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|  | [Picture](http://intranet.delmar.dasny.org/OEI/Communications/DASNYLogos/Print%20Format-%20New%20DASNY%20logo%20and%20tagline%20for%20Printed%20Materials/LOGOTAGLINE_CMYK_288_50eps.jpg) | | | **NYC STATEMENT OF SPECIAL**  **INSPECTIONS & TESTS**  Required by the 2014 New York City Building Code (NYCBC) | |
| **The Registered Design Professional shall complete this table with respect to the project scope and include with the DASNY General Requirements, Section 0140001** | | | | | |
| **Campus/Facility:** | | | | | |
| **Project Title:** | | | | | |
| **Project #:** | | **DASNY Project Manager:** | | | |
| **Registered Design Professional (RDP):** | | | | | |
| **Name of Person Completing Statement:** | | | **Phone:** | | **Date:** |
| **Comments:** | | | | | |

| **VERIFICATION AND INSPECTION** | **CONTINUOUS** | **PERIODIC** | **2014 NYCBC REFERENCE** | **CHECK IF REQUIRED** | **SPECIFICATION REFERENCE AND CLARIFYING NOTES**  **(by RDP)2** | **COMMENTARY/NOTES (by DASNY)3** |
| --- | --- | --- | --- | --- | --- | --- |
| Steel Construction |  |  | 1704.2, 1704.3  Table 1704.3 |  |  | Fabrication of structural members and field assembly. |
| 1. Material verification of high-strength bolts, nuts, and washers: |  |  |  |  |  | Includes submittal review and field verification. |
| 1. Identification markings conform to ASTM standards |  | X |  |  |  | As specified in the construction documents |
| 1. Manufacturer’s certificate of compliance required. |  | X |  |  |  |  |
| 1. Inspection of high-strength bolting: |  |  | 1704.3.3 |  |  |  |
| 1. Snug-tight joints |  |  |  |  |  | Turn of the nut bolting shall be continuously inspected. |
| 1. Pre-tensioned and slip- critical joints |  |  |  |  |  | Turn of the nut without matchmarking or calibrated wrench shall be continuous. |
| 1. Material verification of structural steel and cold formed steel deck: |  |  |  |  |  |  |
| 1. Identification of markings |  | X |  |  |  | Assure conformance to AISC 360 for structural steel; ASTM standards in approved CD’s for other steel. |
| 1. Mfr. certified mill test reports |  | X |  |  |  | Review each submittal. |
| 1. Material verification of weld filler materials |  | X |  |  |  | Includes (a) review of manufacturer’s certificate of compliance and (b) field verification of identification markings to AWS spec. |
| 1. Inspection of welding: |  |  | 1704.3.1 |  |  | NDT requirements and frequencies as specified in the Contract Documents. |
| 1. Complete and partial penetration groove welds. | X |  |  |  |  |  |
| 1. Multi-pass fillet welds | X |  |  |  |  |  |
| 1. Single pass fillet welds greater than 5/16” | X |  |  |  |  |  |
| 1. Plug and slot welds | X |  |  |  |  |  |
| 1. Single pass fillet welds less than or equal to 5/16” |  | X |  |  |  |  |
| 1. Floor and roof deck welds. |  | X |  |  |  |  |
| 1. Cold-formed steel welds |  | X |  |  |  |  |
| 1. Reinforcing steel welding: |  |  | Table 1704.3, 1903.5.2 |  |  |  |
| 1. Verification of weldability of steel other than ASTM A706 |  | X |  |  |  |  |
| 1. Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames | X |  |  |  |  | Applies also to boundary elements of special reinforced concrete shear walls and shear reinforcement. |
| 1. Shear reinforcement | X |  |  |  |  |  |
| 1. Other reinforcing steel |  | X |  |  |  |  |
| 1. Inspection of steel frame joint details: |  |  | 1704.3.2 |  |  | Review for compliance with approved construction docs. |
| 1. Details such as bracing and stiffening. |  | X |  |  |  |  |
| 1. Member locations |  | X |  |  |  |  |
| 1. Application of joint details at each connection. |  | X |  |  |  |  |
| 1. Verification of welder license/certification and welding procedures. | X |  | 2204.1  28-407.1 |  |  |  |
| Cold-Formed Steel Light-Frame Construction |  |  | 1704.3.4  Table 1704.3.4 |  |  | Fabrication of prefabricated structural elements and site-built assemblies. |
| 1. Material Verification (per construction documents) |  | X |  |  |  | Identification markings and that material is clean, straight and undamaged. |
| 1. Inspection of General Framing |  |  |  |  |  |  |
| 1. Member Sizes |  | X |  |  |  | Conformance to approved construction documents. |
