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High-pressure decorative laminates (HPL, HPDL) — Sheets based on thermosetting resins (usually called laminates) —

Part 4: Classification and specifications for compact laminates of thickness 2 mm and greater

Stratifiés décoratifs haute pression (HPL, HPDL) — Plaques à base de résines thermodurcissables (communément appelées stratifiés) —

Partie 4: Classification et spécifications des stratifiés compacts d'épaisseur égale ou supérieure à 2 mm



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Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Material types and classification system	2
4.1 General.....	2
4.2 Type CGS.....	2
4.3 Type CGF.....	2
5 Characteristics and applications	2
6 Requirements	3
6.1 Compliance.....	3
6.2 Inspection requirements	3
6.2.1 General.....	3
6.2.2 Colour and pattern	3
6.2.3 Surface finish.....	3
6.2.4 Visual inspection	4
6.3 Dimensional tolerance requirements	4
6.4 Test requirements	5
6.4.1 General requirements	5
6.4.2 Notes on requirements for reaction to fire (see Annex B).....	8
Annex A (informative) Addendum to Table 3 relating to test method for resistance to scratching ..	9
Annex B (informative) Addendum to 6.4.2, relating to fire performance	10
Bibliography	12

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

This second edition cancels and replaces the first edition (ISO 4586-4:2015), which has been technically revised.

The main changes compared to the previous edition are as follows:

- correction of errors due to typographical, formatting, and omission issues.

A list of all parts in the ISO 4586 series can be found on the ISO website.

This is a preview of "ISO 4586-4:2018". [Click here to purchase the full version from the ANSI store.](#)

Introduction

High-pressure decorative compact laminates are characterized by their aesthetic qualities, strength, durability, and functional performance. Compact high-pressure decorative laminate sheets are available in a wide variety of colours, patterns, and surface finishes. They are extremely strong, and resistant to wear, impact, scratching, moisture, heat, and staining; and possess good hygienic and anti-static properties, being easy to clean and maintain.

In an effort to harmonize ISO 4586 with other high-pressure decorative laminate standards, multiple methods may be published that demonstrate similar properties. In these instances, the same test method title is given and is annotated as either "Method A" or "Method B". This is the case in the following tests: Edge squareness — 8/9, Dry heat — 17/18 Dimensional stability at elevated temperatures — 19/20, Dimensional stability at ambient temperature — 21/22, Staining — 30/31, Lightfastness — 32/33, Formability — 38/39, and Blistering — 40/41. In these instances, either method may be utilized in testing. Compliance to both methods is not required. While these tests are similar, they are by no means identical and results of one method do not necessarily correspond to the results of the accompanying test. In these situations, it is intended that the documentation in specific parts of ISO 4586 for performance requirements be consulted. Each specific method has performance requirements particular to that method for individual grades of high-pressure decorative laminate.

This document has been harmonized with EN 438-4 whenever possible.