



Core Materials



HP-TeXtiles

3D|CORE™ green - from recycled material-

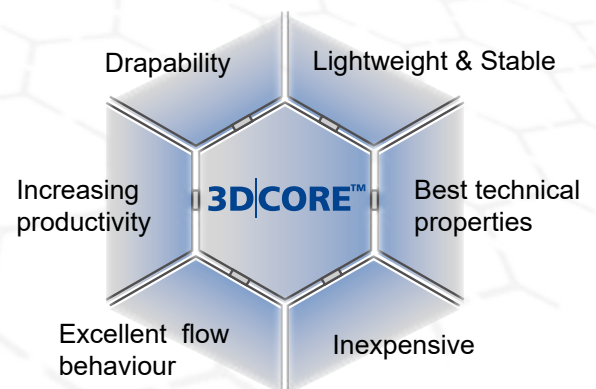


Description:

The 3D|CORE™ PET GR foam core is a green foam made from 100% recycled material. The core is a closed-cell, thermoplastic and recyclable rigid foam with excellent technical properties. It is suitable for the construction of high-strength lightweight components. The integrated honeycomb structure provides more flexibility and is easy to handle. The foam core follows the guidelines for recycling economy and contributes to the preservation and improvement of the human environment. The core is applicable with all known resin systems and processes.

Areas of applications:

- Excellent fatigue resistance
- Excellent long-term thermal stability up to 100°C
- Very high processing temperature up to 180°C
- Closed-cell foam (no water absorption, no re-expansion, no outgassing)
- Easy processing with all known resin systems and processes
- Very high chemical resistance
- Homogenous connection of all components
- Excellent surface adhesion (connection between the surfaces and core)
- Highly consistent material properties
- Good thermal insulation
- Integrated flow mesh



ARTICLE	PLATE SIZE mm	THICKNESS mm	MATERIAL <i>PET 100kg/m³</i>	PLATES / Box	m² / Box
HP-3DCORE-GR-3	1015 x 405 x 3	3	+	155	63,72
HP-3DCORE-GR-5	1015 x 405 x 5	5	+	98	40,29
HP-3DCORE-GR-7	1015 x 405 x 7	7	+	71	29,18
HP-3DCORE-GR-10	1015 x 405 x 10	10	-	51	20,96
HP-3DCORE-GR-12,5	1015 x 405 x 12,5	12,5	+	40	16,44
HP-3DCORE-GR-15	1015 x 405 x 15	15	+	34	13,97
HP-3DCORE-GR-20	1015 x 405 x 20	20	+	25	10,28
HP-3DCORE-GR25	1015 x 405 x 25	25	+	20	8,22

☐+ = available

☐- = on request

3D|CORE™ XPS

Hexagon:

3D|CORE™ is a structure-reinforcing foam core consisting of hexagonal foam honeycomb interconnected. The honeycomb construction gives flexibility that allows an excellent drapability of the foam core.

Rhombus:

3D|CORE™ Rhombus is a structure-reinforcing foam core that consists of foam rhombuses that are connected to each other by fine webs.

This rhombus construction (division of the hexagon into 3 rhombuses) gives the board enormous flexibility, which enables even better draping of the foam core.

However, HEXAGON and RHOMBUS can also be combined depending on the intended use.

The used polystyrene foam (XPS) has a density of only approx. 45Kg/m³. This foam system is particularly suitable for weight saving in areas of components that are exposed to lower dynamic loads. Due to the low resin absorption and the small cell size, the weight/performance ratio is much better than with many other foams.

By simplifying processing, 3D|CORE™ improves production processes and is therefore also ideal for the IMC/MTI® process, among others. Not only time but also material is saved.

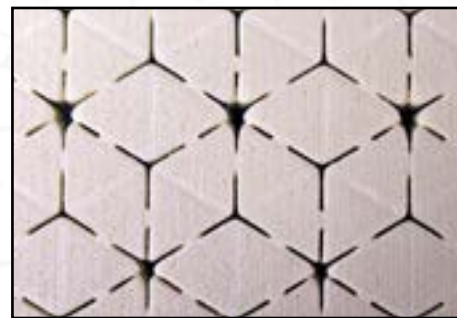


Hexagon:

Resin consumption:

Surface approx. 200g/m² per side

Structure approx. 90g x mm x m²



Rhombus:

Resin consumption:

Surface approx. 200g/m² per side

Structure approx. 126g x mm x m²

ARTICLE	PLATE SIZE mm	THICKNESS mm	STUCTURE	PLATES / Box	m² / Box
HP-3DXPS-HX-3	1015 x 405 x 3	3	Hexagon	155	63,72
HP-3DXPS-HX-5	1015 x 405 x 5	5	Hexagon	98	40,29
HP-3DXPS-HX-10	1015 x 405 x 10	10	Hexagon	51	20,96
HP-3DCORE-RB-3	1015 x 405 x 3	3	Rhombus	155	63,72
HP-3DCORE-RB-5	1015 x 405 x 5	5	Rhombus	98	40,29
HP-3DCORE-RB-10	1015 x 405 x 10	10	Rhombus	51	20,96

Attention:

3D|CORE™ XPS-PH can only be processed with **solvent-free epoxy systems**.

3D|CORE™ XPS-PH

The polystyrene foam (XPS) used has a density of only approx. 45Kg/m³. It is the ideal foam core for many light-weight, dynamic or statically loaded sandwich constructions. Due to the low resin absorption and the small cell size, the weight/performance ratio is much better than with many other foams. Due to the special perforation, this core material is also excellently suited for the vacuum injection process or the IMC/MTI® process. The special structure makes it particularly flexible without breaking. Suitable for all common, solvent-free epoxy resins.

