

**SPECIAL INSPECTION AND STRUCTURAL OBSERVATION AGREEMENT
CITY OF MENLO PARK – BUILDING DEPARTMENT**

8/18/16

To permit applicants of projects requiring special inspection and/or testing per chapter 17 of the California Building Code (**C.B.C.-2013**)

Project Name/Address: _____ Building Permit No: _____

BEFORE A PERMIT CAN BE ISSUED: The owner, or the engineer or architect of record acting as the owner's agent, shall complete two (2) copies of this agreement and the attached structural tests and inspections schedule including the required acknowledgements. A preconstruction 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 department prior to performing any duties. Each special inspector shall submit his/her qualifications to the building department and is subject to a personal interview for prequalification. Special inspectors shall display approved identification, as stipulated by the building department, when performing the function of a special inspector.

Special inspection and testing shall meet the minimum requirements of **chapter 17 C.B.C.** The following conditions are also applicable:

A. Duties and Responsibilities of the Special Inspector

1. Observe Work

The special inspector shall observe the work for conformance with the building department approved (stamped) design drawings and specifications and applicable workmanship provisions of the **C.B.C.** Architect/engineer-reviewed shop drawings and/or placing drawings may be used only as an aid to inspection. Special inspections are to be performed on a continuous basis, meaning that the special inspector is on site in the general area at all times observing the work requiring special inspection. Periodic inspections, if any, must have prior approval by the building department based on a separate written plan reviewed and approved by the building department and the project engineer or architect.

2. Report Nonconforming Items

The special inspector shall bring nonconforming items to the immediate attention of the contractor and note all such items in 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 jobsite with the contractor for review by the building department's inspector.

4. Furnish Weekly Reports

The special inspector of 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:

- a. Description of daily inspections and tests made with applicable locations;
- b. Listing of all nonconforming items;
- c. Report on how nonconforming items were resolved or unresolved as applicable; and
- d. Itemized changes authorized by the architect, engineer and building department if not included in nonconformance items.

5. Furnish Final Report

The special inspector 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 **C.B.C.** 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 report.

B. Contractor Responsibilities

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 approved plans at the jobsite.

3. Retain Special Inspection Records

The contractor is also responsible for retaining at the jobsite all special inspection records submitted by the special inspector, and providing these records for review by the building department’s inspector upon request.

C. Building

1. Approve Special Inspection

The building department shall approve all special inspectors and special inspection requirements.

2. Monitor Special Inspection

Work requiring special inspection and the performance of special inspectors shall be monitored by the building department’s inspector. His/her approval must be obtained prior to placement of concrete or other similar activities in addition to that of the special inspector.

3. Issue Certificate of Occupancy

The building department may issue a Certificate of Occupancy after all special inspection reports and the final report have been submitted and accepted.

ACKNOWLEDGEMENTS

I have read and agree to comply with the terms and conditions of this agreement.

Owner: _____ By: _____ Date: _____

Contractor: _____ By: _____ Date: _____

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

Project Engineer/Architect: _____ By: _____ Date: _____

ACCEPTED FOR THE BUILDING DEPARTMENT

By: _____ Date: _____

The following inspection and tests, as indicated below, will be required as detailed in applicable project plans, specifications and the California Building Code. These inspections are in addition to inspections performed by the Menlo Park Building Inspection Department.

Individuals performing these duties must be qualified, and approved by the Building Department prior to performing inspections. Individuals certified in a special inspection category by a qualified independent third party organization, and individuals employed by a recognized testing laboratory and under the direct supervision of a Civil Engineer are considered qualified and approved.

Special Inspection Reports shall be submitted to the Building Inspection Department, engineer or architect of record and other designated individuals. Reporting methods shall be as described in plans, specifications, and the Building Code. A final inspection report will be required prior to occupancy of the building.

