

## Statement of Special Inspections 2013 CBC

**PERMIT #:** \_\_\_\_\_

**PROJECT ADDRESS:** \_\_\_\_\_

This Statement of Special Inspections is submitted in fulfillment of the requirements of CBC Sections 1704 and 1705. Included are:

- Schedule of Special Inspections and tests applicable to this project:
  - Special Inspections per Sections 1704 and 1705
  - Structural Observation per Section 1710
  - Special Inspections / Testing for Seismic Resistance per Sections 1707 and 1708
- List of the Testing Agencies and other special inspectors and/or structural observation agency that will be retained to conduct the tests and inspections and/or structural observation.

Special Inspections and Testing will be performed in accordance with the approved plans and specifications, this statement and CBC Sections 1704, 1705, 1707, and 1708.

The Schedule of Special Inspections summarizes the Special Inspections, structural observation, and tests required. Special Inspectors will refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests and inspections required by the approved plans and specifications will also be performed.

Interim reports will be submitted to the Building Official and the Registered Design Professional in Responsible Charge in accordance with CBC Section 1704.1.2.

A Final Report of Special Inspections documenting 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 (Section 1704.1.2).

The Final Report will document:

- Required special inspections
- Correction of discrepancies noted in inspections.

The Owner recognizes his or her obligation to ensure that the construction complies with the approved permit documents and to implement this program of special inspections. In partial fulfillment of these obligations, the Owner will retain and directly pay for the Special Inspections as required in CBC Section 1704.1.

Structural Observations will be performed in accordance with the approved plans and specifications, this statement and CBC Section 1710 where applicable.

This plan has been developed with the understanding that the Building Official will:

- Review and approve the qualifications of the Special Inspectors who will perform the inspections.
- Monitor special inspection activities on the job site to assure that the Special Inspectors are qualified and are performing their duties as called for in this Statement of Special Inspection.
- Review submitted inspection reports.
- Perform inspections as required by the 2013 CBC, as amended by the City.



## Schedule of Special Inspection

### Notations Used in Table:

Column headers:	Notation Definition
<b>C</b>	Indicates continuous inspection is required
<b>P</b>	Indicates periodic inspections are required. The notes and or contract documents should clarify.

Box entries:	Notation Definition
<b>X</b>	Is placed in the appropriate column to denote either “ <b>C</b> ” continuous or “ <b>P</b> ” periodic inspections.
---	Denotes an activity that is either a one-time activity or one whose frequency is defined in some other manner.

Verification and Inspection	C	P	Notes	Required	
				Y	N
<b>Section 1704.2.2 – Fabricator approval</b>					
Inspect fabricator’s fabrication and quality control procedures.	---	---			
<b>Table 1704.3 - Steel</b>					
1. Material verification of high-strength bolts, nuts, and washers.					
a. Identification markings to conform to ASTM standards specified in the approved construction documents.		X			
b. Manufacturer’s certificate of compliance required.		X			
2. Inspection of high-strength bolting:					
a. Snug-tight joints		X			
b. Pretensioned and slip-critical joints using turn-of-the-nut <u>with</u> matchmarking, twist-off bolt or direct tension indicator methods of installation.		X			
c. Pretensioned and slip-critical joints using turn-of-the-nut <u>without</u> matchmarking or calibrated wrench methods of installation.	X				
3. Material verification of structural steel and cold-formed steel deck.					
a. For structural steel, identification markings to conform to AISC 360.		X			

Verification and Inspection	C	P	Notes	Required	
				Y	N
b. For other steel, identification markings to conform to ASTM standards specified in the approved construction documents.		X			
c. Manufacturer's certified test reports		X			
4. Material verification of weld filler materials:					
a. Identification markings to conform to AWS specification in the approved construction documents.		X			
b. Manufacturer's certificate of compliance required.		X			
5. Inspection of welding:					
a. Structural steel and cold-formed steel deck:					
1) Complete and partial penetration groove welds.	X				
2) Multipass fillet welds.	X				
3) Single-pass fillet welds > 5/16"	X				
4) Plug and slot welds	X				
5) Single-pass fillet welds ≤ 5/16"		X			
6) Floor and roof deck welds.		X			
b. Reinforcing steel					
1) Verification of weldability of reinforcing steel other than ASTM A706.		X			
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls, and shear reinforcement.	X				
3) Shear reinforcement.	X				
4) Other reinforcing steel		X			
6. Inspection of steel frame joint details for compliance with approved construction documents:					
a. Details such as bracing and stiffening.		X			
b. Member locations.		X			
c. Application of joint details at each connection.		X			

