INTERNATIONAL STANDARD

ISO 13894-2

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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

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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.

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

3.2
high-pressure decorative laminate(s)
HPDL
HPL
See Definition 3.1 in ISO 4586-1:2004.

3.3
wood-based substrate
particleboard, oriented-strand board, fibreboard (ISO 17064) or plywood (ISO 1096)

NOTE Solid timber and blockboard are not suitable substrates for HPDL.

3.4
board
composite board in the manufacturer's standard sheet size, possibly with one or two sides having postformed edges

3.5
panel
composite panel cut to a specified size, with finished edges

4 Requirements

All composite elements for normal interior use shall meet the requirements for every property for which a value or range is specified in Clause 5.

Annex A contains details of other tests which may be applicable for special applications, and may be applied subject to agreement between customer and supplier. The typical performance values included in Annex A are for information only, and are not requirements of this part of ISO 13894.

5 Properties

5.1 Appearance

5.1.1 General

See ISO 13894-1:2000, Clause 5.

5.1.2 Decorative surfaces

The laminate on the decorative surface or surfaces of the composite element shall comply with ISO 4586-1:2004, Subclause 6.4.1.

5.1.3 Fabrication defects

5.1.3.1 Surface ripple (telegraphing)

Slight surface ripple is permissible if only visible at certain viewing angles.

5.1.3.2 Bumps and indentations

Bumps and indentations are not allowed in the surface(s) or postformed edges of cut-to-size panels. Such defects may be accepted in full-size boards, however, if agreed between customer and supplier.