SCHEDULE OF SPECIAL INSPECTION

<p>COLUMN HEADER:</p> <p>C = Indicates continuous inspection required P = Indicates periodic inspections are required. The notes and or contract documents should clearly clarify I = Required inspection to be performed under this permit per the registered design professional</p>	<p>BOX ENTRIES:</p> <p>X = is placed in the appropriate column to denote either “C” continuous or “P” periodic inspections R = Review and approve document G = In accordance with the Geotechnical report or document approved by the Building Official</p>
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Additional details regarding inspections and tests are provided in the project specifications or notes on the drawings. Items marked as continuous inspection may be approved for periodic inspection upon documentation submittal from a nationally recognized laboratory or ICC report that allows periodic inspection and approved by the Building Official.

INSPECTION TASK				C	P	I
Inspect fabricator’s fabrication and quality control procedures				R		
STEEL						
1. Material verification of high-strength bolts, nuts, and washers						
a. Identification markings to conform to 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						
i. Turn of the nut or twist-off					X	
ii. Calibrated wrench				X		
3. Material verification of structural steel						
a. Identification markings to conform to ASTM standards specified in the approved construction documents					R	
b. Manufacturer’s certified mill test reports					R	
4. Material verification or weld filler materials						
a. Identification markings to conform to AWS designation listed in the WPS					R	
b. Manufacturer’s certificate of compliance required					R	
5. Inspection of welding (Shop or Field)						
a. Structural steel						
i. Complete and partial penetration groove welds				X		
ii. Multipass fillet welds				X		
iii. Single-pass fillet welds > 5/16”				X		
iv. Single-pass fillet welds ≤ 5/16”					X	
v. Floor and roof deck welds					X	
vi. Welded studs when used for structural diaphragms					X	
vii. Welding of cold-formed sheet steel framing members (studs and joists)					X	
viii. Welding of stairs and railing systems					X	
b. Reinforcing Steel						
i. Verification of weldability of reinforcing of reinforcing steel other than ASTM A706					X	
ii. 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		
iii. Shear reinforcement				X		
iv. Other reinforcing steel					X	
c. Inspection of steel frame joint details for compliance with approved construction documents						
i. Details such as bracing and stiffening					X	
ii. Member locations					X	
iii. Application of joint details at each connection					X	
d. Post installed with concrete anchors						
i. Mechanical anchor bolts				X		
ii. Adhesive anchor bolts				X		

INSPECTION TASK	C	P	I
CONCRETE			
1. Inspection of reinforcing steel, including prestressing tendons and placement		X	
2. Inspection of reinforcing steel welding.			
a. Complete and partial penetration of groove welds	X		
b. Multipass fillet welds	X		
c. Single-pass fillet welds > 5/16"	X		
d. Single-pass fillet welds ≤ 5/16"		X	
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased	X		
4. Verifying use of required design mix		X	
5. At 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		
6. Inspection of concrete and shotcrete placement for proper application techniques	X		
7. Inspection for maintenance of specified curing temperature and techniques		X	
8. Inspection of prestressed concrete			
a. Application of prestressing forces	X		
b. Grouting of bonded prestressing tendons in the seismic force-resisting system	X		
9. Erection of precast concrete members		X	
10. Verification of in-situ concrete strength, prior to stressing of tendons in postensioned concrete and prior to removal of shores and forms from beams and structural slabs		X	
11. Inspect formwork for shape, location, and dimensions of the concrete member being formed		X	
MASONRY			
Level (1) Inspections			
1. At the start of masonry construction verify the following to ensure compliance			
a. Proportions of site-prepared mortar		X	
b. Construction of mortar joints		X	
c. Location of reinforcement, connectors, prestressing tendons, and anchorages		X	
d. Prestressing technique		X	
e. Grade and size of prestressing tendons and anchorages		X	
2. Verify			
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. Specified size, grade, and type of reinforcement		X	
d. Welding of reinforcing bars	X		
e. Protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees F)		X	
f. Application and measurement of prestressing force		X	
3. Prior to grouting verify the following to verify compliance			
a. Grout space is clean		X	
b. Placement of reinforcement and connectors and prestressing tendons and anchorages		X	
c. Proportions of site-prepared grout and prestressing grout for bonded tendons		X	
d. Construction of mortar joints		X	
4. Verify			
a. Grout placement to ensure compliance with code and construction documents	X		
b. Observe grouting of prestressing bonded tendons	X		
5. Observe preparation of required grout specimens, mortar specimens, and/or prisms	X		
6. Verify compliance with required inspection provisions of the construction documents and the approved submittals		X	

