



2022 NYC CONSTRUCTION CODE SIDEWALK SHED REQUIREMENTS & PEDESTRIAN PROTECTION UPDATES

presented by

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PRESENTATION DESCRIPTION

This presentation will review the 2022 NYC Construction Code requirements for sidewalk sheds and discuss the updates pertaining to pedestrian protection. These provisions address the Code requirements for alternatives to traditional sidewalk sheds as pedestrian protection, including netting and cantilever platforms.

SHEDS & PEDESTRIAN PROTECTION

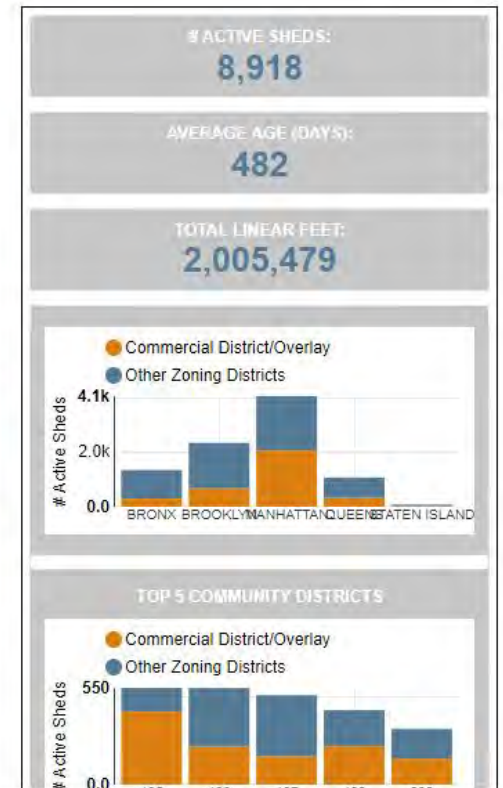
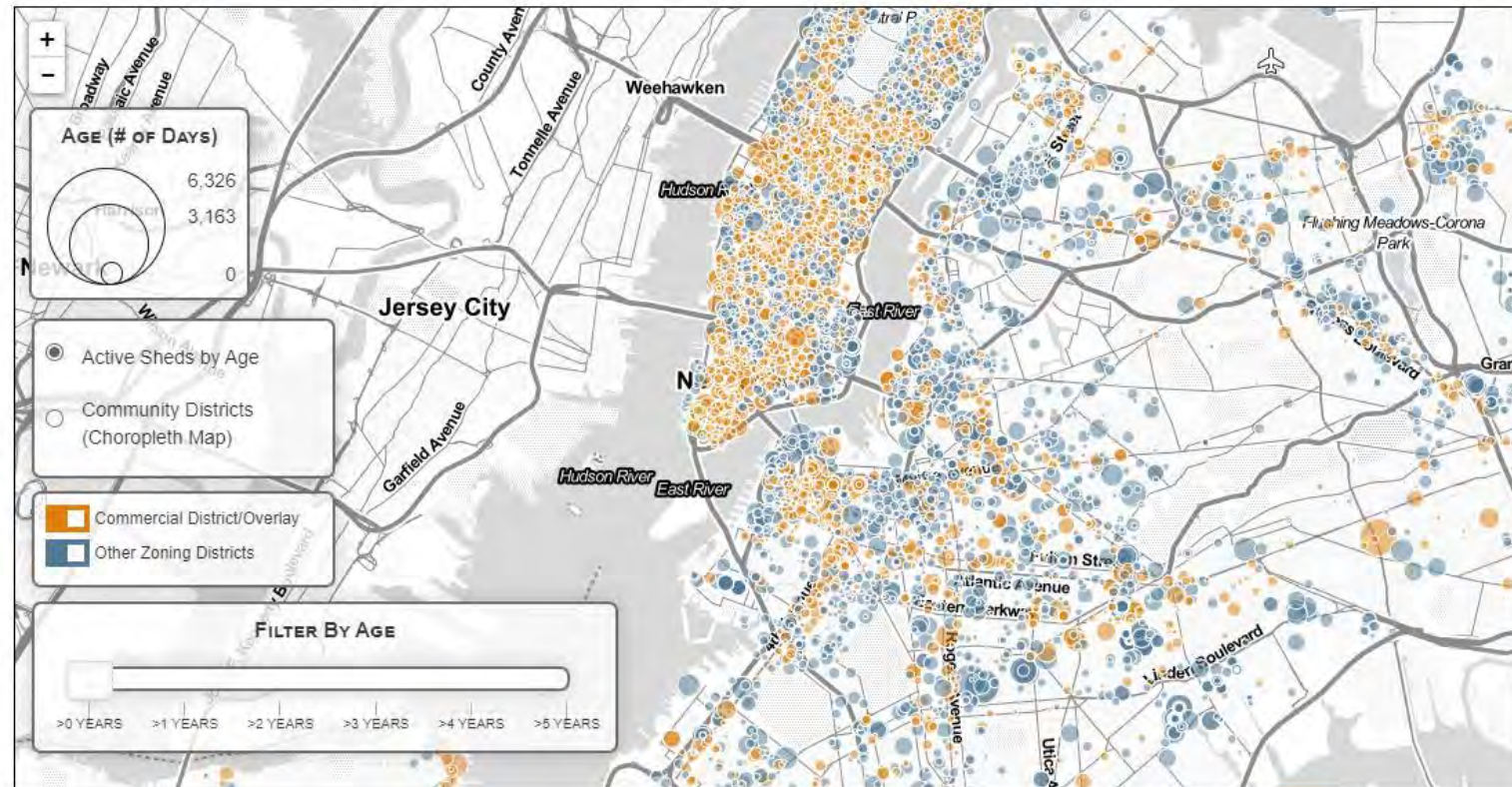


