*This declaration of performance concerns to **GS PIR D MAX** 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 issuead by notified body ICiMB (no. 1487).*

GÓR-STAL®

DECLARATION OF PERFORMANCE

no. **D/MAX/02'/2020**

CE 18

Unique identification code of the product-type:

GS PIR D [*thickness* d_N] **MAX** [*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), 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 D80 MAX	GS PIR D100 MAX	GS PIR D120 MAX	GS PIR D160 MAX	Classification
					module: **1000,** *profilation:* **T / L, P**				
Thickness					***80**/120* **mm**	***100**/140* **mm**	***120**/160* **mm**	***160**/200* **mm**	
Essential characteristics / Parameters					**Value of parameters**				
Thermal properties									EN 14509:2013
Thermal conductivity, λ_D				W/m·K	0,020				
Thermal transmittance, $U_{d,S}$				W/m²·K	0,25	0,20	0,17	0,13	
Mechanical properties									
Compressive strength (core)				MPa	0,10				
Tensile strength				MPa	0,06				
Shear strength				MPa	0,100	0,100	0,100	0,080	
Shear modulus (core)				MPa	3,00	2,90	2,80	2,40	
Bending resistance in the span	(+)	ambient temperature		kN·m	5,40	5,80	8,20	8,00	
Bending resistance in the span	(-)	ambient temperature		kN·m	6,80	5,70	6,70	5,20	
Bending resist. at internal support	(+)	ambient temperature		kN·m	4,70	4,60	5,40	6,10	
Bending resist. at internal support	(-)	ambient temperature		kN·m	4,40	5,30	6,40	7,20	
Bending resistance in the span	(+)	elevated temperature		kN·m	4,10	4,41	6,23	6,08	
Bending resistance in the span	(-)	elevated temperature		kN·m	5,17	4,33	5,09	3,95	
Bending resist. at internal support	(+)	elevated temperature		kN·m	3,57	3,50	4,10	4,64	
Bending resist. at internal support	(-)	elevated temperature		kN·m	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	0,040	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	RE 30 / REI 20			
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/m*h] for Δp=50 [kPa])*				
				(-)	C=0,0033 m3/(hPa^n), n=1,0658 *(0,2 [m3/m*h] 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				

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, 03.08.2020
place and date of issue

signed for and behalf of the manufacturer by