



SPECIAL INSPECTION AND TESTING AGREEMENT

To permit applicants of projects requiring special inspection, verification and/or testing per Chapter 17 of the 2010 California Building Code (CBC)

Project Name/Address: _____ Application/Permit No. _____

BEFORE A PERMIT CAN BE ISSUED The owner or the registered design professional in responsible charge acting as the owner's agent shall complete two (2) copies of this agreement and the attached Structural Tests and Inspections Schedule. A pre-construction conference with the parties involved may be required to review the special inspection requirements and procedures.

APPROVAL OF SPECIAL INSPECTORS: Each special inspector shall be approved by the Building Official prior to performing any duties. Each special inspector shall submit his/her qualifications to the building official for approval, unless the Building Official waives the submittal. Special inspectors shall display approved identification, as stipulated by the Building Official, when performing the function of special inspector.

MINIMUM REQUIREMENTS: Special inspection and testing shall meet the minimum requirements of Chapter 17 of the 2010 California Building Code.

A. Duties and responsibilities of the Special Inspector and/or the Special Inspection Agency

1. Observe work

The special inspector shall observe the work for conformance with the building department approved design drawings and specifications, and per applicable workmanship provisions of the 2010 CBC.

2. Report non-conforming items

The special inspector shall bring non-conforming items to the immediate attention of the contractor and note all such items on the daily report. If any item is not resolved in a timely manner or is about to be incorporated in the work, the special inspector shall immediately notify the Building Department by telephone or in person, notify the engineer or architect, and post a discrepancy notice.

3. Furnish daily reports

On request, each special inspector shall complete and sign both the special inspection record and the daily report form for each day's inspections to remain at the job site with the contractor for review by the Building Department's inspector.

4. Furnish weekly reports

The special inspector or inspection agency shall furnish weekly reports of tests and inspections directly to the Building Department, project engineer or architect, and others as designated. These reports must include the following:

- Description of daily inspections and tests made with applicable locations
- Listing of all non-conforming items
- Report on how non-conforming items were resolved or unresolved as applicable
- Itemized changes authorized by the architect, engineer and building department if not included in any nonconformance item

5. Furnish final report

The special inspection or inspection agency shall submit a final signed report to the Building Department stating that all items requiring special inspection and testing were fulfilled and reported and, to the best of his/her knowledge, in conformance with the approved design drawings, specifications, approved change orders and the applicable workmanship provisions of the 2010 CBC. Items not in conformance, unresolved items or any discrepancies in inspection coverage (i.e., missed inspections, periodic inspections when continuous was required, etc.) shall be specifically itemized in this final report.

B. Contractor's responsibility

1. Notify the special inspector

The contractor is responsible for notifying the special inspector or agency regarding individual inspections for items listed on the attached schedule and as noted on the Building Department approved plan. Adequate notice shall be provided so that the special inspector has time to become familiar with the project.

2. Provide access to approved plans

The contractor is responsible for providing the special inspector access to the approved plans at the job site.

3. Retain special inspection records

The contractor is responsible for retaining at the job site all special inspection records submitted by the special inspector, and providing these records for review by the Building Department's inspector upon request.

4. Section 1707.1 of the 2010 CBC (Seismic systems & components and designated- seismic systems need only be considered in Mendocino County)

Each contractor responsible for the construction of a main seismic-force-resisting system, designated seismic system, or a seismic resisting component listed in the "Statement of Special Inspections" shall submit a written Statement of Responsibility to the Building Official and to the owner prior to the commencement of work on the system or component (The "Statement of Special Inspections" is prepared for submittal with the permit application by the Engineer of Record). The contractor's Statement of Responsibility shall contain the following:

- Acknowledgment of awareness of the special requirements contained in the Statement of Special Inspections
- Acknowledgment that control will be exercised to obtain conformance with the construction documents approved by the building official
- Procedures for exercising control within the contractor's organization, the method and frequency of reporting and distribution of the reports
- Identification and qualifications of the person(s) exercising such control and their position(s) in the organization

C. Engineer of Record's responsibility

1. Specify on the project plans and specifications all items requiring special inspections, including periodic inspections in accordance with Chapter 17 of the 2010 CBC.
2. Prepare a "Statement of Special Inspections", including seismic requirements when applicable, in accordance with Section 1705 of the 2010 CBC.
3. If structural observation is required by section 1710, and if the owner hires the Engineer of Record to do the observations, conduct structural observations. All final reports shall be submitted to the Building Department.

