



## GUIDELINES FOR SPECIAL STRUCTURAL TESTING and INSPECTIONS

**PURPOSE:** To provide a method for complying with the requirements of 2012 IBC Chapter 17.

**BEFORE PERMIT ISSUANCE:** The architect or engineer of record shall complete the Special Structural Testing and Inspection Schedule. The completed schedule is an element of the construction documents and after permit issuance, becomes part of the Inspections Department approved plans and specifications. The completed schedule shall include the following:

- The project specification section and/or IBC article which defines the special inspection and/or test.
- A specific description of the items requiring special inspection (observation and testing).  
Structural Observation is required unless specifically exempted by the Inspections Department, It is the visual observation of the structural system by a registered design professional for general conformance to the approved construction documents at significant construction stages and at completion of the structural system. Structural observation does not include or waive the responsibility for the inspection required by MSBC 1300.0210, 2000 IBC 1704 or other sections of the code.
- The type of inspector ie., special inspector - technical, special inspector - structural.
- The frequency of reporting, ie., intermittent, weekly, monthly, per floor, per test, etc.
- The assigned firm responsible for performing the special inspections.
- Acknowledgments by each designated party.

**REQUIREMENTS:** “Special Inspection” includes inspection (work requiring observation and engineering judgment) and testing (work analyzing materials in accordance with approved standards). Special Inspection shall meet the minimum requirements of the *Minnesota State Building Code* which includes *IBC Chapter 17*, and the approved plans and specifications. Special Inspectors shall be employed by the Owner, or Engineer/Architect of record, but not the Contractor. Special Inspection shall not relieve the Contractor of responsibility to complete the work in accordance with the approved plans and specifications.

### **RESPONSIBILITIES:**

#### **A. Special Inspectors:**

1. Test and/or observe the work assigned for conformance with the approved plans, specifications, and applicable material and workmanship provisions of the *Code*. Perform testing and inspection in a timely manner to avoid delay of work.
2. Bring nonconforming items to the immediate attention of the Contractor for correction, then, if uncorrected after a reasonable period of time, to the attention of the Structural Engineer of Record (SER), Building Official and Architect.
3. Submit test and/or inspection reports to the Building Official, Contractor, Architect, SER, and other designated person in accordance with the Special Structural Testing and Inspection Schedule.
4. Submit a final signed report to the Building Official stating whether the work requiring Special Inspection was, to the best of the inspectors knowledge, in conformance with the approved plans, specifications and applicable workmanship provisions of the *Code*.
5. Sign the Special Structural Testing and Inspection Schedule in conjunction with other responsible parties prior to commencing construction.

#### **B. Architect of Record (or other prime consultant):**

1. Coordinate the flow of reports and related information to expedite resolution of construction issues.
2. Arrange and attend a pre-construction meeting to review scope of Special Structural Testing and Inspection. Include Contractor, Building Official, SER, Testing Agency and other parties concerned.
3. Complete and sign the Special Structural Testing and Inspection Schedule in conjunction with other responsible parties prior to commencing construction. Provide a completed copy of the schedule to all signed parties including Building Official.

#### **C. Structural Engineer of Record:**

1. Identify items requiring Special Structural Testing and Inspection.

2. Define "type" of Special Inspector required for "description" of work indicated on the Special Structural Testing and Inspection Schedule.
  3. Attend a pre-construction meeting to review scope of Special Structural Testing and Inspection.
  4. Complete and sign the Special Structural Testing and Inspection Schedule prior to commencing construction.
  5. Review reports issued by Special Inspectors.
  6. If engaged as a Special Inspector, provide Special Structural Testing and Inspection Services as noted in the specification.
- D. Testing Agency:
1. When engaged as a Special Inspector, provide Special Structural Testing and Inspection Services as noted in the specification.
  2. Sign the Special Structural Testing and Inspection Schedule in conjunction with other responsible parties prior to commencing construction.
- E. Contractor:
1. Attend a pre-construction meeting to review scope of Special Structural Testing and Inspection.
  2. Post or make available the Special Structural Testing and Inspection Schedule at the job site. Provide adequate notification to those parties designated on the schedule so they may properly prepare for and schedule their services.
  3. Provide the Special Inspectors access to the approved plans and specifications at the job site.
  4. Review all reports issued by Special Inspectors.
  5. Retain at the job site all reports submitted by the Special Inspectors for review by the Building Official upon request.
  6. Correct in a timely manner, deficiencies identified in inspection and/or testing reports.
  7. Provide the Special Inspector safe access to the work requiring inspection and/or testing.
  8. Provide labor and facilities to provide access to the work, to obtain, handle and deliver samples, to facilitate testing and inspection and for storage and curing of test samples.
  9. Sign the Special Structural Testing and Inspection Schedule in conjunction with other responsible parties prior to commencing construction.
- F. Fabricator:
1. Sign the Special Structural Testing and Inspection Schedule in conjunction with other responsible parties prior to commencing construction.
  2. Submit a Certificate of Compliance to the Building Official, Special Inspector, and SER that the work was performed in accordance with the approved plans and specifications.
- G. Building Official:
1. Determine work which, in the Building Official's opinion, involves unusual hazards or conditions (*IBC 1704.13 - Special Cases*).
  2. Review Special Inspector qualifications.
  3. Review qualifications of fabricators.
  4. Accept and sign the completed Special Structural Testing and Inspection Schedule.
  5. Review reports and recommendations submitted by the special inspectors.
  6. Review the "final signed reports" submitted by the special inspector(s). These documents should be accepted and approved by the Building Official prior to issuance of a Certificate of Occupancy.
- H. Owner:
1. Establish direct funding for Special Structural Testing and Inspection services.
  2. Provide Special Inspector with approved plans, specifications and approved shop drawings.
  3. Provide Special Inspectors and Testing Agencies with full access to the site at all times.
  4. Sign the Special Structural Testing and Inspection Schedule in conjunction with other responsible parties prior to commencing construction.