

November 2025

## **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 fit-



Fire protection

### **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** 8.0 0.8 mm Design front edge not processed Design rear edge not processed ± 0.5 ISO 13894-1 Tolerance on thickness mm ISO 13894-1 Tolerance on length ± 5 mm Tolerance on width ± 5 mm ISO 13894-1 max. 1 1) mm<sup>2</sup>/m<sup>2</sup> Surface defects - HPL EN 438-2 max. 10 <sup>2)</sup> mm/m<sup>2</sup> ± 0.5 Straightness of edges ISO 13894-1 mm/m Squareness ≤ 2 ISO 13894-1 mm/m Flatness (length) ISO 13894-1 max. 2 mm/m Flatness (width) ISO 13894-1 max. 2 mm/m Resistance to wet heat, 100 °C min. 3 rating EN 438-2 (gloss finishes) - HPL Resistance to wet heat, 100 °C min. 4 EN 438-2 rating (other finishes) – HPL Resistance to dry heat, 160 °C (gloss finishes) – HPL rating EN 438-2 min. 3 Resistance to dry heat, 160 °C (other finishes) – HPL rating EN 438-2 min. 4 Resistance to water vapour (gloss finishes) – HPL min. 3 rating EN 438-2 Resistance to water vapour (oth-EN 438-2 min. 4 rating er finishes) - HPL min. 50 <sup>3)</sup> Resistance to surface wear -EN 438-2 cycles min. 150 <sup>4)</sup> min. 1 3) Resistance to scratching (smooth rating EN 438-2 finishes) - HPL min. 2 4)



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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 (tex-<br>tured finishes) – HPL | min. 2 <sup>3)</sup><br>min. 3 <sup>4)</sup> |      | rating |               |
| Resistance to impact (small diameter ball)              | min. 15                                      |      | N      | ISO 13894-1   |
| Stain resistance (groups 1 & 2) –<br>HPL                | min. 5                                       |      | rating | EN 438-2      |
| Stain resistance (group 3) – HPL                        | min. 4                                       |      | rating | EN 438-2      |
| Resistance to colour change<br>(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 <sup>5)</sup>                      |      | kg/m³  | EN 323        |
| Bending strength                                        | 11 <sup>5)</sup>                             |      | N/mm²  | EN 310        |
| Modulus of elasticity (bending stiffness)               | 1,600 <sup>5)</sup>                          |      | N/mm²  | EN 310        |
| Internal bond                                           | 0.35 <sup>5)</sup>                           |      | N/mm²  | EN 319        |
| Resistance to fixings (face)                            | ≥ 1,000                                      |      | N      | ISO 13894-1   |
| Resistance to fixings (edge)                            | ≥ 800                                        |      | N      | ISO 13894-1   |
| Bonding strength                                        | ≥ 0.7                                        |      | N/mm²  | ISO 13894-1   |
| Flexural tensile strength                               | ≥ 0.7                                        |      | N/mm²  | ISO 13894-1   |
| Durability – Glue-line quality                          | ≥3                                           |      | rating | ISO 13894-1   |
| Durability – Resistance to elevated temperature         | no effect                                    |      |        | ISO 13894-1   |

Dirt, spots and similar surface defects
 Fibres, hairs and scratches
 Classification VGF

## **Additional information**

| Product standard     | in accordance with EN 13894-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Areas of application | <ul> <li>Wherever high demands are made on quality and durability in addition to preventive fire protection in<br/>decorative interior design. For wall coverings, installations and interior furnishing in industrial, sales and<br/>administration buildings, in recreational facilities and public areas, such as schools, sports and festival<br/>halls, cinemas, discotheques, hotels, hospitals and care home facilities.</li> </ul>                                                                                                           |
| Core material        | <ul> <li>PremiumBoard Pyroex</li> <li>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.</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>4)</sup> Classification HGF

<sup>5)</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>The smoother the structure and the the darker the decor, the more sensitive it is to stains.</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>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.</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</li> </ul> |
| Note                     | refer to our sales documentation, to check which textures are available for this product.  • FSC certification or PEFC certification available on request.  • FSC license code: FSC <sup>®</sup> 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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