



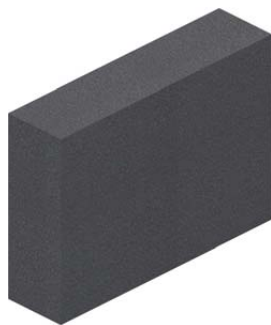
Construction material VARITHERM®



Dosteba

*Elemente sind
Elements are
unsere Stärke
our strength*

Standard panels



The product

VARITHERM® standard panels are available from stock and can be processed in the factory or by the customer with conventional woodworking machines.

Dimensions

Max. size: 1200 x 800 mm¹⁾
 Thicknesses: 10 / 20 / 30 / 40 / 50
 60 / 80 / 100 mm

Application

- Pressure pads
- Supports
- Fillings for sandwich constructions

Cuttings



The product

VARITHERM® cuttings are manufactured from standard panels at the factory.

Dimensions

Max. size: 1200 x 800 mm¹⁾
 Thicknesses: 10 / 20 / 30 / 40 / 50
 60 / 80 / 100 mm

Anwendung

- Pressure pads
- Supports
- Fillings for sandwich constructions

Profile bars



The product

VARITHERM® profile bars are manufactured by the metre from standard panels at the factory.

Dimensions

Max. size: 1200 x 800 x 100 mm¹⁾

Application

- Attachment strips
- Frame extensions
- Connector and end profiles
- Supports for doors, windows and walls

Moulded parts from water jet cutting



The product

VARITHERM® moulded parts are manufactured from standard panels at the factory using water jet cutting. The shape can be chosen as desired.

Dimensions

Max. size: 1200 x 800 mm¹⁾
 Thicknesses: 10 / 20 / 30 / 40 / 50
 60 / 80 / 100 mm

Application

- Pressure pads for consoles and brackets
- Installation on insulated façades

Moulded parts foam-moulded



The product

VARITHERM® moulded parts are foamed in specially made tools. A tool investment makes sense, especially for larger production quantities. There are almost no limits to the type of geometry.

Dimensions

Max. size: on request

Application

- Pressure pads
- Support bracket
- Corner connector
- Construction parts

¹⁾ The maximum size for VARITHERM® 320 and VARITHERM® 410, thicknesses 60 - 100 mm is 800 x 600 mm.

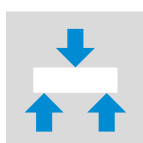
Material properties

Material property	unit	standard	140	230	320	410
Compressive strength at 10 % compressive strain ²⁾	N/mm ²	EN 826	1.17	2.70	6.50	10.00
Compressive strength at 5 % compressive strain ²⁾	N/mm ²	EN 826	1.03	2.40	5.90	9.20
Compressive strength at 2 % compressive strain ²⁾	N/mm ²	EN 826	0.85	1.80	4.30	6.60
Resistance to pressure at 2% long-term deformation under permanent load ²⁾	N/mm ²	EN 826	0.31	0.72	1.86	3.04
Modulus of elasticity (pressure) ²⁾	N/mm ²	EN 826	55	98	218	336
Flexural strength ²⁾	N/mm ²	EN 12089	1.13	1.95	2.10	3.23
Modulus of elasticity (bending) ²⁾	N/mm ²	EN 12089	80	144	278	382
Deflection (for flexural strength) ²⁾	%	EN 12089	2.4	1.6	1.5	1.5
Extraction screw pull Ø 5 mm, anchoring depth 40/60 mm ³⁾	kN		0.23 / 0.37	0.50 / 0.75	0.67 / 1.52	1.19 / 2.30
Extraction screw pull Ø 6 mm, anchoring depth 40/60 mm ³⁾	kN		0.25 / 0.41	0.55 / 0.97	0.69 / 1.58	1.26 / 2.35
Extraction screw pull Ø 8 mm, anchoring depth 40/60 mm ³⁾	kN		0.42 / 0.45	0.74 / 1.17	1.61 / 2.38	2.47 / 3.21
Transverse screw pull Ø 5mm, anchoring depth 40/60 mm ³⁾	kN		0.14 / 0.19	0.35 / 0.32	0.50 / 0.57	0.89 / 0.91
Transverse screw pull Ø 6 mm, anchoring depth 40/60 mm ³⁾	kN		0.18 / 0.24	0.36 / 0.44	0.51 / 0.94	1.24 / 1.02
Transverse screw pull Ø 8 mm, anchoring depth 40/60 mm ³⁾	kN		0.26 / 0.35	0.75 / 0.69	0.79 / 1.40	1.70 / 2.38
Thermal conductivity ⁴⁾	W/mK	EN 12667	0.0397	0.04969	0.058	0.0687
Water vapour diffusion resistance level ⁴⁾		EN 12086	457	457	630	976
Behaviour in fire		EN 13501	E	E	E	E
Max. water absorption capacity 28 days (W _{1z}) ²⁾	%	EN 16535	2.04	1.77	1.51	1.24

