



# Temporary Construction: Safety Practices and Design Criteria for Temporary Construction

John Chiusano, RA, Chief Plan Examiner  
James Corral, PE, Executive Engineer

2015 BUILD SAFE | LIVE SAFE  
CONFERENCE

**NYC**  
Buildings

# American Institute of Architects Continuing Education System

---

The NYC Department of Buildings is a registered Provider with The American Institute of Architects Continuing Education Systems (AIA/ CES). Credit earned on completion of this program will be reported to AIA/CES for AIA members. Certificates of Completion for both members and non-AIA members are available upon request.

This program is registered with the AIA/CES for continuing professional education. As such, it does not include content that may be deemed or constructed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



# Course Description

This course will open by providing an overview of demolition and the complexities of doing so in our urban environment. Then, we will supplement this broad topic of demolition by examining safety practices and design criteria for some temporary structures that are commonly used during both construction and demolition.

We will approach the safety and design requirements of fences, sidewalk sheds, supported scaffolds, and suspended scaffolds through the eyes of the 2014 New York City Building Code. Real life examples of deficiencies witnessed in each respective structure will be provided to help illustrate their importance.

# Learning Objectives

At the end of this course participants will be able to:

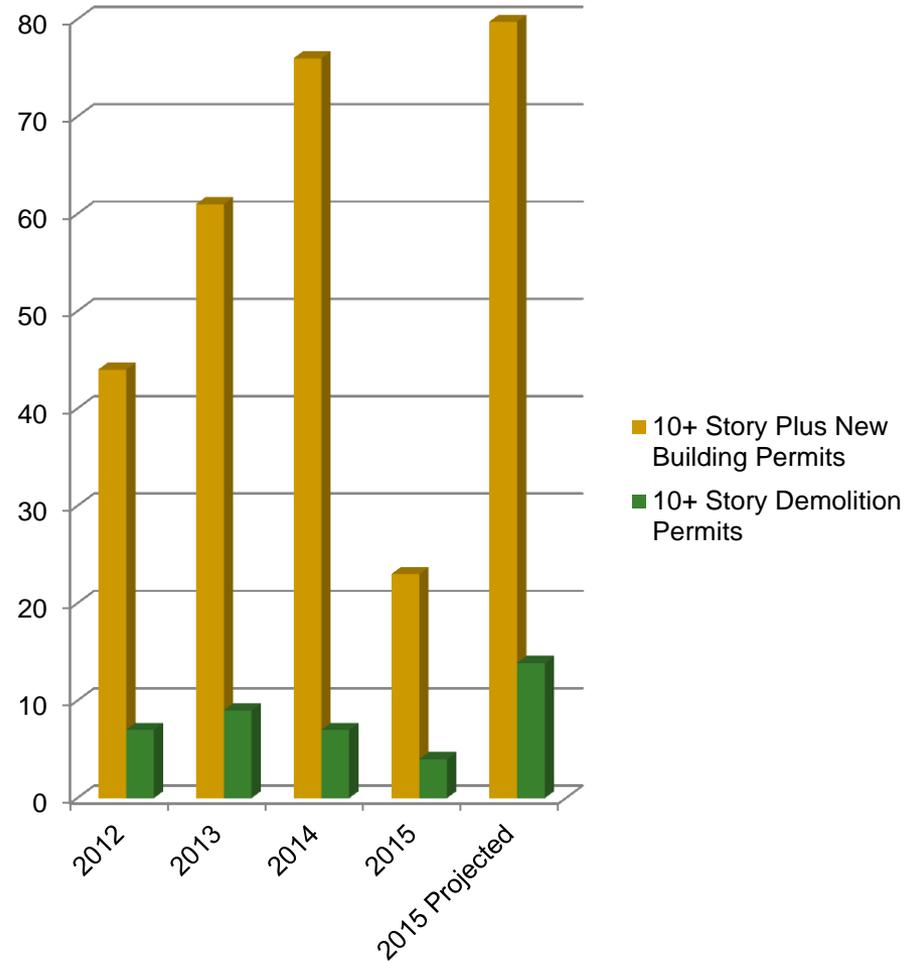
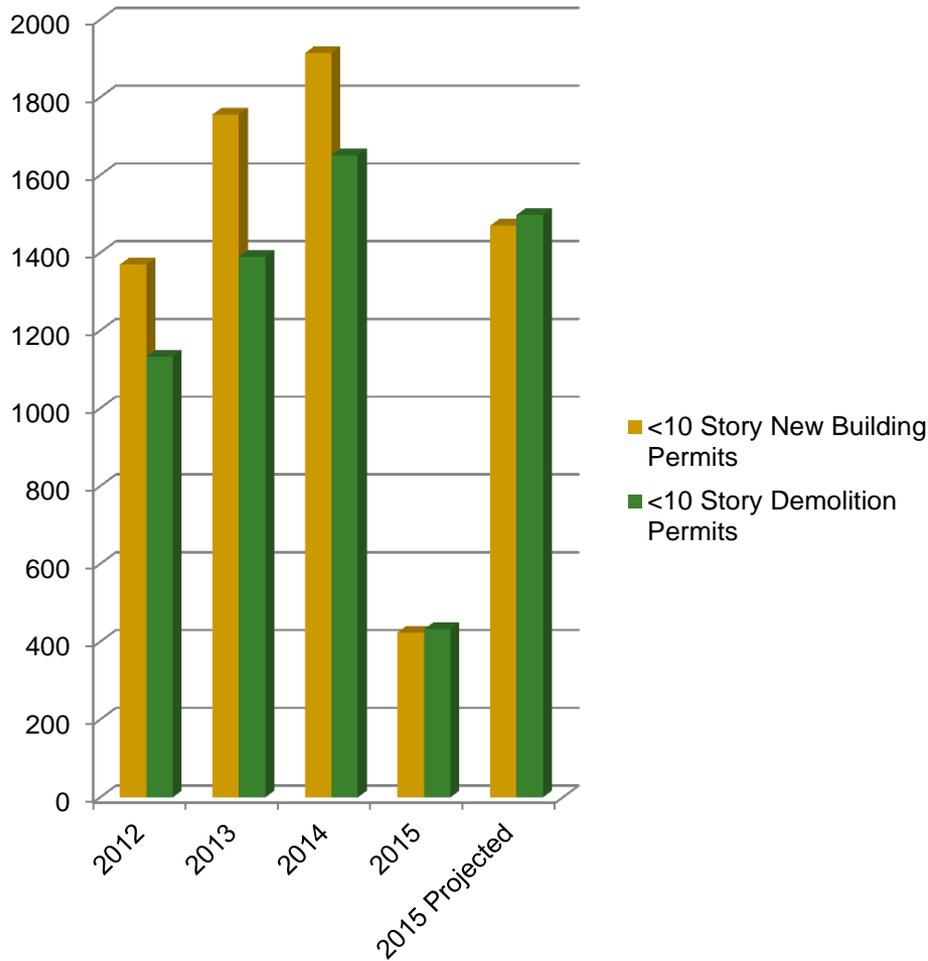
- Understand critical elements of demolitions and the various components required to effectively safeguard the adjacent public and property.
- Participants will realize design load requirements for temporary structures in order to safely design, build and maintain them.
- Recognize the distinctions between the 2008 NYC Building Code and the 2014 New York City Building Code to determine how amended requirements affect the design, construction and maintenance of temporary structures.
- Understand the difference between different types of temporary structures as well as importance of the “temporary” distinction.

# Course Outline

This course will consist of the following five sections:

1. Demolition Overview
2. Design, Construction, and Maintenance of:
  - A. Sidewalk Sheds
  - B. Supported Scaffolds
  - C. Suspended Scaffolds
  - D. Fences
3. Loads on Temporary Installations
4. Other Temporary Structures.

# Demolition- By the Numbers



# How to file a Full Demolition Plan

---

- 1) File application in the borough and pay all required fees
- 2) Bring the folder to the BEST Squad (log in cover sheet)
- 3) Review conducted by the BEST Squad
- 4) If approved then pre-demo is scheduled and conducted
- 5) If approved the permit is pulled
- 6) 24 hour notice call (212)-393-2550
- 7) Demo work starts
- 8) When demo work is completed the contractor calls for sign off
- 9) BEST conducts sign off inspection
- 10) Sign off is entered into BIS

# Understanding Key Demolition terms

---

## **(BC) Section 3302 – Definitions**

### **What Is Demolition?**

- Full Demolition – the dismantling, razing, or removal of all of a building or structure, including all operations incidental thereto
- Partial Demolition – the dismantling, razing, or removal of structural members, floors, interior bearing walls, and/ or exterior walls or portions thereof, including all operations incidental thereto

# Understanding Key Demolition terms

## What Is The Difference Between Handheld Equipment And Mechanical Equipment?

- Handheld equipment is any mechanical or non-mechanical device used in the demolition of a building or structure that is held or operated by a single person. A handheld device is not an accessory to a compressor, and it is not moved, and it does not include



mechanical  
polish a  
g or structure,  
single person.  
an accessory to  
a compressor,  
ed, moved,  
device does

# Understanding Key Demolition terms

## What Is The Difference Between Handheld Equipment And Mechanical Equipment?

•Mechan  
or power  
a building  
structure  
structure  
the buildi  
shall not  
equipment  
of the bu



ally driven  
y demolish  
or  
or  
aterial within  
equipment  
aterial outside

# Understanding Key Demolition terms

---

## Interior Mechanical Demolition



# Where to find Demolition Requirements

---

## **(BC) Section 3306 - Demolition**

**BC 3306.1** – Scope

**BC 3306.2** – Protection of Pedestrians and Adjoining Properties

**BC 3306.2.1** – Safety Zones

**BC 3306.3** – Notification

**BC 3306.3.1** – The permit holder shall notify the department via phone or electronically at least 24 Hours, but no more than 48 hours prior to the commencement of such work

**BC 3306.3.2** – Notification of adjoining property owners. Adjoining property owners shall be notified of upcoming demolition operations in writing not less than 10 days prior to the scheduled starting date of the demolition....

