



CITY OF CITRUS HEIGHTS

BUILDING & SAFETY DIVISION

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Statement of Special Inspections - CBC Chapters 1704 - 1705

PERMIT #: _____

PROJECT ADDRESS: _____

This Statement of Special Inspections is submitted in fulfillment of the requirements of California Building Code (CBC) Sections 1704 and 1705. Special Inspections and Testing will be performed in accordance with the approved plans and specifications, this statement and CBC Chapter 17. Included are:

- Schedule of Special Inspections and tests applicable to this project:
 - Special Inspections per Sections 1704 and 1705
 - Structural Observation per Section 1704.6
 - Special Inspections for Soils per Section 1705.6
 - Special Inspections for Wind Resistance per Section 1705.12
 - Special Inspections for Seismic Resistance per Section 1705.13
 - Other Special Inspections: _____
- 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.

Section 1704.2.1 “The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted to act as the approved agency and their personnel are permitted to act as special inspectors for the work designed by them, *provided they qualify as special inspectors.*” The City of Citrus Heights requires verification that the design professional is qualified to perform special inspections, either by certification as a Special Inspector, or through experience via references.

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 Chief 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 scheduling a final inspection of the project or issuance of a Certificate of Occupancy (Section 1704.2.4). The Final Report will document the required special inspections and any corrections of discrepancies noted in inspections.

The Owner recognizes their 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.

Structural Observations, if applicable, will be performed in accordance with the approved plans and specifications, this statement and CBC Chapter 17 where applicable.

This plan has been developed with the understanding that the Chief 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 CBC, as amended by the City.

Schedule of Inspection, Testing Agencies, and Inspectors

The following are the testing agencies, special inspectors and structural observation agency that will be retained to conduct tests, inspections and structural observations on this project.

Responsibility	Firm / Name	Address, Telephone, e-mail
1. Special Inspection (except geotechnical)		
2. Material Testing		
3. Geotechnical Inspections		
4. Structural Observation		
5. Registered Design Professional performing Special Inspections (attach qualifications)		

Document and Plans Prepared By:

Registered Design Professional in Responsible Charge

Signature

Date

Contractor's Acknowledgement:

Contractor Name / Representative (print)

Signature

Date

Owner's Authorization:

Owner Name (print)

Signature

Date

Building Official's Acceptance

Chief Building Official (print)

Signature

Date

Special Inspection and/or Structural Observation Acceptance

These signatures provide confirmation that the above listed agencies will provide special inspection and/or structural observation services as defined by the California Building Code (CBC) Chapter 17 and in accordance with the City approved plans for the items listed in the attached documents within the subject project.

Signature of Testing Agency Representative Acceptance

Print Name

(_____) _____

Phone

Signature of Structural Observation Agency Acceptance

Print Name

(_____) _____

Phone

Schedule of Special Inspections and Tests

Notation Used in Table:

Column headers

C	Indicates continuous inspection is required.
P	Indicates periodic inspections are required. The notes below 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 a one-time activity.
Std	Indicates that the standard defines frequency.

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

Special Inspections and Tests	C	P	Notes
1705.1.1 – Special Cases			
1705.2 – Steel Construction			
1705.2.1 – Structural steel			
1. Review material test reports and certifications (AISC 360 N5.2)		---	
2. Inspection of welding (AISC 360 N5.4)		Std	
3. NDT of welded joints (AISC 360 N5.5)		X	
4. Inspection of high strength bolting (AISC 360 N5.6)		Std	
5. Verify compliance of steel members with details on construction documents (AISC 360 N8)		X	
6. Headed stud anchors (AISC 360 Table N5.4-2)		Std	
1705.2.2 Cold-formed steel deck			
1. Review material test reports and certifications (SDI QA/QC 4.2.B)		---	
2. Verify deck materials (SDI QA/QC 6.1.A)		---	
3. Verify deck and accessory installation (SDI QA/QC 6.1.D)		X	
4. Inspect deck welding (SDI QA/QC 6.1.B and Tables 1.3, 1.4, and 1.5)		Std	
5. Inspect mechanical fastening of deck (SDI QA/QC 6.1.C and Tables 1.6, 1.7, and 1.8)		Std	
1705.2.3 –Open-web steel joists and joist girders			
Installation of open-web steel joists and joist girders			
End connections – welding or bolted		X	
Bridging – horizontal or diagonal.			
Standard bridging		X	
Bridging that differs from the SJI specifications listed in Section 2207.1		X	
1705.2.4 – Cold formed steel trusses spanning 60 feet or greater			
Verify temporary installation restraint/bracing and the permanent individual truss member bracing are installed in accordance with the approved truss submittal package.		X	
1705.3 Concrete			
Table 1705.3 – Concrete Construction			
1. Inspection of reinforcing steel, including prestressing tendons and placement		X	

