



## **SPECIAL INSPECTION AND TESTING**

To applicants of projects requiring special inspection or testing per Chapter 17 of the California building code:

BEFORE A PERMIT CAN BE ISSUED, the owner or their representative, on the advice of the responsible project engineer or architect, shall complete, sign and submit two (2) copies of this form, the structural tests and inspection schedule to this division for review and approval.

The owner and their general contractor, where applicable, shall also acknowledge the following conditions applicable to special inspection and/or testing.

1. Contractor is responsible for proper notification to the inspection or testing agency for items listed.
2. Only the testing laboratory should take samples and transport them to their laboratory.
3. Copies of all laboratory reports and inspections are to be sent directly to this division by the testing agency on a weekly basis.
4. Inspection agency to submit names and qualifications of on-site special inspectors to this division for approval. Submission of qualifications is not required when the agency utilizes an inspector who is pre-approved by the City. See item 10 below.

The agency must provide each special inspector with an identification badge that indicates the following:

- a. Name of inspector
- b. Photo of inspector
- c. The specific areas in which the inspector is qualified to inspect
- d. An authorized signature by the registered engineer who is a full-time employee of the agency
- e. The special inspector shall display his/her badge whenever performing the function of an inspector.
5. The special inspector is responsible to the Chief Building Official for immediate notification of any concerns and/or problems encountered.
6. It is the responsibility of the contractor to review the building division approved plans for additional inspection or testing requirements that may be noted. A pre-construction conference at the job is recommended to review special inspection procedures.
7. The special inspector shall use building division approved drawings.
8. BEFORE OCCUPANCY PERMIT CAN BE ISSUED: The inspection agency shall submit a statement that all items requiring testing and inspection were fulfilled and reported. Those items not tested and/or inspected shall be noted in this statement. A copy of the statement to be maintained at the job site for building inspectors review prior to final inspections.



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## **STRUCTURAL TESTS AND INSPECTION SCHEDULE**

(Per California Building Code, Section 1704, 1705 or 1708) Plan check # \_\_\_\_\_

Prior to issuance of a building permit, the owner, on the advice of the Architect or Engineer, shall complete, sign and submit this form to the Building Official.

Project Name	Testing/Inspection Agency	
Project Address	Authorized Signature of the Testing Agency	
Owner/Representative Name (Print)	(Signature)	Date

This form hereby certifies that the testing/inspection agency named above has been engaged to perform structural test and inspection during construction, as checked below, to satisfy all applicable portions of the Building Code.

Prior to issuance of an occupancy permit, the inspection agency shall submit a statement that all items of designated work performed were reported. Any items checked but not tested or inspected will be noted and explained.

Whenever any designated items on this list are ready for sampling, testing or inspection, it shall be the responsibility of the contractor to give timely notice to the inspection agency so that the required services may be performed.

### **REINFORCING STEEL:**

- Tensile & Bend, one set per heat per \_\_\_\_\_ tons
- Inspection of Placement
- Inspection of Welding

### **MASONARY:**

- Preliminary Acceptance Test (Masonry Units, Wall Prisms)
- Subsequent Tests (Mortar, Grout, Field Wall Prisms)
- Inspection of Grouting
- Inspection of Placement of Grouting

**CONCRETE, SHOTCRETE, GROUT & MORTAR**

Conc.	Shot	Grout	Mortar	
				Aggregate Tests for Design
				Suitability of Aggregates
				Mix Designs
				Test Panel
				Batch Plant Inspection
				Cement Grab Sample
				Inspection placing
				Compression Tests
				Cast Specimens
				Pick – Up Samples
				Shrinkage Bars
				Yield Check
				Air Check
				Dry Unit Weight

**PILING, CAISSONS, CAPS, TIES:**

- Inspection of Reinforcing Placement
- Inspection of Concrete Placement
- Inspection of Concrete Batching

**UNDERPINNING:**

- Inspection of Steel Fabrication
- Inspection of Reinforcing & Forms
- Inspection of Concrete Placement
- Inspection of Tiebacks

**PRECAST/POST TENSIONED CONCRETE**

- Reinforcing Tests
- Inspection of Reinforcing Placement
- Tendon Test
- Inspection of Tendon Placement
- Inspection of Concrete Placement
- Inspection of Concrete Batching
- Inspection of Panel Attachment & Inserts
- Compression Tests
- Inspection of Stressing/Transfer

**STRUCTURAL STEEL:**

- Sample & Test (list specific members below)
- Shop Identification & Welding Inspection
- Shop Ultrasonic Inspection
- Shop Radiography
- Field Welding Inspection
- Field Bolting Inspection
- Field Ultrasonic Inspection
- Field Radiography
- Metal Deck Welding Inspection

**ASHALTIC CONCRETE:**

- Mix Design
- Inspection of Batch Plant
- Core/Test
- Field Inspection
- Suitability Test
- Asphalt Content
- Sieve Analysis
- K Factors
- Stabilometer Valve
- Swell

**INSULATING CONCRETE:**

- Sample & Test
- Unit Weights

**FIREPROOFING:**

- Inspection of Placement
- Density Tests
- Thickness Tests
- Inspect Bathing

**SEISMIC RESISTING ELEMENTS (PERIODIC SPECIAL INSPECTION IS REQUIRED)**

**STRUCTURAL WOOD:**

- Field Gluing (continuous inspection)
- Nailing and Bolting
- Anchoring and Other Fasteners: Specify Here: \_\_\_\_\_

