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IS 2046 (Part 2) : 202X
ISO 4586-2 : 2018
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**BUREAU OF INDIAN STANDARDS**

DRAFT FOR COMMENTS ONLY



भारतीय मानक *मसौदा*

# सजावटी थर्मोसेटिंग सिंथेटिक रेज़िनबॉन्डेड लेमिनेटेड चादरें — विशिष्टि भाग 2 गुणों का निर्धारण

*Draft Indian Standard*

# DECORATIVE THERMOSETTING SYNTHETIC RESIN BONDED LAMINATED SHEETS — SPECIFICATION PART 2 DETERMINATION OF PROPERTIES

(*Third Revision* of IS 2046)

(ICS No. 83.140.20)

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| 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-l : 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:

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| Part 1 | Introduction and General Information |
| Part 3 | Classification and specifications for laminates less than 2 mm thick and intended for bonding to supporting substrates |
| Part 4 | Classification and specifications for compact laminates of thickness 2 mm and greater |
| 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:

| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
|---|---|---|
| ISO 62, Plastics — Determination of water absorption | IS 13360 (Part 8/Sec 1) : 2022/ ISO 62 : 2008 Plastics — Methods of testing Part 8 Permanence/Chemical Properties Section 1 Determination of water absorption (First Revision) | Identical |
| 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 | Identical |
| ISO 291, Plastics — Standard atmospheres for conditioning and testing | IS 196 : 1966 Atmospheric Conditions for testing | Not equivalent |
| ISO 1770, Solid-stem general purpose thermometers (non-identical) | IS 2480 (Part 1) : 1983 Specification for general purpose glass thermometers part I solid-stem thermometers (*second revision*) | Not Equivalent |

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| ISO 4892-1 Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance | IS 17863 (Part 1) : 2022 / ISO 4892-1: 2016 Plastics — Methods of exposure to laboratory light sources: Part 1 General guidance | Identical |
| ISO 4892-2:2013 Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps | IS 17863 (Part 2) : 2022 / ISO 4892-2:2013 Plastics — Methods of exposure to laboratory light sources: Part 2 Xenon-Arc Lamps | Identical |
| ISO 4892-3 Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps | IS 17863 (Part 3) : 2022 / ISO 4892-3:2016 Plastics — Methods of exposure to laboratory light sources: Part 3 Fluorescent UV lamps | Identical |
| ISO 9370 Plastics — Instrumental determination of radiant exposure in weathering tests — General guidance and basic test method | IS 17864 : 2022 / ISO 9370: 2017 Plastics — Instrumental determination of radiant exposure in weathering tests — General guidance and basic test method | Identical |
| ISO 12945-2, Textiles — Determination of fabric propensity to surface fuzzing and to pilling — Part 2: Modified Martindale method | IS 10971 (Part 2) : 2022 ISO 12945-2 : 2020 Textiles — Determination of Fabric Propensity to Surface Pilling, Fuzzing or Matting Part 2 Modified Martindale Method (*Second Revision*) | Identical |
| ISO 12947-1, Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 1: Martindale abrasion testing apparatus | IS 12673 (Part 1) : 2014 / ISO 12947-1 : 1998 Textiles — Determination of the Abrasion Resistance of Fabrics by the Martindale Method Part 1 Martindale Abrasion Testing Apparatus (*First Revision*) | Identical |

The technical committee has reviewed the provisions of the following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard:

| *International Standard* | *Title* |
|---|---|
| ISO 105-A02 | Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour |
| ISO 3668 | Paints and varnishes — Visual comparison of colour of paints |
| ISO 6506-1 | Metallic materials — Brinell hardness test — Part 1: Test method |
| ISO 9352 | Plastics — Determination of resistance to wear by abrasive wheels |
| EN 312 | Particleboards — Specifications |

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| EN 316 | Wood fibreboards — Definition, classification and symbols |
| ASTM G155 | Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials |
| CIE publication no. 85:1989 | Solar spectral irradiance |

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'.

NOTE — The technical content of this document has not been enclosed as this is identical with the corresponding ISO Standard. For details, pleases refer to ISO 4586-2 : 2018 or kindly contact:

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