

ROHACELL FOAM TECHNICAL PRODUCT MANUAL



PROPERTIES OF ROHACELL HF

PROPERTY	METHOD	UNIT	ROHACELL® 31 HF	ROHACELL® 51 HF	ROHACELL® 71 HF
DENSITY	ISO 845 ASTM D 1622	kg/m ³ lbs/ft ³	32 2.00	52 3.25	75 4.68
COMPRESSIVE STRENGTH	ISO 844 ASTM D 1621	MPa psi	0.4 58	0.9 130	1.5 217
TENSILE STRENGTH	ISO 527-2 ASTM D 638	MPa psi	1.0 145	1.9 275	2.8 406
SHEAR STRENGTH	DIN 53294 ASTM C 273	MPa psi	0.4 58	0.8 116	1.3 188
ELASTIC MODULUS	ISO 527-2 ASTM D 638	MPa psi	36 5,220	70 10,150	92 13,340
SHEAR MODULUS	DIN 53294 ASTM C 273	MPa psi	13 1,885	19 2,755	29 4,205
STRAIN AT BREAK	ISO 527-2 ASTM D 638	%	3.5	4.0	4.5

EMKAY PLASTICS. Rohacell Foam for the Core Industry.

ELECTRICAL PROPERTIES OF ROHACELL HF

PROPERTY	FREQUENCY GHz	ROHACELL® 31 HF	ROHACELL® 51 HF	ROHACELL® 71 HF
DIELECTRIC CONSTANTS	2.5	1.050	1.057	1.075
	5.0	1.043	1.065	1.106
	10.0	1.046	1.067	1.093
	26.5	1.041	1.048	1.093
LOSS TANGENT	2.5	<0.0002	<0.0002	<0.0002
	5.0	0.0016	0.0008	0.0016
	10.0	0.0017	0.0041	0.0038
	26.5	0.0106	0.0135	0.0115