

NYC Buildings Department 280 Broadway, New York, NY 10007

Rick D. Chandler, PE, Commissioner



# BUILDINGS BULLETIN 2015-031 Operational

Supersedes:	Buildings Bulletin 2013-014					
Issuer:	Gus Sirakis, P.E. Assistant Commissioner for Technical Affairs and Code Development					
Issuance Date:	November 4, 2015					
Purpose:	To clarify the submittal and permitting process for projects that require Structural Peer Review per BC Section 1617.					
Related Code/Zoning Section(s):	-	502 504.3 1604.5	BC BC BC	1614.1 1615 1616	BC	1617
Subject(s):	Construction document approval, structural peer review; Structural design, structural peer review; Structural peer review, structural peer review report; Structural peer review, structural peer reviewer					

## I. Background

BC Section 1617 of the Building Code requires Structural Peer review for certain types of structures as part of the construction document approval process. This bulletin describes the process to be followed for these structures to comply with this requirement.

#### II. Structural peer review to comply with BC Section 1617

Structural Peer Review required by BC Section 1617 shall meet the requirements and follow the process indicated in the code and as detailed in this bulletin.

BC Section 1617.2 lists the types of structures that require structural peer review and what should be in the scope of the review. A Structural Peer Review Report is required for the following buildings:

1. Buildings included in Structural Occupancy Category IV as defined in BC Section 1604.5 and more than 50,000 square feet (4,645 m<sup>2</sup>) of framed area.

2. Buildings with aspect ratios of seven or greater.

3. Buildings greater than 600 feet (183 m) in height or more than 1,000,000 square feet (92,903 m<sup>2</sup>) in gross floor area.

4. Buildings taller than seven stories where any element, except for walls greater than 10 feet (3.048 meters) in length, supports in aggregate more than 15 percent of the building area.

5. Buildings designed using nonlinear time history analysis or with special seismic energy dissipation systems.

6. Buildings designed for areas with 3,000 or more occupants in one area in close proximity, including fixed seating and grandstand areas.

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7. Buildings where a structural peer review is requested by the commissioner. Unless otherwise ordered, peer reviews requested by the Commissioner shall follow the format required in BC Section 1617 and the process described in this bulletin. The Commissioner may require additional items to be included in the scope of the peer review not specifically listed in BC Section 1617. A peer review requested by the Commissioner per BC Section 1617.2, Item 7 does not by itself require compliance with key element analysis provisions of BC Section 1616, unless specifically ordered by the Commissioner.

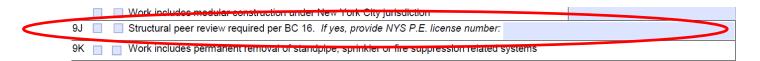
For the purposes of determining the building height for BC Section 1617.2, item 3, rooftop structures shall be considered in the calculation of the building height in accordance with BC Section 504.3.

Rooftop structures including but not limited to roof tanks and their supports, ventilating, air conditioning, combined heat and power systems and similar building service equipment, bulkheads, penthouses, greenhouses, chimneys, and parapet walls shall be considered in the evaluation of a building's aspect ratio, as defined in BC Section 1614.1, regardless of whether or not such rooftop structure is included in the building height.

The peer reviewer's qualifications shall be acceptable to the applicant of record for the structural design.

#### III. Identification of Peer Reviewer on PW1

All structural applications for new buildings shall contain a statement as to the whether or not the structure belongs to the type of structures listed in BC Section 1617.2. The applicant of record shall identify a project as being subject to structural peer review by filling out the appropriate question of section 9 of the Department's PW1 form:



For structures that require structural peer review the license number of the peer reviewing consultant shall be identified on the PW1 form in section 9.

#### IV. Requirements for structural peer review reports

Construction documents shall not be approved without a peer review report addressed to the Department that contains an acceptance of code compliance of the structural design. The text of the report shall be prepared according to BC Section 1617.6.2 *Contents* and this bulletin.

