2017 NYSUC and 2017 NYSUC SUPPLEMENT
REQUIRED STRUCTURAL CODE COMPLIANCE
CONSTRUCTION DOCUMENTATION
FOR WOOD FRAMED AND COLD FORMED STEEL FRAMED BUILDINGS

Submittals:

1. A full set of structural calculations showing compliance with and in accordance with the reference standard 2015 IBC 3rd printing as amended Chapters 16, 22 and 23 including nailing tables, sheathing tables and reference materials AISI, SDPWS-2015, ANSI/AWC NDS-2015 and ASCE-7 2010 and the AWC WFCM 2015 as well as AISI S100-12, S110-07, S200-12, S210-12, S211-07(S1-12), S213-07(S1-12).

2. Calculations shall show all items of NY State Building code section 1603 as well as design loads used including but not limited to live, dead, gravity, wind (all directions) and seismic (even if wind governs), impact (elevator, machines and cranes), roof/floor/wall diaphragm loads with blocking, sheathing and nailing. Also show calculations for deflection, drift and allowable wood shrinkage. Also include building occupancy (risk) category, surface roughness, wind exposure category, whether building was designed as open or enclosed and whether construction is restrained or unrestrained. Also note whether the design is ASD or LRFD as per code.

3. Design of each type of lateral load resisting system (in all directions) including roof and floor diaphragms and shear walls in all directions (and note types such as perforated, non-perforated, force transfer) and load transfer path such as roof to collector (collector splicing detail) and continuity to the foundation (especially connection to a podium slab). All connections and hold downs as well as shear wall bottom plate shear attachment connections and fasteners and post axial tension and compression loads and design shall be shown. Provide shear wall elevations with heights and lengths, loads, dimensioned openings, shear panel size and aspect ratio calculations, shear panel type and size with any blocking and edge and field nailing. Show and detail story to story connections. Show design and loads used for all connections for uplift and continuous load paths. Provide compliance drawings and details with the following code section.
§BC2304.10.6 Load path.
Where wall framing members are not continuous from the foundation sill to the roof, the members shall be secured to ensure a continuous load path. Where required, sheet metal clamps, ties or clips shall be formed of galvanized steel or other approved corrosion-resistant material not less than 0.0329-inch (0.836 mm) base metal thickness.

4. For computer generated calculations provide –

I. Analysis program description and explanatory comments. A program description shall be provided and shall contain information necessary to determine the following:
   a. Nature and extent of the analysis
   b. Verification of the input data
   c. Interpretation of the results
   d. Compliance of the computations with the applicable State code.
Explanatory comments by the designer besides the input and output data and a written summary that provides the controlling loads from the computer output in a graphical manner are recommended to facilitate the structural plans review. (items of note are live, dead, equipment and building loads, loads combinations used, design methods such as ASD, LRFD, simplified or ASCE-7 2010 wind design and either simplified or equivalent lateral force methods for seismic, Building Code and reference standards tables and equations used, etc...)
II. Identification of computer input. Data provided as computer input shall be clearly distinguished from those computed in the program.
III. Correlation between members and plans. The member identification used in the program input and results should be readily correlated with the members shown on the structural and architectural plans.

5. All structural members in the calculations shall be labeled and shown on the structural and architectural plans. Third party design of structural components shall be done by a licensed NYS design professional and submitted for code compliance review. All structural designers shall submit a Town of Islip structural affidavit.

Building construction in flood zones

New buildings, additions, and substantial improvements shall be structurally designed and shall comply with the following requirements for locations identified as flood hazard area (coastal high hazard area and coastal A zones).

1. Structural plans and required calculations shall be in accordance with:
   a. A soil boring test of the site shall be submitted. Soil boring shall indicate depth, soil types and soil bearing capacity as per the Unified Soil Classification system and water table.
   b. Town of Islip Zoning code Article XL, section 68-442, parts B and E.
   c. Reference standard 2015 IBC Chapters 16 and 18 as amended. Note all exterior decks and connections shall be designed for a 100 PSF live load, snow and wind loads and required pullout loads. All columns and posts shall have connections designed to resist lateral loads.
   d. ASCE-7 2010 and ASCE-24 2014