
**Adhesives — Test methods for the
evaluation and selection of adhesives
for indoor wood products —**

**Part 2:
Resistance to delamination in severe
environments**

*Adhésifs — Méthodes d'essai pour l'évaluation et la sélection des
adhésifs destinés aux produits en bois pour l'usage intérieur —*

Partie 2: Résistance à la délamination dans des environnements sévères



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Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Principle	1
4 Apparatus	2
5 Specimens	2
5.1 Preparation and number	2
5.2 Conditioning	2
6 Delamination-resistance grades	3
7 Delamination-resistance tests	3
8 Procedure	3
9 Assessment of the delamination-resistance grade chosen	4
10 Test report	4
Annex A (informative) Report form	6
Bibliography	7

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. www.iso.org/patents

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

This second edition replaces the first edition (ISO 26842-2:2009), of which it constitutes a minor revision.

ISO 26842 consists of the following parts, under the general title *Adhesives — Test methods for the selection and evaluation of adhesives for indoor wood products*:

- *Part 1: Resistance to delamination in non-severe environments*
- *Part 2: Resistance to delamination in severe environments*

Adhesives — Test methods for the evaluation and selection of adhesives for indoor wood products —

Part 2:

Resistance to delamination in severe environments

SAFETY STATEMENT — Persons using this document should be familiar with normal laboratory practice, if applicable. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any regulatory conditions.

It is recognized that some of the materials permitted in this document might have a negative environmental impact. As technological advances lead to more acceptable alternatives for such materials, they will be eliminated to the greatest extent possible.

At the end of the test, care should be taken to dispose of all waste in an appropriate manner in accordance with local regulations.

1 Scope

This part of ISO 26842 gives guidelines to select, by means of delamination-resistance tests, adhesive/wood combinations for use in wood products placed in severe environments, in which the products are exposed to extreme change of temperature and humidity. A series of exposure cycles at various temperature and humidity values is provided to verify that the adhesive selected, or a product bonded with the adhesive, meets the necessary requirements for resistance to delamination.

This part of ISO 26842 is intended to help the user not only to select a suitable adhesive, but also to evaluate adhesives and adhesively bonded wood products.

NOTE When actual wood products are tested using this method, the test results might not be comparable because the test laboratory will not normally have had adequate control over the way the product was assembled.

This part of ISO 26842 is not intended for use in the qualification of structural components.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6238, *Adhesives — Wood-to-wood adhesive bonds — Determination of shear strength by compressive loading*

ISO 9424, *Wood-based panels — Determination of dimensions of test pieces*

ISO 16999, *Wood-based panels — Sampling and cutting of test pieces*

3 Principle

Test specimens or actual products that have been bonded with the test adhesive are placed in chambers at a specified temperature and humidity for a length of time and/or number of cycles depending on the grade of resistance to delamination under consideration. On completion of this exposure, the length of any delamination at the bond line is determined as a percentage of the overall length. If the length of