²⁾ characteristic values, ³⁾ recommended values, ⁴⁾ measured average



high compressive strength



high ductility



low thermal conductivity



low weight



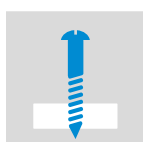
low water absorption



behaviour in fire



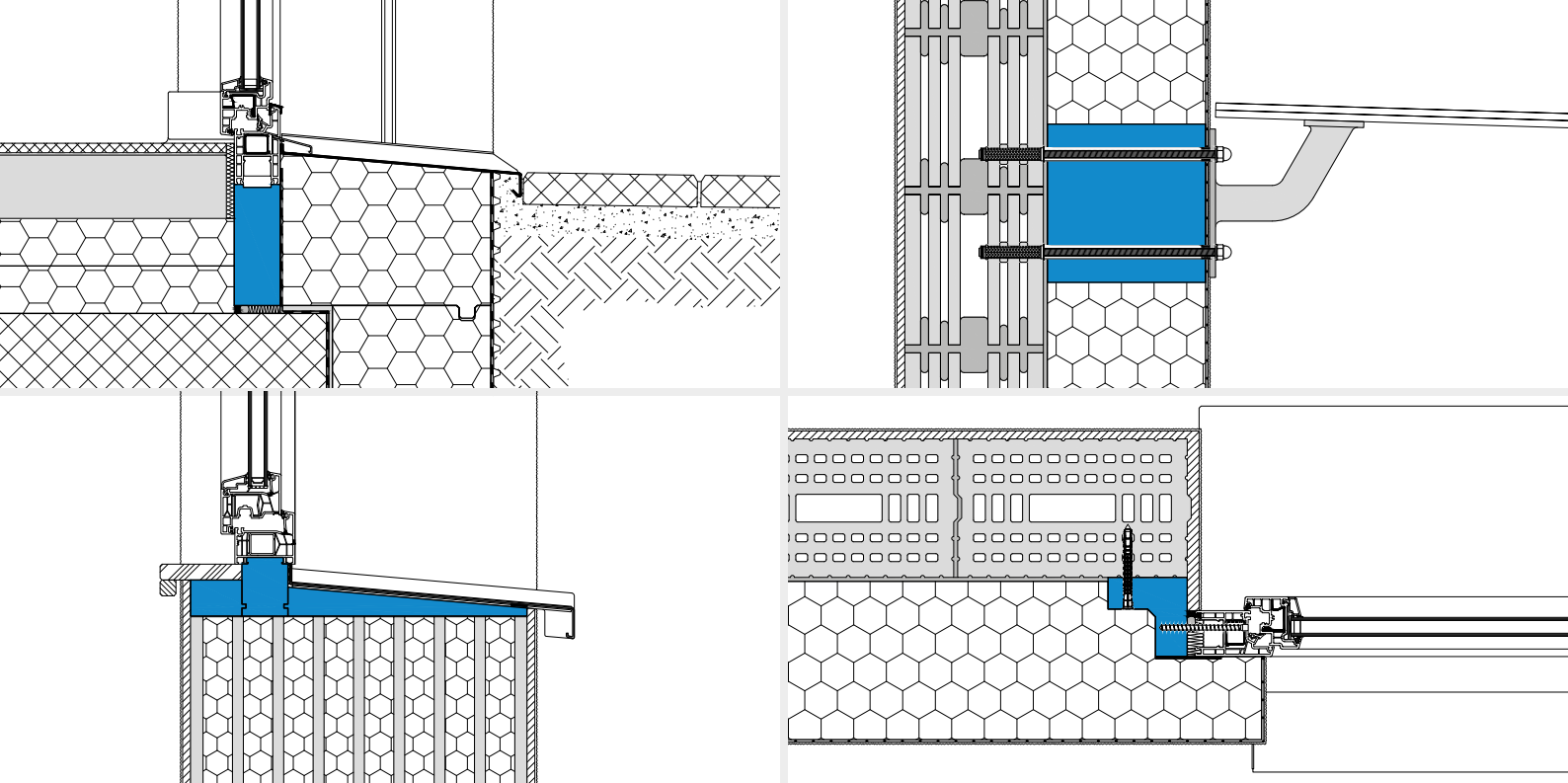
can be sawed



can be screwed



can be bonded



Construction material VARITHERM®

Your advantages

- ✓ VARITHERM® is suitable for applications requiring a high degree of compressive strength and thermal insulation.
- ✓ VARITHERM® standard panels can be fabricated as pre-cut panels, profile bars or moulded parts at the customer's request.
- ✓ VARITHERM® can be supplied as foam-finished parts. There are almost no limits to the type of geometry.
- ✓ VARITHERM® can be processed with conventional woodworking machines.
- ✓ VARITHERM® can be screwed together with wood screws.
- ✓ VARITHERM® can be bonded with commercially available, solvent-free adhesives (e.g. polyurethane or polymer adhesives).

The product

VARITHERM® is a construction material made of EPS with excellent mechanical strength, high thermal insulation properties and low volumetric weight. These properties are essential criteria for various applications and is also why the range of applications is so diverse.

Volumetric weight:
140 / 230 / 320 / 410 kg/m³

VARITHERM®

- Standard panels
- Cuttings
- Profile bars
- Moulded parts from water jet cutting
- Moulded parts foam-moulded

VARITHERM®

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