Verification and Inspection	C	P	Notes	Required	
				Y	N
1704.3 - Welded studs when used for structural diaphragms.		X			
1704.3 - Welding of cold-formed sheet steel framing members.		X			
1704.3 - Welding of stairs and railing systems.		X			
1704.3.4 – Cold formed steel trusses spanning 60' or greater: Verify that the temporary installation of restraint / bracing and the permanent individual truss member restraint / bracing are installed per the approved truss submittal package.		X			
<b>Table 1704.4 - Concrete</b>					
1. Inspection of reinforcing steel (including prestressing tendons) and placement.		X			
2. Inspection of reinforcing steel welding in accordance with Table 1704.3 Item 5b.	---	---			
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased or where strength design is used.	X				
4. Inspection of anchors installed in hardened concrete per ICC ES Report.		X			
5. Verify use of required design mix.		X			
6. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X				
7. Inspection of concrete and shotcrete placement for proper application techniques.	X				
8. Inspection for maintenance of specified curing temperature and techniques.		X			
9. Inspection of prestressed concrete.					
a. Application of prestressing forces.	X				
b. Grouting of bonded prestressing tendons in the seismic force-resisting system.	X				
10. Erection of precast concrete members.		X			

Verification and Inspection	C	P	Notes	Required	
				Y	N
11. 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 and structural slabs.		X			
12. Inspect formwork for shape, location, and dimensions of the concrete member being formed.		X			
<b>Table 1704.5.1 - Level 1 Masonry Inspections</b>					
1. Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.		X			
2. Verification of $f'_m$ and $f'_{AAC}$ prior to construction except where specifically exempted by the CBC.		X			
3. Verification of slump flow and VSI as delivered to the site for self-consolidating grout.		X			
4. As masonry construction begins, the following shall be verified to ensure compliance:					
a. Proportions of site-prepared mortar.		X			
b. Construction of mortar joints.		X			
c. Location of reinforcement, connectors, prestressing tendons and anchorages.		X			
d. Prestressing technique.		X			
e. Grade and size of prestressing tendons and anchorages.		X			
5. During construction, the inspection program shall verify:					
a. Size and location of structural elements.		X			
b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.		X			
c. Specified size, grade, and type of reinforcement, anchor bolts, prestressing tendons and anchorages.		X			
d. Welding of reinforcing bars.	X				
e. Preparation, construction and protection of masonry during cold weather (temperature below 40° F) or hot weather (temperature above 90° F).		X			

Verification and Inspection	C	P	Notes	Required	
				Y	N
f. Application and measurement of prestressing force.		X			
6. Prior to grouting, the following shall be verified to ensure compliance:					
a. Grout space is clean.		X			
b. Placement of reinforcement and connectors, and prestressing tendons and anchorages.		X			
c. Proportions of site-prepared grout and prestressing grout for bonded tendons.		X			
d. Construction of mortar joints.		X			
7. Grout placement shall be verified to ensure compliance:	X				
a. Grouting of prestressing bonded tendons.	X				
8. Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed.	X				
9. Inspection of anchors installed in hardened masonry per ICC Evaluation Report.		X			
<b>Table 1704.5.3 - Level 2 Masonry Inspections</b>					
1. (Required for Occupancy Category IV Structures – fire stations, police stations, aviation control towers, etc. Comply with CBC Table 1704.5.3. Attach copy of CBC Table 1704.5.3 to this packet.)					
<b>Section 1704.6 – Wood Construction</b>					
<b>1704.6 - Inspect prefabricated and site-built wood structural elements and assemblies in accordance with Section 1704.2.</b>					
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<b>1704.6.1 - Inspect high-load diaphragms:</b>					
1. Verify grade and thickness of sheathing.	---	---			
2. Verify nominal size of framing members at adjoining panel edges.	---	---			
3. Verify:					
a. Nail or staple diameter and length.					
b. Number of fastener lines,	---	---			
c. Spacing between fasteners in each line and at edge margins.					