# Where to find Demolition Requirements

---

## **BC 3306.4** – Mechanical Demolition

## **BC 3306.5** – Submittal Documents for Demolition

Exceptions: Section 3306.5 shall not apply to:

1. Demolitions performed as emergency work....
2. The full demolition of a detached one-, two-, or three-family dwelling....
3. The removal, with mechanical demolition equipment, of foundations and landscaping elements...
4. The full demolition of a fully detached building that is three stories or fewer and with a floor area of 5,000 square feet (464.5 m<sup>2</sup>) or less per story....
5. Partial demolition operations accomplished without any mechanical demolition equipment, other than handheld devices, provided such work is a minor alteration or ordinary repair

# Where to find Demolition Requirements

---

## **BC 3306.5.1** – Required documents

1. Identification of the Structure
2. Identification of all Mechanical Equipment other than handheld
3. Means and Methods
4. Scope of Proposed Mechanical Equipment Work and/or Hand Work
5. Positioning of Equipment
6. Calculations – Loads Imposed

**BC 3306.5.1.1** – Submittal documents for full or partial demolition using mechanical equipment other than handheld

**BC 3306.5.2** – Maintenance of submittal documents

**BC 3306.5.3** – Filing requirements

# Where to find Demolition Requirements

---

**BC 3306.6** – Special Inspections

**BC 3306.7** – Demolition of weakened structures

**BC 3306.8** – Demolition sequence

**BC 3306.8.1** – Structural steel, reinforced concrete, and heavy timber buildings

**BC 3306.8.2** – Masonry buildings with wooden floors

# Where to find Demolition Requirements

---

**BC 3306.9** Safeguards. Demolition shall be conducted in accordance with the requirements of Sections 3306.9.1 through 3306.9.14

**BC 3306.9.1** – Utilities and service lines

**BC 3306.9.2** – Party wall exits, fire exits

**BC 3306.9.3** – Dust

**BC 3306.9.4** – Water accumulation

# Where to find Demolition Requirements

---

**BC 3306.9.5** – Temporary elevators and standpipe systems

**BC 3306.9.6** – Sprinkler systems

- SP Permit
- Maintained as Non-Automatic Systems
- Capped Immediately Below the Floor being Demolished
- Siamese Connection to be painted (903.6), marked with a Red Light and Maintained Free from Obstructions

# Where to find Demolition Requirements

---

For the Removal of Damaged Sprinklers you will also need a CCD1 and a Letter of No Objection from FDNY

Important to remember if the building has an existing Stand Pipe(SD) System the system must be maintain in a state of readiness, you will need:

- SD Permit
- Air Pressurized Alarm System for All Existing Standpipes (SD)
- Application Submitted by Design Professional
- Electrical Permit

# Where to find Demolition Requirements

---

**BC 3306.9.7** – Use of explosives. The use of explosives in demolition operations shall conform to the requirements and limitations imposed by the New York City Fire Code and Section 3312

**BC 306.9.8** – Hazards to be removed. Prior to the commencement of demolition operations, hazards shall be removed in accordance with Sections 3306.9.8.1 through 3306.9.8.4

**BC 3306.9.8.1** – Combustible content. Prior to the commencement of demolition operations, the area authorized to be demolished by the work permit shall be thoroughly cleaned of combustible content and debris, including but not limited to building contents and exterior finishes, down to the structural elements

# Where to find Demolition Requirements

---

**BC 3306.9.8.2** – Asbestos. Prior to the commencement of demolition operations, all asbestos shall be removed from the area authorized to be demolished by the department work permit, and certification to that effect shall be filed with the DOB and DEP....

**BC 3306.9.8.3** – Glass. Prior to the commencement of demolition operations, all glass located in the area authorized to be demolished by the work permit, including but not limited to glass in windows, doors, skylights, and fixtures, shall be removed

**BC 3306.9.8.4** – Steam and fuel. Prior to the commencement of demolition operations, all pipes, tanks, boilers, or similar devices containing steam or fuel and located in the area authorized to be demolished by the work permit shall be purged of such steam or fuel

# Where to find Demolition Requirements

---

**BC 3306.9.9** – Stairs. All enclosed vertical shafts and stairs shall be maintained enclosed at all floors except the uppermost floor being demolished, and all work on the uppermost floor shall be completed before stair and shaft enclosures on the floor below are disturbed. All hand rails and banisters shall be left in place until actual demolition of such floor is in progress

**BC 3306.9.13** – Rodent Extermination. A licensed exterminator shall effectively treat the premises for rodent extermination as per the requirements of the Department of Health and Mental Hygiene

**BC 3306.11**– Completion of demolition operations. All work required for structural stability and permanent waterproofing of adjacent buildings must be completed prior to demolition sign-off

# Required Forms for Demolition

## Section 5:

- Job Application
- Type: Demolition



**PW1: Plan / Work Application**  
*Must be typewritten.*

On Standby 88  
Job Number Update

**1 Location Information** *Required for all applications.*

House No(s)		Street Name			
Borough	Block	Lot	BIN	C.B. No.	
Work on Floor(s)					Apt. / Condo No(s)

**2 Applicant Information** *Required for all applications. Fax, mobile telephone and e-mail address are optional information.*

Last Name		First Name		Middle Initial
Business Name			Business Telephone	
Business Address				
City		State	Zip	Mobile Telephone
E-Mail				
License Number				
Choose one: <input type="checkbox"/> P.E. <input type="checkbox"/> R.A. <input type="checkbox"/> Sign Hanger <input type="checkbox"/> R.L.A. <input type="checkbox"/> Other				

**3 Filing Representative** *Complete only if different from applicant specified in section 2. Fax, mobile phone, and e-mail are optional info.*

Last Name		First Name		Middle Initial
Business Name			Business Telephone	
Business Address				
City		State	Zip	Mobile Telephone
E-Mail				
Registration Number				

**4 Filing Status** *Required for all applications. Choose one and provide specified associated information.*

Choose only one:

<input type="checkbox"/> <b>Initial Filing</b> 5, 7, 11, 12A, 25-26	<input type="checkbox"/> <b>Prior to Approval Actions</b> 25-26	<input type="checkbox"/> <b>Reinstatement</b> 24-26
<input type="checkbox"/> Amend Existing Filing 4A	<input type="checkbox"/> Subsequent Filing 6-7, 8A (A&-2 only), 11	<input type="checkbox"/> <b>Withdrawal</b> 26
<input type="checkbox"/> Standard Plan Examination or Review	<input type="checkbox"/> <b>Post Approval Amendment (PAA)</b> 4A, 6, 24-25	<input type="checkbox"/> Specified in 4A and 6
<input type="checkbox"/> Professional Certification PC1, POC1	Will PAA affect filing fees? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Entire Job
<input type="checkbox"/> Professional Certification of Objections A11	<input type="checkbox"/> <b>New (Superseding) Applicant</b> 4A, 25-26	4A Indicate existing document number affected by filing:

**5 Job/Project Types** *Choose one and provide specified associated information.*

<input type="checkbox"/> <b>Alteration Type 1 or Alteration Type 1 required to meet New Building requirements (28-101.4.5)</b> 6A-E, 8B-C, 9-10, 12, 13C-F, 14, 18-20, 22 & PW1A, PD1	<input type="checkbox"/> <b>Alteration Type 2</b> 5A, 6A-D, 8A-B, 9-10, 13C-E & 14, 20, 22	<input type="checkbox"/> <b>Full Demolition</b> 6B, 8D, 9A & 9C-D, 9K, 13D-E, 14, 21A, 22
<input type="checkbox"/> <b>Alteration Type 1, OT: 'No Work'</b> 8C, 9-10 & 12, 13C-F, 14, 18-19, 22, PW1A, PD1	<input type="checkbox"/> <b>Alteration Type 3</b> 5A, 6B-F, 8C, 9-10, 13C-E, 20, 22 & 13A-E, 14, 18-20, PW1A, PD1	<input type="checkbox"/> <b>Subdivision</b> 9A, 9D, 12A-B
<input type="checkbox"/> <b>Sign</b> 5A, 6B-D, 9A, 9D, 22-23	<input type="checkbox"/> <b>New Building</b> 6A-E, 8F-G, 9A, 9C-K, 10, 12 & 13A-E, 14, 18-20, PW1A, PD1	<input type="checkbox"/> Condominium <input type="checkbox"/> Improved 17
		5A Directive 14 acceptance requested? <input type="checkbox"/> Yes <input type="checkbox"/> No

**6 Work Types** *Select all that apply but no more than allowed by job and filing type. \*OT\* required on all NB and Alteration 1 initial applications.*

