



## BUILDINGS BULLETIN 2015-010

### Operational

**Supersedes:** 2013-013

**Issuer:** Thomas Fariello, RA  
First Deputy Commissioner

**Issuance Date:** May 19, 2015

**Purpose:** To clarify special inspection requirements related to raising, lifting, elevating or moving buildings.

<b>Related Code Sections:</b>	AC 28-101.5	BC 1704.20	BC 3306.2	BC 3319
	AC 28-104.7.13	BC 3302	BC 3306.5	
	AC 28-116.2.3.2	LL 29/2013	BC 3316	
		RCNY 101-06	BC 3317	

**Subject(s):** Building, raising; Building, moving; Building, lifting; Building, elevating; Local Law 29 of 2013; Special inspections, raising or moving of a building; Special inspectors, raising or moving of a building

### I. BACKGROUND

The purpose of this bulletin is to clarify Local Law 29 of 2013 that amended and added sections to the 2008 New York City Construction Codes for the “raising or moving of a building.” These additions and changes were subsequently incorporated into the 2014 update of the Construction Codes. The Building Code (BC) and Administrative Code (AC) sections in this bulletin are updated to reference the 2014 Codes. This bulletin describes the specific requirements for the special inspections of such work and for the construction documents needed for these special inspections.

Local Law 29 of 2013 amended and added sections to the NYC Construction Codes governing the raising, lifting, elevating or moving the lowest above-grade floor or the lowest subgrade floor of a building. The “work involving raising or moving a building” as stipulated in the Code, shall refer only to the on-site operations involved to raise, lift, elevate, lower or otherwise move an existing building or a substantial portion of an existing building. The “raising or moving” of a building may be necessary in order to comply with the Flood-Resistant Construction requirements of NYC Construction Codes, Appendix G.

The “work involving raising or moving a building” commences at the pre-construction inspection and preparation of the building and site, and ends when the building is in its new design elevation and/or location and is permanently secured to permanent construction. Raising, lifting, elevating or moving operations are subject to the requirements

listed in Building Code (BC) Chapter 33 (Safeguards during Construction or Demolition) and BC Chapter 17 (Structural Tests and Special Inspections) and may include but are not limited to the following:

1. The installation of temporary supports, shores, and braces to safely support the building or structure during the various stages of work;
2. The temporary modification of the building or structure to allow the proper transfer of loads to temporary supports;
3. The separation, dismantling or removal of the building from the other structural elements not intended to be moved or raised;
4. Various stages of work to move or raise the building until it is installed in its new elevation and/or location, including all installations and measures needed to maintain site safety during the work process; and
5. The transfer of loads to permanent construction and the attachment of structural members thereto.

## **II. REQUIREMENTS FOR CONSTRUCTION DOCUMENTS**

When an alteration application involves the “raising operations,” such work is subject to special inspections, required by BC Chapter 17 and explained in Part III of this Bulletin. Special inspections must be identified on the title sheet of the application’s construction drawings. In addition to any other new construction, the construction drawings must clearly identify the existing building, or substantial portion thereof, to be relocated, including its new location and elevation. Each construction drawing required for “raising operations” shall be clearly identified with the discipline designator “DM” (Partial Demolition) in accordance with the requirements outlined in the Department’s website link, [http://www.nyc.gov/html/dob/downloads/pdf/B-SCAN\\_080210.pdf](http://www.nyc.gov/html/dob/downloads/pdf/B-SCAN_080210.pdf)

The construction documents for raising operations shall be prepared by a registered design professional (RDP) per Section AC 28-101.5. Section BC 3302 defines “demolition, partial” as the “dismantling, razing, or removal of structural members, floors, interior bearing walls, and/or exterior walls or portions thereof, including all operations incidental thereto.” Therefore, “raising operations” include partial demolition and the submittal documents for raising operations must comply with Section BC 3306, and all of its subsections. In accordance with Section BC 3306.5.1, the required submittal documents for raising operations are required to be submitted to the department in advance of the issuance of a permit. The applicant responsible for the design of the raising operations shall submit signed and sealed plans for the raising operations and a DS1 form prior to the issuance of a permit. Question 3B of the DS1 form shall have the “Raising and/or moving a building” box checked off. The RDP can be the applicant of record or a different RDP, where such RDP submits a DS1 form which includes this information in Question 2, and attaches the design documents of the raising operations.

