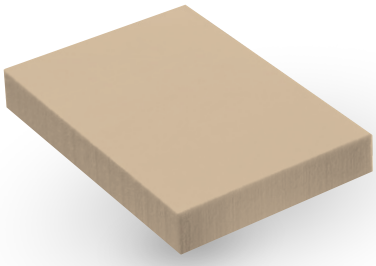

TECHNICAL DATA

PVC Foam | **Divinycell HM**

PVC core material with outstanding toughness and strength

Divinycell HM is a high-performance structural core specifically designed for fast marine hulls that demand higher toughness. It combines very high shear strength with exceptional shear elongation, making it an extremely durable core material capable of withstanding high dynamic impacts and slamming loads.

Divinycell HM's elongation exceeds the requirements of ISO 12215, GL and ABS rules to allow for reduced safety factors in structural calculations, providing a lighter, yet strong structure. Divinycell HM's high compressive properties provide excellent resistance to denting and skin wrinkling of thin skins. Divinycell HM offers a high operating temperature, thus reducing the risk of print through on dark hulls.

Mechanical properties

Property	Test Procedure	Unit		HM80	HM100	HM130
Compressive Strength[1]	ASTM D 1621	MPa	Nominal	1.4	2.0	3.0
			Minimum	1.15	1.65	2.4
Compressive Modulus[1]	ASTM D1621-B-73	MPa	Nominal	100	135	170
			Minimum	80	115	145
Shear Strength	ASTM C 273	MPa	Nominal	1.15	1.6	2.2
			Minimum	0.96	1.4	1.9
Shear Modulus	ASTM C 273	MPa	Nominal	27	35	50
			Minimum	22	28	40
Shear Strain	ASTM C 273	%	Nominal	41	41	41
Density	ISO 845	kg/m³	Nominal	80	100	130

All values measured at +23°C

1. Properties measured perpendicular to the plane.

Nominal value is an average value of a mechanical property at nominal density.
Minimum value is a minimum guaranteed mechanical property a material has independently of density.
Maximum processing temperature is +110°C. It is dependent on time, pressure and process conditions.
Therefore users are advised to contact Diab Technical Services to confirm that Divinycell HM is compatible With their particular processing parameters.

Product characteristiscs

- Outstanding toughness and fatigue resistance
- Superior shear strength
- High compressive strength and stiffness
- High temperature resistance
- Compatible with all resins used in marine
- Very low resin absorption

Typical application areas

Marine

Technical characteristiscs

Characteristics[1]	Unit	HM80	HM100	HM130
Density range	kg/m³	72-92	90-115	117-149

1. Typical values

Dimensions

Format		Unit	HM80	HM100	HM130
Plain sheets	Length	mm	2440	2160	1960
	Width	mm	1220	1070	970
GS sheet	Length	mm	1220	1080	980
	Width	mm	813	1070	970

Tolerances	Unit	Length	Width	Thickness
Plain sheets	mm	-10/+6	-5/+6	-/+ 0.5

Storage of product

The shelf life of Divinycell is unlimited when it is stored in its original package on ambient indoor storage conditions and protected against UV exposure.

Divinycell HM is type approved by:

TYPE APPROVED PRODUCT
DNV·GL
DNVGL.COM/AF

For more info visit:
diabgroup.com/contact

Datasheet Diab Divinycell HM rev 9 SI May 2026