<input type="checkbox"/> BL - Boiler PW1C	<input type="checkbox"/> FS - Fuel Storage PW1C	<input type="checkbox"/> PL - Plumbing PW1B	<input type="checkbox"/> CC - Curb Cut 16
<input type="checkbox"/> FA - Fire Alarm	<input type="checkbox"/> FP - Fire Suppression	<input type="checkbox"/> SD - Standpipe PW1B	<input type="checkbox"/> O.T.A.N - Landscape
<input type="checkbox"/> FB - Fuel Burning PW1C	<input type="checkbox"/> MH - Mechanical	<input type="checkbox"/> SP - Sprinkler PW1B	<input type="checkbox"/> O.T.A.N.T - Antenna
<input type="checkbox"/> EQ - Construction Equipment 15	<input type="checkbox"/> O.T.G.C - General Construction	<input type="checkbox"/> O.T - Other, describe:	<input type="checkbox"/> O.T.F.P.P - Builders Pavement Plan 8D
			<input type="checkbox"/> O.T.F.P.P - Fire Protection Plan
			<input type="checkbox"/> O.T.M.A.R - Marquee 8E, 26B

# Required Forms for Demolition

## Item 8D:

- Street Frontage (linear feet)

## Item 9A:

- Review Is Requested Under Which Code

## Item 9C:

- Site Safety

## Item 9D:

- Requesting legalization of work where there are no work without permit violations
- Landmarks
- “Little E”
- Filing to address violations

PW1 PAGE 2

**7 Plans/Construction Documents Submitted** *Plans are required for most applications.*  
 Are plans being submitted with this PW1?  Yes  No *If yes, do the plans include:*  FO — Foundation  EN — Energy Analysis

**8 Additional Information**

8A W/T Cost	W/T Cost	W/T Cost	8B Is a building enlargement proposed?	8C Estimated Job Cost \$
			<input type="checkbox"/> No enlargement is proposed	8D Street Frontage: linear ft
			<input type="checkbox"/> Yes 12, PD1	8E Height: ft Width: ft
			<input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	8F Total Construction Floor Area: sq. ft.
			Additional Construction Floor Area: sq. ft.	

**9 Additional Considerations, Limitations or Restrictions**

9A Review is requested under which building code?  2014  2008  1968  Prior to 1968

9B  Alteration required to meet New Building requirements (28-101.4.5) *If yes, 13A-B*  Change in number of dwelling units  
 Alteration is a major change to exits  Change in occupancy / use  
 Change is inconsistent with current certificate of occupancy

9C  Façade Alteration  Change in number of stories  
 Adult Establishment *If yes, plot diagram (except DM)*  Infill Zoning  
 Compensated Development (Inclusionary Housing)  Loft Board  Yes No Work Includes:  
 Low/Income Housing (Inclusionary Housing)  Quality Housing  Prefab wood I-joists  
 Single Room Occupancy (SRO) Multiple Dwelling  Site Safety Job/Project  Structural cold-formed steel  
 Filing includes Lot Merger / Reapportionment *If yes, 17*  Included in LMCC  Open-web steel joists

9D  Landmark  Filing to address violations (list #s—max. 5)  
 Little "E" or RD Site  Filing to comply with Local Laws (list #s—max. 2)  
 Other (please specify on line provided below)  Filing to address violations (list #s—max. 5)  
 Requesting legalization of work where no work without a permit violations have been issued  
 Other (please specify on line provided below)  Filing to comply with Local Laws (list #s—max. 2)

9E  BSA Calendar Numbers (max. 5)  
 9F  CPC Calendar Numbers (max. 5)  
 9G  Work includes lighting fixture and/or controls, installation or replacement. [ECC §404 and §505]  
 9H  Work includes modular construction under New York State jurisdiction  High Rise Team tracking #:  
 Work includes modular construction under New York City jurisdiction  
 9J  Structural peer review required per BC 16. *If yes, provide NYS P.E. license number:*  
 9K  Work includes permanent removal of standpipe, sprinkler or fire suppression related systems  
 9L  Work includes partial demolition as defined in AC §28-101.5, or the raising/moving of a building *If yes, 21B*  
 Structural stability affected by proposed work

**10 NYCECC Compliance** *New York City Energy Conservation Code*

To the best of my knowledge, belief and professional judgment, all work under this application is in compliance with the NYCECC\*

Code Compliance Path (choose one):  NYCECC  ASHRAE  
 Energy Analysis (choose one):  Tabular Analysis  REScheck  COMcheck  Energy Modeling (EN1)

To the best of my knowledge, belief and professional judgment, all work under this application is exempt from the NYCECC\* in accordance with one of the following (choose one):

- The work is an alteration of a State or National historic building.
- The scope of the work is entirely in a "low-energy building" and is limited to the building envelope.
- The entire scope of work involves a temporary structure and/or one or more of the following work types: FA, FP, SD, SP, FS, EQ, CC, OT/BPP, OT/FPP. Other work types are not exempt.
- This is a post-approval amendment and exempt under a prior edition of the energy code. See statement of exemption on attached drawings.

# Required Forms for Demolition

## Item 13D:

- Building Type – 1, 2 or 3 Family, Or Other; Mixed Use Building

## Item 13E:

- Building Height, Stories, & Dwelling Units (Existing/ Proposed)

## Item 14:

- Fill – Onsite, Off-site, Or Under 300 Cubic Yards

## Item 18:

- Fire Protection Equipment

PW1 PAGE 3

<b>11 Job Description</b>				<b>11A Related DOB Job Numbers</b>			
				11B Primary application job no.			
<b>12 Zoning Characteristics</b>							
12A District(s) Overlay(s) Special Dist (s) Map Number				12B Street legal width: _____ ft. Street Status: <input type="checkbox"/> Public <input type="checkbox"/> Private <i>If the zoning lot includes multiple tax lots, list all tax lots here ▶</i>			
12C Proposed: Use* Zoning Floor Area District FAR				Proposed Lot Details: Lot Type: <input type="checkbox"/> Corner <input type="checkbox"/> Interior <input type="checkbox"/> Through Lot Coverage % Lot Area sq. ft. Lot Width ft.			
				Proposed Yard Details: Check here if no yards: <input type="checkbox"/> or Front Yard _____ ft. Rear Yard _____ ft. Rear Yard Equivalent _____ ft. Side Yard 1 _____ ft. Side Yard 2 _____ ft.			
Proposed Totals sq. ft.				Proposed Other Details: Enclosed Parking? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, no. of parking spaces: _____ Perimeter Wall Height _____ ft.			
Existing Total sq. ft.							
<i>*Use can be one of the following: residential, commercial, manufacturing, or community facility. List only one use per line.</i>							
<b>13 Building Characteristics</b> *Main use/dominant occupancy per AC §28-101.5. **Use 2014 Code equivalents only. †Residential w/other use.							
13A Primary structural system, choose one: <input type="checkbox"/> Masonry <input type="checkbox"/> Concrete (CIP) <input type="checkbox"/> Concrete (Precast) <input type="checkbox"/> Wood <input type="checkbox"/> Steel (Structural) <input type="checkbox"/> Steel (Cold-Form ed) <input type="checkbox"/> Steel (Encased in Concrete)							
13B Existing Proposed				13D Building Type: <input type="checkbox"/> 1, 2, or 3 Family <input type="checkbox"/> Other Mixed use building <sup>†</sup> <input type="checkbox"/> Yes <input type="checkbox"/> No			
Structural Occupancy/Risk Cat.				Building Height Existing _____ ft. Proposed _____ ft.			
Seismic Design Cat.				Building Stories Existing _____ Proposed _____			
13C Occupancy Classification* <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes**				Dwelling Units Existing _____ Proposed _____			
Construction Classification <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No							
Multiple Dwelling Classification							
13F Building was originally erected pursuant to which Building Code: <input type="checkbox"/> 2014 <input type="checkbox"/> 2008 <input type="checkbox"/> 1968 <input type="checkbox"/> Prior to 1968 The earliest Code with which this building or any part of it is required to comply: <input type="checkbox"/> 2014 <input type="checkbox"/> 2008 <input type="checkbox"/> 1968 <input type="checkbox"/> Prior to 1968							
<b>14 Fill</b> Choose one. <input type="checkbox"/> Not Applicable <input type="checkbox"/> On-Site <input type="checkbox"/> Off-Site <input type="checkbox"/> Under 300 cubic yards							
<b>15 Construction Equipment</b>				<b>16 Curb Cut Description</b>			
<input type="checkbox"/> Chute <input type="checkbox"/> Sidewalk Shed Construction Material: _____ <input type="checkbox"/> Fence Size: _____ linear ft. BSAMEA Approval No. _____ <input type="checkbox"/> Supported Scaffold <input type="checkbox"/> Other _____				Size of cut (with plays): _____ ft. Distance to nearest corner: _____ ft. to street.			
<b>17 Tax Lot Characteristics</b>				<b>18 Fire Protection Equipment</b>			
Original tax lots being merged or reappportioned (if applicable): _____				Existing Proposed Yes No Yes No			
Tentative tax lot numbers (new tax lots only): _____				Fire Alarm <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
				Fire Suppression <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
				Sprinkler <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
				Standpipe <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

# Required Forms for Demolition

## Item 21:

- Demolition Details

## Item 22:

- Asbestos Abatement Compliance

PW1 PAGE 4

19 Open Spaces			
	Existing	Proposed	
Plaza Area	sq. ft.	sq. ft.	Arcade Area
Parking Area	sq. ft.	sq. ft.	Parking Spaces
Loading Berths	sq. ft.	sq. ft.	Loading Berths

20 Site Characteristics	20A Flood Hazard Area Information
Yes No <input type="checkbox"/> Tidal/Wetlands <input type="checkbox"/> Coastal Erosion Hazard Area <input type="checkbox"/> Fire District	Yes No <input type="checkbox"/> Freshwater/Wetlands <input type="checkbox"/> Urban Renewal <input type="checkbox"/> Flood Hazard Area - if yes, 20A <input type="checkbox"/> Flood Hazard Area - if yes, 20A <input type="checkbox"/> Flood Hazard Area - if yes, 20A

21 Demolition Details *\*Mechanical equipment other than hand-held devices to be used for demolition or removal of debris (BC §3306.4).*

Yes No

21A  Demo. sling is for a secondary structure? *If yes, specify structure being demolished:*

Mechanical means\* from out of building? *If yes, mechanical means will demolish:*  entire structure or  part of structure

Mechanical means\* from within building? *If yes, describe equipment proposed:*

21B  Demolition work affects the exterior building envelope

The scope of work involves raising/moving of a building

22 Asbestos Abatement Compliance *Choose one.*

The scope of work requires related asbestos abatement as defined in the regulations of the NYC Department of Environmental Protection (DEP).