The application shall be filed as an Alteration Type 1 application if the raised and lifted home will be inconsistent with the current certificate of occupancy. Otherwise, the raising and lifting operation may be filed as an Alteration Type 2 application. In both cases the “yes” box must be checked on Questions 9L (both parts) and 21B of the PW-1 to indicate partial demolition, an impact on structural stability and the raising/moving of a building. The “yes” box of Question 9D “Other, specify:” must also be checked with “RMB” entered in the adjacent space.

### **A. Submittal Documents for Raising Operations**

The submittal documents for raising operations must adhere to all of the requirements in Section BC 3306.5.1, including Item 4, which mandates a description of compliance with the applicable provisions of Section BC 3306.9 as they pertain to partial demolition operations.

The submittal documents for the raising operations shall include a written sequence of operations, a list of all items that need to be monitored during the operation, and an analysis investigating the possible need to protect adjoining construction. The submittal documents shall specify the following as applicable:

- The capacity of the soil to temporarily support any installation used in the raising or moving operation.
- The maximum weight of the building or portion thereof that is to be raised or moved.
- The lateral loads that need to be resisted during the raising or moving operation. Such loads might be due to environmental loads specified in BC Chapter 16, or due to the maximum design permitted misalignment of the designed supporting system.
- Limiting allowances for deviation from horizontal or plumb lines.
- The type of machinery and installation to be used during the raising, lifting, elevating or moving operation and the rate/speed. No machinery can be substituted without a signed and sealed approval by the registered design professional of record.
- The construction or other work necessary to maintain the safety and integrity of the building to be raised, lifted, elevated or moved when such building is in a weakened condition or becomes weakened in the process of raising, lifting, elevating or moving.
- The protection of pedestrians and adjoining buildings pursuant to Section BC 3306.2, except that netting per Section BC 3308 is not required.

If the vertical distance from any point of the surrounding grade to the uppermost point of the building in its raised condition exceeds 25 feet, the following additional measures must be implemented: a special “safety zone”(as described in BC 3306.2.1) shall be clearly identified in the submittal documents and be in effect from the start of the actual vertical and/or horizontal relocation and shall remain in place until the placement of the building on temporary supports. The safety zone shall be measured horizontally from each face of the building to be moved or raised, and shall have a horizontal distance equal to at least one-half of the vertical height from the uppermost point of the relocated building to the immediate surrounding grade. Only “qualified persons” , as such term is defined in BC 3302, shall be present in the “safety zone” during any raising, lifting, elevating or moving operations.

### **III. SPECIAL INSPECTIONS**

Section BC 1704.20.5 requires a periodic special inspection where the lowest above grade floor or the lowest subgrade floor of a building is to be raised, lifted, elevated or moved. This special inspection will verify that the work performed is in compliance with the construction drawings submitted for the raising, lifting, elevating or moving operations, including site and building preparation. The site and building preparation includes, but is not limited to the disconnecting of utilities, the positioning of the equipment to be used for the lifting or moving, and the rating of this equipment.

Since Section BC 1704.20.1 Structural Stability of Existing Buildings includes “raising operations” in that it applies to “...alterations to existing structures in which loads are transferred from one structural system of structural

elements to another...,” raising, lifting, elevating or moving operations, including submittals and special inspections, must comply with the requirements outlined in Sections BC 1704.20.1 and BC 1704.20.4. The requirements for the special inspection of Section BC 1704.20.5 shall be considered as including any special inspections requirements pursuant to Sections BC 1704.20.6 through 1704.20.10. In addition, the special inspector will verify that the machinery or equipment used in the raising, lifting, elevating or moving of a building meets the type and rating of the approved submittal documents.

