

COMPOSITE DESIGNS FOR PREMIUM, SPORT, ELECTRIC & SPECIAL EDITION CARS

Process with more speed and less cost

Forget long processing cycles and excess costs with fast, state-of-the-art production techniques and ROHACELL®, the foam that can handle high pressure and elevated temperatures – as well as adapt seamlessly into automated production.



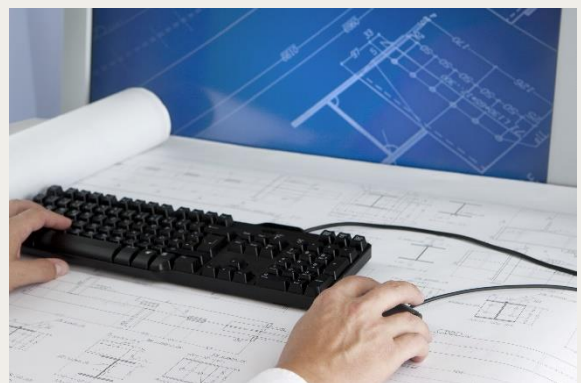
Increase in-service performance

Structural automotive parts with ROHACELL® cores withstand millions of load cycles while maintaining high residual strength over a car's lifetime – minimizing added safety margins and reducing overall weight for economical operation.



Design freedom

Foam-cored sandwich composites offer auto designers creative integral design options far beyond what is possible with steel, plus, our versatile foam can be CNC machined, thermoformed, thermoshaped, or in-mold foamed.



Lightweight parts

With outstanding mechanical properties and low density, our foam has the most weight-saving potential of all structural foams, featuring a closed cell structure that prevents excess resin absorption to assure the lightest of finished components.



Property	Test Method*	Unit	ROHACELL® 71 IG-F	ROHACELL® 110 IG-F	ROHACELL® 71 SL	ROHACELL® 110 SL
Density**	ISO 845 ASTM D 1622	kg/m ³ lbs/ft ³	75 ± 15 4.68 ± 0.94	110 ± 21 6.87 ± 1.31	75 ± 15 4.68 ± 0.94	110 ± 21 6.87 ± 1.31
Compressive Strength	ISO 844 ASTM D 1621	MPa psi	1.5 217	3.0 435	1.5 218	3.0 435
Compressive Modulus	ISO 844 ASTM D 1621	MPa psi	73 10,600	120 17,400	76 11,000	123 17,800
Tensile Strength	ISO 527-2 ASTM D 638	MPa psi	2.8 406	3.5 507	3.7 537	6.0 870
Tensile Modulus	ISO 527-2 ASTM D 638	MPa psi	92 13,340	160 23,200	120 17,400	202 29,300
Elongation at Break	ISO 527-2 ASTM D 638	%	N/A	N/A	4.0	4.7
Shear Strength	DIN 53294 ASTM C 273	MPa psi	1.3 188	2.4 348	1.4 203	2.3 334
Shear Modulus	DIN 53294 ASTM C 273	MPa psi	29 4,205	50 7,250	33 4,790	58 8,410
Maximum Shear Strain	DIN 53294 ASTM C 273	%	N/A	N/A	7.8	7.8
Coefficient of Thermal Expansion		1/K*10E-5	3.81	3.04	3.85	N/A

Technical data values presented above are typical for nominal density, subject to normal manufacturing variations. *Data values are based on ISO & DIN standard test methods, however ASTM values can be confirmed upon request. All ROHACELL® products are closed-cell rigid foams based on polymethacrylimide (PMI) chemistry and contain no CFC's. ** Density values are valid for full-size sheets with a minimum thickness of 10 mm (0.39 inch) only. Other density ranges are available upon request.

INTERESTED IN ROHACELL® FOR AUTOMOTIVE?

If you have questions or would like to discuss using a ROHACELL® core in your application, talk with your local ROHACELL® representative or contact:

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