| 1. Member Layout |  | X |  |  |  |  |
| 1. Proper Bearing Lengths |  | X |  |  |  |  |
| 1. Punched holes and sheared or flame cut edges of material |  | X |  |  |  | Material in members shall be clean and free from notches and burred edges. |
| 1. Framing connections and anchorages: |  |  |  |  |  |  |
| 1. Diameter, length, quantity, spacing, edge distance and location of screws, bolts and other fasteners. |  | X |  |  |  | Conformance to approved construction document requirements. |
| 1. Manufactured connectors, such as joist hangars, caps, straps, clips, ties, hold-downs and anchors. |  | X |  |  |  | Conformance to approved construction document requirements for manufacturer, type, gauge and fastener requirements. |
| 1. Welding (in accordance with Table 1704.3) |  | X |  |  |  |  |
| 1. Bracing |  |  |  |  |  |  |
| a. Temporary bracing, shoring, jacks, etc. |  | X |  |  |  | Installed and not removed until no longer necessary in accordance with approved construction documents and erection drawings. |
| b. Permanent bracing, web stiffeners, bridging, blocking, wind bracing, etc. |  | X |  |  |  | Installed in accordance with approved construction documents and erection drawings. |
| c. For truss spans 60 feet or greater, temporary and permanent restraint/bracing |  | X | 2210.3.4 |  |  | Conformance to approved truss submittal package. |
| Concrete Construction |  |  | 1704.2, 1704.4  Table 1704.4 |  |  | Includes inspection of fabricators (precast) where applicable per BC 1704.2. |
| 1. Inspection of reinforcing steel, including prestressing tendons and placement. |  | X | 1903.5, 1907.1, 1907.7, 1913.4 |  |  |  |
| 1. Inspection of reinforcing steel welding. |  | X | 1903.5.2 |  |  | Includes anchor bolt welding. See Item B.6 above. |
| 1. Inspection of bolts to be installed in concrete prior to and during placement. | X |  | 1911.5, 1912.1 |  |  | Where allowable loads have been increased or strength design used. |
| 1. Inspection of anchors installed in hardened concrete. |  |  | 1912.1 |  |  |  |
| 1. Verify use of required design mix. |  | X | 1904, 1905.2 - 1905.4, 1913.3 |  |  | Submittal review. Batch plant inspection as specified in the contract documents. |
| 1. Sampling fresh concrete: perform slump, unit weight, air content, temperature and fabricate strength test specimens. | X |  | 1905.6, 1913.10 |  |  | Frequency of sampling and testing must be per the contract documents. |
| 1. Inspection of concrete and shotcrete placement for proper application techniques. | X |  | 1905.9,1905.10, 1913.6 - 1913.8 |  |  | Also includes precast and shotcrete placement. For precast inspection (in-plant) specify PCI-MNL116 |
| 1. Inspection for maintenance of specified curing temperature and techniques. |  | X | 1905.11, 1905.13, 1913.9 |  |  | Field inspection of curing process. |
| 1. Inspection of prestressed concrete: |  |  | 1704.2 |  |  |  |
| 1. Application of pre-stressing forces | X |  |  |  |  |  |
| 1. Grouting of bonded pre-stressing tendons in the seismic-force-resisting system. | X |  |  |  |  |  |
| 1. Erection of precast concrete members. |  | X |  |  |  | Specify PCI-MNL127. |
| 1. Verification of in-situ concrete strength prior to stressing of tendons in post tensioned concrete and prior to removal of shores and forms from beams / structural slabs. |  | X | 1906.2 |  |  | Review field testing and laboratory reports. |
| 1. Inspection of formwork for shape, location and dimensions of members. |  |  | 1906.2 |  |  |  |
| Masonry Construction L1 = Level 1 Inspection  L2 = Level 2 Inspection |  |  | 1704.5  Table 1704.5.1 Table 1704.5.3 |  | **Structural Occupancy Category:** | See NYCBC 1704.5.1 through 1704.5.3 for clarification of Level 1 vs. Level 2 inspection. |
| 1. Verify compliance with inspection provisions of Construction Documents and approved submittals. |  | X  L1L2 |  |  |  | Inspection and test requirements per the contract documents. Inspection(s) may need to be continuous. |
| 1. Verify f’m and f’AAC |  |  |  |  |  |  |
| 1. Prior to construction |  | X  L1 |  |  |  | Except where exempted by Code. |
| 1. Prior to construction and for every 5,000 square feet |  | X  L2 |  |  |  |  |