Verification and Inspection	C	P	Notes	Required	
				Y	N
1704.6.2 – Metal-plate-connected wood trusses spanning 60' or more: Verify that the temporary installation of restraint / bracing and the permanent individual truss member restraint / bracing are installed per the approved truss submittal package.	---	---			
<b>Table 1704.7 - Inspection of Soils</b>					
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.		X			
2. Verify excavations are extended to proper depth and have reached proper material.		X			
3. Perform classification and testing of compacted fill materials.		X			
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X				
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.		X			
<b>Table 1704.8 – Required Verification and Inspection of Driven Deep Foundation Elements</b>					
1. Verify and inspect driven deep foundation elements per CBC 1704.8.	---	---			
<b>Table 1704.9 – Required Verification and Inspection of Cast-in-Place Deep Foundation Elements</b>					
1. Verify and inspect cast-in-place deep foundation elements per CBC 1704.9.	---	---			
<b>Section 1704.10 – Helical pile foundations</b>					
1. Record installation equipment used, pile dimensions, tip elevations, final depth, final installation torque and other pertinent installation data as required by the registered design professional in responsible charge.	X				
<b>Section 1704.11 – Vertical masonry foundation elements:</b>					
1. Perform special inspection in accordance with Section 1704.5 for vertical masonry foundation elements.	---	---			
<b>Section 1704.12 – Sprayed Fire-Resistant Materials</b>					

Verification and Inspection	C	P	Notes	Required	
				Y	N
1. Provide verification and special inspection for sprayed fire-resistant material in accordance with Sections 1704.12.1 through 1704.12.6.					
<b>Section 1704.13 – Mastic and Intumescent Fire-Resistant Coating</b>					
1. Provide verification and special inspection for sprayed fire-resistant material in accordance with AWCI 12-B	---	---			
<b>Section 1704.14 – Exterior Insulation and Finish Systems (EIFS)</b>					
1. Provide verification and special inspection EIFS applications per Section 1704.14	---	---			
<b>Section 1704.15 – Special Cases (List below)</b>					
<b>Section 1704.16 – Smoke Control System</b>					
1. Provide verification and special inspection of smoke control system per CBC 1704.16	---	---			
<b>Section 1707 – Special Inspections for Seismic Resistance</b>					
<b>1707.2 – Structural Steel:</b> Special inspection for structural steel used in the <i>seismic force resisting system</i> shall be in accordance with Quality Assurance Plan requirements of AISC 341.	---	---			
<b>1707.3 - Structural Wood</b>					
1. Inspect field gluing operations of elements of the seismic-force-resisting system.	X				
2. Inspect nailing, bolting, anchoring, and other fastening of components within the seismic-force-resisting system, including: <ul style="list-style-type: none"> <li>a. wood shear walls,</li> <li>b. wood diaphragms,</li> <li>c. drag struts, braces,</li> <li>d. shear panels,</li> <li>e. hold-downs.</li> </ul>		X			
<b>1707.4 – Cold-formed steel framing</b>					

Verification and Inspection	C	P	Notes	Required	
				Y	N
1. Welding of elements of the seismic-force-resisting system.		X			
2. Inspection of screw attachments, bolting, anchoring, and other fastening of components within the seismic-force-resisting system including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs.		X			
<b>1707.5 – Storage racks and access floors</b>					
1. Anchorage of access floors, and storage racks 8' and greater in height.		X			
<b>1707.6 – Architectural components</b>					
1. Inspect erection and fastening of exterior cladding weighing more than 5 psf.		X			
2. Inspect erection and fastening of interior and exterior non-bearing walls weighing more than 15 psf.		X			
3. Inspect erection and fastening of interior and exterior veneer weighing more than 5 psf.		X			
<b>1707.7 – Mechanical and electrical components</b>					
1. Inspect anchorage of electrical equipment for emergency or stand-by power systems.		X			
2. Inspect installation of piping systems and associated mechanical units carrying flammable, combustible, or highly toxic contents.		X			
3. Inspect installation of HVAC ductwork that contains hazardous materials.		X			
4. Inspect installation of vibration isolation systems where required by Section 1707.8.		X			
<b>1707.9 – Designated seismic system verification:</b> Verify that the equipment label and anchorage or mounting conforms to the certificate of compliance when mechanical and electrical equipment must be seismically qualified.	---	---			
<b>1707.10 – Seismic isolation system:</b> Inspection of isolation system fabrication and installation per ASCE 7 – Section 17.2.4.8		X			
<b>Section 1708 – Structural Testing for Seismic Resistance</b>					

Verification and Inspection	C	P	Notes	Required	
				Y	N
<b>1708.2 – Concrete reinforcement</b> in certain types of reinforced concrete structures: Obtain mill certificates and verify compliance with ACI 318 Section 21.5.2.	---	---			
<b>1708.3 – Structural steel:</b> Testing of structural steel used in the <u>seismic force resisting system</u> shall be in accordance with Quality Assurance Plan requirements of AISC 341.	---	---			
<b>1708.4 – Seismic certification of nonstructural components:</b> Obtain certificate that equipment has been tested per Sec. 1708.4 and ASCE 7 Chapter 13	---	---			
<b>1708.5 – Seismically isolated structures:</b> Obtain system tests as required by ASCE 7 Section 17.8.	---	---			