decision-making authority remains solely

⁵ Upon information and belief, a major factor in seeking the expansion of the kind of work a city-employed plumbing certificate holder can perform is simply to reduce the possibility of bad press. The NYC’s Comptroller’s Prevailing Work Schedule provides two rates for plumbing work, one rate for “repair and replacement” and another rate for “alterations and new construction.” While the present Code only allows City workers to perform “repair and replacement,” the agencies and the local plumbing union, which represents these city plumbers, have agreed to collective bargaining agreements that mandate wage payments for repair work at the “alteration” rate, some 60% higher than the “repair and replacement” rate. In other words, these City workers are getting paid at the higher “alteration rate” which they legally cannot perform. Changing the Code to allow these city workers to perform alteration work would justify them being paid the higher rate.

⁶ Intro. No. 2261, *supra* note 1, at 288-90 (Article 417).

with the Commissioner. The License Board meets once a month. Nevertheless, DOB wants to eliminate the License Board.

Upon information and belief, virtually all jurisdictions that license trades, have a license board composed partly of licensees. It is also common practice in many professions to have peer review. DOB explains that its sole rationale to eliminate the License Board is to speed up the licensing process. DOB's license application process typically takes several months, therefore waiting an additional couple of weeks until the next monthly meeting of the License Board is not a significant delay to the applicant. Rather, the "delay" rationale may not be the real reason for the proposed change. There have been instances when some members of the License Board have questioned the conclusions made by the DOB staff (e.g. amount of time credited for experience). Even though everyone agrees that decision-making rests solely with the Department, government agencies do not relish anyone questioning their decisions. There is no demonstrated reason to eliminate the License Board. DOB's proposal simply removes a level of transparency and oversight that exists all throughout the state and a peer review process that occurs in many other professions.

We urge the Council to reject DOB's removal of Article 417. We ask that the Council strengthen the License Board and not allow DOB to remove it.

III. Opposition to Prohibition of Legal Sprinkler Work under Plumber License As Non-Qualifying Experience⁷

The DOB also proposes to prohibit otherwise **technically compliant and legally conducted** sprinkler work towards the experience needed to apply for a Fire Suppression Piping Contractor License if such work was done under a plumbing license. The Code under sec. 28-101.5 (definition of "Limited Plumbing Alteration") and sec. 28-401.3 (definition of "Plumbing Work") specifically authorizes licensed plumbers to install, alter, and repair sprinkler systems of no more than 29 heads connected to the domestic water system.⁸ This is clearly "fire suppression work" but, nevertheless, DOB is proposing to exclude any of that work to meet any portion of the 7 years' necessary experience to qualify for a fire suppression license. DOB offered no explanation to exclude what is clearly fire suppression work as relevant experience for the 7-year requirement, other than it is an "administrative burden" on its staff.

We urge the Council to reject DOB's newly proposed sec. 28-410.4.1.1 regarding "non-qualifying experience." This will lessen the ability for more licensees, and by that, impact the pool of qualified fire suppression contractors. It will trickle down to the consumer. DOB should not be in the business of hindering work opportunities for those seeking to obtain a license.

⁷ Intro. No. 2261, *supra* note 1, at 277 (§ 28-410.4.1.1).

⁸ On many smaller jobs it reduces costs to the owner if an alteration or addition to the sprinkler system is performed by a licensed plumbing firm that is already present on the job. An additional contractor for such a small job is not necessary since the licensed plumber is usually on the job already and, in any case, is required by Code to perform the connection to the domestic water system.

IV. Opposition to Eliminating Companies that Can Perform Both Plumbing and Fire Suppression Work⁹

There are approximately a total of 1,680 active plumbing licenses and active fire suppression contractor licenses in New York City.¹⁰ Approximately 70% of NYC fire suppression licensees also hold an NYC plumbing license¹¹ and, therefore, these dual license holders provide both plumbing and fire suppression work under a single company. In many cases, allowing plumbing and fire suppression work to be performed by a single entity reduces cost to the consumer as it reduces overhead, simplifies construction coordination, and other benefits. These dual licensed companies were all approved by DOB over the years. Furthermore, employees working under the direct and continuing supervision of these dual license holders these firms can legally perform both classes of work. Some portion of the experience obtained doing fire suppression work under a dually licensed fire suppression contractor / plumber should be credited towards the 7-year experience requirement even if the applicant was doing some plumbing work during that period and visa-versa. Unfortunately, DOB has been interpreting the Code to require that any person legally performing both plumbing and fire suppression work must use any portion of that work experience solely as credit towards just one license type. If a person worked for a company legally performing both plumbing and fire suppression work and indeed performed some of both trades, according to DOB, that person, when applying for their own license, is now only able to use that experience for one license type. In order for applicants to become licensed in both trades, DOB interprets the Code to require that a person must obtain 7 years' experience in just one trade, obtain a license in that trade and then stop work in that trade and gain 7 years' experience in the other trade before applying for the second license.¹² **This is completely impractical.**

The practical effect of this DOB interpretation is that in the future **no one can ever become licensed in both trades** despite having the relevant experience, and that after the current dual licensees retire or die, there will no longer be any firm authorized to perform both plumbing and fire suppression work. While we fully support provisions to assure that only qualified individuals become licensed, DOB's code interpretation is overly restrictive. Indeed, prior to the 2008 Code, anyone applying for a fire suppression license was automatically credited with 4 full years' experience if they had worked in plumbing.¹³ While we believe that such provision is overbroad, we also believe there is a middle ground between DOB's outright prohibition on applying actual and

⁹ Intro. No. 2261, *supra* note 1, at 269–81 (Articles 408 on Master Plumbing License and 410 on Master Fire Suppression Contractor License).

¹⁰ This is according to the NYC Department of Buildings (DOB) data received via an Excel Spreadsheet on May 24, 2021.

¹¹ *Id.*

¹² DOB interprets the reference to “full time experience” for a journeyman fire suppression piping installer registration and journeyman plumber registration as a person can only gain experience in one trade at a time. Although the Code allows individuals to perform both plumbing and fire suppression work if working for a company licensed to do both, DOB's position is that experience can only be obtained in one trade at a time.

¹³ See NYC Admin. Code § 26-146(b)(i).

verifiable work experience to each trade and the 2008 Code’s automatic application of 4 years’ experience from another trade, whether that experience was actually gained or not.

The proposed code change is simple. It provides that when a person is working for a firm that is licensed in both trades and actually performs work in both trades, up to 2 years’ work experience in either trade can be applied when applying for each license. All other requirements to obtain a license (written test, practical test [for plumbing], background check, etc.) remain the same. If this change is not made, the practice of having one company do both trades will eventually cease. Furthermore, individuals who legally perform some plumbing and some fire suppression work may never be able to obtain either license since they do not, according to DOB, work “full time” in either trade.

We urge the Council to revise the requirements under Articles 408 and 410 to allow for up to 2 years’ of work experience in either trade to count towards the license of either (both) trade(s).

V. Support for Expanding the Seizure & Forfeiture Abilities of the Department¹⁴

As presently written, the Code permits forfeiture of tools and vehicles when there is unlicensed work but only at construction sites involving new residential construction of 3 units or less. That is typically not where the problem of unlicensed work exists, since a builder cannot obtain a Certificate of Occupancy (CO) for a new building from the DOB without documentation from a licensed firm. The real problem of unlicensed work is on alteration work, wherein the rogue builder brings in unlicensed entities and the work is completed without having to obtain COs. Accordingly, DOB’s authority to seize tools and vehicles should be expanded to include ALL unlicensed and unpermitted work **other than** work in residential buildings containing 3 units or less.

DOB stated it is opposed to having this expanded enforcement tool based upon “budget and personnel” constraints. However, the need to enforce the laws against unlicensed construction activity, i.e. to stop dangerous conditions and to deter future unlicensed construction work, severely outweighs DOB’s position. Enforcement against unlicensed construction activity is an important safety matter that the City should be making a priority with taxpayer funds. We believe a simple revision as set forth below will resolve this issue:

§28-419.1 General. [~~On and after November 1, 2008~~] ~~The vehicles and tools used in connection with unlicensed or unregistered activity at the work sites of a new residential structure containing no more than three dwelling units~~ **other than a residential structure containing three dwelling units or less** shall be subject to seizure and forfeiture.

We urge the Council to adopt the above proposed changes to section 28-419.1.

¹⁴ Intro. No. 2261, *supra* note 1, at 292 (§ 28-419.1).

VI. Opposition to Monetary Cap on Limited Plumbing Alterations - Category 1 Work¹⁵

The DOB proposes to place an arbitrary monetary cap of \$50,000 in any twelve-month period on what is known as category 1 limited plumbing alteration work. A limited plumbing alteration, also known as a Limited Alteration Application (LAA) by the Department, is used to file for work that is limited in scope, as the title suggests. For plumbing work, there are two categories of work falling under an allowed LAA. Intro. No. 2261 revises category 1 work to encompass the following plumbing work:

- (1) The addition of not more than five plumbing fixtures or fixture connections in a building within any 12-month period, including any associated plumbing necessary to serve such additional fixtures or fixture connections;
- (2) The installation of new fuel gas piping in conjunction with the addition of not more than five gas appliances or six unit heaters, limited to residential gas barbecue, Category 1 vented hot water heater, gas infrared heater, gas light, gas oil burner pilot, gas pool heater in conjunction with an R-3 occupancy group, one commercial gas appliance and gas unit heater, including any associated fuel gas piping necessary to serve such additional appliances;
- (3) The installation of up to five new sprinkler heads off of an existing domestic water system within any 12-month period; and
- (4) Installation of a new single domestic gas dryer that is vented directly through an exterior wall in buildings occupied exclusively as one- or two-family dwellings not more than three stories in height, as provided for in rules of the department.

The Plumbing Foundation supports the scope of work listed in 1 through 4 above, however, opposes the additional restriction of the monetary cap of \$50,000 on these projects. As the industry will attest to, the restrictions placed on each type of category 1 work already provide a sufficient limitation on such work. In addition, it is possible that materials such as appliances listed in the above could cost more than \$50,000 even under the imposed restrictions (5 appliances, for example). When asked what the Department's justification was for this proposed cap, none was provided, further evidencing it was an arbitrary number. The times have changed and costs increased since the original \$35,000 cap was (no doubt also arbitrarily) placed on such work.

In addition, it is apparent that this proposed change will mean for multi-family dwellings such as apartment buildings, condos and co-ops, the limitation of ***“not more than five plumbing fixtures or fixture connections in a building within any 12-month period”*** implies a \$50,000 cap **for the entire building**, not just one individual dwelling unit, owner, or tenant's proposed work.

¹⁵ Intro. No. 2261, *supra* note 1, at 13 (Definition of LIMITED ALTERATION APPLICATIONS under § 28-101.5).

To help illustrate the hardship and unfair limitation placed on the public, imagine a building has 150 units, based on the **cap** and today's approximate pricing for the addition of a typical bathroom group (3 plumbing fixtures), you could assume only (4) tenants/owners could take the advantage of using an LAA under Category 1. Any other tenant or owner would be required to use the more costly, time consuming, and burdensome method of filing a PW-1. The cost for an owner/tenant/landlord to hire an architect, engineer, and expediter would likely increase the cost of the project by upwards of 30%. They would bear this added cost to perform a scope of work that is already covered and allowable by the less costly and cumbersome Category 1 LAA. The limit is arbitrary and places an unfair hardship on anyone who wishes to perform these limited projects already covered under the Category 1 scope of work.

We urge the Council to remove the \$50,000 cap as proposed in the definition of Limited Plumbing Alterations, Category 1 work.

VII. Opposition to Use of “Dedicated” Office Space¹⁶

Finally, DOB is proposing to revise the requirement that licensees have an office located within New York City by adding the following language:

§28-401.18 New York city location required. Except as otherwise noted for a particular license, the holder of a license, other than an employee of a city agency, shall have or be employed by a business entity that has an established place [of] dedicated to the licensee's business with an address within the city of New York at which such person can be contacted by the public and the department by mail, telephone, email or other modes of communication during usual business hours. A post office box or virtual office is not [an] acceptable [address].¹⁷

The plumbing industry is aware of the intent and reasons behind requiring an NYC office and is generally in support of the existing requirements, which licensees have been subject to for some time. However, we are concerned with the use of the phrase “dedicated to the licensee's business” as it is unclear what the intention is behind this proposed revision. As the Council is no doubt aware, office space rental costs are extremely high in the City, and many businesses share space and rent rooms from other businesses. This is a well-known and established practice in the City for businesses and organizations across the board. By proposing to change the language and require the licensee's office space to be dedicated to the licensee's business it would impact a large number of plumbing licensees who rent shared spaces. It makes absolutely no difference to a customer, to DOB, or anyone else whether a licensee's office is in a rented room in shared floor space or the licensee rents an entire unit. There is no practical explanation for this requirement, at least to the

¹⁶ Intro. No. 2261, *supra* note 1, at 253 (§ 28-401.18).

¹⁷ *Id.* (emphasis added).

industry's knowledge, and it only impedes the ability for licensees to find and establish affordable office space. This is yet another hit to small, mom-and-pop shops in New York City.

We urge the City Council to strike the language “dedicated to the licensee’s” in section 28-401.18

Conclusion

We thank the Chairman and the Committee for their time today. The Building Code Revision is long overdue and we commend the Department and all committee members for their hard work and countless hours bringing the Code up to date. **We strongly urge the Council to consider our comments to ensure the revised Code is practical, fair, and promotes safety in the construction industry.**

Please do not hesitate to contact us for any reason.



OPERATIVE PLASTERERS' & CEMENT MASONS'

INTERNATIONAL ASSOCIATION OF THE UNITED STATES & CANADA

9700 Patuxent Woods Drive, Suite 200 ♦ Columbia, MD 21046 ♦ 301-623-1000 ♦ Fax 301-623-1032 ♦ www.OPCMIA.org

America's Oldest Building and Construction Trades International Union, Established 1864

New York City Buildings Committee

June 14, 2021

Dear Committee Member:

My name is Douglas Taylor. I am Vice President of the Operative Plasterers' & Cement Masons Union representing more than 50,000 workers in the United States and Canada, including more than 1300 members and their families right here in New York city, who make a living and support their families installing EIFS and materials like EIFS. I am submitting this letter on their behalf to ask you to reject these proposed changes.

Review of the proposed changes creates uncertainties in how the City will meet its already ambitious climate goals. Taken together, the proposed changes to NYC code (Chapters 7, 14, 17, and 26) appear to be a significant setback in the city's own carbon reduction and environmental sustainability goals.

EIFS, and other building materials like EIFS, represent the best opportunity for the city to adhere to those goals. The global warming impact and carbon footprint of EIFS is 3 times smaller than stucco and 5 times smaller than brick. In fact, EIFS is 84% more energy efficient than the next best performing cladding, outpacing brick and stucco among others.

Adopting these changes will also result in higher costs for building owners, and a deleterious economic impact to the affected industries who have been providing safe, energy efficient building products and systems for many years.

Taking all of this into consideration it is hard not to question the motives behind proposing such a change. I respectfully ask that you do what's right for the citizens of New York City by sticking with the tested and proven International Building Code and rejecting these untested design changes.

I look forward to your response.

Fraternally yours

Douglas L. Taylor
Vice-President

Tenmat

Tenmat is a manufacturer of advanced fire protection materials and innovative firestopping solutions. The company possesses 100 years of experience in the manufacturing of safety critical composite wear parts and high temperature materials coupled with 30 years of experience in producing intumescent materials and passive fire protection solutions. This includes 15 years of manufacturing fireblocking materials for use in external wall systems, such as rainscreen and cladding. During these 15 years Tenmat was also heavily involved in spearheading legislative efforts in the UK to heighten fire safety standards regarding external façade systems.

Fireblocking

The proposal of stone wool fireblocking the open cavity behind rainscreen systems is clearly an effective solution in terms of stopping vertical fire spread caused by the so-called chimney effect.

However, in non-fire situations, this complete blocking of the cavity can cause other issues, such as a lack of drainage and ventilation which can lead to damp problems and reduced energy efficiency through thermal bridging.

These issues can be prevented with the use of intumescent technology while still providing fireblocking capabilities.

Intumescent Technology

Intumescent materials are designed to rapidly swell as a result of heat exposure and can expand many times their original thickness to shut off potential passageways for fire, heat, and smoke.

Tenmat intumescent materials are unidirectional, high expansion and quick reacting enabling them to expand directly across the air gap cavity to stop the fire. The material is made from non-combustible mineral wool/stone wool and an expandable graphite which causes the expansion in case of a fire. Tenmat's intumescent fireblocks are halogen-free, low smoke emitting and have undergone extensive accelerated age and durability testing guaranteeing their performance for the lifespan of the building whilst not contributing any more combustible, smoke emitting substances.

Such intumescent fireblocks have been used extensively in the UK for the past 15 years, as well as other parts of Europe and Australasia and have been increasingly specified and enforced following the tragedy of Grenfell Tower in London. Tenmat's range of intumescent fireblocks for rainscreen systems have undergone and passed the most stringent independent third-party testing in the world, including the UK's BS8414 and BR135, and France's Lepar II.

In addition, the technology has also been successfully employed within façade systems in the US, tested to NFPA 285, where restriction of fire spread through the ventilation cavity is needed.

Conclusion

In conclusion, intumescent fireblock limits vertical fire spread behind the cladding, while allowing ventilation and drainage to remain under normal conditions. This is all possible without the need for any significant changes to current rainscreen system designs.

**Testimony of Thomas Gordon Training Director, IUOE Local 14-14B
Before NYC Council on Housing and Buildings on Int. 2261
Relating to Updating NYC Plumbing, Building, Mechanical and Fuel
Gas Codes**

GOOD MORNING CHAIRMAN CORNEGY AND MEMBERS OF THE COMMITTEE. I WANT TO THANK YOU FOR THE OPPORTUNITY TO SUBMIT THE TESTIMONY ON BEHALF IUOE LOCAL 14-14B IN SUPPORT OF THE PROPOSED AMMENDMENTS TO THE NEW YORK CITY BUILDINGS AND OTHER CONSTRUCTION AND RELATED CODES.

MY NAME IS THOMAS GORDON, I AM CURRENTLY THE TRAINING DIRECTOR OF IUOE LOCAL 14-14B. WHICH, I AM PROUD TO SAY, IS AMONG THE MOST SOPHISTICATED, WELL EQUIPPED, STATE-OF-ART TRAINING CENTERS ANYWHERE.

OVER THE COURSE OF MY MORE THAN 30 YEARS IN THE INDUSTRY I HAVE OPERATED EVERY TYPE OF CRANE FROM CRAWLER CRANES TO THE SLIDER CRANE LOCATED AT THE TOP OF THE WORLD TRADE CENTER FREEDOM TOWER.

I AM N.C.C.C.O. (NATIONAL COMMISION FOR THE CERTIFICATION OF CRANE OPERATORS) CERTIFIED TO OPERATE EVERY TYPE OF CRANE; AND AS WELL AS AN N.C.C.C.O ACCREDITED PRACTICAL EXAMINER FOR ALL TYPES OF CRANES FROM BOOM TRUCK TO TOWER CRANE.

I AM ALSO AFFILIATED WITH NUMEROUS INTERNATONAL UNION OF OPERATING ENGINEERS COMMITEES INCLUDING: THE NATIONAL SAFETY & HEALTH; THE NATIONAL TRAINING SITE; THE MOBILE CRANE MANUAL REVISION; THE RIGGING MANUEL REVISION; AND THE TOWER CRANE MANUAL.

I AM A MEMBER OF NUMEROUS OTHER N.C.C.C.O. COMMITTEES AND TASK FORCES; AS WELL AS THE ASME (AMERICAN SOCIETY OF MECHANICAL ENGINEERS) TOWER CRANE COMMITTEE; ARTICULATING BOOM CRANE COMMITTEE; THE UNMANNED AIRCRAFT SYSTEMS (DRONES) USED IN THE INSPECTION, TESTING, MAINTENANCE AND LIFTING OPERATIONS; A CONTRIBUTING MEMBER OF ASME MOBILE CRANE COMMITTEE; AM A MAIN COMMITTEE ALTERNATE; AND, I AM PROUD TO SAY, I ALSO SERVE ON THE NEW YORK CITY DEPARTMENT OF BUILDINGS CRANE RULES ADVISORY COMMITTEE.

ON BEHALF OF THE LEADERSHIP AND THE MEMBERSHIP OF IUOE LOCAL 14-14 B, WE WANT TO EXPRESS OUR APPRECIATION FOR EVERYONE WITHIN THE VARIOUS TRADES AND DISCIPLINES AND THE DEPARTMENT OF BUILDINGS WHO WORKED TIRELESSLY TO CREATE A BUILDING CODE WHICH REFLECTS TODAY'S TECHNOLOGY.

MORE IMPORTANTLY, THESE NEW CODES WILL CREATE SAFER WORKSITES, IMPROVE EFFICIENCIES AND MAKE FOR A CLEANER, SAFER NEW YORK FOR ALL.

FINALLY LOCAL 14 AND I ARE AVAILABLE TO PROVIDE ANY ADDITIONAL INFORMATION RELATING TO SAFETY CONCERNS WITHIN THIS REVISION OR FUTURE SAFETY RELATED LEGISLATION.

THANK YOU.

UFOA Local 854, Uniform fire Officers Association:

Testimony in support of Int. No. 2261

June 14, 2021

George Farinacci, Vice President of the UFOA, (Fire Officers Union)

The Grenfell Tower tragedy was four years ago today, 72 civilians died a horrific death that could have been prevented if your counterparts across the pond had enacted the safety measures recommended by Int. No. 2261.

When a preventable loss of life occurs, the worst thing we can do is fail to learn from our mistakes. Otherwise said, to make a decision that would allow someone to die in vain.

Working in the fire dept for the last 30 years we learn to count on the unexpected, we live by the credo “**If anything can go wrong, it will.**” When we suffer a loss of life, we do everything we can to correct those conditions that lead to an unnecessary death so it does not happen again.

Responsible Fire code makes a difference:

1. In 1911, Triangle Shirtwaist Factory fire, lead to 146 deaths because of locked exits, workers couldn't get to their second means of egress.
 2. In 1990 the Happy Land social club fire claimed the lives of 87 persons; they were killed because of no second means of egress.
 3. In 2017 seventy two people died when a common kitchen fire on the fourth floor spread to each of the 20 floors above. This conditions that allowed for the rapid spread of this fire were many, the results prevented occupants from to getting to their second means of egress.
- Int no 2261 Will effectively take a 100 story building and contain it to a 3 story fire fight.
 - One of the byproducts of the smoke created when many of these products burn is lethal cyanide gas.
 - 75' was original limit for combustibles materials. This coincided with the maximum reach of the rescue ladders on our fire trucks. This legislation will provide an essential layer of safety for these combustibles materials to be used above the height of 75'. If the fire fighters cannot get to you through you front door, we may get to you through a window unless the building is above 75', in this case building code recommendations such as int no 2261 is going to play a much more critical role in your safety.
 - A vote against this legislation would be in favor of compromising the safety of the people of NYC for shortsighted savings. A tragedy of this magnitude in NYC may set back our post pandemic economic recovery if businesses or civilians don't feel safe to occupy these buildings.

The Current code is dangerous to life and property; the Changes put forth by Int. No. 2261 will responsibly address the dangers of the use of combustible building materials. Today this body has the opportunity today to prevent a similar tragedy here in NYC.



Monday June 14, 2021, 10:00a.m.

The New York City Council
Committee on Housing and Buildings
Hearing on Intro 2261 – A Local Law to amend the Building Code of the City of New York

Testimony by Marc Weissbach, AIA, Chief Executive officer of Vidaris, Inc.

Good morning Council Member and Chair Cornegy and Members and Staff of the City Council Committee on Housing and Buildings. My name is Marc Weissbach. I am a Registered Architect, and the Chief Executive Officer of Vidaris, Inc, as well as the Chairman of LPI, Inc. and an executive of Socotec US Holdings responsible for ten specialty consulting companies throughout the United States. I come before you today in support of Intro 2261; an important Bill to update The Construction Codes of the City of New York.

Today ironically marks the 4th anniversary of the horrific Grenfell Tower fire that claimed the lives of 72 innocent people and destroyed a high-rise apartment block in North Kensington, a suburb west of central London, England. The fire reportedly started due to an electrical malfunction in a refrigerator located along the perimeter of the 4th floor, and uncontrollably raced up the 24 story structure, engulfing the entire building within minutes. Damages have been estimated in excess of \$75M, before accounting for personal property, furnishings, and lives that can never be replaced. A similar fire in NYC would likely result in much higher loss and replacement costs than Grenfell due to our density and the higher costs and complex nature of construction in NYC. Now, government officials and residents throughout England believe that tens of thousands of similarly constructed buildings should be remediated, and that government has set aside billions of dollars to offset repair costs that are expected to be measured in multiples of available funding. Hundreds of buildings maintain 24-hour fire watch at the cost to taxpayers of tens of millions of dollars a year in an effort to alert residents in the case of a life threatening fire event. Buildings incorporating similar materials and details are permitted by code and continue to be built in the United States, including right here in New York City - and it is time to take action to mitigate, unnecessary, excessive risk.

Vidaris and its U.S. affiliates include more than 350 highly technical architects, engineers, code and zoning consultants, energy efficiency and sustainability specialists, and project advisors, with expertise in design, construction, and assessment and investigation of construction failures and property loss. We are part of the 9,000 person, internationally recognized Testing, Inspection, and Certification leader, Socotec Group. Our firm is known worldwide and has worked on some of the most prestigious projects our city has completed or is currently undertaking. Projects include: all of the reconstructed buildings as well as the memorial and plaza on the World Trade Center site, three major sports arenas, One Vanderbilt, multiple

buildings in Hudson Yards, revitalization and repositioning of the Jacob Javits Center and historically significant landmarks such as Carnegie Hall and the Waldorf Astoria, as well having worked on countless numbers of new and existing buildings and apartments throughout all five boroughs of New York City. Our company was the first entity in New York City to become accredited for Special Inspection of building exteriors as required by the 2008 Building Code, and we perform tens of thousands of hours of inspection on projects throughout our City annually. Vidaris and LPI are often called upon in instances where buildings experience water leaks, fires, collapses, and other manmade or natural disasters resulting in property and personal loss or damage. Our staff contribute hundreds of hours per year to New York City participating on committees in various roles to support our City's effort to create and maintain codes intended to protect the health, safety, and welfare of our citizens. It is critical that our codes are current, relevant, and most importantly, clear, so that users can comply effectively and efficiently. It is equally important that our codes reflect current knowledge, trends, and standards and are appropriate for the dense, urban, and specific requirements of our City. We must also take advantage of lessons learned, and balance the dynamics and demands of competing initiatives, putting health and safety at the top of the list.

I am honored to have been selected for two terms as the Chair for the Construction Requirement and Materials Committee (CRM). This committee was most recently charged with reviewing several chapters of the proposed New York City Building Code to ensure its content was consistent with the 2015 International Building Code (IBC), and relevant to New York City.

The Construction Requirements and Materials committee was well balanced and included members representing various stakeholders of our City; designers, developers, manufacturers, contractors, and representatives of various City agencies including the Department of Buildings and FDNY. We held 39 meetings, vetting specific Code language for impact and improvement to the existing code as well for the benefit of the residents and businesses of New York City. Each of the committee members volunteered additional time beyond the meetings to further research code provisions and ensure that our work was focused on moving New York City forward, to maintain New York City's position as a leader and innovator. Our efforts were not simply directed towards cost or construction detailing, but were always sensitive and sensible towards occupant comfort, safety, economics, durability, and energy efficiency. The committee included some of the most hardworking, dedicated, and sophisticated individuals I have had the pleasure to work with and I am again honored to have been a part of this important Department of Buildings initiative.

I am here today to support Intro 2261, but more specifically to acknowledge that there was contentious debate over certain portions of the Code that address the use of combustible materials in and within exterior walls; in fact, this topic was discussed at no fewer than 13 meetings, or roughly once every third meeting that we convened. As you know, the Department of Buildings has endorsed a consensus policy towards code review and

development, meaning that all members of the technical committees must agree on revisions for adoption, the result intended to yield well balanced, reasonable, and necessary code provisions. When consensus cannot be reached in a collaborative manner, remaining issues are then settled through a mediation process. The outcome of the mediation is accepted by all stakeholders; not necessarily because all participants are thrilled with the outcome, but because the process is reached through compromise, and this process helps our City move forward to a better place than where we started. On December 10, 2020 Building Department Commissioner La Rocca issued a 46 page Final Determination of All Sections Mediated as part of the 2020 Code Revision, with detailed provisions regarding the use of combustible materials in and within exterior walls. It was my point of view and the view of FDNY, as well as other Committee members and specialists, that combustible materials should not be used in the exterior walls of buildings taller than 75 feet. As a result of the mediation process, certain provisions were outlined by the DOB that can mitigate unnecessary risk, and slow the spread of fire and poisonous gasses on surfaces and through concealed cavities of exterior wall systems by compartmentalization of combustible materials with fire blocking and other intermittent separation, without banning or otherwise eliminating the use of combustible materials. Introduction of compartmentalization and other separations in and within exterior walls can effectively reduce the spread of fire while maintaining accommodation of provisions to allow for ventilation and drainage of wall systems. Proper rainscreen wall design incorporates intermittent compartmentalization specifically to enhance performance and equalize internal and external pressures. These positive adjustments will allow for progress forward in a City that has no alternative, but to move forward.

London Grenfell, Dubai Address, CCTV Tower, Shanghai 2010, Cathedral of Notre Dame. All of these fires have at least two things in common; the use of combustible materials, and the lack of access to extinguish the fire. Some of these fires occurred in occupied buildings. Some of these fires occurred during construction and renovation operations. These fires resulted in substantial loss of life and property, and presented unnecessary danger to residents, occupants, neighbors, and first responders. While fire cannot be completely avoided, additional steps can and must be taken to mitigate the risk of unnecessary, uncontrollable fire spread.

The altruistic goal to achieve energy efficiency, carbon gas reduction, increase affordable housing, and maximization of land use is clear, and admirable. However, sound decision making is not achieved by exploiting one criterion while disregarding others. Identifying the optimal solution requires compromise, to locate the intersection of seemingly conflicting criteria, challenges, and obstacles.

Exterior fires are generally considered to be low frequency events, occurring in approximately 10% of fires investigated. However, the consequence to life and property is disproportionately high. The percentage of exterior wall fires occurring in sprinklered buildings is also

disproportionately high, occurring in roughly 25% of building fires¹; 1 in 4 fires investigated spread to the building exterior, and if combustible materials and assemblies are present, the fire can easily spread beyond the area of origin. Even in fully sprinklered buildings, the risk of exterior fire spread is high; suppression systems can be overwhelmed, fires can be larger, hotter, and spread more quickly than tested configurations suggest, and fire suppression systems can do little to extinguish fires that are on the exterior of buildings, or even worse, fires that spread within concealed cavities that communicate with adjacent floors or occupancies within a burning building.

