DUROPAL | thermopal

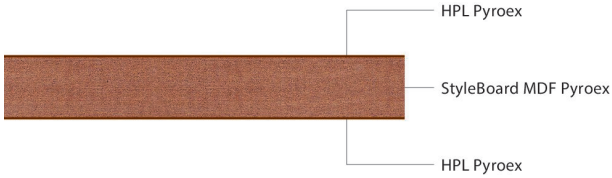
PFLEIDERER

November 2025

Technical data

Duropal Element MDF Pyroex

Flame retardant HPL bonded board consisting of a medium-density fibreboard (MDF) with uniform structure and improved flame resistance, surfaced on both sides with Duropal HPL Pyroex.



Applications

Furniture and interior fitting

Fire protection

Properties

Variety of decors and / or textures

Easy care

Antimicrobial

Food harmless

Flame retardant

Certificates

Specification			Unit	Test standard
Nominal thickness	**17.6**	**20.6**	**mm**	
HPL-thickness	**0.8**	**0.8**	**mm**	
Design front edge	not processed			
Design rear edge	not processed			
Tolerance on thickness	± 0.5		mm	ISO 13894-1
Tolerance on length	± 5		mm	ISO 13894-1
Tolerance on width	± 5		mm	ISO 13894-1
Surface defects – HPL	max. 1 [1)] max. 10 [2)]		mm²/m² mm/m²	EN 438-2
Straightness of edges	± 0.5		mm/m	ISO 13894-1
Squareness	≤ 2		mm/m	ISO 13894-1
Flatness (length)	max. 2		mm/m	ISO 13894-1
Flatness (width)	max. 2		mm/m	ISO 13894-1
Resistance to wet heat, 100 °C (gloss finishes) - HPL	min. 3		rating	EN 438-2
Resistance to wet heat, 100 °C (other finishes) – HPL	min. 4		rating	EN 438-2
Resistance to dry heat, 160 °C (gloss finishes) – HPL	min. 3		rating	EN 438-2
Resistance to dry heat, 160 °C (other finishes) – HPL	min. 4		rating	EN 438-2
Resistance to water vapour (gloss finishes) – HPL	min. 3		rating	EN 438-2
Resistance to water vapour (other finishes) – HPL	min. 4		rating	EN 438-2
Resistance to surface wear – HPL	min. 50 [3)] min. 150 [4)]		cycles	EN 438-2
Resistance to scratching (smooth finishes) – HPL	min. 1 [3)] min. 2 [4)]		rating	EN 438-2

Pfleiderer Deutschland GmbH
Ingolstädter Str. 51
92318 Neumarkt
Germany

phone +49 (0) 91 81 28 48 0
Fax +49 (0) 91 81 28 48 2
info@pfleiderer.com
www.pfleiderer.com

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Specification			Unit	Test standard
Nominal thickness	**17.6**	**20.6**	**mm**	
HPL-thickness	**0.8**	**0.8**	**mm**	
Resistance to scratching (textured finishes) – HPL	min. 2 [3] min. 3 [4]		rating	
Resistance to impact (small diameter ball)	min. 15		N	ISO 13894-1
Stain resistance (groups 1 & 2) – HPL	min. 5		rating	EN 438-2
Stain resistance (group 3) – HPL	min. 4		rating	EN 438-2
Resistance to colour change (xenon arc light) – HPL	4 to 5 Grey Scale Grade			EN 438-2
Reaction to fire	flame retardant			
Reaction to fire (Euroclass)	C-s2,d0			EN 13501-1
Formaldehyde emission class	E1 E05 TSCA Title VI			EN 717-1
Mean density	780 [5]		kg/m³	EN 323
Bending strength	20 [5]		N/mm²	EN 310
Modulus of elasticity (bending stiffness)	2,200 [5]		N/mm²	EN 310
Internal bond	0.55 [5]		N/mm²	EN 319
Thickness swell (24 h)	10 [5]	8 [5]	%	EN 317
Resistance to fixings (face)	≥ 1,000		N	ISO 13894-1
Resistance to fixings (edge)	≥ 600		N	ISO 13894-1
Bonding strength	≥ 0.8		N/mm²	ISO 13894-1
Flexural tensile strength	≥ 0.8		N/mm²	ISO 13894-1
Durability – Glue-line quality	≥ 3		rating	ISO 13894-1
Durability – Resistance to elevated temperature	no effect			ISO 13894-1

[1] Dirt, spots and similar surface defects
[2] Fibres, hairs and scratches
[3] Classification VGF
[4] Classification HGF
[5] Core material

Additional information

Product standard	• in accordance with EN 13894-2
Areas of application	• Wherever a durable, outstanding surface quality – for profiling and lacquering – is required in conjunction with improved fire protection: For furnishings and installations in sales and recreational facilities, public buildings, special buildings and public areas, also in the trade fair and event sector.
Core material	• StyleBoard MDF Pyroex • Flame-retardant medium-density fibreboard (MDF), with a uniform structure.
Product safety	• This product follows the REACH regulation EC 1907/2006 an article. Following Article 7 it does not need to be registered. • The surface is physiologically safe, and approved for direct contact with food acc. to Regulation (EU) No. 10/2011. • The decorative surface and the core consists of paper layers, which are impregnated with thermosetting resins. The resins harden completely during the manufacturing process by heat and high-pressure. They form a stable, resistant and non-reactive material.

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Antimicrobial effect	• Surface with antimicrobial effect in 24 h for interior fit-out and finishes – Test Methodology JIS Z 2801 / ISO 22196
Special	• The coarser the structure and the lighter the decor, the greater the scratch resistance. • The smoother the structure and the the darker the decor, the more sensitive it is to stains. • Depending on the decor and surface texture, slightly different surface visual impressions can result between cut panels viewed from different angles. This is a result of the production methods and does not constitute a quality defect. • Especially for large applications, we recommend paying attention to the colour and texture uniformity of the boards and cut products used when further processing and installing and that the production direction is taken into account. • With intensive plain decors, especially in the red range, colour pigment wash-out may occur under certain circumstances. It is possible that colour pigments are not bound by the resin during the impregnation of the decor paper and are only deposited on the surface of the impregnate and are thus directly on the surface. If cleaning is then carried out, slight discolouration of the cleaning cloths can be observed.This is particularly the case when solvent-based cleaners are used. This is not a product defect. • Classification HGP / HGS / HGF is achieved with the surface textures recommended for horizontal applications. Requirements of classification VGP / VGS / VGF are met by all surface textures. Please refer to our sales documentation, to check which textures are available for this product.
Note	• FSC certification or PEFC certification available on request. • FSC license code: FSC® C011773 • PEFC license code: PEFC/04-32-0828
Colour and surface match	• Decor, structure and core board all influence the final appearance of the end product. • Due to the product-specific differences in production technologies, even identical decor/structure/core board combinations can result in slight optical and tactile deviations across different product groups and formats. Such deviations do not constitute a defect. • The choice of surface structure in particular has a significant influence on the visual impression, the tactile perception as well as the technical characteristics of the product. Thus, the overall impression of a decor can change almost completely depending on the surface structure. Furthermore, mechanical influences on the product surface can lead to a higher contrast optical perception with dark decors. • To ensure that you always achieve the best results with our products and to clarify any deviations in advance, we will be happy to advise you individually.

Further information on products, formats and decor/structure combinations is available at www.pfleiderer.com

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