INSPECTION TASK	C	P	I
Level (2) Inspections			
1. From the beginning of masonry construction the following shall be verified to ensure compliance			
a. Proportions of site-prepared mortar, grout, and prestressing grout for bonded tendons		X	
b. Placement of masonry units and construction of mortar joints		X	
c. Placement of reinforcement, connectors and prestressing tendons and anchorages		X	
d. Grout space prior to grouting	X		
e. Placement of grout	X		
f. Placement of prestressing grout	X		
2. Verify			
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 and other construction	X		
c. Specified size, grade, and type of reinforcement		X	
d. Welding of reinforcing bars	X		
e. Protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees F)		X	
f. Application of measurement of prestressing force	X		
3. Preparation of any required grout specimens, mortar specimens, and/or prisms shall be observed	X		
4. Compliance with required provisions of construction documents and the approved submittals shall be verified		X	
WOOD (BLOCKED DIAPHRAGMS)			
1. Verify grade and thickness of sheathing		X	
2. Verify nominal size of framing members at adjoining panel edges		X	
3. Verify nail or staple diameter and length		X	
4. Verify number of fastener lines		X	
5. Verify spacing between fasteners in each line and at edge margins		X	
SOILS			
1. Verify materials below 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 controlled fill materials		X	
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of controlled fill	X		
5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly		X	
PILE FOUNDATIONS			
1. Verify pile materials, sizes and lengths comply with the requirements	X		
2. Determine capacities of test piles and conduct additional load tests, as required	X		
3. Observe driving operations and maintain complete and accurate records for each pile	X		
4. Verify locations of piles and their plumbness		G	
a. Confirm type and size of hammer		G	
b. Record number of blows per foot of penetration		G	
c. Determine required penetrations to achieve design capacity		G	
d. Record tip and butt elevations and record any pile damage		G	
PIER FOUNDATIONS			
1. Observe drilling operations and maintain complete and accurate records for each pier	X		
2. Verify locations of piers and their plumbness - confirm	X		
a. Pier diameters	X		
b. Bell diameters (if applicable)	X		
c. Lengths, embedment into bedrock (if applicable)	X		
d. Adequate end strait bearing capacity	X		

