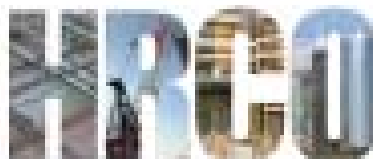


Design Industry Meeting II



New York City Department of Buildings

April 6, 2010

3-5PM

Currently Required by NYC Building Code and ACI 318:

- Specified Compressive Strength and Rebar Grade
 - Sizes, sections, and locations of structural elements
 - Provisions for dimensional changes
 - Prestress Forces and stressing sequences
 - Anchorage and lap splice details (location, length)
 - Mechanical and welded splice details
 - Details of contraction and isolation joints
 - Slab-on-grade diaphragm action (if any)
-

Additional Current New York City Building Code Requirements:

- **Sufficient clarity** (28-104.7.1)
 - **Referenced codes** (28-104.7.5)
 - **Column loads, and accumulated column loads at each floor** (106.7.4)
 - **Truss element forces** (106.7.5)
 - **Design loads pertinent to design** (1603.1)
 - **Building classification** (106.4)
 - **Chemical and sulfate exposure classifications** (1901.4)
 - **Maximum Chloride ion concentrations** (1901.4)
-

HRCO Proposals for Minimum Drawing Information

- Information is in addition to existing ACI and NYC code requirements
 - This additional information will be used as part of a DOB audit
 - Seeks to set baseline information levels available to future DOB audit processes
 - Recommendations reflect existing best practices of many firms in NYC
-

1. Provide Member End Reactions

- **Critical members (e.g. at a minimum; transfer girders, shear walls, link beams)**
 - **Information to include capacities and design reactions (in lieu of loads and analysis results)**
-

2. Show Main Wind Resisting System Element Loads

- May be listed in a schedule
 - At a minimum, include capacities and design reactions
-

3. Reinforcement Detail with Sufficient Specificity

- Level of detail commensurate with CRSI and ACI 315
 - Column splice configurations, procedures, or notes
 - Notes or drawings addressing rebar precedence
 - Beam bar cut-off details
 - Representative details of typical conditions
 - Details of atypical conditions
-

4. Show Reinforcing Details for RC Beams on Drawings

- At columns with three or more framed beams
 - Where beam $\rho \geq 1.25\%$
 - At top and bottom of PT drapes
 - Where beams frame into transfer girders
 - At beam intersections with more two or more layers of steel
-

5. Load Key Plan

- Design dead and live loads
 - Repetitive floors may be combined into one keyplan
 - Include location and approximate size of special loads (e.g. mechanical units)
-

6. Foundation Loads

- **Include with column load schedule**
 - **Include capacities and design reactions**
-

7. Construction Joint Information

- Limitations on location
 - May be included as a note
-

8. PE Responsible for Building Stability

- **Stability under temporary construction loads**
 - **Temporary bracing for steel buildings**
 - **Shoring/reshoring**
 - **Crane tie-in**
 - **Adjacent structures**
-

High-rise Concrete



Concrete 

hrcoteam@buildings.nyc.gov