Special Inspections and Tests	C	P	Notes
2. Reinforcing bar welding			
a. Verify weldability if not ASTM A706		X	
b. Single pass fillet welds max 5/16"		X	
c. Inspect other welds	X		
3. Inspection of anchors cast in concrete		X	
4. Inspection of anchors installed in hardened concrete.			
a. Adhesive anchors horizontally or upward inclined	X		
b. Mechanical anchors and other adhesive anchors		X	
5. Verify use of required design mix		X	
6. Prior to concrete placement fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete	X		
7. Inspect concrete and shotcrete placement for proper application techniques	X		
8. Verify maintenance of specified curing temperature and techniques		X	
9. Inspect prestressed concrete for:			
a. Application of prestressing forces, and	X		
b. Grouting of bonded prestressing tendons	X		
10. Inspect erection of precast concrete members		X	
11. Verify in-situ concrete strength, prior to stressing of tendons in posttensioned 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	
ACI 318-14 Section 26.12: Compressive tests of specimens taken during concrete placement		X	
1705.4 – Masonry Construction			
Level 1 Masonry Inspections (TMS 602 Table 3)			
1. Prior to construction, verification of compliance of submittals.			
Level 2 Masonry Inspections (TMS 602 Table 3 & Table 4)			
A. Prior to construction, verification of compliance of submittals.			
B. Prior to construction, verification of f'_m and f'_{AAC} , except where specifically exempted by the Code.			
C. During construction, verification of slump flow and VSI when self-consolidating grout is delivered to the project site			
1. As masonry construction begins, the following are in compliance:			
a. Proportions of site-prepared mortar		X	
b. Grade and size of prestressing tendons and anchorages		X	
c. Grade, type and size of reinforcement, connectors, anchor bolts, and prestressing tendons and anchorages		X	
d. Prestressing technique		X	
e.1. Properties of thin-bed mortar for the first 5,000 square feet of AAC masonry	X		
e.2. Properties of thin-bed mortar after the first 5,000 square feet of AAC masonry		X	
f. Sample panel construction		X	
2. Prior to grouting, verify that the following are in compliance:			
a. Grout space		X	
b. Placement of prestressing tendons and anchorages		X	
c. Placement of reinforcement, connectors, and anchor bolts		X	

Special Inspections and Tests	C	P	Notes
d. Proportions of site-prepared grout and prestressing grout for bonded tendons		X	
3. Verify compliance of the following during construction:			
a. Materials and procedures with the approved submittals		X	
b. Placement of masonry units and mortar joint construction		X	
c. Size and location of structural elements.		X	
d. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction		X	
e. Welding of reinforcement	X		
f. Preparation, construction and protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees F)		X	
g. Application and measurement of prestressing force	X		
h. Placement of grout and prestressing grout for bonded tendons is in compliance	X		
i.1. Placement of AAC masonry units and construction of thin-bed mortar joints for the first 5,000 square feet of AAC masonry	X		
i.2. Placement of AAC masonry units and construction of thin-bed mortar joints after the first 5,000 square feet of AAC masonry		X	
4. Observe preparation of grout specimens, mortar specimens, and/or prisms		X	
Level 3 Masonry Inspections (TMS 602 Table 3 & Table 4)			
A. Prior to construction, verification of compliance of submittals.			
B. Prior to construction, verification of f'_m and f'_{AAC} , except where specifically exempted by the Code			
C. During construction, verification of slump flow and VSI when self-consolidating grout is delivered to the project site			
D. During construction, verification of f'_m and f'_{AAC} for every 5,000 sq. ft.			
E. During construction, verification of proportions of materials as delivered to the project site for premixed or preblended mortar, prestressing grout, and grout other than self-consolidating grout			
1. As masonry construction begins, the following are in compliance:			
a. Proportions of site-prepared mortar		X	
b. Grade and size of prestressing tendons and anchorages		X	
c. Grade, type and size of reinforcement, connectors, anchor bolts, and prestressing tendons and anchorages		X	
d. Prestressing technique		X	
e. Properties of thin-bed mortar for AAC masonry	X		
f. Sample panel construction	X		
2. Prior to grouting, verify that the following are in compliance:			
a. Grout space	X		
b. Placement of prestressing tendons and anchorages		X	
c. Placement of reinforcement, connectors, and anchor bolts	X		
d. Proportions of site-prepared grout and prestressing grout for bonded tendons		X	
3. Verify compliance of the following during construction:			
a. Materials and procedures with the approved submittals		X	
b. Placement of masonry units and mortar joint construction		X	
c. Size and location of structural elements.		X	