INSPECTION TASK	C	P	I
SPRAYED FIRE-RESISTANT MATERIALS			
1. Inspect surface for accordance with the approved fire-resistance design before application		X	
2. Approved manufacturer's written instructions		R	
3. Verify minimum ambient temperature before and after application		X	
4. Verify ventilation of area during and after application		X	
5. Measure average thickness per ASTM E605 and Section 1705.13.4		X	
6. Verify density of material for conformance with the approved fire-resistant design and ASTM E605		X	
7. Test cohesive/adhesive bond strength per Section 1705.13.6		X	
MASTIC AND INTUMESCENT FIRE-RESISTANT COATING 1705.14			
EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) 1705.15			
SMOKE CONTROL SYSTEM 1705.17			
SEISMIC RESISTANCE -1705.11			
1. Exterior wall panel and their anchorage		X	
2. Suspended ceiling system and their anchorage		X	
3. Special inspection for welding in accordance with AISC 341	X		
4. Structural Wood – 1705.11.2 (fasteners ≤ 4" O.C)			
a. Field gluing operations of elements of the seismic-force-resisting system	X		
b. Nailing, bolting, anchoring, and other fastening of components within the seismic force-resisting system including		X	
i. Wood shear walls		X	
ii. Wood diaphragms		X	
iii. Drag struts, braces		X	
vi. Shear Panels		X	
vii. Hold downs		X	
5. Cold-Formed Steel Framing – 1705.11.3			
a. Welding of elements of the seismic-force resisting system		X	
b. Inspection of screw attachments, bolting, anchoring, and other fastening of components within the seismic-force-resisting system including struts, braces, and hold-downs		X	
6. Pier Foundations – 1705.8			
a. Placement of reinforcing		X	
b. Placement of concrete	X		
7. Steel storage racks 8 ft or greater in height – 1705.11.7			
8. Access floor and their anchorage – 1705.11.5.1			
9. Architectural Components – 1705.11.5			
a. Inspect erection and fastening of exterior cladding weighing more than 5 psf.		X	
b. Inspect erection and fastening of interior non-bearing walls weighing more than 15 psf.		X	
c. Inspect erection and fastening of interior and exterior veneer at seismic category D.E.F.		X	
10. Mechanical and Electrical Components – 1705.11.6			
a. Inspect anchorage of electrical equipment for emergency or stand-by power systems		X	
b. Inspect anchorage of non-emergency electrical equipment		X	
c. Inspect installation of piping systems and associated mechanical units carrying flammable, combustible, or highly toxic contents		X	
d. Inspect installation of HVAC ductwork that contains hazardous materials		X	
e. Inspect installation of vibration isolation systems where required		X	
11. Seismic isolation system per section 1705.11.8			
12. Masonry Seismic – 1705.4			
Epoxy Anchors in tension (ESR 2508, 2322)			
Mechanical expansion anchors (ESR 1917)			



RECOGNIZED SPECIAL INSPECTION & TESTING AGENCIES

Key:
 RC=Reinforced Concrete
 PC=Prestressed/Post-Tensioned Concrete
 SM=Structural Masonry
 SS=Structural Steel Welding/Bolting
 FP=Spray-Applied Fireproofing
 URM=Unreinforced Masonry Push/Torque Tests Only

