

Schedule of Inspection and Testing Agencies

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- | | |
|--|--|
| <input type="checkbox"/> Soils and Foundations | <input type="checkbox"/> Spray Fire Resistant Material |
| <input type="checkbox"/> Cast-in-Place Concrete | <input type="checkbox"/> Wood Construction |
| <input type="checkbox"/> Precast Concrete | <input type="checkbox"/> Exterior Insulation and Finish System |
| <input type="checkbox"/> Masonry | <input type="checkbox"/> Mechanical & Electrical Systems |
| <input type="checkbox"/> Structural Steel | <input type="checkbox"/> Architectural Systems |
| <input type="checkbox"/> Cold-Formed Steel Framing | <input type="checkbox"/> Special Cases |

| Special Inspection Agencies | Firm | Address, Telephone, e-mail |
|-----------------------------------|------|----------------------------|
| 1. Special Inspection Coordinator | | |
| 2. Inspector | | |
| 3. Inspector | | |
| 4. Testing Agency | | |
| 5. Testing Agency | | |
| 6. Other | | |

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

Quality Assurance Plan

Quality Assurance for Seismic Resistance

Seismic Design Category

Quality Assurance Plan Required (Y/N)

Description of seismic force resisting system and designated seismic systems:

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust)

Wind Exposure Category

Quality Assurance Plan Required (Y/N)

Description of wind force resisting system and designated wind resisting components:

Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated above must submit a Statement of Responsibility.

Qualifications of Inspectors and Testing Technicians

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided if requested.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

| | |
|-------|---|
| PE/SE | Structural Engineer – a licensed SE or PE specializing in the design of building structures |
| PE/GE | Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations |
| EIT | Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination |

American Concrete Institute (ACI) Certification

| | |
|----------|---|
| ACI-CFTT | Concrete Field Testing Technician – Grade 1 |
| ACI-CCI | Concrete Construction Inspector |
| ACI-LTT | Laboratory Testing Technician – Grade 1&2 |
| ACI-STT | Strength Testing Technician |

American Welding Society (AWS) Certification

| | |
|--------------|--------------------------------------|
| AWS-CWI | Certified Welding Inspector |
| AWS/AISC-SSI | Certified Structural Steel Inspector |

American Society of Non-Destructive Testing (ASNT) Certification

| | |
|------|---|
| ASNT | Non-Destructive Testing Technician – Level II or III. |
|------|---|

International Code Council (ICC) Certification

| | |
|----------|--|
| ICC-SMSI | Structural Masonry Special Inspector |
| ICC-SWSI | Structural Steel and Welding Special Inspector |
| ICC-SFSI | Spray-Applied Fireproofing Special Inspector |
| ICC-PCSI | Prestressed Concrete Special Inspector |
| ICC-RCSI | Reinforced Concrete Special Inspector |

National Institute for Certification in Engineering Technologies (NICET)

| | |
|-----------|--|
| NICET-CT | Concrete Technician – Levels I, II, III & IV |
| NICET-ST | Soils Technician - Levels I, II, III & IV |
| NICET-GET | Geotechnical Engineering Technician - Levels I, II, III & IV |

Exterior Design Institute (EDI) Certification

| | |
|----------|----------------------------|
| EDI-EIFS | EIFS Third Party Inspector |
|----------|----------------------------|

Other

| Item | Agency # (Qualif.) | Scope |
|-------------------------------|--------------------|---|
| 1. Shallow Foundations | PE/GE | <p><i>Inspect soils below footings for adequate bearing capacity and consistency with geotechnical report.</i></p> <p><i>Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill</i></p> |
| 2. Controlled Structural Fill | PE/GE | <p><i>Perform sieve tests (ASTM D422 & D1140) and modified Proctor tests (ASTM D1557) of each source of fill material.</i></p> <p><i>Inspect placement, lift thickness and compaction of controlled fill.</i></p> <p><i>Test density of each lift of fill by nuclear methods (ASTM D2922)</i></p> <p><i>Verify extent and slope of fill placement.</i></p> |
| 3. Deep Foundations | PE/GE | <p><i>Inspect and log pile driving operations. Record pile driving resistance and verify compliance with driving criteria.</i></p> <p><i>Inspect piles for damage from driving and plumbness.</i></p> <p><i>Verify pile size, length and accessories.</i></p> <p><i>Inspect installation of drilled pier foundations. Verify pier diameter, bell diameter, lengths, embedment into bedrock and suitability of end bearing strata.</i></p> |
| 4. Load Testing | | |
| 4. Other: | | |