The scope of the work is **not** an asbestos project as defined in the regulations of the NYC DEP. *DEP Control # is required.*

DEP ACP # Control No. \_\_\_\_\_

The scope of work is exempt from the asbestos requirement as defined in the regulations promulgated by the NYC DEP (15RCNY 1-23(b)) or is an alteration to a building constructed pursuant to plans submitted for approval on or after April 1, 1987, in accordance with § 23-106.1.

23 Sign

Purpose:  Advertising  Non-Advertising

Type:  Illuminated - 23A  Non-Illuminated

Estimated Cost: \$ \_\_\_\_\_

Total Square Feet: \_\_\_\_\_

23A Illuminated type:  Direct  Flashing  Indirect

Yes No

If sign projects beyond building line, is owner billed for annual permit? *If no, specify in 26B*

Location:  Ground  Roof 23B  Wall

Height above Curb: \_\_\_\_\_ ft. in.

Height above Root: \_\_\_\_\_ ft. in.

23B  Is roof sign light, closed or solid?

23C Sign wording. *If extensive, provide only key wording.*

Yes No

Is sign inside building line? *If no, sign projects by:* \_\_\_\_\_ ft. in.

Designed for changeable copy? *If no, 23C*

Does an OAC have an interest in this sign or location? *If yes, 23G*

Within 900' and within view of an arterial highway? *If yes, 23D*

Within 200' and within view of a park 1/2 acre or more? *If yes, 23E*

23D Distance from Arterial Highway: \_\_\_\_\_ ft.

23E Distance from Park 1/2 acre or more: \_\_\_\_\_ ft.

23F OAC Sign Number: \_\_\_\_\_

23G OAC Registration Number: \_\_\_\_\_

*If answer is "yes" to either of the above two questions and this is an advertising sign, OAC sign number is required in section 23F*

24 Comments *Place additional comments on an A-1 form. See Guide for proper incorporation of professional certification statements.*

# Required Forms for Demolition

## DS1 Demolition Submittal Certification

- Must be submitted by the professional engineer or architect
- Plans – required prior to permit when performing demolition work as per BC 3306.5. This form is submitted together with the plan

## Items 3A & 3B:

### Full/ Partial Demolition Description and Certification

- Mechanical equipment with general demolition
- Non-mechanical means & methods
- Work on building interior, exterior or both



**NYC Buildings**

DS1: Demolition Submittal Certification Form

*Must be typewritten.*

Demolition drawings must be submitted along with this form.

On Stand with BIS  Job Number Table 1 & 2

BIS Document No., required \_\_\_\_\_

**1 Location Information** *Required for all certifications.*

House No(s)	Street Name
Borough	Floor(s)

**2 Preparer Information** *Required for all certifications.*

Check all that apply:  PW1 Applicant  P.E./R.A. Other Than PW1 Applicant

Last Name	First Name	Middle Initial	
Business Name		Business Telephone	
Business Address		Business Fax	
City	State	Zip	Mobile Telephone
License Type <input type="checkbox"/> P.E. <input type="checkbox"/> R.A. <input type="checkbox"/> Other:			License Number

**3 Demolition Description and Certification** *Required prior to perm. Subsequent revisions must be submitted to the Department.*

Indicate Submittal Type:  Initial submittal  Supersede existing submittal(s) - indicate scan code(s) of DS1 being superseded below

Scan Code(s): \_\_\_\_\_

**3A** Demolition Type:  Full Demolition (DM)  Partial Demolition (Alteration)

**3B** Demolition work will involve, per BC 3306.5 (authorized preparers indicated in parenthesis): *Check all that apply*

<input type="checkbox"/> Non-mechanical demolition means and methods <b>only</b> (P.E. or R.A. only) - <b>stop and proceed the section 3C</b>	<input type="checkbox"/> Work on interior of building
<input type="checkbox"/> Use of hand-held mechanical equipment (P.E. or R.A. only)	<input type="checkbox"/> Work on exterior of building
<input type="checkbox"/> Use of other than hand-held mechanical equipment (P.E. or R.A. only)	<input type="checkbox"/> Raising and/or moving of a building

General description of the type(s) of mechanical demolition equipment used:  
 \_\_\_\_\_

**3C** If superseding a previous plan submittal, indicate scan code(s) of the All: *(Note: any revisions/additions/deletions to the original plan submittal must be accompanied by an All form detailing all the plan changes)*  
 \_\_\_\_\_

**3D** Statement by demolition document preparer:  
 I have prepared the attached demolition submittal documents in accordance with BC 3306 and certify that they are in compliance.

I hereby state that all of the above information is correct and complete to the best of my knowledge. Falsification of any statement is a misdemeanor and is punishable by a fine or imprisonment, or both. It is unlawful to give to a city employee, or for a city employee to accept, any benefit, monetary or otherwise, either as a gratuity for properly performing the job or in exchange for special consideration. Violation is punishable by imprisonment or fine or both.

Name (please print) \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

P.E./R.A. Seal (apply seal, then sign and date over seal)

12/14

# Required Forms for Demolition

## BEST Recommendation for Mechanical Means Demolition

- In order to request a recommendation in favor of using mechanical means for demolition, you must complete and submit (BEST 4) to BEST at time of submittal of pre-demolition application
- The Borough Commissioner's approval still required after receiving BEST Recommendation.

		APPLICATION FOR BEST RECOMMENDATION FOR MECHANICAL MEANS DEMOLITION <i>Application must be typewritten.</i>		BEST USE ONLY DEMOLITION #	
<b>Structure and Location Information:</b>					
Number of structures at this address you intend to demolish (a separate application is required for each):					
Name:	Company:				
E-mail:	Phone:	Fax:			
Application date:	<input type="checkbox"/> Bronx	<input type="checkbox"/> Brooklyn	<input type="checkbox"/> Manhattan	<input type="checkbox"/> Queens	<input type="checkbox"/> Staten Island
Structure type (check only one): <input type="checkbox"/> House <input type="checkbox"/> Garage <input type="checkbox"/> Shed <input type="checkbox"/> Commercial Building <input type="checkbox"/> Other:					
Building address:					
Cross streets:	BIN:	Block:	Lot:		
All AKA's ("Also-Known-As", if applicable):					
BIS job # for demolition (DM) filing:		Other related BIS job #s:			
Distance from nearest street corner (in feet):					
<b>Mechanical Means Information:</b>					
Description of mechanical equipment proposed for demolition:					
<input type="checkbox"/> Requesting full mechanical demolition <input type="checkbox"/> Requesting partial mechanical demolition					
A plot plan must accompany this request. It must show: <ul style="list-style-type: none"> <li>• the size of the lot, the size, location and height of all structures on the lot of adjacent structures</li> <li>• the structures which are to be demolished and the structures or portions thereof which are to be demolished by mechanical means</li> <li>• the construction classification of the building to be demolished</li> <li>• the mechanical means to be used (type of machinery) and proposed location of it</li> <li>• the safety zone</li> <li>• the location of the sidewalk shed, fences and other protective construction</li> <li>• the width of the adjoining street</li> </ul>					
<b>Agreement and Signature:</b>					
By signing below, I agree that if issued a mechanical means permit: <ul style="list-style-type: none"> <li>• A construction fence will be erected along the perimeter of job site. No persons other than the operator of the equipment will be permitted within the safety zone of demolition while the mechanical means method of demolition is in use. No part of the equipment, when in use will extend beyond the permitted boundaries. Letter of Request, Letter of Permission and Plot Plan must be available on the premises during course of demolition.</li> <li>• All Building Department regulations will be followed when performing the demolition in accordance with Chapter 19 Article 6, section 27-1039d.</li> <li>• All hand demolition will be completed and inspected by B.E.S.T. prior to commencement of any Mechanical demolition</li> </ul>					
Print Name:	Title:				
Company:					
Signature:				Date:	
<b>BEST Use Only</b> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved					
Reviewed by:	Signature:	Badge #	Date:		
Supervisor:	Signature:	Badge #	Date:		
Comments:					
safety • service • integrity <span style="float: right;">BEST4 (7/08)</span>					

# Required Forms for Demolition

All demolition applications must be pre-filed prior to requesting a pre-demolition inspection from BEST

- BEST will only accept applications for inspection prior to demolition (B Form 2A) with the nine digit BIS Job number on the upper right hand corner of the form