The submitted reports need not include the supporting calculations. The calculations shall be maintained by the peer reviewer for a minimum of six years after the date of project completion in accordance with New York State Rules of the Board of Regents, General Provisions for Design Professions § 29.3, item a.4 and shall be provided to the department upon request. Peer review reports shall be based on and reference only the set of construction documents submitted to the Department for approval, including Geotechnical reports. Reports shall list all drawings with the latest revision dates that were peer reviewed for a particular phase of the submission.

Phased submissions of the structural peer review report shall be acceptable in accordance with the requirements of BC Section 1617.6.3.

Each phased peer review report submission shall cover the construction documents submitted for that phase, and shall be without any exclusion that would make such review incomplete. These reports may enumerate the changes, if any, made following an initial structural peer review evaluation.

In the introduction to each submitted report, the peer reviewer shall list their qualifications meeting the requirements of BC Section 1617.4 for such structural peer review, including a statement that they are independent from the applicant of record for the structural design. In order to satisfy the requirement that the peer

reviewer be "independent," the Department requires that the peer reviewer must not engage in any activities that may conflict with their objective judgment and integrity, including but not limited to having a financial and/or other interest in the design, construction, installation, manufacture or maintenance of structures or components that they are reviewing.

Peer review reports shall provide a clear conclusion that may be either an acceptance of code compliance of the structural design or a rejection of the structural design. In order to obtain application approval, the peer reviewer must submit a peer review report that contains a positive evaluation indicating an acceptance of code compliance of the structural design, and include a completed "structural peer review statement," shown in Attachment-A, as part of the report. Positive evaluations with conclusions that contain exceptions will not be considered. The peer reviewer shall also provide copies of the submitted reports and statements to the building owner.

These reports shall be specific in reporting compliance with the items listed in BC Section 1617.5.1. In accordance with BC Section 1617.5.1, Item 8, the peer review report shall contain statements regarding compliance with the structural integrity provisions of Sections BC 1615 and BC 1616, or a statement that compliance with the structural integrity provisions is not required for this structure. In accordance with BC Section 1617.5.1, Item 9, the peer review reports shall include statements regarding compliance with any fire-resistance requirements included in performance-based fire studies incorporated into the design of the building.

### V. Modifications to the structural design

Post-approval amendments that include changes that substantially modify the basis of the structural peer review evaluation shall not be approved without a peer review report with a positive evaluation indicating an acceptance of code compliance of the structural design, including an updated statement per Attachment-A of this bulletin. It is the responsibility of the applicant of record to clearly identify on the plans the changes that are substantial and to notify the peer reviewer of any such changes.

### VI. Disputes and changes in designated peer reviewer

When a dispute arises between the applicant of record and the peer reviewer regarding compliance with BC Section 1617 which cannot be resolved by these parties, such dispute shall be reported to the Department in the form of a letter from the applicant of record. The Department may make a final decision or may accept a change of the peer reviewer.

The peer reviewer cannot be changed without the express consent of the Department. The current peer reviewer must submit both a written letter to the Borough Commissioner detailing the reason for the withdrawal request and a report of the structural peer review findings to date. If a change of peer reviewer is approved, a revised PW1 must be submitted indicating the replacement peer reviewer.

### Attachment A STRUCTURAL PEER REVIEW STATEMENT

This structural peer review and report is complete for the whole building, or For phase \_\_\_\_\_ of \_\_\_\_\_ phased submissions

Structural peer reviewer name:

Structural peer reviewer address:

**Project address:** 

Department application number for structural work:

### Structural Peer Reviewer Statement

I (insert name)\_\_\_\_\_\_\_\_ am a qualified and independent NYS licensed and registered engineer in accordance with BC Section 1617.4, and I have reviewed the structural plans, specifications, and supplemental reports for (Insert address and DOB application # for structural work)\_\_\_\_\_\_\_\_ and found that the structural design shown on the plans and specifications generally conforms to the foundation and structural requirements of Title 28 of the Administrative Code and the NYC Construction Codes. The Structural Peer Review Report is attached.

#### **New York State Registered Design Professional** (for Structural Peer Review only)

Name (please	print)	
Signature	D	ate
PE/RA Seal (a	pply seal, then sign and dat	e over seal)
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cc: Project Owner Project Registered Design Professional