| 1. Verify proportions of materials in premixed or preblended mortar/grout. |  | X  L2 |  |  |  | As delivered to the site. |
| 1. Verify slump flow and VSI for self-consolidating grout. | X  L1  L2 |  |  |  |  | As delivered to the site |
| 1. As masonry construction begins, the following shall be verified: |  | X  L1 |  |  |  |  |
| * 1. Proportions of site-prepared mortar |  | X  L1 |  |  |  |  |
| * 1. Construction of mortar joints |  | X  L1 |  |  |  |  |
| * 1. Location of reinforce-ment, connectors, prestressing tendons and anchorages |  | X  L1 |  |  |  |  |
| * 1. Prestressing techniques |  | X  L1 |  |  |  |  |
| * 1. Grade and size of pre-stressing tendons and anchorages |  | X  L1 |  |  |  |  |
| 1. Verify to ensure compliance: |  |  |  |  |  |  |
| 1. Placement of masonry units and construction of mortar joints. |  | X  L2 |  |  |  |  |
| 1. Construction of mortar joints |  | X  L1 |  |  |  | Verify prior to grouting  (Level 1) |
| 1. Placement of reinforcement, connectors, tendons and anchorages. |  | X  L1  L2 |  |  |  |  |
| 1. Proportions of site-prepared grout and prestressing grout for bonded tendons. |  | X  L1  L2 |  |  |  | *For Level 2 inspection only*, proportions of site-prepared mortar shall also be verified. |
| 1. Grout space is clean | X  L2 | X  L1 |  |  |  |  |
| 1. Placement of grout | X  L1  L2 |  |  |  |  |  |
| 1. Placement of pre-stressing grout | X  L1  L2 |  |  |  |  |  |
| 1. Inspection program shall verify: |  |  |  |  |  |  |
| 1. Size and location of structural elements. |  | X  L1L2 |  |  |  | Field and submittal review. |
| 1. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other. | X  L2 | X  L1 |  |  |  |  |
| 1. Specified size, grade and type of reinforce-ment, anchor bolts, prestressing tendons and anchorages. |  | X  L1L2 |  |  |  |  |
| 1. Welding of reinforcing bars. | X  L1L2 |  |  |  |  |  |
| 1. Preparation, construc-tion and protection of masonry during cold or hot weather. |  | X  L1L2 | 2104.3  2104.4 |  |  |  |
| 1. Measurement and application of pre-stressing force.. | X  L2 | X  L1 |  |  |  |  |
| 1. Preparation of any required grout specimens, mortar specimens and/or prisms. | X  L1  L2 |  | 2105.2.2  2105.3 |  |  | Includes observation of contractors sampling and preparation of samples by the Special Inspection agent. |
| 1. **Wood Construction**: |  |  | 1704.2  1704.6 |  |  | Fabrication of prefabricated structural elements and site-built assemblies. |
| 1. Installation of high-load diaphragms |  |  | 1704.6.1 |  |  |  |
| 1. Installation of metal-plate-connected trusses |  |  | 1704.6.2 |  |  |  |
| 1. Installation of pre-fabricated I-joists |  |  | 1704.6.3 |  |  |  |
| 1. Other structural wood construction |  |  | 1704.6.4 and 110.3.3 |  |  | Progress inspection per BC 110.3.3. |
| Soils |  |  | 1704.7 |  |  |  |
| 1. Subgrade inspection |  | X | 1704.7.1 |  |  | Field inspection and testing to verify that the site is prepared in accordance with the approved soils report. |
| 1. During fill placement | X |  | 1704.7.2 |  |  | Review submittals, field testing and inspection. Verify soil types and lift thickness are per contract documents. |
| 1. Evaluation of in-place density | X |  | 1704.7.3 |  |  | Verify conformance with contract documents. |
| 1. **Deep foundation elements** | X |  | 1704.8 |  |  | Special inspector shall verify installation conforms to contract documents. |
| 1. **Helical Pile Foundations** | X |  | 1704.8.5 |  |  |  |
| 1. **Vertical masonry foundation elements** | X |  | 1704.9 |  |  |  |
| 1. **Wall Panels, Curtain Walls and Veneers** | X |  | 1704.10, 1704.5 |  |  | Applicable to installation on buildings over a height of 40’. |
| Sprayed Fire-Resistant Materials (SFRM) |  |  | 1704.11.1 |  |  | Per AWCI 12-A |
| 1. Structural member surface conditions |  | X | 1704.11.2 |  |  | Field review of surface conditions prior to application. |
| 1. Application |  | X | 1704.11.3 |  |  | Verify ambient temperature and ventilation requirements before and after application. |
| 1. Thickness |  | X | 1704.11.4 |  |  | Field test. |
| 1. Density |  | X | 1704.11.5 |  |  | Collect field sample, test in laboratory. |
| 1. Bond strength |  | X | 1704.11.6 |  |  | Field test. |
| 1. Inspection of existing SFRM during alterations |  | X | 1704.11.7 |  |  | Classified in Occupancy Group B. |
