



Marmox Thermoblock®

DE IDEALE OPLOSSING BIJ
KOUDEBRUGGEN

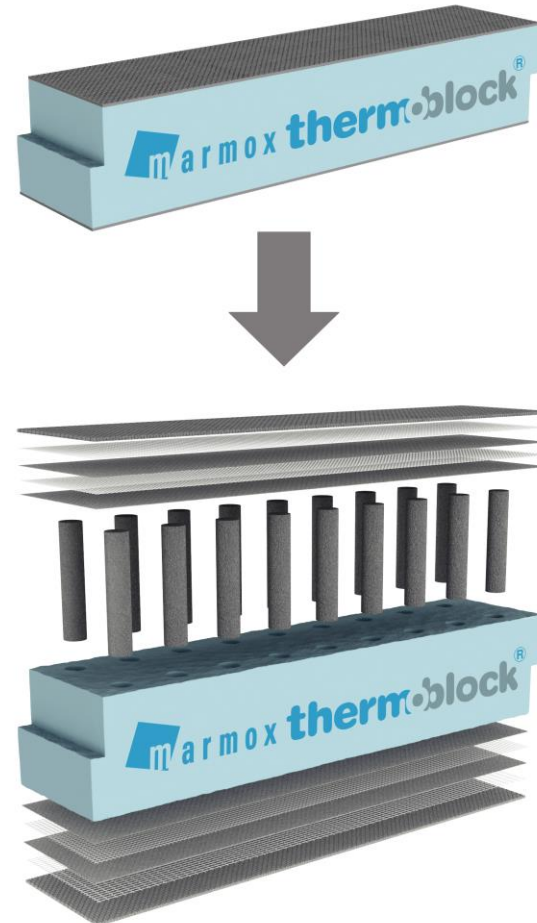
/ ir. Thierry Raets
/ 9/01/2020
/ Sint-Niklaas

Wat is Marmox Thermoblock®?

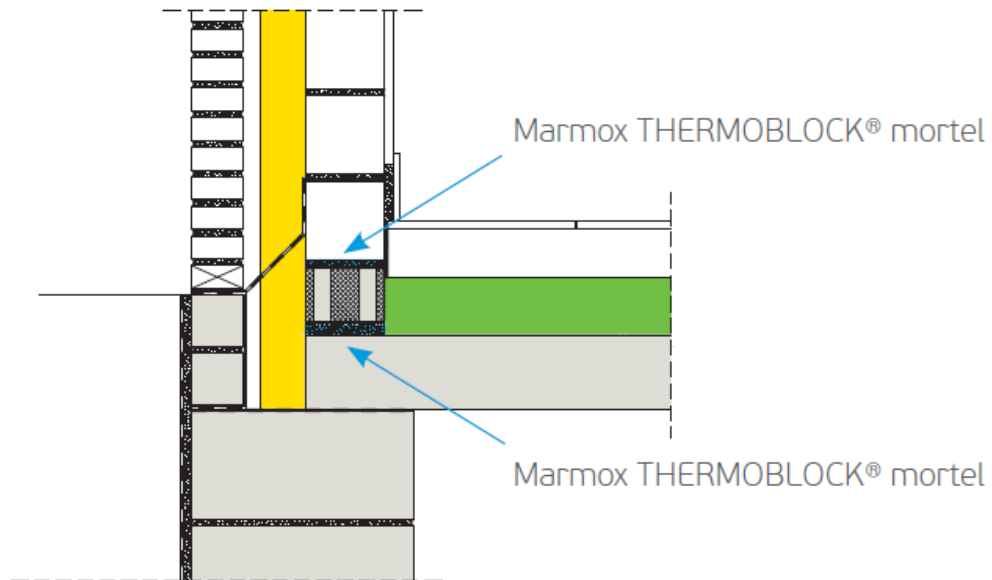
- Gepatenteerde isolerende bouwblok
- Bestaat uit een isolerend deel + bekleding boven en onder
- Isolierend deel bestaat uit XPS of PIR met daarin cilinders
- Cilinders bestaan uit (nano)polymeerbeton
- Beste thermische prestaties
- Beste druksterkte
- Neemt geen water op

Opbouw

- (nano)polymeer cementmortel
+ dubbel glasvezelnet
- (nano)polymeerbeton
- XPS of PIR
- (nano)polymeer cementmortel
+ dubbel glasvezelnet



