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

*Adhésifs — Joints collés de bois à bois — Détermination de la résistance au
cisaillement par effort de compression*



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS

© ISO 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

	Page
1 Scope	1
2 Normative references	1
3 Apparatus	1
4 Test specimens	3
5 Preparation of test blocks	3
6 Conditioning of test blocks	4
7 Preparation of test joints	4
8 Procedure	4
9 Expression of results	5
10 Test report	5

Annexes

A Information required prior to testing	7
B Timber species, surfaces, quality and moisture content	8
B.1 Timber species	8
B.2 Timber quality and surface	9
B.3 Timber moisture content	9

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 6238 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

This second edition cancels and replaces the first edition (ISO 6238:1987), which has been technically revised.

Annexes A and B form a normative part of this International Standard.

Adhesives — Wood-to-wood adhesive bonds — Determination of shear strength by compressive loading

1 Scope

This International Standard specifies a method for determining the shear strength of wood-to-wood adhesive bonds, with a standard specimen loaded in compression and under specified conditions of preparation, conditioning and testing. This method is intended for testing only those adhesives used in bonding wood to wood.

NOTE 1 To carry out this test, basic information regarding certain variables is needed by the testing laboratory (see annex A).

NOTE 2 This method is not intended for use in testing manufactured products.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 291:1997, *Plastics — Standard atmospheres for conditioning and testing*.

ISO 7500-1:1999, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force measuring system*.

3 Apparatus

3.1 Apparatus for preparation of adhesive

3.1.1 Balance and other suitable equipment, capable of measuring the proportions of the adhesive mix to within a tolerance of $\pm 1\%$.

3.1.2 Mixing equipment, to ensure homogeneous mixing of the constituents with minimum aeration of the adhesive (except foamed adhesive).

3.1.3 Spreading equipment, such as a **wire-wound bar**, **roller spreader**, **curtain coater** or **suitable hand applicators**, capable of spreading the adhesive uniformly within $\pm 5\%$ of the desired spread.

3.1.4 Equipment, designed to exert the required pressure evenly over the whole bonded area within $\pm 5\%$ of the desired value, for example a **press** or **clamps**. If necessary, **heated platens** capable of maintaining the prescribed temperature within $\pm 2^\circ\text{C}$ during compression.

3.2 Apparatus for the determination

3.2.1 Analytical balance, capable of weighing to 0,000 1 g.

3.2.2 Linear measuring device, reading to 0,05 mm, e.g. vernier calipers or micrometer.