SHEDS & PEDESTRIAN PROTECTION

ACTIVE SIDEWALK SHED PERMITS



Built by DOB Analytics Dev Squad | This map shows the location of all actively permitted sidewalk sheds and is updated daily. Download Data (csv)



<https://www.nyc.gov/assets/buildings/html/sidewalk-shed-map.html>

NYC CONSTRUCTION CODES

SECTION BC 3307 PROTECTION OF PEDESTRIANS

- 3307.6.2 Describes where sidewalk sheds are required during construction and demolition activities to protect all sidewalks, walkways, and pathways within the property line of a site, and all public sidewalks that abut the property
- Required primarily for
 - New construction, façade work or enlargements over 40 feet
 - Demolitions of buildings taller than 25 feet, or exterior partial demolitions at a height greater than 25 feet
- Exceptions provided (e.g. sidewalk closed per DOT requirements)

OVERHEAD HAZARDS

- Sidewalk sheds frequently provided by Registered Design Professionals as pedestrian protection when overhead hazards are present in existing buildings until repairs are performed
- Alternate means of pedestrian protection may be acceptable to address specific hazards
 - E.g. Cantilever platforms, structural containment netting

2022 CONSTRUCTION CODES HIGHLIGHTS

- Parapets
- Open Shed
- Cantilevered Platforms

MESH PARAPET



Mesh parapet for required for sheds installed under 2022 Code:

- Solid backing allowed for required signage
- Sheds installed for demolition projects will continue to require a solid parapet

ANGLED PARAPET ELIMINATED



OPEN SHED

- Open shed to be required for major new building construction projects
- Optional to use for other projects (alterations, façades, etc.)

OPEN SHED



FOR DISCUSSION PURPOSES ONLY: follow Building Code requirements to ensure Code-complaint shed

OPEN SHED



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OPEN SHED



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OPEN SHED

Key Features

- Horizontal span of at least 10 feet between vertical members
 - Shorter span allowed where needed to avoid obstructions
 - Mast sections, box towers, or similar elements used as vertical members shall be considered as one vertical member, provided its base does not exceed 24 inches by 24 inches
- All cross bracing, struts, and similar lateral support between vertical members shall be placed a minimum of 8 feet above the level of the sidewalk
 - Shorter span allowed where needed to avoid obstructions
 - Can be placed lower to protect against tripping hazard (e.g. dunnage on subway grates)

