
**High-pressure decorative laminates —
Composite elements —**

Part 1:
Test methods

*Stratifiés décoratifs haute pression — Éléments composites —
Partie 1: Méthodes d'essai*



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 2000

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 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Conditioning.....	2
5 Appearance	2
6 Dimensions.....	2
7 Flatness	6
8 Glue-line quality	8
9 Surface bond strength	9
10 Perpendicular tensile strength.....	12
11 Resistance to elevated temperature (short-term exposure)	15
12 Resistance to elevated temperature (long-term exposure).....	15
13 Resistance to water vapour	16
14 Substrate protection against water vapour	18
15 Resistance to axial withdrawal of wood screws (screw-holding).....	19
16 Determination of continuous-load capability of shelving	22
17 Surface impact resistance (large-diameter ball).....	24
18 Surface impact resistance (small-diameter ball).....	24
19 Water resistance (edge swell)	25

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 part of ISO 13894 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 13894-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

ISO 13894 consists of the following parts, under the general title *High-pressure decorative laminates — Composite elements*:

- *Part 1: Test methods*
- *Part 2: Specification of wood-based HPDL elements*

High-pressure decorative laminates — Composite elements —

Part 1:

Test methods

1 Scope

This part of ISO 13894 specifies the methods of test for determination of the properties of composite elements surfaced, and possibly edged, with high-pressure decorative laminate (HPDL) as defined in clause 3.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 13894. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 13894 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 part of ISO 13894.

ISO 1478:1999, *Tapping screw thread*.

ISO 4586-1:1997, *High-pressure decorative laminates — Sheets made from thermosetting resins — Part 1: Classification and specifications*.

ISO 4586-2:1997, *High-pressure decorative laminates — Sheets made from thermosetting resins — Part 2: Determination of properties*.

ISO 7170:1993, *Furniture — Storage units — Determination of strength and durability*.

3 Terms and definitions

For the purposes of this part of ISO 13894, the following terms and definitions apply.

3.1

composite element surfaced with high-pressure decorative laminate

a composite board produced by adhesively bonding high-pressure decorative laminate (HPDL) sheet material to one or both sides of a substrate

NOTE 1 The substrate may be a wood-based product (e.g. particle board), mineral board (e.g. calcium silicate), metal sheet, expanded honeycomb or a plastic material.

NOTE 2 Examples of adhesives are PVAc, urea formaldehyde and polychloroprene.

NOTE 3 Certain tests contained in this part of ISO 13894 are not applicable to all types of composite element.