

This declaration of performance concerns to **GS PIR D** products (name change from **Gorlicka D GS-PIR**) -- Self-supporting double skin metal faced insulating panels with PIR core (galvanized steel faces, yield strength ≥ 220 N/mm²), thickness (outer/inner) min. 0,4 / 0,4 mm and for all organic coatings. Modular width: 1000 mm. Facing profile: outer: T(trapezoidal 40mm), inner: L(linear), G(smooth). Certificate of constancy of performance no. 1487-CPR-174-02 issued by notified body ICiMB (no. 1487).



DECLARATION OF PERFORMANCE

no. D/01/2020



Unique identification code of the product-type:

GS PIR D [thickness d_N] [modular width: 1000] [outer/inner profilation: T / L, G]

Harmonised standard: EN 14509:2013

System/s of AVCP: System 1

Notified body/ies: ICiMB (Nr 1487), ITB (Nr 1488), FIRES (Nr 1396)

Intended use/es: Roofs

Manufacturer: GÓR-STAL Sp. z o.o., ul. Przemysłowa 11, 38-300 Gorlice, POLAND

Declared performance/s:

Unique identification code of the product-type				GS PIR D40	GS PIR D60	GS PIR D80	GS PIR D100	GS PIR D120	GS PIR D160	Classification	
				module: 1000, profilation: T / L, G							
Thickness				40/80 mm	60/100 mm	80/120 mm	100/140 mm	120/160 mm	160/200 mm		
Essential characteristics / Parameters				Value of parameters							
Thermal properties											
	Thermal conductivity, λ_D			W/m·K	0,022						
	Thermal transmittance, $U_{d,s}$			W/m²·K	0,49	0,34	0,26	0,21	0,18	0,13	
Mechanical properties											
	Compressive strength (core)			MPa	0,12						
	Tensile strength			MPa	0,06						
	Shear strength			MPa	0,130	0,120	0,100	0,100	0,100	0,080	
	Shear modulus (core)			MPa	3,20	3,20	3,00	2,90	2,80	2,40	
	Bending resistance in the span		(+)	ambient temperature	kN·m	2,20	3,50	5,40	5,80	8,20	8,00
	Bending resistance in the span		(-)			2,30	2,90	6,80	5,70	6,70	5,20
	Bending resist. at internal support		(+)	kN·m	2,90	3,50	4,70	4,60	5,40	6,10	
	Bending resist. at internal support		(-)		2,00	3,00	4,40	5,30	6,40	7,20	
	Bending resistance in the span		(+)	elevated temperature	kN·m	1,67	2,66	4,10	4,41	6,23	6,08
	Bending resistance in the span		(-)			1,75	2,20	5,17	4,33	5,09	3,95
	Bending resist. at internal support		(+)	kN·m	2,20	2,66	3,57	3,50	4,10	4,64	
	Bending resist. at internal support		(-)		1,52	2,28	3,34	4,03	4,86	5,47	
	Creep coefficient			for t=2.000h:	0,67 (for 0,5/0,5); 0,79 (for 0,5/0,4); 0,91 (for 0,4/0,4)						0,69
				for t=100.000h:	1,09 (for 0,5/0,5); 1,14 (for 0,5/0,4); 1,33 (for 0,4/0,4)						0,83
	Reduced long term shear strength (40%)			MPa	0,052	0,048	0,040	0,040	0,040	0,034	
Resistance to point loads				1,2 kN							
Resistance to access loads				NPD							
Reaction to fire (all applications)				B-s1,d0							
Fire resistance (details in the classification)				NPD			REI 30 / RE 120				
External fire performance				B _{roof}							
Water permeability				Class A							
Water vapour permeability				„Impermeable”							
Air permeability			(+)	C=0,0046 m3/(hPa^n), n=1,2421 (0,7 [m3/m²h] for Δp=50 [kPa])							
			(-)	C=0,0033 m3/(hPa^n), n=1,0658 (0,2 [m3/m²h] for Δp=50 [kPa])							
Airborne sound insulation				24(-1,-3) (for 0,5/0,5 & 0,5/0,4); 24(-2,-4) (for 0,4/0,4); [dB]							
Sound absorption				0,1 dB							
Dimensional tolerances				„Pass” (Thickness: ±2mm for ≤100mm and 2% for ≥100mm)							
Durability – all colours				„Pass”							
Dengerous substances				NPD							

EN 14509:2013

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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GŁÓWNY TECHNOLOG

Bartłomiej Bochnia

signed for and on behalf of the manufacturer by

Gorlice, 03.02.2020
place and date of issue