CSA Standard S269.1-1975  
Falsework for Construction Purposes

**Scope and Application:**

This standard outlines requirements for the design, fabrication, erection, inspection, testing, maintenance, and use of falsework materials and components where they are erected to provide temporary vertical supports for buildings and other structures during their construction, alteration or repair.

This standard does not apply to: (a) suspended scaffolds or swing stages; (b) truck or vehicle mounted platforms; (c) access scaffolds; and (d) formwork design.

**Drawings:**

Drawings are required to give complete information necessary for the fabrication of the various members of the components and other supplementary information, to show and enable the falsework to be accurately assembled. The standard provides details on: (a) shop drawings; and (b) erection drawings.

**Materials, Standards and Identification:**

The standard discusses: (a) acceptable materials; (b) field identification of materials; (c) timber not structurally graded; and (d) used lumber.

** Loads and Forces:**

The combination of total or partial loading which has the most severe effect on the stability of the structure or stresses in the members being analyzed shall be considered.

The standard provides details on these and:

- Loads on falsework, including vertical loads, horizontal loads, and eccentric loading of compression members.
- Loads on foundations and external supports

**Structural Analysis and Design** the standard covers:

- General requirements such as design capacity and the minimum structural requirements;
- Design loads and forces;
- Codes and standards pertaining to materials to be used;
- Design using analytical methods;
- Design using test results;
- General stability of falsework;
- Limiting deflections;
- Additional requirements for tubular metal scaffold frames and accessories;
- Specific and additional requirements for the design of wood falsework.

**Erection and Dismantling:**

The standard provides the following information on erection and dismantling falsework:

- Preparation for erection, including: (a) drawing availability; (b) clarification of drawings; (c) material checks; and (d) foundation and external supports.
- Erection procedures, including: (a) erection to conform design; (b) supervision of workmen; (c) tools; (d) inspection; (f) re-selection of lumber; (g) variation from plumb; (h) sills and foundation; (g) supervision and inspection; and (j) tube and coupler structures and components.

**Use of Falsework** details are provided on:

- Inspection before use;
- Safeguards.
Maintenance details are provided on:

- General requirements, including: lumber components, such as planks or decking, shall be inspected before being utilized as falsework components; repairs shall be done by qualified persons;
- Maintenance of metal shoring components, including: maintenance of components and accessories for falsework; aligning the frame or panel legs with coupling pins; replacement for bent or damage members; regular examination of couplers; threads of nuts and bolts shall conform to their original shape and size; checking of coupler halves; inspection of all tubes, couplers and fittings.

Test procedures details include:

- Scope: inclusions that deal with the testing of false work and shoring equipment and accessories to determine their ultimate load capacities which can be better assessed by using test rather than analytical methods; exclusions were identified in section 10.1.2;
- General requirements: testing apparatus and materials; establishment of the design capacity of tested members;
- Testing procedures (specific tests): capacity rating; capacity of scaffold frame legs; testing apparatus; manner of loading test of horizontal members; tests on jackscrews; tests on extension legs;
- Tube and coupler shoring and components;
- Tests on vertical shores;
- Tests on horizontal shores.

This bulletin contains a summary of excerpts taken from the Standard, for general information purposes only. This bulletin is not reflective of the complete requirements that the Standard prescribes.

Note: Manitoba Regulation M.R. 217/2006 Section 1.4 inconsistency:
If there is an inconsistency between this regulation and a requirement contained in a publication, code or standard referenced in this regulation, the provisions in this regulation prevail.