

November 2025

# **Technical data**

## **Duropal Element P2 ESA**

Electrostatically dissipative HPL bonded board consisting of a ESA particleboard type P2 conforming to EN 312, surfaced on both sides with Duropal HPL ESA.

# HPL ESA HPL ESA HPL ESA

#### Applications



#### Properties







# Certificates





Specification		Unit	Test standard
Nominal thickness	20.6	mm	
HPL-thickness	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 <sup>1)</sup> max. 10 <sup>2)</sup>	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 dry heat, 160 °C (other finishes) – HPL	min. 4	rating	EN 438-2
Resistance to surface wear – HPL	min. 150	cycles	EN 438-2
Resistance to scratching (tex- tured finishes) – HPL	min. 3	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	normally flammable		
Reaction to fire (Euroclass)	D-s2,d0		EN 13501-1, CWFT conforming to 2003/593/EG
Volume resistance R <sub>D</sub>	1 x 10 <sup>4</sup> –1 x 10 <sup>9</sup> Ohm <sup>3)</sup>		EN 61340-5-1
Formaldehyde emission class	E1 E05		EN 717-1



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Specification		Unit	Test standard
Nominal thickness	20.6	mm	
HPL-thickness	0.8	mm	
Mean density	640 - 620 <sup>4)</sup>	kg/m³	EN 323
Bending strength	11 <sup>4)</sup>	N/mm²	EN 310
Modulus of elasticity (bending stiffness)	1,600 <sup>4)</sup>	N/mm²	EN 310
Internal bond	0.35 <sup>4)</sup>	N/mm²	EN 319
Resistance to fixings (face)	≥ 600	N	ISO 13894-1
Resistance to fixings (edge)	≥ 350	N	ISO 13894-1
Bonding strength	≥ 0.6	N/mm²	ISO 13894-1
Flexural tensile strength	≥ 0.6	N/mm²	ISO 13894-1
Durability – Glue-line quality	≥ 3	rating	ISO 13894-1
Durability – Resistance to elevat- ed temperature	no effect	_	ISO 13894-1

<sup>1)</sup> Dirt, spots and similar surface defects

#### **Additional information**

Product standard	in accordance with EN 13894-2
Areas of application	<ul> <li>The products from our ESA system are indispensable wherever electrostatic charges are to be prevented. The conductive constituents in the core plate and facing ensure a reliable and simple earthing possibility for furniture components and worktops in ESD areas, on production and assembly lines, in laboratories or central control rooms.</li> </ul>
Core material	<ul> <li>PremiumBoard P2 ESA</li> <li>Electrostatically dissipative particleboard, Type P2 conforming to EN 312, suitable for interior fitting and furniture, for non load-bearing purposes in dry areas.</li> </ul>
Product safety	<ul> <li>This product follows the REACH regulation EC 1907/2006 an article. Following Article 7 it does not need to be registered.</li> <li>The surface is physiologically safe, and approved for direct contact with food acc. to Regulation (EU) No. 10/2011.</li> <li>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.</li> </ul>

<sup>2)</sup> Fibres, hairs and scratches

<sup>3)</sup> measured dry, measurement voltage 100 V DC, cylindrical electrode, 20–30 °C and 20–50 % rel. humidity (96 h conditioning)

<sup>4)</sup> Core 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	<ul> <li>The coarser the structure and the lighter the decor, the greater the scratch resistance.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>Decors: W10140 Frontal White / U12188 Light Grey</li> </ul>
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	<ul> <li>Decor, structure and core board all influence the final appearance of the end product.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>

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

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