

Decorative laminated plastics sheet veneered boards and panels

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Committees responsible for this British Standard

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- British Laminated Plastics Fabricators' Association Ltd.
- British Plastics Federation
- Fibre Cement Manufacturers' Association Ltd.
- Furniture Industry Research Association
- Standards Association of Australia
- Wood Panel Industries Federation

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Foreword

This British Standard has been prepared by Technical Committee PRI/76. It supersedes BS 4965:1991, which is withdrawn.

The most significant change in this revision is to the nomenclature used to describe the various board and panel categories. Some substrates have also been regraded.

With these changes, the suitability of the product to meet the demands of various environments, the resistance expected of the laminate surface to wear and tear, and the fire rating of the board or panel, if applicable, should now be recognizable in a wide European context.

Items which may be considered for agreement between purchaser and supplier are given in annex A.

Examples of usage of symbols and some suggested applications of the three durability clauses are given in annex E.

Annex A and annex E are informative. Annexes B, C and D are normative.

Assessed capability. Users of this British Standard are advised to consider the desirability of quality system assessment and registration against the appropriate standard in the BS EN ISO 9000 series by an accredited third-party certification body.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 11 and a back cover.

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1 Scope

This British Standard specifies requirements for decorative laminated sheet, based on thermosetting resins, bonded to a substrate, generally for interior use. It specifies the particular combinations of decorative laminate and substrate, generally for interior use. It specifies the particular combinations of decorative laminate, substrate and adhesive necessary to meet the following service conditions:

- a) in normal humidity conditions with occasional wetting;
- b) in high humidity conditions with occasional wetting;
- c) in prolonged high humidity conditions with frequent wetting;
- d) where, in addition to the above, the board or panel is required to meet statutory fire regulations.

The type and grade of laminate required to meet the demands likely to be made on its surface are also specified.

NOTE This standard is not applicable to boards and panels manufactured by directly applying uncured films to the substrate and performing cure and bond in the process, nor boards and panels faced with other decorative films such as thermoplastics.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this British Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references, the latest edition of the publication referred to applies.

BS 476-7, *Fire tests on building materials and structures — Part 7: Method of test to determine the classification of the surface spread of flame of products.*

BS 7332, *Specification for decorative continuous laminates (DCL) based on thermosetting resins.*

BS EN 204, *Classification of non-structural adhesives for joining of wood and derived timber products.*

BS EN 312-3, *Particleboards — Specifications — Part 3: Requirements for boards for interior fitments (including furniture) for use in dry conditions.*

BS EN 312-5, *Particleboards — Specifications — Part 5: Requirements for load-bearing boards for use in humid conditions.*

BS EN 314-2, *Plywood — Bonding quality — Part 2: Requirements.*

BS EN 319, *Particleboards and fibreboards — Determination of tensile strength perpendicular to the plane of the board.*

BS EN 324-2:1993, *Wood-based panels. Determination of dimensions of board — Part 2: Determination of squareness and edge straightness.*

BS EN 438-1:1991, *Decorative high-pressure laminates (HPL) sheets based on thermosetting resins — Part 1: Specifications.*

BS EN 438-2, *Decorative high-pressure laminates (HPL) sheets based on thermosetting resins — Part 2: Determination of properties.*

BS EN 622-2, *Fibreboards — Specifications — Part 2: Requirements for hardboards.*

BS EN 622-5, *Fibreboards — Specifications — Part 5: Requirements for dry process boards (MDF).*

BS EN 634-2, *Cement bonded particleboards — Specification — Part 2: Requirements for OPC bonded particleboards for use in dry, humid and exterior conditions.*

3 Terms and definitions

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

3.1

boards

composite boards produced in the standard sizes of manufacture

3.2

panels

composite panels manufactured to specific sizes

3.3

high humidity

relative humidity above 80 %

3.4

normal humidity

relative humidity of 40 % to 80 %

3.5

low humidity

relative humidity below 40 %

4 Classification

4.1 General

The classification of boards and panels shall be indicated by the following symbols:

- a) the overall durability of the board or panel: D2, D3, D4 (see 4.2);
- b) the performance category of the surface laminate: VG, HG, HD (see Table 1);
- c) the fire rating of the board or panel, if applicable: F1, F0 (see 4.4).

4.2 Durability

The durability of the board or panel shall be classified in accordance with BS EN 204.

NOTE The durability of the board or panel is determined by both the nature of the substrate and the type of adhesive used to bond the facing laminates to it.

