



# Statement of Special Inspections

Project: 4PB0247A PB247/Roosevelt Arms  
Location: 226 Stephens Ave. Portland, ME  
Owner: T-Mobile Northeast LLC  
Design Professional in  
Responsible Charge: Daniel P. Hamm, P.E., Hudson Design Group, LLC

This *Statement of Special Inspections* is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Special Inspection Coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This *Statement of Special Inspections* encompasses the following disciplines:

- Structural
- Mechanical/Electrical/Plumbing
- Architectural
- Other: Entire Project

The Special Inspection Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Registered Design Professional in Responsible Charge.

A *Final Report of Special Inspections* documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

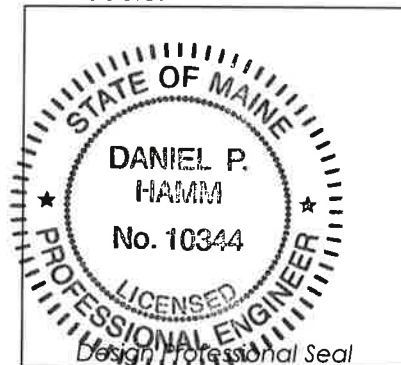
Interim Report Frequency: Upon Completion of Project  
Prepared by:

or  per attached schedule.

Daniel P. Hamm, P.E.  
(type or print name)

  
Signature

12/13/17  
Date



Project Owner's Authorization:

Building Official's Acceptance:

Signature

Date

Signature

Date

# Referenced Standards

- (IBC) 2009
- (TIA-222-G) Structural Standard for Steel Antenna Towers and Antenna Supporting Structures, Revision G
- (AISC) American Institute for Steel Construction, 13<sup>th</sup> Edition
- (ASTM) American Society for Testing and Materials
- (ACI-318) Building Code Requirements for Structural Concrete
- (ACI-347) Guide to Formwork Concrete
- (ACI-301) Placement of Concrete
- (AWS) American Welding Society
- (NEC) National Electrical Code
- (FCC) Federal Communications Commission Rules and Regulations Form 715

# Schedule of Inspection and Testing Agencies

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- |  |   |
|--|---|
| <input type="checkbox"/> Soils and Foundations       | <input type="checkbox"/> Spray Fire Resistant Material              |
| <input type="checkbox"/> Cast-in-Place Concrete      | <input type="checkbox"/> Wood Construction                          |
| <input type="checkbox"/> Precast Concrete            | <input type="checkbox"/> Exterior Insulation and Finish System      |
| <input type="checkbox"/> Masonry                     | <input checked="" type="checkbox"/> Mechanical & Electrical Systems |
| <input checked="" type="checkbox"/> Structural Steel | <input type="checkbox"/> Architectural Systems                      |
| <input type="checkbox"/> Cold-Formed Steel Framing   | <input type="checkbox"/> Special Cases                              |

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. <b>Special Inspection Coordinator</b>	Hudson Design Group, LLC Daniel P. Hamm, P.E.	45 Beechwood Drive North Andover, MA 01845 <a href="mailto:daniel.hamm@hudsondesigngroupllc.com">daniel.hamm@hudsondesigngroupllc.com</a> (978)557-5569
2. Inspector	Hudson Design Group, LLC Derek Creaser, P.E.	45 Beechwood Drive North Andover, MA 01845 <a href="mailto:derek.creaser@hudsondesigngroupllc.com">derek.creaser@hudsondesigngroupllc.com</a> (978)557-5569
3. Inspector	Hudson Design Group, LLC Mark McClusky, P.E.	45 Beechwood Drive North Andover, MA 01845 <a href="mailto:mcclusky@hudsondesigngroupllc.com">mcclusky@hudsondesigngroupllc.com</a> (978)557-5569

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

# Quality Assurance Plan

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## Quality Assurance for Seismic Resistance

Seismic Design Category	B
Quality Assurance Plan Required (Y/N)	N/A

Description of seismic force resisting system and designated seismic systems:  
*Not applicable, does not control*

## Quality Assurance for Wind Requirements

Basic Wind Speed <b>Roof</b> (3 sec. gust)	100 mph
Basic Wind Speed <b>Ground</b> (3 sec. gust)	110 mph
Wind Exposure Category	B
Quality Assurance Plan Required (Y/N)	N

Description of wind force resisting system and designated wind resisting components:

*Steel Mast Designed in accordance with:*

- *TIA 222-G Structural Standards for Steel Antenna Towers: **(100 mph 3 second gust)***
- *American Institute for Steel Construction, 13<sup>th</sup> Edition*

*Roof mounted equipment: steel designed in accordance with:*

- *IBC 2009: (110 mph 3 second gust)*
- *American Institute for Steel Construction, 13<sup>th</sup> Edition*

## Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated above must submit a Statement of Responsibility.