NYC Buildings		APPLICATION FOR INSPECTION PRIOR TO DEMOLITION (AND PRE-DEMOLITION REPORT)	BEST USE ONLY DEMOLITION #
<p><i>Application must be typewritten.</i></p> <p><b>Applicant, please complete all information requested below.</b> (For mechanical demolition requests complete form BEST-4 as well.)</p>			
Number of structures at this address you intend to demolish (a separate application is required for each):			
Name:	Company:		
E-mail:	Phone:	Fax:	
Application date:	<input type="checkbox"/> Bronx	<input type="checkbox"/> Brooklyn	<input type="checkbox"/> Manhattan
Structure type (check only one):	<input type="checkbox"/> House	<input type="checkbox"/> Garage	<input type="checkbox"/> Shed
	<input type="checkbox"/> Commercial Building	<input type="checkbox"/> Other:	
Building address:	Legalizing a completed demolition? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Cross streets:	BIN:	Block:	Lot:
All AKA's ("Also-Known-As", if applicable):			
BIS job # for demolition (DM) filing:	Other related BIS job #s (if applicable):		
Distance from nearest street corner (in feet):	Mechanical demolition requested? <input type="checkbox"/> No <input type="checkbox"/> Full <input type="checkbox"/> Partial		
<b>BEST must be notified in writing 24 hours prior to the commencement of any full demolition (see BC 105.6.1).</b>			
PLOT DIAGRAM (MUST INDICATE ZONE OF SAFETY ON DIAGRAM)			
			
			<p>The north point of the diagram must agree with the arrow</p>
<p><i>A survey may be submitted in addition to or in lieu of a plot diagram as long as the zone of safety is indicated.</i></p>			
DO NOT WRITE BELOW THIS LINE: OFFICIAL USE ONLY			
Date of report:	Number of stories:	Height of building:	
Occupancy: Is building vacant? <input type="checkbox"/> Yes <input type="checkbox"/> No	Sidewalk shed required? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If yes, has a sidewalk shed been erected? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, provide permit number:</i>			
Does the building have fire escapes or other exits used jointly with an adjoining or abutting building? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Will the removal of the fire escape or other exit affect the adjoining building? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Does the building have party walls or walls enclosing an adjoining building? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, please describe:			
Has the demolition of the building commenced? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, answer the following questions:</i>			
Has work been stopped? <input type="checkbox"/> Yes <input type="checkbox"/> No		Have the police been notified? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Has an ECB violation been issued? <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes, provide ECB violation number:	
Comments:			
<b>Inspection Result:</b> <input type="checkbox"/> Pass <input type="checkbox"/> Fail			
Inspected by:	Signature:	Badge #	Date:
Supervisor:	Signature:	Badge #	Date:
Administrative Comments:			

# Required Forms for Demolition

## Important for Demolition

### Item 3 – Special Inspection items:

- Structural stability- existing buildings may be a requirement for the adjoining buildings during demolition operations
- Mechanical demolition



**TR1: Technical Report  
Statement of Responsibility**

This form is not to be typewritten

Oriskany 2011 815  
(00-11100-1001) 1/16

---

**1 Location Information** Required for all applications.

House No(s) \_\_\_\_\_ Street Name \_\_\_\_\_

Work on Floor(s) \_\_\_\_\_

---

**2 Applicant Information** Required for all applications.

Choose all that apply:  Design Applicant 3A, 4A, 5  Special Inspections Applicant 3B-D, 6-9  Progress Inspections Applicant 4B-D, 6-9

Last Name \_\_\_\_\_ First Name \_\_\_\_\_ Middle Initial \_\_\_\_\_

Business Name \_\_\_\_\_ Business Telephone \_\_\_\_\_

Business Address \_\_\_\_\_ Business Fax \_\_\_\_\_

C By \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Mobile Telephone \_\_\_\_\_

License Type choose one:  P.E.  R.A.  Other: \_\_\_\_\_ License Number \_\_\_\_\_

Special Inspection Agency Number \_\_\_\_\_

---

**3 Special Inspection Categories** Required for all applications, continued on page 2; ■ indicates report required.

3A	Identification of Requirement	3B Identification of Responsibilities	3C Certificate of Complete Inspections / Tests	3D Withdraw Responsibilities
Y	N	Initial & Date	Initial & Date	Initial & Date
<input type="checkbox"/>	Structural Steel – Welding	BC 1704.3.1		
<input type="checkbox"/>	Structural Steel – Details	BC 1704.3.2		
<input type="checkbox"/>	Structural Steel – High Strength Bolting	BC 1704.3.3		
<input type="checkbox"/>	Structural Cold-Formed Steel	BC 1704.3.4		
<input type="checkbox"/>	Concrete – Cast-In-Place	BC 1704.4		
<input type="checkbox"/>	Concrete – Precast	BC 1704.4		
<input type="checkbox"/>	Concrete – Prestressed	BC 1704.4		
<input type="checkbox"/>	Masonry	BC 1704.5		
<input type="checkbox"/>	Wood – Installation of High-Load Diaphragms	BC 1704.6.1		
<input type="checkbox"/>	Wood – Installation of Metal Pipe Connected Trusses	BC 1704.6.2		
<input type="checkbox"/>	Wood – Installation of Prefabricated Joints	BC 1704.6.3		
<input type="checkbox"/>	Subgrade Inspection	BC 1704.7.1		
<input type="checkbox"/>	Subsurface Conditions – Fill Placement & In-Place Density	BC 1704.7.2 BC 1704.7.3		
<input type="checkbox"/>	Subsurface Investigations (Borings/Test Pits)	TR4 BC 1704.7.4		
<input type="checkbox"/>	Deep Foundation Elements	TR5 BC 1704.8		
<input type="checkbox"/>	Helical Piles (818 # 2014-020)	TR5H BC 1704.9.5		
<input type="checkbox"/>	Vertical Masonry Foundation Elements	BC 1704.9		
<input type="checkbox"/>	Wall Panels, Curtain Walls, and Meneers	BC 1704.10		
<input type="checkbox"/>	Sprayed fire-resistant materials	BC 1704.11		
<input type="checkbox"/>	Mastic and Intumescent Fire-resistant Coatings	BC 1704.12		
<input type="checkbox"/>	Exterior Insulation and Finish Systems (EIFS)	BC 1704.13		
<input type="checkbox"/>	Alternative Materials - OTCR Buildings Bulletin # _____	BC 1704.14		
<input type="checkbox"/>	Smoke Control Systems	BC 1704.15		
<input type="checkbox"/>	Mechanical Systems	BC 1704.16		
<input type="checkbox"/>	Fuel-Oil Storage and Fuel-Oil Piping Systems	BC 1704.17		
<input type="checkbox"/>	High-Pressure Steam Piping (Welding)	BC 1704.18		
<input type="checkbox"/>	High Temperature Hot Water Piping (Welding)	BC 1704.18		
<input type="checkbox"/>	High-Pressure Fuel-Gas Piping (Welding)	BC 1704.19		
<input type="checkbox"/>	Structural Stability – Existing Buildings	BC 1704.20.1		
<input type="checkbox"/>	Excavations—Sheeting, Shoring, and Bracing	BC 1704.20.2		
<input type="checkbox"/>	Underpinning	BC 1704.20.3 BC 1814		
<input type="checkbox"/>	Mechanical Demolition	BC 1704.20.4		

TR1 12/2014

# Required Forms for Demolition

## Important for Demolition

### Item 3 – Special Inspection items:

- Sprinkler Systems
- Standpipe Systems



**TR1: Technical Report  
Statement of Responsibility**

*This form must be typewritten*

---

**3 Special Inspection Categories (continued)** *Required for all applications, continued on page 2; ■ indicates report required.*

3A Identification of Requirement		3B Identification of Responsibilities	3C Certificate of Complete Inspections / Tests	3D Withdraw Responsibilities
Y	N	Code/Section	Initial & Date	Initial & Date
<input type="checkbox"/>	<input type="checkbox"/>	Raising and Moving of a Building	BC 1704.20.5	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Soil Penetration Test - Private On-Site Storm Water Drainage Disposal Systems, and Detention Facilities ■	BC 1704.21.1.2	
<input type="checkbox"/>	<input type="checkbox"/>	Private On-Site Storm Water Drainage Disposal Systems, and Detention Facilities Installation	BC 1704.21.2	
<input type="checkbox"/>	<input type="checkbox"/>	Individual On-Site Private Sewage Disposal Systems Installation	BC 1704.22	
<input type="checkbox"/>	<input type="checkbox"/>	Soil Penetration Test - Individual On-Site Private Sewage Disposal Systems ■	BC 1704.22	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sprinkler Systems	BC 1704.23	
<input type="checkbox"/>	<input type="checkbox"/>	Standpipe Systems	BC 1704.24	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Heating Systems	BC 1704.25	
<input type="checkbox"/>	<input type="checkbox"/>	Chimneys	BC 1704.28	
<input type="checkbox"/>	<input type="checkbox"/>	Fire-resistant Penetrations and Joints	BC 1704.27	
<input type="checkbox"/>	<input type="checkbox"/>	Aluminum Welding	BC 1704.28	
<input type="checkbox"/>	<input type="checkbox"/>	Flood Zone Compliance (attach FEMA/elevation/dry floodproofing certificate where applicable)	BC 1704.29	
<input type="checkbox"/>	<input type="checkbox"/>	Luminous Egress Path Markings ■ TR7	BC 1704.30	
<input type="checkbox"/>	<input type="checkbox"/>	Emergency and Standby Power Systems (Generators)	BC 1704.31	
<input type="checkbox"/>	<input type="checkbox"/>	Post-Installed Anchors (BS# 2014-018, 2014-019)	BC 1704.32	
<input type="checkbox"/>	<input type="checkbox"/>	Seismic Isolation Systems	BC 1707.9	
<input type="checkbox"/>	<input type="checkbox"/>	Concrete Design Mix ■ TR0	BC 1905.3 BC 1913.5	Submit TR0 to complete this item.
<input type="checkbox"/>	<input type="checkbox"/>	Concrete Sampling and Testing ■ TR2	BC 1905.6 BC 1913.10	Submit TR2 to complete this item.