3 Special Inspection Categories (continued) Required for all applications, continued on page 2; inc			3B Identification of Responsibilities	3C Ce
3A ← Identification of Requirement			Initial & Date	
Y	N	Special Inspections	Code/Section	
<input type="checkbox"/>	<input type="checkbox"/>	Raising and Moving of a Building	BC 1704.20.5	
<input type="checkbox"/>	<input type="checkbox"/>	Soil Percolation 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		

Special Inspections shall be performed in accordance with The Rules of the City of New York (1 RCNY 101-06) and all other applicable requirements for special inspections in the Building Code, including but not limited to:

1. The obligation to avoid a conflict of interest;
2. Documentation of findings and test results; and
3. The reporting of findings.

**(a) Qualifications for Special Inspection Agency and Special Inspector**

The qualifications of a special inspector performing any special inspections pursuant to Section BC 1704.20.5 shall be the same as for a special inspector of “structural safety – stability” as outlined in the Rules of the City of New York (1 RCNY 101-06, Appendix A), which also stipulates registration of the special inspection agency. Procedures and operations for special inspections of “structural safety – stability” shall be in accordance with Sections BC 1704.20.1 and BC 1704.20.4.

**(b) Frequency of Inspection**

Special inspections for “raising operations” shall be periodic as described below:

The special inspector must visit the site when the site and building preparation for raising or moving is completed. No raising or moving shall be permitted before acceptance by the special inspector that the building and site preparation is complete and in accordance with the submittal documents.

When such operations are performed in stages, the special inspector shall be present at the first lift and at a minimum of one other subsequent lift. In addition, the special inspector shall be present during all lifts when the raised condition exceeds twenty-five feet requiring a safety zone per Part IIA of this bulletin. During the period when the building has not yet been securely attached to the permanent foundation, there shall be at least one weekly periodic special inspection.

At the end of the process, the special inspector shall certify that the raised, lifted, elevated or moved building was securely attached to permanent construction in its new elevation and/or location.

**(c) Special Inspections not under BC 1704.20.5**

Where applicable, construction operations of lifting equipment shall comply with the appropriate requirements of Section BC 3316 Hoisting Equipment, Section BC 3317 Material Hoists and Bucket Hoists, Section BC 3319 Crane and Derricks, and Section BC 3320 Material Handling Equipment. Such operations are not required to be in the purview of the Section BC 1704.20.5 special inspector.

The Section BC 1704.20.5 special inspection for raising operations shall not include the special inspection of any work necessary for the construction or installation of new and permanent structural, architectural or mechanical elements. For example, it shall not include any special inspection of work for the installation of new and permanent foundations, pile systems, basement walls or the repair of existing construction that will remain in its original location. All such construction operations shall be subject to the other special inspections listed in BC Chapter 17.

**IV. NOTIFICATION TO THE DEPARTMENT**

- (a) **Notification to the Department.** Pursuant to Section AC 28-116.2.3.2 no building “raising operations” within the property line shall commence unless the permit holder notifies the Department as here prescribed at least forty-eight (48) hours prior to the commencement of such work. The notification shall state the date that such raising operations shall commence. Should the notification date fall on a weekend or an official holiday, the permit holder shall notify the Department on the last business day before the commencement date.
- (b) **Cancellation.** In the event that the raising operations of the building do not begin on the date provided in the notification to the Department, the permit holder shall notify the Department of its cancellation not more than twenty-four (24) hours prior to but no later than the date for which the raising operations of the building was initially scheduled. Should the cancellation date fall on a weekend or an official holiday, the permit holder shall notify the Department on the next business day after the intended commencement date. The permit holder shall notify the Department of the new intended commencement date pursuant to the provisions of subdivision (a), above.
- (c) **Method of notification and cancellation.** Such notification and cancellation shall be made by submitting an online notification form located at:  
[http://www.nyc.gov/html/dob/html/development/forms\\_online\\_rmb.shtml](http://www.nyc.gov/html/dob/html/development/forms_online_rmb.shtml)  
OR by contacting NYC Buildings at **(212) 393-2550**
- (d) **Stop work order.** The Commissioner may issue a stop work order if there is a failure to provide notice as required in this section and if the work is found to violate any of the provisions of the Building Code, the Zoning Resolution or other applicable law, rule or regulation. The raising or moving of the building shall not recommence until the stop work order has been lifted.