



County of Santa Cruz

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
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STATEMENT OF SPECIAL INSPECTIONS

2013 California Building Code 1704.3

Prior to issuance, the registered design professional in responsible charge shall complete, sign and submit a Statement of Special Inspections to Santa Cruz County Building Section. Additional forms shall be submitted if more than one special inspection agency is to be used for this project.

Building Permit Application # _____ Project Address: _____

Registered Design Professional in Responsible Charge _____

Special Inspection Agency _____ APN: _____

Geotechnical Special Inspection Agency _____

This project includes special inspections for Seismic Resistance per CBC 1705.11: yes no

If yes, the contractor shall acknowledge the following:

I am aware of the special requirements contained in the statement of special inspection.

Contractor's Signature _____ Date : _____

This project requires structural observation for seismic resistance by a CA licensed design professional per CBC 1704.5.1 :

yes no If yes, name and title of CA licensed design professional : _____

Notations Used in Table:

Column headers:

- C Indicates continuous inspection is required. The same inspector is on site, day to day, observing the work requiring special inspections.
- P Indicates periodic inspections are required. Inspections may be made on a periodic basis to satisfy the requirements of continuous inspection, provided these periodic scheduled inspections are performed and approved by the registered design professional in responsible charge and the building official. The notes and or contract documents should clarify.
- √ Indicates applicable special inspection item. To be identified by the registered design professional in responsible charge.
- 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 and Inspection	C	P	√	Notes
1704.2.5 - Inspect fabricator's fabrication and quality control procedures.	-	-		
Table 1705.2- Steel				
1. Material verification of high-strength bolts, nuts, and washers.				
a. Identification markings to conform ASTM standards specified in the approved construction documents		X		
b. Manufacturer's certificate of compliance required.		X		
2. Inspection of high-strength bolting:				
a. Bearing-type connections.		X		
b. Slip-critical connections	X	X		
3. Material verification of structural steel:				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	-	-		
b. Manufacturer's mill test reports	-	-		
4. Material verification of weld filler materials:				
a. Identification markings to conform to AWS designation listed in the WPS.	-	-		
b. Manufacturer's certificate of compliance required.	-	-		
5. Inspection of welding:				
a. Structural steel				
1) Complete and partial penetration groove welds.	X			
2) Multipass fillet welds.	X			
3) Single-pass fillet welds > 5/16".	X			
4) Single-pass fillet welds ≤ 5/16".		X		
5) 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		

Verification and Inspection	C	P	√	Notes
6. Inspection of steel frame joint details for compliance with approved construction documents: a. Details such as bracing and stiffening. b. Member locations. c. Application of joint details at each connection.		X		
7. Material verification of cold-formed steel deck: a. Identification markings to conform to ASTM standards specified in the approved construction documents. b. Manufacturer's certified test reports		X		
Welded studs when used for structural diaphragms.		X		
Welding of cold-formed sheet steel framing members.		X		
Welding of stairs and railing systems.		X		
Table 1705.3 - Concrete				
1. Inspection of reinforcing steel, including prestressing tendons and placement.		X		
2. Inspection of reinforcing steel welding in accordance with Table 1705.2.2 Item 2b.	-	-		
3. Inspect of anchors cast in concrete where allowable loads have been increased or when strength design is used.		X		
4. Inspection of anchors installed in hardened concrete ¹ .		X		
5. Verifying 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			

¹ Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with ACI 355.2 or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of work.

Verification and Inspection	C	P	v	Notes
b. Grouting of bonded prestressing tendons in the seismic force-resisting system.	X			
10. Erection of precast concrete members.		X		
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		
1705.4 Masonry				
Table 1.19.2 TMS 402-11/ACI 530-11/ASCE 5-11 - Level B Masonry Inspections. (Risk Category I, II, III structures or IV veneer)				
1. Verify compliance with the approved submittals		X		
2. As masonry construction begins, verify that the following are in compliance :				
a. Proportions of site-prepared mortar		X		
b. Construction of mortar joints.		X		
c. Grade and size of prestressing tendons and anchorages..		X		
d. Location of reinforcement, connectors, and prestressing tendons and anchorages.		X		
e. Prestressing tendons		X		
f. Properties of thin-bed mortar for AAC masonry.: • First 5000 s.f. of AAC masonry • After the first 5000 s.f.	X		X	
3. Prior to grouting, verify that the following are in compliance:				
a. Grout space.		X		
b. Grade, type and size of reinforcement and anchor bolts, and prestressing tendons and anchorages.		X		
c. Placement of reinforcement, connectors, and prestressing grout for bonded tendons.		X		
d. Proportions of site-prepared grout and prestressing grout for bonded tendons..		X		
e. Construction of mortar joints.		X		
4. Verify during construction.				

Verification and Inspection	C	P	√	Notes
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. Welding of reinforcement	X			
d. Preparation, construction, and protection of masonry during cold weather (temp. below 40°F or hot weather (temp. above 90°F)		X		
e. Application and measurement of prestressing force.	X			
f. Placement of grout and prestressing grout for bonded tendons is in compliance.	X			
g. Placement of ACC masonry units and construction of thin-bed mortar joints. <ul style="list-style-type: none"> • First 5000 s.f. of AAC masonry • After first 5000 s.f. 	X			
5. Observe preparation of grout specimens, mortar specimens, and/or prisms.		X		
Table 1.19.3 TMS 402-11/ACI 530-11/ASCE 5-11 - Level C Masonry Inspections (Risk Category IV structures)				
1. Verify compliance with the approved submittals		X		
2. Verify that the following are in compliance:				
a. Proportions of site-mixed mortar, grout, and prestressing grout for bonded tendons.		X		
b. Grade, type, and size of reinforcement and anchor bolts, and prestressing tendons and anchorages.				
c. Placement of masonry units and construction of mortar joints.		X		
d. Placement of reinforcement, connectors and prestressing tendons and anchorages.	X			
e. Grout space prior to grouting.	X			
f. Placement of grout and prestressing grout for bonded tendons.	X			
g. Size and location of structural elements.		X		

