

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

सजावटी थर्मोसेटिंग सिंथेटिक रेज़िनबॉन्डेड लेमिनेटेड चादरें — विशिष्टि
भाग 4 2 मिमी और उससे अधिक मोटाई के कॉम्पैक्ट लैमिनेट्स के लिए वर्गीकरण और विशिष्टियाँ

Draft Indian Standard

**DECORATIVE THERMOSETTING SYNTHETIC RESIN BONDED LAMINATED
SHEETS — SPECIFICATION PART 4: CLASSIFICATION AND SPECIFICATIONS
FOR COMPACT LAMINATES OF THICKNESS 2 MM AND GREATER**

(Third Revision of IS 2046)

(ICS No. 83.140.20)

Plastics Sectional Committee, PCD 12

Last date for receipt of
comment is **14 July 2024**

NATIONAL FOREWORD

(Formal clauses to be added later)

This standard was originally published in 1962 and subsequently revised in 1969 and 1995. The standard was originally published to meet the general demand for a standard to cover the use of synthetic resin bonded sheets as a decorative material having a surface which is characterized by its hardness and the materials covered were suitable for use as wall panels or as veneer for wood or other surfaces.

The first revision of this standard was based on BS 3794 : 1964 'Specification for decorative laminated plastics sheets' issued by the British Standards Institution.

The Second revision has been necessitated to harmonize the standard with EN 438-1 : 1991 and EN 438-2 : 1992 issued by the European Committee for Standardization (CEN).

This revision (third) has been undertaken to align the Indian Standard with the ISO 4586 (all parts) High-pressure decorative laminates (HPL, HPDL) Sheets based on thermosetting resins (usually called laminates). Since the ISO standard is published in 8 parts, the standard (IS 2046) has been also bifurcated in 8 parts. This Standard (Part 1) covers the introduction and general information.

Other parts in this series are:

Part 1	Introduction and General Information
Part 2	Determination of properties
Part 3	Classification and specifications for laminates less than 2 mm thick and intended for bonding to supporting substrates
Part 5	Classification and specifications for flooring grade laminates less than 2 mm thick intended for bonding to supporting substrates
Part 6	Classification and specifications for exterior-grade compact laminates of thickness 2 mm and greater
Part 7	Classification and specifications for design laminates
Part 8	Classification and specifications for alternative core laminates

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 178, Plastics — Determination of flexural properties	IS 13360 (Part 5/Sec 7) : 2022 ISO 178 : 2019 Plastics — Method of Testing Part 5 Mechanical Properties Section 7 Determination of Flexural Properties (Second Revision)	Identical
ISO 527-2, Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics	IS 13360 (Part 5/Sec 2) : 2017 / ISO 527-2 : 2012 Plastics — Methods of Testing Part 5 Mechanical Properties Section 2 Determination of tensile properties — Test conditions for moulding and extrusion plastics (<i>First Revision</i>)	Identical
ISO 1183-1, Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid	IS 13360 (Part 3/Sec 10) : 2021/ ISO 1183-1 : 2019 Plastics — Methods of Testing Part 3 Physical and Dimensional Properties Section 10 Determination of density of non-	Identical

pycnometer method and titration method	cellular plastics — Immersion method, Liquid Pycnometer method and Titration method (<i>first revision</i>)	
ISO 4586-2 High-pressure decorative laminates (HPL, HPDL) — Sheets based on thermosetting resins (usually called laminates) — Part 2: Determination of properties	PCD 12 (25647) Decorative thermosetting synthetic resin bonded laminated sheets – Specification Part 2 : Determination of properties (<i>under WC</i>)	Identical

The standard makes a reference to the Packing and marking of the product, details of which are given in National Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (second revision).’ The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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National Annex A
(National Foreword)

A-1 PACKING AND MARKING

A-1.1 Packing

The material shall be supplied in packages as agreed to between the purchaser and the supplier.

A-1.2 Marking

A-1.2.1 The consignment shall be marked suitably with the following information:

- a) Manufacturer details and trade mark, if any;
- b) Type and class of the material;
- c) Month and year of manufacture; and
- d) Batch number and code number.

A-1.2.1 *BIS certification marking*

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.