---

**4 Progress Inspection Categories** *Required for all applications; ■ indicates report required.*

4A Identification of Requirement		4B Identification of Responsibilities	4C Certificate of Complete Inspections / Tests	4D Withdraw Responsibilities
Y	N	Code/Section	Initial & Date	Initial & Date
<input type="checkbox"/>	<input type="checkbox"/>	Preliminary	28-116.2.1, BC 110.2	
<input type="checkbox"/>	<input type="checkbox"/>	Footing and Foundation	BC 110.3.1	
<input type="checkbox"/>	<input type="checkbox"/>	Lowest Floor Elevation	BC 110.3.2	
<input type="checkbox"/>	<input type="checkbox"/>	Structural Wood Frame	BC 110.3.3	
<input type="checkbox"/>	<input type="checkbox"/>	Energy Code Compliance Inspections ■ TR6	BC 110.3.5	Submit TR6 to complete this item.
<input type="checkbox"/>	<input type="checkbox"/>	Fire-Resistance Rated Construction	BC 110.3.4	
<input type="checkbox"/>	<input type="checkbox"/>	Public Assembly Emergency Lighting	28-116.2.2	
<input type="checkbox"/>	<input type="checkbox"/>	Final*	28-116.2.4.2, BC 110.5, Directive 14 of 1975, and 1 RCNY §101-10	

\* For column 4C, indicate date when the actual final inspection was performed.

---

**5 Design Applicant's Statements and Signatures** *P.E./R.A. responsible for plans, choose both below and sign/seal.*

I have identified all of the special inspections, progress inspections and tests required for compliance.

I certify that the Special Inspection and Approved Agencies engaged by the owner to supervise the work specified above are acceptable. (BC 1704.1)

Name (please print)

---

Signature

---

Date

---

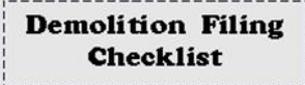
P.E./R.A. Seal (apply seal, then sign and date over seal)

TR1 12/2014

# Demolition Checklist Plans

## Demolition Checklist

- Is the minimum standards for required items on the demolition plan



1. The address on the plan must be the same as the "Filed At" location indicated BIS.

**1 Location Information (Filed At)**

House No(s): 280	Street Name: BROADWAY	Lot: 1	BIN: <a href="#">1079215*</a>	CB No: 101
Borough: Manhattan	Block: 153	Apt/Condo No(s):	Zip Code: 10007	
Work on Floor(s): PEN 001 thru 007				

2. All drawings must be to scale as per BC 28-104.7.3 (regarding plans drawn to suitable scale).

- All fonts must a minimum of 3/32" in size.

3. If the building is fully occupied or partially occupied:

- Tenant protection and or tenant safety plan may be required.
- Ensure that all occupied areas are shown in full or in part on the plans?

4. The following forms are required as part of your submission:

- Photos of all four elevations
- BEST 2A
- BEST 4B
- DS1
- TR1's
- PW1
- Required Asbestos form

5. The Demolition Plans must graphically represent the following, but is not limited to:

- Site plan must show the property to be demolished and all adjoining properties. Building stories and heights must be provided for both the building being demolished as well as the adjoining buildings with in 20' of the lot in question, in addition to horizontal offset of structures from property lines and from each other. All Addresses and block/lot numbers must be provided. Property lines must be clearly identified in bold lines.
- All Construction fencing/gates including type and location must be identified. The location of the project's info sign must also be shown. A section detail must be provided for the fencing. All dimensions must be shown for the above. BC 3307.3 Signage BC 3301.9.3

# Temporary Installations by the Numbers

In 2014:

- 7,186 Fence Permits were issued
- 3,029 Supported Scaffold permits were issued
- 5,799 Sidewalk Shed permits were issued
- 10,930 Suspended Scaffold notifications were received
  - 6,951 of which were C-Hook notifications
  - 3,979 of which were Outrigger Scaffold notifications

# Sidewalk Sheds 2014 NYC Building Code § 3307.6



**§ 3307.6.2 Where Required.** A sidewalk shed shall be installed and maintained to protect all sidewalks, walkways, and pathways within the property line of the site, and all public sidewalks that abut the property...

# Sidewalk Sheds - Where Required

Sidewalk sheds shall be installed and maintained to protect all sidewalks, walkways, and pathways within the property line of a site, and all public sidewalks that abut the property as follows:

1. Below a scaffold, mast climber or chute
2. When a structure or facade higher than 40 feet is to be constructed, altered, maintained, or repaired
3. When a structure higher than 25 feet is to be demolished

The decking of the sidewalk shed shall extend the full length of the area plus an additional 5 feet beyond the length\*. The decking must extend the full width of the protected sidewalk, walkway or pathway.

\* 20 foot extension if work is above 100 feet.



# Sidewalk Sheds - Design Requirements

## Design Loads

### Live Loads

1. Light Duty Sidewalk Shed (work above is less than 100 feet high) - 150 pound per square foot (psf).
2. Heavy Duty Sidewalk Shed- 300 psf.

### Wind Loads

The effect of wind loads, in accordance with NYCBC Chapter 16, must be considered in the design.

### Storage Loads

1. Light Duty Sheds - No items shall be stored or placed on these sheds.
2. Heavy Duty Sheds
  1. No material storage unless the shed is designed for such storage and the storage areas are clearly designated on the drawings.
    1. Storage Less than 150 psf: the 300psf design load need not be increased.
    2. Storage greater than 150 psf: The load of the item to be stored or placed on the shed, minus 150 psf must be designed for in addition to the 300 psf Live Load.

### Supported Scaffold Loads Imposed

Where a supported scaffold sits on a sidewalk shed, the shed must be designed to support all loads imposed by the supported scaffold.

### Foundation Imposed Loads

The surface upon which the shed rests shall be capable of supporting all of the design loads above.

# Sidewalk Sheds - Vertical Members and Beams

Vertical members and beams shall be:

1. Adequately braced and connected to prevent displacement or distortion of the framework
2. The vertical members shall be plumb with a tolerance of  $L/100$
3. The vertical members shall not be placed into the street without DOT approval
4. Vertical members placed on the sidewalk shall not be closer than 18 inches from the face of the curb line
5. Vertical members shall be placed at least 7 feet from the edge of a curb cut or vehicular access point



# Sidewalk Sheds - Deck

The deck shall:

1. Consist of 2-inch thick wood plank or equivalent and shall be capable of sustaining 300 psf/ 150 psf
2. Be solid or consist of planking laid close and tight
3. Shall abut a building or structure



# Sidewalk Shed- Parapet

The parapet shall:

1. Extend at least 3'-6" above the deck of the shed
2. Be constructed along all edges of the shed not abutting a building or structure
3. Be constructed of approved material and be attached to the shed with braced uprights



# Sidewalk Sheds- Height, Lighting, Color

---

**Height-** the passageway under the shed shall have a minimum clearance of 8 feet

**Lighting-** The underside of sidewalk sheds shall be illuminated at all times by either daylight or electric light

**Color-** Sidewalk sheds shall be painted the color of hunter green



# Sidewalk Sheds- Founding

The Surface upon which the shed rests shall be capable of supporting the design loads of the sidewalk sheds, including any storage



# Scaffolds Part A - Suspended Scaffolds

---

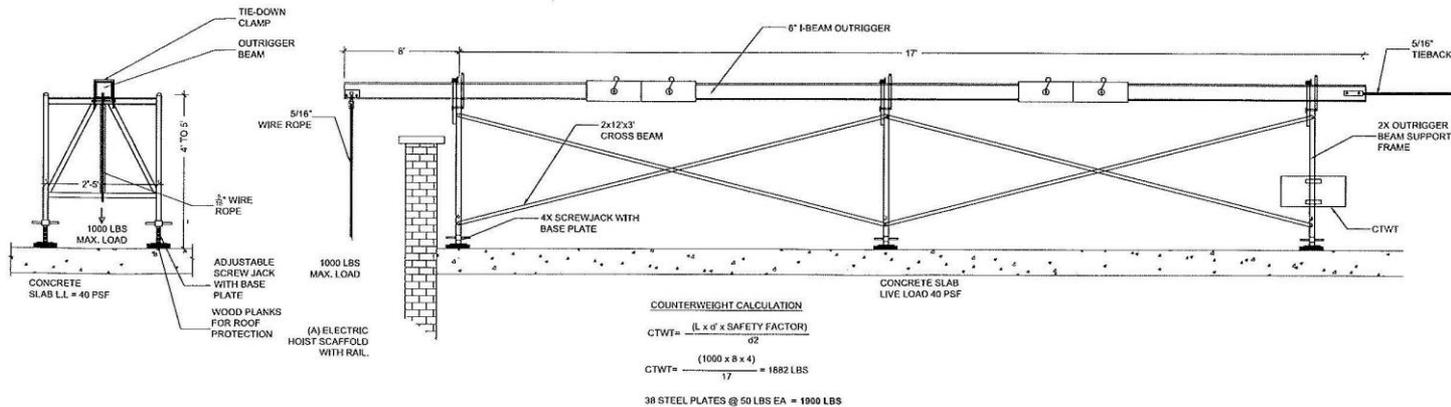


# Scaffolds - 2014 NYC Building Code § 3314

Suspended scaffolds drawings must provide, at a minimum, a plan view and an elevation view, full dimensions and details.

The following items are often not adequately provided in drawings:

1. All connections and attachments to the base structure.
2. Structural modifications required to the base structure
3. Required overhead protection
4. Specification of outrigger structure



# Suspended Scaffolds

## Design

Suspended scaffolds must be designed by a registered design professional. (See § 3314.3.2 for exceptions)

## Inspections

Prior to installation, After installation but prior to use, prior to each use, and following a repair or adjustment.