**COLD-FORMED STEEL FRAMING:**

- Screw Attachment
- Bolting
- Anchoring of Other Fasteners: Specify Here: \_\_\_\_\_

**STRUCTURAL WOOD:**

- Inspection of Fabrication
- Inspection of Truss Joist Fabrication
- Sample & Test Components
- Inspection of Glu Lam Fabrication

**FILL MATERIAL:**

- Acceptance Tests
- Moisture-Density Determination
- Field Density

**ROOFING:**

- Inspection of Placement
- Sample Test

**OTHERS:**

- Epoxy Anchors
- Anchor Bolts Installed in Concrete

**STORAGE RACKS AND ACCESS FLOORS:**

- Anchorage of Access Floor
- Anchorage of Storage Rack 8 feet or Greater

**ERECTION AND FASTENING OF ARCHITECTURAL COMPONENTS:**

- Exterior Cladding
- Interior and Exterior Non Bearing Walls
- Interior Exterior Veneer

**FASTENING OF MECHANICAL AND ELETRICAL COMPONENTS:**

- Electrical Equipment for Emergency or Standby Power
- Anchorage of Other Electrical Equipment in Seismic Design Category D
- Installing Of Piping Systems
- Installing of HVAC Duct Work

**SPECIFY IF OTHER TESTS, INSPECTIONS OR SPECIAL INSTRUCTIONS ARE REQUIRED FOR THE PROJECT.**

**SAMPLE MATRIX**

**INSPECTOR QUALIFICATION MATRIX**

Inspector Name	Date of Hire	RC*	SM*	PC*	SSW	FP
Inspector A	05/0499	X	X	I-T	I-T	
Inspector B	07/31/98	X	X			
Inspector C	10/01/00	X	X	X	X	
Inspector D	10/01/00	X	X	I-T	I-T	X
Inspector E	08/01/01	X	X	I-T		
Inspector F	08/01/01	X	X		X	

Legend:

RC= Reinforced Concrete    PC= Pre stressed Concrete    FP= Fire Proofing

SM= Structural Masonry    SSW= Structural Steel & Welding

I-T= In Training as lacking Certification and/or Experience

X= Meets Experience and Certain Certification Criteria

\*= American Concrete Institute (ACI) Grade 1 – Is Required



Inspection Services	Pier 26 Embarcadero of San	415.243.3265 415.243.3266		X	X	X	X	X
KC Engineering	865 Cotting Ln Ste. A Vacaville	707.447.4025 707.447.4143		X	X	X	X	

Company Name	Address	Phone & Fax	URM	RC	PC	SM	SS	FP
Kleinfelder Inc.	2601 Barrington Ct. Hayward	925.484.1700 510.887.5932		X	X	X	X	X
Krazan	1061 Serpentine Ln, Ste F Pleasanton, CA	925.307.1160		X	X	X		X
L&M Industrial Fabrication	31975 Rolland Dr, Tangent, OR	541.752.0110		X	X		X	X
MatriScope Engineering	436 14 <sup>th</sup> St. Ste. 1429 Oakland	510.763.3601 510.763.1388		X	X	X	X	X
Moore Twinning	5675 Powers Inn Rd. Ste. C Sacramento	916.381.9477 916.381.9478		X	X	X	X	X
MPE	4200 North Freeway Blvd	916.927.7000		X	X	X	X	X
Nicholas Engineering	6743 Dublin Blvd. Ste.15 Dublin	925.829.8090 925.829.0235	X	X	X	X	X	X
North American	4713 Enterprise Way Modesto	209.545.1108		X	X	X	X	X
PSI	365 Victor St. Ste. C	831.757.3536 831.757.6265		X	X	X	X	X
RMA Group	3140 Beacon Blvd. W. Sacramento	916.371.0434 916.371.1809		X	X	X	X	X
Salem Engineering	4729 West Jacqueline Ave.	559.271.9700 559.275.0827		X	X	X	X	X
Signet Testing Labs, Inc.	3562 Breakwater Ct. Hayward	510.887.8484	X	X	X	X	X	X
Stevens, Ferrone & Bailey	1600 Willow Pass Rd. Concord	925.688.1001 925.688.1005	X	X	X	X	X	X
Terracon Consultants	3140 Gold Camp Dr. Ste. 170	916.858.1570 916.858.8277		X	X	X	X	X
Testing Engineers, Inc.- Diablo Valley	827 Arnold Dr Unit 4 Martinez	925.370.7000 925.229.2951		X	X	X		X
Valley Inspections Inc.	326 Woodrow Ave. Vallejo	707.552.7037 707.552.7022		X	X	X	X	X
Wallace Kuhl & Assoc.	3410 W. Hammer Ln. Ste. F Stockton	209.234.7722 209.234.7727		X	X	X	X	X
Youngdhal Consulting, Inc.	1234 Glenhaven Ct. El Dorado Hills	916.933.0633	X	X	X	X	X	X

**NOTE: In order to be recognized for projects requiring Building Permits, those firms with no expiration date must submit qualification packets to the Chief Building Official and be approved PRIOR to performing required special inspection services.**