

Technical data

Duropal Element Pyroex

Flame retardant HPL bonded board consisting of a particleboard with improved flame resistance, surfaced on both sides with Duropal HPL Pyroex.

Applications



Furniture and interior fitting



Fire protection



HPL Pyroex

PremiumBoard Pyroex

HPL Pyroex

Properties



Variety of decors and / or textures



Easy care



Antimicrobial



Food harmless



Flame retardant



Particularly low emission

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⁾	mm ² /m ²	EN 438-2
Straightness of edges	± 0.5		mm/m	ISO 13894-1
Squareness	≤ 2		mm/m	ISO 13894-1
Flatness (length)	≤ 2		mm	ISO 13894-1
Flatness (width)	≤ 2		mm	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

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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	EN 438-2
Resistance to impact (small diameter ball)	min. 15		N/mm	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			EN 717-1
Mean density	640 - 620 ⁵⁾		kg/m ³	EN 323
Bending strength	11 ⁵⁾		N/mm ²	EN 310
Modulus of elasticity (bending stiffness)	1,600 ⁵⁾		N/mm ²	EN 310
Internal bond	0.35 ⁵⁾		N/mm ²	EN 319
Surface soundness	0.8 ⁵⁾		N/mm ²	EN 311
Durability – Water resistance	≤ 15		%	ISO 13894-1
Resistance to fixings (face)	≥ 1,000		N	ISO 13894-1
Resistance to fixings (edge)	≥ 800		N	ISO 13894-1
Bonding strength	≥ 0.7		N/mm ²	ISO 13894-1
Flexural tensile strength	≥ 0.7		N/mm ²	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	<ul style="list-style-type: none"> EN 13894-1
Areas of application	<ul style="list-style-type: none"> Wherever high demands are made on quality and durability in addition to preventive fire protection in decorative interior design. For wall coverings, installations and interior furnishing in industrial, sales and administration buildings, in recreational facilities and public areas, such as schools, sports and festival halls, cinemas, discotheques, hotels, hospitals and care home facilities.
Core material	<ul style="list-style-type: none"> PremiumBoard Pyroex Flame resistant particleboard, suitable for non load-bearing purposes in dry areas, for interior fitting and for furniture subject to higher demands on fire protection.
Product safety	<ul style="list-style-type: none"> 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.

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Antimicrobial effect	<ul style="list-style-type: none"> Surface with antimicrobial effect in 24 h for interior fit-out and finishes – Test Methodology JIS Z 2801 / ISO 22196
Special	<ul style="list-style-type: none"> 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.
Note	<ul style="list-style-type: none"> FSC certification or PEFC certification available on request. FSC license code: FSC® C011773 PEFC license code: PEFC/04-32-0828
Colour and surface match	<ul style="list-style-type: none"> 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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