

# Triothersm<sup>+</sup> thermal brackets for windows & doors



- for door & window installation without thermal bridging
- passive house certified
- infinitely extendable through dovetail joints
- highly load bearing & permanently stable



## Where to use:

Triothersm<sup>+</sup> was originally created to allow the installation windows and doors beyond the blockwork right in the insulation layer of EWI. It combines a high load-bearing capacity, easy installation process and the reduce of thermal bridges in comparison to former details like timber joists or steel brackets.

Triothersm<sup>+</sup> thermal brackets can be also used for cavity walls, to create a structural support for windows and doors, installed at cavity level. The installation process is almost similar to external wall insulation but the concrete screws should be screwed through the block into the thermal bracket.

The wider versions of Triothersm<sup>+</sup> thermal brackets are perfect as load bearing and insulated supports for all types of doors and floor-to-ceiling windows. The brackets can be either installed upright on an existing subfloor or bolted against an existing upstand, made of block or concrete.

Another application area for the Triothersm<sup>+</sup> thermal brackets is the load bearing and insulated bridging in insulation systems. Due to the high pull out force capacity, it is feasible to fix heavier items like satellite dishes or even window frames directly to the Triothersm<sup>+</sup>

# Triotherm<sup>+</sup> thermal brackets for windows & doors

## Product benefits:

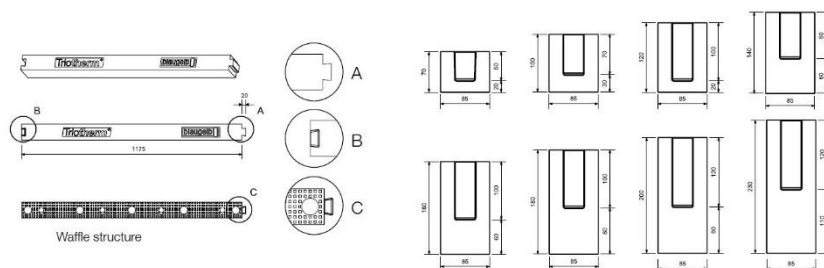
- Stable dimensions and volume
- Insensitive to moisture
- Resistant to ageing
- 100 % recyclable
- 100 % HCFC and HFC-free
- HBCD (hexabromocyclododecane)-free
- High ductility
- CE mark explanation: EPS-EN 13163-L2-W2-TS-S2-P4-DS(N)2DS(70,-)3-DLT(1)5-CS(10)2500-BS650
- Easy to process/cut with jigsaw or mitre saw (coarse longitudinal-cut saw blade)
- Can be cut to shape precisely and with minimal dust
- Infinitely extensible by dovetailing for waste free processing
- Profiles exhibit a very low weight and compact dimensions
- Window frames can be joint with Triotherm<sup>+</sup> just by screwing without pre-drilling
- Waffle structure increases the adhesion of the sealant between the Triotherm<sup>+</sup> and the substrate
- Professionally manufactured with very high dimensional accuracy and geometrical
- High inherent stability and flexural strength, high ductility
- Airtight, connection between profile and base is verified by technical tests
- Absorption of high building tolerances flush with windows is verified by technical tests
- Reduces thermal bridges in the mounting plane of the assembly parts
- Compact shape and low weight

## Technical data:

Material:	High-density EPS (expanded polystyrene), high ductility
Colour:	Grey
Pressure load capacity (max. deformation):	1260 kg/dm <sup>2</sup>
Pressure load capacity 60 x 40 mm: (blaugelb Spacer block)	5,800 N
Pressure load capacity 210 x 53 mm: (blaugelb Shim block HST)	15,510 N
Fire behaviour: DIN EN 13501-1	Class E
Thermal conductivity Nominal value λ <sub>0</sub> : DIN EN 12667   DIN 10456:2010-05	λ = 0.041 W/m <sup>2</sup> K
Air permeability: EN 12207	Class 4
Water vapour diffusion resistance: DIN EN ISO 12572	30 - 55 μ
Flexural strength: DIN EN 12089	≥ 750 kPa
Compression stress (10 % compression): DIN EN 13163:2015-04	≥ 2,500 kPa
Shear strength: DIN EN ISO 14130	0.217 N/mm <sup>2</sup>
Dimensional strength: DIN ISO 75-1	Short-term up to +95 °C Long-term up to +85 °C
Dimensional stability: DIN EN 13163:2015-04	Very high, including outdoor weathering
Water absorption after 28 days under water: DIN 12087	≤ 1,5 Vol-%
Compatibility with conventional building materials:	Compatible, except for solvents, solvent-bearing materials and materials that are not polystyrene-compatible
Ageing resistance:	Mould-proof, does not rot
Waste code:	Code no. 170604 Code no. 170904

## Available dimensions:

70 x 85 x 1,175mm	160 x 85 x 1,175mm
100 x 85 x 1,175mm	180 x 85 x 1,175mm
120 x 85 x 1,175mm	200 x 85 x 1,175mm
140 x 85 x 1,175mm	230 x 85 x 1,175mm



The information provided in this document corresponds to the information and technical details available to the best of our knowledge. Our processing instructions have to be considered as general guidelines only and may differ in the individual case due to the range of possible uses and applications. They do not therefore automatically exempt the user from carrying out their own tests. We reserve the right to make technical modifications and enhancements at any time.