

2660 Civic Center Drive • Roseville, MN 55113, Phone: 651-792-7080

GUIDELINES FOR SPECIAL INSPECTIONS AND TESTING

PURPOSE: To provide a method for complying with the requirements of the International Building Code, Chapter 17 – Special Inspections.

BEFORE PERMIT ISSUANCE: The Architect or Engineer of Record shall prepare and submit a Special Structural Testing and Inspection Program to the Building Official. The Program may be included in the contract documents or as a separate submittal document. The completed Program Summary schedule should include the following:

- 1. A specific listing of the items requiring special inspection (observation and testing).
- 2. The associated technical scope sections which define the applicable standards to judge conformance of construction work and describe the duties of special inspectors.
- 3. The type of special inspector required for each item.
- 4. The frequency of reporting, i.e., weekly, monthly, per test/inspection, per floor, etc.
- 5. The parties responsible for performing the special inspections.
- 6. 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 Inspections shall meet the minimum requirements of the *Minnesota State Building Code* which includes *I.B.C. Chapter 17*, and the approved drawings 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 drawings, specifications and codes.

GUIDELINE PROGRAM: To assist with the standardization of Special Inspections and Testing, The Council of American Structural Engineers/Minnesota Chapter (CASE/MN) developed a *Guideline Program for Special Structural Testing and Inspection, 4th Edition.* The document is intended to identify items critical to the structural integrity of buildings and clearly outline the responsibilities of parties involved in design, construction, testing and inspection. An excerpt regarding responsibilities is included on the following pages. Copies of this **voluntary use** document can be obtained through the American Council of Engineering Companies of Minnesota (ACEC/MN) office at 952-593-5533 or www.acecmn.org.

RESPONSIBILITIES:

- 7. Special Inspectors:
 - a. Sign the Special Structural Testing and Inspection Summary Schedule in conjunction with other responsible parties prior to commencement of constriction.
 - b. If requested, attend pre-construction meetings to review the scope of special structural testing and inspection.
 - c. Test and/or inspect the work assigned for conformance with the building department approved design drawings, specifications and applicable material and workmanship provisions of the Code. Perform testing and inspection in a timely manner to avoid delay of work.
 - d. Bring discrepancies 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, the Building Official and to the Architect.
 - e. Submit test and/or inspection reports to the Building Official, Contractor, the Structural Engineer of Record and other designated persons in accordance with the Special Structural Testing and Inspection Summary Schedule
 - f. Submit a final signed report stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans, specifications and the applicable workmanship provisions of the Code.
- 8. Architect of Record (or other prime consultant):
 - a. Complete and sign the Special Structural Testing and Inspection Summary Schedule in conjunction with other responsible parties prior to commencement of construction. Provide a completed copy of the schedule to all signed parties including Building Official.

- b. If appropriate, arrange and attend a pre-construction meeting to review the scope of special structural testing and inspection. Include Contractor, Building Official, SER, Testing Agency and other parties concerned.
- c. Coordinate the flow of reports and related information to expedite resolution of construction issues.

9. Structural Engineer of Record (SER):

- a. Identify items requiring special structural testing and inspection including special cases.
- b. Define "type" of special inspector required for "description" of work indicated on the special structural testing & inspection schedule.
- c. Complete and sign the Special Structural Testing and Inspection Summary Schedule prior to commencement of construction.
- d. If requested, attend a pre-construction meeting to review the scope of special structural testing and inspection.
- e. Review reports submitted by special inspectors.
- f. If engaged as a special inspector, provide special structural testing and inspection services as previously described.

10. Testing Agency:

- a. Sign the Special Structural Testing and Inspection Summary Schedule in conjunction with other responsible parties prior to commencement of construction.
- b. If required, attend a pre-construction meeting to review the scope of special structural testing and inspection.
- c. When engaged as a special inspector, provide special structural testing and inspection services as previously described.

11. Contractor:

- a. Sign the Special Structural Testing and Inspection Summary Schedule in conjunction with other responsible parties prior to commencement of construction.
- b. If requested, attend a pre-construction meeting to review the scope of special structural testing and inspection.
- c. Post or make available the Special Structural Testing and Inspection Summary Schedule within its office at the job site. Also, provide adequate notification to those parties designated on the schedule so they may properly pay for and schedule their work.
- d. Provide the special inspectors access to the approved drawings and specifications at the job site.
- e. Review reports submitted by special inspectors.
- f. Retain at the job site all reports submitted by the special inspectors for review by the building official upon request.
- g. Correct in a timely manner, deficiencies identified in inspection and/or testing reports.
- h. Provide the special inspector safe access to the work requiring inspection and/or testing.
- i. Provide labor and facilities to provide access to the work and to obtain, handle and deliver samples, to facilitate testing and inspection and for storage and curing of test samples.
- j. Verification of conformance of the work within special construction tolerances is solely the Contractor's responsibility.

12. Fabricator:

- a. Sign the Special Structural Testing and Inspection Summary Schedule in conjunction with other responsible parties prior to commencement of construction.
- b. Submit a Certificate of Compliance to the Building Official, Special Inspector, and Structural Engineer of Record that the work was performed in accordance with the approved plans and specifications.

13. Building Official (typical responsibilities noted for information only):

- a. Determine work which, in the Building Official's opinion, involves unusual hazards or conditions in accordance with the I.B.C.
- b. Review special inspector qualifications.
- c. Accept and sign the completed Special Structural Testing and Inspection Summary Schedule.
- d. Review all fabricators who perform in their shop, which requires special inspection.
- e. Review reports and recommendations submitted by the special inspectors.
- f. Review the final signed reports submitted by the special inspector(s). These documents should be accepted and approved by the building department prior to issuance of a Certificate of Occupancy.

14. Owner:

- a. Establish direct funding for cost of special structural testing and inspection services.
- b. Provide special inspector with approved design drawings, specifications and approved shop drawings.
- c. Sign the Special Structural Testing and Inspection Summary Schedule in conjunction with other responsible parties prior to commencement of construction.



2660 Civic Center Drive • Roseville, MN 55113, Phone: 651-792-7080 Fax: 651-792-7070

SPECIAL STRUCTURAL TESTING AND INSPECTION PROGRAM SUMMARY SCHEDULE

Tachnical	(0)				Assigned
Technical (2)		Description (3)	Type of Inspector (4)	Report Frequency (5)	Assigned Firm (6)
Section	Article	• • • • • • • • • • • • • • • • • • • •	J	-F	(3)
					_
					+
(1) Per (2) Re (3) Us (4) Sp (5) We (6) Fir	rmit # to beferenced to e descript ecial Inspeckly, moreontrace	be provided by the Butto the specific technical ions per IBC Chapte ector T = Technical, nthly, per test/inspected to perform services.	uilding Official. cal scope section in the pro r 17, as adopted by the Mi Special Inspector S = Stru tion, per floor, etc. ces. ACKNOWLEDGEME	nnesota State Building Co ectural.	
(1) Per (2) Re (3) Us (4) Sp (5) We (6) Fir	rmit # to be ferenced to e descript ecial Inspeckly, mo em contract	be provided by the Butto the specific technical ions per IBC Chapte ector T = Technical, nthly, per test/inspected to perform services esentative shall sign be	ailding Official. cal scope section in the pro r 17, as adopted by the Mi Special Inspector S = Stru tion, per floor, etc. ces. ACKNOWLEDGEME pelow.	ogram. nnesota State Building Co ectural.	ode.
(1) Per (2) Re (3) Us (4) Sp (5) We (6) Fir	rmit # to be ferenced to be descript ecial Inspeckly, moontracent contracent riate representations.	be provided by the Broto the specific technical ions per IBC Chapte ector T = Technical, nthly, per test/inspected to perform service esentative shall sign to the service in the service esentative shall sign to the service esentative esentative esentative shall sign to the service esentative ese	uilding Official. cal scope section in the pro r 17, as adopted by the Mi Special Inspector S = Stru tion, per floor, etc. ces. ACKNOWLEDGEME pelow.	ogram. nnesota State Building Co ctural. ENTS Date:	ode.
(1) Per (2) Re (3) Us (4) Spr (5) We (6) Fir ach appropriments on tractor:	rmit # to be ferenced to e descript ecial Inspeckly, moreontrace	pe provided by the Breto the specific technical ions per IBC Chapte ector T = Technical, nthly, per test/inspected to perform service esentative shall sign because Firm: Firm:	ailding Official. cal scope section in the pro r 17, as adopted by the Mi Special Inspector S = Stru tion, per floor, etc. ces. ACKNOWLEDGEME pelow.	ogram. nnesota State Building Conctural. ENTS Date: Date:	ode.
(1) Per (2) Re (3) Us (4) Sp (5) We (6) Fir ach appropriate to the contractor:	rmit # to be ferenced to e descript ecial Inspeckly, moreontrace	pe provided by the Broto the specific technical ions per IBC Chapte ector T = Technical, nthly, per test/inspected to perform service esentative shall sign to the service in the service in the service in the service is the service in the service	uilding Official. cal scope section in the pro r 17, as adopted by the Mi Special Inspector S = Stru tion, per floor, etc. ces. ACKNOWLEDGEME pelow.	ogram. nnesota State Building Conctural. ENTS Date: Date:	ode.
(1) Per (2) Re (3) Us (4) Sp (5) We (6) Fir ach appropriate tontractor:	rmit # to beferenced to e descript ecial Inspectally, more montractive representations.	pe provided by the Broto the specific technical ions per IBC Chapte ector T = Technical, nthly, per test/inspected to perform service esentative shall sign to Firm: Firm: Firm: Firm: Firm:	ailding Official. cal scope section in the pro r 17, as adopted by the Mi Special Inspector S = Stru tion, per floor, etc. ces. ACKNOWLEDGEME pelow.	Date:Date:Date:Date:Date:Date:Date:	ode.
(1) Per (2) Re (3) Us (4) Spr (5) We (6) Fir ach appropriate tractor:	rmit # to be ferenced to e descriptecial Inspeckly, moreontractive representations.	pe provided by the Breto the specific technical ions per IBC Chapte ector T = Technical, nthly, per test/inspected to perform service esentative shall sign because Firm: Firm: Firm: Firm: Firm: Firm:	ailding Official. cal scope section in the pro r 17, as adopted by the Mi Special Inspector S = Stru tion, per floor, etc. ces. ACKNOWLEDGEME pelow.	Date: Date: Date: Date: Date: Date:	ode.
(1) Per (2) Re (3) Us (4) Sp (5) We (6) Fir ach appropriate tontractor:	rmit # to beferenced to e descript ecial Inspeckly, moreontractive representations.	pe provided by the Breto the specific technical ions per IBC Chapte ector T = Technical, nthly, per test/inspected to perform service esentative shall sign because Firm: Firm: Firm: Firm: Firm: Firm: Firm: Firm: Firm:	ailding Official. cal scope section in the pro r 17, as adopted by the Mi Special Inspector S = Stru tion, per floor, etc. ces. ACKNOWLEDGEME pelow.	Date:Date:Date:Date:Date:Date:Date:	ode.