



STATEMENT OF SPECIAL INSPECTIONS, 2022 CBC

Project:

Location:

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
 - Special inspections for Seismic Resistance
 - Special inspections for Wind Resistance
- List of the Testing Agencies and other special inspectors that will be retained to conduct the tests and inspections.

Special Inspections and Testing will be performed in accordance with the approved plans and specifications, this statement and CBC Chapter 17.

The Schedule of Special Inspections summarizes the Special Inspections 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 shall 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 1704.2.4

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 1704.2.4). 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 1704.2.

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 local building code.

Prepared by:

Registered Design Professional in Responsible Charge

Signature

Date

Owner's Authorization:

Building Official's Acceptance:

Owner

Building Official

Signature

Date

Signature

Date

Schedule of Inspection, Testing Agencies, and Inspectors

The following are the testing agencies and special inspectors that will be retained to conduct tests and inspection on this project.

Responsibility	Firm	Address, Telephone, e-mail
1. Special Inspection (except for geotechnical)		
2. Material Testing		
3. Geotechnical Inspections		
4.		

Seismic Requirements (Section 1704.3.2)

Description of seismic-force-resisting system and designated seismic systems subject to special inspections as per Sections 1704.5, & 1705.13:

The extent of the seismic-force-resisting system is defined in more detail in the construction documents.

Wind Requirements (Section 1705.12)

Description of main wind-force-resisting system and designated wind resisting components subject to special inspections in accordance with Section 1705.12:

The extent of the main wind-force-resisting system and wind resisting components is defined in more detail in the construction documents.

Schedule of Special Inspection

Notation Used in Table:

Column headers:

- C Indicates continuous inspection is required.
- P Indicates periodic inspections are required. The notes and or contract documents should clarify.

Box entries:

- X Is placed in the appropriate column to denote either “C” continuous or “P” periodic inspections.
- Denotes an activity that is either a one-time activity or one whose frequency is defined in some other manner.

Additional detail regarding inspections and tests are provided in the project specifications or notes on the drawings.

Verification, Inspection & Tests	C	P	Notes
1704.2.5 - Inspect fabricator's fabrication and quality control procedures.			
1704.3.2 - Structural observations for seismic resistance.			
1704.3.3 - Structural observations for wind requirements.			
1705.2.1 - Structural steel shall be in accordance with quality assurance inspection requirements of AISC 360.			
1705.2.2 - Cold-formed steel deck:			
1. Material verification of cold-formed steel deck:			
a. Quality assurance inspection requirements of SDI QA/QC.			
b. Manufacturer's certified test reports.			
2. Inspection of welding:			
a. Cold-formed steel deck:			
1) Floor and roof deck welds.			
b. Reinforcing steel			
1) Verification of weld-ability of reinforcing steel other than ASTM A706.			
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.			
3) Shear reinforcement.			

Table 1705.3 – Concrete Construction	C	P	Notes
1. Inspection of reinforcing steel, including prestressing tendons and placement.			
2. Inspection of reinforcing bar welding.			
a. Verify weldability of reinforcement bars other than ASTM A706.			
b. Inspect single-pass fillet welds, max. 5/16"			
c. Inspect all other welds.			
3. Inspection of anchors cast in concrete.			

4. Inspection of anchors post-installed in hardened concrete members. a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. b. Mechanical anchors and adhesive anchors not defined in 4a.			
5. Verify use of required design mix.			
6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete.			
7. Inspection of concrete and shotcrete placement for proper application techniques.			
8. Verify maintenance of specified curing temperature and techniques.			
9. Inspection of prestressed concrete. a. Application of pre-stressing forces and b. Grouting of bonded pre-stressing tendons.			
10. Inspect erection of precast concrete members.			
11. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to Seismic Design Category C, D, E or F, inspect such connections & reinforcement for: a. Installation of embedded parts b. Completion of the continuity of reinforcement across joints. c. Completion of connections in the field.			
12. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5			
13. Verify 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.			
14. Inspect formwork for shape, location, and dimensions of the concrete member being formed.			
1705.4 - Masonry Construction shall be inspected and verified in accordance with TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6 quality assurance program requirements.			
1705.4.1 - Empirically designed masonry, glass unit masonry and masonry veneer in Risk Category IV.			
1705.5 – Wood construction: Fabrication elements of prefabricated wood structural elements and assemblies in accordance with Section 1704.2.5.			
1705.5.1 - Inspection of high-load diaphragms and site-built assemblies in accordance with Section 2306.2:			
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.			
1705.5.2 - Restraint/bracing of metal-plate-connected wood trusses spanning 60 feet or greater. Overall heights 60 inches or greater.			
Table 1705.5.3 - Mass Timber Construction 1. Inspection of anchorage and connections of mass timber construction to deep foundation systems. 2. Inspect mass timber construction. 3. Inspection of connections where installation methods are required to meet design loads. a. Verify threaded fasteners. b. Verify adhesive anchors. c. Verify bolted connections. d. Verify concealed connections.			

