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Falsework and formwork

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Contents

Preface

This is the second edition of CSA S269.1, *Falsework and formwork*. It supersedes the previous edition published in 1975 under the title *Falsework for Construction Purposes*.

The following are the significant changes from the previous edition of this Standard:

a) Provisions are now included for limit states design (LSD) while keeping provisions for allowable stress design (ASD), thereby letting the designer choose the method most appropriate. The aim in including LSD requirements is to be at least as safe as the existing ASD requirements.
b) This Standard combines the previous CSA S269.1 (dealing with falsework) and CSA S269.3 (dealing with formwork) into one Standard to eliminate redundancy and improve user readability.
c) A section on specialized formwork and falsework has been added.
d) A new Annex A on plywood has been added.
e) Updates have been made to scope, definitions, reference Standards, design, drawings, site activities, testing, figures, and tables. The updates will make this Standard more current and compatible with other similar documents.

This Standard was prepared by the Technical Committee on Falsework and Formwork, under the jurisdiction of the Strategic Steering Committee on Construction and Civil Infrastructure, and has been formally approved by the Technical Committee.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
4) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include "Request for interpretation" in the subject line:*
   a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
   b) *provide an explanation of circumstances surrounding the actual field condition; and*
   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

   Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at standardsactivities.csa.ca.*
5) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line:*
   a) *Standard designation (number);*
   b) *relevant clause, table, and/or figure number;*
   c) *wording of the proposed change; and*
   d) *rationale for the change.*

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Falsework and formwork

1 Scope

This Standard provides rules and requirements for the design, fabrication, erection, inspection, testing, maintenance, and use of falsework and formwork materials, components, and systems where they are erected to provide temporary vertical and lateral support or containment of freshly placed concrete for buildings and other structures during their construction, alteration, or repair, and includes the removal of new slab systems that have not achieved full strength. This Standard also covers the design of perimeter enclosure systems.

Notes:

1) *Supplementary rules or requirements may be necessary for unusual types of falsework or formwork that*
   a) *are exposed to unusual environments or features;*
   b) *employ materials or procedures not covered in this Standard; and*
   c) *are intended to be used many times for precasting applications.*
2) *Similar material can be found in AS 3600, AS 3610, BS 5975, and BS EN 12812.*

1.2

This Standard is structured and organized so that it may be used with either working stress or limit states design standards and concepts.

1.3

This Standard does not apply to

a) suspended scaffolds or swing stages;
b) truck or vehicle mounted platforms;
c) access scaffolds;
d) design of concrete structures;
e) chimney jump forms; and
f) demolition.

1.4

In this Standard, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the Standard; "should" is used to express a recommendation or that which is advised but not required; and "may" is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

