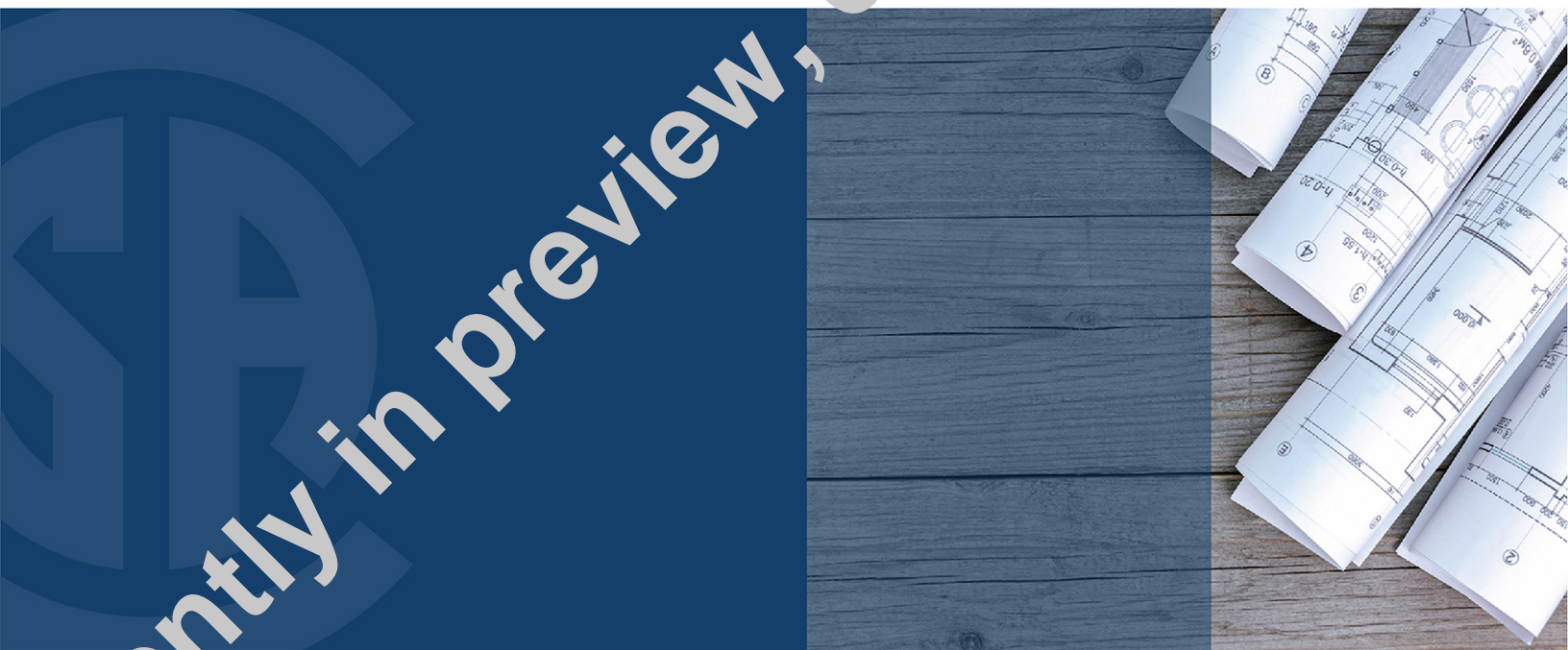


Procedure for certification of prefabricated buildings, modules, and panels



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Contents

Technical Committee on Factory Certification of Buildings	3
Preface	6
0 Introduction	8
1 Scope	8
2 Reference publications	9
3 Definitions	10
4 General requirements	11
4.1 Technical requirements	11
4.1.1 Codes or regulations in force	11
4.1.2 Codes or regulations not in force	11
4.2 Administrative requirements	11
5 Certification requirements	11
6 Certification — Quality system and program	11
6.1 General	11
6.2 Facilities and personnel	12
6.2.1 Suitability	12
6.2.2 Quality program personnel	12
6.2.3 Documentation	12
6.3 Quality program manual	12
6.3.1 Development and implementation	12
6.3.2 Contents	12
6.3.3 Forms	12
6.3.4 Document access	13
6.3.5 Noncompliance	13
6.3.6 Changes	13
7 Certification — Products	13
7.1 In-factory inspection	13
7.2 Documentation	13
7.3 Noncompliances	13
7.4 Markings	13
7.4.1 Compliance marking	13
7.4.2 Specification sheet	14
7.4.3 Buildings with limited-use running gear	17
7.5 Instructions	17
7.5.1 Instructions — General	17
7.5.2 Instructions — Connections of prefabricated modules and panels	17
7.5.3 Instructions — Prefabricated buildings	17

8	Surveillance by the certification body	18
8.1	General	18
8.2	Frequency	18
8.3	Certification body report	18

Annex A (informative)	— Commentary	19
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① Preface

This is the sixth edition of CSA A277, *Procedure for certification of prefabricated buildings, modules, and panels*. It supersedes the previous edition, published in 2008 under the title *Procedure for Factory-Certification of Buildings*, and editions published in 2001, 1990, 1981, and 1972, under the title *Procedure for Certification of Factory-Built Houses*.

Significant changes since the previous edition include the following:

- a) explicit statement of application to modules and panels for buildings;
- b) change in the terminology used to describe types of buildings to which this Standard applies consistent with the *National Building Code of Canada* occupancy classifications;
- c) reorganization of the technical requirement to reference first the codes and regulations that apply at the location where the building, module, or panel will be installed, followed by references to specific documents where such codes or regulations are not in force;
- d) new reference to the *National Energy Code for Buildings* where there are no codes or regulations addressing energy efficiency in force at the installation location;
- e) reference to the authorities having jurisdiction for requirements for professional involvement and stamped drawings;
- f) clarification of the compliance marking requirements (labels or stamps) as they apply to prefabricated buildings, and modules and panels;
- g) provision of options for providing specification sheets for modules and panels;
- h) reorganization of the specification sheet requirements based on the properties or functions of components, materials, services, or appliances installed or provided with the building, module, or panel;
- i) new specification sheet requirements to identify the date of manufacture, additional design loads, and energy performance; and
- j) transfer of detailed information on instructions from Annex A to the body of this Standard.

This Standard provides a framework for certification programs for factory-constructed buildings, building modules, and fully or partially closed panels for panelized buildings. It applies to both residential and non-residential buildings. The requirements of this Standard are consistent with the requirements for the certification of manufacturers according to CAN/CSA-ISO 9001.

Annex A provides further information on the clauses in the body of this Standard.

This Standard is considered suitable for assessment of the conformity of prefabricated buildings, modules, and panels to building codes and standards mandated by authorities having jurisdiction.

This Standard was prepared by the Technical Committee on Factory Certification of Buildings, under the jurisdiction of the Construction and Civil Infrastructure Strategic Steering Committee, 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:
- define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;
 - provide an explanation of circumstances surrounding the actual field condition; and
 - 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:
- Standard designation (number);
 - relevant clause, table, and/or figure number;
 - wording of the proposed change;
 - rationale for the change.

A277-16

Procedure for certification of prefabricated buildings, modules, and panels

0 Introduction

Most buildings are inspected for compliance with codes and standards during and after the installation of various components and subassemblies. Site-built structures are normally subject to inspection at key stages by the authority having jurisdiction. For products whose construction cannot be readily inspected except during assembly, a certification program can assist consumers and those responsible for regulating products to confirm compliance with requirements.

This Standard specifies an approved in-factory certification procedure, applicable to prefabricated buildings, modules, and panels that complements required on-site inspections and testing.

1 Scope

1.1

This Standard specifies the procedure for certification of prefabricated buildings, and partially or fully enclosed modules and panels for buildings of any occupancy.

It provides requirements for

- a) certification of the factory quality program;
- b) certification of the prefabricated product;
- c) auditing of the factory quality program; and
- d) in-factory inspection of the prefabricated product.

Notes:

- 1) *This Standard applies to prefabricated buildings, modules, and panels constructed of any material. (See Annex A.)*
- 2) *This Standard applies to buildings of any occupancy. Use is limited only by certification listing for the manufacturer and the capabilities of the certification body. (See Annex A.)*

1.2

This Standard does not cover portions of buildings or services that are not completed in the factory. It also does not address the transport of buildings or their erection at the building site, except as provided in Clause [7.5.1](#).

Note: *Prefabricated buildings, modules, and panels should be designed to resist or accommodate loads and stresses imposed in transit and during placement. Loads and stresses imposed in transit will depend in part on the methods of transportation accepted by the transportation authority.*

1.3

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.