DECLARATION OF PERFORMANCE

No termPIR/WS/12

CE 16

Unique identification code of the product type: termPIR WS 20-250, type of edges
Manufacturer: Gór-Stal sp. z o.o.; ul. Przemysłowa 11; 38-300 Gorlice, Poland / Place of manufacture: Gór-Stal sp. z o.o.; ul. Adolfa Mitery 9; 32-700 Bochnia, Poland
Harmonised standard: EN 13165:2012+A2:2016
The system/s of AVCP: 3
Notified body/ies: Notified laboratory no **1488** (ITB, Warszawa, PL) make tests reports for: reaction to fire, thermal conductivity, thermal resistance and compressive stress; **1454** (IMBiGS, Katowice, PL) make tests reports for flatness after one-sided wetting
Intended use/uses: thermal insulation products for buildings; *(internal use acc. to EPBD, Belgium)*

Declared performances:

essential characteristics	performance	values / classes					
Thermal resistance	Thickness tolerance, class	*for ($20 \le d_N < 50$ mm):* ± 2 mm, T2		*for ($50 \le d_N \le 120$ mm):* ± 3 mm,T2		*for ($120 < d_N \le 250$ mm):* +5/-3 mm, T2	
	Thermal conductivity, λ_D	*for ($20 \le d_N < 80$ mm):* **0,026** [W/m·K]		*for ($80 \le d_N \le 120$ mm):* **0,025** [W/m·K]		*for ($120 < d_N \le 250$ mm):* **0,024** [W/m·K]	
	Thermal resistance, R_D [m^2·K/W]	*20 mm:* **0,75**	*30 mm:* **1,15**	*40 mm:* **1,55**	*50 mm:* **1,90**	*60 mm:* **2,30**	*70 mm:* **2,70**
		80 mm: **3,20**	*90 mm:* **3,60**	*100 mm:* **4,00**	*110 mm:* **4,40**	*120 mm:* **5,05**	*130 mm:* **5,45**
		140 mm: **5,85**	*150 mm:* **6,30**	*160 mm:* **6,70**	*170 mm:* **7,15**	*180 mm:* **7,55**	*190 mm:* **8,00**
		200 mm: **8,40**	*210 mm:* **8,80**	*220 mm:* **9,25**	*230 mm:* **9,65**	*240 mm:* **10,1**	*250 mm:* **10,5**
Reaction to fire *(of the product as placed on the market)*		Classe **E**					
Reaction to fire *(end of use)*		Classe **B-s2,d0** *(with trapezoidal metal sheet)*					
Durability of reaction to fire against heat, weathering, ageing/degradation	Durability of reaction to fire of the product as placed on the market	NPD *The fire performance of PIR does not deteriorate with time (acc. EN 13165+A2)*					
Durability of thermal resistance against heat, weathering, ageing/degradation	Thermal conductivity, λ_D agged values	*for ($20 \le d_N < 80$ mm):* **0,026** [W/m·K]		*for ($80 \le d_N \le 120$ mm):* **0,025** [W/m·K]		*for ($120 < d_N \le 250$ mm):* **0,024** [W/m·K]	
	Thermal resistance, R_D [m^2·K/W] agged values *(for thickness d_N)*	*20 mm:* **0,75**	*30 mm:* **1,15**	*40 mm:* **1,55**	*50 mm:* **1,90**	*60 mm:* **2,30**	*70 mm:* **2,70**
		80 mm: **3,20**	*90 mm:* **3,60**	*100 mm:* **4,00**	*110 mm:* **4,40**	*120 mm:* **5,05**	*130 mm:* **5,45**
		140 mm: **5,85**	*150 mm:* **6,30**	*160 mm:* **6,70**	*170 mm:* **7,15**	*180 mm:* **7,55**	*190 mm:* **8,00**
		200 mm: **8,40**	*210 mm:* **8,80**	*220 mm:* **9,25**	*230 mm:* **9,65**	*240 mm:* **10,1**	*250 mm:* **10,5**
	Durability characteristics	NPD					
	Dimensional stability	*for ($20 \le d_N < 50$ mm):* DS(70,-)**1**		*for ($50 \le d_N \le 250$ mm):* DS(-20,-)**2** / DS(70,90)**3**			
	Deformation under specified compressive load and temper. condition	NPD					
Compressive strenght	Compressive stress, σ_{10}	≥ 120 kPa, CS(10/Y)**120**					
Tensile strength	Tensile strength perpendicular to faces	≥ 60 kPa, TR **60**					
Durability of compressive strenght against ageing/degradation	Compressive creep	NPD					
Water permeability	Long term water absorption	NPD					
	Short term water absorption	NPD					
	Flatness after one-sided wetting	≤ 10 mm / FW**2**					
Water vapour permeability	Water vapour transmission, μ	μ = (90 ÷ 170), MU(90-170)					
Acoustic absorption index	Sound absorption	NPD					
Release of dengerous substances to the indoor environment		NPD; *European test methods are under development for this characteristic.*					
Continuous glowing combustion		NPD; *European test methods are under development for this characteristic.*					
NPD: No Performance Determined							

Harmonised standard: EN 13165:2012+A2:2016

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

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DYREKTOR PRODUKCJI
Piotr Grzywa

Bochnia, dn. 10.12.2017
place and date of issue

signature and seal of the authorized person

ADDITIONAL INFORMATION (not falling within the scope of CE marking and other than the contents of this declaration of performance):

Description: Insulation panels with PIR core, double-sided panel lining is made of fiberglass (WS)
Type of edges: **FIT** (straight edges), **LAP** (overlap edges), **TAG** (tounge and groove)

Additional product's information :

Core density (EN 1602): 30 +6/-2 kg/m^3
Board lenght / width (EN 822): 2,4 m (±10 mm); 1,2 m (±7,5 mm); 0,6 m (±5 mm) / 1,2 m (±7,5 mm); *minus cutting depth LAP i TAG: about 15 mm; or acc. to order*
Long term water absorption (EN 12087): ≤ 2,0 % [kg/kg]
Fire resistance (EN 13501-2): REI 20 (dla $d_N \ge 120$ mm) - *details in the classification*
External fire performance (EN 13501-5): Broof (t1) dla $d_N \ge 50$ mm - *details in the classification*

Informations about product safety:

Information referred to in Article 31 and 32 of the Regulation (EC) No 1907/2006 (REACH): Not applicable

Installation guidelines: Lay panels in a single layer or multiple layers, in a staggered pattern. Ensure that the panels adhere tightly to each other. Ensure surface stability. Insulation panels can be installed mechanically using screws, can be suspended or bonded - depending on the type of surface and type of waterproofing membrane. Ensure that the fasteners do not come clear through the panels. Protect your insulated panel system against the elements. For further information please consult the Technical Catalogue available on www.gor-stal.pl.