Before 2005 there was roughly one fire per year in taller buildings recorded or categorized as an exterior, or cladding fire. With more widespread use of combustible materials and codes reliance on standard tests and buildings to gauge safety, the rate of cladding fires has expanded nearly fourfold. There are more than 15,000 buildings in NYC taller than six stories, more than any other city in the United States. Most of the cladding fires to date have occurred outside of the United States, but the probability is that when such a fire occurs in our country, there is a disproportionately high likelihood it will happen in New York City.

Our City has the best fire fighters of any City in the world, and the FDNY were invaluable contributors on our committee, and invaluable for educating stakeholders in our City about the risk of fire in tall buildings. FDNY has said on numerous occasions that fighting fires from the exterior of buildings is not effective at heights greater than 75 feet, and fires today burn hotter, and faster, than at any time in the past due to the nature of combustible materials used in building construction. Often times, sprinkler systems are not present in older buildings, systems malfunction, or are overwhelmed by the size and speed at which fires can spread.

City Council recently adopted building code provisions, Local Law 15, aimed to protect the lives of birds through the use of friendly glass, but yet our codes leave building residents and occupants exposed to unnecessary, excessive risk of fire, which risk can be mitigated through the use of alternate materials and/or details to eliminate or reduce the likelihood of catastrophic cladding fires.

I urge the Committee on Housing and Buildings to accept and approve Intro 2261, inclusive of the Final Determination resulting from the mediation surrounding the use of combustible materials in and within exterior walls. The immediate concern fire blocking will address is not the elimination of fires or materials, but rather a way to reduce the possibility of fire reaching combustible materials and to slow rapid fire spread, allowing fire suppression systems and first responders to save lives and property.

Weissbach Testimony on Code Revision Bill, Intro 2261_June 14, 2021

¹ The Fire Protection Research Foundation “Fire Hazards of Exterior Wall Assemblies Containing Combustible Components”, June 2014

William Stein FAIA
c/o Dattner Architects
1385 Broadway
New York, NY 10018

June 14, 2021

New York City Council
Housing and Buildings Committee

Re: Construction Codes Revision Completion Bill

Dear Councilmembers:

I am writing in support of the Construction Codes Revision Completion Bill.

I have practiced architecture in New York City for over 40 years and served as Chair of the Use, Occupancy, Egress and Classification Committee for the 2008, 2014 and current code revisions.

The industry-wide committee review process instituted by the Department of Buildings, involving representatives from the design, development, construction trades and regulatory sectors of the construction industry, has resulted in consensus-based revisions to NYC's Construction Codes. The revisions continue to align NYC's codes with developments in the International Construction Codes, while tailoring provisions to our specific, local conditions and practices in NYC.

I believe that the proposed revisions will continue to provide a high degree of health and safety for NYC's buildings and construction practices. The proposed revisions will also continue to standardize NYC's regulatory structure, will facilitate economic development and improve the built environment of the City.

I urge passage of this important bill.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'William Stein', followed by a stylized flourish.

William Stein FAIA



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Via Email: Electronic Posting
June 15, 2021

New York City Council
250 Broadway
New York, New York 10007

Fire Resistance of Exterior Claddings

Position Statement

Dear Honorable Council Members:

This letter has been prepared in support of Intro 2261 and the results of the of the Department of Building's (DOB's) mediation with respect to the combustibility of exterior facades. Unfortunately, there have been unintended consequences of adding additional combustible materials to exterior wall assemblies. There needs to be a balance between energy efficiency and fire safety.

I support the view that making no changes to the building code or instituting a complete ban on the use of combustible materials in exterior walls above a certain height should not occur. New York City is a unique large urban environment and the FDNY has stated that they have little resources to combat an exterior building envelope fire on a high-rise building. Therefore, I believe that a change in New York City is warranted. Also, a complete ban will have unintended negative consequences in building design and construction and poses unnecessary restrictions on those in responsible charge of designing and manufacturing and ultimately approving these assemblies.

Intro 2261 is a viable compromise, which still allows all types of insulation and cladding materials with appropriate modifications to accommodate materials and assemblies known to have a greater risk of combustion.

Engendered and tested solutions are prudent to mitigate the risk of external building envelope fires in high-rise structures in dense urban environments. However, we believe that waiting for future code cycles to address new tests or revisions to existing test standards is not appropriate for New York City. I therefore endorse Intro 2261, with the mediated code language related to the combustibility of exterior facades.

If you have any questions or comments please contact the undersigned.

Sincerely,

WJE ENGINEERS & ARCHITECTS, P.C.

Douglas R. Stieve, AIA,
Senior Principal & Vice Chair, NYC Construction Requirements & Materials Committee

Chair Cornegy and members of the Committee on Housing and Buildings:

I would like to present you with the case of a building that is typical in NYC, unfortunately. We are a building that was constructed with sponsors who cut corners (partly done facade that was glued on, no insulation, no removal of old foundation, etc). And due to this, our building which is only 18 years old is in dire need of immediate improvements.

In rolling with the punches, we are at a juncture, where in order to cost effectively improve our facade & insulation - we would need to build 12" past our lot line. If we are able to build 12" past the lot line, this will allow for both the insulation to be improved to allow for sound proofing & better temperature regulation but also allow us to fully electrify our building.

We are not an outlier, New York is full of buildings whose builders cut corners; the difference of 4" which seems small, will help them electrify their buildings in addition to significantly improving their energy efficiency. With NYC's lofty goals of being electric by 2050, only allowing the 8" will not provide enough room to buildings which are built directly on the lot line with little to no insulation. We need the extra 4" to a total of 12" to increase insulation + electrify the building. We at the Bedford Place Condominium implore you to allow for 12" past the lot line. This will be a huge help to all those buildings that are in disrepair and allow them to immediately improve their buildings in a cost effective manner.

Thank you for your time - Amit

Speaker Johnson, Chairman Cornegy Jr., and Members of the Council:

Thank you for the opportunity to submit my testimony before today's committee hearing. As Vice-Chairman of the Fire Protection Systems Technical Committee, I can personally attest to the thousands of hours invested by volunteers like myself in producing the draft bill before you today. I truly believe that our consensus-based process, including both the public and private sectors and representing a broad cross-section of this great city, has produced a document that will keep New York City at the forefront of construction innovation and building safety for many years to follow. In closing, I respectfully request your consideration in support of Introduction Number 2261.

= = = = =

Submitted by: Charles Joyce, P.E.

Vice Chairman, Fire Protection Systems Technical Committee

AKF Group

IN SUPPORT OF INTRO #2261 (1459)

This written testimony is submitted in support of intro #2261.(1459) My name is Jack Brown. I am a rent stabilized senior. First I will focus on how the absence of legislation addressing the reforms of intro #2261 has severely undermined my warranty of habitability. Following will be a bullet point account detailing the process initiated in June of 2012 and which continues at this hearing.

The landlord of 335 E. 6th Street installed a Fujitsu Halcyon Inverter 30,000 BTU -an HVAC-in the courtyard of the building immediately adjacent to the rear door. When operative in warm weather anyone entering or exiting is hit with a blast of hot air. In cold weather one is hit with a blast of cold.

My west window on the ground floor is 5 ½ feet from the HVAC. In warm weather I cannot open the window because the hot air heats the apartment. In the east window the air comes in and heats the apartment. In the east window the air conditioner when not operative must be covered with plastic bags inside and out to prevent hot air from traveling through the unit and heating the apartment. The operation of the AC seems to be affected by proximity to the HVAC.

The hours of operation of the coffee shop which the HVAC services are commonly 6-6:30 AM to 9-9:30 PM seven days a week. My life-both inside the residence and outside in the backyard is circumscribed by the operation of the HVAC. Severe limitation. If the AC has been used at night it must be covered by the time the HVAC is turned on. At night the backyard retains heat after the HVAC is turned off. I need to pour cold water on the stone. Only then can I open the window or use the AC. I find moving air-fans-the healthier alternative-to chilled air in general.

Rather than live at the mercy of the HVAC which is sometimes left on after the shop closes I prefer to use fans. I have an overhead fan. Two Standing fans and one smaller fan. The heat in my apartment regularly reaches 88 degrees in warm weather. These imposed conditions compromise my ability to sleep. To work. To cook. In short my quality of life suffers greatly. The warranty of habitability is willfully violated.

The violation extends to the need to fight this in time, energy and expense. A consuming process which many tenants cannot afford to contest. Therefore I have pursued it not only for my benefit but that of tenants current or future who may find themselves so beset.

IN SUPPORT OF INTRO 2261-BROWN (2)

In March of 2012 Landlord Roman Bohdanowycz of 125 Second Ave RC installed an HVAC on the west wall and property line of the courtyard of 335 E.6th Street. The technician indicated by his expression that the location could be problematic to the tenants on the ground floor. The landlord', who supervised indicated, to my observation, that the probability was intentional

On June 12, 2012. Inspector Mulvahill from the Dept. of Buildings issued a violation for the placement of the HVAC. The HVAC services a coffee shop located in front the building. The shop is run by adult children of the landlord. The violation required a follow up inspection in the basement of the building.

Over months despite numerous attempts to arrange the necessary inspection by DOB I was unable to do so. Either the landlord did not comply or the DOB did not arrive at the designated time. I then contacted the office of the Public Advocate Letitia James. The case was assigned to the senior ombudsman. The experience and governmental contacts of Fernando Fernandez were invaluable. However a number of inspections were scheduled. All failed despite our best efforts. It became apparent that there was one or more impediments involved.

In July of 2015 I started an HP Action in Housing Court. 6172/15.. The case was assigned to Judge Cheryl J. Gonzales. The landlord's lawyer Gregory Calabro came in waving plans that he represented as proving the violation had been corrected. This subsequently was proved to not be true. Further subsequently Calabro said the plans had been misplaced and could not be located. In fact the records showed that the plans Calbro were for the work to install an HVAC and were done prior to when the violation was issued in June of 2012. This constituted a false self certification on the part of the landlord. At the time a false cert was punishable by civil and criminal fines and up to 6 months in jail.

Subsequent inspection by DOB confirmed that the violation stood. It was a false self cert. A new and separate violation was supposed to be written..This did not occur. I spoke with the inspector. He told me I needed to speak with the Chief. After phone contact proved impossible I spoke face to face with Assistant Special Ops Chief Spina. He told me the Chief told the inspector why he was NOT to write a new and separate violation for the false cert. I found this unacceptable.

After numerous dilatory tactics on the part of landlord's lawyer a trial and evidentiary hearing were conducted. Judge Gonzales found in my favor on June 16, 2016. Ordering correction of violation.

IN SUPPORT OF INTRO #2261 Brown (3)

Then City Councilman Jumaane Williams had enacted legislation that made submission of false certs constituting harassment. Prosecution of false certs was onerous. First a police report. Then the DA's office only selected those cases that involved eviction or bodily harm. Therefore for most cases this constituted a free pass. Get out of jail free card. This false cert was submitted prior to William's legislation. Fell through the crack. None the less it certainly was and contributed to a pattern of harassment.

Subsequently I went to Internal Affairs. I was told the lack of a violation for false cert would be rectified. It did not happen.

Judge Gonzales rotated to Brooklyn. Judge Peter Wendt assumed the bench. At that point the HVAC had been moved from its original location on the west wall where it was 12 ½ feet from my window to a spot immediately adjacent to the rear door and now 5 ½ feet from my window. Thereby exacerbating the violation of the warranty of habitability. A location I characterized before Judge Wendt as “implausible”.

In court Judge Wendt asked Chief Inspector Hughes to examine a photo I presented of the location of the HVAC in relation to the rear door and my window. He replied that it did appear to be a violation. Subsequently Hughes made a personal inspection. He concluded by saying he and Assistant Commissioner Rebholz would sit down and discuss that which he had said appeared to be a violation. This aroused my skepticism.

In court Hughes, Spina and the employee who approved the false certification appeared. Hughes did the talking. The upshot was that Hughes represented that the location of the HVAC did not constitute a violation. Judge Wendt went along with this reversal. In addition he essentially ignored the trial and evidentiary hearing conducted by Judge Gonzales.

I believe this reversal was based on a vindictive motive for my having contested the lack of a violation being written for a false cert. The court lawyer said that made the DOB “nervous”. Subsequently an HPD inspector characterized Judge Wendt as “erratic.”

It had been suggested that I pursue “harassment” against the landlord. I went to DHCR. That unit could not pursue a clear case of harassment with a violation to base the case on. DOB had jurisdiction. DOB had approved the location. Further there was no applicable code to write a violation on. Therefore the imperative for what became intro #1459 was clear..

Based on my experience I suggest that the enforcement of the new legislation be assigned to Environmental Protection. On behalf of all current and future tenants.

To: The New York City Council Committee on Housing and Buildings Hearing on Intro 2261 – A Local Law to amend the Building Code of the City of New York

In Support of the Bill

Currently in this country exterior wall assemblies containing combustible components are allowed in all buildings if the wall assembly passes N.F.P.A. 285 test standards. While passing the standard does ensure that *the* tested wall assembly has significantly safeguarded the combustible component(s) from exposure and thus subsequent contribution to fire, too many variables not addressed in the test affect buildings over their lifespan to rely on the test alone to safeguard buildings.

It is recommended that the concession to allow combustible components to make up substantial parts of exterior wall assemblies in otherwise non-combustible buildings be limited to buildings 75' or less in height, or additional countermeasures need be taken as proposed in Bill 2661. Fire Departments have effective counter-measures to large flame fronts on exterior walls below 75' by use of exterior streams, both hand-held and large caliber. Fire Departments do not have matching tactics on large exterior flame fronts above 75'. Fire Departments have the added challenge in hi-rise buildings in that we cannot quickly evacuate people from very tall/ large buildings.

Countermeasures are proposed that could further reduce risks to such a level that applications above 75' would be acceptable. Fire blocking at panel edges and at floor levels, clear labeling as to which components and assemblies are acceptable, better interior fire barriers, and increased controls (inspection) during manufacturing and installation, etc. are all recommended means to lower the risk of using combustible wall assemblies at height on large buildings.

Vulnerabilities

1. The wall system may be exposed to fires that can vary greatly from the test fire. In actuality the fires may have higher heat release rates and/ or longer duration than the test fire. Trucks at loading docks, transformers and other electrical equipment, dumpsters filled with combustible rubbish, packing materials, and processes present during maintenance, repair, and renovations, may all introduce bigger fires than the test simulates.

FM Global Insurance tested wall assemblies and found with greater heat input 60% of the walls that had passed NFPA 285 burn test failed, allowing flame to spread up the wall to the next levels.

2. NFPA Test 285 does not factor for the effect of wind, which can greatly accelerate flame spread.

3. The fire may affect a larger area, causing multiple portions of the wall system to heat up. High-Rise Buildings can have large-open area occupancies such as restaurants, clubs, retail stock floor areas, parking areas, as well as office spaces undergoing renovation. These spaces have fires that do not match the fire situation the test creates, and yet we have fires of this intensity each month in NYC.
4. The wall system may be configured differently than a simple flat wall causing heat to intensify due to chimney effect and re-radiation near corners and below overhangs.
5. NFPA Test 285 does not account for the Schlyter Effect, a phenomenon where in the tall vertical space common in exterior wall assemblies accelerates fire growth.
6. The wall system is vulnerable to serious fire during installation. The insulating material, usually polystyrene, is highly flammable; and until the exterior non-flammable lamina is applied the insulating material is exposed. In addition the outer coating needs to be thick enough and remain intact through the life span of the building in order to properly shield the polystyrene from exposure to heat and/ or flame. This presents a very difficult inspection and maintenance challenge as all components of the system need to be installed and maintained as per the design wall assembly that passed standard- *throughout the lifespan of the building.*
7. The smoke generated by a polystyrene fed fire is copious. This presents challenges in High-Rise Buildings where the smoke can enter HVAC intakes as well as individual AC units in residential buildings. People seeing heavy smoke may disregard shelter-in-place evacuation plans and expose themselves to contaminated floors unnecessarily.
8. Lastly, the fire service at present has no effective tactics to extinguish large flame fronts on the exterior of buildings at great height. This redundancy to safety engineering is absent to control these fires. To have a large fire burn uncontrolled for extended periods of time in a modern, densely occupied urban center is an unacceptable risk. Below 75' the fire service has multiple tactics and lots of experience to draw upon to combat large flame fronts on the exterior of buildings, not so above the limit of our exterior streams.

Vulnerabilities Became Losses

1. As a Captain I was first due Ladder Company at a fire in Queens Center Mall, a large Class I shopping mall. The fire was a fully involved 30 yard dumpster filled with plastic coat hangers in the mall's interior loading dock. As a Battalion Chief in Manhattan my first High-Rise fire involved a Hi-Lo on fire on the 23rd floor of a 40 story High-Rise Office building undergoing renovation on that floor. These fires illustrate that in large High-Rise Buildings fires occur that generate more heat and for longer duration than N.F.P.A. 285 test simulates. 393 Kennedy St. Winnipeg Canada exterior wall fire started from 25 vehicles in the building's parking garage. The Dijon, France 2010 exterior wall fire from a dumpster adjacent the building. These are just two of hundreds of catastrophic hi-rise fires resulting from combustibles in exterior wall assemblies.
2. In February 2009, 510 Madison Avenue, Manhattan, had a fire in a floor undergoing renovation. This fire resulted in multiple windows failing and exposing the exterior of the building to fire.

While fires involving major portions of large floor areas are rare, they do occur and would expose large areas of the exterior to flame and heat.

3. The Monte Carlo Hotel Las Vegas Nevada 2008 Fire had ornamental features, ledges, and floor wings that contributed to heat and flame intensifying instead of dissipating as it would in a flat wall. N.F.P.A. 285 does not factor in the configuration of the building. The Monte Carlo Fire resulted in an estimated \$100 Million Dollar real property and business interruption loss.
4. The Water Club Tower, Atlantic City, N.J. Fire involved the all 41 floors of the exterior wall while the building was nearing completion. China's 2009 Central Television CCTV Fire was also nearing completion when the catastrophic polystyrene fed fire occurred.
5. Every photo and video of a fire involving large quantities of polystyrene insulation shows very large amounts of very dense smoke. While smoke dampers should limit circulation, the buildings air intakes, active (central and individual HVAC) and passive (open windows, balconies, roof top spaces) would be exposed to the heavy smoke for long duration. In addition people seeing the heavy smoke may attempt to evacuate, possibly exposing themselves to harm (two occupants at the Strand High Rise fire that I was incident commander at several years ago did just that and were killed by the heat and smoke).
6. Every catastrophic combustible cladding fire involving a High-Rise building looks similar in that the Fire Department attempts to extinguish the fire but can only effect areas within the reach of hose line streams. This places limits of 130' from ground level, *given optimal conditions*, right in front of the appliance. The practical "scrub area", even with optimal appliance placement, is less (ground-based hand lines 40-75', large caliber appliances 110-135'). Any wall that cannot be accessed by tower ladders would limit ready water application to 75'.

Conclusion

NFPA burn test 285 should not be the only measure to allow the use of combustibles in exterior walls of hi-rise buildings. There are multiple other factors, both in the environment and the shape and size of the building which greatly influence fire risk. NFPA acknowledges this risk when they created EFFECT (Exterior Façade Fire Evaluation and Comparison Tool) , an algorithm to access vulnerabilities to exterior wall fires.

All other portions of a hi-rise building are required, for good reason, to be fire blocked at each floor. A single line in the code allowed an exception for the exterior wall assembly plastics. We have subsequently had hundreds of catastrophic fires worldwide in these wall systems, and several in the U.S., where these in-wall plastics burned furiously up the building with devastating result.

The recommendations in the bill are reasonable but do require adaptation. It will be well worth the effort required to adapt to these basic countermeasures if this great city can avoid these disastrous fires as well as the liability for having a generation of these buildings in our building stock. I urge the city council to pass the bill.

John Buckheit, MS

Assistant Chief of Fire Prevention, FDNY (retired)

Max G. Wolf AIA PE CPHD LEED AP
52 Saint Nicholas Place, Unit 5
New York, NY 10031

June 11, 2021

The Honorable Robert E. Cornegy
New York City Council
250 Broadway, Suite 1743
New York, NY 10007

Intro. 2261 Testimony – Exterior Wall Code Changes Confused and Undermine Local Law 97

Dear Council Member Cornegy and City Council Members:

My name is Max Wolf and I am an architect and professional engineer specializing in sustainability and building enclosure design at Skidmore Owings & Merrill, New York. I don't doubt the good intentions of the proposed changes to the cladding and fireblocking portions of the Building Code, as there have been cladding fires that show some enclosures to be far less safe than claimed. But what concerns many of us about the revisions is the confused, nonsensical approach. Enclosure design is one of the most complicated specialties in architecture, and since there is no time today to go into the attached details, I suggest two overarching trends for guidance:

1) The history of cladding fires points to combustible cladding and at times combustible insulation as the culprit. Thus, I recommend combustible cladding and insulation not be permitted on highrise buildings, and probably not on lowrise buildings above 40 ft. This is a more conservative, simpler approach than the Code Committees'.

2.) Climate change is a parallel life safety matter that is as deadly and irreversible as a fire, on a much greater scale.¹ Its more extreme weather will increasingly contribute to fires, deadly heatwaves, and other devastating processes throughout New York if we don't continue to reduce emissions. And what we do to building enclosure designs to improve fire resistance can often degrade thermal performance and increase embodied and operational emissions if not done with care. The proposed Code changes severely undermine the ability of some enclosures to fight climate change, while not substantially reducing fire risk.

Therefore, the LL97 Advisory Board absolutely must have time to require any changes to the proposed enclosure revisions, and I recommend you delay passage of this bill and direct the Committee to make available a report summarizing their research, including anticipated LL97 impacts. I urge you to introduce a bill that requires all future changes to Codes and Zoning include LL97 impact statements, or it will be gradually picked apart.

Thank you.



Max G. Wolf AIA PE CPHD LEED AP

¹ Solomon, S., Plattner, G. K., Knutti, R., & Friedlingstein, P. (2009). Irreversible climate change due to carbon dioxide emissions. Proceedings of the national academy of sciences, 106(6), 1704-1709.

Max Wolf Testimony (cont.)

To my knowledge, no cladding fires have been attributed to *noncombustible* exterior wall assemblies – as either the fire source or the conductor of fire from floor to floor (See Table 1).

Property, Location	Year of Fire	Stories	Cladding Fire Fuel Source (Confirmed or suspected)
Monte Carlo Hotel, Las Vegas	2008	32	combustible cladding
Mermoz Tower, Roubaix, France	2012	18	combustible cladding
Lacrosse Apartments, Melbourne, Australia	2014	23	combustible cladding
Address Downtown, Dubai, UAE	2015	63	combustible cladding
Torch Tower, Dubai UAE	2015	79	combustible cladding
Grenfell Tower, London	2017	24	combustible cladding & insulation
Torch Tower, Dubai UAE (again)	2017	79	combustible cladding

Table 1: Published Highrise Cladding Fires since 2008 ^{2 3}

Yet the Code Committee proposes in BC 718.2.6, Exception 2.3 (Fig.1) that noncombustible assemblies with nonmetallic claddings, such as terracotta (Fig. 2), precast concrete or stone - with no cladding fire history - must now be fireblocked. Steel and aluminum plate cladding remain exempt. By adding fireblocking to these nonmetallic cladding types, the Code Committee is wrecking the fire performance of something that doesn't need fixing. At the same time, they are *not* eliminating all combustible wall assemblies on highrises. This conflicted approach, citing no evidence, causes serious doubts in minds of enclosure professionals that I work with, and speaking for myself: a suspicion of incompetence and possibly conflict of interest.

~~[717-2.6] 718.2.6 Architectural trim.~~ Fireblocking shall be installed within concealed spaces of exterior wall ~~[finish] coverings~~ and other exterior architectural elements where permitted to be of combustible construction as specified in Section 1406 or where erected with combustible frames, at maximum intervals of 20 feet (6096 mm) so that there will be no open space exceeding 100 square feet (9.3 m²). Where wood furring strips are used, they shall be of approved wood of natural decay resistance or preservative-treated wood. If non-continuous, such elements shall have closed ends, with at least 4 inches (102 mm) of separation between sections.

Exceptions:

1. Fireblocking of cornices is not required in single-family dwellings. Fireblocking of cornices of a two-family dwelling is required only at the line of dwelling unit separation.
2. Fireblocking shall not be required where the exterior wall covering does not contain plastic or foam plastic insulation, is installed on noncombustible framing and the ~~[face of the exposed to the concealed space is covered by]~~ exterior wall covering is one of the following materials:
 - 2.1. Aluminum siding having a minimum thickness of 0.019 inch (0.5 mm).
 - 2.2. Corrosion-resistant steel ~~[having a base metal thickness]~~ siding not less than 0.016 inch (0.4 mm) at any point.

~~[2.3. Other approved noncombustible materials.]~~

Retain 'Exterior wall coverings.' from IBC 2015. 'Architectural Trim' is too narrow and confusing since this section's scope is exterior walls.

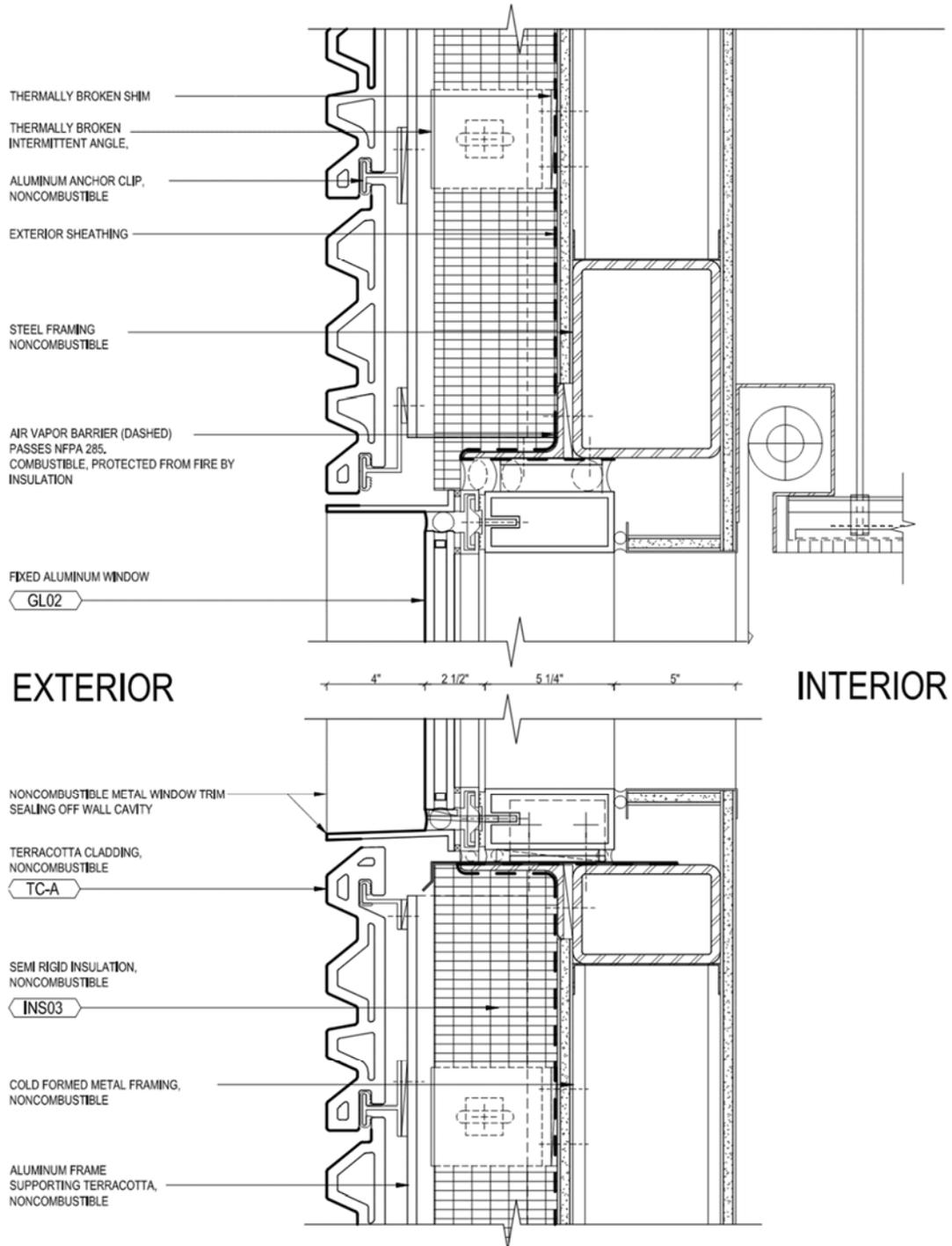
Retain approved noncombustible materials per IBC 2015 conforming to Ch.14. There is no known history of a cladding fire within this category.

Fig. 1 BC 718.2.6 as revised in Intro. 2261. Red highlights problems, in particular the elimination of exception 2.3 that up to now allowed noncombustible nonmetallic cladding without fireblocking.

² Cladding fire data adapted from: Lstiburek, Joseph. BSI-098: *Great Fire of London*. (2017, August 10). <https://www.buildingscience.com/documents/building-science-insights/bsi-098-great-fire-london>. Accessed 29 May, 2021. Fires listed are within the last 10 years and do not necessarily include every highrise fire that occurred.

³ Other cladding fire data adapted from: Underwriters Laboratories. *Catastrophic Exterior Wall Fires in Highrise Buildings* <https://www.ul.com/news/catastrophic-exterior-wall-fires-highrise-buildings>. Accessed 30 May, 2021.

Max Wolf Testimony (cont.)



TYPICAL WINDOW SECTION, TERRACOTTA RAINSCREEN

Fig. 2 Noncombustible exterior wall example. In this common rainscreen assembly, the only combustible components are the (dashed) water resistive barrier (permitted in BC 1403.5.1), and small, localized thermal breaks (which are NFPA 285 fire tested), both of which are shielded by continuous mineral wool - an approved fireblocking per BC 717.2.1(7). Because of the terracotta cladding, it could now require additional fireblocking to create compartments of no more than 100 sf.

Testimony (cont.)

Max Wolf Testimony (cont.)