Typische toepassing--> muurvoet

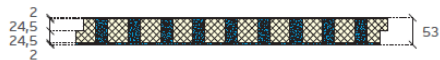


Meerdere types

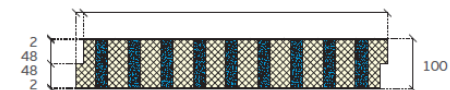
Marmox THERMOBLOCK® is verkrijgbaar in 3 types - 2 op basis van XPS en 1 op basis van PIR:

- Marmox THERMOBLOCK® nano op basis van XPS en $R = 1 \text{ m}^2\text{K/W}$
- Marmox THERMOBLOCK® R2 nano op basis van XPS en $R = 2 \text{ m}^2\text{K/W}$
- Marmox THERMOBLOCK® R2 nano/pir op basis van PIR en $R = 2 \text{ m}^2\text{K/W}$

Elk type is beschikbaar in 6 breedtes: 90, 110, 140, 190, 240 en 290 mm.



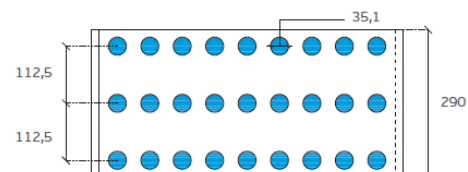
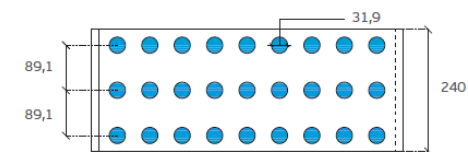
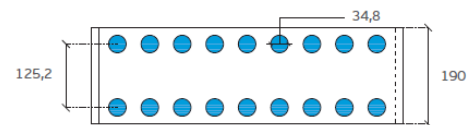
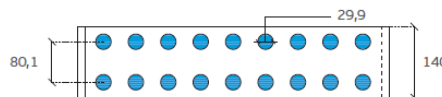
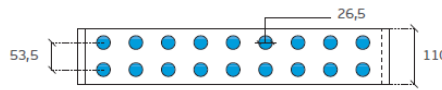
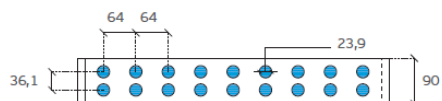
Marmox THERMOBLOCK® nano



Marmox THERMOBLOCK® R2 nano



Marmox THERMOBLOCK® R2 nano/pir



Bijlage III Transmissie referentie document (6. Bepaling van de totale warmteweerstand (R_T) van bouwelementen)

Calculation of thermal resistance R_T of the insulating part in Marmox Thermoblock®

	Marmox Thermoblock® with XPS as the insulation material									
	t _{ip} (mm)	t _c (mm)	t _e (mm)	λ _{Uim} (W/mK)	λ _{Unpc} (W/mK)	R _{im} (m²K/W)	R _{npc} (m²K/W)	f _{im} (-)	f _{npc} (-)	R _T (m²K/W)
Marmox® Thermoblock R2 nano/100	96	2	100	0,033	0,130	2,91	0,74	0,85	0,15	2,019
Marmox® Thermoblock nano	48		52			1,45	0,37			1,009

	Marmox Thermoblock® with PIR as the insulation material									
	t _{ip} (mm)	t _c (mm)	t _e (mm)	λ _{Uim} (W/mK)	λ _{Unpc} (W/mK)	R _{im} (m²K/W)	R _{npc} (m²K/W)	f _{im} (-)	f _{npc} (-)	R _T (m²K/W)
Marmox® Thermoblock R2 nano/pir	84	2	88	0,026	0,130	3,23	0,65	0,85	0,15	2,019

Berekeningswijze met 15% polymeerbeton

$$\frac{1}{R_T} = \frac{f_{im}}{R_{im}} + \frac{f_{npc}}{R_{npc}}$$

$$R_T = R_{T \text{ vertical}} < R_{T \text{ horizontal}}$$

- R_{im} is the thermal resistance of the insulation material
- R_{npc} is the thermal resistance of the nano polymer concrete material
- f_{im} is the fraction of the insulation material in the insulating part
- f_{npc} is the fraction of the nano polymer concrete material in the insulating part
- R_T is the vertical thermal resistance of the insulating part

ATG 3093

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Technische Goedkeuring ATG met Certificatie



ATG 3093

Ruwbouwproducten

Kimlaagstenen

**MARMOX
THERMOBLOCK**

Geldig van 09/01/2018
tot 08/01/2023

Goedkeurings- en Certificatie-operator



Belgian Construction Certification Association
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