



SPECIAL INSPECTION BULLETIN

Revised 1/12/09

Special Inspection – Preconstruction Conference: Since May 1, 1986, preconstruction conferences have been arranged prior to the issuance of a permit for the purpose of clarifying Code requirements, procedures and policies for those projects that require special inspections as required by Section 1704 of the California Building Code. The conference participants may include, but not limited to, the owner, the contractor, the designer, and a representative of the Building Department. The conference will elaborate on such areas as selection and approval of special inspectors, methods of reporting, identification of special inspection, and completion of our form entitled "Required Tests and Inspection Schedule Checklist."

It is the owner's (or his agent's) responsibility to submit the names and qualifications of those individuals that will be performing the duties of a special inspector (see page 2). These will be reviewed by our division and either approved or rejected based on their qualifications and the required disciplines of the project. We would also like for the designers to list on the first sheet of their plans those areas that require special inspection.

Included in this bulletin is a three page form (pages 3-5) to be completed for projects requiring special inspection. This will also be discussed in the conference described above.

This emphasis on special inspection is being promoted by all of the Building Departments that are members of the Yosemite Chapter of ICC. This organization is made up of the Building Departments of Stanislaus, Merced, and San Joaquin Counties. This program is consistent with that administered in the Bay Area. Your cooperation in this effort will eliminate the confusion over the requirements of special inspection and who performs them.

Duties of a Special Inspector: Section 1704.1 of the California Building Code states that in addition to the normally required inspections, the owner is to employ a special inspector for certain types of work. The types of work requiring special inspections are listed below (exceptions are not listed):

1. CONCRETE: During the taking of test specimens and placing of all reinforced concrete and pneumatically placed concrete.
2. DUCTILE MOMENT-RESISTING CONCRETE FRAME
3. REINFORCING STEEL AND PRESTRESSING STEEL:
 - a. During all stressing and grouting of prestressed concrete.
 - b. During placing of reinforcing steel, placing of tendons and prestressing steel for all concrete required to have special inspection by Item No. 1.
4. WELDING:
 - a. Ductile moment-resisting steel frames.
 - b. All structural welding, including welding of reinforcing steel.

5. HIGH-STRENGTH BOLTING: During all bolt installations and tightening operations.
6. STRUCTURAL MASONRY: During preparation of masonry wall prisms, sampling and placing of all masonry units, placement of reinforcement, inspection of grout space, immediately prior to closing of cleanouts, and during all grouting operations.
7. REINFORCED GYPSUM CONCRETE
8. INSULATING CONCRETE FILL: During the application of insulating concrete fill when used as part of a structural system.
9. SPRAY-APPLIED FIREPROOFING
10. PILING, DRILLED PIERS AND CAISSONS: During driving and testing of piles and construction of cast-in-place drilled piles or caissons.
11. SPECIAL GRADING, EXCAVATION AND FILLING
12. SPECIAL CASES: Work which, in the opinion of the Building Official, involves unusual hazards.

STATEMENT OF SPECIAL INSPECTIONS: The registered design professional in responsible charge shall prepare a Statement of Special Inspections in accordance with Sections 1704.1.1 and 1705.

SPECIAL INSPECTION RESUMES: The following is a sample of what we expect to receive from the agencies that are proposing to provide special inspection by the Building Code:

TO: Modesto Building Inspection
FROM: Testing Lab
SUBJECT: Special Inspection

As per your request, we are attaching the resumes of the technical personnel presently on our local staff. As you can see, these resumes include technicians from our civil department, as well as our nondestructive testing and examination department.

We will specify for each project the technician or technicians assigned to perform the duties of a special inspector. We will also identify the type of inspection he is to perform so that you can verify that his experience and training are appropriate for this duty. We will also specify which technicians will be performing the special inspections prior to commencing our duties. Further, we will update our resumes on a yearly basis and also submit new resumes should we reduce, increase, or change our staffing during the year. We will also update the qualifications of our staff should they change.

We will leave a handwritten daily record at the job site that reflects our observations and inspections and will follow that up with a formal weekly report sent to your office.

Should you need more specific information regarding experience, training, or qualifications of any of our technicians, please call our office.

Testing Lab Responsible Engineer

STRUCTURAL TESTS AND INSPECTIONS SCHEDULE

See Appendix A on Page 5 for a list of possible special inspections.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR

1. The special inspector shall observe the work assigned to be certain it conforms to the design drawings and specifications.
2. The location of these reports for the Building Inspector shall be by prearrangement to the satisfaction of the Building Inspector. Handwritten reports shall be left at the job site each day that the special inspector is present. In addition to these handwritten reports, more formal reports may be prepared and sent to our office weekly.
3. The special inspector shall submit a final signed report stating whether the work requiring special inspection was, to the best of his knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of this Code.

The undersigned special inspector or agent of the testing laboratory agrees to comply with the above-listed duties and responsibilities of the special inspector as described in the Uniform Building Code.