Embodied Carbon's Dependence on Service Life; Operational Carbon's Dependence on Low Thermal Bridging

Given that the thermal performance and durability of facades must now be improved significantly to stop climate change, they are more sensitive than ever to any added thermal bridging (the short circuiting of heat through the wall) which additional blocking will create. For the cladding types noted, the Committee requires fireblocking for every 100sf of exterior wall area, which will substantially increase the likelihood of leaks through all the additional penetrations and create impediments to drainage, which in turn reduce overall durability. Maximizing service life is critical to minimizing embodied carbon, which is the quotient of the embodied carbon to make and maintain the thing (kgCO_{2e} per declared unit) over the *years of service life* (kgCO_{2e} per declared unit per year. It's analogous to miles per gallon: one needs to consider both the size of the gas tank *and* how far the car will go on it). The longer building components can last, the more we can spread out their embodied carbon load in the biosphere and cause it less stress. See Fig. 3 for one example of the significant additional fireblocking needed to provide cavities of no more than 100 sf on a typical exterior wall.

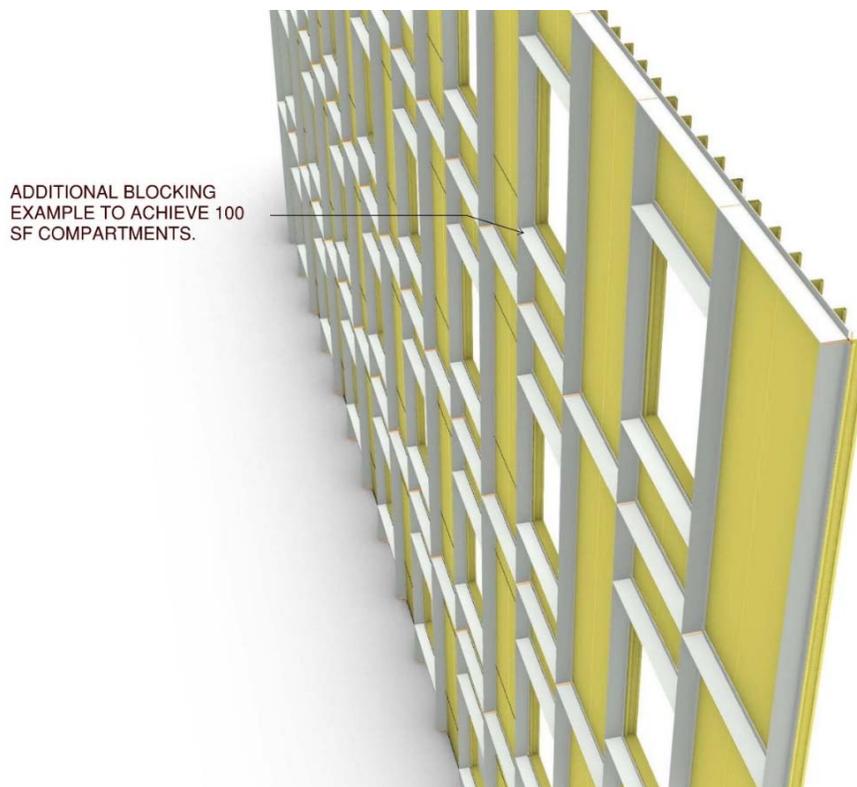


Fig. 3 Additional fireblocking creating compartments no larger than 100sf as required by the proposed updates to BC 718.2.6. Cladding and insulation not shown to clarify extent of blocking.

We need to fix the root problem of cladding fires, by eliminating the components that burn and spread fire, not place another ill-conceived layer within either already poorly designed walls, or in walls that don't have a problem. One possible exception recommended for research is the case of lowrise buildings with rainscreen wall that may still be permitted to be combustible. In such cases, one continuous horizontal line of flashing that closes off the assembly at each floor could be useful.⁴ Floor-to-floor spacing (not every 100 sf) would block the predominantly vertical flame

⁴ See Procter, D. (2017, August 2). *Fire safety paramount in building envelope design*. <https://canada.constructconnect.com/dcn/news/projects/2017/08/fire-safety-paramount-in-building-envelope-design->

Max Wolf Testimony (cont.)

spread seen in buildings with combustible cladding or insulation.⁵ In the case of Grenfell,⁶ flame spread was both up and down: up due to the buoyancy of the hot gasses, and down due to the melting, dripping polymer core. That said, I still recommend elimination of plastics from cladding in all cases.

One other aspect of ventilated exterior wall design that would do well to research involves the gap width between the back of the cladding and the front of the insulation. In *combustible* cladding/insulation assemblies, the gap - if wide enough - can feed a cavity fire with more oxygen. A reasonable proposal from a Code perspective would be to reduce the gap for combustible exterior wall assemblies. As Joe Lstiburek suggested: "Everything can be made to work with a gap no greater than 3/8 inch to 1/2 inch." A 2-inch gap is now common (Fig. 2). As he also notes, this narrower gap range can still provide the necessary ventilation for drying cycles and drainage to ensure long service life, but also exerts significant drag on potential fire updrafts, acting as a damper to the 'chimney effect'. This can be confirmed with NFPA 285 fire testing, where they actually set the mocked-up wall assembly on fire and monitor its fire resistance.

Why Continue to Allow Plastics in Exterior Wall Coverings?

There is no defensible reason that our Building Code should continue to allow exterior wall coverings that contain significant amounts of petrochemicals, which need significant amounts of toxic fire retardant (Fig.4). There are more sustainable alternatives that tend to get recycled and not landfilled or downcycled. These products are a serious hazard to our environment,⁷ FDNY and other first responders. Chapter 26 (Plastics) still allows plastics in exterior wall coverings for construction types I – V with the exception of CLT in IV.

718.2.6.1 Exterior wall coverings containing plastics, MCM or HPL panels. Exterior wall coverings containing plastics complying with Chapter 26, metal composite materials (MCM) or high-pressure decorative exterior-grade compact laminates (HPL), shall be fireblocked.

718.2.6.1.1 Locations. Noncombustible fireblocking materials shall be required at all of the following locations to cut off concealed spaces within the exterior wall covering:

1. Around wall openings.
2. In alignment with the slab edge, for a height of not less than 8 inches (203 mm), and at maximum intervals of 20 feet (6096 mm) vertically.
3. Between different occupancy groups, horizontally or vertically, as applicable.

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Prohibit all wall coverings containing plastics, MCM and HPL in highrise buildings, lowrise buildings above 40 ft and possibly others as supported by analysis peer review and community input. Consider eliminating them altogether.

Fig. 4 BC 718.2.6.1 as proposed in Intro. 2261. Cladding fire history points repeatedly to combustible cladding such as MCM and HPL, yet they remain in the Code.

1026106w. Accessed 30 May, 2021. Excerpt from article: "[John] Straube, who has been involved in forensic investigations into building failures and is an expert in leading-edge building envelope science, says that compartmentalizing each floor in a tower "is a good idea" and can often be done with cross cavity flashings [emphasis added].

⁵ Consider the lowrise Bolton student housing fire, London. <https://www.bdonline.co.uk/news/bolton-student-block-blaze-raises-new-cladding-concerns/5102783.article>

⁶ Grenfell Tower Inquiry: Phase 1 Report Overview. p.4.

⁷ Rillig, M. C., Kim, S. W., Kim, T. Y., & Waldman, W. R. (2021). The Global Plastic Toxicity Debt. *Environmental Science & Technology*, 55(5), 2717-2719.

Max Wolf Testimony (cont.)

Conclusion

The Code Committee has failed to make a case for the proposed changes noted here, based on my preliminary review that is far from exhaustive. Given the potential far-reaching negative effects, they should also be peer reviewed by those with recognized expertise in enclosure design and fire science. For enclosures I recommend Joseph Lstiburek⁸ and/or John Straube,⁹ both recognized industry-wide as experts in enclosures and forensics, with decades of experience in our climate zone and the way we build.

⁸ <https://www.buildingscience.com/users/joseph-lstiburek>. Accessed 29 May, 2021.

⁹ <http://jstraube.com/>. Accessed 29 May, 2021.

Chair Cornegy and members of the Committee on Housing and Buildings:

Before beginning my testimony regarding the proposed regulations for overcladding encroaching past the street line, I would like to first thank you for the Climate Mobilization Act. These local laws are among the most impactful municipal climate laws passed to date anywhere in the world. It is my hope that these laws will help catalyze a transformation of our beloved New York into a true net-zero carbon city.

I am an architect who has practiced for over 30 years in New York City, and the architect of record for projects, large and small, for public and private clients in all 5 boroughs. I have been devoted to environmentally positive, sustainable, resilient, and socially equitable design for the majority of my career, and have earned accreditations and certifications from the US Green Building Council and the Passive House Institute. I work daily on issues of energy efficiency in the design and construction of buildings and renovation projects.

Under consideration today is a revision to the New York City Building Code. I also work daily with the Building Code in my practice and am particularly concerned about one proposed revision to the building code.

Proposed section 3202.2.2.5 is a new section added to the text. It allows for encroachment of buildings past the street line in order to install new exterior cladding for purposes of improving building energy efficiency.

This is a much needed change, because New York will never meet its ambitious targets for carbon reduction under the Climate Mobilization Act without drastically reducing carbon output from buildings, and providing new exterior cladding with new high performance windows is one of the best ways to reduce heating and cooling costs for buildings. However there are some clarifications needed to remove any ambiguity in potential interpretations by Department of Buildings personnel.

1. The proposed text of the code states that exterior cladding systems may extend past the street line, but makes no mention of building mechanical systems, ductwork, piping, and conduit that may be a part of an energy efficiency retrofit. These items are often installed in an integrated way with cladding systems, and should be explicitly allowed to extend past the street line.
2. The proposed text of the code states that the covering system must be needed to comply with the New York City Energy Conservation Code. This language remains open to interpretation in that the New York City Department of Buildings could limit the allowable encroachment to meet today's energy code requirements, but not tomorrow's. The text should be revised to allow for overcladding to **meet or exceed** the requirements of the energy code. Overcladding projects are "once-in-a-generation" projects, and one cannot expect buildings to be retrofitted with more insulation every time the energy code is upgraded.

3. The proposed text limits the extent to which overcladding may encroach past the street line to 8", with certain exceptions. The basis for overcladding should be a 12" encroachment, which will allow for the installation of integrated overcladding systems with sufficient insulation to meet future stringent requirements for building energy performance.
4. The provisions should allow for overcladding of existing building ornament such as cornices and window surrounds to the extent that these items may already extend past the street line.

Thank you for your consideration.

Tony Daniels, RA.

TESTIMONY
CITY COUNCIL
COMMITTEE ON HOUSING AND BUILDINGS
06/14/2021 10:00

Good morning. My name is Benjamin Maltz. As a native New Yorker and history lover, I have long been fascinated by the urban environment. That fascination led me to investigate a facet of New York I've grown up around, yet knew nothing about: Scaffolding. It was at that point that I discovered LL11. Soon after, I learned of Grace Gold and her story. I was shocked to hear that her tragic death was the catalyst for the Law, and I was shocked even more so because as a 2021 alum of Columbia University, her same school (she went to Barnard), I frequented the very corner she died on. I was alarmed to discover that her death was not the last when, several years ago, I witnessed young Greta lose her life directly across from where I live. Why didn't LL11 put an end to falling façades?

In my senior year at Columbia I completed an honors thesis in Urban Studies. My topic was scaffolding—the first paper of its kind in academia. Over the course of my research, I found that few individuals—including seasoned professionals—knew about Grace's relationship to LL11, and fewer still knew her story, let alone her name. Few realized that the NYC construction industry blossomed from LL11, enacted to protect the public through façade repair and restoration. In pinning Grace's name to this Law, you make it *her* law. And by making it *her* law, you give a face to the duty to protect New Yorkers. Too often, this duty is lost on landlords and others who prioritize self over safety. "Grace's Law" injects personal incentive into Local Law observance because it makes you realize—you, or someone you love could be her. It informs us New Yorkers—particularly those of us who are young and, having lived with scaffolding all our lives, take it for granted—that the law serves a vital purpose. Please honor her memory by renaming LL11 after Grace. Thank you.

Ubiquitous and Misunderstood: A Detailed Picture of New York City Sidewalk Sheds and Their “Epidemic” Proportions

Benjamin J. Weiden-Maltz

Senior Thesis for the Undergraduate Urban Studies Program
Columbia University in the City of New York

Submitted March 31st, 2021
Thesis Advisor: Aaron Passell



Photo by author, December 2020

Abstract:

In New York City, sidewalk sheds—colloquially known as scaffolding, meant to protect the public from falling objects—are everywhere. It wasn't always this way: They seldom graced the city's streets until the untimely death of a college freshman in 1979 revealed their necessity. Since then they have become commonplace, and then some; increased installation and repair costs as well as heightened construction have granted them "epidemic" status. Despite their ubiquity, they are consistently misunderstood—if they are even acknowledged to begin with. And, although New York is so regularly analyzed by urban studies scholars, sheds are near absent from the literature. This thesis attempts to remedy both matters, novelly portraying in full both sidewalk sheds' history and present stature. First, I investigate what they are, where they are found, when they are used, and why they are so numerous today. Then, I explore how they are experienced and conceptualized by pedestrians, and how they may be reenvisioned in the future. I use a mixed-methods approach involving interviews, GIS, observation, and a survey; in addition to collecting my own quantitative and qualitative data, I also evaluate existing material. I discover that New York's streets may possess over 370 miles of sheds, many of which have ominously aged beyond their years. The prevalence of sheds in any given area is contingent on density and building heights, not demographic factors such as race or class, although high costs ensure they last longer on structures whose owners are less financially stable. Pedestrians, perhaps expectedly, do not like sheds; most found them off-putting and even threatening. Some blamed them for identity obstruction, others for psychic destabilization. Yet sheds were also understood to be protective, near-iconic, status-quo-altering, and ripe with potential. Ultimately, examining sidewalk sheds encourages a new understanding of the city as simultaneously temporary and permanent.

Dedicated to Grace Gold and the tens of other
New Yorkers who have shared and will share her
tragic, untimely fate

Special thanks to:

Jacqueline P. Weiden, my mom, for everything from my birth up until this point and beyond, including but not limited to her advice, patience, and support.

Aaron Passell, my thesis advisor, for his encouragement, accessibility, leniency, confidence in me, and unending words of wisdom.

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My friends, classmates, professors, and all others who were involved along the way.

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Introduction:

On Tuesday July 18th, 1961 at around 9:30pm, Grace Barbara Gold was born at the Linden General Hospital in Brooklyn, New York.¹ ² The hospital was just a short walk from her home at a housing complex in East New York, where she lived with her father Henry, her mother Sylvia, and her older siblings Larry (b. 1960) and Lori (b. 1957). In 1966 her parents—both teachers at a nearby school—decided to move the family to a 16th-floor apartment in Brightwater Towers, a public housing facility on Coney Island directly across from the newly-relocated New York Aquarium and near-adjacent to the Cyclone rollercoaster. As a child Grace loved to sing and dance; these interests persisted as she grew older. As a tweenager, she wrote and illustrated a children’s book entitled “Upsy-Daisy,” a story about a carousel horse who had trouble moving in tandem with her fellow wooden herdmembers.³ In her teenage years she taught herself guitar and became fluent in Spanish. At John Dewey High School in Gravesend, she developed “a wide, wide range of interests,” expressing a desire to become a lawyer while mulling over studying medicine in college.⁴ She enjoyed reading (she was a frequent patron of the local library) and sang as a soprano in the All City Chorus. She also thought it was important to give back to her community; she was a regular volunteer worker at outreach organizations in Coney Island and beyond.

¹ Established 1935, Linden General Hospital closed in 1976. It is now the Linden Men’s Home, a homeless shelter (501 New Lots Avenue, Brooklyn, NY, 11207).

² Interview with Lori Gold, 12/16/2020; unless otherwise specified, most information pertaining to Grace Gold was gleaned via this interview and the occasional post-interview follow-up question.

³ Gold, Lori. May 24th, 2012. “In Memory of Grace Gold” within “The Lost Beatles & Rolling Stones Photographs,” a brochure for a charity event of the same name:11. *Grace Gold Memorial Scholarship Fund*.

⁴ Interview with Lori Gold, 12/16/2020; [00:50:11].

By seventeen, red-haired Grace was “a remarkable soul with immeasurable allure, inside and out.”⁵ A classmate described her as “a very intense person: smart, sophisticated, passionate, articulate, and, trivial though it may seem, strikingly beautiful.”⁶ Friends called her “Spacey Gracey” and “Graciela Oro”—the latter nickname she picked up in Spanish class.⁷ Possessing copious smarts and talent as well as humility and kindness (she was an honors student, but did not like to say it), she was accepted to Barnard College of Columbia University in 1978 after skipping a year of high school. There, she followed in her sister’s footsteps; Lori had also skipped a year of high school and had graduated from Barnard in 1976.

By May of 1979, Grace had completed her freshman year with high marks and plenty of new friends, many of whom were also impressed with her intellect and academic drive. Some swore that she was going to be the one to cure cancer, that there was no limit to what she’d produce. After final exams, she decided to stay on campus in order to attend the graduation ceremonies for the class of 1979. After all, many of her friends—two roommates Christina and Judy included—were seniors. The three of them planned to host a party at their Barnard dorm, 616 West 116th Street, in the evening of May 16th following commencement. Grace was looking forward to it; a picture taken just before the get-together shows her beaming on the corner of 116th and Broadway, arm in arm with her friends donning Pantone-292 (Columbia Blue) caps and gowns (Fig. C1; for other photos of Grace see Figs. C2-C7).⁸

⁵ Gupte, Pranay B. May 18th, 1979. “City Is Studying Why Lintel Fell, Killing Student.” *The New York Times* CXXVIII(44,221):31. Accessed via *TimesMachine*. Retrieved December 22nd, 2020 (<https://timesmachine.nytimes.com/timesmachine/1979/05/18/111711684.html?pageNumber=31>).

⁶ Gold, Lori and Broder, Michael. 2012. “In Memory of Grace Gold”. 11. *Grace Gold Memorial Scholarship Fund*.

⁷ Interview with Lori Gold, 12/16/2020; [00:53:42].

⁸ Gold, Lori. 2012. “In Memory of Grace Gold”. 13. See Fig. 1.

On Tuesday September 5th, 1911 at 9:00am, brothers Charles and Joseph Paterno applauded as workers laid the cornerstone for their newest project, a twelve-story apartment tower on the northwest corner of Broadway and 115th Street (#601) in the Morningside Heights neighborhood of Manhattan.⁹ The brothers emigrated to the United States from Palermo, Italy in 1888 with their father, John, who was a prominent Italian real-estate developer.¹⁰ After John's death in 1899, Charles cast aside his newly-acquired Cornell medical degree and took over the family business with Joseph's help. In 1904 he capitalized on a construction boom following the opening of the Interborough Rapid Transit's subway along Broadway, the city's first regularly operated line, by purchasing over twenty undeveloped lots on Manhattan's West Side. Soon thereafter, his sharp wit and calculated entrepreneurialism earned him the nickname "Napoleon of the Manhattan Skyscraper Builders."¹¹

The apartment tower at 601 West 115th Street, called the Regnor, was one of three erected on the site as part of this boom; the other two were the Luxor, on the southwest corner of Broadway and 115th, and the Rector, on the southwest corner of Broadway and 116th (Fig. C8).¹² All were designed by Sicilian architect Gaetan Ajello.¹³ The triplet, considered "of the highest class" by the New York World's 1912 Apartment House Album, featured Renaissance-style

⁹ Unknown Author. September 6th, 1911. "Cornerstone Laid For New Apartments." *The New York Times* LX(19,583):8. Accessed via *TimesMachine*. Retrieved December 24th, 2020 (<https://timesmachine.nytimes.com/timesmachine/1911/09/06/issue.html?pageNumber=8>).

¹⁰ Gray, Christopher. October 15th, 1995. "Streetscapes: The Paterno Brothers' Apartment Houses." *The New York Times* CXLV(50,215):280. Accessed via *TimesMachine*. Retrieved December 22nd, 2020 (<https://timesmachine.nytimes.com/timesmachine/1995/10/15/225395.html?pageNumber=280>).

¹¹ Ibid.

¹² Unknown Author. June 23rd, 1912. "Block Front of Apartments Ready To Open On Broadway." *The New York Times* LXI(19,874):83. Accessed via *TimesMachine*. Retrieved December 22nd, 2020 (<https://timesmachine.nytimes.com/timesmachine/1912/06/23/100372027.html?pageNumber=83>).

¹³ Gray, Christopher. June 11th, 2006. "Streetscapes: Remembering an Architect Who Shaped the West Side." *The New York Times* CXXLI(48,850):223. Retrieved December 22nd, 2020 (https://www.nytimes.com/2006/06/11/realestate/11scap.html?_r=1&oref=slogin).

façades, stylized iron cornices, prominently displayed central staircases, and oak or mahogany-lined rooms.¹⁴ The novel inclusion of electric lights and elevators was deemed “a great leap forward in taste, convenience, and efficiency.”¹⁵ Initially, much to the astonishment (and in some cases distress, some eager excitement) of the general public, the Regnor was to be sixteen stories high. This would make it the tallest apartment building in the five boroughs, setting a lofty precedent for future architects.¹⁶ Prospective apartment owners were, however, hesitant to be “cliff-dwellers...so close to the sky” and the building was subsequently shortened on paper before the foundation was laid.¹⁷ It was completed in October 1912.

In the late 1950s, Columbia University acquired the Regnor and its two sisters.¹⁸ Much to the horror of historic preservation advocates, between 1974 and 1977 following a city-wide trend they had all three “scalped;” each building’s cornice was removed in order to save money on maintenance.¹⁹ At the time, the Regnor was fully occupied. In December of 1977, one resident in apartment 11E reported a water leak. After a month had passed without action, they reported it again, this time revealing that water was pooling within the building’s exterior wall.²⁰ As it froze,

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Unknown Author. August 27th, 1911. “Taller Apartment Houses Are Predicted For New York Cliff Dwellers In Five Years.” *The New York Times* LX(19,573):89. Accessed via *TimesMachine*. Retrieved December 22nd, 2020 (<https://timesmachine.nytimes.com/timesmachine/1911/08/27/100501696.html?pageNumber=89>).

¹⁷ Unknown Author. August 4th, 1911. “The Real Estate Field.” *The New York Times* LX(19,550):13. Accessed via *TimesMachine*. Retrieved December 22nd, 2020 (<https://timesmachine.nytimes.com/timesmachine/1911/08/04/104832066.html?pageNumber=13>).

¹⁸ Higgins, Richard. August 5th, 1979. “Tragedy Puts Columbia To New Test as Landlord.” *The New York Times* CXXVIII(44,300):228-231. Accessed via *TimesMachine*. Retrieved December 22nd, 2020 (<https://www.nytimes.com/1979/08/05/archives/tragedy-puts-columbia-to-new-test-as-landlord-tragedy-puts-columbia.html>).

¹⁹ Gray, Christopher. January 19th, 1992. “Streetscapes: ‘Scalped’ Buildings; For Utility Alone, a Restored Cornice.” *The New York Times* CXXLI(48,850):223. Accessed via *TimesMachine*. Retrieved December 22nd, 2020 (<https://www.nytimes.com/1992/01/19/realestate/streetscapes-scalped-buildings-for-utility-alone-a-restored-cornice.html>).

²⁰ Polner, Rob. October 1981. “Parents of Grace Gold Upset By Terms of CU Settlement.” *Columbia Daily Spectator* CV(154):29. Accessed via *Columbia Spectator Archive*. Retrieved December 22nd, 2020 (<http://spectatorarchive.library.columbia.edu/?a=d&d=cs19811029-01.2.3&>).

cracks developed in the façade. In February of 1978, an inspector from the City's Department of Buildings (DOB) deemed the issue a "non-hazardous violation" of a housing code that requires building owners to adequately address plumbing and leakage issues.²¹ As owner, Columbia did not institute repairs until January of 1979; by this time, water had seeped down through the exterior walls to the sixth floor.²²

On May 16th, 1979 at around 8:15pm, Grace Barbara Gold smiled for a photograph on the corner of 116th and Broadway. Minutes later, friends in tow, she jovially walked southwards to a cash machine inside Ta-Kome, a popular deli at the base of the Regnor. Presumably, she needed cash for supplies for the post-graduation party she was throwing. Mid-conversation, she laughed. Then, fifteen-year-old John Asta of Regnor apartment 5E saw something dark fall past his window.²³ A few steps behind Grace, Columbia student Robert Greenwald saw it coming, too, but could do nothing. "It was as if the sky was falling," he recalled.²⁴ Suddenly, a large gash materialized on Grace's forehead. She collapsed to the sidewalk beside a two-foot segment of masonry from the lintel of an eighth-floor window, her screams replaced by the muffled gasping sound of her choking on her own blood. A nearby team of paramedics from Saint Luke's Hospital rushed over. Minutes later, they pronounced her dead.

Grace's friends and family remembered her as "a beacon," as a "passionate soul...who accomplished more in her seventeen years than most people [do] in thirty-five."²⁵ She was

²¹ Ibid.

²² Ibid.

²³ Unknown Author. May 17th, 1979. "Falling Masonry Fatally Injures Barnard Student." *The New York Times* CXXVIII(44,220):28. Accessed via *TimesMachine*. Retrieved December 22nd, 2020 (<https://timesmachine.nytimes.com/timesmachine/1979/05/17/111026733.html?pageNumber=28>). **This article has many inaccuracies: for instance, Grace Gold was not 18 and was not from Philadelphia.

²⁴ Ibid.

²⁵ Polner, Rob. 1981. "Parents of Grace Gold Upset By Terms of CU Settlement." *Columbia Daily Spectator* CV(154):29.

posthumously bestowed the “Quality of Life” award by her high school in recognition of her numerous talents and joie de vivre.²⁶ Grace’s absence on campus was stark to many friends and acquaintances; “[her] gregarious charm,” one said, “is painfully missed.”²⁷ At a 2011 speech dedicating the Grace Gold Digital Photography Center at Barnard in her honor, Lori, borrowing the words of a mutual friend, said that “Grace’s death inspired [her] to take risks.”²⁸

In June of 1979, Grace’s parents sued Columbia for \$10 million, accusing them of “horrific negligence” regarding the maintenance of 601 West 115th Street.²⁹ Engineers from the Department of Buildings reinspected the site where the lintel fell from and discovered sizable cracks in the building’s façade, within which were water stains, softened mortar, loose masonry, rusted metal, and even a bird’s nest.³⁰ These defects, claimed Henry and Sylvia, warranted swift payment from the university, whom they believed should have immediately addressed the initial leak when it was reported in December of 1977. As far as Grace’s parents were concerned, Columbia was complicit in their daughter’s death.³¹ A lawyer retained by the University’s insurance company answered that Columbia “didn’t do anything wrong;” he asserted instead that while the death was certainly tragic, “vibrations of the traffic on Broadway and the antiquity of the building...dislodged [the lintel] and brought it down.”³² A lengthy trial at the New York State

²⁶ Ibid.

²⁷ Ibid.

²⁸ Interview with Lori Gold, 12/16/2020; [00:52:10].

²⁹ Gupte, Pranay B. May 18th, 1979. “City Is Studying Why Lintel Fell, Killing Student.” *The New York Times* CXXVIII(44,221):31.

³⁰ Ibid.

³¹ Polner, Rob. 1981. “Parents of Grace Gold Upset By Terms of CU Settlement.” *Columbia Daily Spectator* CV(154):29.

³² Ibid.

Supreme Court together with a Department of Buildings board of inquiry eventually cleared the university of any criminal negligence, much to the distress of Grace's family and friends.³³

In December of 1979, Columbia approved a settlement of \$153,000 as compensation for Grace's death, purported to be the "highest amount ever given in New York State for an instantaneous death of a teenager who was not yet a money earner."³⁴ Three years later, Columbia had all ornamental features stripped from the façade of the Regnor instead of paying for their restoration (the Regnor's sisters, the Rexor and Luxor, retained—and still retain—their ornamentation; see Fig. C9).³⁵ ³⁶ Lori went on to establish a foundation at Barnard in her sister's honor, the Grace Gold Memorial Scholarship Fund.³⁷ She has worked extensively to cement Grace's legacy, striving to ensure deaths like her sister's become rarer and rarer. In 2013, she successfully lobbied the City government to rename the Broadway block between 115th Street and 116th Street "Grace Gold Way," as "[Grace] lived (dormed) on one end, and died on the other" (Figs. C10-C11).³⁸ Grace's legacy, however, extends far beyond a new street name. Her now near-infamous untimely demise "unleashed a string of laws and building safety measures" from which a multi-billion dollar industry burst forth: that of the sidewalk shed.³⁹

This thesis renders a comprehensive image of the sidewalk shed, deciphering its complexities and exposing its present status. First, I provide background information on the

³³ Ibid.

³⁴ Ibid.

³⁵ See Fig. 10.

³⁶ Goodman, George W. December 12th, 1982. "Owners Stripping Facades of Ornament." *The New York Times* CXXXII(45,525):390, 403. Accessed via *TimesMachine*. Retrieved December 24nd, 2020 (<https://timesmachine.nytimes.com/timesmachine/1982/12/12/090557.html?pageNumber=390>).

³⁷ Interview with Lori Gold, 12/16/2020; [00:44:01].

³⁸ Ibid, [01:14:57].

³⁹ Gold, Lori. 2012. "In Memory of Grace Gold". 13-14.

sheds themselves. What are they? What are the laws that govern them, and how is Grace involved? I describe the typical life-cycle of a shed, explaining why and via what processes they are erected. Second, I engage the literature on sidewalk sheds, seeing how academia can be wielded to interpret them. Third, I embark upon a mixed-methods investigation that is itself twofold. In the first part, I explore where sidewalk sheds are and how long they have been there, gauging their proliferation. In the second, I ask: How do pedestrians experience and conceptualize sheds, and how do those experiences and conceptualizations affect how they experience and conceptualize New York City as a whole?

Background:

Sidewalk sheds, colloquially known by the misnomer “scaffolding,” are temporary structures erected over sidewalks to protect pedestrians from overhead construction work and maintenance.^{40 41} Even I casually refer to sidewalk sheds as “scaffolding,” although to do so is technically incorrect. “Scaffolding” refers only to the vertically-inclined temporary structures and paraphernalia built to support workers *up the side* of a building, parallel to the façade (Figs. C12-C13). Scaffolding, referring specifically to “pipe scaffolds,” is accessed via and anchored to the ground by sidewalk sheds. In the words of Andrew Rudansky, Senior Deputy Press Secretary for the DOB, “a scaffold is the installation that runs up the side of a building and is used as a platform for workers to make repairs on the outside of the building. A sidewalk shed is the anchorage of the scaffold that pedestrians interact with on the street.”⁴²

Although found globally (and certainly nationally), in New York City sidewalk sheds are uniquely predominate as protective structures and serve as a part and parcel element of the cityscape; elsewhere they are harder to come by.^{43 44 45} Today as per City guidelines they sport

⁴⁰ Department of Buildings. August 2015. “Sidewalk Sheds: Construction Equipment.” *The New York City Department of Buildings*, Version 3. Retrieved December 25th, 2020 (https://www1.nyc.gov/assets/buildings/pdf/code_notes_sidewalk-sheds.pdf).