D. Owner's responsibilities

1. To hire and pay one or more approved special inspector or special inspection agency to do the required special inspections.
2. To be sure that the two copies of the special inspection agreement and the attached Structural Tests and Inspections Schedule for the project are submitted to the Building Department as part of the permit application process.
3. If applicable, to hire and pay the engineer of record to do structural observations as required by Section 1709 of the 2007 CBC.

E. Building Department's responsibilities

1. The Building Department shall approve all special inspectors and special inspection requirements.
2. Work requiring special inspection and the performance of special inspectors shall be monitored by the Building Department's inspector. The Building Inspector's approval must be obtained prior to placement of concrete, covering inspected areas or other similar activities.

3. The Building Department shall verify that all required special inspections for the project have been completed and shall receive all required reports for the special inspections prior to the final inspection, and prior to giving consideration to the issuance of a Certificate of Occupancy.

F. Scope of work

All work falling within the categories identified on the attached Structural Tests and Inspections Schedule shall be inspected and/or tested in accordance with the provisions of Chapter 17 of the 2010 CBC.

My signature below acknowledges that I have read this agreement and that I agree to comply with the terms and conditions of this agreement. If a sub-consultant is used, the Prime Agency accepts full responsibility for the work, actions and performance of the sub-consultant.

**Owner or
Owner's Agent:** _____ **Date:** _____

By: _____ **Print Name:** _____

**Special Inspector or
Inspection Agency:** _____ **Date:** _____

By: _____ **Print Name:** _____

Contractor: _____ **Date:** _____

By: _____ **Print Name:** _____

Engineer of Record: _____ **Date:** _____

By: _____ **Print Name:** _____

Sub-Consultant: _____ **Date:** _____
(If any)

By: _____ **Print Name:** _____

STRUCTURAL TESTS AND INSPECTIONS SCHEDULE

Please check all boxes that apply.

Verification and Inspection of Steel Construction (See 2010 CBC Table 1704.3)

Materials verification of high-strength bolts, nuts and washers

- Identification of Markings (Periodic)
- Manufacturer's certificate of compliance (Periodic)

Inspection of high-strength bolts

- Bearing type connections (Periodic)
- Slip critical connections (Periodic)
- Slip critical connections (Continuous)

Materials verification of structural steel

- Identification of markings to conform with AISC 360
- For other steel, markings to conform to ASTM standards (Periodic)
- Manufacturer's certified mill test reports (Periodic)

Materials verification of weld filler materials

- Identification of markings to conform to AWS specifications (Periodic)
- Manufacturer's certificate of compliance (Periodic)

Welding Inspection of structural steel in the field, or in an uncertified shop

- Complete and partial penetration groove welds (Continuous)
- Multi-pass fillet welds (Continuous)
- Single pass fillet welds > 5/16" (Continuous)
- Single pass fillet welds < or = 5/16" (Periodic)
- Floor and roof deck welds (Periodic)

Welding of reinforcing steel

- Verification of weldability of reinforcing steel other than ASTM 706 (Periodic)
- Inspection of 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 (Continuous)
- Inspection for shear reinforcement (Continuous)
- Other reinforcing steel (Periodic)

Inspection of steel joint details for compliance with approved construction documents

- Details such as bracing and stiffening (periodic)
- Member locations (periodic)
- Application of joint details at each connection (periodic)

Verification and Inspection of Concrete Construction (See 2010 CBC Table 1704.4)

- Inspection of reinforcing steel, including prestressing tendons, and placement (Periodic)
- Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5b (Continuous)
- Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased. (Continuous)
- Inspections of anchors installed in hardened concrete (Periodic)
- Verifying use of required design mix (Periodic)
- 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 (Continuous)
- Inspection of concrete and shotcrete placement for proper application techniques (Continuous)
- Inspection for maintenance of specified curing temperature and techniques (Periodic)
- Inspection of prestressed concrete for "Application of prestressing forces" (Continuous)
- Inspection of prestressed concrete for "Grouting of bonded prestressing tendons in the seismic-force resisting system" (Continuous)
- Erection of precast concrete members (Periodic)
- Verification of 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 (Periodic)
- Inspect formwork for shape, location and dimensions of the concrete member being formed (Periodic)

Level 1 Special Inspection for Masonry (See 2010 CBC Table 1704.5.1)

Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.

- Verification required (Periodic)

Verification of $f'm$ and f'_{AAC} prior to construction except where specifically exempted by the 2011 CBC.

- Verification required (periodic)

Verification of slump flow and VSI as delivered to the site for self-consolidating grout.