| Item | Agency # (Qualif.) | Scope |
|-------------------------------------|-----------------------|--|
| 1. Mix Design | ACI-CCI ICC-RCSI | <i>Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.</i> |
| 2. Material Certification | | |
| 3. Reinforcement Installation | ACI-CCI ICC-RCSI | <i>Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters</i> |
| 4. Post-Tensioning Operations | ICC-PCSI | <i>Inspect placement, stressing, grouting and protection of post-tensioning tendons. Verify that tendons are correctly positioned, supported, tied and wrapped. Record tendon elongations.</i> |
| 5. Welding of Reinforcing | AWS-CWI | <i>Visually inspect all reinforcing steel welds. Verify weldability of reinforcing steel. Inspect preheating of steel when required.</i> |
| 6. Anchor Rods | | <i>Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.</i> |
| 7. Concrete Placement | ACI-CCI ICC-RCSI | <i>Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.</i> |
| 8. Sampling and Testing of Concrete | ACI-CFTT ACI-STT | <i>Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).</i> |
| 9. Curing and Protection | ACI-CCI ICC-RCSI | <i>Inspect curing, cold weather protection and hot weather protection procedures.</i> |
| 10. Other: | | |

| Item | Agency # (Qualif.) | Scope |
|---|-----------------------|---|
| 1. Plant Certification / Quality Control Procedures <input type="checkbox"/> Fabricator Exempt | ACI-CCI ICC-RCSI | <i>Review plant operations and quality control procedures.</i> |
| 2. Mix Design | ACI-CCI ICC-RCSI | <i>Inspect concrete batching operations and verify compliance with approved mix design</i> |
| 3. Material Certification | | |
| 4. Reinforcement Installation | ACI-CCI ICC-RCSI | <i>Inspect size, spacing, position and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials.</i> |
| 5. Prestress Operations | ICC-PCSI | <i>Inspect placement, stressing, grouting and protection of prestressing tendons</i> |
| 6. Connections / Embedded Items | | |
| 7. Formwork Geometry | | |
| 8. Concrete Placement | ACI-CCI ICC-RCSI | <i>Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated .</i> |
| 9. Sampling and Testing of Concrete | ACI-CFTT ACI-STT | <i>Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).</i> |
| 10. Curing and Protection | ACI-CCI ICC-RCSI | <i>Inspect curing, cold weather protection and hot weather protection procedures.</i> |
| 11. Erected Precast Elements | PE/SE | <i>Inspect erection of precast concrete including member configuration, connections, welding and grouting.</i> |
| 12. Other: | | |

Masonry

Required Inspection Level: 1 2

Page of

| Item | Agency # (Qualif.) | Scope |
|-----------------------------------|---------------------|--|
| 1. Material Certification | | |
| 2. Mixing of Mortar and Grout | ICC-SMSI | <i>Inspect proportioning, mixing and retempering of mortar and grout.</i> |
| 3. Installation of Masonry | ICC-SMSI | <i>Inspect size, layout, bonding and placement of masonry units.</i> |
| 4. Mortar Joints | ICC-SMSI | <i>Inspect construction of mortar joints including tooling and filling of head joints.</i> |
| 5. Reinforcement Installation | ICC-SMSI AWS-CWI | <i>Inspect placement, positioning and lapping of reinforcing steel. Inspect welding of reinforcing steel.</i> |
| 6. Prestressed Masonry | ICC-SMSI | <i>Inspect placement, anchorage and stressing of prestressing bars.</i> |
| 7. Grouting Operations | ICC-SMSI | <i>Inspect placement and consolidation of grout. Inspect masonry clean-outs for high-lift grouting.</i> |
| 7. Weather Protection | ICC-SMSI | <i>Inspect cold weather protection and hot weather protection procedures. Verify that wall cavities are protected against precipitation.</i> |
| 9. Evaluation of Masonry Strength | ICC-SMSI | <i>Test compressive strength of mortar and grout cube samples (ASTM C780). Test compressive strength of masonry prisms (ASTM C1314).</i> |
| 10. Anchors and Ties | ICC-SMSI | <i>Inspect size, location, spacing and embedment of dowels, anchors and ties.</i> |
| 11. Other: | | |