## Training

1. Supervisors- successful completion of a 32-hour approved training course and complete a 8-hour refresher course every 4 years thereafter.
2. Users- successful completion of a 16-hour approved training course and complete a 8-hour refresher program every 4 years thereafter.

## Capacity

1. Each scaffold, and its components, shall be capable of supporting its own weight and at least four times its maximum intended load.
2. Each suspension rope must be capable of supporting at least six times the maximum intended load.
3. All suspended scaffold support devices (outrigger beams, C-hooks, parapet clamps, etc.) must be supported by surfaces capable of supporting at least four times the loads imposed upon them by the operation and rated load of the hoist.

## Winds

Use of suspended scaffolding must be suspended when wind speeds (sustained or gusts) exceed 30mph.

# Suspended Scaffolds– Elements to be Vertical and Plumb

---

Ropes and suspension elements must be installed and used such that they are vertical and/ or in plane parallel to the wall at all times



# Suspended Scaffolds- Support Devices

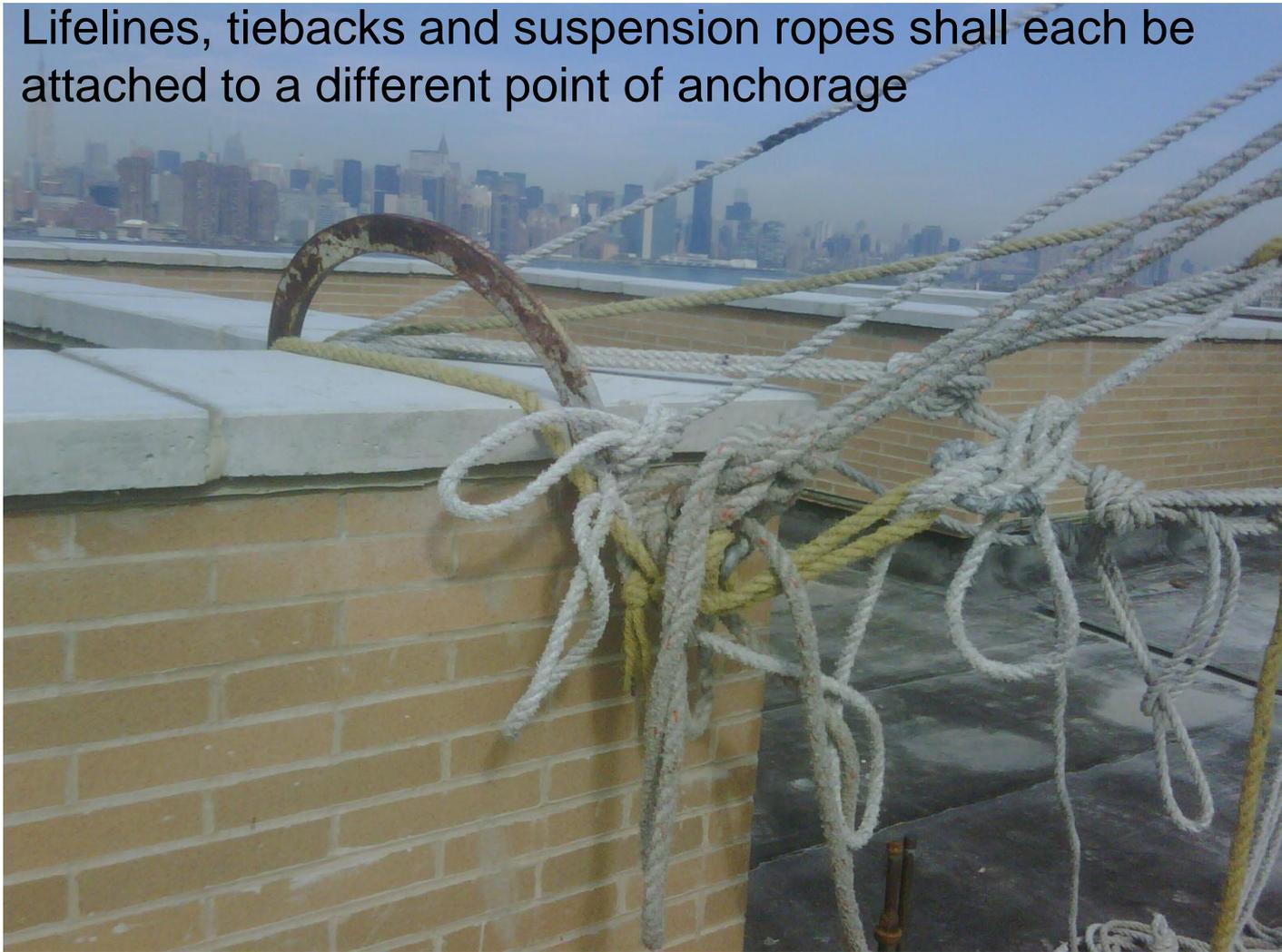
Suspended scaffold support devices, such as C-hooks, cornice hooks, roof hooks, parapet clamps or other devices shall meet the following:

1. Made of steel, wrought iron or equivalent
2. Supported by bearing blocks
3. Secured against movement by tiebacks installed perpendicular to the face of the building or structure and secured to a structurally sound point of anchorage



# Suspended Scaffolds- Anchorage

Lifelines, tiebacks and suspension ropes shall each be attached to a different point of anchorage



# Suspended Scaffolding- Wire and Rope



# Suspended Scaffold- Outrigger Beams



# Suspended Scaffold- Counterweights

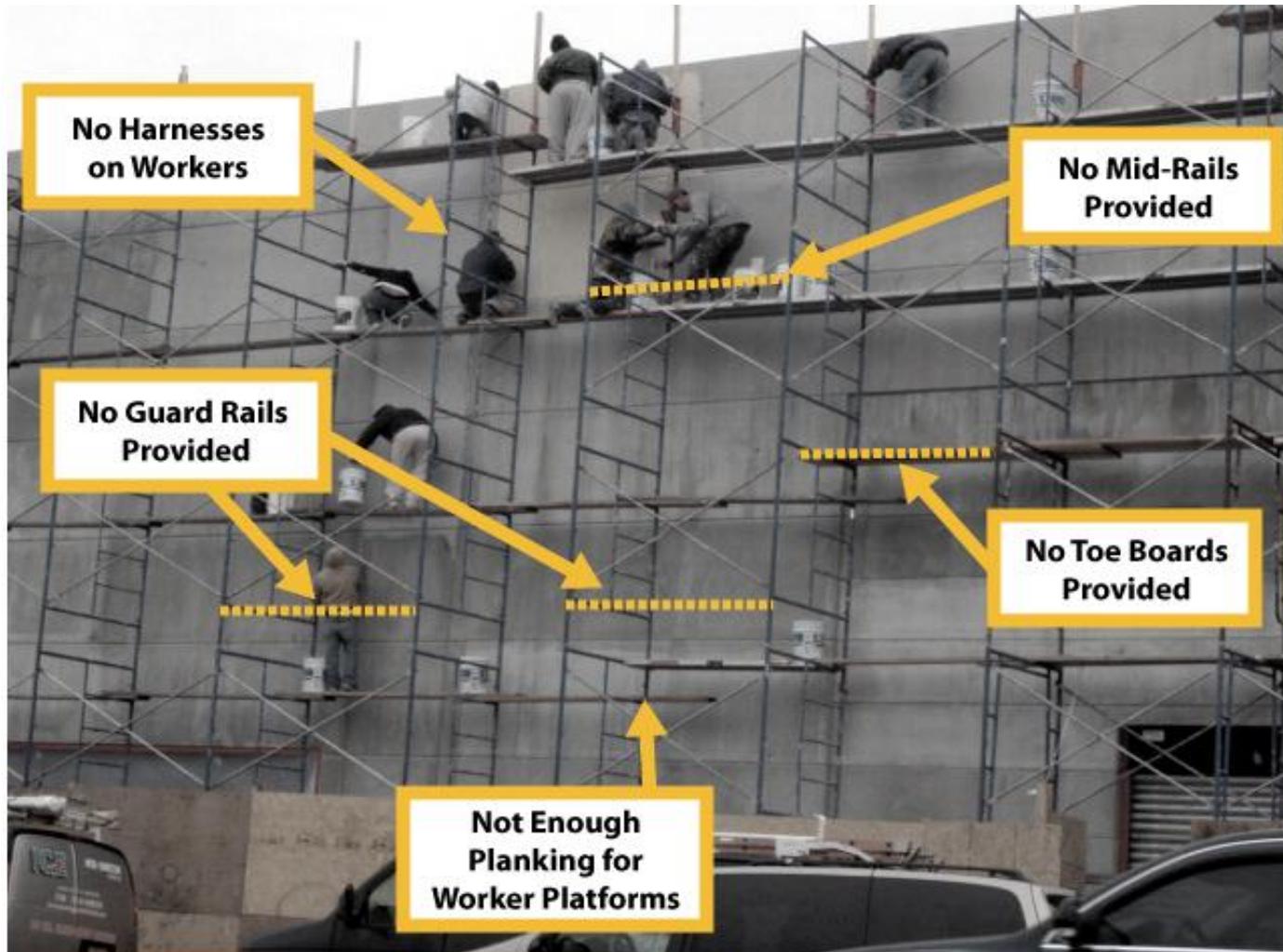


# Suspended Scaffolds- Defective Supports

---



# Scaffolds Part B- Supported Scaffolds

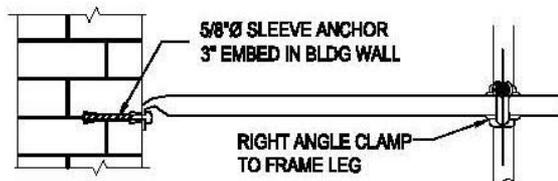


# Supported Scaffolds

Supported scaffolds drawings must provide, at a minimum, a plan view and an elevation view, full dimensions and details.

