

Aircell HRL

THE NEW RECYCLED PVC CORE

Aircell HRL is the new recycled PVC core for composite sandwich structures. It is compatible with most resin systems; polyester, vinylester, phenolic or epoxy. It can be processed at room temperature or at any temperature below 80°C. Developed for the marine industry, windmills, transport and composite applications in general. Aircell HRL can be supplied in different sheets, either rigid or flexible, to be adapted to different surface shapes. For series production, Aircell can be supplied in kit form to reduce processing time and wastage.

Technical Data Sheet - Aircell HRL

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| Property | Method | Unit | HRL 45 | HRL 60 | HRL 80 | HTRL 80 | HRL 100 | HRL 130 | HRL 200 |
|---------------------------|----------------|-------------------|--------|--------|--------|---------------|---------|---------|---------|
| Nominal Density | ISO 845 | kg/m ³ | 48 | 60 | 80 | UNDER REQUEST | | | |
| Compressive Strength | ISO 844 | Mpa | 0,6 | 1,0 | 1,5 | | | | |
| Compressive Modulus | ISO 844 | MPa | 30,6 | 47,0 | 63,0 | | | | |
| Tensile Strength | DIN 53571 | N/mm ² | 1,1 | 1,3 | 2,0 | | | | |
| Tensile Modulus | DIN 53457 | N/mm ² | 35 | 45 | 66 | | | | |
| Shear Strength | ISO 1922 | N/mm ² | 0,42 | 0,82 | 1,17 | | | | |
| Shear Modulus | ISO 1922 | N/mm ² | 17,1 | 26,6 | 27,5 | | | | |
| Shear Strain | ISO 1922 | % | 10 | 16 | | | | | |
| Thermal Conductivity | ISO 8301 | W/m.k | 0,031 | 0,031 | 0,031 | | | | |
| Water Absorption | ISO 62 (24/2h) | % | 2,0 | 2,4 | 2,2 | | | | |
| Thermal Bending Stability | DIN 53424 | °C | 80 | 85 | 85 | | | | |

Bold: Test Aimplas

Density tolerance ±15%. Continuous operating temperature is -200°C to 70°C. Maximum processing temperature is dependent on time and the pressure applied, but can be processed up to 80°C. Material can be heat treated for higher temperature resistance of 100°C. For higher temperatures or any other issue, please contact MEL Composites for assistance.



Aircell is a Trade Mark.



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