| 1. **Mastic and intumescent fire-resistant coatings** |  | X | 1704.12 |  |  | Per AWCI 12-B |
| 1. **Exterior Insulation and Finish Systems (EIFS)** |  | X | 1704.13 |  |  | Applications installed more than 15 feet above grade. |
| Special Cases (Attach Additional Information as necessary) |  |  | 1704.14 |  |  | Applies to alternative materials and systems, when required by NYCDOB. |
| Smoke Control Systems |  | X | 1704.15,  909 |  |  | Inspect during ductwork, erection and system testing. |
| Mechanical Systems |  |  | 1704.16 |  |  | Includes interior and exterior mechanical systems and equipment. |
| Fuel Oil Storage and Piping Systems |  |  | 1704.17 |  |  | Inspection for conformance with the approved CD’s and manufacturers’ requirements. |
| High Pressure Steam and High Temperature Hot Water Piping |  |  | 1704.18 |  |  | Welder qualifications, welding procedures and operations, hydrostatic testing |
| High-pressure-gas piping |  |  | 1704.19 |  |  | Welder qualifications, welding procedures and operations, pressure testing |
| Structural Stability |  |  |  |  |  |  |
| Structural stability of existing buildings |  | X | 1704.20.1 |  |  | Applicable to structural alterations. |
| Excavations |  | X | 1704.20.2 |  |  | Methods employed to protect the sides of excavations. |
| Underpinning |  | X | 1704.20.3 |  |  |  |
| Demolition |  | X | 1704.20.4 |  |  | For use of mechanical demolition equipment other than handheld devices. |
| Raising and moving of a building |  |  | 1704.20.5 |  |  |  |
| Private on-site storm water disposal systems and detention facilities |  | X | 1704.21 |  |  | Applies to storm water detention, roof retention and dry well systems. |
| Individual on-site private sewage disposal systems |  | X | 1704.22 |  |  |  |
| Sprinkler Systems |  |  | 1704.23 |  |  | Applies to new and altered systems. |
| Standpipe Systems |  |  | 1704.24 |  |  |  |
| Heating Systems |  |  | 1704.25 |  |  |  |
| Chimneys |  |  | 1704.26 |  |  |  |
| Fire-resistant penetrations & joints. |  | X | 1704.27 |  |  | Penetration firestops and joint systems. |
| Aluminum construction |  |  | 1704.28 |  |  | Applies to structural aluminum elements. |
| Flood zone compliance |  |  | 1704.29 |  |  |  |
| Photoluminescent exit path markings |  |  | 1704.30 |  |  |  |
| Emergency and standby power systems |  |  | 1704.31 |  |  | Generators |
| Post-installed anchors |  |  | 1704.32  Table 1704.32 |  |  | Mechanical, adhesive and screw anchors. |
| Seismic Resistance |  |  |  |  |  |  |
| Mechanical, plumbing, fuel gas and electrical components |  | X | 1707.7 |  |  | Applies to structures assigned to SDC C or D. |
| Seismic Isolation Systems |  | X | 1707.8 |  |  | Installation of isolator units & energy dissipation devices. |
| Progress Inspections |  |  |  |  |  |  |
| Preliminary |  |  | 110.2 |  |  |  |
| Footing & Foundation |  |  | 110.3.1 |  |  |  |
| Lowest Floor Elevation |  |  | 110.3.2 |  |  |  |
| Structural Wood Frame |  |  | 110.3.3 |  |  |  |
| Fire-Resistance Rated Construction |  |  | 110.3.4 |  |  |  |
| Energy Code Compliance |  |  | 110.3.5 |  |  |  |
| Public Assembly Emergency Lighting |  |  | 28-116.2.2 |  |  |  |
| Final |  |  | 110.5 |  |  |  |
| GG. Other Chapter 17 Requirements |  |  |  |  |  | Indicate if requirements of BC 1711-1716 are applicable. |
|  |  |  |  |  |  |  |
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TABLE LEGEND:

* NYCDOB - New York City Department of Buildings
* RDP – Registered Design Professional (A/E – Architect / Engineer)
* SDC – Seismic Design Category
* NYCBC – 2014 New York City Building Code

NOTES:

1. Completion of this form by the RDP is a DASNY requirement and separate from the TR1: Technical Report Statement of Responsibility form required to be filed with the New York City Department of Buildings.
2. RDP to provide reference specification section detailing the requirements for inspections and/or tests and other clarifying notes, as necessary.
3. Commentary / Notes by DASNY are provided for information and are not intended to provide complete details of the required tests and inspections. Refer to the 2014 NYCBC for complete and detailed requirements.