# Qualifications of Inspectors and Testing Technicians

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The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided if requested.

## Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination

### American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

### American Welding Society (AWS) Certification

AWS-CWI	Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector

### American Society of Non-Destructive Testing (ASNT) Certification

ASNT	Non-Destructive Testing Technician – Level II or III.
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### International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

### National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

### Exterior Design Institute (EDI) Certification

EDI-EIFS	EIFS Third Party Inspector
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### Other

## SPECIAL INSPECTION AND TESTING ITEMS REQUIRED BY CHAPTER 17 OF THE 2009 IBC

Indicate items requiring special inspection or structural testing by checking the appropriate box. All items not requiring inspection/testing should be removed from the form. For items requiring continuous inspection, a special inspector must be present onsite during the performance of that task. In most cases "periodic" inspections/tests shall be performed prior to commencing the task, intermittently during the task, and at the completion of the task. The "Detailed Instructions & Frequency" provides a description of the presumed requirements for tasks requiring "periodic" inspections. The design professional in responsible should revise the requirements as needed on a project-specific basis.

### FABRICATORS (IBC 1704.2)

<input type="checkbox"/> Approved Fabricator	Yes	No
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<input checked="" type="checkbox"/> Unapproved Fabricator	Yes	No
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Fabricators Name:			
Fabricators plant location			
Required In-plant Inspections	<input type="checkbox"/> Steel Construction <input type="checkbox"/> Cold-formed Construction	<input type="checkbox"/> Concrete Construction <input type="checkbox"/> Other: _____	<input type="checkbox"/> Wood Construction <input type="checkbox"/> Other: _____

### STEEL CONSTRUCTION (IBC 1704.3, 1707.2 & 1708.3)

WELDING (1704.3.1)	Frequency		Inspector	Detailed Instructions and Frequencies
Complete & partial penetration groove welds	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	Pre-welding inspections are to be performed to ensure that proper materials (i.e. structural steel, weld filler material, etc.), welding procedures, and welding personnel qualifications are appropriate. A visual inspection of all welds must be provided with periodic inspections made of work in progress.
Multi-pass fillet welds	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Single-pass fillet welds > 5/16"	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Plug, slot, seam or flange welds	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Single-pass fillet welds ≤ 5/16"	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	
Floor & roof deck welds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	
Shear connector (i.e. stud) welds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	
Cold-formed steel welds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	
Welds of stairs & railing systems	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	
<b>DETAILS OF STEEL FRAME (1704.3.2)</b>				
Member locations, bracing, gusset plates, stiffeners and other connection components	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	2,3	All steel frames shall be inspected to verify compliance with the approved const. documents, such as bracing, stiffening, member size and loc, and proper appl. of joint details at ea. connection.

<b>HIGH-STRENGTH BOLTING (1704.3.3)</b>			<b>Inspector</b>	<b>Detailed Instructions and Frequencies</b>
Pretensioned & slip-critical joints	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic <input type="checkbox"/> #1 <input type="checkbox"/> #2 <input type="checkbox"/> #3	N/A	For periodic inspections one of the following methods must be used: (1) turn-of-nut method w/ match-marking, (2) direct tension indicator method or (3) the alternate design fastener (i.e. twist-off bolt) method (see Section 9.2 of 2009 RCSC Specification).
Snug-tightened joints	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	2,3	Verify that all joints use proper fastener components, connected elements are fabricated properly, the bolted joint is drawn into firm contact, and that the nuts cannot be removed without the use of a wrench (see Section 9.1 of 2009 RCSC Specification).