Agency Name	HQ Address	Phone/Fax	RC	PC	SM	SS	FP	URM
Achievement Engineering Corp	2455 Autumnvale Dr., Unit E San Jose, CA 95131	(408) 217-9174 (408) 217-9632	X	X	X	X	X	X
Advanced Testing & Inspection.LLC*	540 Brunken Avenue,Suite B Salinas, CA 93901	(888) 499-9979 (831) 597-2004	X	X	X	X	X	X
Applied Materials & Engineering, Inc.	980 41 st Oakland, CA 94608	(510) 420-8190 (510) 420-8186	X	X	X	X	X	
Berlogar Geotechnical Consultants	5587 Sunol Blvd. Pleasanton, CA 94566	(925) 484-0220 (925) 846-9645	X	X				
Biggs Cardosa Associates, Inc.*	1871 The Alameda, Ste. 200 San Jose, CA 95126	(408) 296-5515 (408) 296-8114	X	X	X	X		X
B.S.K. Associates	324 Earhart Way Livermore, CA 94551	(925) 315-3151 (925) 315-3152	X		X	X	X	X
Capex Engineering, Inc.	74 Shanico Common Fremont, CA 94538	(510) 668-1815 (510) 490-8690	X	X	X	X	X	X
Consolidated Engineering Labs	7060 Koll Center Parkway #300 Pleasanton, CA 94566-3108	(925) 485-5000 (925) 485-5018	X	X	X	X	X	X
Construction Materials Testing, Inc.	2278-F Pike Court Concord, CA 94520-1252	(925) 825-2840 (925) 682-7953	X	X	X	X	X	X
Construction Testing Services	2142 Rheem Drive, Ste. E Pleasanton, CA 94566	(925) 462-5151 (925) 462-5183	X	X	X	X	X	X
Construction Testing & Engineering, Inc.	46716 Fremont Blvd. Fremont, CA 94538	(510) 573-6362 (510) 573-6684	X	X	X	X	X	X
Earth Systems Consultants	47853 Warm Springs Boulevard Fremont, CA 94539-7400	(510) 353-0320 (510) 353-0344	X	X	X	X	X	X
ENGEO Incorporated	2401 Crow Canyon Road, Ste 200 San Ramon, CA 94583-1545	(925) 838-1600 (925) 838-7425	X	X	X	X	X	X
Forsythe Engineering Consultants*	1760 Industrial Way, Su. 1 Napa, CA 94558	(707) 259-1292 (707) 259-1393				X	X	X
HP Inspections	690 Sunol St., Bld H San Jose, CA 95126	(408) 287-7722 (408) 271-0902	X	X	X	X	X	X
Inspection Services Inc.	Pier 26, The Embarcadero San Francisco, CA 94105	(415) 243-3265 (415) 243-3266	X	X	X	X	X	X
KC Engineering Co.	865 Cotting Lane, Suite A Vacaville, CA 95688	(707) 447-4025 (707) 447-4143	X	X	X	X		X
Kleinfelder Inc.	7133 Koll Ctr. Pkwy #100 Pleasanton, CA 94566	(925) 484-1700 (925) 484-5838	X	X	X	X	X	X
Korbmacher Engineering Inc.	480 Preston Court, Suite B Livermore, CA 94551	(925) 454-9033 (925) 454-9564					X	
Krazan and Associates Inc.	545 Parrott St. San Jose, CA 95112	(408) 271-2200 (408) 271-2201	X	X	X	X	X	X
Nicholas Engineering Consultants*	6743 Dublin Blvd. #15 Dublin, CA 94568	(925) 829-8090 (925) 829-0235	X	X	X	X	X	X
Ninyo & Moore	675 Hegenberger Rd., Ste. 220 Oakland, CA 94621	(510) 633-5640 (510) 633-5646	X	X	X	X	X	
PSC Associates Inc.	1185 Terra Bella Mountain View, CA 94043	(650) 969-1144 (650) 969-5523	X	X	X	X	X	X
PSI	365 Victor Street, Ste. C Salinas, CA 93907	(831) 757-3536 (831) 757-6265	X	X	X	X	X	X
RES Engineers, Inc.	150 North Wiget Lane, Suite 204 Walnut Creek, CA 94598-2434	(925) 932-4600 (925) 932-4625	X	X	X	X	X	X
Signet Testing Laboratories Inc	3526 Breakwater Ct Hayward, CA 94545	(510) 887-8484 (510) 880-8090	X	X	X	X	X	X
Smith-Emery San Francisco	1940 Oakdale Avenue San Francisco, CA 94124	(415) 642-7326 (415) 642-7055	X	X	X	X	X	X
Sina Hooshdar	10566 S De Anza Blvd Cupertino, CA 95014	(408) 366-1000 (408) 366-1100						Special Soils Inspections Only
Terrasearch Inc.	6840 Via Del Oro, #110 San Jose, CA 95119	(408) 362-4920 (408) 362-4926	X	X	X	X	X	X
Testing Engineers Inc.	2811 Teagarden Street San Leandro, CA 94577	(510) 835-3142 (510) 834-3777	X	X	X	X	X	X
Twining Laboratories, Inc.	2527 Fresno Street Fresno, CA 93721	(559) 268-7021 (559) 268-7126	X	X	X	X	X	X

*Agency subcontracts laboratory services.

**Agencies have not been evaluated for geotechnical special inspection or for nondestructive testing.
 Agencies may not be qualified to perform all aspects of special inspection. Agencies may have offices in more than one location.
 Other agencies may be approved by local jurisdictions.**