International Standard

ISO 34256

Adhesives for non-structural wood applications — Test method and requirements for resistance to static load

Adhésifs pour bois à usages non structuraux — Méthode d'essai et exigences pour la résistance à la charge statique

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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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 document should be noted (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by European Committee for Standardization as EN 14256:2007, and was adopted without modification other than those given below. It was assigned to Technical Committee ISO/TC 61, *Plastics*, subcommittee SC 11, *Products* and adopted under the “fast-track procedure”.

— changed "this European Standard" to "this document";

— EN 14256 has been added in Clause 2;

— omitted article "The" in the heading of 10.2.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Adhesives for non-structural wood applications — Test method and requirements for resistance to static load

SAFETY STATEMENT — Persons using this document should be familiar with the 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 determine any regulatory conditions.

1 Scope

This document specifies a method for determining the ability of a test piece bonded with a thermoplastic adhesive, to support a given load for a specified time without fracture or excessive distortion, and specifies performance requirements for mean survival time.

It should be used in conjunction with ISO 19209 and ISO 19210, which describe durability classes and corresponding test methods for non-structural wood adhesives based on their ability to withstand various water treatments and relatively rapidly applied loads. The test described in this standard may be used to assess joints made with thin glue line, as defined in ISO 19210.

NOTE The test described in this document is not a mandatory requirement for the classification of adhesives into the classes D1, D2, D3 and D4 given in ISO 19209. It is an additional test that can be specified by a purchaser if required.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 19210:2017, *Adhesives — Wood adhesives for non-structural applications — Determination of tensile shear strength of lap joints*

EN 923, *Adhesives — Terms and definitions*

EN 13183-1, *Moisture content of a piece of sawn timber — Part 1: Determination by oven dry method*

EN 13183-2, *Moisture content of a piece of sawn timber — Part 2: Estimation by electrical resistance method*

EN 14256, *Adhesives for non-structural wood applications — Test method and requirements for resistance to static load*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 923 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Principle

A number of test pieces, each incorporating a symmetrical single lap joint between two rectangular wooden adherents, is placed in a jig in a climatically controlled environment. A weight is suspended from the jig applying a constant shear force to each joint for a period of 21 d. The time after which any joint fails is reported.

5 Apparatus

5.1 Jigs, for holding the test pieces (see Figure 1).

5.2 Weights, (30,0 ± 0,5) kg with means of attachment to the jigs.

5.3 Enclosure, capable of maintaining the test piece assembly at (23 ± 2) °C and (50 ± 5) % relative humidity.

6 Sample preparation

6.1 Preparation of test pieces

Prepare 10 test pieces, thin line only, in accordance with ISO 19210:2017, 7.1 to 7.2 but with an overlap of (20,0 ± 0,2) mm. A diagram of the test piece is given in Figure 1.