



## DECLARATION OF PERFORMANCE

no. D/03/2022



### 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), ITB (1488)

**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 D150	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	150/190 mm	160/200 mm		
Essential characteristics / Parameters		Value of parameters								
Thermal properties										
Thermal conductivity, $\lambda_D$		W/m·K		0,022						
Thermal transmittance, $U_{d,s}$		W/m <sup>2</sup> ·K		0,55	0,37	0,27	0,22	0,18	0,15	0,14
Mechanical properties										
Compressive strength (core)		MPa		0,10						
Tensile strength		MPa		0,060						
Shear strength		MPa		0,13	0,12	0,10	0,10	0,10	0,080	0,080
Shear modulus (core)		MPa		3,20	3,20	3,00	2,90	2,80	2,4	2,40
Bending resistance in the span		kn·m		2,72	4,08	5,44	6,80	8,16	10,20	10,88
Bending resistance in the span		kn·m		1,60	2,40	3,20	4,00	4,80	6,00	6,40
Bending resist. at internal support		kn·m		2,05	3,07	4,10	5,12	6,15	7,68	8,20
Bending resist. at internal support		kn·m		2,30	3,45	4,60	5,75	6,90	8,62	9,20
Bending resistance in the span		kn·m		2,66	3,99	5,33	6,66	7,99	9,99	10,66
Bending resistance in the span		kn·m		1,56	2,35	3,13	3,92	4,70	5,88	6,27
Bending resist. at internal support		kn·m		2,00	3,00	4,01	5,01	6,02	7,52	8,03
Bending resist. at internal support		kn·m		2,25	3,38	4,50	5,63	6,76	8,44	9,01
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	0,034
Reaction to fire (all applications)		B-s1,d0								
Fire resistance (details in the classification)		NPD			REI 30 / RE 120					
External fire performance		B <sub>roof</sub>								
Water permeability		Class A								
Air permeability		(+) C=0,0046 m <sup>3</sup> /(hPa·n), n=1,2421								
		(-) C=0,0033 m <sup>3</sup> /(hPa·n), n=1,0658								
Airborne sound insulation		24(-1,-3) (for 0,5/0,5 & 0,5/0,4); 24(-2,-4) (for 0,4/0,4); [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.

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