<b>STRUCTURAL STEEL (IBC 1707.2 &amp; 1708.3)</b>				
Visual inspection prior to welding	<input checked="" type="checkbox"/> Continuous		N/A	
Visual inspection during welding	<input checked="" type="checkbox"/> Continuous		N/A	
Visual inspection after welding		<input checked="" type="checkbox"/> Periodic	N/A	Verify that welds are clean; welder identification is legible; size, length and location of welds; verify that welds meet acceptance criteria; placement of reinforcement fillets; removal of backing bars and weld tabs as required; and repair activities (see Section Q5.1 of AISC 341-05).
Nondestructive testing	<input checked="" type="checkbox"/> Continuous		N/A	
Inspection prior to bolting	<input checked="" type="checkbox"/> Continuous		N/A	
Inspection during bolting	<input checked="" type="checkbox"/> Continuous		N/A	
Inspection after bolting		<input checked="" type="checkbox"/> Periodic	2,3	Document accepted and rejected connections (see Section Q5.3 of AISC 341-05).
Reduced beam sections (RBS)		<input checked="" type="checkbox"/> Periodic	N/A	Verify contour and finish as well as dimensional tolerances (see Section Q5.4 of AISC 341-05).
Protected zones		<input checked="" type="checkbox"/> Periodic	N/A	Verify that no holes or unapproved attachments are made within the protected zone (see Section Q5.4 of AISC 341-05).

<b>CONCRETE CONSTRUCTION (IBC 1704.4 &amp; 1708.2)</b>				
<b>Item</b>	<b>Frequency</b>		<b>Inspector</b>	<b>Detailed Instructions and Frequencies</b>
Reinforcing steel, including prestressing tendons	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify prior to placing concrete that reinforcing is of specified type, grade and size; that it is free of oil, dirt and rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and

				supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
Welding of reinforcing steel	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify weldability of reinforcing steel other than A706. Continuous inspection is required for welding of reinforcing steel used in intermediate or special concrete moment frames, boundary elements of special structural walls or shear reinforcement.
Cast-in bolts & embeds	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Post-installed anchors or dowels	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	All post-installed anchors/dowels shall be specially inspected as required by the approved ICC-ES report.
Use of required mix design	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that all mixes used comply with the approved construction documents; ACI 318: Ch. 4, 5.2-5.4; and IBC 1904.3, 1913.2, 1913.3.
Concrete sampling for strength tests, slump, air content, and temperature	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Concrete & shotcrete placement	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Curing temperature and techniques	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that the ambient temperature for concrete is kept at > 50°F for at least 7 days after placement. High-early-strength concrete shall be kept at > 50°F for at least 3 days. Accelerated curing methods may be used (see ACI 318: 5.11.3). The ambient temperature for shotcrete shall be > 40°F for the same period of time as noted for concrete. Shotcrete shall be kept continuously moist for at least 24 hours after shotcreting. All concrete materials, reinforcement, forms, fillers, and ground shall be free from frost. In hot weather conditions ensure that appropriate measures are taken to avoid plastic shrinkage cracking and that the specified water/cement ratio is not exceeded.
Pre-stressed concrete	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Erection of precast concrete	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that all precast elements are lifted, assembled and braced in accordance with the approved construction documents.
Strength verification	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that adequate strength has been achieved prior to the removal of shores and forms or the stressing of post-tensioned tendons.

Formwork	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that the forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents.
Reinforcement in special moment frames, special structural walls and coupling beams	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that ASTM A 615 reinforcing steel used in these areas complies with ACI 318: 21.1.5.2 by means of certified mill test reports. If this reinforcing steel is to be welded chemical tests shall be performed in accordance with ACI 318: 3.5.2.

<b>MASONRY CONSTRUCTION (IBC 1704.5)</b>				
<b>Item</b>	<b>Frequency</b>		<b>Inspector</b>	<b>Detailed Instructions and Frequencies</b>
Review material certificates, mix designs, test results and construction procedures	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	It shall be confirmed that materials used conform to the requirements of the approved construction documents. Mortar mix designs shall show compliance with the proportion or property specification of ASTM C270. Grout shall comply with the proportion or strength requirements of ASTM C476 or be based upon compressive strength tests in accordance with ASTM C1019. Material certificates shall be provided for the following: reinforcement; anchors, ties, fasteners, and metal accessories; masonry units; mortar and grout materials. Construction procedures for cold-weather or hot-weather construction shall be reviewed.
Verify $f'_m$ and $f'_{AAC}$ prior to construction	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Determine the compressive strength for each wythe by the "unit strength method" or by the "prism test method" as specified in Section 1.4B of ACI 530.1-08 prior to construction. For Occupancy Category IV this should be verified at every 5,000ft <sup>2</sup> of construction.
Self-consolidating grout	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Grout placement	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Preparation of required grout specimens, mortar specimens and/or prisms shall be observed	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	If the prism test method is used a minimum of three prisms shall be constructed in accordance with ASTM C1314. If the unit strength method is selected the compressive strength of the grout shall be determined per ASTM C1019 (not required if grout complies with ASTM C476). Continuous inspection required for Occupancy Category IV structures.
Post-installed anchors or dowels	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	All post-installed anchors/dowels shall be specially inspected as required by the approved ICC-ES report.