OPEN SHED

Key Features *(continued)*

- Open shed designs must comply with all other code requirements (e.g., light duty or heavy-duty decking requirements, code design loads for wind, strength of materials, etc.)
- **DO NOT** simply repurpose existing shed material to meet increased spans, heights, without an engineering analysis to verify adequacy of design

CANTILEVERED PLATFORMS





FOR DISCUSSION PURPOSES ONLY: follow Building Code requirements to ensure Code-complaint shed

CANTILEVERED PLATFORMS

- Cantilevered platform must be approved by the Department.
- The cantilevered platform must provide overhead protection equivalent to a sidewalk shed.
- The cantilevered platform must be installed below the level of work to be performed, excluding work performed at the first story.

BUILDINGS BULLETIN 2022-018



**BUILDINGS
2022-018
BULLETIN
TECHNICAL**

ISSUANCE DATE
December 27, 2022

ISSUER: Joseph Ackroyd, P.E., CFM
Assistant Commissioner
Technical Affairs & Code Development

PURPOSE: This Bulletin clarifies the 10' horizontal span measurement in Section 3307.6.4.4, Item 7 of the 2022 New York City Building Code


SUBJECT(S): Sidewalk shed horizontal span, sidewalk shed measurement, sidewalk shed vertical members

RELATED CODE SECTIONS & RESOURCES: BC 3307.6.4.4, Item 7

I. BACKGROUND
Section 3307.6.4.4, Item 7 of the 2022 New York City Building Code requires "a horizontal span of at least 10 feet (3048 mm), as measured down the length of the sidewalk, walkway, or pathway" to be provided between vertical members of certain sidewalk sheds. This bulletin provides guidance concerning this measurement.

II. MEASUREMENT
The measurement shall be taken from the centerline of the vertical member.
Where a pipe or column is utilized as a vertical member, the centerline shall be through the center of the pipe or column. (See Figure 1)

Figure 1: Sidewalk shed pipes (in plan view)



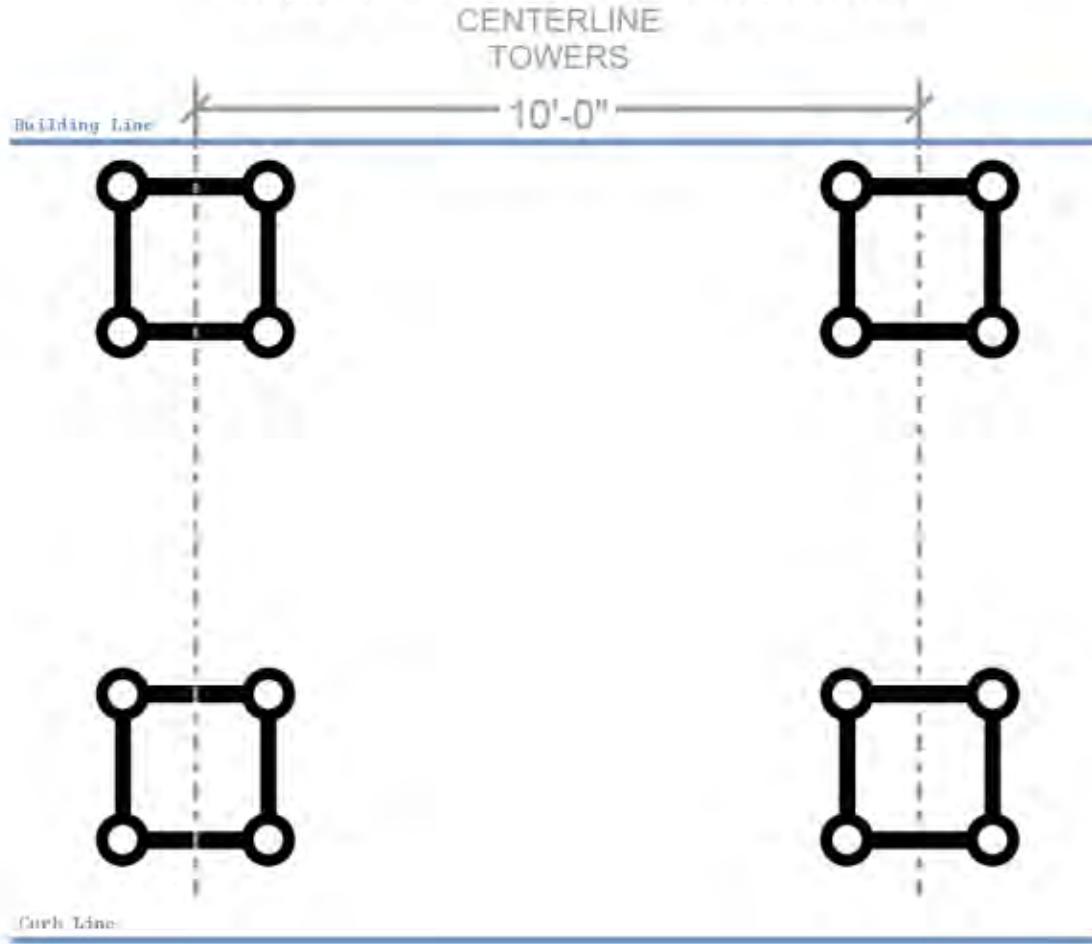
The diagram illustrates two vertical pipes, represented by circles, positioned on a horizontal sidewalk. A horizontal line with arrows at both ends indicates the measurement of the horizontal span between the centerlines of the two pipes, which is labeled as 10'-0".

