



## STATEMENT OF SPECIAL INSPECTION

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

This Statement of Special Inspections is submitted in fulfillment of the requirements of CBC Sections 1704 and 1705.

Special Inspections and Testing will be performed in accordance with the approved plans and specifications, this statement and CBC sections 1704, 1705, 1707, and 1708.

The following attachments summarize the special inspections and structural tests required for this project:

- Schedule of Special Inspections
- Schedule of Structural Tests

These requirements have also been made a part of the approved plans. 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 shall be submitted to the Building Official and the Registered Design Professional in Responsible Charge in accordance with CBC Section 1704.1.2 and Department policies.

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 issuance of a Certificate of Use and Occupancy (Section 1704.1.2). The Final Report will document:

- Required special inspections
- Correction of discrepancies noted in inspections

The Owner recognizes his or her 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 1704.1.

This plan has been developed with the understanding that the 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 local building code.

**Seismic Requirements (Section 1705.3.1)**

Description of seismic-force-resisting system and designated seismic systems subject to special inspections in accordance with Section 1705.3:

The extent of the seismic-force-resisting system is defined in more detail in the construction documents.

**Wind Requirements (Section 1705.4.1)**

Description of main wind-force-resisting system and designated wind resisting components subject to special inspections in accordance with Section 1705.4.2:

The extent of the main wind-force-resisting system and wind resisting components is defined in more detail in the construction documents.

**Prepared by:**

\_\_\_\_\_  
Registered Design Professional in Responsible Charge

[Seal of Registered Design Professional  
in Responsible Charge for the structural  
design of the building or structure]

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Building Official's Acceptance:**

\_\_\_\_\_  
DBI Plans Examiner

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



## SCHEDULE OF SPECIAL INSPECTIONS

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

The Registered Design Professional in Responsible Charge is responsible for completing this Schedule of Special Inspections. The Special Inspections shown on this form are minimum requirements for specified construction per the 2007 San Francisco Building Code. Please place a mark in the "Req'd" column to indicate Special Inspection requirements. Additional Special Inspections may be required by the Registered Design Professional in Responsible Charge and should be included in this Schedule of Special Inspections.

It is acceptable that Special Inspections not required for a project be deleted from this Schedule of Special Inspections. Please maintain the numbering system as shown.

	Verification and Inspection	Req'd	Contin	Periodic	Notes
<b>A.</b>	<b>Steel Construction (1704.3)</b>				
	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		X	X	
	3. Material verification of structural steel:				
	a. Identification markings to conform to ASTM standards specified in the approved construction documents.				
	b. Manufacturer's mill test reports				
	4. Material verification of weld filler materials:				
	a. Identification markings to conform to AWS designation listed in the WPS.				
	b. Manufacturer's certificate of compliance required.				
	5. Inspection of structural steel welding:				
	a. Complete and partial penetration groove welds.		X		Also see Schedule of Structural Tests
	b. Multi-pass fillet welds.		X		
	c. Single-pass fillet welds > 5/16".		X		
	d. Single-pass fillet welds ≤ 5/16".			X	Continuous special inspection is not required provided that periodic inspections of the work in progress are made and that materials, welding procedures and qualifications of welders are verified prior to the start of work.
	e. Floor and roof deck welds.			X	See above.
	f. Welded studs when used for structural diaphragms.			X	See above.
	g. Welded sheet steel for cold-formed steel framing members such as studs and joists.			X	See above.
	h. Welding of stairs and railing systems.			X	See above.
	6. Inspection of steel frame joint details for compliance with approved construction documents:			X	
	a. Details such as bracing and stiffening.				
	b. Member locations.				
	c. Application of joint details at each connection.				

	Verification and Inspection	Req'd	Contin	Periodic	Notes
<b>B.</b>	<b>Concrete Construction (1704.4)</b>				
	1. Inspection of reinforcing steel, including prestressing tendons, and placement.			X	
	2. Inspection of reinforcing steel welding:				
	a. Identification markings to conform to AWS designation listed in the WPS.				
	b. Manufacturer's certificate of compliance required.				
	c. Verification of weldability of reinforcing steel other than ASTM A706.			X	
	d. 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		
	e. Shear reinforcement.		X		
	f. Other reinforcing steel			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	
<b>C.</b>	<b>Masonry Construction (1704.5.1 and 1704.5.3)</b>				
	1. At the start of masonry construction verify the following to ensure compliance:				
	a. Proportions of site-prepared mortar.			X	
	b. Proportions of site-prepared grout and prestressing grout for bonded tendons			X	Added requirements for Level 2 Masonry Inspections.
	c. Placement of masonry units.			X	Added requirements for Level 2 Masonry Inspections.
	d. Construction of mortar joints.			X	
	e. Placement of reinforcement, connectors, prestressing tendons, and anchorages.			X	
	f. Prestressing technique.			X	
	g. 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	Continuous special inspection for Level 2 Masonry Inspections
	c. Specified size, grade, and type of reinforcement.			X	
	d. Welding of reinforcing bars.		X		

	Verification and Inspection	Req'd	Contin	Periodic	Notes
	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	Continuous special inspection for Level 2 Masonry Inspections
	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 grout placement to ensure compliance with code and construction document provisions.		X		
	a. 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	
<b>D.</b>	<b>Exterior facing (1704.5.4)</b>				
	1. During fastening of all exterior veneer and ornamentation facing units constructed of concrete, masonry, stone or similar materials, and all curtain walls weighing more than 5 pounds per square foot of wall.		X		
	2. Exterior Insulation and Finish System (EIFS) (1704.12)			X	
<b>E.</b>	<b>Retrofit of unreinforced masonry bearing wall buildings (1704.5)</b>				
	1. During the testing of mortar quality and performance of masonry shear tests.		X		
	2. During repointing operations		X		
	3. During the installation of new shear bolts		X		
	4. Prior to the placement of the bolt and grout or adhesive for embedded bolts		X		
	5. Prequalification tests for embedded bolts		X		See SFBC Sections 1615C.3 and 1615C.4.
<b>F.</b>	<b>Wood Construction (1704.6)</b>				
	1. Prefabricated wood structural elements and assemblies in accordance with Section 1704.2				
	2. Plywood sheathed floor and roof diaphragms, including nailing, bolting, anchoring, and other fastening of components such as drag struts and braces.			X	
	3. Plywood sheathed shear walls, including nailing, bolting, anchoring, and other fastening of components such as hold-downs and braces.			X	
	4. Gypsum wallboard shear walls where shear values exceed one-half of the values permitted by Footnote a of Table 2306.4.5.			X	
	5. Field gluing operations of elements of the seismic-force-resisting system.		X		
<b>G.</b>	<b>Cold-Formed Steel Construction (1707.4)</b>				
	1. Welding of elements of the seismic-force-resisting system.			X	

	Verification and Inspection	Req'd	Contin	Periodic	Notes
	2. Inspection of screw attachments, bolting, anchoring, and other fastening of components within the seismic-force-resisting system including struts, braces, and hold-downs.			X	
<b>H.</b>	<b>Soils (1704.7)</b>				
	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	
<b>I.</b>	<b>Pile Foundations (1704.8)</b>				
	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. 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 but elevations and record any pile damage.		X		
	5. For steel piles, perform additional inspections in accordance with Section 1704.3.		X		
	6. For concrete piles and concrete-filled piles, perform additional inspections in accordance with Section 1704.4.		X		
	7. For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.		X		
	8. For augered uncased piles and caisson piles, perform inspections in accordance with Section 1704.9.		X		
<b>J.</b>	<b>Pier Foundations (1704.9)</b>				
	1. Observe drilling operations and maintain complete and accurate records for each pier.		X		
	2. Verify locations of piers and their plumbness. Confirm: a. Pier diameters, b. Bell diameters (if applicable), c. Lengths, embedment into bedrock (if applicable), d. Adequate end strata bearing capacity.		X		
	3. For concrete piers, perform additional inspections in accordance with Section 1704.4.				
	4. For masonry piers, perform additional inspections in accordance with Section 1704.5.				
<b>K.</b>	<b>Spray-Applied Fire-Resistant Materials (1704.10)</b>				
	1. Structural member surface conditions.			X	Before application of the sprayed fire-resistant material.
	2. Verify minimum ambient temperature.			X	Before and after application.

	Verification and Inspection	Req'd	Contin	Periodic	Notes
	3. Verify ventilation of area.			X	During and after application.
	4. Measure average thickness.				Thickness shall be determined in accordance with ASTM E605.
	5. Verify density of material.				Density shall be determined in accordance with ASTM E605.
	6. Test cohesive/adhesive bond strength.				Cohesive/adhesive bond strength shall be in accordance with the field test specified in ASTM E736.
<b>L.</b>	<b>Mastic and Intumescent Fire-Resistant Coating (1704.11)</b>				Special inspections for mastic and intumescent fire-resistant coatings applied to structural elements and decks shall be in accordance to AWCI 12-B.
<b>M.</b>	<b>Special Cases (1704.13)</b>				
	1. Underpinning		X		
	2. Lateral shoring of excavation			X	
	3. Crane Safety			X	See AB-023.
<b>N.</b>	<b>Smoke Control System (1704.14)</b>			X	Smoke control systems shall be tested during erection of ductwork and prior to concealment; and prior to occupancy and after sufficient completion.
<b>O.</b>	<b>Demolition (1704.15)</b>		X		Demolition of buildings more than two stories or 25 feet in height, except Type V buildings.
<b>P.</b>	<b>Bolts Installed in Existing Masonry or Concrete (1704.16)</b>			X	See ICC ES Reports for special inspection requirements for proprietary products. See 2007 SFBC Sections 1704.16, 1607C and 1615C and Schedule of Structural Tests for testing requirements.
<b>Q.</b>	<b>New Construction or Alteration of Existing Building within Special Slope Protection Areas (1704.18)</b>			X	Special inspection of grading and foundation construction by a Registered Geotechnical Engineer of a Registered Civil Engineer with expertise in geotechnical engineering is required.
<b>R.</b>	<b>Seismic Resistance of Non-Structural Components (1705.3)</b>				Also see requirements for Bolts Installed in Existing Masonry or Concrete and Schedule of Structural Tests.
	1. Heating, ventilating and air-conditioning (HVAC) ductwork containing hazardous materials and anchorage of such ductwork.			X	
	2. Piping systems and mechanical units containing flammable, combustible or highly toxic materials.			X	
	3. Anchorage of electrical equipment used for emergency or standby power systems.			X	
	4. Anchorage of electrical equipment.			X	In buildings assigned to Seismic Design Categories E and F only.
	5. Suspended ceiling systems and their anchorage.			X	
	6. Access floors and their anchorage.			X	
	7. Steel storage racks and their anchorage, where the importance factor is equal to 1.5 in accordance with Section 15.5.3 of ASCE 7, or 8 feet or greater in height.			X	

	Verification and Inspection	Req'd	Contin	Periodic	Notes
	8. Erection and fastening of interior and exterior non-bearing walls weighing more than 15 pounds per square foot.			X	
	9. Installation of vibration isolation systems where the required nominal clearance between the equipment support frame and restraint is less than or equal to 0.25 inches.			X	
<b>S.</b>	<b>Designated Seismic System Verifications (1707.9)</b>  The special inspector shall examine designated seismic systems requiring seismic qualification in accordance with Section 1708.5 and verify that the label, anchorage or mounting conforms to the certificate of compliance.			X	Required for those architectural, electrical and mechanical systems and their components that require design in accordance with Chapter 13 of ASCE 7 and for which the component importance factor, $I_p$ , is greater than 1 in accordance with Section 13.1.3 of ASCE 7.
<b>T.</b>	<b>Seismic Isolation System (1707.10)</b>			X	Required during the fabrication and installation of isolator units and energy dissipation devices that are part of the seismic isolation system.
<b>U.</b>	<b>Inspect Fabricator's Fabrication and Quality Control Procedures (1704.2.1)</b>				





## SCHEDULE OF SPECIAL INSPECTIONS AND STRUCTURAL TESTS

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

The Registered Design Professional in Responsible Charge is responsible for completing this Schedule of Special Inspections and Structural Tests. The Special Inspections and Structural Tests shown on this form are minimum requirements for specified construction per the 2007 San Francisco Building Code for R-3, Type V construction. Please place a mark in the "Req'd" column to indicate Special Inspections and Structural Test requirements. Additional Special Inspections and/or Structural Tests may be required by the Registered Design Professional in Responsible Charge and should be included in this Schedule of Special Inspections and Structural Tests.

It is acceptable that Special Inspections and Structural Tests not required for a project be deleted from this Schedule of Special Inspections and Structural Tests. Please maintain the numbering system as shown.

	Verification and Inspection	Req'd	Contin	Periodic	Notes
<b>A.</b>	<b>Steel Construction (1704.3)</b>				
	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		X	X	
	3. Material verification of structural steel:				
	a. Identification markings to conform to ASTM standards specified in the approved construction documents.				
	b. Manufacturer's mill test reports				
	4. Material verification of weld filler materials:				
	a. Identification markings to conform to AWS designation listed in the WPS.				
	b. Manufacturer's certificate of compliance required.				
	5. Inspection of structural steel welding:				
	a. Complete and partial penetration groove welds.		X		Also see Schedule of Structural Tests
	b. Multi-pass fillet welds.		X		
	c. Single-pass fillet welds > 5/16".		X		
	d. Single-pass fillet welds ≤ 5/16".			X	Continuous special inspection is not required provided that periodic inspections of the work in progress are made and that materials, welding procedures and qualifications of welders are verified prior to the start of work.
	e. Floor and roof deck welds.			X	See above.
	f. Welded studs when used for structural diaphragms.			X	See above.
	6. Inspection of steel frame joint details for compliance with approved construction documents:			X	
	a. Details such as bracing and stiffening.				
	b. Member locations.				
	c. Application of joint details at each connection.				

	Verification and Inspection	Req'd	Contin	Periodic	Notes
<b>B.</b>	<b>Concrete Construction (1704.4)</b>				
	1. Inspection of reinforcing steel, including prestressing tendons, and placement.			X	
	2. Inspection of reinforcing steel welding:				
	a. Identification markings to conform to AWS designation listed in the WPS.				
	b. Manufacturer's certificate of compliance required.				
	c. Verification of weldability of reinforcing steel other than ASTM A706.			X	
	d. 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		
	e. Shear reinforcement.		X		
	f. Other reinforcing steel			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		
<b>F.</b>	<b>Wood Construction (1704.6)</b>				
	1. Prefabricated wood structural elements and assemblies in accordance with Section 1704.2				
	2. Plywood sheathed floor and roof diaphragms, including nailing, bolting, anchoring, and other fastening of components such as drag struts and braces.			X	
	3. Plywood sheathed shear walls, including nailing, bolting, anchoring, and other fastening of components such as hold-downs and braces.			X	
	4. Gypsum wallboard shear walls where shear values exceed one-half of the values permitted by Footnote a of Table 2306.4.5.			X	
<b>H.</b>	<b>Soils (1704.7)</b>				
	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	
<b>J.</b>	<b>Pier Foundations (1704.9)</b>				
	1. Observe drilling operations and maintain complete and accurate records for each pier.		X		

	Verification and Inspection	Req'd	Contin	Periodic	Notes
	2. Verify locations of piers and their plumbness. Confirm: a. Pier diameters, b. Bell diameters (if applicable), c. Lengths, embedment into bedrock (if applicable), d. Adequate end strata bearing capacity.		X		
	3. For concrete piers, perform additional inspections in accordance with Section 1704.4.				
<b>M.</b>	<b>Special Cases (1704.13)</b>				
	1. Underpinning		X		
	2. Lateral shoring of excavation			X	
<b>P.</b>	<b>Bolts Installed in Existing Masonry or Concrete (1704.16)</b>			X	See ICC ES Reports for special inspection requirements for proprietary products. See 2007 SFBC Sections 1704.16, 1607C and 1615C and Schedule of Structural Tests for testing requirements.
<b>Q.</b>	<b>New Construction or Alteration of Existing Building within Special Slope Protection Areas (1704.18)</b>			X	Special inspection of grading and foundation construction by a Registered Geotechnical Engineer or a Registered Civil Engineer with expertise in geotechnical engineering is required.

	Structural Testing	Req'd	Notes
<b>B.</b>	<b>Concrete (ACI Section 5.6)</b>		
	1. Compressive strength tests for concrete with specified minimum compressive strength, $f_c$ , of 3,000 psi or greater at 28 days.		Samples for strength tests of each class of concrete placed each day shall be taken not less than once a day, nor less than once for each 150 cubic yards of concrete, nor less than once for each 5000 square feet of surface area for slabs or walls.
	2. Shotcrete test panels and core samples.		
	3. Other:		
<b>D.</b>	<b>Structural Steel (1708.4)</b>		
	1. Testing contained in the Quality Assurance Plan as required by AISC 341.		This includes non-destructive testing (NDT) of welds.
	2. Base metal thicker than 1.5 inches, where subject to through-thickness weld shrinkage strains, shall be ultrasonically tested for discontinuities behind and adjacent to such welds after joint completion.		
	3. Other:		
<b>E.</b>	<b>Bolts Installed in Existing Masonry or Concrete (1704.16)</b>		
	1. Direct tension testing of existing anchors.		
	2. Direct tension testing of new bolts.		
	3. Torque testing of new bolts		
	4. Prequalification test for bolts and other types of anchors.		
	5. Other:		



## SCHEDULE OF STRUCTURAL TESTS

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

The Registered Design Professional in Responsible Charge is responsible for completing this Schedule of Structural Tests. The Structural Tests shown on this form are minimum requirements for specified construction materials per the 2007 San Francisco Building Code. Please place a mark in the "Req'd" column to indicate Structural Testing requirements. Additional Structural Testing may be required by the Registered Design Professional in Responsible Charge and should be included on this Schedule of Structural Tests.

It is acceptable that Structural Tests not required for a project be deleted from this Schedule of Structural Tests. Please maintain the numbering system as shown.

	Structural Testing for Seismic Resistance	Req'd	Notes
<b>A.</b>	<b>Masonry (1708.1)</b>		
	1. Compressive strength tests for minimum compressive strength, $f'_m$ and $f'_{AAC}$		Verification of $f'_m$ and $f'_{AAC}$ prior to construction for Level 1 Quality Assurance and every 5000 square feet during construction additional for Level 2 Quality Assurance.
	2. Other:		
<b>B.</b>	<b>Concrete (ACI Section 5.6)</b>		
	1. Compressive strength tests for concrete with specified minimum compressive strength, $f'_c$ , of 3,000 psi or greater at 28 days.		Samples for strength tests of each class of concrete placed each day shall be taken not less than once a day, nor less than once for each 150 cubic yards of concrete, nor less than once for each 5000 square feet of surface area for slabs or walls.
	2. Shotcrete test panels and core samples.		
	3. Other:		
<b>C.</b>	<b>Reinforcing and Prestressing Steel (1708.3)</b>		
	1. Certified mill test reports for each shipment of reinforcing steel used to resist flexural, shear and axial forces in reinforced concrete intermediate frames, special moment frames and boundary elements of special reinforced concrete or reinforced masonry shear walls.		Where ASTM A615 reinforcing steel is used to resist earthquake-induced flexural and axial forces in special moment frames and in wall boundary elements of shear walls in structures assigned to Seismic Design Category D, E or F, the testing requirements of ACI 318 shall be met.
	2. Weldability of reinforcement, except that which conforms to ASTM A706, shall be determined in accordance with the requirements of Section 3.5.2 of ACI 318..		
	3. Other:		
<b>D.</b>	<b>Structural Steel (1708.4)</b>		
	1. Testing contained in the Quality Assurance Plan as required by AISC 341.		This includes non-destructive testing (NDT) of welds.
	2. Base metal thicker than 1.5 inches, where subject to through-thickness weld shrinkage strains, shall be ultrasonically tested for discontinuities behind and adjacent to such welds after joint completion.		
	3. Other:		

	<b>Structural Testing for Seismic Resistance</b>	<b>Req'd</b>	<b>Notes</b>
<b>E.</b>	<b>Bolts Installed in Existing Masonry or Concrete (1704.16)</b>		
	1. Direct tension testing of existing anchors.		
	2. Direct tension testing of new bolts.		
	3. Torque testing of new bolts		
	4. Prequalification test for bolts and other types of anchors.		
	5. Other:		
<b>F.</b>	<b>Seismic Qualification of Mechanical and Electrical Equipment (1708.5)</b>		Required for designated seismic systems that require design in accordance with Chapter 13 of ASCE 7 and for which the component importance factor, $I_p$ , is greater than 1 in accordance with Section 13.1.3 of ASCE 7.
<b>G.</b>	<b>Seismically Isolated Structures (1708.6)</b>		Obtain system tests as required by ASCE 7 Section 17.8.



**City and County of San Francisco**  
**Department of Building Inspection**  
1660 Mission Street, San Francisco, CA 94103-2414  
[www.sfdbi.org](http://www.sfdbi.org)

## **STATEMENT OF STRUCTURAL OBSERVATION**

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

Pursuant to 2007 California Building Code (CBC) Section 1709, where required by the provisions of Section 1709.2 or 1709.3, the owner shall employ a registered design professional to perform structural observation as defined in Section 1702.

Prior to issuance of a building permit, the design professional in responsible charge for the design of the building or structure shall specify structural observation at each construction stage. These requirements shall be made a part of the approved plans with all the significant stages identified. See Administrative Bulletin AB-046 for additional information regarding structural observation.

At the conclusion of the work included in the permit, the structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that, to the best of the structural observer's knowledge, have not been resolved.

### **Structural Observations for Seismic Resistance (2007 CBC Section 1709.2)**

Structural observations shall be provided for those structures included in Seismic Design Category D, E or F, as determined in Section 1613, where one or more of the following conditions exist:

- 1. The structure is classified as Occupancy Category III or IV in accordance with Section 1604.5.
- 2. The height of the structure is greater than 75 feet above the base.
- 3. The structure is assigned to Seismic Design Category E, is classified as Occupancy Category I or II in accordance with Section 1604.5, and is greater than two stories in height.
- 4. When so designated by the registered design professional in responsible charge of the design.
- 5. When such observation is specifically required by the Building Official.
- 6. Not required.

**- Continued on Page 2 -**

**Structural Observation Requirements**

The structural observer shall observe the following:

- 1. Foundations
  - a. Isolated and continuous footings, stem walls
  - b. Mat foundations
  - c. Piers, caissons, piles, pile caps
  - d. Retaining walls, hillside construction
- 2. Shear walls
  - a. Light-framed shear walls, including holdown installation and sheathing nailing
  - b. Concrete shear walls, including reinforcing steel placement and concrete placement
  - c. Masonry shear walls, including reinforcing steel placement and grout placement
  - d. Steel shear walls
- 3. Moment-resisting frames
  - a. Concrete moment-resisting frames, including reinforcing steel placement and concrete placement
  - b. Steel moment-resisting frames
- 4. Braced frames
  - a. Steel braced frames
- 5. Horizontal roof and floor diaphragms
  - a. Concrete
  - b. Steel deck, concrete on steel deck
  - c. Wood
  - d. Chords and/or collectors
- 6. Other \_\_\_\_\_

**Prepared by:**

\_\_\_\_\_  
Registered Design Professional in Responsible Charge

[Seal of Registered Design Professional  
in Responsible Charge for the structural  
design of the building or structure]

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Name of Registered Design Profession performing structural observation:**

(required if the Structural Observer is different from the Registered Design Professional in Responsible Charge for the structural design of the building or structure)

\_\_\_\_\_  
Name of Structural Observer

\_\_\_\_\_  
License Number

**Building Official's Acceptance:**

\_\_\_\_\_  
DBI Plans Examiner

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



**STATEMENT OF AREAS OF WORK**

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

This Statement of Areas of Work defines the portions or phases of construction that must be accepted prior to inspection of the next portion or phase of construction.

The Areas of Work are defined as follows:

- 1. Grading \_\_\_\_\_
- 2. Foundation \_\_\_\_\_
- 3. Concrete Podium to Level \_\_\_\_\_
- 4. Superstructure \_\_\_\_\_
- 5. Curtain Wall \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_

Upon satisfactory completion of the construction work requiring special inspection, structural testing, and structural observation for each Area of Work, an Area Acceptance Report shall be submitted to the Building Official for review and approval. No field inspections will be performed by the Department of Building Inspection for the next portion or phase of work until the Area Acceptance Report for the previous portion or phase of work has been reviewed and approved by the Building Official.

**Prepared by:**

\_\_\_\_\_  
 Registered Design Professional in Responsible Charge

[Seal of Registered Design Professional  
 in Responsible Charge for the structural  
 design of the building or structure]

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date

**Building Official's Acceptance:**

\_\_\_\_\_  
 DBI Plans Examiner

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date





**City and County of San Francisco**  
**Department of Building Inspection**  
 1660 Mission Street, San Francisco, CA 94103-2414  
[www.sfdbi.org](http://www.sfdbi.org)

**SCHEDULE OF SPECIAL INSPECTION AGENCIES  
 AND MATERIALS TESTING LABORATORIES**

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

Effective Date: \_\_\_\_\_

The following are the testing agencies and special inspectors that will be retained to conduct tests and inspection on this project. This form shall be submitted to the Department of Building Inspection Building Inspection Division prior to commencement of work for review.

<b>Responsibility</b>	<b>Firm Name</b>	<b>Address, Telephone, E-mail</b>
1. Special Inspection (except for geotechnical)		
2. Material Testing		
3. Geotechnical Inspections		
4.		
5.		
6.		

**Prepared by:**

**Building Official's Acceptance:**

\_\_\_\_\_  
 Owner or Owner's Authorized Agent

\_\_\_\_\_  
 DBI Building Inspection Division

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date



**CONTRACTOR'S STATEMENT OF RESPONSIBILITY**

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

Pursuant to 2007 California Building Code Section 1706, each Contractor responsible for the construction of a main wind- or seismic-force-resisting system, designated seismic system or a wind- or seismic-resisting component listed in the statement of special inspections shall submit a written statement of responsibility to the Building Official and the Owner prior to commencement of work on the system or component.

To comply with the requirements of Section 1706, the Contractor acknowledges the following:

1. The Contractor is aware of the special requirements contained in the Statement of Special Inspection (including the Schedule of Special Inspection and Schedule of Structural Tests) prepared by the Registered Design Professional in Responsible Charge per the requirements of Section 1705 of the 2007 CBC.
2. Control will be exercised to obtain conformance with the construction documents approved by the Building Official.
3. The Contractor has procedures for exercising control within the Contractor's organization, the method and frequency of reporting, and the distribution of the reports.

Provide a brief description of the procedure:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

4. The Contractor has the qualified personnel to exercise such control.

Specify the name(s) of the person(s) exercising such control and a brief description of their qualifications:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Contractor's Acknowledgement:**

**Building Official's Acceptance:**

\_\_\_\_\_  
 Contractor's Firm Name License Number

\_\_\_\_\_  
 Contractor's Representative's Name

\_\_\_\_\_  
 DBI Building Inspection Division

\_\_\_\_\_  
 Signature Date

\_\_\_\_\_  
 Signature Date



**SPECIAL INSPECTION DAILY REPORT**

[sample format]

[Company Letterhead]

**SPECIAL INSPECTION DAILY REPORT**

Permit Application No.: \_\_\_\_\_ Date: \_\_\_\_\_

Project Address: \_\_\_\_\_

Inspection Type(s)/Coverage: \_\_\_\_\_

Continuous  Periodic; frequency: \_\_\_\_\_

Inspections made, including locations: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Tests performed: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

The following items: 1) require correction, 2) are previously listed corrected items, and 3) are previously listed uncorrected items: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Changes to approved plans authorized by engineer or architect of record: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

To the best of my knowledge, work inspected was in accordance with the Department of Building Inspection approved plans and specifications, and applicable workmanship provisions of the SFBC except as noted above.

\_\_\_\_\_  
Special Inspector

\_\_\_\_\_  
Special Inspection Agency

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
ID Number



**SPECIAL INSPECTION CERTIFICATE OF COMPLIANCE**

[sample format]

[Company Letterhead]

**SPECIAL INSPECTION CERTIFICATE OF COMPLIANCE**

[Date]

City and County of San Francisco  
Department of Building Inspection  
Building Inspection Division  
1660 Mission Street, 3<sup>rd</sup>Floor  
San Francisco, CA 94103

Subject: Project Address: \_\_\_\_\_  
Permit Application No.: \_\_\_\_\_

In accordance with Section 1704 of the 2007 San Francisco Building Code, we have provided special inspection for the following items:

*[List special inspection items with corresponding numbers to the Statement of Special Inspection, i.e.,*

*A.5.a Inspection of structural steel welding – complete and partial penetration groove welds*

*A.5.b Inspection of structural steel welding – multi-pass fillet welds*

*A.5.e Inspection of structural steel welding – floor and roof deck welds*

*B.2.e Inspection of reinforcing steel welding – shear reinforcement*

*etc.]*

Based upon inspections performed and our (my) substantiating reports, it is our (my) professional judgment that, to the best of our (my) knowledge, the inspected work was performed in accordance with the approved plans, specifications, and applicable workmanship provisions of the San Francisco Building Code.

\_\_\_\_\_  
Design Professional in Responsible Charge  
for the Special Inspection Work

\_\_\_\_\_  
Special Inspection Agency

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

[Seal of Registered Professional  
in Responsible Charge for special inspection  
work performed by the SIA]

cc: Client/Project Owner  
Engineer/Architect

**STRUCTURAL TESTING CERTIFICATE OF COMPLIANCE**

[sample format]

[Company Letterhead]

**STRUCTURAL TESTING CERTIFICATE OF COMPLIANCE**

[Date]

City and County of San Francisco  
Department of Building Inspection  
Special Inspection Unit  
1660 Mission Street, 3<sup>rd</sup>Floor  
San Francisco, CA 94103

Subject: Project Address: \_\_\_\_\_  
Permit Application No.: \_\_\_\_\_

In accordance with Section 1704 of the 2007 San Francisco Building Code, we have provided special inspection for the following items:

\_\_\_\_\_  
*[List special inspection items with corresponding numbers to the Statement of Structural Tests, i.e.,*

\_\_\_\_\_  
*B.1 Compressive strength for concrete*

\_\_\_\_\_  
*D.1 Testing contained in the Quality Assurance Plan*

\_\_\_\_\_  
*etc.]*

\_\_\_\_\_  
Based upon inspections performed and our (my) substantiating reports, it is our (my) professional judgment that, to the best of our (my) knowledge, the inspected work was performed in accordance with the approved plans, specifications, and applicable workmanship provisions of the San Francisco Building Code.

\_\_\_\_\_  
Registered Professional in Responsible Charge  
of the Structural Testing Work

\_\_\_\_\_  
Special Inspection Agency

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
[Seal of Registered Professional  
in Responsible Charge of structural testing  
work performed by the MTL]

cc: Client/Project Owner  
Engineer/Architect

**STRUCTURAL OBSERVATION CERTIFICATE OF COMPLIANCE**

[sample format]

[Company Letterhead]

**STRUCTURAL OBSERVATION CERTIFICATE OF COMPLIANCE**

[Date]

City and County of San Francisco  
Department of Building Inspection  
Special Inspection Unit  
1660 Mission Street, 3<sup>rd</sup>Floor  
San Francisco, CA 94103

Subject: Project Address: \_\_\_\_\_  
Permit Application No.: \_\_\_\_\_

In accordance with Section 1709 of the 2007 San Francisco Building Code, we have provided structural observation for the following items:

\_\_\_\_\_  
*[List special inspection items with corresponding numbers to the Statement of Structural Observation, i.e.,*

\_\_\_\_\_  
*2.a Shear walls – light-frame shear walls, including holdown installation and sheathing nailing*

\_\_\_\_\_  
*5.c Horizontal roof and floor diaphragms – wood  
etc.]*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Based upon structural observation performed and our (my) substantiating reports, it is our (my) professional judgment that, to the best of our (my) knowledge, the observed structural work was performed in accordance with the approved plans, specifications, and applicable workmanship provisions of the San Francisco Building Code.

\_\_\_\_\_  
Structural Observer

[Seal of Registered Design Professional  
in Responsible Charge of the  
structural observation work]

\_\_\_\_\_  
Signature Date

cc: Client/Project Owner  
Engineer/Architect





**City and County of San Francisco**  
**Department of Building Inspection**  
1660 Mission Street, San Francisco, CA 94103-2414  
[www.sfdbi.org](http://www.sfdbi.org)

# **SPECIAL INSPECTION SUBMITTAL PACKAGE**

Where special inspection, testing, and/or structural observation is required, a series of forms shall be completed and submitted to the Department of Building Inspection (DBI) per requirements of the San Francisco Building Code (SFBC) Chapter 17 and Administrative Bulletin AB-046. This package contains required forms and sample letters and reports for your use.

The following forms are attached:

- Special Inspection Submittal Form (Form SI202)
- Statement of Special Inspection (Form SI101)
- Schedule of Special Inspections (Form SI102 or Form SI102EZ)
- Schedule of Structural Tests (Form SI103)
- Statement of Areas of Work (Form SI105)
- Statement of Structural Observation (SI104)
- Schedule of Special Inspection Agencies and Materials Testing Laboratories (Form SI106)
- Contractor's Statement of Responsibility (Form SI107)

The following sample letters and reports are attached:

- Special Inspection Record (Form SI108)
- Special Inspection Daily Reports (Form SI109)
- Special Inspection Non-Compliance Report (Form SI110)
- Special Inspection Certificate of Compliance (Form SI111)
- Structural Testing Certificate of Compliance (Form SI112)
- Structural Observation Certificate of Compliance (Form SI113)

For information regarding special inspection prior to permit issuance, please contact the assigned plans examiner at:

City and County of San Francisco  
Department of Building Inspection  
1660 Mission Street, 2<sup>nd</sup> Floor  
San Francisco, CA 94103-2414  
Tel: 415-558-6133 Fax: 415-558-6686

For information regarding special inspection after permit issuance, please contact a special inspections coordinator at:

City and County of San Francisco  
Department of Building Inspection  
1660 Mission Street, 3<sup>rd</sup> Floor  
San Francisco, CA 94103-2414  
Tel: 415-558-6132 Fax: 415-558-6474  
Email: [dbi.specialinspections@sfgov.org](mailto:dbi.specialinspections@sfgov.org)



**SPECIAL INSPECTION SUBMITTAL FORM**

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

Where special inspection, testing, and/or structural observation is required, this Special Inspection Submittal Form, along with noted attachments below, shall be completed and submitted to the Department of Building Inspection (DBI) per requirements of the San Francisco Building Code (SFBC) Chapter 17 and Administrative Bulletin AB-046.

**PRIOR TO PERMIT ISSUANCE:** In addition to this form, the following items, where applicable, are required at the time of permit or first construction addendum (if the site permit process is used) submittal.

- Statement of Special Inspection (Form SI101)
- Schedule of Special Inspections (Form SI102 or Form SI102EZ)
- Schedule of Structural Tests (Form SI103)
- Statement of Structural Observation (SI104)
- Statement of Areas of Work (Form SI105)
- Authorized Agent

**PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK:** The Owner, or Owner’s Authorized Agent, and the Contractor shall submit the items noted below prior to the commencement of construction work that requires special inspection, testing, and/or structural observation.

- Schedule of Special Inspection Agencies and Materials Testing Laboratories (Form SI106)
- Contractor’s Statement of Responsibility (Form SI107)

**PRIOR TO FINAL APPROVAL OF CONSTRUCTION WORK:** Please submit to DBI the Final Report with the following items, where applicable, at least 10 business days prior to request for final inspection. Also note that the Area of Acceptance Report must also be submitted to DBI at least 10 business days prior to approval of that area of work.

- Special Inspection Record (Form SI108)
- Special Inspection Daily Reports (Form SI109)
- Special Inspection Non-Compliance Report (Form SI110)
- Special Inspection Certificate of Compliance (Form SI111)
- Materials Testing Laboratory Test Reports
- Structural Testing Certificate of Compliance (Form SI112)
- Structural Observation Certificate of Compliance (Form SI113)

**Acknowledgement:**

By signing below, the Owner recognizes their obligation to ensure that the construction complies with the approved permit documents and to implement this program of special inspections.

**Owner or Owner’s Agent:** \_\_\_\_\_  
 Name \_\_\_\_\_ Company \_\_\_\_\_  
 \_\_\_\_\_  
 Signature \_\_\_\_\_ Date \_\_\_\_\_



## SCHEDULE OF STRUCTURAL TESTS

Job Address: \_\_\_\_\_ Application No.: \_\_\_\_\_

The Registered Design Professional in Responsible Charge is responsible for completing this Schedule of Structural Tests. The Structural Tests shown on this form are minimum requirements for specified construction per the 2007 San Francisco Building Code for R-3, Type V construction. Please place a mark in the "Req'd" column to indicate Structural Testing requirements. Additional Structural Testing may be required by the Registered Design Professional in Responsible Charge and should be included on this Schedule of Structural Tests.

It is acceptable that Structural Tests not required for a project be deleted from this Schedule of Structural Tests. Please maintain the numbering system as shown.

	Structural Testing for Seismic Resistance	Req'd	Notes
<b>B.</b>	<b>Concrete (ACI Section 5.6)</b>		
	1. Compressive strength tests for concrete with specified minimum compressive strength, $f'_c$ , of 3,000 psi or greater at 28 days.		Samples for strength tests of each class of concrete placed each day shall be taken not less than once a day, nor less than once for each 150 cubic yards of concrete, nor less than once for each 5000 square feet of surface area for slabs or walls.
	2. Shotcrete test panels and core samples.		
	3. Other:		
<b>C.</b>	<b>Reinforcing and Prestressing Steel (1708.3)</b>		
	1. Certified mill test reports for each shipment of reinforcing steel used to resist flexural, shear and axial forces in reinforced concrete intermediate frames, special moment frames and boundary elements of special reinforced concrete or reinforced masonry shear walls.		Where ASTM A615 reinforcing steel is used to resist earthquake-induced flexural and axial forces in special moment frames and in wall boundary elements of shear walls in structures assigned to Seismic Design Category D, E or F, the testing requirements of ACI 318 shall be met.
	2. Weldability of reinforcement, except that which conforms to ASTM A706, shall be determined in accordance with the requirements of Section 3.5.2 of ACI 318..		
	Other:		
<b>D.</b>	<b>Structural Steel (1708.4)</b>		
	1. Testing contained in the Quality Assurance Plan as required by AISC 341.		This includes non-destructive testing (NDT) of welds.
	2. Base metal thicker than 1.5 inches, where subject to through-thickness weld shrinkage strains, shall be ultrasonically tested for discontinuities behind and adjacent to such welds after joint completion.		
	3. Other:		
<b>E.</b>	<b>Bolts Installed in Existing Masonry or Concrete (1704.16)</b>		
	1. Direct tension testing of existing anchors.		
	2. Direct tension testing of new bolts.		
	3. Torque testing of new bolts		
	4. Prequalification test for bolts and other types of anchors.		
	5. Other:		