<b>PRIOR TO GROUTING:</b>				
Grout space is clean	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that grout space is free of mortar droppings, debris, loose aggregate, and material deleterious to masonry grout. Continuous inspection required for Occupancy Category IV structures.
Placement of reinforcement an connectors, and prestressing tendons and anchorages	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with Section 3.4 of ACI 530.1-08.
Proportions of site-prepared grout and prestressing grout	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that grout is proportioned per ASTM C476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite.
<b>AS MASONRY CONSTRUCTION BEGINS:</b>				
Proportions of site-prepared mortar	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Ensure that mortar that begins to stiffen or is not used within 2½ hours is discarded. No admixtures containing > 0.2% chlorides shall be used. Jobsite pigments shall meet the limitations of Section 2.6A of ACI 530.1-08.
Construction of mortar joints	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Unless specified otherwise construct 3/8" bed and head joints, except at foundation or glass unit masonry. Bed joint at foundation shall be >1/4" and ≤ 3/4". Tool joints with a round jointer when mortar is thumbprint hard. Remove masonry protrusions extending ≥ 1/2" into cells to be grouted. Solidly fill collar joints < 3/4" with mortar during construction.
Location of reinforcement, connectors, prestressing tendons and anchorages	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify compliance with approved construction documents. Do not place dissimilar metals in contact with each other. Prestressing tendon placement shall conform to Section 3.6A of ACI 530.1-08.
Prestressing technique	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	The pre-stressing force at each tendon shall be verified by two methods: (1) measuring the steel elongation and (2) the observed jacking force applied to the tendon. The measured elongation should be compared to the load-elongation curves for the pre-stressing steel used and not more than a 5% difference should be found when comparing to the actual force applied. A 7% difference is allowed for post-tensioned tendons. (See Section 3.6B of ACI 530.1-08)
Grade and size of prestressing tendons and anchorages	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Confirm that anchorages and couplers are capable of developing 95% of the specified breaking strength of the prestressing tendons. Confirm that tendons meet the requirements of Section 2.4B in ACI 530.1-08.
<b>DURING CONSTRUCTION:</b>				
Size and location of structural elements	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that structural elements are placed in locations specified on the approved

				construction documents and to the tolerances noted in Section 3.3F of ACI 530.1-08.
Type, size and location of anchors and other details of masonry anchorages to structural members	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that structural elements are placed in locations specified on the approved construction documents. Headed or bent bar anchor bolts shall be embedded in grout. Continuous inspection required for Occupancy Category IV structures.
Size, grade and type of reinforcement, prestressing tendons and metal accessories	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that materials meet the requirements of Section 2.4 of ACI 530.1-08. All reinforcement shall be placed in grout with minimum grout cover of 1/2" for coarse grout and 1/4" for fine grout. Verify that reinforcement protection, standard hooks and minimum bend diameters comply with Section 1.15 of ACI 530-08.
Welding of reinforcing bars	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Preparation, construction and protection of masonry during cold or hot weather construction	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	When the ambient air temperature is <40°F ensure that construction complies with Section 1.8C of ACI 530.1-08. When the ambient air temperature is >100°F, or >90°F with a wind velocity >8mph, ensure that construction complies with Section 1.8D of ACI 530.1-08.
Application and measurement of prestressing force	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	

**OCCUPANCY CATEGORY IV:**

Verification of proportions of materials in premixed or pre-blended mortar and grout as delivered to the site	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	Verify that proportions for mortar meet ASTM C270 and proportions for grout meet ASTM C476.
Placement of masonry units	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	Verify that face shells and head joints are fully mortared and that vertical cells are aligned and unobstructed openings for grout are provided. All units are to be clean and placed while mortar is soft and plastic. Review Section 3.3B(5) for requirements at glass units.