KAZIMIR VILENCHIK, PE, Acting Commissioner nyc.gov/buildings

- Purpose: Clarifies the 10' horizontal span measurement in Section 3307.6.4.4, Item 7 of the 2022 New York City Building Code
- Where a pipe or column is utilized as a vertical member, the centerline shall be through the center of the pipe or column.

BUILDINGS BULLETIN 2022-018

Figure 2: Sidewalk shed towers (in plan view)



Where a mast section, lattice tower, or similar element is utilized as a vertical member, the centerline shall be through the center of the entire structure.



BUILDINGS BULLETIN 2022-018

- 10' span may be shorter if needed to avoid the curb or obstructions such as curb cuts or ramps, vehicular access points, streetlights, traffic lights or signs, fire hydrants, fire department connections, water sampling stations, bus shelters, street furniture, trees, adjacent show windows, means of ingress/egress, subway entrances, or access points to vaults, manholes, or other underground structures.
- Sidewalk shed plans shall include locations of such obstructions and indicate measurement of shorter spans.

STRUCTURAL CONTAINMENT NETTING



NETTING: BUILDINGS BULLETIN 2023-006



BUILDINGS
2023-006
BULLETIN
O T C R

ISSUANCE DATE
July 25, 2023

ISSUER: Alan Price, P.E. *Alan Price*
Director, Office of Technical Certification and Research

PURPOSE: This document clarifies the procedure to obtain approval from the Department for the use of non-sidewalk level pedestrian protection such as containment netting as an alternative to sidewalk sheds. Conditions which are appropriate for the use of containment netting are also outlined.

SUBJECT(S): Safety netting systems; Safeguards during construction or demolition

RELATED CODE SECTIONS
BC 106.8.1, BC 106.8.2, BC 202, BC 1705.37, BC 3307.1, BC 3307.6.2, AC 28-105.4.1, AC 28-113

I. BACKGROUND

NYC BC section 3307.1 requires that pedestrians be protected from unsafe conditions that may occur during construction and demolition activities. In addition, for existing buildings with unsafe exterior wall conditions, public protection is required.