Special Inspections and Tests	C	P	Notes
d. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction	X		
e. Welding of reinforcement	X		
f. Preparation, construction and protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees F)		X	
g. Application and measurement of prestressing force	X		
h. Placement of grout and prestressing grout for bonded tendons is in compliance	X		
i. Placement of AAC masonry units and construction of thin-bed mortar joints	X		
4. Observe preparation of grout specimens, mortar specimens, and/or prisms	X		
Masonry Testing			
TMS 602, Section 1.4.B.2: Masonry units – Sample and test		X	
TMS 602, Section 1.4.B.3: Masonry Prisms – Form and test.		X	
TMS 602 Section 2.2B: Grout – Sample and test.		X	
1705.5 - Wood Construction			
1. Inspect prefabricated wood structural elements and assemblies in accordance with Section 1704.2.5		X	
Inspect site built assemblies		X	
1705.5.1 - Inspect high-load diaphragms:			
1. Verify grade and thickness of sheathing.		X	
2. Verify nominal size of framing members at adjoining panel edges.		X	
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		X	
1705.5.2 – Metal-plate-connected wood trusses spanning 60 feet or greater:			
Verify temporary installation restraint/bracing and the permanent individual truss member bracing are installed in accordance with the approved truss submittal package		X	
1705.6 - Soils			
Table 1705.6 – Soils			
1. Verify materials below shallow foundations 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, inspect subgrade and verify that site has been prepared properly		X	
1705.7 – Driven Deep Foundations			
Table 1705.7 –Deep Driven Foundation Elements			
1. Verify element materials, sizes and lengths comply with the requirements	X		

Special Inspections and Tests	C	P	Notes	
2. Determine capacities of test elements and conduct additional load tests, as required	X			
3. Inspect driving operations and maintain complete and accurate records for each element	X			
4. Verify locations of piles and their 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 and document any damage to foundation elements 	X			
5. For steel elements, perform additional special inspections in accordance with Section 1705.2				
6. For concrete elements and concrete filled elements, perform tests and additional special inspections in accordance with Section 1705.3				
7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge				
1705.8 – Cast-in-place Deep Foundations				
Table 1705.8 - Special Inspections and Tests of Cast-in-Place Deep Foundation Elements				
1. Inspect 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"> a. Element diameters b. Bell diameters (if applicable) c. Lengths, embedment into bedrock (if applicable) d. Adequate end strata bearing capacity. Record concrete or grout volumes 	X			
3. For concrete elements, perform tests and additional special inspections in accordance with Section 1705.3				
1705.9 – Helical Pile Foundations				
Record installation equipment used, pile dimensions, tip elevations, final depth, final installation torque	X			
1705.11 – Special Inspections for Wind Resistance				
1705.11.1 – Structural wood				
1. Inspect field gluing operations of elements of the wind-force-resisting system.	X			
2. Inspect nailing, bolting, anchoring, and other fastening of elements of the main wind-force-resisting system, including: <ul style="list-style-type: none"> a. Wood shear walls b. Wood diaphragms c. Drag struts, braces d. Hold-downs 		X		
1705.11.2 – Cold-formed steel light-frame construction				
1. Welding of elements of the main wind-force-resisting system		X		
2. Inspection of screw attachments, bolting, anchoring, and other fastening of elements of the main wind-force-resisting system including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs		X		