⁴¹ Tannenhauser, Carol. May 15th, 2019. “The Answer Column: Why Has a Sidewalk Shed on 86th Street Been Up for 18 Years?” *West Side Rag*. Retrieved January 5th, 2021 (<https://www.westsiderag.com/2019/05/15/the-answer-column-why-has-a-sidewalk-shed-on-86th-street-been-up-for-18-years>).

⁴² Ibid.

⁴³ Chaban, Matt A. V. August 24th, 2015. “The Sidewalk Shed, a Ubiquitous New York Eyesore, Gets a Makeover.” *The New York Times*. Retrieved January 4th, 2021 (<https://www.nytimes.com/2015/08/25/nyregion/the-sidewalk-shed-ubiquitous-new-york-eyesore-gets-a-makeover.html>).

⁴⁴ Devine, Miranda. December 1st, 2019. “How the scourge of scaffolding is ruining New York City.” *The New York Post*. Retrieved January 4th, 2021 (<https://nypost.com/2019/12/01/devine-scaffolding-has-taken-over-new-york-city/>).

⁴⁵ Zinoman, Jason. November 2nd, 2020. “The Best Half-Hour of Comedy in 2020 Is About ... Scaffolding?” *The New York Times*. Retrieved December 31st, 2020 (<https://www.nytimes.com/2020/11/02/arts/television/john-wilson-scaffolding-hbo.html?smid=em-share>).

hunter green plywood parapet siding, corrugated metal or plywood parapet platforms, steel railings, steel cross-braced stanchions (uprights, standards), and wood block sills (feet). Many feature electric lighting. They used to be an ultramarine blue, and before that tan, grey, and maroon (Figs. C14-C16). Sheds were not unknown in 1979; they have been utilized in New York as far back as 1896.⁴⁶ In direct response to her demise, though, the City enacted Local Law 10 (“Grace’s Law,” informally) in 1980, which requires the “periodic inspection of exterior walls and exterior appurtenances of buildings...facing the street...every five years.”^{47 48} These inspections must utilize sidewalk sheds whenever a violation is found. Grace’s death, thus, attributed them new importance.

New York City government officials, of course, have long been aware of the dangers posed by taller ill-maintained structures. Grace Gold’s death was far from the first casualty attributed to falling debris. On August 13th, 1855, a portion of a fourth-floor cornice collapsed, killing five; on June 30th, 1901, bricks fell from a tenement at 242 Monroe Street, maiming a resident; and three men were killed and two others gravely hurt on January 24th, 1931 when another cornice plunged seven stories in Jackson Heights.^{49 50 51} In another famous case, Detroit

⁴⁶ Unknown Author. March 16th, 1956. “Broadway Group Cites An ‘Eyesore’.” *The New York Times* CV(35,846):31. Accessed via *TimesMachine*. Retrieved December 24th, 2020 (<https://timesmachine.nytimes.com/timesmachine/1956/03/16/86548921.html?pageNumber=31>).

⁴⁷ Lori is endeavoring to make this name official, although in 2015 she was told by representatives from the City government that municipal laws cannot be named after individuals.

⁴⁸ New York City Local Law § No. 10. (1980). Retrieved December 24th, 2020 (https://www1.nyc.gov/assets/buildings/local_laws/ll_1080.pdf).

⁴⁹ Unknown Author. August 13th, 1855. “Fall of a Cornice—Five Persons Killed.” *The New York [Daily] Times* IV(1,217):4. Accessed via *TimesMachine*. Retrieved December 24th, 2020 (<https://timesmachine.nytimes.com/timesmachine/1855/08/13/88146804.html?pageNumber=4>).

⁵⁰ Unknown Author. June 30th, 1901. “Panic In Tenement Houses.” *The New York Times* L(16,061):2. Accessed via *TimesMachine*. Retrieved December 24th, 2020 (<https://timesmachine.nytimes.com/timesmachine/1901/06/30/108285248.html?pageNumber=2>).

⁵¹ Unknown Author. January 24th, 1931. “Three Killed When Ten-Ton Cornice Plunges Seven Stories From Jackson Heights Building.” *The New York Times* LXXX(26,663):1. Accessed via *TimesMachine*. Retrieved December 24th, 2020 (<https://timesmachine.nytimes.com/timesmachine/1931/01/24/98315520.html?pageNumber=1>).

tourist Alvin Rodecker died after an eight-pound dumbbell plummeted off the Ritz Tower at 57th Street and Park Avenue, splitting his skull.⁵² Unfortunately, Grace's death was not the last, either; a greater emphasis on maintenance and the novel utilization of sheds have not prevented catastrophe, although in many cases perhaps they should have: Police officer John Williamson was killed by a knocked-over bucket of Spackle in 1993, Maria Checchi met her end after being struck by an air conditioner a year later, and a metal sheet paralyzed a woman after falling 76 stories from the Time Warner Center in 2002.⁵³ More recently, in 2015, toddler Greta Greene died outside her apartment after being rained upon by bricks, and in 2019 a chunk of terra cotta ended the life of famed New York architect and mother Erica Tishman.⁵⁴

Local Law 10 was amended in 1998 with the passing of Local Law 11.⁵⁵ While the former only required façades abutting a street or public walkway to be maintained quinquennially, the latter expanded the requirement to *all* façades. Inspections must be done at arms-length by a hired professional called a Qualified Exterior Wall Inspector (QEWI), who is either a New York State Registered Architect (RA) or New York State licensed Professional Engineer (PE) with at least seven years of experience.⁵⁶ These inspectors are often part of engineering firms like RAND and Vidaris. While all structures in the City require general upkeep under various public protection laws (particularly 1 RCNY §103-04), only institutional buildings

⁵² Unknown Author. May 17th, 1979. "Falling Masonry Fatally Injures Barnard Student." *The New York Times* CXXVIII(44,220):28.

⁵³ Curtis, Bryan. April 9th, 2004. "Dodge City." *New York Magazine*. Retrieved December 22nd, 2020 (https://nymag.com/nymetro/news/people/columns/intelligencer/b_10189/).

⁵⁴ Otterman, Sharon and Haag, Matthew. December 17th, 2019. "Woman Killed by Falling Debris Near Times Square." *The New York Times*. Retrieved January 4th, 2021 (<https://www.nytimes.com/2019/12/17/nyregion/woman-killed-times-square.html>).

⁵⁵ New York City Local Law § No. 11. (1998, Reissued 2004). Retrieved December 24th, 2020 (https://www1.nyc.gov/assets/buildings/local_laws/locallaw_1998_package.pdf).

⁵⁶ Interview with Yegal Shamash, Assistant Commissioner of the NYC Department of Buildings, 12/08/2020; unless otherwise specified, most information pertaining to Local Law 11 and the processes for erecting a shed was gleaned via this interview and the occasional post-interview follow-up question.

(schools, hospitals, courts, etc.) and buildings *over six stories* (seven stories and up) fall under the domain of Local Law 11.⁵⁷ This height limit was instituted to pragmatically restrict the number of structures that require regularized maintenance; if the minimum height was lowered to include all six-story buildings (or even five-story buildings), the building stock under Local Law would be exponentially greater and thereby harder to manage physically and financially (Figs. A1-A2).⁵⁸ Further, many building codes like those regarding elevator placement, enhanced sprinkler systems, tuned mass dampeners (wind counterweights), etc., pertain specifically to structures over 75 feet (about six stories) tall; in essence, buildings over six stories are “a different kind of [structure] that necessitates...special consistent...care.”⁵⁹ Some like Lori Gold have argued that a brick falling from the sixth floor (let alone third) would do just as much damage as one falling from the seventh; City officials by and large agree but argue that altering the law in this way is not logistically feasible.⁶⁰

Local Law 11 serves as the basis for the DOB’s Façade Safety Inspection Program (FISP), which was inaugurated in 2013; this program formalized and strengthened the directives stipulated in Local Laws 10 and 11, as well as the procedures for reporting compliance and noncompliance.⁶¹ FISP (like both Local Laws) operates on five-year sequences known as “cycles.” The first cycle began under Local Law 10 in 1980; cycle nine began in January/

⁵⁷ Ibid.

⁵⁸ Six-story buildings are eligible under FISP if they feature an additional “penthouse” or “setback” floor, or if they stand above a basement (as opposed to a cellar). A basement is a full story with more than one-half its height above the grade plane, thus being only partially underground; a cellar is a story with more than one-half of its height *below* the grade plane, thus being either partially or wholly underground. Cellars are not counted as stories in measuring the height of buildings.

⁵⁹ Ibid. [00:04:35].

⁶⁰ Ibid. [00:10:21].

⁶¹ Department of Buildings. 2020. “Façade Inspection & Safety Inspection Program (FISP) Filing Instructions.” *The New York City Department of Buildings*. Retrieved December 28th, 2020 (<https://www1.nyc.gov/site/buildings/safety/facade-inspection-safety-program-fisp-filing-instructions.page>).

February of 2020. Staggered subcycles based on census block number exist within each cycle so as to mediate the number of structures requiring inspection each year. Each new cycle, amendments are added. Among the major updates made this time, hands-on inspections are now required every sixty feet along public-facing façades, and building owners must now post and maintain a “Façades Conditions Certificate” (similar to an elevator certificate) in their lobby or entryway to alert occupants of the status of the exterior wall(s).^{62 63}

The inspection processes outlined in FISP are as follows.⁶⁴ When five years have passed since a previous inspection and a new cycle has begun, a building owner must hire a QEWI to conduct a new façade inspection. At its close, the QEWI will declare the building “safe,” “unsafe,” or “SWARMP,” an in-between category indicating that it will be “Safe With a Repair and Maintenance Program.” If maintenance or repairs are needed, the installation of public protection is compulsory. Most often, public protection takes the form of sidewalk sheds, but it can also include netting and fencing depending on the situation; fencing is less expensive and preferred in areas where building density is lower. For all public protection items, permits must be filed with the DOB. As of 2016, these permits (as well as all FISP reports) are electronically retrieved and submitted via the DOB NOW online portal, which is accessible at all hours, all year round.

If a building is deemed safe, no further action is needed. No public protection is erected.

If a building is deemed SWARMP, this means danger is not imminent but that repairs are

⁶² Thornton Tomasetti. 2020. “NYC Façade Inspection & Safety Program (FISP - Formerly Local Law 11/98).” *Thornton Tomasetti*. Retrieved December 28th, 2020 (<https://www.thorntontomasetti.com/fisp>).

⁶³ RAND Engineering & Architecture, DPC. 2020. “Playing It ‘Safe’: A Guide to NYC’S Façade Safety Inspection Program (FISP).” *RAND Engineering & Architecture, DPC*. Retrieved December 28th, 2020 (<https://randpc.com/articles/exterior-repair-and-maintenance/fisp-fact-sheet>).

⁶⁴Interview with Yegal Shamash.

required within a timeline specified by the QEWI; a SWARMP violation might comprise spalled/effloresced masonry or damaged coatings that at the time of inspection are safe, but are likely to deteriorate to unsafe status over time. Usually, SWARMP violations are scheduled to be completed within one to two years after they are recorded, but within the cycle. Outstanding SWARMP items cannot carry over from one cycle to the next; if they are not addressed by the cycle's end, fines are issued and the building is automatically downgraded to unsafe. Public protection is only erected when the repairs are being carried out and is (supposed to be) removed when the work is completed. If a building is judged unsafe, an emergency work declaration is made and public protection is put up right away, even before a permit for it is filed, and even when work is not in progress. The QEWI files a FISP3 form, which is a formal notification of unsafe conditions; this triggers an official violation and a DOB representative is sent to conduct an examination. The QEWI and DOB representative work with the building owner to establish a repair timeline. Repairs must be finalized within thirty days, but oftentimes thirty days is insufficient; if this is the case, building owners can file for a ninety-day extension. Indefinite ninety-day extensions can be made.⁶⁵ Once repairs are completed, the building is upgraded to safe or SWARMP status.

Throughout the repair and maintenance process, various additional inspections are required at multiple junctures to ensure everything is running smoothly. These inspections must be carried out by specific professionals knowledgeable about the involved building materials. There are limited numbers of each; for instance, there are only seven DOB inspectors trained to

⁶⁵ RAND Engineering & Architecture, DPC. 2020. "Playing It 'Safe': A Guide to NYC'S Façade Safety Inspection Program (FISP)." *RAND Engineering & Architecture, DPC.*

assess curtain walls on buildings over 50 stories.^{66 67} Oft-commissioned engineering firms like RAND employ a handful of inspectors each specializing in particulars like glazed brick or terra cotta.⁶⁸ If they are unavailable, building owners must halt repair work and wait until they are. As stated earlier, all inspections must be carried out at “arms-length,” a somewhat dubious requirement. Occasionally, for instance, the DOB will accept examinations conducted via binoculars.⁶⁹ Binocular inspections are frowned upon as they are proved to be less sufficient; the Regnor, for one, was “adequately reviewed” in this fashion prior to Grace Gold’s death.⁷⁰ Pipe-and-net scaffolds, in lieu of binoculars, are constructed alongside façades to allow inspectors to scrutinize them at literal arms-length. To circumvent being shrouded in scaffolding, most skyscrapers (and even shorter apartment towers) have winch or pulley systems that allow inspectors to move up and down the façades. Older towers like the Empire State Building feature pulley-directed outdoor work platforms identical to those window washers use; these require inspectors to be harnessed and can only be operated during certain weather conditions. Newer buildings like 432 Park Avenue have enclosed, elevator-like winch-operated boxes built into each façade that can be lowered or raised independently as needed.⁷¹

Sidewalk sheds are also erected whenever construction or demolition is taking place as per New York City Building Code, if the structure involved is over forty feet in height (at completion/the start of demolition).⁷² The first law to require the erection of sheds during

⁶⁶ Interview with Wilfred Lopez, Chief Legislative Aide to City Council Member Ben Kallos. 02/23/2021.

⁶⁷ RAND. 2020.

⁶⁸ Interview with Stephen Varone, President of RAND Engineering. 02/26/2021.

⁶⁹ Interview with Wilfred Lopez.

⁷⁰ Ibid.

⁷¹ Ibid.

⁷² RAND. 2020.

construction in New York City, affectionately known as “The Scaffold Law,” was passed in 1885 by the New York State Legislature. The first of its kind in the nation, its main goal was to protect laborers from any “gravity-related danger” and provide them with legal recourse when injured on the job.⁷³ It was last amended in 1969 and still stipulates many of the specifics regarding the utilization of sheds during new construction. During construction projects, sheds are installed when the height of the new structure surpasses two stories. Newly built buildings must retain their construction sheds until all façade and roof elements are secured and all exterior work is complete.⁷⁴ If they are over six stories, they become eligible under FISP five years after their initial Temporary Certificate of Occupancy is filed.⁷⁵ Sometimes, even, elective sheds are constructed to ameliorate chronic issues caused by design flaws. For instance, architects of Columbia University’s Northwest Corner Building failed to account for winter weather when finalizing the pitch of its roof and metal façade slats; sheds are erected hibernally around the structure to protect pedestrians from falling ice and snow (this annual expense is ultimately less than the requisite repairs).⁷⁶ All sheds must extend ten to twenty feet beyond the edges of the building they cover (usually ten, along the property line) and must be outfitted with inward-angled plywood sheets at those edges to catch falling debris;⁷⁷ this is to protect adjoining properties, especially when the shedded building is directly adjacent to an unshedded building.⁷⁸

⁷³ New York State Labor Law § No. 240. (1885, last amended 1969). Retrieved February 25th, 2021 via *The Perecman Firm* (<https://www.perecman.com/blog/2019/may/ny-scaffold-law-was-passed-in-1885-here-s-what-i/>).

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ Kusnick, Adam. January 29th, 2010. “NoCo Building Requires Annual Scaffolding.” *Columbia Daily Spectator* CXXXIV(9):29. Accessed via *Columbia Spectator Archive*. Retrieved February 26th, 2021 (<http://spectatorarchive.library.columbia.edu/?a=d&d=cs20100129-01&e=-----en-20--1--txt-txIN----->).

⁷⁷ Ten feet for buildings under 100 feet, twenty for buildings over 100 feet.

⁷⁸ Department of Buildings. 2020. “Sidewalk Sheds.” *The New York City Department of Buildings*. Retrieved January 4th, 2021 (<https://www1.nyc.gov/site/buildings/safety/sidewalk-sheds.page>).

Additionally, all sheds must have a clearance at least five feet wide and eight feet high to accommodate foot traffic.⁷⁹

Sheds are typically rented from and constructed by a third party company, of which there are many throughout New York City.⁸⁰ They are not inexpensive. On average, building owners pay between \$90 and \$120 per linear foot of standard shed for the first three months, and then a rent thereafter of 5% to 25% the original cost every month until the shed is removed.⁸¹ The most expensive sheds (with specialized materials, etc.) can cost between \$144 and \$350 per linear foot.⁸² Additionally, there are tangential charges as well as fees for installation and disassembly. First, the QEWI must be paid for their services. Second, the DOB charges its own fees: \$425 is required to file a FISP report, as well as an additional \$425 for any amended or subsequent reports.⁸³ Each ninety-day unsafe repair extension costs \$305. Fines and penalties levied for non-compliance are hefty: Late filing of a FISP report incurs \$1,000 per month past the deadline, failure to correct an unsafe condition also incurs \$1,000 per month (plus an additional monthly fee based on the linear footage of the shed), failure to correct a SWARMP condition before the next cycle incurs \$2,000, failure to file a FISP report to begin with demands \$5,000, failure to “take required measures to protect public safety” (which can include failure to complete repairs in a specified period of time or failure to erect a shed when required to) demands \$10,000, and

⁷⁹ New York City Building Code § No. 3307. (2014). Retrieved January 4th, 2021 (https://up.codes/viewer/new_york_city/nyc-building-code-2014/chapter/33/safeguards-during-construction-or-demolition#33).

⁸⁰ Sidewalk Shed NYC. 2020. “About Us.” *Sidewalk Shed NYC*. Retrieved December 28th, 2020 (<https://www.sidewalkshednyc.com/about-us.html>).

⁸¹ Elstein, Aaron. July 9th, 2018. “Tackling the Scourge of Sidewalk Sheds.” *Crain’s New York Business*. Retrieved December 30th, 2020.

⁸² Ibid.

⁸³ Department of Buildings. 2020. “Façade Inspection & Safety Inspection Program (FISP) Filing Instructions.” *The New York City Department of Buildings*.

preemptive removal of a shed exacts up to \$15,000.⁸⁴ Sans fines, the lowest possible initial cost of erecting the average-length sidewalk shed—192 feet, as of January 1st, 2021— using the cheapest possible materials is \$17,705.⁸⁵ If at present the average shed is 312 days old (about 11.25 months), the lowest estimate for the total cost of the average shed, not including fees incurred for its physical erection and disassembly and the hiring of the QEWI, is \$62,063.31.⁸⁶ Of course, many sheds are shorter, and many are longer, and many additional expenses may be required along the way. All this is to say that the ever-expanding sidewalk shed industry is “*mana from heaven for shed builders...private contractors, private inspectors, and...other related parties.*”⁸⁷ In 2018 alone, according to industry officials New York City building owners collectively paid \$455 million for street-level sheds and an additional \$872 million for the scaffolding that sits atop them.⁸⁸

Outside New York, sidewalk sheds are less lucrative and less prevalent. Only a handful of shed rental and construction companies exist in Chicago, and only four exist in Miami; New York has close to fifty.⁸⁹ The combined revenue made in 2019 by every single American sidewalk shed erection company outside the New York Metropolitan Area was equivalent to the revenue made by all metro-area shed companies in the *first half of the first quarter* of 2019.⁹⁰ Nationally, there are 169 state-level and municipal-level legal codes that touch on sheds,

⁸⁴ Ibid.

⁸⁵ The 192 feet was calculated as follows: The total linear feet of sidewalk sheds (1,959,339.21 ft.) divided by the total number of sheds (10,266), both figures reported on January 1st, 2021 by the Department of Buildings on their Active Sidewalk Shed database; these figures shift daily; Retrieved January 1st, 2021 (<https://www1.nyc.gov/assets/buildings/html/sidewalk-shed-map.html>).

⁸⁶ Ibid; Retrieved January 1st, 2021 (<https://www1.nyc.gov/assets/buildings/html/sidewalk-shed-map.html>).

⁸⁷ Elstein, Aaron. July 9th, 2018. “Tackling the Scourge of Sidewalk Sheds.” *Crain’s New York Business*.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ Ibid.

including those that refer to them by other names (temporary walkway, protective walkway, sidewalk bridge, etc.); all fifty states have at least one.⁹¹ 119 (70%) of those 169 are within New York City or State jurisprudence.⁹² Only twelve—all New York City municipal codes—pertain directly to sheds' construction and usage; New York City is the only city *in the world* to have a law on the books similar to Local Law 10/11 that explicitly requires and systematizes the maintenance and repair of taller-building façades.⁹³ ⁹⁴ Several other cities like Chicago *have* passed ordinances specifically dealing with sidewalk shed construction; they, however, are all minimal in scope, not as particular, and are all based on Local Law 11. On the one hand, this can be attributed to the fact that New York has the fifth-highest number of high-rises and the second-highest number of skyscrapers in the world, as well as the oldest crop of high-rises internationally.⁹⁵ ⁹⁶ On the other hand, this can be attributed to Grace's death, coupled with both American litigiousness and the power of a select few individuals like Lori. New York building owners, after all, are uniquely afraid of lawsuits and would usually much rather erect shedding than risk being embroiled in a costly legal settlement; a state law holds landlords fully liable for any gravity-related accident or injury on their property, even if they are not wholly at fault.

⁹¹ Data compiled from the Nexis UNI National Legal Database, the HeinOnline Subject Compilations of State Laws, the National Survey of State Laws, the New York Legal Research Library, and the ProQuest National Legal Database.

⁹² Ibid.

⁹³ Ibid; Green, Penelope. January 2nd, 2020. "Our Lives, Under Construction." *The New York Times*. Retrieved January 2nd, 2021 (<https://www.nytimes.com/2020/01/02/style/scaffolding-new-york-city.html>).

⁹⁴ See Chicago City Ordinance § 13-124-180 Walkways and Temporary Sidewalks – Construction Requirements; 2016.

⁹⁵ A high-rise is defined as a building over 115 feet tall, about 12 stories. New York has 6,259. Ahead are (4) Mumbai, India, (3) Hong Kong, (2) Moscow, Russia, and (1) Seoul, South Korea. Data and definition from Emporis, a global provider of building information. Retrieved December 30th, 2020 (<https://www.emporis.com/statistics>).

⁹⁶ A skyscraper is defined as a building over 328 feet, about 34 stories. Ahead is (1) Hong Kong. Data and definition from Emporis, a global provider of building information. Retrieved December 30th, 2020 (<https://www.emporis.com/statistics>).

Sheds are utilized for various uses besides protection. Protection, however, is of course supreme: Per square foot shed decks must be strong enough to support 300 pounds, equivalent to the force exerted by 44 standard bricks falling at terminal velocity.^{97 98 99} This is higher than the supportive weight mandated for sheds by construction codes in other American cities.¹⁰⁰ In addition to potential falling façade elements, sheds must also withstand and protect passersby from falling objects including potted plants, icicles, tools, work gear, and even (unfortunately) other humans. They must bear the weight of and provide a “foundation” for scaffolding, as well as all other vertically-inclined construction apparatuses; these contraptions are always physically secured to their parent sidewalk shed. Sheds also provide much-needed temporary storage space for construction and maintenance materials (items must not be stored for more than a day). Lastly, they enable workers to easily and safely access each work site.¹⁰¹

⁹⁷ If the average clay brick weighs approximately 3.1 kg, and if gravity causes objects to fall at a consistent 9.8 m/s² (barring air resistance), one average falling brick would generate 30.38 newtons of force; this is equivalent to about 6.8 pounds of force. 300 pounds of force is equivalent to about 1334.47 newtons of force. Since the speed at which an object falls due to gravity does not change, this is equivalent to the fall of 136.17 kg of bricks (300 pounds!); this is approximately 44 bricks.

⁹⁸ For buildings less than 100 feet high, they must only be strong enough to support 150 pounds per square foot.

⁹⁹ Department of Buildings. 2020. “Sidewalk Sheds.” *The New York City Department of Buildings*.

¹⁰⁰ Elstein. 2018. “Tackling the Scourge of Sidewalk Sheds.” *Crain’s New York Business*.

¹⁰¹ Department of Buildings. 2020. “Sidewalk Sheds.” *The New York City Department of Buildings*.

Review of the Literature:

Sidewalk sheds are a common sight throughout New York City. Before I explore just *how* common they are, I reveal an apparent conundrum: They remain almost entirely absent from the realm of academic scholarship pertaining to New York City. Considering the disproportionately large degree of attention given to New York throughout many areas of study, especially those dealing with the urban environment, the lack of formal literature on sidewalk sheds—a distinct New York phenomenon—is surprising. A comprehensive database search across multiple scholastic institutions, independent academic journals, and various data-collecting organizations the world over yielded exactly one source with an explicit focus on sheds—a graduate thesis published in the spring of 2020 by architecture student Sukhmann Aneja of Syracuse University.¹⁰² This dearth, at worst, signals a purposeful campaign to deem sheds unworthy of scholarly scrutinization and investigation. At best, sheds are an unheard of phenomenon. Or, perhaps academia is guilty of accidental nescience on account of overfamiliarity: Certainly, contemporary scholars physically or intellectually based in New York have encountered sheds in some form or another, and may, for whatever reason, have taken their existence for granted. Whether they are ignored by or simply unknown to intellectuals, I cannot say either way. Regardless, they shade hundreds of city streets and thus deserve thoughtful consideration.

I am not concerned with the bulk of Aneja's (2020) thesis, in which she proposes a modular design intervention for sidewalk sheds: the addition of "seating pods" embedded above

¹⁰² Aneja, Sukhmann. 2020. "Alternative Shelters: Immortalizing the New York City Sidewalk Shed." B.A. in Architecture, Renée Crown University Honors Program at Syracuse University.

sidewalk space—within each shed but below the surface utilized by construction workers—that constitute “occupiable...multiple single-occupancy rooms that are free to the public” (Ibid:12-24).¹⁰³ She explains how practical alterations can be made to the average shed to increase its utility and engagement with both homeless individuals and its community at large. In doing so, she suggests a valiant, ingenious part-solution to both the homelessness crisis and the apparent sidewalk shed scourge. Moreover, her interventions are practical in that they successfully work within legal code requirements and use the same materials presently incorporated into shed construction. They are based on the sound observation that sheds function as important fixtures in what she refers to as “homeless New York”; homeless individuals utilize such constructions for shelter, particularly in Manhattan where she says sheds are more common.¹⁰⁴ City agencies, she believes, should recognize existing shed-covered “encampments...not as nuisances...[but] as opportunities...to address the needs of [New York’s] underserved populations” via her designs (Aneja 2020:6).¹⁰⁵

I am more concerned with the claims Aneja deploys to motivate her work. I am unsatisfied with these claims because they are presented as givens; no effort is made to verify them. In other words, she attempts to build her house without first checking its foundations. For instance, in providing a succinct, casual background assessment of sidewalk sheds’ place in New York, she declares that (1) Sheds are unavoidably experienced by many, rich and poor, young and old, tourist and resident; (2) as such, they are often utilized in ways beyond those prescribed or intended; (3) consequently, they have become part of New York’s iconography on par with the

¹⁰³ Ibid:12-24.

¹⁰⁴ Ibid:9.

¹⁰⁵ Ibid:6.

yellow cab, relentlessly adding to the City's image; (4) but, they are "neither desirable nor attractive" and amount to a citywide scourge, negatively affecting commerce, real estate, and quality of life (Ibid:7).¹⁰⁶ These statements may all be well and true, but that requires investigation; said investigations will be an important aspect of this thesis.

Although sidewalk sheds have been given the academic short shift, much has been written on their domain—the sidewalk. In her foundational mid-century work *The Death and Life of Great American Cities* ([1961] 1992), famed author and urbanist Jane Jacobs presents the sidewalk as a public amenity integral to the city and the urban experience. It is on and through the sidewalk, she says, that social fabrics take shape, where the "web of public respect and trust" is spun.¹⁰⁷ Sidewalks are not just avenues for movement, they are stages for street life, human interaction, and spatial contestation; their health and vitality is directly tied to the health and vitality of the city they are in.

Mitchell Duneier expands on this in *Sidewalk* (1999), another monumental work on the subject, arguing that sidewalks function as a stage for the performance of identity on multiple levels and as a platform for various informal economies.¹⁰⁸ Neither Jacobs nor Duneier consider the role the sidewalk shed plays in sidewalk vitality. For the former, this is understandable because sheds were not utilized then for the same purposes they are today and did not exist as we presently know them; for the latter, their absence in his work might suggest that they were not nearly as ubiquitous in New York at the time (or within his geographical area of study).

Regardless, I examine both Jacobs' and Duneier's conclusions in light of sidewalk sheds;

¹⁰⁶ Ibid:7.

¹⁰⁷ Jacobs, Jane. [1961] 1992. *The Death and Life of Great American Cities*. New York, NY: Vintage Books.

¹⁰⁸ Duneier, Mitchell. 1999. *Sidewalk*. New York, NY: Farrar, Straus, and Giroux.

sidewalk literature can and should be redirected towards exploring their command over pedestrian spaces.

Jacobs (1992) declares that in order for city sidewalks to remain safe and healthy, they must possess three main qualities. The first is “a clear [social] demarcation between what is public space and what is private space;” these immaterial boundaries ideally exclude the use of physical demarcations of space like fences and walls that obscure access, hinder movement, and announce division.¹⁰⁹ The second is “eyes upon the street belonging to... adjacent proprietors... and residents...;” in tandem with “fairly continuous use,” the third quality, these eyes eliminate the need for potentially threatening corporate, contracted, or governmental surveillance modes like security cameras, guard posts, and patrolling officers, outsiders with formal roles rather than stakeholders in the community.¹¹⁰ The idea is that people will rely on one another for care and protection, becoming more connected. Does the presence of sidewalk sheds endanger any of these qualities, imperiling the health and safety of sidewalks and their parent neighborhoods? As per Duneier, do they complicate the public production and presentation of identities? I contend they do.

Sheds are absent, too, from research by more contemporary scholars on sidewalks.^{111 112}

¹¹³ For instance, Deacon (2013) investigates sidewalks in New York as contested, conflictual, controlled public spaces—users, she says, frequently actively and passively push the limits of

¹⁰⁹ Jacobs, Jane. [1961] 1992. *The Death and Life of Great American Cities*. 36-37.

¹¹⁰ Ibid:37.

¹¹¹ Kim, Hyunsoo, Changbum R. Ahn, and Kanghyeok Yang. 2016. “A People-Centric Sensing Approach to Detecting Sidewalk Defects.” *Advanced Engineering Informatics* 30:660-671.

