

High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (Usually called Laminates) - Part 1: Introduction and general information

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 438-1:2005 sisaldab Euroopa standardi EN 438-1:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 30.03.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 438-1:2005 consists of the English text of the European standard EN 438-1:2005.</p> <p>This document is endorsed on 30.03.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This Part of EN 438 gives an overview of the standard, and provides guidance in the selection and application of test methods and specifications contained in Parts 2 to 7 of EN 438.</p>	<p>Scope: This Part of EN 438 gives an overview of the standard, and provides guidance in the selection and application of test methods and specifications contained in Parts 2 to 7 of EN 438.</p>
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Võtmesõnad: dekoratiivsed pinnakatted, lamineeritud plastid, liigitused, plaadid, plastid, tehnilised nõuded, termokõvenemine, vaigud

English version

**High-pressure decorative laminates (HPL) - Sheets based on
thermosetting resins (Usually called Laminates) - Part 1:
Introduction and general information**

Stratifiés décoratifs haute pression (HPL) - Plaques à base
de résines thermodurcissables (communément appelées
stratifiés) - Partie 1 : Introduction et informations générales

Dekorative Hochdruck-Schichtpressstoffplatten (HPL) -
Platten auf Basis härtpbarer Harze (Schichtpressstoffe) -
Teil 1: Einleitung und allgemeine Informationen

This European Standard was approved by CEN on 16 August 2004.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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Foreword

This document (EN 438-1:2005) has been prepared by Technical Committee CEN /TC 249, "*Plastics*", the Secretariat of which is held by IBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2005, and conflicting national standards shall be withdrawn at the latest by July 2005.

This document supersedes EN 438-1:1991 and EN 438-2:1991.

This document consists of seven parts:

Part 1: *Introduction and general information*

Part 2: *Determination of properties*

Part 3: *Classification and specifications for laminates less than 2 mm thick 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: *Compact laminate and HPL composite panels for internal and external wall and ceiling finishes*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This Part of EN 438 gives an overview of the standard, and provides guidance in the selection and application of test methods and specifications contained in Parts 2 to 7 of EN 438.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 438-2, *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (Usually called Laminates) - Part 2: Determination of properties*

EN 438-3, *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (Usually called Laminates) - Part 3: Classification and specifications for laminates less than 2 mm thick intended for bonding to supporting substrates*

EN 438-4, *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (Usually called Laminates) - Part 4: Classification and specifications for Compact laminates of thickness 2 mm and greater*

EN 438-5, *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (Usually called Laminates) - Part 5: Classification and specifications for flooring grade laminates less than 2 mm thick intended for bonding to supporting substrates*

EN 438-6, *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (Usually called Laminates) - Part 6: Classification and specifications for Exterior-grade Compact laminates of thickness 2 mm and greater*

EN 438-7, *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (Usually called Laminates) - Part 7 Compact laminate and HPL composite panels for internal and external wall and ceiling finishes*

EN 13329, *Laminate floor coverings — Specifications, requirements and test methods*

3 Term and definition

For the purposes of this document, the following term and definition applies.

3.1

high-pressure decorative laminate(s) (HPL)

sheet(s) consisting of layers of cellulosic fibrous material (normally paper) impregnated with thermosetting resins and bonded together by the high pressure process described below

The high pressure process is defined as the simultaneous application of heat (temperature ≥ 120 °C) and high specific pressure (≥ 5 MPa), to provide flowing and subsequent curing of the thermosetting resins to obtain a homogeneous non-porous material with increased density ($\geq 1,35$ g/cm³), and with the required surface finish.

NOTE 1 This is a general definition of high-pressure decorative laminate(s). More specific product definitions can be found in parts 3 to 6 of the standard.

NOTE 2 In addition to the more common surface layers based on thermosetting resin impregnated décor papers, other decorative design surfaces are available such as metal foils, wood-veneers, textiles, etc. These products are not covered by a specific part of EN 438.