**WOOD CONSTRUCTION (IBC 1704.6, 1706.2 & 1707.3)**

Item	Frequency		Inspector	Detailed Instructions and Frequencies
High-load diaphragms	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify appropriate sheathing, framing members at panel edges and fasteners are used. Performed by code inspection firm.
Wood trusses spanning > 60-feet	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that temporary and permanent truss bracing is installed in accordance with approved truss package. Performed by code inspection firm.
Structural wood	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	If fastener spacing is < 4" o.c.: Verify that

	Continuous	Periodic		proper nailing, bolting, anchoring and other fastening of shearwalls, diaphragms, drag struts, braces, shear panels and holdowns has occurred. Performed by code inspection firm.
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### SOILS CONSTRUCTION (IBC 1704.7)

Item	Frequency		Inspector	Detailed Instructions and Frequencies
Verify subgrade is adequate to achieve design bearing capacity	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Prior to placement of concrete.
Verify excavations extend to proper depth and material	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Prior to placement of compacted fill or concrete.
Verify that subgrade has been appropriately prepared prior to placing compacted fill	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Prior to placement of compacted fill.
Perform classification and testing of compacted fill materials	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	All materials shall be checked at each lift for proper classifications and gradations not less than once for each 10,000ft <sup>2</sup> of surface area.
Verify proper materials, densities and lift thicknesses during placement and compaction.	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	

### DRIVEN DEEP FOUNDATIONS (IBC 1704.8)

Item	Frequency		Inspector	Detailed Instructions and Frequencies
Verify materials, sizes and lengths	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Determine capacities and conduct necessary load tests	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Observe drilling operations	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Verify placement locations & plumbness, confirm type & size of hammer, record number of blows per foot, record tip and butt elevations and document any damage to element	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Perform additional inspections for steel, concrete or other specialty elements.	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	Steel per IBC 1704.3 Concrete per IBC 1704.4 Specialty items per registered design professional

### CAST-IN-PLACE DEEP FOUNDATIONS (IBC 1704.9)

Item	Frequency		Inspector	Detailed Instructions and Frequencies
Observe drilling operation and reporting	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Verify placement locations & plumbness, confirm element diameters, lengths, embedment and adequate end-bearing capacity. Record concrete or grout volumes.	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Perform additional inspections for concrete elements.	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	Concrete per IBC 1704.4

### HELICAL PILE FOUNDATIONS (IBC 1704.10)

Item	Frequency		Inspector	Detailed Instructions and Frequencies
Record installation equipment used, pile dimensions, tip elevations, final depth and final installation torque	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Verify that helical piles used match the approved submittal	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	

### SPRAYED FIRE-RESISTANT MATERIALS (IBC 1704.12)

Item	Frequency		Inspector	Detailed Instructions and Frequencies
Surface preparation	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Prior to application confirm that surface has been prepared per the approved fire-resistance design and manufacturer's instructions.
Material thickness	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Samples shall be taken from selected floor, roof and wall assemblies and structural members. No more than 10% of the samples shall be less than the thickness required by the fire-resistance design.
Material density	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Density tests shall be performed in accordance with ASTM E 605 for every 2,500ft <sup>2</sup> of floor, roof or wall area. One sample must also be provided for each beam, girder, truss or column at each story.
Bonding strength	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Bond strength tests shall be performed in accordance with ASTM E 736 for every 2,500ft <sup>2</sup> of floor, roof or wall area. One sample must also be provided for each beam, girder, truss or column at each story. The bond strength shall not be <150psf.

<b>MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS (IBC 1704.13)</b>				
<b>Item</b>	<b>Frequency</b>		<b>Inspector</b>	<b>Detailed Instructions and Frequencies</b>
Surface preparation	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Prior to application confirm that surface temperature and substrate are acceptable and that a compatible primer is used.
Thickness	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Record thickness of primer or other existing coating on substrate prior to application of coating. Final thickness of coating must be conducted in multiple locations prior to application of top coat (see AWCI Technical Manual 12-B).

<b>EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) (IBC 1704.142)</b>				
<b>Item</b>	<b>Frequency</b>		<b>Inspector</b>	<b>Detailed Instructions and Frequencies</b>
Material and installation	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that water-resistive barrier is installed appropriately over a sheathing substrate. Performed by code inspection firm. (Not required if applied over concrete, masonry, or if a means of draining moisture to exterior is provided.)

<b>SPECIAL CASES (IBC 1704.15) – material alternatives or unusual design applications</b>				
<b>Item</b>	<b>Frequency</b>		<b>Inspector</b>	<b>Detailed Instructions and Frequencies</b>
Material and installation	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Per design professional in responsible charge or report from an accepted accreditation agency (i.e. ICC-ES).