¹¹² Loukaitou-Sideris, Anastasia and Renia Ehrenfeucht. 2009. *Sidewalks: Conflict and Negotiation Over Public Space*. Cambridge, MA: MIT Press.

¹¹³ Goldstein, Daniel M. 2016. “Owners of the Sidewalk: Security and Survival in the Informal City.” *American Ethnologist* 43(4):772-791, Durham, NC: Duke University Press.

what is expected on or required of them.¹¹⁴ She fails to mention, however, that ubiquitous sheds might play a major role in these contests, conflicts, and attempts at control. Perhaps, for example, sheds delineate property in a way that is inconsistent with the ways individual businesses or agencies delineate property. Perhaps they simply reduce or imperil the space available to pedestrians, increasing the likelihood of spatial discord. Or, perhaps the shelter they provide yields uses dissimilar to and irreconcilable with uses found on uncovered sidewalkscapes.

Deacon draws our focus to the large body of regulations that deal with sidewalks, discussing how they often reveal conflict amongst local sidewalk users and conflict between local users and non-local administrative entities. Usage ordinances and laws determining structure, form, and regular pavement maintenance attempt to diffuse liability; in our litigious society, she declares, neither property owners nor government bodies want to be responsible for damage or injury so they utilize regulations to ensure pedestrians behave in a predictable, ordered manner within a predictable, ordered environment. Deacon develops a five-step “criteria for successful sidewalks” evocative of Jacobs’, which she asserts regulations help fulfill. For her, sidewalks must (1) function as public space, (2) allow and promote social activity, (3) engender safe environments, (4) not have impaired circulation or high congestion, and (5) provide opportunities for “spontaneous occurrences” and fluidity of use within structured space.¹¹⁵ Once again, however, sheds are not considered. How might they influence a sidewalk’s “success”?

Further, regulations surrounding sidewalk sheds and the regulatory aspects of the sheds themselves are absent from her discussion. This is frustrating, considering sheds are commonly

¹¹⁴ Deacon, Leslie. 2013. “Planning Sidewalks: Implications of Regulating Sidewalk Space in the East Village.” M.Sc. in Urban Planning, Graduate School of Architecture, Planning & Preservation of Columbia University.

¹¹⁵ Deacon, Leslie. 2013. “Planning Sidewalks: Implications of Regulating Sidewalk Space in the East Village.” 12.

employed to enforce and maintain environmental “predictability” (utilized to prevent harm done unto pedestrians).

Mere slabs of concrete, sidewalks support a vast array of functions carried out by and catering to numerous participants with often divergent needs. The sidewalk is first and foremost a transitory space, used by pedestrians to get from one point to another. It is a destination space, engaged by loiterers. It is a social space, a venue for interactions with others mediated through the public eye.¹¹⁶ It is a space of business for itinerant panhandlers and street vendors, and a place of business for restaurants and other commercial establishments that lay claim to the swathes of pavement they front (particularly nowadays, with COVID-19 restrictions spotlighting activities like outdoor dining).¹¹⁷ It is a place of conscientious art-making and protest, a space for policing and surveillance.¹¹⁸ ¹¹⁹ It is even, as Aneja might remind us, a space some call “home.” It is also, quite noticeably, an oft-shedded, spatially-restricted space of construction and maintenance. This last function is important because it likely affects all others; this thesis is the first step towards exploring how.

The declaration of sidewalks as public by Deacon and others conjures questions about the role of sidewalk sheds vis-à-vis the Lefebvrian “right to the city.” In *La Droit à La Ville* (1968), Henri Lefebvre asserts among other things that urban space is increasingly recast as an “exclusive good,” that is— a commodity that can be occupied and claimed by some at the expense of others.¹²⁰ In other words, areas that are supposed to be “public”—open to or shared

¹¹⁶ Jacobs. 1992. *The Death and Life of Great American Cities*. 36-37.

¹¹⁷ Deacon. 2013. “Planning Sidewalks: Implications of Regulating Sidewalk Space in the East Village.” 15.

¹¹⁸ Ibid:15.

¹¹⁹ Bise, et. al. 2018. “Sidewalks as Measures of Infrastructural Inequities.” *Southeastern Geographer* 58(1):49.

¹²⁰ Lefebvre, Henri. Trans. Kofman, Eleonore, Lebas, Elizabeth. [1968] 1996. “The Right to the City” in *Writings on Cities* 85, Cambridge, Massachusetts: Wiley-Blackwell.

by all people—are privatized and made exclusive, at the very least made subject to unique restrictions. Beyond demanding the “rescue [of] the citizen as [the] main element and protagonist of the city that he himself had built,” Lefebvre calls for a general “transformed and renewed access to urban...collective life.”¹²¹ Does the sidewalk shed, in fact, limit access (physical and social)? Moreover, does it limit access to some and not others? Do sheds “claim” space at someone’s expense? Or, conversely, do they enable otherwise marginalized individuals to claim space by providing a physical platform for their presence? Do sidewalk sheds always occupy spaces deemed public, and do they ever call the definition of a space as “public” or “private” into question? I address these inquiries later on.

Yet another facet of urban spatial theory that implicates sidewalk sheds is the debate between “space” and “place.” “Space” and “place” were importantly juxtaposed by French philosopher Michel de Certeau in his 1984 work entitled *The Practice of Everyday Life*.¹²² De Certeau develops a theory of space and place around the positioning of people (and structures) within them. Whereas a place is “an instantaneous configuration of...stability” defined by “discernible concrete elements..., geographic definition, and...function,” space is “composed of intersections of mobile elements...[and] activity within an area.”¹²³ The built environment defines the former, while human activity defines the latter, and one is transformed into the other through the introduction of people. The conceptual (“instantaneous”) storefront, museum, or restaurant, for instance, is a place, designed expressly for the sale of goods, the display of relics, or the consumption of food and drink, respectively. When occupied by real people in real time,

¹²¹ Ibid:29.

¹²² De Certeau, Michel, trans. Steven Rendall. 1984. *The Practice of Everyday Life, English Edition*. Berkeley, California: University of California Press.

¹²³ Ibid:49.

each becomes a space, populated by some individuals who abide by the place-specific design/intended usage (in this case, De Certeau would say “space is practiced place”), and others who do not. Expanding De Certeau’s articulations, geographer Edward Soja asserts that “space is a product of social translations, transformations, and experiences.”¹²⁴ In other words, it is not just the presence of individuals—but the relationships individuals have with one another in a particular place—that convert said place into space. Within this line of thought, this conversion is important because “spaces” possess inherent conflict—the sidewalk as a public space is thus a conflictual one on which sheds take center stage.

There is yet another related definition of “place” and “space”: Concerned with identity, marketing, and place-based psychological meaning-creation, foundational environmental psychologists Harold M. Proshansky et al. explained space as “that which has no defining characteristics, ...[that] which could be anywhere” [emphasis original].¹²⁵ Place, on the other hand, “has an identity...comprising unique attributes [that are]...readily recognizable.”¹²⁶ The practice of placemaking is coterminous with the practice of identity formation. While the terms here are effectively switched, their definitions overlap.

Within the realm of space and place theory, various scholars maintain that many cities are quickly becoming “placeless” at the local or street level, that is— devoid of “place identities” (Relph, [1976] 2008:6).¹²⁷ Some (Kelkar, 2019; Segalla, 2020; Vis, 2018; Mbembe and Roitman, 1995) suggest that incessant urban growth might partially be to blame; construction

¹²⁴ Soja, Edward. 1989. *Postmodern Geographies: The Reassertion of Space in Critical Social Theory*. New York, New York: Verso Books USA, 11.

¹²⁵ Proshansky, Harold M., Fabian, Abbe K., and Kaminoff, Robert. 1983. “Place-Identity: Physical World Socialization of the Self.” Amsterdam, The Netherlands: Elsevier. *Journal of Environmental Psychology* Vol. 3:61.

¹²⁶ Ibid:62.

¹²⁷ Relph, Edward. [1976] 2008. *Place and Placelessness*. 3rd Ed. London, U.K.: SAGE Publishing Ltd.

paraphernalia tends to obscure structures, making them blend into one another and become unrecognizable or unremarkable.^{128 129 130 131} The loss of place identity ultimately hurts business and tourism; it also potentially harms the psyches of urban residents who build identities located in, at, on, or near the “places” they frequent. If sheds are so ubiquitous throughout New York City, surely they threaten place identities locally and perhaps even across the city at large; no scholars have considered this.

Kelkar (2019), however, does argue that existing informal and temporary architecture has high potential as a generative force for the reinterpretation and reassertion of local place identities. A burgeoning area of interest within the fields of urban studies and architecture, temporary architecture is a nebulous category comprising art installations, makeshift structures, and tents and shacks used in markets, festivals, and the like. I contend that sidewalk sheds rightfully reside within this category and thus possess the same potential (even if sheds are the product of a formal, legally regulated process, while other temporary architecture may not be). After all, they are by definition meant to be nonpermanent. Several recent articles emphasize the ability of temporary architecture to transform “space” into “place”; for instance, Almousa (2016) codifies art installations as “spaces turned temporary places” and surmises how they can be wielded as saving graces in placeless areas.¹³² Could sheds foster (or even themselves be)

¹²⁸ Kelkar, Unmesh Shrikant. 2019. “Representing the Generic: A Study of the Threshold Between Static and Temporary.” M.A. in Architecture, School of Architecture and Interior Design of the College of Design, Architecture, and Planning of the University of Cincinnati.

¹²⁹ Segalla, Spencer D. 2020. “Empire and Catastrophe: Decolonization, Environmental Disaster, and Placelessness in North Africa and Mediterranean France Since 1954.” Baltimore, MD: Project MUSE.

¹³⁰ Vis, Benjamin N. 2018. “Cities Made of Boundaries: Mapping Social Life in Urban Form.” *OAPEN*. London, U.K.: UCL Press.

¹³¹ Mbembe, Achille and Janet Roitman. 1995. “Figures of the Subject in Times of Crisis.” *Public Culture*, The University of Chicago 7:323-352.

¹³² Almousa, Sukaina Adnan. 2016. “Temporary Architecture: An Architectural Mirage.” Doctorate of Philosophy, the School of Architecture at the University of Sheffield.

artworks, combatting placelessness and providing local artists with a stage to display their skills? Further, Melis (2003) discusses flexible, mobile, and temporary structures in Utrecht, Netherlands that “feed off” of existing infrastructure, structures which she calls “parasitic architecture”; by definition, sheds, too, are parasitic.¹³³ Many of these structures are visually dynamic (designed artistically) and serve utilitarian purposes such as providing housing (à la Aneja), space for vendors, or even public restrooms. She touts their importance in modern urban planning. Might sheds be utilized towards the same ends?

If sidewalk sheds constitute temporary architecture, then a recent purported sidewalk shed “epidemic”—which I will assess later—can therefore be reclassified as an issue of temporary architecture verging on permanency. What happens when such temporary structures outlast their temporariness, becoming lasting urban fixtures? Mbembe and Roitman investigate this question in their 1995 article “Figures of the Subject in Times of Crisis,” albeit within a vastly different context: post-colonial Cameroon.¹³⁴ During “The Crisis,” a period of time in Cameroon roughly coincident with the 1980s, the capital city of Yaoundé was beset with infrastructural disrepair, dilapidation, “and general decomposition which contrast[ed] so starkly with the picture of affluence and prosperity that prevailed” in the previous decade.¹³⁵ Construction sites sat in perpetual development (“awash with scaffolding”), and the government championed growth while the lived reality stalled, not matching up.¹³⁶ All this no longer “create[d] a spectacle” or surprised the populace as they learned to live in “permanent

¹³³ Melis, Liesbeth. 2003. *Parasite Paradise: A Manifesto for Temporary Architecture and Flexible Urbanism*. Rotterdam, Netherlands: NAI010 Publishers.

¹³⁴ Mbembe, Achille and Janet Roitman. 1995. “Figures of the Subject in Times of Crisis.” *Public Culture*.

¹³⁵ Ibid:329.

¹³⁶ Ibid:330.

temporariness..., which reduce[d] people and their psyches to a precarious condition that affect[ed] the very way in which they define[d] themselves...and establish[ed] urban identity.”¹³⁷

In other words, as the urban environment appears precarious (or always in flux), those that identify with said environment also feel precarious (in flux). New York City is a world away from post-colonial Cameroon, but Mbembe and Roitman’s findings can be readily applied to the proliferation of sidewalk sheds. How do sheds affect New Yorkers’ psyches and their conceptualizations of the city, particularly if and when they last longer than they should?

It should be mentioned that “permanent temporality”—and thus, too, sidewalk sheds—can also be viewed in a positive light. Boxel and Koreman (2019) propose “permanent temporality” as a radically new way of making and conceptualizing a city.¹³⁸ They believe that the “urban”— a physical, social, and psychological space—is in “continuous transformation, where bricks and mortar and people continue to adapt, without ever being complete.”¹³⁹ If the city is postulated as always in transition instead of a place that “values permanency,” then transitory or temporary elements of the city like the sidewalk shed are suddenly rich evidence of this transitory nature. Still, questions raised by Mbembe and Roitman’s piece remain valid.

After incorporating sidewalk sheds into literature touching all these topics, I now turn to the first part of my research. In the next section, I discuss the present stature of sidewalk sheds in New York City. Where are they? Is there really a “sidewalk shed epidemic”?¹⁴⁰

¹³⁷ Ibid:330.

¹³⁸ Van Boxel, Elma and Kristian Koreman. 2019. *City of Permanent Temporality: Incomplete and Finished*. Rotterdam, Netherlands: NAI010 Publishers.

¹³⁹ Ibid:4.

¹⁴⁰ 7 On Your Side Investigates. January 27th, 2019. “What’s going on with all the sidewalk sheds in New York City?” *Eyewitness News ABC7NY*. Retrieved January 2nd, 2021 (<https://www.youtube.com/watch?v=cbcVBRMgAf4>).

Methods and Process:

Documenting sidewalk shed proliferation in New York City is a hefty task; so too is investigating how they are experienced and conceptualized. In order to adequately tackle this double-barreled thesis, I employed a variety of methods. I first sought out various experts so as to acquire a firm foothold on and broad understanding of the topic; once I knew its shape and scope, I could chart where to climb. I interviewed seven experts over the phone at length, each an authority on some facet of the world of sidewalk sheds. I have already extensively quoted two: Lori Gold is the elder sister of Grace Gold and is by now well versed in shed-related activism—she was (and is) the driver of many changes brought about by her sister’s death; Yegal Shamash is the Assistant Commissioner of the DOB—keen on making sure pedestrians are protected, he elucidated the City’s role to me in straightforward, digestible fashion. Gold and I maintained a relationship throughout this thesis process; she continually provided me feedback and information (“leads”). The third individual I interviewed was Josh Jamieson, spokesperson and Communications Director for Upper East Side (Fifth Council District) New York City Council Member Ben Kallos; Kallos is an indubitably active advocate for shed reform unique amongst his elected peers. The fourth was also part of Ben Kallos’ team: Wilfredo Lopez, his Chief Legislative Aide. The fifth was Dolores Spivack, former DOB report-analyzer and current Director of Design at NYCHA. The sixth was Stanford Chan, the director of Local Law 11-related inspections at New York City engineering firm Vidaris. The seventh was Stephen Varone, president of RAND, another architecture and engineering firm specializing in the restoration and improvement of existing structures and their façades. I relied on these seven individuals’

knowledge while compiling the bulk of my background information. Much of the information they shared framed and founded my research.

The rest of the foundational, framing information I collected came from the media—namely *The New York Times* and similar publications—or from one of several municipal agencies. The DOB’s “Active Sidewalk Sheds” map was particularly useful in understanding the general scope of shedding as reported by the City (Fig. A3). A digital endeavor inaugurated in mid-2018, the map tracks all presently erected sheds with active permits citywide and is updated daily.¹⁴¹ I took full advantage of the downloadable CSV file as it appeared on January 1st, 2021. It included the location of each shed (longitude, latitude, borough, and address), its permit number, its length (in feet), the date its first permit was filed, the expiration date of its current permit, its purpose (e.g. FISP or construction/general maintenance), and the materials used in its assembly.

Although no dataset is entirely perfect, I quickly realized that the “Active Sidewalk Sheds” map harbored significant inconsistencies. For starters, some listed shed lengths were noticeably erroneous and others may have been as well. To verify each shed’s existence and proper length, I plotted their purported addresses on Google Maps, utilizing both recent street and satellite views to discern their presence. I visited twenty random addresses in person to corroborate my results. Using Google Earth’s ground measurement tool, I calculated the total length of each incorrectly-documented shed, rectifying the dataset accordingly.

More pressing, however, the map did not include “inactive” sheds—sheds that have been left up even after their permit lapses and is no longer “active.” To what degree was the DOB

¹⁴¹ Department of Buildings. 2021. “Active Sidewalk Sheds Map.” *The New York City Department of Buildings*. Retrieved repeatedly 2020-2021 (<https://www1.nyc.gov/assets/buildings/html/sidewalk-shed-map.html>).

underreporting shed data by excluding inactive sheds? I knew of at least one inactive shed, gracing the West Park Presbyterian Church on the northeast corner of 86th Street and Amsterdam Avenue (Fig. C17).¹⁴² This shed, casting shadows on my walks in the neighborhood since 2001, was what initially piqued my interest in this thesis topic. It became “inactive” in 2010, when it was purchased from the shed rental company by the church and its nascent not-for-profit organization entitled The Center at West Park.¹⁴³ A few hours on Google turned up several others: one at another church on 83rd Street (two years old), one covering a segment of Exchange Place in the Financial District (erected circa 2003), and one at Lenox Avenue and 115th Street (the City’s oldest shed, circa 1990; the oldest active shed, at 409 Edgecombe, has been in place since circa 1998).¹⁴⁴ ¹⁴⁵ Sheds with active permits but without active work for more than seven days, barring reasons related to inclement weather, are considered dormant; a 2016 DOB survey found that the five boroughs were home to just over 2,000 dormant sheds.¹⁴⁶ That number rose to 3,182 in 2020.¹⁴⁷ The DOB map does not indicate dormancy.

In the hopes of developing a more accurate dataset, I decided to compile my own. I wanted to somehow personally document every shed and compare my counts with those I

¹⁴² Tannenhauser, Carol. May 15th, 2019. “The Answer Column: Why Has a Sidewalk Shed on 86th Street Been Up for 18 Years?” *West Side Rag*. Retrieved January 5th, 2021 (<https://www.westsiderag.com/2019/05/15/the-answer-column-why-has-a-sidewalk-shed-on-86th-street-been-up-for-18-years>).

¹⁴³ Ibid.

¹⁴⁴ Hu, Winnie. July 16th, 2017. “Scaffolding on Harlem Corner: Making Eyes Sore for at Least 17 Years.” *The New York Times*. Retrieved January 18th, 2021 (<https://www.nytimes.com/2017/07/16/nyregion/scaffolding-on-harlem-corner-making-eyes-sore-for-at-least-17-years.html>).

¹⁴⁵ Elstein, Aaron. October 17th, 2018. “After 14 Years, ‘Temporary’ Sidewalk Shed Finally Gone.” *Crain’s New York Business*. Retrieved January 18th, 2021 (<https://www.crainsnewyork.com/real-estate/after-14-years-temporary-sidewalk-shed-finally-gone>).

¹⁴⁶ Smith, Rachel Holliday and Welch, Will. January 8th, 2020. “As City Vows New Facade Crackdown, Old Violations Leave Buildings ‘Unsafe’.” *The City*. Retrieved January 30, 2021 (<https://www.thecity.nyc/2020/1/8/21210624/as-city-vows-new-facade-crackdown-old-violations-leave-buildings-unsafe>).

¹⁴⁷ Hickman, Matt. October 19th, 2020. “New York City Argues That Architect Killed By Falling Building Debris Could Be Responsible For Her Own Death.” *The Architect’s Newspaper*. Retrieved January 31st, 2021 (<https://www.archpaper.com/2020/10/new-york-city-reportedly-argues-that-erica-tishman-responsible-for-own-death/>).

derived from the DOB map. Finding and counting every shed in all five boroughs was not feasible, so I selected five case-study neighborhood proxies that I felt adequately embodied citywide shed trends; I will detail why I felt this way below. Five seemed like a good number because it is small enough so as to be manageable, but large enough to allow potentially divergent responses. I traversed the five on foot over the course of three months beginning in October 2020 and ending in December; I walked a total of 47 miles. Because I felt that these neighborhoods were representative of general shed patterns, I felt that comparisons I made between my community-level data and the DOB's data could be extrapolated to the City as a whole. What resulted is what I believe to be a truer evaluation of the extent of New York City sidewalk sheds. These comparisons were done in January after the Cycle Nine-Year One DOB data was published on January 1st, 2021; I made sure to track how shedding might have shifted between this date and the day(s) I walked each neighborhood.

Before deciding on which neighborhoods to choose, I conducted my preliminary or "test" walk in October 2020 across West 86th Street, inspired by the location of West Park Presbyterian. Using public-access City data, I made a building footprint map of the street on ArcGIS to take with me; clipboard in hand, I marked the extent of each shed on the footprint map as I walked. I also denoted the length of each shed, which I measured via a walk-while-measuring device; I wanted to see if the visible lengths matched up to the lengths reported in the DOB dataset. I conducted my walks through the larger neighborhoods in the same fashion, although I chose not to record shed lengths because it was too time consuming.

The case-study neighborhood selection process was as follows: The City provides sidewalk shed data at the community board level, a municipal division similar in size to City

Council districts. There are 59 of them (12 in Manhattan [101, 102, etc.], 12 in The Bronx [201, etc.], 18 in Brooklyn [301, etc.], 14 in Queens [401, etc.], and 3 in Staten Island [501, etc.]).

Although individual community boards have much internal heterogeneity (each one traverses multiple neighborhoods), data viewed at their level can indicate general areal trends. I categorized the community boards based on how many sheds they had. Then, I focused on where the majority of sheds were located, discounting all community boards that had fewer than the average number of sheds per board (174). Of these 20 remaining boards, I considered diversity of building stock (for sake of comparison, I wanted areas with different kinds of buildings), diversity of zoning, income variation, and ease of access via public transit (for my sake).

Ultimately, I settled on five community boards: 101, 103, 107, 112, and 302. The boards were too large for me to address in toto, especially on foot, so I chose one neighborhood in each. “Neighborhoods” were spatially defined by their conventionally accepted boundaries, and if they were still too large, I created my own manageable smaller-scale boundaries following major streets and parks. The five areas I chose were: (1) Washington Heights bordered by 178th Street to the north, High Bridge Park to the east, 155th Street to the south, and Broadway to the west (Fig. A4); (2) the Upper West Side bordered by 86th Street to the north, Central Park to the east, 72nd Street to the south, and Riverside Park to the west (Fig. A5); (3) the East Village and Gramercy bordered by 23rd Street to the north, 1st Avenue to the east, Houston Street to the south, and Park Avenue South to the west (Fig. A6); (4) the Financial District bordered by Spruce and Fulton Streets to the north, the East River to the east and south, and Broadway to the west (Fig. A7); and (5) Downtown Brooklyn bordered by Gold Street, the Flatbush Avenue Extension,

and Cadman Park Plaza to the east, York Street, Tillary Street, and Pierrepont Street to the south, the BQE to the west, and Brooklyn Bridge Park to the north (Fig. A8).

After I finished compiling the data from my walks, I investigated why some boroughs, community boards, and neighborhoods had more sidewalk sheds than others, and why the number of FISP and non-FISP sheds differed per area. Because many other citywide “scourges” disproportionately affect lower-income and minority communities, I hypothesized that the same might be true in this case. Using data compiled by the NYC Department of Planning for their Community Profiles Program at the community board level, I juxtaposed shed statistics with demographic ones such as the percentage of individuals below the City poverty threshold (Fig. A9), the average annual household income, the predominant race (curiously employing categories such as “Asian” and “Hispanic,” Fig. A10), and the percentage of households considered rent burdened (spending more than 35% of their income on rent).¹⁴⁸ I also incorporated statistics on NYCHA property locations and NYCHA’s shed levels. I searched for variations in building stock that might produce the areal variations seen regarding the purpose and number of sheds. This information came from a building footprint dataset published by NYC OpenData. I will discuss these results in the next section.

The “Active Sidewalk Sheds” map could tell me the approximate state of shedding throughout the five boroughs, but it could not divulge whether we are truly in the throes of a sidewalk shed epidemic. For that, I needed a dataset that revealed change over time. I examined different metrics in order to clarify or refute its existence and its source: Are more sheds being constructed, or are sheds being left up for longer periods of time? To appraise the latter claim, I

¹⁴⁸ Department of Planning. 2021. “Community District Profiles.” *The New York City Department of Planning*. Retrieved January 21st, 2021 (<https://communityprofiles.planning.nyc.gov>).

tracked changes in average shed ages citywide compiled by the Department of Buildings.¹⁴⁹ Data was only available for 2017-2020. To appraise the former claim, I used historical Google Earth satellite imagery and archived Google Maps street view scenes to ‘walk’ all five case study neighborhoods in the recent past, counting the sheds as I went in identical fashion to my actual neighborhood walks. Again, I decided to extrapolate these findings to the city at large, as a citywide ‘walk’ was not doable. I chose the five different time periods that had the most data (e.g. the most blocks covered by the Google street view car): March/April 2008, March/April 2012, May/June 2017, April/May 2019, and February/March 2020. That each dataset was from around the same time of year was an unexpected but much appreciated boon— that way, variations in the number of sheds that may occur based on season were controlled. However, it is important to note that each period fell at a different point in the five-year FISP cycles, and this may have affected the number of sheds present: 2020 was a first-year, 2012 and 2017 were third-years, 2008 was a fourth-year, and 2019 was a fifth-year.

In order to probe for greater change over time, I included a sixth time period— mid-1985 (a FISP first-year), five years after the initial enacting of Local Law 10. I was able to acquire data for this past point by looking at photographs taken in the mid-1980s of every single structure and vacant lot in New York for the Department of Finance; these photographs were utilized by the City to estimate real property values for taxation purposes. They have since been compiled into a searchable street-view style map called 80s.NYC; although grainy and missing at

¹⁴⁹ Department of Buildings. 2020. “Sidewalk Sheds Historical Data.” *The New York City Department of Buildings*. Retrieved January 4th, 2021 (<https://www1.nyc.gov/site/buildings/safety/sidewalk-sheds-historical-data.page>).

some junctures, the presence of sheds in a select few images was readily apparent.¹⁵⁰

Frustratingly, I was unable to find usable data for the intermediate years between 1985 and 2008.

Again employing building footprint data, I also traced changes in the number of extant buildings across the five boroughs; if the number of sheds increased over time, perhaps this was due to an increase in the number of buildings eligible under FISP. I compared these figures with an estimated count of the number of structures covered under every FISP cycle, provided by Assistant Commissioner Shamash. DOB statistics regarding the number of façade maintenance violations each FISP cycle requiring sheds were also helpful. Lastly, I explored whether or not more construction was carried out year after year; the New York State Comptroller provided me a report on the city construction industry that included this information.¹⁵¹

For the second prong of my thesis, I relied primarily on an online survey I concocted in early January via Google Forms. This survey aimed to gauge how pedestrians conceptualize and experience sheds citywide. I recorded respondents' age, gender, New York City business owner status, and level of financial stability, as well as the boroughs and neighborhoods in which they spend most of their time. The majority of the questions I asked were multiple-choice for ease of completion. These included inquiries that were intentionally-stated oversimplifications, in order to measure respondents' general gut reactions, such as "sidewalk sheds (a) have no effect on quality of life; (b) make the city a better place to live; (c) make the city a worse place to live" and "sidewalk sheds (a) do not affect pedestrians; (b) benefit pedestrians; (c) impair pedestrians." If respondents struggled to answer these questions, it would reveal that such determinations were

¹⁵⁰ Liu, Brandon and Lechtzin, Jeremy. 2020. "Street View of 1980s New York." *80s.NYC*. Retrieved December 4th, 2020 (<http://80s.nyc>).

¹⁵¹ The Office of the State Deputy Comptroller for the City of New York. 2020. "The Construction Industry in New York City." *Office of the New York State Comptroller*.

in fact not so cut and dry. Other multiple choice questions asked respondents to decide whether they would walk down (a) a shedded sidewalk, (b) a non-shedded sidewalk, or (c) either, depending on certain specified weather conditions, times of day, and congestion levels. In addition, I asked respondents to write three adjectives they associated with sidewalk sheds; I classified these adjectives into “negative,” “neutral,” and “positive” categories, then I further sorted them into eight subclasses based on which aspect of the shed they were referring to. I also included a place for general opinions/concerns. One final section listed 37 statements regarding sheds; respondents had to select only those they felt were true. Throughout the survey, I repeated several questions but altered the wording in the hopes that this might induce different responses (similar to those pesky questions in personality quizzes). For a transcript, see Appendix D.

Initially, I sent the survey to various individual family members, friends, and peers. I emailed it to former teachers, professors, and other adults in my life, asking them to send it along to others as well. It was subsequently uploaded to two listservs, one a university-wide Urban Studies listserv, the other a New York City-based listserv for psychologists. I posted it to various Facebook groups, including several dedicated to survey answering and thesis assistance. Posting it to my Columbia College Class of 2021 page garnered the most responses; as replies began to skew towards my age range, I endeavored to reach out to older individuals so as to maintain balance. Lastly, I converted the survey link into a QR code and designed a sticker to display it on; I had 100 of these stickers printed (Fig. C18). I strategically placed them throughout Manhattan, making sure not to skip the five case study neighborhoods. Survey responses are discussed at the outset of part two of my analysis.

I melded the information I gathered from my survey with observation mined from many of the same sources I used for the thesis' first prong. Televised news clips, newspaper articles, and op-eds provided more than enough fodder. All my interviewees, too, had plenty to say on how they *felt* about sheds. I also conducted various informal participant observation sessions at three shedded sites, one on 72nd/73rd Street and Broadway, one on 23rd Street and 7th Avenue, and one on 96th Street and Broadway. Further, throughout the duration of this project I made an effort to be more cognizant of sidewalk sheds whenever I was out an about; this included taking photos whenever I saw some interesting shed configuration or pertinent happenstance. After synthesizing all this data I appraised it in combination with my literature review; in viewing the opinions and insights of individual pedestrians through the lens of each selected author and work, I bring the sidewalk shed into academic realms it has not entered before. I observe sheds in a new light—or perhaps lights—revealing their potential futures.