| Item | Agency # (Qualif.) | Scope |
|--|------------------------------|---|
| 1. Fabricator Certification/ Quality Control Procedures <input type="checkbox"/> Fabricator Exempt | AWS/AISC- SSI ICC-SWSI | <i>Review shop fabrication and quality control procedures.</i> |
| 2. Material Certification | AWS/AISC- SSI ICC-SWSI | <i>Review certified mill test reports and identification markings on wide-flange shapes, high-strength bolts, nuts and welding electrodes</i> |
| 3. Open Web Steel Joists | | <i>Inspect installation, field welding and bridging of joists.</i> |
| 4. Bolting | AWS/AISC- SSI ICC-SWSI | <i>Inspect installation and tightening of high-strength bolts. Verify that splines have separated from tension control bolts. Verify proper tightening sequence. Continuous inspection of bolts in slip-critical connections.</i> |
| 5. Welding | AWS-CWI ASNT | <i>Visually inspect all welds. Inspect pre-heat, post-heat and surface preparation between passes. Verify size and length of fillet welds.</i> <i>Ultrasonic testing of all full-penetration welds.</i> |
| 6. Shear Connectors | AWS/AISC- SSI ICC-SWSI | <i>Inspect size, number, positioning and welding of shear connectors. Inspect suds for full 360 degree flash. Ring test all shear connectors with a 3 lb hammer. Bend test all questionable studs to 15 degrees.</i> |
| 7. Structural Details | PE/SE | <i>Inspect steel frame for compliance with structural drawings, including bracing, member configuration and connection details.</i> |
| 8. Metal Deck | AWS-CWI | <i>Inspect welding and side-lap fastening of metal roof and floor deck.</i> |
| 9. Other: | | |

Cold-Formed Steel Framing

| Item | Agency # (Qualif.) | Scope |
|----------------------------|-----------------------|-------|
| 1. Member Sizes | | |
| 2. Material Thickness | | |
| 3. Material Properties | | |
| 4. Mechanical Connections | | |
| 5. Welding | | |
| 6. Framing Details | | |
| 7. Trusses | | |
| 8. Permanent Truss Bracing | | |
| 9. Other: | | |

Spray-Applied Fire Resistant Material

| Item | Agency # (Qualif.) | Scope |
|---|-----------------------|---|
| 1. Material Specifications | | |
| 2. Laboratory Tested Fire Resistance Design | ICC-SFSI | <i>Review UL fire resistive design for each rated beam, column, or assembly.</i> |
| 3. Schedule of Thickness | ICC-SFSI | <i>Review approved thickness schedule.</i> |
| 4. Surface Preparation | ICC-SFSI | <i>Inspect surface preparation of steel prior to application of fireproofing</i> |
| 5. Application | ICC-SFSI | <i>Inspect application of fireproofing.</i> |
| 6. Curing and Ambient Condition | ICC-SFSI | <i>Verify ambient air temperature and ventilation is suitable for application and curing of fireproofing.</i> |
| 7. Thickness | ICC-SFSI | <i>Test thickness of fireproofing (ASTM E605). Perform a set of thickness measurements for every 1,000 SF of floor and roof assemblies and on not less than 25% of rated beams and columns.</i> |
| 8. Density | ICC-SFSI | <i>Test the density of fireproofing material (ASTM E605).</i> |
| 9. Bond Strength | ICC-SFSI | <i>Test the cohesive/adhesive bond strength of fireproofing ASTM E736). Perform not less than one test for each 10,000 SF.</i> |
| 10. Other: | | |

| Item | Agency # (Qualif.) | Scope |
|--|-----------------------|--|
| 1. Fabricator Certification/ Quality Control Procedures <input type="checkbox"/> Fabricator Exempt | | <i>Inspect shop fabrication and quality control procedures for wood truss plant.</i> |
| 2. Material Grading | | |
| 3. Connections | | |
| 4. Framing and Details | | |
| 5. Diaphragms and Shearwalls | | <i>Inspect size, configuration, blocking and fastening of shearwalls and diaphragms. Verify panel grade and thickness.</i> |
| 6. Prefabricated Wood Trusses | | <i>Inspect the fabrication of wood trusses.</i> |
| 7. Permanent Truss Bracing | | |
| 8. Other: | | |

Exterior Insulation & Finish Systems (EIFS)

| Item | Agency # (Qualif.) | Scope |
|--------------------------------------|-----------------------|-------|
| 1. Material Submittals | | |
| 2. Condition of Substrate | | |
| 3. Application of Foam Plastic Board | | |
| 4. Application of Coatings | | |
| 5. Application of Mesh | | |
| 6. Ambient Condition and Curing | | |
| 7. Flashing and Joint Details | | |
| 8. Sealants/Caulks | | |
| 9. Other: | | |

| Item | Agency # (Qualif.) | Scope |
|------------------------------|-----------------------|-------|
| 1. Smoke Control | | |
| 2. Mechanical, HVAC & Piping | | |
| 3. Electrical System | | |
| 4. Other: | | |

