

# **THERMANO**

**SUPERDOCIEPLENIE POLSKIEGO DOMU**

## **DECLARATION OF PERFORMANCE**

NO. 32/7/13165/THERMANO

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**1 Unique product type identification code**

THERMANO thermal insulation boards with a polyisocyanurate (PIR) foam core in multi-layered, gas-tight cladding made of aluminium laminate

**2 Type, batch or series number, or other information enabling identification of the product**

Information identifying the product batch - listed on the label of each product packaging, serial number printed on every board

Product thickness: 40,50,60,80,100,113,120 [mm]

Thermal insulation [ $\text{kg/m}^3$ ]: PIR, thickness  $30\pm 2$

**3 Intended applications, in accordance with the harmonised technical specification**

THERMANO thermal insulation boards with a polyisocyanurate (PIR) foam core in multi-layered, gas-tight cladding made of aluminium laminate as wall, roof or floor insulation

**4 Manufacturer name, contact address**

**BALEX METAL Sp. z o.o.**  
ul. Wejherowska 12 C, 84-239 Bolszewo

Manufacturing plant:

ul. Spalska 145/155,  
97-200 Tomaszów Mazowiecki

**5 System for assessment and verification of functional properties stability**

System 3

**6 Notified body identification**

Instytut Techniki Budowlanej  
ul. Filtrowa 1, 00-611 Warszawa  
Notified Body no. 1488

Reports: NF-02037/A/2009, NK – 0511/P/09,  
0894.1/13/Z00NP, 0822/13/Z00NF,  
2073/14/R22NK,  
LK00-02073/14/R24NK

## 7 Declared performance

Primary characteristics	Functional properties		Harmonised technical specification
<b>Reaction to fire</b>	Fire protection class	E	EN 13165:2013-05
<b>Water permeability</b>	Water absorption	WL(T)2	EN 13165:2013-05
	Flatness after wetting one of the surfaces	FW2	EN 13165:2013-05
<b>Release of hazardous substances to the internal environment</b>	No harmonised test methods		EN 13165:2013-05
<b>Sound absorption coefficient</b>	Sound absorption	NPD	EN 13165:2013-05
<b>Insulation coefficient for airborne sounds carried directly</b>	Sound absorption	NPD	EN 13165:2013-05
<b>Continuous incandescent combustion</b>	No harmonised test methods		EN 13165:2013-05
<b>Thermal resistance</b>	Thermal resistance accounting for aging $R_D$ [m <sup>2</sup> K/W]	40(1.91), 50(2.34), 60(2.78), 80(3.65), 100(4.52), 113(5.08), 120(5.39)	EN 13165:2013-05
	Thermal conductivity coefficient accounting for aging $\lambda_D$ [W/mK]	0.023	EN 13165:2013-05
	Thickness	T1	EN 13165:2013-05
<b>Steam permeability</b>	Steam permeation	NPD	EN 13165:2013-05
<b>Compressive strength</b>	CS(10)100		EN 13165:2013-05
<b>Tensile/bending Strength</b>	Tensile strength	TR70	EN 13165:2013-05

<b>Stability of reaction to fire as a function of heat, atmospheric conditions, aging/degradation</b>	Reaction to fire does not change in time		EN 13165:2013-05
<b>Stability of heat resistance as a function of heat, atmospheric conditions, aging/degradation</b>	Thermal resistance accounting for aging $R_D$ [m <sup>2</sup> K/W]	40(1.91), 50(2.34), 60(2.78), 80(3.65), 100(4.52), 113(5.08), 120(5.39)	EN 13165:2013-05
	Thermal conductivity coefficient accounting for aging $\lambda_D$ [W/mK]	0.023	EN 13165:2013-05
	Stability of heat resistance as a function of	NPD	EN 13165:2013-05
	Dimensional stability under specific temperature and humidity conditions	DS(70,90)2 DS(-20,-)2	EN 13165:2013-05
	Deformation under specific conditions of compressive load and temperature	NPD	EN 13165:2013-05
	Annex C Methods of determining heat resistance and heat conductivity coefficient accounting for aging	C. 5	EN 13165:2013-05
<b>Stability of compressive strength as a function of aging and degradation</b>	Creeping under compression	NPD	EN 13165:2013-05

**8 The performance of the product specified in pt. 1 and 2 are consistent with the performance declared in pt. 7.**

This declaration of performance is issued at the sole responsibility of the manufacturer specified in pt. 4.

Anna Stępień  
Junior Certification Specialist

Bolszewo, 27 April 2015



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PN-EN 13165:2013-05

**THERMANO thermal insulation boards  
with a polyisocyanurate (PIR) foam core  
in multi-layered, gas-tight cladding made  
of aluminium laminate  
wall, roof and floor insulation**

**Reaction to fire: E**

**Thermal resistance  $R_D$  accounting for aging** 40(1,91), 50(2,34),  
60(2,78), 80(3,65), 100(4,52), 113(5,08), 120(5,39) m<sup>2</sup>K/W

**Thermal conductivity coefficient accounting for aging  $\lambda_D$**  0,023  
W/mK

**Thicknesses:** 40,50,60,80,100,113,120 mm

**PIR-EN 13165 - T1 - DS(70.90)2 - DS(-20,-)2 - CS(10)100 - TR70 -  
FW2 - WL(T)2**