Analysis, Part One:

In a front-page article published at the end of January in 2016, Aaron Elstein, a senior reporter for leading trade publication *Crain's New York Business*, dubbed the state of sidewalk sheds in New York City an “epidemic.”¹⁵² He was the first to do so, but certainly not the last. Over forty news articles have since employed the term, from a handful that same year to sixteen in 2020; some city officials and lawmakers have even followed suit. The issue has now entered the realm of popular culture: An October 30th, 2020 episode of John Wilson’s hit HBO show “How To with John Wilson” focused on the apparent superfluity (yet necessity?) of sidewalk sheds, which Wilson incorrectly referred to as “scaffolding.”¹⁵³ A January 2019 *Channel ABC 7 Eyewitness News* segment declared that “it appears the City has lost control of the spread of sidewalk sheds”; in tandem with various pedestrian interviewees, the newscasters agreed that sheds comprised a “scourge...that has escalated dramatically as of late.”¹⁵⁴ Just how dramatically? One reporter claimed that between 2018 and 2019, the number of sheds rose by 1,100 (17%).¹⁵⁵

When revealing the “Active Sidewalk Shed” website in 2017, DOB Commissioner at the time Rick Chandler asserted that “real-time mapping not only increases [the DOB’s] ability to monitor...sidewalk sheds, [it] also shows how we are harnessing technology to hold building

¹⁵² Elstein, Aaron. December 5th, 2016. “A Cure Emerges for New York’s Epidemic of Sidewalk Sheds.” *Crain’s New York Business*. Retrieved January 18th, 2021 (https://www.craigslist.com/article/20161206/REAL_ESTATE/161209914/a-cure-emerges-for-new-york-s-sidewalk-shed-epidemic-as-city-council-considers-bill-to-place-time-limits-on-th).

¹⁵³ Wilson, John. October 30th, 2020. “How To With John Wilson: How To Put Up Scaffolding.” *HBO WarnerMedia Studios & Networks*.

¹⁵⁴ 7 On Your Side Investigates. January 27th, 2019. “What’s going on with all the sidewalk sheds in New York City?”

¹⁵⁵ Ibid.

owners accountable...[and] assure that New Yorkers don't have to deal with so many particular sheds for longer than is needed."¹⁵⁶ In so many words here and elsewhere, he acknowledged the veracity of the so-called epidemic, even if he did not want to call it such.

The media and others seemed (and seem) to be under the impression that the epidemic has been caused by an increase in the raw number of sheds constructed. In other words, they believe that more sheds are being installed each year. DOB members like Chandler and Assistant Commissioner Shamash disagree with this claim; Shamash maintained that barring "ebbs and flows, the number of sidewalk shed permits has been roughly stable [over the past six years]."¹⁵⁷ Any perceived increase in the number of sheds, he said, is actually an increase in the amount of time existing active sheds remain in place. I asked him, then, if sheds often remain up even after they are no longer active (e.g. inactive). He replied no, that they "are almost always taken down after the work is completed and...the permit expires"; the number of inactive sheds that comprise this "almost," he said, is "negligible" and is not tracked by the DOB in any capacity.¹⁵⁸

On January 1st, 2021, the DOB's "Active Sidewalk Shed" map boasted 10,266 sidewalk sheds (Fig. A11-A13). Near half (46.5%; 4,769) were in Manhattan, 27.6% (2,831) were in Brooklyn, 13.8% (1,421) were in the Bronx, 11.5% (1,183) were in Queens, and 0.6% (62) were in Staten Island. Roughly the same breakdown is found when total shed lengths are calculated as opposed to just sheer number (Fig. A14-A16); 43.3% of the linear shed footage was in Manhattan, 23.7% was in Brooklyn, 19.2% was in the Bronx, 13.3% was in Queens, and 0.5%

¹⁵⁶ Department of Buildings. April 11th. 2018. "DOB Releases Real-Time Sidewalk Shed Map: Press Release." *The New York City Department of Buildings*. Retrieved January 18th, 2021 (<https://www1.nyc.gov/site/buildings/about/pr-sidewalk-shed-map.page>).

¹⁵⁷ Interview with Yegal Shamash, Assistant Commissioner of the NYC Department of Buildings, 12/08/2020.

¹⁵⁸ Ibid. [00:12:59].

was in Staten Island. On average, sheds in the Bronx and Queens were individually longer than those in other boroughs; sheds in Brooklyn were the shortest. Together, if placed end to end, all 10,266 sheds would stretch a whopping 1,820,538 linear feet, equivalent to 344.8 miles. They could span the length of Manhattan (measured from the southern tip of Battery Park to the Henry Hudson Bridge stanchion) 26.3 times, their breadth equal to a straight line drawn from Columbus Circle (the point from which official distances from New York City are measured) to either Toronto, Ontario or Nags Head, North Carolina.

About 37% of sheds extant citywide on January 1st, 2021 were erected for FISP purposes (Fig. A12). The majority of these (63.5%) were in Manhattan; 14.8% were in the Bronx, 12.5% were in Brooklyn, 8.8% were in Queens, and 0.4% were in Staten Island. The majority of sheds built for construction or general maintenance purposes (I refer to these as non-FISP; they are about 63% of the total) were also in Manhattan, but by a much slimmer margin (Fig. A13); Manhattan held 36.5% of these sheds, Brooklyn held 36.4%, the Bronx held 13.3%, Queens held 13.1%, and Staten Island held the remainder. Manhattan was the only borough to have more FISP sheds than non-FISP sheds; 51% of Manhattan's sheds were under the FISP program, while FISP sheds only accounted for 17% to 38% of other boroughs' shed stock. On average, FISP sheds citywide were significantly longer than non-FISP sheds, probably because FISP requires them to surround entire buildings; their average length was 231.77 feet, versus 145.43 feet for non-FISP sheds.

Ninety sheds were listed on the "Active Sidewalk Shed" map as zero feet long and twenty-one were listed as one foot long; I felt both of these lengths to be implausible. I wondered if these 111 sheds had been authorized by permits but had not yet been constructed, if they had

since been taken down, or if their lengths were somehow incorrectly entered into the system. In actuality, all 111 addresses had sheds; Ninety-seven (87.4%) of these sheds covered public school facilities, and another nine (8.1%, totaling to 95.5%) were public housing projects. Their distribution roughly matched the citywide distribution of all sheds; there was no borough-centric pattern. Why had these lengths been omitted from the dataset? Wilfredo Lopez claims that this was (and is) not done in error. Several municipal governmental organizations like the New York City Department of Education (NYCDOE) and the New York City Housing Authority (NYCHA) are not entirely autonomous; they operate, in some respects, as quasi-city, quasi-state entities. As such, when a building owned by one of these agencies requires a shed, the State (to a degree) is legally and financially implicated in its erection and associated inspections; the DOB is only “partially responsible.”¹⁵⁹ The DOB must denote this while nonetheless recording each sheds’ existence. They do so by listing them with placeholder lengths (of zero feet or one foot). What changed when I adjusted these lengths to meet reality? The number of FISP sheds rose; 77 sheds (69.4%), the majority, were under FISP. More importantly, however, the citywide sidewalk shed linear footage rose as well. When the lengths were corrected, 39,694 feet—about 7.52 miles—were added, yielding a combined 352.32 miles.

Across all five case-study neighborhoods, I documented 543 total sidewalk sheds; 181 on the Upper West Side, 145 in the East Village, 67 in Washington Heights, 95 in the Financial District, and 55 in Downtown Brooklyn (Fig. B1). About half of the sheds were FISP and half were non-FISP (on par with citywide trends), however the number of each differed dramatically per neighborhood. In Washington Heights, the majority of sheds were erected for construction or

¹⁵⁹ Interview with Wilfredo Lopez.

general maintenance; FISP sheds made up only 19.4% of the local shed stock. By contrast, the greater part of sheds in the Financial District—72.8%—were under FISP, and only 27.2% were built for construction or general maintenance. More Upper West Side sheds served FISP (55.1%), while more East Village and Downtown Brooklyn sheds facilitated construction (50.5% and 62.3% respectively). Overall, about 9% of buildings were shedded, but when broken down by neighborhood, differences once again became apparent. Around six to seven percent of buildings in the East Village, Washington Heights, and Downtown Brooklyn had sheds; this rose to 9.3% on the Upper West Side and jumped to 23.1% in the Financial District. The reason for these differences, put simply, is that some neighborhoods have far more FISP-eligible buildings than others—I will speak more on this later.

Of all 543 sheds, I could not find 68 (13%) that, according to the “Active Sidewalk Shed” map, were supposed to be there. I realized after the fact that they were all in alleyways, courtyards, and atriums not publicly visible; that is why I did not see them. Many other visible sheds also had segments extending away from the sidewalk into alleyways, courtyards, driveways, and over the roofs of adjacent building. On my initial walk of 86th Street, these segments amounted to approximately 1,845 feet; I know this because there was a 1,845-foot discrepancy between the DOB recorded shed lengths and those I measured (of course, the City-recorded lengths may not have been accurate). 1,845 feet accounted for 35% of the total linear footage I documented on 86th Street. Only 65% engaged with a public sidewalk.

Thirty-five sheds across case-study neighborhoods were inactive (not on the “Active Sidewalk Shed” Map), accounting for, on average, 6.5% of all sheds in any case neighborhood (the total mapped was 508 [543 minus 35]; the total seen was 475 [543 minus 68]). This means

that for every mapped shed, there were 0.065 unmapped sheds. This number, contrary to its appearance and Shamash's claim, is not negligible; if it can be extrapolated to the city at large, that means there are nearly 668 sheds presently unaccounted for, bringing the citywide shed tally to 10,934. If the average shed is 194.44 feet in length—and there are many shorter, many longer—this could mean that there is approximately 129,885.92 unmapped linear feet of sheds in New York City, about 24.6 additional miles. The actual length of all sheds across the five boroughs laid end to end, therefore, could be as high as 376.92 miles, 28.75 times the length of Manhattan (about a 10% increase from the initial calculation). The average human walking 3.5 miles per hour without stopping would require four days, 11 hours, and 42 minutes to travel this entire distance. It should be repeated, however, that not all sheds are encountered by the general public. If 68 of the 543 sheds (13%) were not visible at all to me as a pedestrian, this could mean around 1,422 sheds citywide are not either (about 52 miles). And, as I saw on 86th Street, a substantial portion of a sheds' linear footage does not engage with the public (only 65% did). This means that, while up to 376.92 miles of sheds are present in New York, approximately 114 (+ 52) miles do not grace public sidewalks; 211 miles, however, remains notable.¹⁶⁰

As of January 1st, 2021, New York City has 1,086,013 completed buildings: Most are in Queens (42.5%); 30.6% are in Brooklyn, 13% are in Staten Island, and 9.7% are in the Bronx (Fig. B2). These amounts are proportionate to the square mileage of each borough and their relative buildable space, that is— area that is not designated parkland, green space, swampland, or reserve. Manhattan only has 4.2% of the city's buildings (a total of 45,360), yet accounts for

¹⁶⁰ This figure was calculated as follows: 13% of case-study sheds were not visible at all to me as a pedestrian on the street. 13% of 10,934 is 1,422; thus, the total number of publicly visible sheds in New York is 9,512 (about 325 miles long). On my initial walk of 86th Street I measured shed lengths and compared those lengths to the DOB-recorded ones; I discovered that I only encountered 65% of the recorded linear footage. If this pattern holds true citywide, then only 65% of the 325 miles should front public sidewalks, resulting in about 211 miles.

46.5% its shed stock. Why? In large part due to FISP guidelines and construction trends, shed proliferation depends on factors such as built density and building height. More suburban and less-dense areas have fewer sheds, which are on average older and longer, while more built-up areas have more sheds, which tend to be shorter and younger. In general, I could not find any correlation between race, income, or poverty level and the amount, length, or average age of sheds in any given neighborhood, community board, or borough.

It should be noted, however, that of the 220 developments owned and operated by NYCHA, 60.3% of them—particularly those with structures over six stories—have at least one shed.¹⁶¹ ¹⁶² In every borough except Staten Island, there are more NYCHA developments with shedding than without. And, sheds at these sites tend to be, on average, about two months older than non-NYCHA sheds. This, according to NYCHA Director of Design and former DOB FISP report analyzer Dolores Spivack, is largely because of the age of NYCHA building stock, and a lack of funds.¹⁶³ Of their 220 developments, about 80% were constructed during a building boom following WWII and lasting until about 1960. During this time, the New York City government rushed to accommodate returning GIs and their families while simultaneously dealing with an influx of new arrivals, many of them lower-income. To meet the demand, the City created an unprecedented amount of affordable housing; these new buildings lacked ornamentation, in step with the vogue of the day. Architects forwent the then outmoded plasterwork techniques (like stucco detailing) and limestone carving of the early 20th century that required more

¹⁶¹ New York City Housing Authority. 2021. “NYCHA Development Interactive Map.” *NYCHA*. Retrieved February 20th, 2021 (<https://nycha.maps.arcgis.com/apps/webappviewer/index.html?id=41c6ff5e73ec459092e982060b7cf1a1>).

¹⁶² New York City Housing Authority. 2021. “NYCHA Property Directory.” *NYCHA*. Retrieved February 20th, 2021 (<https://www1.nyc.gov/assets/nycha/downloads/pdf/Development-Guide-04-23-2020.pdf>).

¹⁶³ Interview with Dolores Spivack, February 19th, 2021.

craftsmanship, time, and money. On account of their purpose and immediate necessity, new buildings were instead constructed with the latest, quickest-to-use materials like glazed masonry, sheetrock, cinderblocks, and concrete.¹⁶⁴ Although more cost-effective, they were not as weather- or time-hardy as plaster and limestone, and today it shows. The metal ties used to secure façades to building frames often disintegrate, resulting in the occasional (but rare) façade collapse.¹⁶⁵ Many NYCHA building components from façades to boilers to elevators, according to Spivack, have not been updated in over half a century. Now, NYCHA is struggling to play catch-up; often, they are forced to conduct near-regular three-to-four-year long “[façade] spot repairs as Band-Aid solutions...to stretch the funds we do have” in lieu of much longer, much more expensive comprehensive repairs.¹⁶⁶ The sheds that are erected disproportionately affect lower-income people of color by definition; NYCHA residents must be below certain citywide poverty thresholds and are 96% non-White.¹⁶⁷

Contrary to what might be expected, most buildings in New York City are low-rise structures, no more than four stories tall.¹⁶⁸ The most common type of dwelling citywide, on par with the rest of the nation, is a two-story detached single-family home. 98.8% of them can be found in the Bronx, Queens, Staten Island, and Brooklyn; understandably, these boroughs’ average building heights range from 22.9 to 28.9 feet (Fig. B3). Recall that only buildings over six stories (about 75 feet) are eligible under FISP; of all one million-plus buildings citywide,

¹⁶⁴ Interview with Dolores Spivack, February 19th, 2021.

¹⁶⁵ Interview with Stephen Varone, February 26th, 2021.

¹⁶⁶ Ibid.

¹⁶⁷ New York City Housing Authority. 2020. “Resident Summary Fact Sheet” *NYCHA*. Retrieved February 20th, 2021 (<https://www1.nyc.gov/assets/nycha/downloads/pdf/Resident-Data-Book-Summary-Pages-2020.pdf>).

¹⁶⁸ Department of Information Technology & Telecommunications (DoITT). 2021. “Building Footprints Historical Shape.” *NYC OpenData via DoITT*. Retrieved December 4th, 2020 (<https://data.cityofnewyork.us/Housing-Development/Building-Footprints-Historical-Shape/s5zg-yzea>).

those over six stories only account for 1.4%—a mere 14,726. Of this 1.4%, over two thirds (67.4%) are in Manhattan, and Manhattan’s average building height is just under 75 feet. A pie chart showcasing the percentages of FISP-eligible structures by borough looks near identical to a pie chart depicting the number of FISP sheds citywide; the Manhattan segment is largest in both (Fig. B2). More sheds in the Financial District and on the Upper West Side were FISP sheds because buildings in those neighborhoods are 59.5% and 22% FISP-eligible, as opposed to 7-17% in the three other case-study neighborhoods. Moreover, barring some slight dissimilarities, the number of non-FISP sheds in each borough roughly parallels the number of active construction projects in each borough that require sidewalk sheds per city code (all those excluding “1 & 2 family houses” and “low-rise commercial facilities,” essentially).¹⁶⁹ Thus, differences in average building heights and the number of active construction projects in each borough can explain citywide variations in the number of sidewalk sheds.

Now, I finally move to discuss to the purported epidemic. All five neighborhoods saw a surge in the number of sidewalk sheds over time, across all six focus years. Overall, the late 2020 case-study-wide shed total of 543 comprised a 1010% increase from 1985, when there were only 49 sheds: 25 on the Upper West, twelve in the Financial District, six in the East Village, five in Washington Heights, and one in Brooklyn (Figs. B4-B5). There was a mean increase of about 100 sheds between each focus year. Between 1985 and 2008, the added sheds constituted a 146.9% increase: this averaged out to an estimated increase of 6.4% per year (Fig. B6, by no means, however, did the number of sheds really rise at such a regular rate). Between 2008 and

¹⁶⁹ The Office of the State Deputy Comptroller for the City of New York. 2020. “The Construction Industry in New York City.” *Office of the New York State Comptroller*. Retrieved January 16th, 2021 (<https://www.osc.state.ny.us/files/reports/osdc/pdf/report-2-2020.pdf>).

2012, 91 sheds were added— this 75.2% increase averaged out to a 18.8% increase per year. The 2012-2017 period saw a 44.3% increase, 8.9% per year, the 2017-2019 period saw a 35% increase, 17.5% per year (on par with the 17% calculated by the *Eyewitness News*), and the 2019-2020 period saw a 15% increase overall/per year. What this demonstrates is that although the average estimated percent increase per year (calculated as the total percent increase for the period divided by the number of years gone by) was not constant, it did grow overtime (Fig. B6), and the number of sheds *did* increase between each measured year (Figs. B4-B5).

Each neighborhood saw its greatest shed-count increase between different focus years. The Upper West Side saw the greatest addition of sheds between 2012 and 2017, while the East Village had its highest shed increase between 2019 and 2020. Shed counts in the other three neighborhoods grew the most between 2017 and 2019. These patterns loosely mirror trends in construction: More new buildings were built in each neighborhood during each of the aforementioned year-blocs than during any other years post-1980, with the exception of Downtown Brooklyn (construction there was at its highest level in 2020, not between 2017 and 2019).¹⁷⁰ Since 2000, the number of construction permits issued citywide has risen every year, save only for 2009 when the economy suffered following the 2008 Financial Crisis.¹⁷¹ This held true even through 2020, during which New York Governor Andrew Cuomo issued a stop-work order for all non-essential projects in April, May, and June at the height of New York City's COVID-19 crisis. While construction and shed erection did dip during this period, they were still

¹⁷⁰ The Office of the State Deputy Comptroller for the City of New York. 2020. "The Construction Industry in New York City: Neighborhood Statistics." *Office of the New York State Comptroller*. Retrieved January 16th, 2021 (<https://www.osc.state.ny.us/files/reports/osdc/pdf/report-3-2020-neighborhood-statistics.pdf>).

¹⁷¹ *Ibid*.

at levels higher than previous years.¹⁷² Increases in construction means an increase in the number of construction sheds built. Increases in the construction of taller buildings and the regular aging of existing structures means an increase in the number of FISP sheds built. Presently beginning year two of cycle nine, the DOB has already issued nearly 2,000 public safety violations, almost twice the number of violations issued at this time in the previous cycle.¹⁷³ Over 1,000 additional sheds have been installed as a result.¹⁷⁴

FISP sheds on average were 75 days older than non-FISP sheds (Figs. A17-A19); this is presumably because FISP inspection and maintenance endeavors are arduous and typically cover more surface area, requiring more time (the taller the building, the larger the area requiring evaluation). Sheds in Manhattan tend to be comparatively middle-aged (about 313 days), while sheds in the more suburban boroughs (Queens and Staten Island) tend to be slightly younger (301 days) and sheds in the quasi-suburban boroughs (Brooklyn and the Bronx) tend to be older (352 days). I was unable to provide explanations for these dissimilarities.

With all this construction and with the increase in shed-counts, I was surprised to discover that since 1980 the total number of buildings in the five case study neighborhoods has actually *decreased*. This is because there have been more structures demolished than built; only 139 structures replaced 305 demolished ones. Modes of development explain the subsequent increase in shedding: Usually, developers will replace smaller, shorter structures with larger, taller ones. For instance, an apartment building built on 72nd Street and Broadway in 2010 has

¹⁷² Ibid.

¹⁷³ Haag, Matthew. January 30th 2020. "Facades on 1,400 Buildings in New York Are a Threat to Pedestrians." *The New York Times*. Retrieved January 30th, 2021 (<https://www.nytimes.com/2020/01/30/nyregion/nyc-scaffolding-building-facades.html>).

¹⁷⁴ Ibid.

196 units across 20 stories; it replaced 58 units across five brownstones four to six stories in height.¹⁷⁵ Whereas the demolished buildings were not eligible under FISP and did not require sheds, the new one was and did. Only 4% of the 309 demolished buildings were higher than six stories, while 79% of the replacement structures were. Thus, fewer buildings begat more sheds. This pattern is replicated throughout the five boroughs, evidenced by FISP statistics; Shamash stated that every cycle, approximately 1,500 new structures are added to the program, which presently includes nearly 16,000 total.¹⁷⁶ Overall, however, citywide more buildings have been built than demolished (in part due to the reclamation of marshland and the erection of new suburbs). The City's building stock has increased by about 113,000 structures since 1980.¹⁷⁷

Have sheds been staying up for longer periods of time as well, as the DOB claims? In 2017, the mean shed age for the entire City was about 274 days (Figs. A17-A19). This rose to 291 days in 2018, 310 in 2019, and 344 in 2020; the large jump from 2019 and 2020 was likely due to the fact that many sheds were left up for longer than planned when much work was halted during the COVID-19 pandemic.¹⁷⁸ Still, though, average shed ages increased between every year measured. Sheds in 2020 remained standing for approximately 70 days—over two months—longer than sheds in 2017. As of January 1st, 2021, 1,170 sheds plus an approximate additional 100 uncounted inactive sheds (1,270; 12.5% of the total shed count) had been up for over one year; over half—642 sheds plus up to 60 inactive others—had been standing for over three. In 2017, the number of active sheds over a year old was 848, revealing a substantial 38%

¹⁷⁵ NYNesting. 2020. "The Corner: 212 West 72nd Street." *NYNesting*. Retrieved January 31st, 2021 (<https://www.nynesting.com/building/corner>).

¹⁷⁶ Interview with Yegal Shamash, 12/08/2020, [00:15:28].

¹⁷⁷ Ibid; Department of Information Technology & Telecommunications (DoITT). 2021. "Building Footprints Historical Shape." *NYC OpenData via DoITT*.

¹⁷⁸ Interview with Yegal Shamash, 12/08/2020, [00:16:53].

increase since then. Indeed, the epidemic-esque increase in sheds over the last several years can also be attributed in large part to the fact that more sheds are disassembled progressively later rather than sooner.

I have already enumerated why the number of sidewalk sheds erected citywide has risen over time. Why sheds have remained standing for longer than in the past is another matter. The majority of such sheds overstaying their welcome on New York's sidewalks (e.g., those over three years old) are those erected under FISP. They remain up for longer than necessary either because building owners cannot take them down, or do not want to; these decisions hinge on the complexity of the job, financial ability and, often, ulterior financial motives.

Façade work and other similar repair and maintenance programs, especially the more complicated ones (like those involving landmarked structures), take an “often misunderstood” amount of time, according to Stephen Varone of RAND Engineering.¹⁷⁹ Recently, that timescale has increased ever-so-slightly due to shifting requirements and administrative regulations regarding accountability (labeled by some as bureaucracy). “Even when a [building] owner is diligent...and no one delays,” Varone says, “it’s not uncommon for repair work to last two, three years.”¹⁸⁰ Engineers have to be hired, budgets and design specs must be drafted and approved, contractors, workers, and materials have to be sourced, inspections have to be completed, and on top of that every decision has to be agreed to by both the building owner and the City. Material acquisition, in particular, requires considerable patience, more than it has before. For instance, two decades ago the process of molding and ordering a terra cotta element to replace its deteriorated counterpart took approximately three to four months. Now, the same process can

¹⁷⁹ Interview with Stephen Varone.

¹⁸⁰ Interview with Stephen Varone.

take over a year because artisans have become more expensive and scarce.¹⁸¹ And, landlords may have to do extra legwork to overcome a taboo associated with the continued usage of more fragile materials like terra cotta. Debates had between the DOB and preservationists (like the Landmarks Commission) can occasionally delay repair work at the expense of a building owner, who must decide between prioritizing their building's historical or long-standing structural integrity (keeping terra cotta, say, or replacing it with cast stone).¹⁸²

Façade maintenance carries necessary yet heavy financial burdens, second only perhaps to fines levied by the DOB for non-compliance or the potential lawsuit brought on behalf of a pedestrian injured by falling debris. As the cost of living and maintenance rises citywide, many landlords have increasingly had trouble keeping up.¹⁸³ If a building owner cannot afford repairs but they are required for preserving public safety, a shed is erected and stays up until the work can be funded and completed. Occasionally, funds run out in the middle of repairs. Contractors may discover the project is bigger than they initially thought or an unexpected façade issue arises, and the owner is asked to pay more than they budgeted for. When this happens, work is halted, and the sheds remain attached to the building until the necessary funds can be obtained for the job to be completed.¹⁸⁴ This is what happened at West Park Presbyterian Church: Shortly after the sheds were put up in 2001 to address a crumbling façade, the church ran out of money and the work was put on hold.¹⁸⁵ Various fundraisers were held to no avail as the sandstone

¹⁸¹ Ibid.

¹⁸² Ibid.

¹⁸³ Velsey, Kim. August 24th, 2018. "The New High-Rent Districts." *The New York Times*. Retrieved January 20th, 2021 (<https://www.nytimes.com/2018/08/24/realestate/the-new-high-rent-districts.html>).

¹⁸⁴ Interview with Yegal Shamash, 12/08/2020.

¹⁸⁵ Tannenhauser, Carol. May 15th, 2019. "The Answer Column: Why Has a Sidewalk Shed on 86th Street Been Up for 18 Years?" *West Side Rag*.

continued to disintegrate. By 2008, the shed itself had fallen into disrepair, and the DOB ordered the church to construct an additional secondary shed to support it.¹⁸⁶ This secondary shed was removed in 2010 when the congregation made the decision to purchase the original shed from the rental company and maintain it themselves.¹⁸⁷ Since then, West Park Church has been landmarked, and the Landmarks Preservation Commission now maintains the shed for the church while funds are sought to conduct the long-awaited façade fixes.¹⁸⁸ Similar situations have played out at buildings across the city; ironically, the DOB's own headquarters at 280 Broadway had a sidewalk shed for eleven years because they, too, could not afford repairs.¹⁸⁹ These repairs (now completed) cost upwards of four million dollars in large part because 280 Broadway is landmarked. Landmarked structures require particular modes of repair (like the hiring of a conservator) that are quite expensive. As a result, sheds tend to front landmarked structures for longer periods of time.¹⁹⁰

Sometimes, landlords do not want to remove their sheds because they do not want to address the reasons their sheds are up in the first place. They purposefully file permit extension after permit extension because paying to keep a shed installed is more cost-effective than performing repairs.¹⁹¹ The owners of rental buildings—who oscillate between wanting to raise rents and wanting to retain tenants—are especially guilty of this; one Upper East Side proprietor said he would “sure as hell...rather pay the \$1,400 a month it costs to rent [the shed] than the...

¹⁸⁶ Ibid.

¹⁸⁷ Ibid.

¹⁸⁸ Ibid.

¹⁸⁹ Graham, Aidan. September 24th, 2019. “12-Year-Old Sidewalk Shed Costs Taxpayers Half a Million and Counting.” *Brooklyn Paper*. Retrieved December 28th, 2020 (<https://www.brooklynpaper.com/12-year-old-sidewalk-shed-costs-taxpayers-half-a-million-and-counting/>).

¹⁹⁰ Interview with Dolores Spivack, February 20th, 2021.

¹⁹¹ Interview with Yegal Shamash, 12/08/2020.

\$300,000 for repairs.”¹⁹² This is because owners of rental buildings usually receive cashflow (rents) on a monthly, more incremental, more financially volatile basis than the owners of non-rental buildings; rarely are they earning large sums of money at once. Renting a shed for \$1,400 monthly appeals to them far more than a one-time payment of hundreds of thousands of dollars.

Many landlords who plan to renovate, demolish, or otherwise redevelop a building or multiple buildings deemed unsafe or SWAMP—particularly large-scale real estate developers—will most definitely not want to pay for repairs, let alone do them: why waste money to fix up a damaged façade when its eventual fate is the wrecking ball? They, too, will accordingly erect sheds and keep them up for as long is financially allowable (which usually, for them, is indefinite as it suits their needs).¹⁹³ It can take years for “long-game” developers to acquire every building and plot within the scope of their project before work commences.¹⁹⁴ For instance, in 2003 during the embryonic stage of its Manhattanville expansion project, Columbia University acquired a near-derelict warehouse on 129th Street. The warehouse, not eligible for FISP on account of its height, was nonetheless cited for code violations; its façade was in visible danger of collapse.¹⁹⁵ Columbia erected a shed within a year but it sat dormant until 2010, when construction began on the Lenfest Center for the Arts. At that juncture, the warehouse and its shed were demolished in one fell swoop; no repair work was ever completed.¹⁹⁶

¹⁹² Graham, Aidan. September 24th, 2019. “12-Year-Old Sidewalk Shed Costs Taxpayers Half a Million and Counting.” *Brooklyn Paper*.

¹⁹³ Interview with Yegal Shamash, 12/08/2020.

¹⁹⁴ *Ibid.*

¹⁹⁵ Kensing, Nathan. March 8th, 2018. “As Columbia University Moves Into Manhattanville, Its Industrial Past is Erased.” *Curbed New York*. Retrieved January 4th, 2021 (<https://ny.curbed.com/2018/3/8/17095838/manhattanville-columbia-university-expansion-photo-essay>).

¹⁹⁶ *Ibid.*

For some landlords, the sheds themselves are too expensive. Even if they can afford shed erection during one FISP cycle, they might not be able to afford it during the next. Because shed assembly and disassembly both must be paid for, in recent years more building owners (no matter their financial ability) have opted not to remove their sheds once work is complete.¹⁹⁷ By doing so, they avoid the cost of taking them down and rebuilding them every five years, and sheds are resultantly left in place indefinitely. If a façade is deemed unsafe, sheds must be erected whether the landlord can afford them or not; if erecting a shed is too costly, the DOB will pay for its erection and then bill the building owner, who must reimburse the City when they are able.¹⁹⁸

There is no law limiting the lifespan of a New York City sidewalk shed. Upper East Side (Fifth Council District) Council Member Ben Kallos has made changing this his pet project: In 2016, he introduced a bill that would “force landlords to make repairs and get sidewalk sheds down sooner.”¹⁹⁹ It would require private landlords to dismantle dormant sheds, it would mandate that sheds be disassembled once work is completed, and it would allow the Department of Housing Preservation and Development (HPD) or the DOB to conduct repairs when, following a ninety day warning period and additional ninety day extension, landlords refuse or are still unable to themselves (landlords would still, however, be billed for this work

¹⁹⁷ Interview with Yegal Shamash, 12/08/2020.

