*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/03/2022**

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 D150 MAX** | **GS PIR D160 MAX** | Classification |
|---|---|---|---|---|---|---|---|---|---|
| | | | | *module:* **1000,** *profilation:* **T / L, P** | | | | | |
| *Thickness* | | | | ***80**/120* **mm** | ***100**/140* **mm** | ***120**/160* **mm** | ***150**/190* **mm** | ***160**/200* **mm** | |
| **Essential characteristics** / Parameters | | | | **Value of parameters** | | | | | |
| Thermal properties | | | | | | | | | EN 14509:2013 |
| Thermal conductivity, $\lambda_D$ | | | W/m·K | 0,020 | | | | | |
| Thermal transmittance, $U_{d,S}$ | | | W/m$^2$·K | 0,25 | 0,20 | 0,17 | 0,13 | 0,13 | |
| Mechanical properties | | | | | | | | | |
| Compressive strength (core) | | | MPa | 0,10 | | | | | |
| Tensile strength | | | MPa | 0,060 | | | | | |
| Shear strength | | | MPa | 0,10 | 0,10 | 0,10 | 0,080 | 0,080 | |
| Shear modulus (core) | | | MPa | 3,0 | 2,9 | 2,8 | 2,4 | 2,4 | |
| Bending resistance in the span | (+) | ambient temperature | kN·m | 5,44 | 6,80 | 8,16 | 10,20 | 10,88 | |
| Bending resistance in the span | (-) | ambient temperature | kN·m | 3,20 | 4,00 | 4,80 | 6,00 | 6,40 | |
| Bending resist. at internal support | (+) | ambient temperature | kN·m | 4,10 | 5,12 | 6,15 | 7,68 | 8,20 | |
| Bending resist. at internal support | (-) | ambient temperature | kN·m | 4,60 | 5,75 | 6,90 | 8,62 | 9,20 | |
| Bending resistance in the span | (+) | elevated temperature | kN·m | 5,33 | 6,66 | 7,99 | 9,99 | 10,66 | |
| Bending resistance in the span | (-) | elevated temperature | kN·m | 3,13 | 3,92 | 4,70 | 5,88 | 6,27 | |
| Bending resist. at internal support | (+) | elevated temperature | kN·m | 4,01 | 5,01 | 6,02 | 7,52 | 8,03 | |
| Bending resist. at internal support | (-) | elevated temperature | kN·m | 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 | 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 | 0,83 | |
| Reduced long term shear strength (40%) | | | MPa | 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 | 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 | | | | | |
| | | | (-) | C=0,0033 m3/(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: ±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

At Gorlice, on 28.02.20222

signed for and behalf of the manufacturer by