Special Inspections and Tests	C	P	Notes
1705.11.3 – Wind-resisting components			
1. Roof covering, roof deck, and roof framing connections		X	
2. Exterior wall coverings and wall connections to roof and floor diaphragms and framing		X	
1705.12 – Special Inspections for Seismic Resistance			
1705.12.1 – Structural steel			
Special inspection for both structural steel and structural steel elements in accordance with the quality assurance requirements of AISC 341			
1. Visual Weld Inspection (AISC 341 J6.1)		Std	
2. High strength bolting (AISC 341 J7)		Std	
3. Protected zones (AISC 341 J8)		Std	
4. Reduced beam sections (AISC 341 J8)		Std	
5. H piles (AISC 341 J10)		Std	
1705.12.2 - 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 elements of the seismic-force-resisting system, including: a. Wood shear walls b. Wood diaphragms c. Drag struts, braces d. Shear panels e. Hold-downs		X	
1705.12.3 - Cold-formed steel light-frame construction			
1. Welding operations of elements of the seismic-force-resisting system		X	
2. Inspection of screw attachments, bolting, anchoring, and other fastening of elements of the seismic-force-resisting system including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs		X	
1705.12.4 – Designated seismic system			
Verify that the equipment label, anchorage and mounting conforms to the certificate of compliance for systems requiring seismic qualification		X	
1705.12.5 – Architectural components			
1. Inspect erection and fastening of exterior cladding		X	
2. Inspect erection and fastening of veneer		X	
3. Inspect erection and fastening of exterior non-bearing walls		X	
4. Inspect erection and fastening of interior non-bearing walls		X	
1705.12.5.1 – Anchorage of access floors			
1705.12.6 – Plumbing, mechanical and electrical components			
1. Inspect anchorage of electrical equipment for emergency or stand-by power systems		X	
2. Inspect anchorage of non-emergency electrical equipment		X	
3. Inspect installation and anchorage of piping systems and associated mechanical units carrying hazardous materials		X	
4. Inspect installation and anchorage of ductwork that contains hazardous materials		X	
5. Inspect installation and anchorage of vibration isolation systems		X	

Special Inspections and Tests	C	P	Notes
6. Inspect installation of mechanical and electrical equipment, including duct work, piping systems and their structural supports, where automatic fire sprinkler systems are installed		X	
1705.12.7 – Storage racks 8 feet or greater in height			
Inspect anchorage		X	
1705.12.8 – Seismic isolation system:			
Inspection of isolation system during fabrication and installation		X	
1705.12.9 – Cold-formed steel special bolted moment frames		X	
1705.13 Testing for Seismic Resistance			
1705.13.1 – Structural Steel			
For both structural steel and structural steel elements in seismic force resisting systems perform NDT per AISC 341		Std	
1705.14 – Sprayed Fire-Resistant Materials			
1705.14.1 – Physical and visual tests			
1. Condition of substrates			
a. Inspect surface for accordance with the approved fire-resistance design and the approved manufacturer's written instructions		X	
b. Verify minimum ambient temperature before and after application		X	
c. Verify ventilation of area during and after application		X	
2. Measure average thickness per ASTM E605 and Section 1705.14.4		X	
3. Verify density of material for conformance with the approved fire-resistant design and ASTM E605. (Ref. Section 1705.14.5)		X	
4. Test cohesive/adhesive bond strength per Section 1705.14.6		X	
5. Condition of finished application		X	
1705.15 – Mastic and Intumescent Fire-Resistant Coating		X	
1705.16 – Exterior Insulation and Finish Systems (EIFS).			
1705.16.1 Water-resistive barrier coating			
Inspect when installed over a sheathing substrate		X	
1705.17 – Fire-resistant penetrations and joints			
1705.17.1 – Penetration firestops		X	
1705.17.2 – Fire-resistant joint systems		X	
1705.18 – Smoke Control System		X	