For construction and demolition related projects, sidewalk sheds and fences are the primary Code-prescribed means of providing protections for pedestrians. In certain instances, containment netting may be a viable alternative to a sidewalk shed until permanent repairs can be performed. Because containment netting is not Code-prescribed its use must be treated as an alternative

Clarifies the procedure to obtain approval from the Department for the use of non-sidewalk level pedestrian protection such as containment netting

NETTING: BUILDINGS BULLETIN 2023-006

- May be used to provide adequate public protection at overhead conditions; and is necessary for the containment of overhead conditions, such as displaced, deteriorated, or loose facade materials including but not limited to:
 - brick
 - terra cotta
 - natural stone
 - metal overhanging cornice assemblies and
 - parapet copings
- Containment netting shall not be used in lieu of sidewalk sheds required in accordance with BC 3307.6.2

NETTING: BUILDINGS BULLETIN 2023-006

- Provides netting material criteria:
 - Netting materials shall be High Density Polyethylene or High Tenacity Polypropylene (HTPP)
 - Netting shall be flame retardant in accordance with NFPA 701
 - Netting manufacturer shall supply a certificate of compliance prepared in accordance with ANSI/ASSE A10.11 and the manufacturer's qualification test outlined in ANSI/ASSE A10.37-2016.
 - (1) Name of manufacturer, (2) Identification of net material, (3) Date manufactured, (4) Date of prototype test, (5) Designation of test method, (6) Name of the testing agency, and (7) Serial number or Batch number

NETTING: BUILDINGS BULLETIN 2023-006

- Provides design and permit filing criteria
 - Requires site-specific design by registered design professional
 - Site-specific design needs to account for anticipated loads
 - In no event the maximum rated capacity of the netting shall be less than 6,000 lbs. lateral force over an area no less than 10ft by 10ft
 - Site-specific design needs to address anchoring system
 - Buildings Bulletin 2016-005 acceptance criteria for post-installed anchors in masonry
 - Permit filing in DOB NOW: *Build* with Work Type: Protection and Mechanical Methods, Subcategory: Netting.

ART ON TEMPORARY CONSTRUCTION



"Breathing Wall" by Monika Bravo. Photograph courtesy of the artist.

<https://www.nyc.gov/assets/dcla/downloads/pdf/city-canvas-pilot-application.pdf>

ART ON TEMPORARY CONSTRUCTION

- Local Law 163 of 2021, Effective September 1, 2023
- Provides a process for building owners to display artwork on temporary protective structures
- DOB proposed Rules to implement LL163-2021: 1 RCNY 3307-01
 - Provides requirements for notification of solicitation of alternative artwork
 - Provides criteria for opting out of art installation requirement
 - Provides installation and inspection criteria
 - Public hearing held 8/17/23
- More to come

GET SHEDS DOWN



- Mayor Adams and DOB Commissioner Oddo unveil plan to remove unsightly sheds, scaffolding from NYC sidewalks July 24, 2023
- <https://www.nyc.gov/content/getstuffdone/pages/sidewalk-sheds>

REIMAGINING SIDEWALK SHEDS



- DOB will issue a public request for proposals by the end of summer 2023 to solicit new design ideas for sidewalk sheds and other means of pedestrian protection
- Goals include designs that are less obtrusive, more visually appealing, and still affordable for property owners to improve the pedestrian experience, while simultaneously offering critical overhead protection from any potential hazards

