

Evaluation of adhesives for structural wood products (exterior exposure)



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***CSA 0112.9:21
November 2021***

Title: *Evaluation of adhesives for structural wood products (exterior exposure)*

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CSA 0112.9:21

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*Published in November 2021 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3*

*To purchase standards and related publications, visit our Online Store at www.csagroup.org/store/
or call toll-free 1-800-463-6727 or 416-747-4044.*

*ICS 79.080
ISBN 978-1-4883-4014-7*

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Preface

This is the third edition of CSA O112.9, *Evaluation of adhesives for structural wood products (exterior exposure)*. It supersedes the previous editions, published in 2010 and 2004.

Unlike the other Standards in the CSA O112 Series, which rely on CSA O112.0 for their test procedures, this Standard is not restricted to a specific class of adhesives, and its test procedures are self-contained. It is also one of the few Standards that evaluate the performance of adhesives under thermal conditions corresponding to those that would be encountered during a fire by a structural wood product used in a fire-protected wood assembly.

Significant changes to this edition include the following:

- addition of definitions to Clause [3](#).

Users of this Standard should note that it has been developed for untreated wood only. It is solely the responsibility of the users of this Standard to decide whether they wish to apply its requirements to treated wood.

The procedures in this Standard are under continuing development by the members of the Technical Committee and the Subcommittee responsible for producing this Standard. The areas under development are described in Annex [C](#). They include the development of a fire test for bonded wood members.

This Standard was prepared by the Subcommittee on Wood Adhesives, under the jurisdiction of the Technical Committee on Solid and Engineered Wood Products and the Strategic Steering Committee on Forest Products, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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:*
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 - b) *provide an explanation of circumstances surrounding the actual field condition; and*
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 - a) *Standard designation (number);*
 - b) *relevant clause, table, and/or figure number;*
 - c) *wording of the proposed change; and*

d) *rationale for the change.*

CSA 0112.9:21

Evaluation of adhesives for structural wood products (exterior exposure)

1 Scope

1.1

This Standard specifies requirements for evaluating adhesives used to bond solid wood materials in structural wood products designed for exterior applications.

Note: See Annex C for additional information on exterior exposure and other moisture exposure categories for structural wood adhesives.

1.2

This Standard specifies requirements for evaluating the resistance of adhesives to

- a) shear caused by compression loading, under both wet and dry conditions;
- b) delamination during accelerated exposure to wetting and drying; and
- c) deformation under static shear loading during exposure to heat, high humidity, or combined heat and high humidity.

1.3

This Standard does not apply to adhesives intended for below-ground, ground-contact, or marine service applications.

1.4

This Standard is not intended for the assessment of the effects of chemical treatments of wood on adhesive performance.

1.5

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.

1.6

The values given in SI units are the units of record for the purposes of this Standard. The values given in parentheses are for information and comparison only.