¹⁹⁸ Ibid.

¹⁹⁹ Kallos, Ben. 2020. “Annual Report: 6 and a Half Years as Your Council Member.” *The Office of New York City Council Member Ben Kallos*.

eventually).²⁰⁰ At present, Kallos' efforts are stalled. Lobby groups with strong grips on the City's politics and its coffers like REBNY, the Real Estate Board of New York, are very much against any laws putting additional pressure on landlords. "The City has meddled enough in our business," a spokesperson for the Board said.²⁰¹ Industry professionals like Varone feel legal proposals like these are well-intentioned but must acknowledge the reality that maintenance, repair, and construction work *can* take time.

Kallos, however, believes it is the City's duty to meddle when public safety is at stake. Limiting the lifespan of sheds is not enough, he says. As the number of sheds rises citywide, his concern regarding the dangers they face rises alongside. These dangers, although perhaps smaller in comparison to the more pressing dangers mitigated by shed construction, are significant: Shedding is rarely if ever maintained, even as it ages past its prime.²⁰² There is no formal ordinance mandating such maintenance. Not only do many sheds remain up for years on end without upkeep; components are reused persistently, perhaps past safety (in walking around Manhattan, I did notice shed stanchions painted long-defunct blues and tans, revealing their age).²⁰³ ²⁰⁴A Scaffold Safety Team was created by Mayor Bloomberg in 2007 to monitor shed construction and stability, but as of 2017 it only employed six field inspectors; faulty shed violations dropped from 855 in 2009 to 294 in 2017, not because fewer violations were to be

²⁰⁰ Kallos, Ben. 2020. "Introduction 1389-2016: Time Limits for Scaffolding and Sidewalk Sheds." *The Office of New York City Council Member Ben Kallos*. Retrieved January 30th, 2021 (<https://benkallos.com/legislation/introduction-1389-2016-time-limits-scaffolding-and-sidewalk-sheds>).

²⁰¹ Elstein, Aaron. January 23rd, 2016. "The Law That Created the Billion-Dollar Scaffold Industry Has Turned City Sidewalks Into An Obstacle Course." *Crain's New York Business*. Retrieved January 18th, 2021 (https://www.craigslist.com/article/20160124/REAL_ESTATE/160129960/scaffolds-are-everywhere-in-new-york-city).

²⁰² Haag, Matthew. January 30th 2020. "Facades on 1,400 Buildings in New York Are a Threat to Pedestrians." *The New York Times*.

²⁰³ Ibid.

²⁰⁴ Recall that shed coloring has always been regulated; before they were hunter green, they were blue, and before that, tan and maroon...

found but because inspectors' capacity was reduced.²⁰⁵ Meanwhile, the number of pedestrians and construction workers injured by sheds rose. One East Village man was hit by a falling plywood crossbeam in 2012, that same year a four year old was electrocuted after she touched a shed with improperly wired electric lighting, and in 2016 a woman was struck by an improperly secured steel beam while walking under a shed in Brooklyn.²⁰⁶ ²⁰⁷ In 2017, a model was nearly killed when a shed collapsed on her in SoHo during a moderate wind storm.²⁰⁸ After an DOB investigation, the shed was discovered to have been irregularly constructed and was not up to code. Had it been erected properly, it would not have collapsed. Wind storms have wreaked havoc on sheds for over a century; the first recorded shed-related fatality was September 30th, 1899, when 18-year-old Bohemian domestic servant Anna Kraha was killed on 14th Street and 6th Avenue ²⁰⁹ ²¹⁰ ²¹¹ ²¹² ²¹³ . Today, sheds are designed to survive gusts up to 150 miles per hour.

Most do.

²⁰⁵ Gannon, Devin. December 31st, 2019. "City to Double Number of Facade Inspectors After Pedestrian's Death." *6sqft*. Retrieved January 31st, 2021 (<https://www.6sqft.com/city-to-double-number-of-facade-inspectors-after-pedestrians-death/>).

²⁰⁶ Ibid.

²⁰⁷ McCroy, Winnie. August 23rd, 2020. "Sidewalk Sheds Shield Criminal Acts, Shelter the Unhoused, Blight Small Business Bottom Line, Hassle Passersby." *Chelsea Community News*. Retrieved January 2nd, 2021 (<https://chelseacommunitynews.com/2020/08/23/sidewalk-sheds-shield-criminal-acts-shelter-the-unhoused-blight-small-business-bottom-line-hassle-passersby/>).

²⁰⁸ 7 On Your Side Investigates. 2019. "DOB: Collapsed SoHo Shed a Result of Cutting Corners, Could've Been Prevented." *Eyewitness News ABC7NY*. Retrieved January 10th, 2021 (<https://abc7ny.com/dob-collapsed-shed-that-hurt-5-a-result-of-cutting-corners/3008268/>).

²⁰⁹ Ibid.

²¹⁰ Unknown Author. October 1st, 1899. "Girl Crushed To Death." *The New York Times* XLIX(15,515):1. Accessed via *TimesMachine*. Retrieved February 23rd, 2021 (<https://timesmachine.nytimes.com/timesmachine/1899/10/01/100453523.html?pageNumber=1>).

²¹¹ Unknown Author. March 2nd, 1914. "Street Sheds Fall, Man and Boy Killed." *The New York Times* LXIII(20,491):2. Accessed via *TimesMachine*. Retrieved December 24th, 2020 (<https://timesmachine.nytimes.com/timesmachine/1914/03/02/100301659.html?pageNumber=2>).

²¹² Unknown Author. May 24th, 1925. "High Wind Hits City." *The New York Times* LXXIV(24,592):1, 26. Accessed via *TimesMachine*. Retrieved December 24th, 2020 (<https://timesmachine.nytimes.com/timesmachine/1925/05/24/107059273.html?pageNumber=1>).

²¹³ Unknown Author. March 4th, 1904. "Wind Causes Havoc." *The New York Times* LIII(16,900):1. Accessed via *TimesMachine*. Retrieved December 24th, 2020 (<https://timesmachine.nytimes.com/timesmachine/1904/03/04/101388052.html?pageNumber=1>).

After the incident with the model, Kallos lobbied the City to better enforce shed inspection and once again pushed his bill, to no avail. In 2018, he proposed a second, this one demanding that sheds be “properly maintained and...inspected at regular intervals by adequate professionals...[so as to] make pedestrians safer.”²¹⁴ In response, the DOB did not pass any new law but rather reinvigorated the Scaffold Safety Team; there are now 22 inspectors.²¹⁵ Kallos and other lawmakers have additionally advanced legislation requiring building owners to actually address and complete violations they may be handed, as violations themselves—like the shedding they bring forth—also persist citywide. One daycare center in the Bronx has had a sidewalk shed for 11 years, but an outstanding “unsafe” violation for 20; after an inspector noticed “substantial vertical cracks” in 2001, it took nine years for a shed to be erected, and as of January 1st, 2021 still no repairs have occurred.²¹⁶ Of the 2,663 buildings initially labeled unsafe during the previous FISP cycle, about 1,500 (around 57%) still carry that distinction today.²¹⁷ After inspections are carried out, structures remain “unsafe” for nearly 600 days on average, and over half of SWARMP buildings deteriorate to the “unsafe” category before their conditions are addressed.²¹⁸ Similar to how many building owners would rather pay for a monthly shed rental than fix the issues that required the shed, for many building owners, fines are a more manageable expense than the necessary repairs. Over the past decade (two FISP cycles), \$31 million in fines

²¹⁴ Kallos, Ben. 2020. “Introduction 87-2018: Removing Construction-Related Equipment.” *The Office of New York City Council Member Ben Kallos*. Retrieved January 30th, 2021 (<https://benkallos.com/legislation/introduction-87-2018-removing-construction-related-equipment>).

²¹⁵ Kallos, Ben. 2020. “Annual Report: 6 and a Half Years as Your Council Member.” *The Office of New York City Council Member Ben Kallos*.

²¹⁶ Haag, Matthew. January 30th 2020. “Facades on 1,400 Buildings in New York Are a Threat to Pedestrians.” *The New York Times*.

²¹⁷ Smith, Rachel Holliday and Welch, Will. January 8th, 2020. “As City Vows New Facade Crackdown, Old Violations Leave Buildings ‘Unsafe’.” *The City*.

²¹⁸ Ibid.

were collected by the DOB, a large portion levied because landlords either were not completing their repairs or because they did not have their façades inspected to begin with.²¹⁹

When sheds are erected and remain standing for far too long, it becomes a problem. When sheds are *not* erected where they are needed, more problems emerge. Some building owners, like the landlord of the aforementioned daycare center, get away with paying endless fines whilst avoiding shed construction and repair completion. Himmel + Meringoff Properties, LLC, the owners of the Godfrey Building on 7th Avenue and 49th Street, were not so lucky. The Godfrey was cited for several SWARMP violations in April of 2019, and they preferred incurring a financial penalty instead of installing a shed.²²⁰ Doing repairs, a Properties spokesperson said, was “too cumbersome” a task.²²¹ By Thanksgiving the façade had begun to crumble, and later in December falling terra cotta struck and killed Erica Tishman.²²² Only after her death did the building erect a shed, and only after did the City realize they had failed to follow up on their initial summons.²²³

At this juncture, Kallos proposed his most recent law suggesting the City enhance their inspection tactics. Why use century-old examination technology like binoculars when drones could be employed? Why only have eleven inspectors for 16,000 FISP-eligible structures? In response, the DOB began researching drones as an alternative to the required building-wide arm-

²¹⁹ Haag, Matthew. “Façades on 1,400 Buildings in New York Are a Threat to Pedestrians.” *The New York Times*.

²²⁰ Hickman, Matt. October 19th, 2020. “New York City Argues That Architect Killed By Falling Building Debris Could Be Responsible For Her Own Death.” *The Architect’s Newspaper*.

²²¹ *Ibid.*

²²² *Ibid.*

²²³ *Ibid.*

length inspection.²²⁴ ²²⁵ These drones would be capable of ultra high-definition video recording and would be equipped with thermal (and other) sensors. Drone implementation is difficult for a variety of reasons. For one, there are privacy concerns; some worry drones would be able to photograph (and record or otherwise visualize) building residents through their windows.²²⁶ For two, they are expensive and require skillful operators. The main hurdle to drone usage, however, is a legal one. An “avigation” law originally intended to limit hot-air-balloon usage in New York City has since been adapted to drones (and remote-controlled planes, etc.)— it makes it illegal for such “aircraft” to take off or land outside State property, of which the City is home to very little.²²⁷ Some have found loopholes of sorts—one private QEWI inspects buildings on the far West Side of Manhattan using drones that are dispatched from New Jersey.²²⁸

Following Kallos’ and other’s recommendations, the DOB also doubled the number of inspectors on hand and reappraised all existing outstanding violations. Of 1,300 buildings given surprise inspections, near 300 of them were determined to have improper protection (no sheds, most often) and were subsequently issued Class 1 violations.²²⁹ More surprise inspections were carried out throughout early 2021, with the intention to “establish a culture of safety in the

²²⁴ Kallos, Ben. 2020. “Introduction 1353-2019: Sidewalk Shed Inspections.” *The Office of New York City Council Member Ben Kallos*. Retrieved January 30th, 2021 (<https://benkallos.com/legislation/introduction-1353-2019-sidewalk-shed-inspections/>).

²²⁵ Natanzon, Emma. January 2nd, 2020. “NYC Considers Drones For Building Inspections After Deadly Façade Collapse.” *The Architect’s Newspaper*. Retrieved January 31st, 2021 (<https://www.archpaper.com/2020/01/nyc-drones-for-building-inspections/>).

²²⁶ Interview with Wilfredo Lopez, February 23rd, 2021.

²²⁷ New York City Public Safety Law § No. 10-126: “Avigation in and over the City.” (1918, last amended 2006). Retrieved February 23rd 2021 (<https://nycadministrativecode.readthedocs.io/en/latest/c09/>).

²²⁸ Interview with Wilfredo Lopez.

²²⁹ Ibid.

industry.”²³⁰ In addition, the agency unveiled an expanded investigation program involving larger penalties, regular follow-up visits by QEWIs, and randomly-issued compliance reviews.²³¹ The heart of the issue, however, according to Kallos, was not fully remedied. New York is still without any legislation that mandates shed installation, shed maintenance, and reduces shed longevity in a way that does not rely on the threat of financial punishment. “Sheds have been going up more and more,” he remarked, “[and]... they must sometimes go up, that is certain. ... But like all things that go up, they must come down.”²³²

²³⁰ Morris, Bill. March 4th, 2021. “City Conducting Surprise Sweeps of Facade-Repair Projects.” *Habitat Weekly: New York’s Cooperative and Condominium Community, Habitat Magazine*. Retrieved March 4th, 2021 via Lori Gold.

²³¹ Ibid.

²³² Kallos, Ben. 2020. “Annual Report: 6 and a Half Years as Your Council Member.” *The Office of New York City Council Member Ben Kallos*.

Analysis, Part Two:

I have hitherto demonstrated that sidewalk sheds are proliferating throughout many parts of New York City, and I have explained why this is the case. Now I move to discuss how pedestrians experience and conceptualize the sheds themselves. The bulk of data for this section came from the survey I conducted, which garnered just over 200 responses in one month.²³³ Although 200 responses are not enough to argue for statistical significance, the results are nonetheless indicative. I asked respondents to supply various pieces of demographic information including their age (amongst 10 age brackets),²³⁴ gender, degree of financial stability (on a scale of one to ten, ten being most stable), and the borough(s) and neighborhood(s) in which they live or spend most of their time (Fig. A20). Just under half of the respondents (the majority) were between the ages of 19 and 24; 70% of respondents were between the ages of 19 and 39. The remaining 30% or so were between the ages of 40 and 79; no respondents were over 79 or under 19. About three-fifths of the respondents identified as female; the remaining two-fifths or so identified as male. Twenty-seven were neither or preferred not to say. About three-fifths, too, considered themselves to be “financially stable” (ranking a 10, 9, or 8). 31% were “more financially stable than not” (ranking a 7, 6, or 5), and 9.1% were “not” or “less financially stable”; 7.5 was the average recorded level of financial stability. The majority of responses (about 70%) came from individuals who live or spend considerable time in Manhattan. A fair share of respondents (about 14%) live or spend considerable time in Brooklyn, and another 10% or more than one borough; I received a small number of responses from Queens and one each

²³³ See Appendix D for survey transcript.

²³⁴ 0-12 years; 13-18; 19-24; 25-39; 40-49; 50-59; 60-69; 70-79; 80-89; 90+

from The Bronx and Staten Island.²³⁵ While the survey results largely showcase the opinions on sheds held by younger, more financially-stable Manhattanites, these opinions are echoed not only by the various individuals I interviewed but also by the media. Interestingly, potentially on account of my comparatively small sample size, I did not find any correlations between the shed-related answers respondents gave and their demographic affiliations.

My analysis will proceed as follows. Survey respondents were each asked to supply three adjectives they would use to describe sidewalk sheds. Many submitted words were not necessarily adjectives, but I will categorize them as such (seeing as they are meant to characterize sheds). First, I grouped these 600+ adjectives into general “positive,” “neutral,” and “negative” classes (Fig. B7, B8). Then, I ordered them further into eight categories based on what aspect of the sheds they were referring to. They are: Adjectives related to (1) Physicality—*‘who’* or *what* the sheds are as structures (ex. rickety, large); (2) Space—*what* sheds do to affect the human environment (ex. claustrophobic, protective); (3) Positioning—*where* individual sheds are placed vis-à-vis pedestrian movement (ex. obstructive, occluding); (4) Scope—*where* sheds can be found more broadly, and in what forms (ex. ubiquitous, unique); (5) Temporality—*when* sheds occupy space and for how long (ex. eternal, temporary); (6) Utility—*why* sheds are erected, and what larger-scale effects they may have (ex. necessary, safety); (7) Environment—*how* sheds affect the quality of their immediate physical surroundings (ex. dark, dry); and (8) Unclassed—general terms difficult to class one way or another. I will assess the general public’s

²³⁵ 38/59 New York City community boards (64%) were represented by at least one respondent. 12/12 Manhattan community boards saw representation, as well as 15/18 of those in Brooklyn, 7/14 of those in Queens, 3/12 of those in The Bronx, and 1/3 of those on Staten Island.

opinion on sheds utilizing these categories, while tying in information from the rest of the survey, the literature review, and other sources.

Respondents provided 30 unique adjectives pertaining to the physicality of sidewalk sheds (68 total, 11%). The majority of them were either neutral or negative (14 each). Most of these pointed to an assumed unsteadiness; in fact, about a quarter of those surveyed believed sheds are “often improperly constructed,” “rickety and unstable,” and/or “could collapse at any moment.”²³⁶ This alludes to a lack of trust felt regarding sheds, stemming perhaps from those few but injurious instances harped upon by Kallos, other lawmakers, and the local news. That they present an unpredictable danger in this way yields, occasionally, changes in behavior; every individual who expressed this opinion in some way also mentioned that they will go out of their way to avoid walking under sheds (especially during their construction, Fig. C19). Others do not believe sheds, on account of their physicality (and common sense, some say) really afford protection. Some wondered to what extent they can really catch falling debris. Stephen Varone echoed some of these concerns: “The concept that sidewalk sheds 100% protect us while we’re walking all around is a fallacy,” he said. “Sidewalk sheds, for me, function more like a security blanket,” he continued, “we delude ourselves by thinking that [they’re] a panacea.”²³⁷

Within the environmental category, respondents provided 29 unique adjectives (110 total, 18%). Nearly all were negative. Shedded space was characterized as “dark,” “dank,” “dirty,” “drippy” (rain and melting ice leaking through sheds often yield notorious showers, Fig. C20) and “isolated.” Many, particularly several young women, described how sheds are dreadful at night. “I don’t feel safe walking under them when I’m alone,” one female respondent wrote,

²³⁶ See Appendix D for survey transcript.

²³⁷ Interview with Stephen Varone.

“especially because they usually don’t have proper lighting.”²³⁸ Indeed, over thirty survey-takers mentioned how sheds’ requisite electric lights are often nonfunctional or insufficient.

A noted target of hatred closely related to sidewalk sheds were sidewalk passageways, those narrow, plywood-flanked, shed-covered construction detours that drive pedestrians out beyond the curb or—worse—through the bowels of a worksite. Respondents (and article after article) described these as prime spots for muggings, drug deals, and other clandestine or nefarious acts.²³⁹ Most of those surveyed choose to avoid walking through them because “once inside, there’s nowhere to run” and because “no one can see you if you’re in trouble”; sheds and passageways clearly obstruct Jacobs’ “eyes on the street” that might deter misconduct and do not “engender safe environments” (public protection aside) as per Deacon.^{240 241 242 243}

20% of respondents believed that sheds enable criminal activity; a local Chelsea newspaper opinion piece referred to them as “harbingers of crime” and “stages for delinquents.”²⁴⁴ Although sheds might allow burglars to more easily access second-floor apartments, and although they do engender darker, perhaps more secluded surroundings (conditions that might foster an unwanted touch or impromptu slashing), no study has been undertaken that conclusively connects higher crime levels to the presence of shedding. Between

²³⁸ Respondent #121.

²³⁹ Respondent #156.

²⁴⁰ Respondent #121.

²⁴¹ Respondent #93.

²⁴² Jacobs, Jane. *The Death and Life of Great American Cities*.

²⁴³ Deacon, Leslie. “Planning Sidewalks.”

²⁴⁴ McCroy, Winnie. August 23rd, 2020. “Sidewalk Sheds Shield Criminal Acts, Shelter the Unhoused, Blight Small Business Bottom Line, Hassle Passersby.” *Chelsea Community News*. Retrieved January 2nd, 2021 (<https://chelseacommunitynews.com/2020/08/23/sidewalk-sheds-shield-criminal-acts-shelter-the-unhoused-blight-small-business-bottom-line-hassle-passersby/>).

the lines of these comments, however, important truths are revealed, mirrored elsewhere in the survey and beyond: Sidewalk sheds both accommodate people and alter behavior.

Within the space and positioning categories, respondents provided 49 unique adjectives (127 total, 21%). Adjectives describing shed positioning were overwhelmingly negative. Many of those illustrating how they affect the human environment were negative as well. The main complaint amongst respondents was that sheds disrupt movement. About two thirds of all survey-takers agreed with statements maintaining that sheds “impede pedestrian traffic” and “make walking on the sidewalk more difficult.”²⁴⁵ Individuals remarked how they are often forced to change their walking course directly or indirectly because a shed stands in their way. Sheds directly thwart behaviors like jaywalking (mid-block crossing) when their stanchions and crossbars prevent individuals from entering the sidewalk where they like or where is most convenient; similarly, these metal features regularly impede movement from one part of the sidewalk to another. I myself (as well as several other respondents) know how troublesome ducking under shed bars to stay my course can be. Older or less-limber individuals are not afforded this option. Even Assistant Commissioner Shamash likened sidewalk sheds to “jails” because of their tendency to pen in both people and businesses.²⁴⁶ Not all respondents, however, felt that these “disruptions” and “inconveniences” were necessarily negative; one preferred to see them as “reorientations...that diversify my experiences as a pedestrian.”²⁴⁷

Indirectly, sheds may “force” someone to change their course because they do not feel comfortable walking under them; I have already touched on this as it pertains to the perceived

²⁴⁵ See Survey Transcript.

²⁴⁶ Interview with Yegal Shamash.

²⁴⁷ Respondent #1.

structural integrity of the sheds themselves. Pedestrians, too, may work to avoid the physical and social conditions wrought by sheds. For instance, 30% of the respondents felt sheds themselves were “too enclosed” or “claustrophobic,” with stanchions too close together and ceilings too low; when paired with sheds’ apparent propensity to restrict ease of travel, shedded space becomes “crowded,” “congested,” and subject to “bottlenecking.” “People hate their fellow pedestrians in a scaffolding confinement more profoundly than they do once liberated,” said comedian Dina Seiden in a *New York Times* interview.²⁴⁸ Crowdedness can be especially frustrating and even unnerving in a variety of situations: When leashed dogs or slow walkers further complicate on-foot maneuvers, when “umbrella etiquette” is forgotten during inclement weather, and when COVID-conscious individuals are averse to being in close proximity with others. Sheds, then, pose a clear threat to both Jacobs’ and Deacon’s requirements for healthy sidewalks. Fairly continuous use, as per Jacobs, is discouraged by shedding. Sheds undoubtedly impair circulation as per Deacon; they also increase spatial discord and dissuade “spontaneous occurrences” between individuals.²⁴⁹ In Lefebvrian terms, physical access to the sidewalk is limited by shedding.

A secondary complaint within these categories revolved around the tendency of sheds to obscure and obstruct, whether it be the cityscape, business, or light. 70% felt that they (and attached scaffolding) “obscure beautiful architecture” (one respondent specifically noted the DOB headquarters in the landmarked Sun Building).²⁵⁰ Many famous structures known for their attractiveness—from the Flatiron Building to the former Ansonia Hotel, to inside Grand Central

²⁴⁸ Green, Penelope. January 2nd, 2020. “Our Lives, Under Construction.” *The New York Times*. Retrieved January 2nd, 2021 (<https://www.nytimes.com/2020/01/02/style/scaffolding-new-york-city.html>).

²⁴⁹ Deacon, Leslie. “Planning Sidewalks.”

²⁵⁰ See Survey Transcript.

Terminal's Main Hall—have been shrouded under shed-anchored scaffolds for over a year (Figs. C12-C13, C21). Survey respondents reported feeling dismayed by how sheds, as one individual put it, “turn stunning, notable buildings...into anonymous exoskeletons.”²⁵¹ In taking away from the city's character and belying New York's architectural diversity, placelessness, as per Proshansky, arises. For instance, one respondent recalled a shed-lined segment of 5th Avenue appearing “like it could be anywhere, save for all the scaffolding of course.”²⁵² The regularized humdrum of sidewalk sheds obscures particular elements of New York's identity while, of course, imparting a near-iconic flavor all its own.

Placelessness affects more than city identities; it also fuddles personal indicators of place, complicating wayfinding. One individual remembered walking through Madison Square and “feeling momentarily lost” because she couldn't see the Flatiron Building; “I forgot if I was walking uptown or downtown for a second because I didn't know if [the building] was in front... or behind me,” she said.²⁵³ She was not alone. Three quarters of all respondents felt that sidewalk sheds “make wayfinding and navigation around the city more difficult.”²⁵⁴ When sheds are dismantled, especially after prolonged periods of time, a similar discombobulation arises—another respondent commented how “when [sheds] are taken down I sometimes don't realize where I am because I don't recognize the (often really beautiful) building that it was covering!”²⁵⁵

²⁵¹ Respondent #189.

²⁵² Respondent #4.

²⁵³ Respondent #4.

²⁵⁴ See Survey Transcript.

²⁵⁵ Respondent #112.

Aside from physical hindrances addressed earlier, sheds often block locales and objects used to pinpoint one's location and direction. Corner street signs are often (illegally) covered (Fig. C22); for example, the city-installed "Grace Gold Way" marker was ironically obscured by a shed at the Regnor for years. It is uncovered now, in place of its "W. 115th Street" partner (Cover Photo). They also block storefronts, 70% agreed that sheds "make it harder to find particular addresses and places of business" and/or "block signage."²⁵⁶ A website designed for the owners of covered businesses warned that under a shed, "new customers will have trouble finding your address and window shoppers may overlook your space....Even regular customers may not be able to tell at a glance if you're open for business."²⁵⁷ One respondent felt that under a shed, a business is unable to "express itself"; this may be seen as an example of sheds complicating the public production and presentation of identities as per Duneier.²⁵⁸ When sheds are constructed, the construction company is under no legal obligation to provide signage for any covered venue. Some shed installers sell placards for a small fee, which are plainly emblazoned with businesses' names and either secured to the outside of the shed's parapet facing the street or hung under the shed over the sidewalk. Most businesses, however, are left to fend for themselves—within strict regulations. If a business wants to erect their own sign attached to a shed in any way, they must first file a sign permit, which incurs a fee of up to \$1,500; ordinances require the sign to be no larger than six square feet, unless an oversized sign permit is filed and an additional fee is paid (Fig. C23). Even then, an inspector must ensure that the sign does not hinder workers.

²⁵⁶ See Survey Transcript.

²⁵⁷ SignsNYC. January 28th, 2020. "Scaffolding Problems? A Banner May Be Just the Solution You've Been Looking For." *SignsNYC*. Retrieved February 13th, 2021 (<https://www.signsny.com/blog/scaffolding-problems-a-banner-may-be-just-the-solution-you-ve-been-looking-for>).

²⁵⁸ Respondent #90.

Unfortunately, businesses suffer under sheds. A *New York Post* piece reported that restaurants and retailers endure, on average, 30% drop in revenue (up to 50%) when a shed is erected over them.²⁵⁹ Matters are made worse when sheds persist over time. Chelsea residents blamed the shuttering of several long-standing small businesses on the long term presence of scaffolding.²⁶⁰ The well-known Hi-Life Bar and Grill on the Upper West Side has dealt with a shed for over eight years; by covering its “astronomically expensive” neon sign, customers are lost and the bar’s reputation is sullied.²⁶¹ About two thirds of survey respondents expressed, too, that they felt sheds “hurt the businesses they cover”; one individual described sheds as “a blight on the whole City...putting local shops and restaurants out of business every day.”²⁶² ²⁶³ The City understands this: Shamash expressed that efforts are being made to mitigate sheds’ adverse effects on business volume. With enough money, any building owner can alter the shed itself so as to make their address more legible. Retailers are, in specific circumstances, able to change the color of their shed(s) to better match their brand or aesthetic; Tiffany & Co., for instance, colored sheds gracing their flagship 5th Avenue store their signature turquoise (Fig. C24). Across the street, the Crown Building, home to Bulgari’s flagship, cantilevered their sheds off the building’s third floor (in lieu of installing stanchions, cross-bars, etc) so that they do not block the luxury storefront (Fig. C25). Since the beginning of the COVID-19 pandemic, signage fees have been

²⁵⁹ Devine, Miranda. December 1st, 2019. “How the scourge of scaffolding is ruining New York City.” *The New York Post*. Retrieved January 4th, 2021 (<https://nypost.com/2019/12/01/devine-scaffolding-has-taken-over-new-york-city/>).

²⁶⁰ McCroy, Winnie. August 23rd, 2020. “Sidewalk Sheds Shield Criminal Acts, Shelter the Unhoused, Blight Small Business Bottom Line, Hassle Passersby.” *Chelsea Community News*.

²⁶¹ Tannenhauser, Carol. November 16th, 2019. “Two Small Businesses Struggle Under a Sidewalk Shed for Six-and-a-Half Years; ‘Enough is Enough.’” *West Side Rag*. Retrieved January 2nd, 2021 (https://www.westsiderag.com/2019/11/16/_trashed-18).

²⁶² See Survey Transcript.

²⁶³ Respondent #95.

waived, and business owners have been given more leeway (hanging special lights, wrapping stanchions with fake vines) when it comes to decorating their shedded outdoor spaces.

Half of the survey-takers lamented that sidewalk sheds “prevent necessary natural light from reaching people’s windows, businesses, and the ground.”²⁶⁴ Those who live close to the ground floor of buildings behind scaffolds know this all too well; a resident of a long-shedded apartment building on 55th Street whom I know personally described how a shed has “made [her] apartment dark for years, and there’s so much dust....I get depressed, can’t tell the time of day, my plants die,” she exclaimed.²⁶⁵ Indeed, shed-covered street trees and flowerbeds suffer as well, denied sunlight and rainwater. Shed installation companies are supposed to accommodate healthy trees by engineering cutaways and brackets that support them, allowing them to grow freely; however, these are often omitted for ease of shed installation, leaving trees’ development stunted.²⁶⁶

Curiously, despite all this over half of the adjectives pertaining to sidewalk sheds’ effects on the human environment were positive. The most oft-stated adjective in this category was “protective.” Although some respondents acknowledged sheds’ true purpose—to safeguard pedestrians from falling debris, construction materials, and tools—most cited another perhaps closer-to-home way sheds “protect.” Nearly 90% of respondents agreed—forming the largest consensus to a question survey-wide—that they offer much-appreciated protection from the elements: during hot weather, shedded areas are shaded and thus cooler; during cold weather, shedded areas are warmer because rising heat is trapped beneath them; during inclement weather,

²⁶⁴ See Survey Transcript.

