

This declaration of performance concerns to **GS PIR D** products -- 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), P(smooth). Certificate of constancy of performance no. 1487-CPR-174-02 issued by notified body ICiMB (no. 1487).



DECLARATION OF PERFORMANCE

no. D/02/2020



Unique identification code of the product-type:

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

Harmonised standard: EN 14509:2013

System/s of AVCP: System 1

Notified body/ies: ICiMB (Nr 1487), 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, P															
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/m ² ·K							0,55	0,37	0,27	0,22	0,18	0,14
Mechanical properties															
Compressive strength (core)			MPa							0,1					
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		(+)	ambient temperature	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		(+)	elevated temperature	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 m ³ /(hPa ⁿ), n=1,2421 (0,7 [m ³ /m ² h] for $\Delta p=50$ [kPa])												
		(-)	C=0,0033 m ³ /(hPa ⁿ), n=1,0658 (0,2 [m ³ /m ² h] for $\Delta p=50$ [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: $\pm 2mm$ for $\leq 100mm$ and 2% for $\geq 100mm$)												
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.

„GÓR-STAL” Sp. z o.o.
38-300 Gorlice, ul. Przemysłowa 11
tel. 018 353 98 00
REGON 852712117 NIP 738-19-45-154

GŁÓWNY TECHNOLOG
Bartłomiej Bochnia

Gorlice, 20.07.2020

place and date of issue

signed for and behalf of the manufacturer by