

TECHNICAL DATA SHEET

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.

issue 05/2013. Rev.3									
Property	Method	Unit	HRL 45	HRL 60	HRL 80	HTRL 80	HRL 100	HRL 130	HRL 200
Nominal Density	ISO 845	kg/m3	48	60	80				
Compressive Strength	ISO 844	Mpa	0,6	1,0	1,5				
Compressive Modulus	ISO 844	MPa	30,6	47,0	63,0			Ċ	$\hat{\boldsymbol{c}}$
Tensile Strength	DIN 53571	N/mm2	1,1	1,3	2,0			5	
Tensile Modulus	DIN 53457	N/mm2	35	45	66			Ģ	
Shear Strength	ISO 1922	N/mm2	0,42	0,82	1,17		Č,	2	
Shear Modulus	ISO 1922	N/mm2	17,1	26,6	27,5		X		
Shear Strain	ISO 1922	%	10	16			6		
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		5		
Thermal Bending Stability	DIN 53424	°C	80	85	85				

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Bold: Test Aimplas

Density tolerance $\pm 15\%$. 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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This data sheet may be subjected to revision and change as the data is derived from testing and long experience. The data provided is for the nominal density, is average data and should be treated as such. Calculations based on this data should be verified by actual tests. The data is furnished without liability for the company and does not constitute a warranty or representation in respect of the material or its use.