

August 2021

## **Technical data**

## Duropal Element Real Metal P2

Flat bonded element with real metal surface made from a particleboard core, Type P2 to EN 312, faced on both sides with Duropal HPL Real Metal.

#### **Applications**



### Properties



#### Certificates







Specification									Unit	Test standard
Nominal thickness	9.6	16	17.6	19	20.6	25	29.6	39.6	mm	
HPL-thickness in mm	0.8	0.8	0.8	0.8	0.8	0.8	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 <sup>1)</sup> max. 10 <sup>2)</sup>							mm²/m² mm/m²	EN 438-8:2009	
Straightness of edges	± 0.5								mm/m	ISO 13894-1
Squareness	≤2									ISO 13894-1
Flatness (length)	≤ 2								mm/m	ISO 13894-1
Flatness (width)	≤2									ISO 13894-1
Resistance to water vapour (smooth finishes) - HPL	min. 4							rating	EN 438-2:2016	
Resistance to scratching (smooth finishes) - HPL	min. 1								rating	EN 438-2:2016
Resistance to impact (small diameter ball)	≥ 15								N	ISO 13894-1
Stain resistance (groups 1 & 2) - HPL	min. 4								rating	EN 438-2:2016
Stain resistance (group 3) - HPL	min. 4							rating	EN 438-2:2016	
Resistance to colour change (xenon arc light) - HPL	min. 4 Grey Scale Grade								EN 438-2:2016	
Reaction to fire	normally flammable									
Reaction to fire (Euroclass)	not classi- fied	D- s2,d0	D- s2,d0	D- s2,d0	D- s2,d0	D- s2,d0	not classi- fied	not classi- fied		EN 13501-1, CWFT acc. to 2003/593/ EG
Formaldehyde emission class	E1 E05									EN 717-1
Mean density	≥ 720 <sup>3)</sup>	640 - 620 <sup>3)</sup>	640 - 620 <sup>3)</sup>	640 - 620 <sup>3)</sup>	640 - 620 <sup>3)</sup>	620 - 600 <sup>3)</sup>	600 - 580 <sup>3)</sup>	580 - 540 <sup>3)</sup>	kg/m³	EN 323



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HPL-thickness in mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	mm	
Bending strength - Raw core materials	11 <sup>3)</sup>	10.5 <sup>3)</sup>	9.5 <sup>3)</sup>	8.5 <sup>3)</sup>	N/mm²	EN 310				
Modulus of elasticity (bending stiffness) - Raw core materials	1,800 <sup>3)</sup>	1,600 <sup>3)</sup>	1,600 <sup>3)</sup>	1,600 <sup>3)</sup>	1,600 <sup>3)</sup>	1,500 <sup>3)</sup>	1,350 <sup>3)</sup>	1,200 <sup>3)</sup>	N/mm²	EN 310
Internal bond - Raw core materials	0.4 <sup>3)</sup>	0.35 <sup>3)</sup>	0.35 <sup>3)</sup>	0.35 <sup>3)</sup>	0.35 <sup>3)</sup>	0.3 <sup>3)</sup>	0.25 <sup>3)</sup>	0.2 <sup>3)</sup>	N/mm²	EN 319
Surface soundness - Raw core materials	0.8 <sup>3)</sup>							N/mm²	EN 311	
Durability - Water resistance	≤ 15							%	ISO 13894-1	
Resistance to fixings (face)	≥ 100	≥ 1,500	≥ 1,500	≥ 1,500	≥ 1,500	≥ 1,500	≥ 1,500	≥ 1,500	N	ISO 13894-1
Resistance to fixings (edge)		≥ 500	≥ 500	≥ 500	≥ 500	≥ 500	≥ 500	≥ 500	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 elevated temperature	no effect							ISO 13894-1		

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

<sup>&</sup>lt;sup>2)</sup> Fibres, hairs and scratches <sup>3)</sup> Core material



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#### **Additional information**

Product standard	• EN 13894-1
Areas of application	<ul> <li>Vertical applications in high-quality interior design and shop fitting, in trade fair construction, but also for kitchen and residential furniture. Real aluminium surfaces are not suitable for horizontal surfaces and or surfaces exposed to mechanical loads.</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> </ul>
Special	<ul> <li>Real metal surfaces are generally delivered with a protective foil resistant to temperatures of up to 80°C. The protective foil must be removed six months after delivery at the latest.</li> <li>Available in design M80000 (Alu 1) Stainless steel and M80001 (Alu 2) Nickel effect.</li> <li>The real metal surface is made of aluminium. Unlike classic, melamine-impregnated decor papers, real metal surfaces may provide certain visual effects on the surface. Differences in colour, a slight unevenness in the surface and small indentations may also occur. These are not quality defects, but proof of the real metal surface, distinguishing it from imitations.</li> <li>For side-by-side installations in interior fitting, real metallic surfaces from the same production batch are to be used. If there is some space between applications, different batches may also be used.</li> <li>Please note that metal surfaces are much less resistant to scratches, impacts and abrasion than melamine surfaces. They also have a reduced resistance to chemicals. Therefore, real metal surfaces are to be exclusively used in vertical applications. If used horizontally, we recommend that the surface be protected, for example, by a sheet of glass of inferior thickness.</li> </ul>
Note	<ul> <li>FSC certification or PEFC certification available on request.</li> <li>FSC license code: FSC<sup>®</sup> C011773</li> <li>PEFC license code: PEFC/04-32-0828</li> </ul>
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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