

The extensively upgraded Divinycell HT polymer foam material from DIAB is the worthy successor to the original HT. It sets new standards in terms of performance and processability and is suitable for a very wide range of structural and non-structural applications including aircraft interiors. Furthermore it is non-hygroscopic, has a reduced environmental impact, superior damage/impact performance and improved dielectric properties.

Technical Data for Divinycell HT Grade

Property	Method	Unit	HT 61	HT 81	HT 101	HT 131
Compressive Strength ²⁾	ASTM D 1621	MPa	1.0	1.5	2.0	3.0
		psi	145	217	290	435
Compressive Modulus ²⁾	ASTM D 1621	MPa	80	105	135	170
		psi	11,600	15,225	19,575	24,650
Tensile Strength ²⁾	ASTM D 1623	MPa	1.8	2.8	3.5	4.8
		psi	261	406	508	696
Tensile Modulus ²⁾	ASTM D 1623	MPa	75	100	130	175
		psi	10,875	14,500	18,850	25,375
Shear Strength	ASTM C 273	MPa	0.9	1.25	1.6	2.2
		psi	131	181	232	319
Shear Modulus	ASTM C 273	MPa	20	28	35	50
		psi	2,900	4,060	5,075	7,250
Shear Strain	ASTM C 273	%	25	38	40	40
Density ¹⁾	ISO 845	kg/m ³	65	80	100	130
		lb/ft ³	4.1	5.0	6.3	8.1
Vertical Burn	FAR 25.853	60s	Pass	Pass	Pass	Pass
1) Typical density variation ± 10%.						
2) Perpendicular to the plane. All values measured at +23° (+73.4°F).						

Continuous operating temperature is -200°C to +90°C (-325°F to +194°F). The foam can be used in sandwich structures, for outdoor exposure, with external skin temperatures up to +100°C (+212°F). For optimal design of applications in high operating temperatures in combination with continuous load, please contact DIAB Technical Services for detailed design instructions. Normally Divinycell HT can be processed up to +145°C (+293°F) with minor dimensional changes. Maximum processing temperature is dependent on time, pressure and process conditions. Therefore users are advised to contact DIAB Technical Services to confirm that Divinycell HT is compatible with their particular processing parameters.

Coefficient of linear expansion: approx. $22.2 \times 10^{-6}/^{\circ}\text{F}$ ($40 \times 10^{-6}/^{\circ}\text{C}$)