Architectural Systems

| Item | Agency # (Qualif.) | Scope |
|--------------------------|-----------------------|-------|
| 1. Wall Panels & Veneers | | |
| 2. Suspended Ceilings | | |
| 3. Access Floors | | |
| 4. Other: | | |

Special Cases

| Item | Agency # (Qualif.) | Scope |
|------|-----------------------|-------|
| | | |
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| | | |
| | | |

Instructions – Preparation of the Statement of Special Inspections

1. Who Prepares the Form:

The program of inspection and testing for a project should be prepared by the Registered Design Professional (RDP) that is in responsible charge of the building system requiring inspections and testing. The Structural Engineer of Record (SER) should prepare the sections required for the structural elements such as foundations, concrete, structural steel, etc. The Architect and MEP Engineer of Record should prepare the corresponding sections of the SSI for the building systems that they are responsible for. For further explanation, please refer to the “Guide to Special Inspections and Quality Assurance”.

2. The Front Page:

- 2-1. At the top of the page indicate the project name and location as they appear on the Contract Documents, provide the Owner’s name (individual, private company, municipality, government agency, etc.), and indicate the Design Professional In Responsible Charge. This should be the RDP in responsible charge of the building systems for which this Statement of Special Inspections is being prepared. See explanation in item 1 above.
- 2-2. Next, read the first paragraph and check the box below indicating the discipline(s) that this SSI will encompass (Structural, Architectural, Mechanical/Electrical/Plumbing, or Other).
- 2-3. After reading the remaining paragraphs, the RDP must indicate the frequency of “Interim Reports” required from the Special Inspection Coordinator for the project. This can be indicated directly on the page, i.e. ”weekly”, or the adjacent box can be checked to attach a more specific schedule.
- 2-4. Near the bottom of the page, the RDP must print, sign, and date the form, and stamp the form with their professional seal in the box provided.
- 2-5. The Owner or Owner’s agent must sign and date the front page after the SSI has been completed by the RDP.
- 2-6. The Building Official must sign and date the form upon acceptance.

3. Page 2 – Schedule of Inspection and Testing Agencies:

- 3-1. The top of the page lists all of the categories of building systems with a box next to each. The RDP must check the boxes for only the building systems that are going to be covered in this SSI. A completed inspection program page must be attached for each building system that is checked off. (See instruction #5 below.)
- 3-2. The chart below is where the members of the Special Inspection Program are listed. Their names, addresses, telephone numbers, and emails should be filled out in the appropriate boxes. If the Inspectors and Testing Agencies have not been determined yet, the RDP can fill in the boxes with “To Be Determined”.

4. Page 3 – Quality Assurance Plan:

- 4-1. The RDP must review sections 1705 and 1706 in Chapter 17 of the IBC to determine if the project requires a Quality Assurance Plan for the seismic force and wind force resisting systems and components.
- 4-2. The RDP must indicate whether or not a Quality Assurance Plan is required by filling in the information requested on the page. It is only necessary to provide descriptions

of the seismic and wind force resisting systems if it is determined that a Quality Assurance Plan is required.

5. Inspection Program Pages For Each Building System:

- 5-1. There is a page attached for each building system where the RDP identifies the inspection requirements of each system. Fill out the pages for only the building systems included in this SSI. Do not include blank pages for building systems not covered under this SSI.
- 5-2. Indicate the inspection or testing firm (Agency #) that will perform each inspection task. The Agency # is the number listed next to the Inspector or Testing Laboratory on the chart on page 2 of the SSI.
- 5-3. Indicate the required qualifications of the Inspector for each inspection. A list of qualifications of Inspectors and testing technicians is provided on page 4 of the SSI for reference. The RDP may require additional qualifications beyond the ones listed if they feel it is appropriate. Suggested qualifications have been included for consideration. The RDP must determine what qualifications are appropriate for the particular project and confirm that the selected agency employs individuals with the specified qualifications.
- 5-4. The scope of each inspection must be filled in by the RDP. The editable text provided in italics reflects the code mandated minimum inspection requirements designated in section 1704 of IBC Chapter 17. The editable text does not include the inspections requirements for seismic and wind resisting systems listed in sections 1705 through 1708. The RDP must determine if the project falls under the requirements of sections 1705 to 1708 and add the required inspections to the building systems. The final scope of the inspections required for the project must be determined by the RDP.
- 5-5. Descriptions of all inspections must include the required frequency of each inspection or test.