<b>SMOKE CONTROL (IBC 1704.16)</b>				
<b>Item</b>	<b>Frequency</b>		<b>Inspector</b>	<b>Detailed Instructions and Frequencies</b>
Verify device locations and perform leakage testing	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	During erection of ductwork and prior to concealment. As defined by rational analysis.
Pressure difference testing, flow measurements and detection and control verification	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Prior to occupancy and after sufficient completion. As defined by rational analysis.

<b>COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION (IBC 1704.3.4, 1706.3 &amp; 1707.4)</b>				
<b>Item</b>	<b>Frequency</b>		<b>Inspector</b>	<b>Detailed Instructions and Frequencies</b>
Trusses spanning > 60-feet	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that temporary and permanent truss bracing is installed in accordance with approved truss package. Performed by code inspection firm.

Wind-force-resisting systems or seismic-force-resisting systems	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Periodic inspections of welding operations. If fastener spacing is < 4" o.c.: Verify that proper screw attachment, bolting, anchoring and other fastening of shearwalls, diaphragms, drag struts, braces, shear panels and holdowns has occurred. Performed by code inspection firm.
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<b>STORAGE RACKS &amp; ACCESS FLOORS (IBC 1707.5)</b>				
Item	Frequency		Inspector	Detailed Instructions and Frequencies
Verify anchorage	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that anchorage complies with approved construction documents. Inspection of post-installed anchors shall comply with approved ICC-ES report. Performed by code inspection firm.

<b>ARCHITECTURAL COMPONENTS (IBC 1707.6)</b>				
Item	Frequency		Inspector	Detailed Instructions and Frequencies
Erection and fastening of exterior cladding or interior and exterior veneers	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. Performed by code inspection firm. (Not required if < 30 feet or less than 5psf).
Erection and fastening of interior and exterior nonbearing walls	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. Performed by code inspection firm. (Not required if < 30 feet or for interior walls < 15psf).

<b>MECHANICAL &amp; ELECTRICAL COMPONENTS (IBC 1707.7, 1707.8 &amp; 1708.4)</b>				
Item	Frequency		Inspector	Detailed Instructions and Frequencies
Anchorage of emergency or standby power systems	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that anchorage complies with approved construction documents. Performed by code inspection firm.
Installation of piping systems carrying flammable, combustible or highly toxic materials	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that installation and restraint comply with approved construction documents. Performed by code inspection firm.
Installation of HVAC ductwork containing hazardous materials	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that installation and restraint comply with approved construction documents. Performed by code inspection firm.
Installation of vibration isolation systems having a clearance of $\leq 1/4$ "	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that installation complies with approved construction documents and manufacturer's recommendations. Performed by code inspection firm.
Designated seismic systems			N/A	Confirm that manufacturer's certificate of compliance conforms to the requirements of Section 13.2.1 of ASCE 7-05. Verify that the label, anchorage or mounting conforms

				to the manufacturer's certificate of compliance. Performed by code inspection firm.
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### SEISMICALLY ISOLATED STRUCTURES (IBC 1707.9 & 1708.5)

Item	Frequency		Inspector	Detailed Instructions and Frequencies
Prototype tests	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Prototype tests shall be performed on selected samples prior to construction in accordance with Section 17.8 of ASCE 7-05.
Fabrication and installation	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	N/A	Verify that fabrication and installation of isolators conforms to manufacturer's recommendations.

### MISCELLANEOUS AREAS

Item	Frequency		Inspector	Detailed Instructions and Frequencies
Suspended Ceiling Grid Clips	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	Performed by code inspection firm.
Suspended Ceiling wire spacing (Seismic)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	Performed by code inspection firm.
Soils backfill (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Soils for curb and gutter (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Soils for parking lots (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Soils for utility trench backfill	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Reinforcement for slab on grade sidewalks and drive approaches (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Reinforcement for interior slab on grade (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Concrete testing for slab on grade sidewalks and drive approaches (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Concrete testing for interior slab on grade (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Asphalt inspection (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Asphalt testing (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Steam and water line welding (specify locations and frequency)	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	

Seismic supports for duct work and sealing of joints for duct work	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Seismic supports for electrical raceways, cable trays and lights	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Seismic supports for plumbing lines including gas, water and steam and condensation	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
Seismic bracing for mechanical units both on slab and suspended	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	N/A	
	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic		
	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic		