

Specification for

Direct surfaced wood chipboard based on thermosetting resins

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Plastics Standards Policy Committee (PLM/-) to Technical Committee PLM/41, upon which the following bodies were represented:

- Association of Suppliers to the Furniture Industry Ltd.
- British Laminated Plastics Fabricators' Association Ltd.
- British Plastics Federation
- Fibre Building Board Organization
- Fibre Cement Manufacturers' Association Ltd.
- Furniture Industry Research Association
- Standards Association of Australia
- United Kingdom and Ireland Particleboard Association
- Society of Motor Manufacturers and Traders Ltd.

This British Standard, having been prepared under the direction of the Plastics Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 30 November 1990

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The following BSI references relate to the work on this standard:
Committee reference PLM/41
Draft for comment 89/35573 DC

ISBN 0 580 186555

Amendments issued since publication

Amd. No.	Date	Comments
8537	March 1995	Indicated by a sideline in the margin

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Foreword

This British Standard has been prepared under the direction of the Plastics Standards Policy Committee. It is a new standard detailing performance specifications for six types of direct surfaced wood chipboard.

Appendix A to Appendix G have been included to provide users with information on test methods to verify that required performance specifications have been achieved.

Attention is drawn to BS EN 438-2, BS 3962 and BS 5669 which each contain several of the test methods used in this standard.

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.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard is applicable to boards and panels manufactured by directly applying uncured aminoplast resin impregnated papers to both faces of wood chipboard substrates and achieving bonding and curing in the same process using heat and pressure but without the use of an intermediate adhesive. The cured surfaces may be smooth or textured on one or both faces.

The standard specifies the requirements for six types of direct surfaced wood chipboard for interior applications as follows:

- a) in high humidity conditions, and
- b) in low and normal humidity conditions.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard the following definitions apply.

2.1

direct surfaced boards

boards produced in manufacturers standard sheet sizes

2.2

direct surfaced panels

panels cut to specified sizes from direct surfaced boards

2.3

wood chipboard

particle board made exclusively from small particles of wood and a binder

2.4

high humidity

ambient relative humidity higher than 80 %

2.5

normal humidity

ambient relative humidity of 40 % to 80 %

2.6

low humidity

ambient relative humidity less than 40 %

3 Classification

3.1 General

Direct surfaced boards shall be classified, as shown in Table 1, according to two levels of resistance to wear of the directly applied surface layers and three types of wood chipboard substrate selected from those specified in BS 5669-2.

3.2 Fire performance

Products specified in this standard shall meet the class 3 surface spread of flame requirements of BS 476-7.

NOTE Direct surfaced boards having a class 1 or class 2 rating as determined by BS 476-7 are provided by some manufacturers.

Table 1 — Classification of direct surfaced wood chipboards

Classification	Surface	Substrate
DH/C1A	High wear resistance	General purpose
DH/C3	High wear resistance	Improved moisture resistance
DH/C5	High wear resistance	Improved moisture resistance and enhanced mechanical properties
DG/C1A	General purpose	General purpose
DG/C3	General purpose	Improved moisture resistance
DG/C5	General purpose	Improved moisture resistance and enhanced mechanical properties

4 Appearance

4.1 Colour matching

Where colour matching is required by the purchaser this shall be by comparison with an agreed colour reference sample when inspected under a tungsten illuminant, and in daylight or under a D 6500 standard illuminant as specified in BS 950-1.

NOTE Since slight variations in colour will occur due to inherent variation in the surfacing papers and the chipboard core, it is recommended that boards or panels to be used side by side should be selected from the same production batch where possible and matched to ensure colour compatibility before fabrication or installation.

4.2 Surface finish

Where matching of the surface finish is required by the purchaser there shall be no significant difference between the supplier's master reference sample and the specimen under examination, when inspected at different viewing angles.