The following items are often not adequately provided in drawings:

1. All connections and attachments to the base structure. This includes, but is not limited to, specification of anchor type, embedment, and spacing.
2. Netting, with specific type and manufacturer clearly indicated.
3. Hoisting equipment located on the scaffold.
4. Maximum number of platform levels to be loaded simultaneously as well as the maximum permitted imposed loads on each platform.
5. Full specification and detailing of all structural members.
6. Founding of the scaffold and structural modification required to the base structure\*.
7. Wind loads used in design are often incorrect.



**A** SCAFFOLD WALL ATTACHMENT DETAIL  
EQ-002.00 SCALE: N.T.S.

# Supported Scaffolds

## Design

Supported scaffolds must be designed by a registered design professional. (See § 3314.3.1 for exceptions)

## Inspections

After installation but prior to use, Prior to each use, and following a repair or adjustment.

## Training

1. Supervisors- successful completion of a 32-hour approved training course and complete a 8-hour refresher course every 4 years thereafter.
2. Users- successful completion of a 4-hour approved training course and complete a 4-hour refresher program every 4 years thereafter.

## Capacity

1. Each scaffold, and its components, shall be capable of supporting its own weight and at least four times its maximum intended load.

## Winds

Use of supported scaffolding must be suspended when wind speeds (sustained or gusts) exceed 30mph.

# Supported Scaffolds- Platform Construction

Platforms on all working levels shall be:

1. Fully planked or decked
2. No more than 1 inch spacing
3. Have appropriate span support spacing
4. Overhang the support by at least 6 inches
5. Cantilever no more than 12 inches (for 10 foot or less span) or 18 inches (for spans greater than 10 feet)
6. Be tied down
7. Not deflect more than  $1/60$  of the span when loaded





# Supported Scaffolds- Anchorage

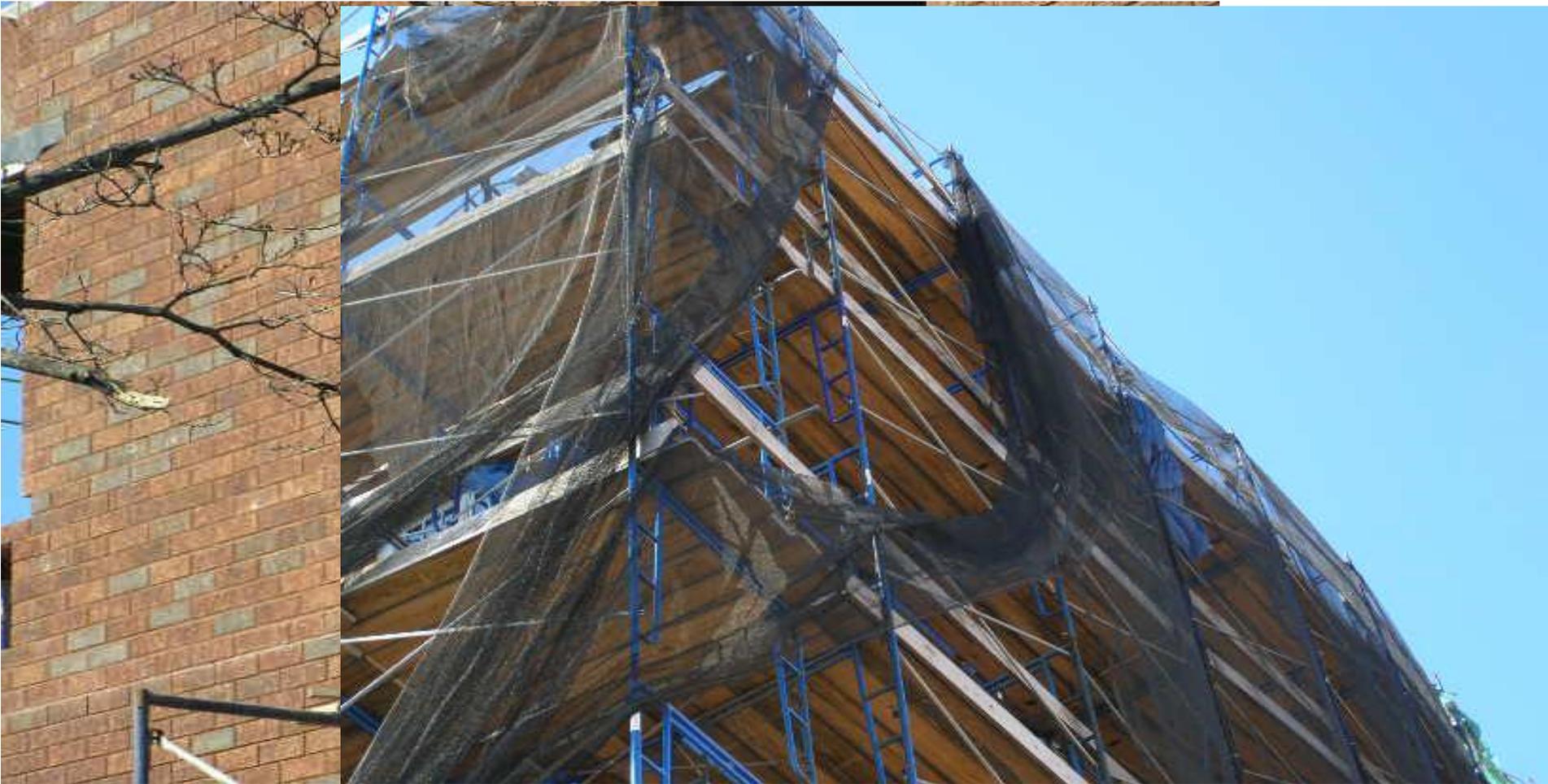
Anchorage shall be sound, rigid, capable of carrying the maximum loads and secured against movement in all directions



# Supported Scaffolds- Guardrails and Debris Netting

---

Open sides and ends must have a guardrail system and debris netting



# Fence Enclosures

---



# Fence Enclosures



# Fences - 2014 NYC Building Code § 3307.7

## Required

All sites where a new building is being constructed or where a building is being demolished to grade shall be enclosed by a fence

## Design

Fences must be designed by a registered design professional and must be designed to withstand wind

# Temporary Installations- 2014 NYC Building Code § 1618

## Temporary Installations

Defined as temporary when such installations are intended to be taken apart or removed after a limited period following their installation. Sidewalk Sheds, Scaffolds, Tents, and Cranes are examples of these types of installations.

## Duration

1. 1 Year: temporary Installations used during construction or demolition operations.
2. 90 days: temporary installations such as tents, platforms, bandstands and other structures covered by section 3103.

## Extension Requests

Such requests, subject to approval, must be accompanied by the submission of a report from a registered design professional that certifies the following

1. The registered design professional performed an inspection within the last 30 days which confirmed that the installation is in continued compliance with the requirements of the approved construction documents.
2. That the action plan is still in effect and reflects the current conditions of the installation.

## Construction Documents

Temporary installations implementing the exemptions and load reductions in the structural design must provide the following:

1. Prominent indication that the temporary structure was designed under reduced loads.
2. The environmental load mitigations must be clearly indicated.
3. Construction documents must be kept at the site at all times and be available upon request.

# Loads on Temporary Installations

Temporary installations must be designed and constructed to resist loads required for new construction

## Exemptions

Temporary installations that are accompanied by an action plan shall be permitted to reduce the design environmental loads as follows:

1. Seismic- permitted to use 2% of the design dead load and live load in lieu of the seismic forces required for new construction. These seismic loads shall be proportionally distributed, applied in any horizontal direction and need not be combined with other environmental loads
2. Wind- May apply a reduction factor of 0.8
3. Snow, Ice, Temperature Differential Effects, etc.- May be reduced as appropriate for the limited exposure

# Temporary Installations- Action Plans

## Action Plans

All temporary installations reducing the design environmental loads must include environmental load mitigation measures as part of an action plan.

## Implementation

Action plan must be reliably implemented in one day's notice or less

## Components

The action plan must include the following at a minimum:

1. Predicted environmental load thresholds.
2. Method of monitoring environmental loads.
3. Party responsible for monitoring and determining implementation.
4. Party responsible for implementing plan.
5. Evacuation procedures.
6. Safety zone requirements.
7. Other requirements such as addition or removal of structure or elements.
8. Prevention of wind-born debris plan.
9. Verification that the design will not adversely impact other structures.

# Temporary Structures- 2014 NYC Building Code § 3103

## Temporary Structures

Temporary Tents, Grandstands, Platforms, Bandstands, stages and similar miscellaneous structures erected for a period of 90 days or less

## Permits

A permit must be obtained from the department.

### 1. Exceptions

- a) Temporary Tents of less than 400 gross square feet for not more than 30 days
- b) Temporary platforms, reviewing stands, outdoor bandstands, and similar structures that cover an area less than 120 square feet for not more than 30 days

## Construction Documents

Must be submitted with the permit application and shall include a site plan indicating the location, egress, and occupant load

# Questions?

**This concludes the American Institute of Architects  
Continuing Education Systems Course.**

AIA Point of Contact:  
Allison Ginsburg

[Aginsburg@buildings.nyc.gov](mailto:Aginsburg@buildings.nyc.gov)

212.393.2167