



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 13894-2:2015

# High-pressure decorative laminates - Composite elements - Part 2 : Specifications for composite elements with wood-based substrates for interior use (ISO 13894- 2:2005)

## I.S. EN ISO 13894-2:2015

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN ISO 13894-2:2015

*Published:*

2015-04-08

*This document was published  
under the authority of the NSAI  
and comes into effect on:*

2015-04-25

ICS number:

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

**EN ISO 13894-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2015

ICS 83.140.20; 97.150

English Version

**High-pressure decorative laminates - Composite elements - Part  
2 : Specifications for composite elements with wood-based  
substrates for interior use (ISO 13894-2:2005)**

Stratifiés décoratifs haute pression - Éléments composites -  
Partie 2: Spécifications des éléments composites avec  
substrats à base de bois pour l'usage intérieur (ISO 13894-  
2:2005)

Dekorative Hochdruck-Laminat - Verbundelemente - Teil  
2: Spezifikationen für Verbundelemente mit holzbasierten  
Substraten für Innenräume (ISO 13894-2:2005)

This European Standard was approved by CEN on 7 April 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**EN ISO 13894-2:2015 (E)**

**Contents**

Page

<b>Foreword.....</b>	<b>3</b>
----------------------	----------

## **Foreword**

The text of ISO 13894-2:2005 has been prepared by Technical Committee ISO/TC 61 “Plastics” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 13894-2:2015 by Technical Committee CEN/TC 249 “Plastics” the secretariat of which is held by NBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2015, and conflicting national standards shall be withdrawn at the latest by October 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### **Endorsement notice**

The text of ISO 13894-2:2005 has been approved by CEN as EN ISO 13894-2:2015 without any modification.

This page is intentionally left blank

# INTERNATIONAL STANDARD

**ISO  
13894-2**

First edition  
2005-07-15

---

---

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

### **Part 2: Specifications for composite elements with wood-based substrates for interior use**

*Stratifiés décoratifs haute pression — Éléments composites —*

*Partie 2: Spécifications des éléments composites avec substrats à base  
de bois pour l'usage intérieur*



Reference number  
ISO 13894-2:2005(E)

© ISO 2005

**ISO 13894-2:2005(E)**

**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.

© ISO 2005

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.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland



## Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Requirements</b> .....	<b>2</b>
<b>5 Properties</b> .....	<b>2</b>
5.1 <b>Appearance</b> .....	<b>2</b>
5.2 <b>Dimensional tolerances</b> .....	<b>3</b>
5.3 <b>Surface bond strength</b> .....	<b>6</b>
5.4 <b>Perpendicular tensile strength</b> .....	<b>6</b>
5.5 <b>Glue-line quality</b> .....	<b>6</b>
5.6 <b>Substrate protection against water vapour (thickness swell)</b> .....	<b>6</b>
5.7 <b>Surface impact resistance</b> .....	<b>6</b>
<b>Annex A (informative) Optional properties</b> .....	<b>7</b>
A.1 <b>General</b> .....	<b>7</b>
A.2 <b>Resistance to axial withdrawal of wood screws (screw-holding)</b> .....	<b>7</b>
A.3 <b>Resistance to elevated temperature (short-term exposure)</b> .....	<b>7</b>
A.4 <b>Resistance to elevated temperature (long-term exposure)</b> .....	<b>7</b>
A.5 <b>Resistance to water vapour</b> .....	<b>8</b>
A.6 <b>Flexural strength/flexural modulus of elasticity</b> .....	<b>8</b>
A.7 <b>Continuous-load capability</b> .....	<b>9</b>
A.8 <b>Water resistance (edge swell)</b> .....	<b>9</b>
<b>Annex B (informative) Reaction to fire</b> .....	<b>10</b>
<b>Annex C (informative) Formaldehyde emission</b> .....	<b>11</b>

## **ISO 13894-2:2005(E)**

### **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 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 13894-2 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: Specifications for composite elements with wood-based substrates for interior use*

# High-pressure decorative laminates — Composite elements —

## Part 2:

## Specifications for composite elements with wood-based substrates for interior use

### 1 Scope

This part of ISO 13894 describes the general properties of composite elements surfaced, and possibly edged, with high-pressure decorative laminate (HPDL) as defined in Clause 3. The composite elements specified in this part of ISO 13894 consist of HPDL sheet material adhesively bonded to one or both sides of a wood-based substrate, and are intended for normal interior use.

Requirements for special applications, e.g. where the product is subjected to extreme conditions of heat or moisture, are not part of this part of ISO 13894, although Part 1 of this International Standard describes test methods for additional properties which may be applicable to such applications (see ISO 13894-1:2000, Subclause 3.1, Note 3).

Test methods and performance levels for special applications shall be agreed between customer and supplier. Information concerning test methods for special applications is given in Annex A.

### 2 Normative references

The following referenced documents are indispensable for the application 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 1096, *Plywood — Classification*

ISO 4586-1:2004, *High-pressure decorative laminates — Sheets made from thermosetting resins — Part 1: Classification and specifications*

ISO 13894-1:2000, *High-pressure decorative laminates — Composite elements — Part 1: Test methods*

ISO 17064, *Wood-based panels — Fibreboard, particleboard and oriented strand board (OSB) — Vocabulary*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **high-pressure decorative laminate (HPDL) composite element with wood-based substrate**

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

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-