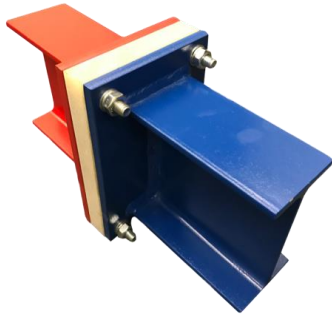


**PLAKA – THERMO BREAK TYPE 300****Thermal break material**

REF 07.08.02 - Version V03 – 22/04/2025

**Description**

THERMO BREAK Type 300 is a high-performance thermal insulator used between both horizontal and vertical connections of internal and external elements to prevent thermal/cold bridging.

This thermal break material is characterized by:

- a very good dimensional stability
- a high insulation effect
- a very high compressive strength
- a high resistance to chemicals such as acids and organic solvents.

**Application fields**

The four primary connections where THERMO BREAK plates Type 300 are used are as follows:

- Steel to steel
- Steel to concrete/masonry
- Steel to timber
- Concrete to concrete

THERMO BREAK plates are used in new build and refurbishment projects in the following building elements:

- Balconies and balustrades
- Brise-soleil
- External staircases
- Façade systems
- Internal/External primary structure junctions
- Man-Safe systems
- Roof plant enclosures
- Sub-structure and basements

**Properties**

The material combines properties of high loading resistance with excellent thermal insulation. The composite materials are weatherproof. Even in an aggressive environment this material will have an excellent durability. Generally, THERMO BREAK Type 300 are used in locations that do not require fire protection.

**PLAKA – THERMO BREAK TYPE 300**

**Thermal break material**

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Properties		
Max. service temperature		
<ul style="list-style-type: none"> <li>Long-term</li> <li>Short-term</li> </ul>	200°C 250 °C	
Compressive strength		EN ISO 604
<ul style="list-style-type: none"> <li>at ambient temperature</li> <li>at 200°C</li> </ul>	300 N/mm <sup>2</sup> 100 N/mm <sup>2</sup>	
Design compressive strength ( $\gamma_M = 1,25$ )		EN ISO 604
<ul style="list-style-type: none"> <li>at ambient temperature</li> <li>at 200°C</li> </ul>	240 N/mm <sup>2</sup> 80 N/mm <sup>2</sup>	
Coefficient of thermal conductivity $\lambda$		DIN 52 612
<ul style="list-style-type: none"> <li>at ambient temperature</li> <li>at 200°C</li> </ul>	0.13 W/m.K 0.17 W/m.K	
Linear coefficient of thermal expansion (length and width direction)		DIN 53 752
	28.10 <sup>-6</sup> [1/K]	
Flexural strength		EN 63
<ul style="list-style-type: none"> <li>at ambient temperature</li> <li>at 200°C</li> </ul>	200 N/mm <sup>2</sup> 60 N/mm <sup>2</sup>	
Flexural modulus of elasticity		EN 63
<ul style="list-style-type: none"> <li>at ambient temperature</li> <li>at 200 °C</li> </ul>	7500 N/mm <sup>2</sup> 4000 N/mm <sup>2</sup>	
Water absorption / 24 h		DIN 53 495
	0.1 %	
Density		
	1.4 g/cm <sup>3</sup>	
Dimension stability under dynamic sustained loading (after 500,000 cycles, at 200 °C and 30 N/mm <sup>2</sup> , 15 mm thickness at the beginning of the test)		
	99.5 %	
Plane parallelism (on 1m length)		
	0.1 mm	

Specifications are subject to alteration due to technical development. The standard values given in this data sheet are not part of any contract.

**Dimensions**

Material dimensions	
Thickness	5, 10, 15, 20 & 25 mm (*)
Max. length	240 cm
Max. width	120 cm

\*A maximum of two plates may be stacked to achieve a greater insulation thickness.

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