- Verification required (continuous)

As Masonry construction begins the following shall be verified to ensure compliance:

- Proportions of site prepared mortar (Periodic)
- Construction of mortar joints (Periodic)
- Location of reinforcement connectors, prestressing tendons and anchorages (Periodic)
- Prestressing technique (Periodic)
- Grade and size of prestressing tendons and anchorages (Periodic)

During construction the inspection program shall verify:

- Size and location of structural elements (Periodic)
- Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction (Periodic)
- Specified size grade and type of reinforcement, anchor bolts, prestressing tendons and anchorages (Periodic)
- Welding of reinforcing bars (Continuous)
- Preparation, construction and protection of masonry during cold weather (< 40 degrees F) or hot weather (> 90 degrees F) (Periodic)
- Application and measurement of prestressing force (Periodic)

Prior to grouting the following shall be verified to ensure compliance:

- Grout space is clean (Periodic)
- Placement of reinforcement and connectors and prestressing tendons and anchorages (Periodic)
- Proportions of site-prepared grout and prestressing grout for bonded tendons (Periodic)
- Construction of mortar joints (Periodic)

Grouting and grout/mortar specimens

- Verify placement to ensure compliance (Continuous)
- Grouting of prestressing bonded tendons (Continuous)
- Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed. (Continuous)

Level 2 Special Inspection for Masonry (See 2010 CBC Table 1704.5.3)

Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.

- Verification required (Periodic)

Verification of $f'm$ and f'_{AAC} prior to construction for every 5,000 square feet during construction.

- Verification required (periodic)

Verification of proportions of materials in premixed and preblended mortar and grout as delivered to the site.

- Verification required (Periodic)

Verification of slump flow and VSI as delivered to the site for self-consolidating grout.

- Verification required (continuous)

From the beginning of masonry construction the following shall be verified to ensure compliance:

- Proportion of site prepared mortar, grout and prestressing grout for bonded tendons (Periodic)
- Placement of masonry units and construction joints (periodic)
- Placement of reinforcement, connectors and prestressing tendons and anchorages (Periodic)
- Grout space prior to grouting (Continuous)
- Placement of grout (Continuous)
- Placement of prestressing grout (Continuous)

The inspection program shall verify:

- Size and location of structural elements (Periodic)
- Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction (Continuous)
- Specified size, grade and type of reinforcement, anchor bolts, prestressing tendons and anchorages (Periodic)
- Welding of reinforcing bars (Continuous)
- Preparation, construction, and protection of masonry during cold weather (< 40 degrees F) or hot weather (> 90 degrees F) (Periodic)
- Application and measurement of prestressing force (Continuous)

Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed

- Yes inspection required (Continuous)

Verification and Inspection of Soils (See 2010 CBC Table 1704.7)

- Verify materials below footings are adequate to achieve the design bearing capacity. (Periodic)
- Verify excavations are extended to proper depth and have reached proper material. (Periodic)
- Perform classification and testing of compacted fill materials. (Periodic)
- Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill. (Continuous)
- Prior to placement of compacted fill, observe subgrade and verify that the site has been prepared properly. (Periodic)

Verification and Inspection of Driven Deep Foundation Elements (See 2010 CBC Table 1704.8)

- Verify element materials, sizes and lengths comply with the requirements (Continuous)
- Determine capacities of test elements and conduct additional load tests, as required (Continuous)
- Observe driving operations and maintain complete and accurate records for each element (Continuous)
- Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any pile damage (Continuous)
- For steel elements, perform additional inspections per Section 1704.3
- For concrete elements and concrete filled elements, perform additional inspections in accordance with Section 1704.4
- For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge.

Verification and Inspection of Cast-In-Place Deep Foundation Elements (See 2010 CBC Table 1704.9)

- Observe drilling operations and maintain complete accurate records for each element (Continuous)
- Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable, lengths, embedment into bedrock (if applicable) and adequate end bearing strata capacity (Continuous). Record concrete or grout volumes.
- For concrete piers, perform additional inspections in accordance with Sections 1704.4
- For masonry pier, perform additional inspections in accordance with Section 1704.5

Inspection of Wood Construction (See CBC 2010 Section 1704.6)

- Inspection of the fabrication process of prefabricated woos structural elements and assemblies in accordance with Section 1704.2
- Inspection of site built assemblies in accordance with Section 1704.6
- The installation of “High-load Diaphragms” designed in accordance with Table 2306.2.1(2) shall be inspected in accordance with Section 1706.1
- Metal-plate connected wood trusses spanning 60 feet or greater shall be inspected in accordance with Section 1704.6.2

Other required special inspections, verifications and tests not listed on this form (i.e. epoxy anchors, smoke control, etc.), and special inspections for “Special Cases” as deemed appropriate by the building official. List the special inspection(s) below and indicate the frequency and requirements of the inspection (Attach addendum if necessary).

Form completed by: _____ **Title:** _____

Telephone Number: _____ **Date:** _____