²⁶⁵ Respondent #176.

²⁶⁶ Green, Penelope. January 2nd, 2020. “Our Lives, Under Construction.” *The New York Times*.

the constructions protect pedestrians from rain, ice, sleet, and snow. As such, sheds regularly become gathering places populated by people—and animals—seeking cover.

This takes many forms. Sheds are a favorite place for birds and even bats to roost (shed removal thus, to their detriment, often involves the removal of nests); rats actually tend to avoid dwelling around or in sheds because they dislike high-traffic areas like sidewalks.²⁶⁷ During storms, it is common sight to see masses of pedestrians huddling under sidewalk sheds; 88% of respondents opt to walk under shedded sidewalks during inclement weather. During other times, as well, sheds are popular loitering destinations. On several visits to 96th Street and Broadway over a span of two months, I observed men playing chess under the sheds; throughout the city I noted many a construction worker enjoying their lunch break while leaning or sitting on a shed cross-bar. Shed-covered space, too, attracts panhandlers, street-musicians (buskers), and street-sellers. Despite the precarity they bring to business, during COVID some restaurants operating under sheds have appreciated the “free” outdoor-dining coverage provided by them. A lemonade stand and lounge chairs assembled in a shedded area outside one respondent’s apartment (in addition to youths utilizing shed cross-beams as pull-up bars) led her to endearingly call sidewalk sheds a “modern portico.”²⁶⁸ Another respondent concluded that sheds “foster community...by functioning as a gathering space and ...[by] occupying what is usually empty public space on behalf of local residents.”²⁶⁹ While sheds do stymie some social activities, as per Deacon, here we see that they simultaneously promote others.

²⁶⁷ Ibid.

²⁶⁸ Respondent #119.

²⁶⁹ Respondent #110.

This respondent's statement recalls earlier discussions on whether or not sidewalk sheds disrupt any demarcations made between what is public space and what is private space. In New York City, sidewalks must be preserved as public property even if they are privately owned.²⁷⁰ All building owners are required to maintain any sidewalk sections they abut and are given (permit-limited) reign over said sections.^{271 272} This means that the majority of city sidewalks are managed by private entities (individual owners, at least)—the same private entities (individual owners) that manage shed construction. City regulations mandate the requisite width and length of sheds, but building owners are free to decide how those sheds “fit” within their property and, considering sheds' potentially adverse effects, may take steps to further control the usage of sidewalk space.²⁷³ For instance, a landlord may decide to install netting or fencing alongside sheds so as to keep pedestrians within them. Actions like these imperil the “publicness” of the sidewalks themselves; they no longer so obviously function as public space, as per Deacon, and instead become exclusive goods claimed by some at the expense of others, as per Lefebvre. Some respondents exclaimed how shedded areas are “unwelcoming” because, for instance, they “make you feel like you're not allowed to walk [under them].”²⁷⁴ Turned off by a landlord

²⁷⁰ Dos Santos, Paula Manoela. May 5th, 2015. “Who Owns Our Sidewalks?” *TheCityFix*. Retrieved February 13th, 2021 (<https://thecityfix.com/blog/nossa-cidade-sidewalk-owners-finance-responsibility-ownership-paula-santos-rocha/>).

²⁷¹ If any property owner or tenant decides to cover or alter the sidewalk in any way beyond a sidewalk shed—from installing a Hollywood-style star-walk, street tree, or lamppost to operating a curbside fruit or halal stand to building a pedestrian overpass, outdoor seating terrace, or awning—they must apply for a sidewalk permit and pay the requisite annual fee. These fees can range from \$300 a year (to have a standing clock like the one outside Trump Tower on 56th Street and 5th Avenue), to \$81,000 a year (for Columbia University's bridge over Amsterdam Avenue), to as high as \$300,000 a year (for the Grand Hyatt New York's protruding second-floor restaurant). The revenue is collected by either the Department of Transportation or the Department of Consumers Affairs.

Roberts, Sam. March 3rd, 2016. “New York's Sidewalks, Unsung Moneymakers.” *The New York Times*. Retrieved February 20th, 2021 (<https://www.nytimes.com/2016/03/04/nyregion/new-yorks-sidewalks-unsung-moneymakers.html>).

²⁷² Dos Santos, Paula Manoela. May 5th, 2015. “Who Owns Our Sidewalks?” *TheCityFix*.

²⁷³ New York City Administrative Codes on Sidewalk Rules § No. 7-210, 19-152. Retrieved February 20th, 2021 (<https://www1.nyc.gov/html/dot/html/infrastructure/19-152.shtml>).

²⁷⁴ Respondent #128.

affixing a “no trespassing” sign to a shed; the same individual asked, “isn’t the sidewalk supposed to be accessible to everyone?”²⁷⁵ The tricky thing here is that this landlord’s decision is backed by law. While sheds are situated on public property, they themselves are still private property because they are legally viewed as appendages of the private buildings they grace.²⁷⁶ Thanks to the influence Common Law has within the New York City legal code, trespassing on private property need not take the form of breaking and entering; actions as simple as propping up a cardboard box against a shed or erecting a tent using shed stanchions as supports can be considered trespassing.²⁷⁷ Owners will utilize such readings of the law so as to dissuade people from using sheds in ways not initially prescribed and that are not directly beneficial to them.

Sidewalk sheds shelter pedestrians, yes, but they also, quite literally provide shelter citywide for houseless individuals. As outlined by Aneja, the City has understood them to be optimal areas for “homeless camps,” particularly in less-trafficked or lower-income neighborhoods.²⁷⁸ Two thirds of the respondents identified this as being the case as well. When building owners erect netting, “keep out” signs, or fences around their sheds, it is usually to discourage the development of such camps; I saw this firsthand in at the long-shedded northwest corner of 73rd Street and Broadway (Fig. C26). Suddenly, sidewalk sheds take center stage in the debate over who has access to supposedly public sidewalk space; many believe that they—to the detriment of the city at large—grant spatial legitimacy to homelessness “without solving the

²⁷⁵ Ibid.

²⁷⁶ Roberts, Sam. March 3rd, 2016. “New York’s Sidewalks, Unsung Money-makers.” *The New York Times*.

²⁷⁷ Interview with Wilfredo Lopez.

²⁷⁸ Oreskes, Michael. January 6th, 2020. “In the Shadow of the Ansonia: A homeless encampment on a busy Upper West Side corner challenges the idea that the city’s streets are for everyone.” *Our Town*. Retrieved February 20th, 2021 (<http://www.ourtownny.com/news/in-the-shadow-of-the-ansonian-FE776575>).

larger problems that yield [homelessness] in the first place.”²⁷⁹ Another respondent viewed this in a positive light instead, arguing that sheds provide marginalized individuals with a metaphorical and spatial platform for their presence.

Respondents provided 25 unique adjectives pertaining to the scope of sidewalk sheds (60 total, 10%). The majority of them were neutral like “omnipresent” and “ubiquitous” while others were veiled with negativity or negative outright (“invasive,” “intrusive”). It is clear that pedestrians are aware of sidewalk sheds’ proliferation. When asked how often they encountered sheds, a resounding 85% of respondents said either “frequently” or “more often than not.” Just under half of all respondents agreed that sheds “are too plentiful.” To some, they are on their way to becoming emblematic of New York City and its grittiness. Some survey-takers wrote comments suggesting that sheds’ regularized, pervasive verdancy (recalling their standardized hue) has empowered them to achieve iconographic status, for better or for worse—Aneja was right all along in this respect. Half the respondents agreed that sheds “are part of New York’s distinctive urban character.”²⁸⁰ One respondent, using the colloquial term for sidewalk sheds, wrote that when he “thinks of New York and something green, [he] think[s] of scaffolding.”²⁸¹

What is interesting to note, though, is that a quarter of the respondents made clear that they did not know what sidewalk sheds’ intended functions were. In other words, they did not know what purposes they serve. Near 40% said sheds have no effect on quality of life in New York; near 30% said sheds have no effect on pedestrians’ safety. These fairly substantial numbers demonstrating quasi-indifference further indicate, to me, sheds’ ubiquity. Many individuals

²⁷⁹ Respondent #140.

²⁸⁰ See Survey Transcript.

²⁸¹ Respondent #71.

expressed that their sheer prevalence allows them to blend into the background and become “unnoticeable” and even “forgotten.” If sheds are “just there,” as one person put it, or “never given any thought because...[one] is never in a space without them,” as another put it, then their effects and utility are even less readily observed.^{282 283}

Over half the survey-takers agreed that sheds “have untapped potential.” For what, there is less consensus. Some indicated that sheds might serve as public art galleries, particularly for up-and-coming artists and/or those who cannot afford “traditional” modes of exhibition. One *New York Times* article even dubbed sheds “New York’s biggest canvas.”²⁸⁴ Works could be displayed alongside the upright portion of a sheds’ parapet or could be hung between cross-bars. The City has pursued this; the Department of Cultural Affairs, for instance, has launched various pilot programs exploring the feasibility of such ideas.²⁸⁵ Much of the program has been spearheaded by ArtBridge, a nonprofit founded in 2008 hoping to “reimagine [sheds]... as canvases to provide unprecedented exposure for local, emerging artists, while turning communal liabilities into a collective asset.”²⁸⁶ At present, ArtBridge manages over 30 shed-gracing exhibits across the five boroughs (Figs. C27-C28).²⁸⁷ The DOB allows the display of art on sheds, so long as it does not impede movement, affect construction or repair work, or threaten pedestrians’ safety. Occasionally, artists are afforded much leniency; famed architect Zaha Hadid was allowed to attractively wrap a shed abutting one of her construction projects on the High Line with taut

²⁸² Respondent #12.

²⁸³ Respondent #108.

²⁸⁴ Green, Penelope. “Our Lives, Under Construction.” *The New York Times*.

²⁸⁵ ArtBridge. 2021. “About Us.” *ArtBridge*. Retrieved February 20th, 2021 (<https://art-bridge.org>).

²⁸⁶ ArtBridge. 2021. “About Us.” *ArtBridge*.

²⁸⁷ Ibid.

silvery sheer fabric, forming a reflective cocoon-of-sorts (Fig. C29).²⁸⁸ Using sheds to display art or as art themselves, as per Kelkar, might work towards reasserting local identity whilst combatting placelessness.

Survey respondents similarly recognized sheds' longevity. Regarding their temporality, 13 unique adjectives were recorded (27 total, 4.5%). What is interesting is that the same number of people labeled sheds "temporary" as those who called them "permanent." Several individuals actually said that they were both. One respondent commented that he has "gotten used to makeshift scaffolding outliving its makeshiftness," and a second described sheds as "that family member who says they're only [staying over] for a week, even after that week has turned into two or three."²⁸⁹ ²⁹⁰ Here, New Yorkers attempt to make sense of the fact that while sheds are built to be short-lived, they frequently last much longer. Perennial while being portrayed as ephemeral, they epitomize Mbembe and Roitman's "permanent temporariness."²⁹¹

It seems many New Yorkers have internalized and accepted a deeper contradiction signified by sidewalk sheds, a "shed paradox" if you will: that they seem to announce active development or ongoing maintenance, even if neither is actually occurring; that they become physical markers of stalled or "invisible" progress. Two respondents summarized this incongruity nicely: One conceptualized sheds as "a sign that the city is taking care of its buildings...or at least that they say they are," and another played on a famous Heraclitus quote,

²⁸⁸ Chaban, Matt A. V. August 24th, 2015. "The Sidewalk Shed, a Ubiquitous New York Eyesore, Gets a Makeover." *The New York Times*. Retrieved January 4th, 2021 (<https://www.nytimes.com/2015/08/25/nyregion/the-sidewalk-shed-ubiquitous-new-york-eyesore-gets-a-makeover.html>).

²⁸⁹ Respondent #99.

²⁹⁰ Respondent #68.

²⁹¹ Mbembe, Achille and Janet Roitman. 1995. "Figures of the Subject in Times of Crisis." *Public Culture*, The University of Chicago, 7.

declaring that “in New York ‘the only constant is change,’ but change [concerning sheds] is not constant.”²⁹² ²⁹³ A particularly striking example of this internalization is the title of a *New York Times* article on the “scourge of sidewalk sheds” that I have already cited at length: “Our Lives, Under Construction.”²⁹⁴ By stating that “our lives” are “under construction” rather than “where we spend our lives” (e.g. “our city”), author Penelope Green suggests that not only our corporeal selves—but the human temporality we exist within as well—are thrown into a state of flux by sidewalk sheds. While we age—ever forward, never stagnant—our shedded surroundings, signs of continuous urban improvement with whom we are putatively in step, paradoxically lag behind. How do we deal? One answer seems to be that some of us have embraced the notion of “permanent temporariness” so as to positively apply it to the city as a whole. This is exactly in line with Van Boxel and Koreman’s charge to conceptualize the “urban” as both “incomplete and finished... in perpetual transmutation, even when [said transmutation] is not visible.”²⁹⁵ If *everything* in the city is understood to be non-permanent and instead as always on its way to something else, it may be that much easier for the average pedestrian to cope with shed longevity. Effort should be made, however, to ensure that this reconceptualization serves only as a mechanism for momentary coping—not justification or consent. Meanwhile, Lori Gold posits another way we might deal with the Shed Paradox: “Luckily, we’re New Yorkers,” she quips, “we’re too busy to notice either way.”²⁹⁶

²⁹² Respondent #195.

²⁹³ Respondent #113.

²⁹⁴ Green, Penelope. “Our Lives, Under Construction.” *The New York Times*.

²⁹⁵ Van Boxel, Elma and Kristian Koreman. 2019. *City of Permanent Temporality: Incomplete and Finished*. Rotterdam, Netherlands: NAI010 Publishers.

²⁹⁶ Interview with Lori Gold.

No matter how they may be rethought, the unfortunate yet unsurprising truth remains: Sheds are disliked. 92% of the survey respondents provided at least one negative adjective when asked to provide three total; 60% gave either two or three negative adjectives. “Ugly” was the most common adjective recorded in any category (I deemed it as a general adjective, Fig. B9); only three survey respondents suggested that they are “pretty or at the very least nice to look at.”²⁹⁷ Over half the respondents felt sheds could “be made more stylish.” A 2010 DOB-led international design competition entitled “urbanSHED” sought to remedy this.²⁹⁸ The winning design, called the “Urban Umbrella,” was submitted by Young-Hwan-Choi, Andrés Cortés, and Sarrah Khan of local architecture and engineering firm Agencie.²⁹⁹ Meant to resemble a “gracefully unfurling umbrella...combining a highway bridge’s strength with artful elegance,” it was launched in 2017 as “the first ever DOB-sanctioned alternative sidewalk shed design...satisfying all existing shed applications.”³⁰⁰ Urban Umbrella, now an independent company, is the sole designer, patent holder, and fabricator of these sheds (Figs. C30-C32).

Each Urban Umbrella is fabricated for the specific building that requires it. As such, they are often far more expensive than a traditional shed, and thus less accessible to the average building owner. This is exactly why Stephen Varone believes they “haven’t taken off in the way [he], or really anyone, expected.”³⁰¹ Urban Umbrellas utilize white melded high-strength

²⁹⁷ See Survey Transcript.

²⁹⁸ Polsky, Sara. January 21st, 2010. “City Picks Winner in Construction Site Beautification Contest.” *Curbed New York*. Retrieved February 24th, 2021 (<https://ny.curbed.com/2010/1/21/10523098/city-picks-winner-in-construction-site-beautification-contest>).

²⁹⁹ Ibid.

³⁰⁰ Nonko, Emily. September 13th, 2017. “NYC Scaffolding Is Getting An Upgrade.” *Curbed New York*. Retrieved February 24th, 2021 (<https://ny.curbed.com/2017/9/13/16301192/nyc-scaffolding-urban-umbrella>).

³⁰¹ Interview with Stephen Varone, February 26th, 2021.

recycled laser-cut steel and polycarbonate.³⁰² Near Gothic-style arches remove the need for cross-bars and excess stanchions. The parapet atop which construction workers walk is a special-engineered plexiglass panel and steel grate combo, translucent to allow natural light through. Stylized arc-shaped LED lighting—eco-friendly, long-lasting, and low-maintenance—is installed underneath, adding a “distinctive...touch while creating a safer environment for pedestrians at night” (Figs. C33-C34).³⁰³ Both the lights and the upright paneling on the parapets are customizable, coming in a variety of colors; these panels can readily be emblazoned with a businesses’ name or logo, a building’s illuminated address, or both. The “bright, airy sidewalk canopies” are also specially devised to accommodate heat lamps and other outdoor dining paraphernalia; cognizant of the fact that during COVID “the sidewalk has become the place where commerce is conducted,” the company has recently endeavored to ensure each shed operates as a “future-inclined...urban front porch” (a genuine “modern portico”), able to foster better, more comfortable usage of the City’s sidewalk space.³⁰⁴ In stark contrast to traditional sheds, Urban Umbrella believes their sheds “add to the economic and symbolic value of communities....[by] revealing New York, rather than smothering it.”³⁰⁵

Responses to the Urban Umbrella have been resoundingly positive. Lori Gold raved how they “take the ‘shed’ out of sheds”; Shamash called them “highly innovative” and “beautiful.”³⁰⁶

³⁰⁷ Survey respondents also expressed overwhelming praise; one commented how she “LOVE

³⁰² Agencie. 2021. “Urban Umbrella: Graceful Scaffolding.” *Agencie Group*. Retrieved February 20th, 2021 (<https://www.agenciogroup.com/portfolio/urban-umbrella/>).

³⁰³ Urban Umbrella. 2021. “Urban Umbrella: Product.” *Urban Umbrella*. Retrieved February 20th, 2021 (<https://www.urbanumbrella.com/product>).

³⁰⁴ Ibid.

³⁰⁵ Urban Umbrella. 2021. “Urban Umbrella: Product.” *Urban Umbrella*.

³⁰⁶ Interview with Lori Gold.

³⁰⁷ Interview with Yegal Shamash.

LOVE LOVE[s] how open they make the sidewalk feel.”³⁰⁸ About half the respondents agreed that Urban Umbrellas offer proof of sheds’ “untapped potential.” Still, there has been a touch of pushback. Urban Umbrella advertises that the illumination their sheds provide “deter[s] crime, squatting, and loitering”; accordingly, some have vilified Urban Umbrellas as the newest tool wielded by gentrifiers.³⁰⁹ Opponents feel they allow wealthy landlords to upscale sheltered sidewalk space while making it unwelcoming to buskers, the homeless, and other marginalized individuals.

In probing how pedestrians conceptualize and experience sidewalk sheds, I have revealed a multifaceted, multi-justified negativity—distaste characterizing almost every realm sheds touch. I have found, also, the occasional bit of misunderstanding, indifference, and optimism. There is gratitude as well. About a third of survey respondents acknowledged that sheds might do more good than harm. 70% of survey-takers, when asked to imagine a world in which there were far fewer sidewalk sheds because building owners erected them less frequently, said they would feel less safe. Varone pronounced that “they’re imperfect solutions, but we’ve got nothing better.... Sheds and only sheds allow the city to be progressively recreated while it’s being lived in.”³¹⁰ Many New Yorkers it seems, including every person I interviewed, ultimately consider sidewalk sheds a necessary evil or something similar. One respondent captured this sentiment: “They make my life miserable at times, but without them I might not have a life to make miserable!”³¹¹

³⁰⁸ Respondent #72.

³⁰⁹ Urban Umbrella. 2021. “Urban Umbrella: Product.” *Urban Umbrella*.

³¹⁰ Interview with Stephen Varone.

³¹¹ Respondent #168.

Conclusion:

It has been over four decades since the Regnor's eighth-floor lintel crumbled, tragically ending the life of Grace Gold. Following her untimely death, New York City implemented Local Law 10, for the first time codifying citywide façade inspections. These inspections necessitated public protection, which sidewalk sheds would come to provide. As Local Law 10 became Local Law 11 and the Façade Safety Inspection Program, sidewalk sheds—scaffolding, to the layperson—became a common sight throughout the five boroughs, particularly in Manhattan on account of higher average building heights. Over the past few years, proliferation begat what some refer to as an epidemic. As of January 1st, 2021, New York was cloaked in as much as 376.92 miles of shedding, enough to reach North Carolina in a straight line. Many sheds had aged past their prime; some were even old enough to vote.

The cause of the so-called epidemic was unclear. Was there an increase in the number of sheds installed each year? Or, was there an increase in the length of time each shed remained in place? Turns out, both. Construction has surged as developers seek to maximize the usage of space, that all-too-precious commodity, reinvigorating older, disused structures or erecting larger new ones in their place. Meanwhile, buildings edge taller and taller, adding to those eligible under FISP. Both activities yield more sheds. An increasing number of sheds overstay their welcome on city sidewalks, too, and an increasing number of sheds stand dormant as projects stagnate. Thorough, attentive repair work and restoration has always required considerable time, but based on decreasing financial stability amongst some landlords and rising costs vis-à-vis repair work, timescales have lengthened. Landlords are also able to delay maintenance work and

shed disassembly for their own personal benefits and financial gains. There is no law that prevents this, nor is there any City directive requiring building owners to complete work and remove sheds in a timely manner...yet. Local politicians like Ben Kallos and community activists like Lori Gold are fighting hard to change this. Progress has already been made— public pressure grows as the DOB actively revises their policies.

Still, sidewalk sheds remain “tall, dark, and ugly” in the public eye. They are often conceptualized by pedestrians as unsightly, unstable, claustrophobic homeless havens, rife with grime and crime. They are understood to obstruct movement and obscure markers of place from signs to buildings themselves, impeding business, wayfinding, and identity formation. They disrupt—or at the very least, reorient—sidewalk usage and thus have profound effects on neighborhood vitality. Efforts have been made to counteract all this, most notably via the Urban Umbrella. Such “designer sheds” are certainly attractive but are unfortunately not economically viable for everyone.

Despite their dislike of sidewalk sheds, many pedestrians nonetheless acknowledge sheds’ protective purpose. Ultimately, they understand that sheds make the City safer. Pedestrians, too, believe sheds have untapped potential as canvasses for art, culture, and identity. They are imagined and witnessed as platforms for the marginalized and underrepresented. They serve as communal gathering spaces, granting spatial legitimacy to leisure activities as a porch might. Simultaneously temporary and permanent, sheds have challenged urban immutability and called into question what is private space versus what is public. They have imprinted upon our timescales, altering our psyches.

Sidewalk sheds are everywhere. Their prevalence renders them iconic, on par with yellow cabs and million-windowed skyscrapers. Yet, they are ignored and unseen by many shed-blind pedestrians to whom they are uninterestingly familiar. Indeed, it seems that literature is shed-blind, too. Sheds are regularly experienced by the people of New York City, a metropolis so often dissected by intellectuals, yet they are not directly examined in any academic setting. Nor are sheds truly understood by the general public; their utility, history, and complexity—as well as Grace Gold’s legacy—are seldom wholly known. Having turned a scholarly gaze upon them we now comprehend just how worthy of attention they are. However, I have only scratched the surface. I implore future social science and urban studies scholars to expand upon my research, devoting entire projects to what were only facets of mine. What, for instance, is the true relationship between sidewalk sheds and crime? How does the public’s relationship with art change if sheds are fully embraced as all-purpose canvases? Is an Urban-Umbrellaed sidewalk truly “healthier” than a shedded sidewalk? How might discussions of formal versus informal spaces employ sheds? In continuing to research and explore answers to these novel questions and others, greater insight into public life will be gained. It will be up to city policy makers and industry professionals to decide whether or how my findings may inform changes to our present shedded reality; as someone who is not privy to the internal intricacies of municipal government and the sidewalk shed trade, this is beyond both my station and area of expertise. My work nevertheless illuminates an integral, cloyingly ubiquitous, and previously overlooked aspect of life in New York City. Allow it to enlighten your journeys through shedded streets and stay alert: You never know when the sky might fall.

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Testimony of the
EIFS Industry Members Association to the
Committee on Housing & Buildings of the
New York City Council
June 14, 2021

On the Subject of New York City Council Bill No. 2261 and
Support for Code Compliant, Tested, and High Performing Building Materials and Systems

My name is David Johnston, and I am the Executive Director and CEO for the EIFS Industry Members Association. I thank you for the opportunity to present the views of the EIFS Industry Members Association, also known as EIMA. The welfare of and fire safety for building occupants, fire fighters and property is the highest priority of EIMA.

EIMA has 750 members, many of whom live and work in the City of New York. This membership includes EIFS manufacturers, EIFS distributors, contractors and architects. These New York City-based members as well as the entire Exterior Insulation and Finish Systems (EIFS) industry oppose the language being considered. In the last two years, over 452 EIFS projects, many of them award-winning, have been constructed within the City of New York, resulting in greater energy-efficiency and lessening damage to the New York City environment.

The EIFS industry prides itself on whole building performance. That means everything from providing green building technologies, the ability to reduce carbon emissions, successful fire safety tests, and sustainable designs. Unfortunately, language in Bill 2261 pertaining to fire-blocking will result in a de facto ban on EIFS industry if it passes.

EIMA opposes the fire-blocking requirements in the strongest possible terms for these reasons:

- Building owners will lose a cost-effective exterior wall cladding to achieve needed energy-efficient requirements that are established by the City of New York;
- Architects will lose a design solution to achieve energy-efficiency requirements, a solution that designers depend upon to achieve design excellence;
- New York City will lose a tool in the fight against carbon emissions and climate change. A tool that exceeds all of the stringent fire tests, is code-compliant, and is a proven high performing building system, and;
- With the introduction of Bill 2261, New York City has designed and is attempted to have used an altered EIFS systems that is totally untested. Registered design professionals will be authorized under this bill to use this untested system if they deem it safe in their professional judgement.

For the above reasons, the EIFS Industry Members Association respectfully requests the proposal to require use of the International Building Code language and to provide an exemption for those high performance building systems that have passed the stringent NFPA 285 test on fire safety.

Thank you for your time and your continual efforts on behalf of the wonderful residents of New York City.

William Stein FAIA
c/o Dattner Architects
1385 Broadway
New York, NY 10018

June 14, 2021

New York City Council
Housing and Buildings Committee

Re: Construction Codes Revision Completion Bill

Dear Councilmembers:

I am writing in support of the Construction Codes Revision Completion Bill.

I have practiced architecture in New York City for over 40 years and served as Chair of the Use, Occupancy, Egress and Classification Committee for the 2008, 2014 and current code revisions.

The industry-wide committee review process instituted by the Department of Buildings, involving representatives from the design, development, construction trades and regulatory sectors of the construction industry, has resulted in consensus-based revisions to NYC's Construction Codes. The revisions continue to align NYC's codes with developments in the International Construction Codes, while tailoring provisions to our specific, local conditions and practices in NYC.

I believe that the proposed revisions will continue to provide a high degree of health and safety for NYC's buildings and construction practices. The proposed revisions will also continue to standardize NYC's regulatory structure, will facilitate economic development and improve the built environment of the City.

I urge passage of this important bill.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "William Stein".

William Stein FAIA

6/11/21

To: Chairman Mr. Robert E. Cornegy, Jr.
New York City Council
Committee on Housing and Buildings
250 Broadway, Suite 1743
New York, NY 10007

From: Matt Hunter, BCO-Northeast Region Manager, American Wood Council

The American Wood Council (AWC) is the voice of North American wood products manufacturing, an industry that provides over 450,000 men and women in the United States (including 13,152 residents of New York state) with family-wage jobs. AWC represents 86 percent of the structural wood products industry, and members make products that are essential to everyday life from a renewable resource that absorbs and sequesters carbon. Staff experts develop state-of-the-art engineering data, technology, and standards for wood products to assure their safe and efficient design, as well as provide information on wood design, green building, and environmental regulations. AWC also advocates for balanced government policies that affect wood products. The AWC is also a respected leader and go-to resource for design professionals and building and fire officials that require accredited continuing education regarding wood and its role in the building code and referenced standards.

Thank you for the opportunity to speak on the issue of code adoption for the City of New York. I would like to thank the Committee for their detailed review and incorporation of several noteworthy code change provisions related to wood design, wood construction, and the initial listing of terms related to cross laminated timber and structural composite lumber (hereafter CLT and SCL). The AWC urges the Committee to adopt the 2015 IBC provisions related to definitions for CLT, SCL, the reorganization of Chapter 23 (the wood Chapter) and various other code change provisions that relate to standards published by the American Wood Council and others like the National Design Specification (NDS), Special Provisions for Wind and Seismic (SDPWS), and the CLT manufacturing production standard, ANSI/APA PRG-320-18. These standards are of paramount importance for practicing design professionals to ensure they have the latest specifications to safely design modern Heavy Timber (HT) buildings. By aligning the NYC City Building Code with the most current edition of AWC and other standards, design professionals will have access to state-of-the-art design criteria.

In the interest of time and greater efficiency of the Committee, we have additional comments related to current editions of referenced standards, definitions, editorial considerations, and other minor, technical modifications to the proposed code which we will submit under a separate cover within the 72-hour window.

Thank you for your time regarding this important matter.

Regards,



Matthew M. Hunter, BCO
Northeast Regional Manager
American Wood Council



OPERATIVE PLASTERERS' & CEMENT MASONS'

INTERNATIONAL ASSOCIATION OF THE UNITED STATES & CANADA

9700 Patuxent Woods Drive, Suite 200 ♦ Columbia, MD 21046 ♦ 301-623-1000 ♦ Fax 301-623-1032 ♦ www.OPCMIA.org

America's Oldest Building and Construction Trades International Union, Established 1864

New York City Buildings Committee

June 14, 2021

Dear Committee Member:

My name is Douglas Taylor. I am Vice President of the Operative Plasterers' & Cement Masons Union representing more than 50,000 workers in the United States and Canada, including more than 1300 members and their families right here in New York city, who make a living and support their families installing EIFS and materials like EIFS. I am submitting this letter on their behalf to ask you to reject these proposed changes.

Review of the proposed changes creates uncertainties in how the City will meet its already ambitious climate goals. Taken together, the proposed changes to NYC code (Chapters 7, 14, 17, and 26) appear to be a significant setback in the city's own carbon reduction and environmental sustainability goals.

EIFS, and other building materials like EIFS, represent the best opportunity for the city to adhere to those goals. The global warming impact and carbon footprint of EIFS is 3 times smaller than stucco and 5 times smaller than brick. In fact, EIFS is 84% more energy efficient than the next best performing cladding, outpacing brick and stucco among others.

Adopting these changes will also result in higher costs for building owners, and a deleterious economic impact to the affected industries who have been providing safe, energy efficient building products and systems for many years.

Taking all of this into consideration it is hard not to question the motives behind proposing such a change. I respectfully ask that you do what's right for the citizens of New York City by sticking with the tested and proven International Building Code and rejecting these untested design changes.

I look forward to your response.

Fraternally yours

Douglas L. Taylor
Vice-President