

Product Information

ROHACELL® WF

FOAM FOR THE MOST DEMANDING MANUFACTURING PROCESS CONDITIONS

ROHACELL® WF foam core has been specifically designed for use in aerospace applications.

Based on polymethacrylimide (PMI) chemistry, it is engineered to meet demanding requirements from aircraft manufacturers and has led to many specifications for more than 30 years, including MIL, CMS and others.

PROCESSING AND PRODUCTION

ROHACELL® core makes it possible to produce sandwich components in a single step (co-curing), resulting in reduced overall production time.

ROHACELL® WF can take curing temperatures up to 130 °C (266 °F) and pressures up to 0.7 MPa (102 psi).

After heat treatment, ROHACELL® WF-HT can even be used at curing temperatures of 180 °C (356 °F) and at pressures of 0.7 MPa (102 psi).

ROHACELL® WF is highly suited to autoclave technologies and vacuum infusion processes, including RTM and VARTM processes.

WEIGHT SAVINGS

When building composite sandwich components, lightweight ROHACELL® WF has a closed cell structure that ensures resin stays exactly where you want it – in the interface. This eliminates excess and unnecessary resin that adds undesirable weight to the finished part.

THERMOFORMING AND SHAPING

ROHACELL® WF can be easily thermoformed or CNC machined to meet customer requirements, bringing tremendous manufacturing advantages.

High precision, pre-shaped and ready-to-use foam cores in complex or simple geometries can be supplied by the ROHACELL® Shapes Department.

Property	Test Method	Unit	ROHACELL® 51 WF	ROHACELL® 71 WF	ROHACELL® 110 WF	ROHACELL® 200 WF	ROHACELL® 300 WF
Density	ISO 845	kg/m³ lbs/ft³	52 3.25	75 4.68	110 6.87	205 12.8	300 18.7
Compressive Strength	ISO 844	MPa psi	0.8 116	1.7 246	3.6 522	9.0 1,305	17.8 2,580
Tensile Strength	ISO 527-2	MPa psi	1.6 232	2.2 319	3.7 536	6.8 986	12.0 1,740
Tensile Modulus	ISO 527-2	MPa psi	75 10,870	105 15,220	180 26,100	350 50,760	578 83,830
Elongation at Break	ISO 527-2	%	3.0	3.0	3.0	3.5	2.8
Shear Strength	DIN 53294	MPa psi	0.8 116	1.3 188	2.4 348	5.0 725	8.3 1,200
Shear Modulus	DIN 53294	MPa psi	24 3,480	42 6,090	70 10,150	150 21,750	364 52,790
Coefficient of Thermal Expansion		1/K*10E-5	3.11	3.09	3.07	3.76	3.50

Technical data values presented above are typical for nominal density at room temperature, subject to normal manufacturing variations.
All ROHACELL® products are closed-cell rigid foams based on polymethacrylimide (PMI) chemistry and contain no CFCs.

FOR MORE INFORMATION

If you have questions or would like to discuss using **ROHACELL® WF** in your application, we encourage you to talk with your local ROHACELL® representative.

Visit www.rohacell.com to locate and directly connect with the contact in your region, by phone or email.

Disclaimer

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