Verification and Inspection	C	P	√	Notes
h. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames and other construction.	X			
i. Welding of reinforcement.	X			
j. Protection of masonry during cold weather (temp. below 40° F) or hot weather (temp. above 90° F).		X		
k. Application and measurement of prestressing force.	X			
l. Placement of AAC masonry units and construction of thin-bed mortar joints.	X			
m. Properties of thin-bed mortar for AAC masonry	X			
2. Observe preparation of grout specimens, mortar specimens, and/or prisms.	X			
1705.5 - Wood - Inspect prefabricated wood structural elements and assemblies in accordance with Section 1704.2	-	-		
	-	-		
1705.5.1 – Inspect high-load diaphragms:				
1. Verify grade and thickness of sheathing.	-	-		
2. Verify nominal size of framing members at adjoining panel edges.	-	-		
3. Verify: <ul style="list-style-type: none"> • Nail or staple diameter and length, • Number of fastener lines, • Spacing between fasteners in each line and at edge margins. 	-	-		
1705.5.2 Metal-plate-connected wood trusses spanning 60 feet or greater				
1. Verify temporary and permanent installation of restraint/bracing	-	-		
Table 1705.6- Inspection of Soils				
1. Verify materials below shallow footings are adequate to achieve the desired 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		

Verification and Inspection	C	P	√	Notes
Table 1705.7 – Driven Deep Foundation Elements				
1. Verify element materials, sizes and lengths comply with the requirements.	X			
2. Determine capacities of test elements and conduct additional load tests, as required.	X			
3. Verify placement locations and plumbness. <ul style="list-style-type: none"> 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 e. Document any damage to foundation element. 	X			
4. For steel piles, perform additional inspections in accordance with Section 1705.2.	-	-		
7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge.	-	-		
Table 1705.8– Cast-In-Place Deep Foundation Elements				
1. Observe drilling operations and maintain complete and accurate records for each element.	X			
2. Verify placement locations and plumbness. Confirm: <ul style="list-style-type: none"> • Element diameters, • Bell diameters (if applicable), • Lengths, embedment into bedrock (if applicable), • Adequate end-bearing strata capacity. • Record concrete or grout volumes 	X			
1705.9 - Helical Pile Foundations				
1. Installation	X			
Record the following information <ul style="list-style-type: none"> • Installation equipment used • Pile dimensions • Tip elevations • Final depth • Final installation torque • Other pertinent installation data as required by the registered design professional 	-	-		

Verification and Inspection	C	P	√	Notes
1705.13 - Sprayed Fire-Resistant Materials				
1. Inspect structural surface for accordance with the approved fire-resistance design and the approved manufacturer's written instructions.	-	-		
2. Verify minimum ambient temperature before and after application.	-	-		
3. Verify ventilation of area during and after application.	-	-		
4. Measure average thickness per ASTM E 605 and Section 1705.13.4.	-	-		
5. Verify density of material for conformance with the approved fire-resistant design and ASTM E 605.	-	-		
6. Test cohesive/adhesive bond strength per Section 1705.13.6.	-	-		
1705.14 - Mastic and Intumescent Fire-Resistant Coating	-	-		
1705.15 - Exterior Insulation and Finish Systems (EIFS)	-	-		
1705.17 - Smoke Control System	-	-		
1705.11 Special Inspections for Seismic Resistance				
1705.11.2 - Structural Wood				
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"> • wood shear walls, • wood diaphragms, • drag struts, braces, • shear panels, • hold-downs. 		X		
1705.11.3- Cold-Formed Steel Framing				
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 struts, braces, and hold-downs.		X		
1705.11.4 Designated Structural Systems per AISC 7, Section 13.2		X		
1705.11.5 Architectural Components				
1. Exterior cladding (> 5psf)		X		

Verification and Inspection	C	P	√	Notes
2. Interior and exterior nonbearing walls (>15 psf)		X		
3. Interior and exterior veneer (>5psf)		X		
1705.11.5.1 Anchorage of access Floors		X		
1705.11.6 Mechanical and Electrical Components				
1. Anchorage of emergency or standby power electrical equipment		X		
2. Anchorage of other electrical equipment for structures assigned SDC E or F		X		
3. Installation and anchorage of piping systems designed to carry hazardous materials and their associated mechanical units.		X		
4. Installation and anchorage of ductwork designed to carry hazardous materials.		X		
5. Installation and anchorage of vibration isolation systems		X		
1705.11.7 – Storage Racks. Anchorage of storage racks 8 feet or greater in height.		X		
1705.11.8 Seismic Isolation Systems. During fabrication and installation of isolator units and energy dissipation devices.		X		
1705.12 Testing and qualifications for seismic resistance				
1705.12 - Verify that the equipment label and anchorage or mounting conforms to the certificate of compliance when mechanical and electrical equipment must be seismically qualified.	-	-		
17012.1 - Obtain mill certificates for reinforcing steel, verify compliance with approved construction documents, and verify steel supplied corresponds to certificate.	-	-		
1705.12.2 - Structural Steel: Testing per quality assurance requirements of AISC 341.	-	-		
1705.12.3 - Obtain certificate that equipment has been tested per Section 1705.12.	-	-		