Testing Inspection Agency

Address

Inspector or Agent's Signature

Date

REQUIRED TESTS AND INSPECTION SCHEDULE CHECKLIST

APPENDIX A

(PLEASE REQUEST "BUILDERS BULLETIN NO. 165" FOR FURTHER REQUIREMENTS ON SPECIAL INSPECTION)

REINFORCING STEEL:

| | <u>Cont.</u> | <u>Periodic</u> |
|---|--------------------------|--------------------------|
| <input type="checkbox"/> Tensile & Bend, one set per heat per ____ tons | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Placement | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Welding | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Carbon Content or Mill Test Reports | <input type="checkbox"/> | <input type="checkbox"/> |

MASONRY:

| | | |
|--|--------------------------|--------------------------|
| <input type="checkbox"/> Preliminary Acceptance Tests (Masonry Units, Wall Prisms) | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Subsequent Tests (Mortar, Grout, Field Wall Prisms) | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Grouting | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Placement & Grouting | <input type="checkbox"/> | <input type="checkbox"/> |

CONCRETE, GUNITE, GROUT & MORTAR:

| Concrete | Gunite | Grout | Mortar | |
|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Agg Tests for Designs |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Suitability of Agg |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Mix Designs |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Test Panel |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Batch Plant Inspection |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Cement Grab Sample |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Inspect Placing |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Compression Tests |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Cast Specimens |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Pick-up Samples |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Shrinkage Bars |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Yield Check |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Air Check |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Dry Unit Weight |

PRECAST CONCRETE:

| | | |
|---|--------------------------|--------------------------|
| <input type="checkbox"/> Reinforcing Tests | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Reinforcing Placement | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Tendon Tests | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Tendon Placement | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Concrete Placement | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Concrete Batching | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Panel Attach & Inserts | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Panel Installation | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Compression Tests | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Stressing/Transfer | <input type="checkbox"/> | <input type="checkbox"/> |

PILING, CAISSONS, CAPS, TIES:

| | | |
|--|--------------------------|--------------------------|
| <input type="checkbox"/> Inspection of Reinforcing Placement | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Concrete Placement | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Concrete Batching | <input type="checkbox"/> | <input type="checkbox"/> |

UNDERPINNING:

| | | |
|--|--------------------------|--------------------------|
| <input type="checkbox"/> Inspection of Tiebacks | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Steel Fabrication | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Reinforcing & Forms | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Concrete Placement | <input type="checkbox"/> | <input type="checkbox"/> |

STRUCTURAL STEEL:

| | | |
|---|--------------------------|--------------------------|
| <input type="checkbox"/> Sample & Test (list specific members on attachment) | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|

| | | |
|---|--------------------------|--------------------------|
| <input type="checkbox"/> Shop Ident. & Welding Inspection | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Shop Ultrasonic Inspection | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Shop Radiography | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Field Welding Inspection | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Field Bolting Inspection | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Field Ultrasonic Inspection | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Field Radiography | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Metal Deck Welding Inspection | <input type="checkbox"/> | <input type="checkbox"/> |

ASPHALTIC CONCRETE:

| | | |
|--|--------------------------|--------------------------|
| <input type="checkbox"/> Mix Designs | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Batch Plant | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Core Test | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Field Inspection | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Suitability Tests | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Specific Gravity | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Asphalt Content | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Sieve Analysis | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> K Factors | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Stabilometer Value | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Swell | <input type="checkbox"/> | <input type="checkbox"/> |

INSULATING CONCRETE:

| | | |
|--|--------------------------|--------------------------|
| <input type="checkbox"/> Sample & Test | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Unit Weights | <input type="checkbox"/> | <input type="checkbox"/> |

FIREPROOFING:

| | | |
|--|--------------------------|--------------------------|
| <input type="checkbox"/> Inspection of Placement | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Density Tests | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Thickness Tests | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspect Batching | <input type="checkbox"/> | <input type="checkbox"/> |

FILL MATERIAL:

| | | |
|---|--------------------------|--------------------------|
| <input type="checkbox"/> Acceptance Tests | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Moisture-Density Determination | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Field Density | <input type="checkbox"/> | <input type="checkbox"/> |

ROOFING:

| | | |
|--|--------------------------|--------------------------|
| <input type="checkbox"/> Inspection of Placement | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Sample & Test | <input type="checkbox"/> | <input type="checkbox"/> |

STRUCTURAL WOOD:

| | | |
|---|--------------------------|--------------------------|
| <input type="checkbox"/> Inspection of Fabrication | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Truss Joist Fab. | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Sample & Test Components | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection of Glu-lam Fab | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Nailing | <input type="checkbox"/> | <input type="checkbox"/> |

1705 REQUIREMENTS

| | | |
|--|--------------------------|--------------------------|
| <input type="checkbox"/> Heat/Vent & A/C Equip. | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Piping Sys. Mech. Units | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Anchorage or Elect Equip. | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Ext. Wall Panels | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Suspended Ceiling Sys. | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Access Floors | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Steel Storage Racks | <input type="checkbox"/> | <input type="checkbox"/> |

ADDITIONAL REQUIREMENTS