Table 1705.6 – Inspections and Tests of Soils			
1. Verify materials below shallow foundations are adequate to achieve the desired bearing capacity.			
2. Verify excavations are extended to proper depth and have reached proper material.			
3. Perform classification and testing of compacted fill materials.			
4. During fill placement, verify use of proper materials and procedures in accordance with the provisions of the approved geotechnical report. Verify densities and lift thicknesses during placement and compaction of compacted fill.			
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.			

Table 1705.7 - Driven Deep Foundation Elements			
1. Verify element materials, sizes and lengths comply with the requirements.			
2. Determine capacities of test elements and conduct additional load tests, as required.			
3. Observe driving operations and maintain complete and accurate records for each element.			
4. Verify placement locations and plumbness, a. Confirm type and size of hammer. b. Record number of blows per foot of penetration. c. Determine required penetrations to achieve design capacity. d. Record tip and butt elevations and record any damage to foundation element.			
5. For steel elements, perform additional inspections in accordance with Section 1705.2.			
6. For concrete elements and concrete-filled elements, perform additional inspections in accordance with Section 1705.3			

7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge.			
Table 1705.8 - CIP Deep Foundation Elements:			
1. Observe drilling operations and maintain complete and accurate records for each element.			
2. Verify placement locations and plumbness. Confirm: a. Element diameters, b. Bell diameters (if applicable), c. Lengths, embedment into bedrock (if applicable), d. Adequate end-bearing strata capacity. e. Record concrete or grout volumes.			
3. For concrete elements, perform tests and additional inspections in accordance with Section 1705.3.			
1705.9 - Helical pile foundations. Continuous.			
1705.10 – Structural integrity of deep foundation elements.			
1705.12 - Special inspections for wind resistance. Structural wood and cold-formed steel light-framed construction:			
1. Roof cladding and roof framing connections.			
2. Wall connections to roof and floor diaphragms and framing.			
3. Roof and floor diaphragm systems, including collectors, drag struts and boundary elements			
4. Vertical wind-force-resisting systems, including braced frames, moment frames, and shear walls.			
5. Wind-force-resisting system connections to the foundation.			
6. Fabrication and installation of systems or components required to meet the impact resistance requirements of Section 1609.1.2.			
7. Screw attachments, bolting, anchoring, etc. of other elements of the main wind force-resisting system per Section 1705.12			
1705.12.3 - Special inspections for wind resistance of roof and wall framing and covering.			
1705.13.1 - Structural steel for seismic force-resisting systems.			
1705.13.2 - Structural wood for seismic force-resisting systems.			
1705.13.3 – Cold-formed steel light-framed construction for seismic force-resisting systems.			
1705.13.4 - Designated seismic systems.			
1705.13.5 - Architectural components and access floors.			

1705.13.6 – Mechanical and electrical components: Installation and anchorage.			
1. Inspect anchorage of electrical equipment for emergency or stand-by power systems.			
2. Inspect anchorage of non-emergency electrical equipment.			
3. Inspect installation of piping systems and associated mechanical units carrying flammable, combustible, or highly toxic contents.			
4. Inspect installation of HVAC ductwork that contains hazardous materials.			
5. Inspect installation of vibration isolation systems where required by Section 1707.8.			
6. Inspect installation of equipment where automatic fire sprinkler systems are installed.			
Table 1705.13.7 - Storage Rack Systems			
1. Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents.			
2. Fabricated storage rack elements.			
3. Storage rack anchorage installation.			
Completed storage rack system, to indicate compliance with the approved construction documents.			
1705.13.8 - Seismic isolation systems.			
1705.13.9 - Cold-formed steel special bolted moment frames.			
1705.14 - Testing for seismic resistance.			
1705.15 - Sprayed Fire-Resistant Materials in accordance with Sections 1705.14.1 through 1705.14.6.			
1. Condition of substrates.			
2. Thickness of application.			
3. Density in pounds per cubic foot (kg/m ³).			
4. Bond strength adhesion/cohesion.			
5. Condition of finished application.			
1705.16 - Mastic and Intumescent Fire-Resistant Coating in accordance with AWCI 12-B.			
1705.17 - Exterior Insulation and Finish Systems (EIFS).			
1705.18 - Fire-resistant penetrations and joints in high-rise buildings or buildings assigned to Risk Category III or IV.			
1705.19 - Smoke control systems.			
1706 – Design strengths of materials:			
1707 - Alternative Test Procedure			
1708 - In-Situ Load Tests			
1709 - Preconstruction Load Tests			

INSERT ADDITIONAL NOTATIONS AND REQUIREMENTS BELOW: