



DRAFT #6
ADMINISTRATIVE BULLETIN

NO. AB-046

DATE : November 16, 2009
SUBJECT : Permit Process; Special Inspection
TITLE : **Special Inspection, Structural Testing, and Structural Observation**

PURPOSE : The purpose of this Administrative Bulletin is to describe the procedures to be used in the administration and enforcement of special inspection, structural testing, and structural observation requirements of the San Francisco Building Code (SFBC). It is intended as an aid for registered design professionals in their preparation of special inspection, structural testing, and structural observation programs. It provides information for building owners, registered design professionals, contractors, and special inspection agencies about their responsibilities regarding special inspection and structural observation and includes standardized forms and formats applicable to these functions.

REFERENCE : 2007 San Francisco Building Code
- Section 108A Inspections, General
- Chapter 2 Definitions
- Chapter 17 Structural Tests and Special Inspections
- Administrative Bulletin AB-036: Special Inspection for Demolition Work
- Administrative Bulletin AB-040: Referral of Design Professionals and Contractors to Regulatory Agencies

DISCUSSION :

I. DEFINITIONS

In addition to definitions listed in SFBC Chapter 2 and Section 1702, the following words and terms shall, for the purposes of this Administrative Bulletin, have the meanings shown herein.

- A. **Area Acceptance Report:** A report to the Building Official which states that all the required activities for special inspection, structural testing, and structural observation are complete and acceptable for a portion of the permitted work.
- B. **Compliance:** Conformity in fulfilling specified requirements.
- C. **Daily Report:** A report that includes a record of inspections, observations, sampling and testing activity, non-compliances and resolutions that took place on that day.
- D. **Final Report:** A final report to close out the special inspection requirements with separate sections for Certificate of Compliance, Area Acceptance Reports, Non-Compliance Reports with Records of Correction, Daily Reports, Final Materials Testing Reports.



- E. **Materials Testing Laboratory:** A laboratory approved by the Building Official to perform materials testing as required by the SFBC.
- F. **Special Inspection Agency:** An agency approved by the Building Official to conduct special inspections as required by the SFBC.
- G. **Structural Observer:** A Registered Design Professional with experience and expertise in the design and construction of the type of construction work to be observed.
- H. **Non-Compliance Report:** A report to the Building Official and to the Contractor that an item was found that did not conform to the requirements of the approved construction documents, and that had not been corrected within 24 hours of notification to the Contractor.
- I. **Record of Correction:** A report used to clear a non-compliance/non-compliant work.
- J. **Registered Design Professional in Responsible Charge:** For smaller projects, the registered design professional in responsible charge could be one individual, licensed in the State of California as an architect or engineer. For larger projects with multiple design professionals, the structural engineer of record may be responsible for determining the special inspection, structural testing, and structural observation for structural components of the structure; the architect of record may be responsible for determining the special inspection and structural testing requirements for fire proofing and similar fire resistive construction.

II. DUTIES AND RESPONSIBILITIES

A. Duties and Responsibilities of the Project Owner

1. Employ a special inspection agency, materials testing laboratory, and/or structural observer to provide special inspections, structural testing, and/or structural observations during construction as required by SFBC Chapter 17 and/or otherwise delineated in the Statement of Special Inspections and/or Statement of Structural Observation.
2. Engage the services of a Registered Design Professional for services during construction as required.

B. Duties and Responsibilities of the Registered Design Professional(s) in Responsible Charge

1. Identify the specific special inspection, structural testing, and structural observation services required.

The construction documents shall indicate the items requiring special inspection, structural testing, and structural observation. In addition to incorporating these requirements into the construction documents, the Registered Design Professional in Responsible Charge shall submit the Statement of Special Inspection, Schedule of Structural Tests, Statement of Structural Observation, and Areas of Work forms to the Building Official for review and approval.

2. Identify the portions of work for Area Acceptance.

The area of work should be separated into easily definable stages of construction. For small projects, this may not be necessary. For large projects, the area of work could be based on each addendum, or based on construction type. For example, the portions of work could be defined as grading, shoring, foundation, podium, superstructure; or grading, concrete construction, light-frame construction. The Registered Design Professional in Responsible Charge shall submit the Statement of Areas of Work with the first construction addendum. The Statement of Areas of Work is not required for the construction or alteration of single-family dwellings and two-family dwellings.



3. Respond to field discrepancies by preparing any design changes and submitting such changes to the Building Official for approval.

In the event that the Registered Design Professional in Responsible Charge has not been retained by the Owner for services during construction, a separate Registered Design Professional shall be retained by the Owner and shall be responsible for preparing any design changes and submitting such changes to the Building Official for approval. A letter from the Owner shall be submitted to the Building Official indicating such change in the Registered Design Professional.

C. Duties and Responsibilities of the Structural Observer

Where required pursuant to SFBC Section 1709, the owner shall employ the Registered Design Professional in Responsible Charge of the structural design, or another Registered Design Professional, to perform structural observation as defined in SFBC Section 1702. The Structural Observer shall:

1. Provide visual observation of the structural system for general conformance to the approved construction documents at significant construction stages and at completion of the structural system.
2. Report in writing to the owner's representative, Special Inspector, Contractor and the Building Official any relevant observations related to the site visit, including construction not in conformance with the approved construction documents. A copy of Field Reports documenting site visits shall be maintained at the job site.
3. At the conclusion of the work requiring structural observation, the Structural Observer shall submit to the Building Official a written statement that the site visits have been made and the structural system as observed has been constructed in general conformance to the approved construction documents. If there are deficiencies in the construction, then the written statement must identify the deficiencies that, to the best of the Structural Observer's knowledge, have not been resolved. The Structural Observation Final Compliance Report, along with all Field Reports, shall be submitted to the Building Official at least 10 working days prior to a request for final inspection.

D. Duties and Responsibilities of the Special Inspector

Duties and responsibilities of the Special Inspector include the following:

1. Inspect the types of work identified in the Schedule of Special Inspection and Schedule of Structural Tests for conformance with the DBI approved construction documents and applicable provisions of the code. Other construction documents, such as shop drawings, that do not carry the DBI approval stamp may only be used as an aid to inspection. If the approved construction documents are not available on the premises at the time of the inspection, the special inspector shall immediately notify the Contractor, write a non-compliance report, and immediately submit a copy of the non-compliance report to the Building Official within 24 hours.
2. Prepare and distribute written reports as required. The Special Inspector shall complete a Daily Report for each day during which a relevant inspection visit occurred. The Special Inspector or Special Inspection Agency shall furnish these reports directly to the Building Official, Registered Design Professional(s) in Responsible Charge of the design of the work, and Contractor.



3. Notify the Contractor and Building Official immediately in writing of non-conformance to the approved construction documents within the scope of the special inspection activities. Non-Compliance Reports shall be submitted directly to the Building Official within 24 hours of inspection. If any such item is not resolved in a timely manner or is about to be incorporated in the work, the Registered Design Professional(s) in Responsible Charge and the Building Official shall be notified immediately.
4. Submit to the Building Official a Record of Correction upon the completion of corrective actions to bring non-compliant construction into conformance with approved construction documents

E. Duties and Responsibilities of the Special Inspection Agency

Duties and responsibilities of the Special Inspection Agencies (SIA) include the following:

1. Employ only approved special inspectors to perform special inspection work as specified in the SFBC and this Administrative Bulletin.
2. Insure that an adequate number of qualified special inspection personnel are on the job based on the intensity of activities, nature of work being performed and other factors.
3. At the Building Official's request, submit to the Building Official a list of special inspector assignments. This list shall include all current work assignments within the City and County of San Francisco for the period requested.
4. Upon satisfactory completion of an area of work, submit to the Building Official an Area Acceptance Report. The Area Acceptance Report shall indicate the area of work (soil compaction, pile installation, concrete, steel, etc.) that has been completed in conformance with the approved construction documents. The Area Acceptance Report shall include any Non-Compliance Reports and Records of Correction for that area of work. Additional construction beyond an area of work will not be inspected by the DBI if the Area Acceptance Report has not been submitted to the Building Official, and reviewed and accepted by the Building Official.

Commentary: The Area Acceptance Report requirement is to ensure that certain scopes of work have been inspected and determined to conform with approved construction documents prior to the commencement of additional work. For example, the Building Official requires the Area Acceptance Report from the geotechnical engineer of record for soil compaction prior to inspection of steel reinforcement placement for a concrete foundation.

5. Upon satisfactory completion of all work requiring special inspection, submit to the Building Official a Final Report. The Final Report shall indicate the area of work that was inspected by the special inspector(s) and was determined to have been constructed in conformance with the approved construction documents. The Final Report shall include all Daily Reports, Non-Compliance Reports, Records of Correction and Special Inspection Certificate of Compliance, and shall be signed by the Registered Professional in Responsible Charge of the special inspection work. The Final Report shall be submitted to the Building Official at least 10 working days prior to a request for final inspection.



F. Duties and Responsibilities of the Material Testing Laboratory

Duties and responsibilities of the Material Testing Laboratory (MTL) include the following:

1. Conduct all required testing as indicated in the Schedule of Structural Tests.
2. Submit written reports and test results directly to the Building Official, Registered Design Professional(s) in Responsible Charge of the design of the work, and Contractor.

Commentary: It is the intent of the Building Official to receive and review final reports and test results only, with the exception of non-compliant test results as indicated below. Intermediate or progress test results are not necessary for most projects. From time-to-time on a case-by-case basis, progress test results may be required per the request of the Building Official.

3. Notify the Registered Design Professional in Responsible Charge, the Contractor, and the Building Official of any non-compliant test results within 24 hours. Non-compliant test results shall be submitted to the Building Official.
4. Upon satisfactory completion of all work requiring structural testing, the Materials Testing Laboratory shall submit to the Building Official a Final Report. The Final Report shall indicate the scope of the structural testing work and conformance with the approved construction documents. The Final Report shall include all test reports, Non-Compliance Reports, Record of Corrections and Structural Testing Certificate of Compliance, and shall be signed by the Registered Professional in Responsible Charge of the material testing work. The Final Report shall be submitted to the Building Official at least 10 working days prior to a request for final inspection.

G. Duties and Responsibilities of the Building Official

1. Review and examine plans, specifications and contract documents for general compliance with special inspection, structural tests, and structural observation requirements.
2. Monitor the special inspection and structural observation activities to verify that special inspection and structural observation is being performed and that an adequate number of special inspection staff is present depending upon the extent and complexity of the project.
3. Review inspection reports.
4. Enforce correction of non-compliance items.
5. Review the Final Report. The Certificate of Occupancy, Certificate of Final Completion, and/or Final Inspection shall not be issued and/or completed until the Final Report has been received and approved by the Building Official.
6. Maintain lists of approved Special Inspection Agencies, Special Inspectors, and Materials Testing Laboratories. For purposes of smoke control, the list will be maintained by the San Francisco Fire Department (SFFD) on behalf of the Building Official.



7. Revise department procedures and forms as required at the discretion of the Building Official.
8. Enforce provisions of this Administrative Bulletin through permit actions and other appropriate enforcement actions.

H. Duties and Responsibilities of the Contractor

1. Submit a written statement of responsibility to the Building Official and the owner prior to the commencement of work on 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. The Contractor's Statement of Responsibility shall include an acknowledgement of awareness of the special requirements contained in the statement of special inspections.
2. Notify the special inspector and/ or special inspection agency regarding special inspections required by the Department of Building Inspection.
3. Provide access to approved construction documents at the job site and fabrication shops to the special inspector and the DBI inspector upon request. Note that shop drawings are not considered approved construction documents.
4. Maintain special inspection, structural observation and structural testing records at the job site and make them available for review by the DBI inspector upon request.

III. SPECIAL INSPECTOR AND SPECIAL INSPECTION AGENCY QUALIFICATIONS

To perform special inspections in the City and County of San Francisco, a Special Inspection Agency and Special Inspectors (including Registered Design Professionals performing special inspections) must be approved by the Building Official. A list of approved Special Inspection Agencies and Special Inspectors shall be maintained by the Building Official.

Special Inspectors performing special inspections of construction projects in the City and County of San Francisco must meet the minimum requirements outlined in the table below and be approved by the Building Official. Special inspection personnel must demonstrate competence to the satisfaction of the Building Official, which includes achieving and maintaining certifications, as detailed in the table below. A qualified Special Inspector shall be employed by an approved special inspection agency and materials testing laboratory conforming insofar as applicable to the requirements of ASTM E329.

Except for testing of materials and reporting of numerical results, the Special Inspector shall work under the general supervision of a Registered Design Professional with expertise in special inspection work, and all reports and certification of compliance must be signed by the Registered Professional in Responsible Charge of the special inspection work.

Commentary: International Code Council (ICC) certification may be used as one of several measures of an individual's qualifications. Special inspectors should possess the right mix of technical knowledge, education, and related experience. Because proper weighting of the relative importance of these three qualifications is a subjective decision, it is the opinion of the ICC that determining the emphasis of ICC certification is most appropriately performed at the local level by the building official. Therefore, the City and County of San



Francisco has added requirements for minimum experience. In addition, the minimum experience requirement is higher for projects requiring structural observation such as high-rise buildings.

Steel Construction – Structural Steel and High Strength Bolting		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ICC Structural Steel and Bolting Special Inspector or AWS/AISC Certified Steel Structure Inspector	three years of verified work experience in structural steel and high strength bolting inspection, and/or structural welding inspection	five years of verified work experience in structural steel and high strength bolting inspection, and/or structural welding inspection
Steel Construction – Welding		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ICC Structural Welding Special Inspector or AWS Certified Welding Inspector	three years of verified work experience in structural steel and high strength bolting inspection, and/or structural welding inspection with minimum of one year of verified work experience in structural welding inspection	five years of verified work experience in structural steel and high strength bolting inspection, and/or structural welding inspection with minimum of two years of verified work experience in structural welding inspection
Steel Construction – Nondestructive Testing of Welds		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
American Society of Nondestructive Testing (ASNT) NDT Level II or ASNT ACCP Level II or ASNT ACCP Professional Level III	one year of verified work experience in nondestructive testing or welds	two years of verified work experience in nondestructive testing or welds
Reinforced Concrete Construction		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ACI Concrete Construction Special Inspector or ICC Reinforced Concrete Special Inspector plus ACI Concrete Field Testing Technician – Grade 1	three years of verified work experience in reinforced concrete construction inspection	five years of verified work experience in reinforced concrete construction inspection
Reinforced Concrete Construction – Reinforcing Steel, Pre-stressed and Post-tensioned Tendon, and Anchor Placement		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ACI Concrete Construction Special Inspector or ICC Reinforced Concrete Special Inspector plus	three years of verified work experience in reinforced concrete construction inspection	five years of verified work experience in reinforced concrete construction inspection



ACI Concrete Field Testing Technician – Grade 1 or Registered Civil/Structural Engineer or Registered Architect		
Reinforced Concrete Construction – Formwork		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
None	three months of verified work experience in reinforced concrete construction inspection	six months of verified work experience in reinforced concrete construction inspection
Reinforced Concrete Construction – Concrete Sampling		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ACI Concrete Field Testing Technician – Grade 1	six months of verified work experience in concrete sampling	one year of verified work experience in concrete sampling
Pre-stressed and Post-tensioned Concrete Construction		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ICC Pre-stressed Concrete Special Inspector or Post-Tensioning Institute (PTI) Level II	one year of verified work experience in pre-stressed/post-tension concrete construction inspection plus minimum experience requirements for reinforced concrete construction inspection noted above	three years of verified work experience in pre-stressed/post-tension concrete construction inspection plus minimum experience requirements for reinforced concrete construction inspection noted above
Masonry Construction		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ICC Structural Masonry Special Inspector or Registered Civil/Structural Engineer or Registered Architect	one year of verified work experience in structural masonry construction inspection	two years of verified work experience in structural masonry construction inspection
Unreinforced Masonry Construction		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ICC Structural Masonry Special Inspector or Registered Civil/Structural Engineer	two years of verified work experience in unreinforced masonry construction inspection	three years of verified work experience in unreinforced masonry construction inspection



or Registered Architect		
Wood Frame Construction and Cold-Formed Steel Construction		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
Any ICC Special Inspector certification or Registered Civil/Structural Engineer or Registered Architect	two years of verified work experience in wood frame and/or cold-formed steel construction inspection	three years of verified work experience in wood frame and/or cold-formed steel construction inspection
Soils – Earthwork, Soil Modification, Underpinning, Excavation, Pile Driving, and Drilled Piers		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ICC Soils Special Inspector or Registered Civil/Geotechnical Engineer or Registered Engineering Geologist	one year of verified work experience in sampling, classifying, and testing soil samples; grading and site preparation; and fill monitoring and testing	three years of verified work experience in sampling, classifying, and testing soil samples; grading and site preparation; and fill monitoring and testing
Soils – Sampling and Testing		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
National Institute for Certification in Engineering Technologies (NICET) Level I or Engineer in Training (EIT) Certificate or ICC Soils Special Inspector or Registered Civil/Geotechnical Engineer or Registered Engineering Geologist	six months of verified work experience in sampling, classifying, and testing soil samples; density-moisture testing	one year of verified work experience in sampling, classifying, and testing soil samples; density-moisture testing
Spray-Applied Fire Proofing		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ICC Spray-Applied Fire Proofing Special Inspector	one year of verified work experience in spray-applied fire proofing inspection	two years of verified work experience in spray-applied fire proofing inspection
Exterior Insulation and Finish Systems (EIFS)		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation



Association of Wall and Ceiling Industry (AWCI) Certified EIFS Inspector or Registered Civil/Structural Engineer or Registered Architect	one year of verified work experience in water-proofing inspection	two years of verified work experience in water-proofing inspection
Smoke Control Systems		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
Registered Mechanical Engineer or Registered Electrical Engineer or Registered Fire Protection Engineer All flow and pressure testing shall be performed by a certified Associated Air Balance Council (AABC) or National Environmental Balancing Bureau (NEBB) personnel under the responsible charge of the special inspector.	one year of verified work experience in smoke control systems inspection	one year of verified work experience in smoke control systems inspection
Bolts, Rods, or Anchors Installed in Existing Masonry or Concrete		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
ACI Concrete Field Testing Technician – Grade 1 or Engineer in Training (EIT) Certificate or Registered Civil/Structural Engineer or Registered Architect	six months of verified work experience in concrete construction inspection	one year of verified work experience in concrete construction inspection
Material Verification		
Certification Required	Minimum Experience	Minimum Experience for Projects Requiring Structural Observation
None	three months of verified work experience in construction inspection	six months of verified work experience in construction inspection

Notes to Table:

1. In order for work experience to count toward qualification, it must be based on verifiable work directly related to the category or type of special inspection involved.
2. Five or more years verifiable work experience as a qualified Special Inspector in one or more



categories of work may fulfill up to half of the experience requirements in any category, if such experience is acceptable to the Registered Professional in Responsible Charge of the special inspection work, and approved by the Building Official.

3. Five or more years verifiable work experience at a journeyman level in that category or type of work may fulfill up to half of the experience requirements in that category, at if such experience is acceptable to the Registered Professional in Responsible Charge of the special inspection work, and approved by the Building Official.
4. An inspector who does not meet the qualifications for Special Inspector may be allowed to perform special inspection work, at the discretion of the Registered Professional in Responsible Charge of the special inspection work, provided the individual is working under direct and continuous supervision of a Special Inspector fully qualified for the type of work involved.
5. An inspector with an Engineer-in-Training Certification must be working under the direct charge of the Registered Design Professional in Responsible Charge of the structural work.

IV. MATERIALS TESTING LABORATORY QUALIFICATIONS

Materials Testing Laboratories (MTL) performing materials and structural testing for construction projects in the City and County of San Francisco must be accredited by either the Division of the State Architect (DSA), the International Accreditation Service (IAS), American Association of State Highway and Transportation Officials (AASHTO), or a third party accreditation agency per ISO/IEC 17025 standards; and be approved by the Building Official. A list of approved MTL shall be maintained by the Building Official.

V. OPERATIONAL PROCEDURE WITHIN THE DEPARTMENT OF BUILDING INSPECTION

A. Plan Review Services

1. Plans Examiners shall review the Statement of Special Inspections, Schedule of Special Inspections, Schedule of Structural Tests, Statement of Structural Observation, and Statement of Areas of Work forms submitted by the Design Professional(s) in Responsible Charge.
2. Plans examiners shall affix the "SPECIAL INSPECTION" stamp on the back of the application and the cover sheet of the plans, when approving the permit for issuance. The plans examiner makes one copy of the Statement of Special Inspection, Schedule of Special Inspections, Schedule of Structural Tests, Statement of Structural Observation, and Areas of Work forms; and attaches them to the applicant's copy of the permit application, then gives the original to the clerical support staff.
3. Clerical support staff enters the special inspection, structural testing, and structural observation requirements into the department's permit tracking system; and forwards the Statement of Special Inspection, Schedule of Special Inspections, Schedule of Structural Tests, Statement of Structural Observation, and Areas of Work forms to Inspection Services

B. Central Permit Bureau (CPB)

Upon building permit or addendum issuance, staff gives one copy of the Statement of Special Inspections,



Schedule of Special Inspections, Schedule of Structural Tests, Statement of Structural Observation, and Statement of Areas of Work to applicant together with the approved drawings.

C. Inspection Services

1. Building Inspector shall review the Contractor's Statement of Responsibility, and Schedule of Testing Agencies and Special Inspectors prior to the commencement of work by the Contractor.
2. Special Inspections Unit and/or building inspectors monitor the special inspection activities at the project site. In the event that building inspectors discover that required special inspection is not being performed, or work is not in compliance with the approved plans, they may suspend or stop the progress of the work.
3. Before final building inspection, the Special Inspections Unit reviews the Final Report covering each item requiring special inspection, structural testing, and structural observation. The Final Report, including the Special Inspection Certificate of Compliance and the Structural Testing Certificate of Compliance, shall be wet signed and sealed by the Design Professional in Responsible Charge of the special inspection and/or structural testing and/or structural observation work.
4. Following review and acceptance, the Special Inspections Unit Building Inspector enters final compliance approval in the department's permit tracking system.
5. Clerical support staff retains completed special inspection, structural testing, and structural observation files as part of building and permit records.

Originally approved by the Building Inspection Commission on September 18, 2002

Originally signed by:
Frank Y. Chiu, Director
October 3, 2002

Revised by:
Vivian L. Day, Director
November 16, 2009

Special Inspection Submittal Package under separate cover



City and County of San Francisco
Department of Building Inspection
1660 Mission Street, San Francisco, CA 94103-2414
www.sfgov.org/dbi

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 special inspector for smoke control shall complete and submit a Special Inspection Program and Special Inspection Final Report to the San Francisco Fire Department (SFFD) per Administrative Bulletin AB-047.

The following forms are attached:

- Special Inspection Submittal Form (Form SI202)
- Statement of Special Inspection (Form SI101)
- Schedule of Special Inspections (Form SI102 and 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, 2nd 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, 3rd Floor
San Francisco, CA 94103-2414
Tel: 415-558-6132 Fax: 415-558-6474
Email: dbi.specialinspections@sfgov.org



City and County of San Francisco
Department of Building Inspection
 1660 Mission Street, San Francisco, CA 94103-2414
www.sfgov.org/dbi

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 _____



City and County of San Francisco
Department of Building Inspection
1660 Mission Street, San Francisco, CA 94103-2414
www.sfgov.org/dbi

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
A. Steel Construction (1704.3)				
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:				
a. Details such as bracing and stiffening.			X	
b. Member locations.			X	
c. Application of joint details at each connection.			X	

	Verification and Inspection	Req'd	Contin	Periodic	Notes
B.	Concrete Construction (1704.4)				
	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	
C.	Masonry Construction (1704.5.1 and 1704.5.3)				
	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	
D. Exterior facing (1704.5.4)				
1. Erection and 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	
E. Retrofit of unreinforced masonry bearing wall buildings (1704.5)				
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.
F. Wood Construction (1704.6 and 1707.3)				
1. Prefabricated wood structural elements and assemblies in accordance with Section 1704.2				
2. Plywood sheathed floor and roof diaphragms, including:			X	
a. Nailing, bolting, anchoring			X	
b. Drag struts			X	
c. Braces			X	
3. Plywood sheathed shear walls, including:			X	
a. Nailing, bolting, anchoring			X	
b. Shear panels			X	
c. Braces			X	
d. Hold-downs			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		
G. Cold-Formed Steel Construction (1707.4)				
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:				
	a. Drag struts			X	
	b. Braces			X	
	c. Hold-downs			X	
H.	Soils (1704.7)				
	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	
I.	Pile Foundations (1704.8)				
	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.		X		
	a. Confirm type and size of hammer		X		
	b. Record number of blows per foot of penetration.		X		
	c. Determine required penetrations to achieve design capacity.		X		
	d. Record tip and butt 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		
J.	Pier Foundations (1704.9)				
	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		X		
	c. Lengths, embedment into bedrock		X		
	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.				
K.	Spray-Applied Fire-Resistant Materials (1704.10)				
	1. Structural member surface conditions.			X	Before application of the sprayed fire-resistant material.

	Verification and Inspection	Req'd	Contin	Periodic	Notes
	2. Verify minimum ambient temperature.			X	Before and after application.
	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.
L.	Mastic and Intumescent Fire-Resistant Coating (1704.11)				Special inspections for mastic and intumescent fire-resistant coatings applied to structural elements and decks shall be in accordance to AWCI 12-B.
M.	Special Cases (1704.13)				
	1. Underpinning		X		
	2. Lateral shoring of excavation			X	
	3. Crane Safety			X	See AB-023.
N.	Smoke Control System (1704.14)			X	See AB-047.
O.	Demolition (1704.15)		X		Demolition of buildings more than two stories or 25 feet in height, except Type V buildings.
P.	Bolts Installed in Existing Masonry or Concrete (1704.16)			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.
Q.	New Construction or Alteration of Existing Building within Special Slope Protection Areas (1704.18)			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.
R.	Seismic Resistance of Non-Structural Components (1705.3)				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	
	8. Erection and fastening of interior and exterior non-bearing walls weighing more than 15 pounds per square foot.			X	

	Verification and Inspection	Req'd	Contin	Periodic	Notes
	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	
S.	Designated Seismic System Verifications (1707.9) 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.
T.	Seismic Isolation System (1707.10)			X	Required during the fabrication and installation of isolator units and energy dissipation devices that are part of the seismic isolation system.
U.	Inspect Fabricator's Fabrication and Quality Control Procedures (1704.2.1)				



**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
A.	Steel Construction (1704.3)				
	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.
	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.				
B.	Concrete Construction (1704.4)				
	1. Inspection of reinforcing steel, including prestressing tendons, and placement.			X	
	2. Inspection of reinforcing steel welding:				

	Verification and Inspection	Req'd	Contin	Periodic	Notes
	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		
F.	Wood Construction (1704.6 and 1707.3)				
	1. Prefabricated wood structural elements and assemblies in accordance with Section 1704.2				
	2. Plywood sheathed floor and roof diaphragms, including:			X	
	a. Nailing, bolting, anchoring			X	
	b. Drag struts			X	
	c. Braces			X	
	3. Plywood sheathed shear walls, including:			X	
	a. Nailing, bolting, anchoring			X	
	b. Shear panels			X	
	c. Braces			X	
	d. Hold-downs			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		
H.	Soils (1704.7)				
	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	
P.	Bolts Installed in Existing Masonry or Concrete (1704.16)			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.

	Structural Testing	Req'd	Notes
B.	Concrete (ACI Section 5.6)		
	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:		
D.	Structural Steel (1708.4)		
	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:		
E.	Bolts Installed in Existing Masonry or Concrete (1704.16)		
	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
A.	Masonry (1708.1)		
	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.	Concrete (ACI Section 5.6)		
	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:		
C.	Reinforcing and Prestressing Steel (1708.3)		
	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:		
D.	Structural Steel (1708.4)		
	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:		

	Structural Testing for Seismic Resistance	Req'd	Notes
E.	Bolts Installed in Existing Masonry or Concrete (1704.16)		
	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:		
F.	Seismic Qualification of Mechanical and Electrical Equipment (1708.5)		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.
G.	Seismically Isolated Structures (1708.6)		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.sfgov.org/dbi

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



City and County of San Francisco
Department of Building Inspection
 1660 Mission Street, San Francisco, CA 94103-2414
www.sfgov.org/dbi

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.sfgov.org/dbi

**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 special 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.

Responsibility	Firm Name	Address, Telephone, E-mail
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



City and County of San Francisco
Department of Building Inspection
 1660 Mission Street, San Francisco, CA 94103-2414
www.sfgov.org/dbi

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

 DBI Building Inspection Division

 Signature Date

 Signature Date



City and County of San Francisco
Department of Building Inspection
1660 Mission Street, San Francisco, CA 94103-2414
www.sfgov.org/dbi

SPECIAL INSPECTION RECORD

Job Address: _____ Application No.: _____

Each special inspector shall complete for each day's inspection. Post this card adjacent to the building permit Job Card. When attached to the Job Card, this Special Inspection Record becomes part of the inspection record.

INSPECTION TYPE	SPECIAL INSPECTOR	ID NO.	NOTES	DATE	TIME	
					ARR	DEP

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, 3rdFloor
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, 3rdFloor
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, 3rd 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