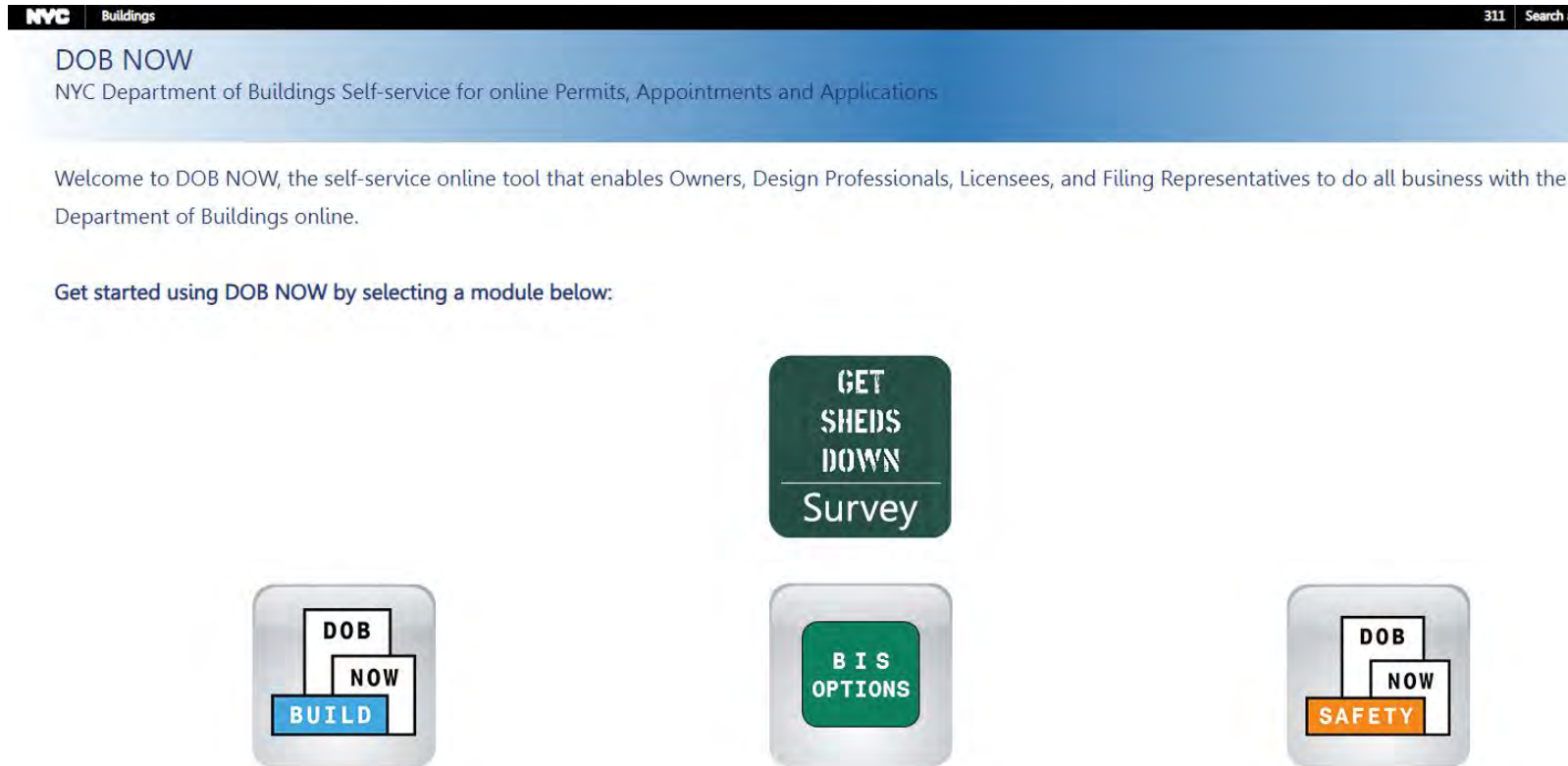
REEVALUATING LOCAL LAW 11 INSPECTIONS



DOB will conduct a study to review the frequency of inspections under Local Law 11 and the Façade Inspection and Safety Program, and determine whether New York City can employ less frequent and/or less onerous inspections without jeopardizing pedestrian safety

GET SHEDS DOWN SURVEY


- Responses due August 31, 2023




Sidewalk Shed Survey

DOB is collecting data on the purpose of sidewalk sheds and the timeline for their removal as a part of Mayor Adams' Get Sheds Down plan. A survey is required for each sidewalk shed permit that has been active for more than 90 days.

Survey Information

 PRODUCTION SUPPORT

 104 TAPSCOTT STREET, BROOKLYN

Work Permit Number

Job Filing Number

Permit Expiration Date

B00148157-I1-SH

B00148157-I1

05/19/2022

1. Have you obtained a DOB permit for the work that required the sidewalk shed?*

Yes

No


2. What is the status of the work being performed at the location?*

Not Started

In Progress

Complete

 Back

 Submit

A low-angle photograph of several skyscrapers under construction against a blue sky with light clouds. The buildings are covered in orange and yellow safety netting and scaffolding. Several white tower cranes are positioned around the structures. The text 'nyc.gov/buildings' is overlaid in the center in a blue, outlined font.

nyc.gov/buildings

build safe | live safe

NYC Buildings