By simplifying processing, 3D|CORE™ improves production processes and is therefore also ideal for the IMC/MTI® process, among others. Not only time but also material is saved.

Possible areas of application:

Automotive, aviation, railway, shipbuilding, industry, interior, sports and leisure time, ...

Properties and application instructions:

- Structure-reinforcing foam core
- Hexagonal foam honeycombs
- Enormous flexibility due to honeycomb construction
- Excellent drapeability



ARTICLE	PLATE SIZE mm	THICKNESS mm	STUCTURE	PLATES / Box	m² / Box
HP-3DXPS-PH-2	1015 x 405 x 2	2	Hexagon, perforated	86,33	210
HP-3DXPS-PH-3	1015 x 405 x 3	3	Hexagon, perforated	63,72	155

Attention:

3D|CORE™ XPS-PH can only be processed with **solvent-free epoxy systems**.

Kernlagenvlies - Corematerial -

Core material - Sandwich material - approx. 5mm thick | HP-CORE-5

HP-CORE is a high performance non-woven fabric developed specifically for the Fibre Reinforced Plastics (FRP) industry.

Designed with a micro-cellular structure, which provides volume with a very low weight and voids that allow easy absorption of resin, HP-CORE is ideal for use as a core material in FRP sandwich constructions with polyester and epoxy resin.

Features:

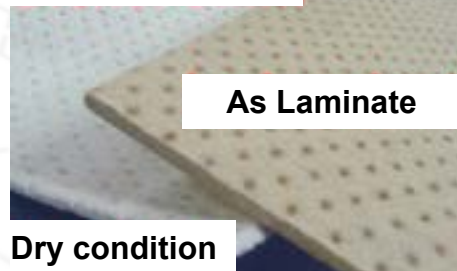
- Stretchable in all directions - in the wet as well as in the dry
- Good drapability
- Suitable for complicated shapes
- Suitable for polyester, vinyl ester and epoxy resins

Areas of application:

Swimming pools, boat building (hulls, superstructures), canoes and kayaks, containers and mold making, vehicle parts (chassis, bodywork and roof boxes), motor homes and caravans, ski and snowboards, and much more.



Thickness: 3mm



Dry condition

ARTICLE	WIDTH cm	THICKNESS mm	WEIGHT dry g/m ²	RESIN UPTAKE kg/m ²	WEIGHT specific kg/m ³
HP-CORE-1	100	1,3	60	0,8	660
HP-CORE-2	100	2	75	1,2	640
HP-CORE-3	100	3	90	1,8	630
HP-CORE-4	100	4	120	2,4	630
HP-CORE-5	100	5	140	3,0	630

SORIC® SF / LRC von Lantor

SORIC® SF

Thin and good drapeable honeycomb core material. The general purpose for infusion core, especially for thinner laminates. Suitable for closed mould processes, including infusion (IMC/MTI®-Process), RTM-light and RTM-Heavy.

Advantages:

- **excellent drapeability**
- The general purpose for infusion core, especially for thinner laminates.
- Compatible with all regular types of resins, including Polyester, Vinylester and Epoxy.
- Controlled and stable flow front

SORIC® LRC

Very thin honeycomb core material. The general purpose for infusion core, especially for thinner laminates. Suitable for closed mould processes, including infusion (IMC/MTI®-Process), RTM-light and RTM-Heavy.

Advantages:

- **for very thin applications**
- Compatible with all regular types of resins, including Polyester, Vinylester and Epoxy.
- Controlled and stable flow front

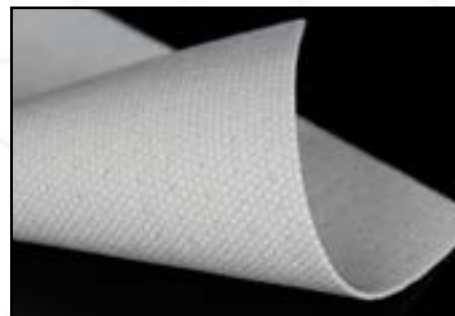
ARTICLE	DESIGNATION	THICKNESS mm	WIDTH cm	WEIGHT g/m ²	RESIN UPTAKE approx. kg/m ²	FIBRE TYPE
HP-CORE-SF-2	Soric® SF	2	127	125	1	Polyester
HP-CORE-SF-3	Soric® SF	3	127	165	1,3	Polyester
HP-CORE-LRC-1.5	Soric® LRC	1,5	127	115	0,6	Polyester
HP-CORE-LRC-2	Soric® LRC	2	127	155	0,8	Polyester
HP-CORE-LRC-3	Soric® LRC	3	127	235	1,0	Polyester

Coremat® von Lantor

Core material and print through barrier for open mould processes

Advantages:

- Honeycomb structure for excellent drapeability.
- Is used as core material and/or print blocker.
- Compatible with all regular types of resins, including Polyester, Vinylester and Epoxy.
- Is suitable for hand lay-up and spray-up processes.
- Geeignet für Handlaminier- und Faserspritzanwendungen.



ARTICLE	DESIGNATION	THICKNESS mm	WIDTH cm	WEIGHT g/m ²	RESIN UPTAKE approx. kg/m ²	FIBRE TYPE
HP-CORE-XM-2	Coremat® XM	2	100	80	1	Polyester
HP-CORE-XM-3	Coremat® XM	3	100	110	1,5	Polyester
HP-CORE-XM-4	Coremat® XM	4	100	140	2	Polyester
HP-CORE-XM-10	Coremat® XM	10	100	250	6,5	Polyester

HP-TeXtiles

Composite Materials

DeinTeich.de

Teich Pool Dach
GRP-Coatings



bredderpox®

Building Chemistry



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