

DECLARATION OF PERFORMANCE

REGULATION (EU) No 305/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (ANNEX III)

- Name of the product-type:
Metal Sheet metal faced, PIR cored insulating panel for use in buildings
- Unique identification code of the product-type:
Metál-Sheet PIR wall panel 40/60/80/100/120/150/200
Depending on the thickness of the facing, the following types are distinguished (I=internal facing; E=external facing):
I 0.4 mm – E 0.4 mm; I 0.4 mm – E 0.5 mm; I 0.5 mm – E 0.5 mm; I 0.5 mm – E 0.6 mm; I 0.6 mm – E 0.6 mm
- Intended use/es:
Self-supporting, metal faced insulating sandwich panel for Internal- and external walls and suspended ceiling use
- Manufacturer:
METÁL-SHEET LTD.
H-4002 Debrecen, Csereerdő utca 10.
- System/s of AVCP:
System 1
- In the case of a manufacturer's declaration for construction products governed by harmonised standards:
The ÉMI Non-Profit Limited Liability Company for Quality Control and Innovation in Building (EMI Non-profit Ltd.), H-2000 Szentendre, Dózsa György út 26., 1415 notified body, who carried out the following in system 1:
 - the definition of the product type,
 - the basic inspection of the manufacturing plant and the factory production control,
 - the continuous supervision, inspection and evaluation of the factory production control (EC-)Performance Stability Certificate issued under the number 1415-CPR-2-(C-45/2012).
- Performance according to the declaration
Harmonised technical specification applied: EN 14509:2013

BASIC PROPERTIES	PERFORMANCE						
	PIR OPN 40	PIR OPN 60	PIR OPN 80	PIR OPN 100	PIR OPN 120	PIR OPN 150	PIR OPN 200
Thermal transmittance (W/m^2K)	0.525	0.350	0.262	0.210	0.175	0.135	0.101
Thermal conductivity (W/mK)	0.021	0.021	0.021	0.021	0.021	0.021	0.021
Facing strength class	S220 GD						
Tensile strength (MPa)	0.050	0.039	0.050	0.075	0.058	0.058	0.062
Shear strength (MPa)	0.275	0.229	0.186	0.153	0.106	0.106	0.097
Reduced long term shear strength (kPa)	20	20	20	20	20	20	20
Shear modulus (core) (MPa)	2.35	2.43	2.31	2.75	2.02	2.02	0.055
Compressive strength (core) (MPa)	0.101	0.136	0.115	0.121	0.115	0.115	0.197
Creep coefficient	$\Phi_{2000}=10.3$ $\Phi_{2000}=20.4$						
Bending resistance in the span:							
positive bending (kNm/m)	2.1	2.1	4.8	4.0	4.0	4.0	4.0
positive bending, elevated temperature (kNm/m)	1.8	1.8	4.1	3.4	3.4	3.4	3.4
negative bending (kNm/m)	2.1	2.1	4.8	4.0	4.0	4.0	4.0
negative bending, elevated temperature (kNm/m)	1.8	1.8	4.1	3.4	3.4	3.4	3.4
Bending resistance at an internal support							
positive bending (kNm/m)	1.7	1.7	3.9	2.5	2.5	2.5	2.5
positive bending, elevated temperature (kNm/m)	1.5	1.5	3.4	2.2	2.2	2.2	2.2
negative bending (kNm/m)	1.7	1.7	3.9	2.5	2.5	2.5	2.5
negative bending, elevated temperature (kNm/m)	1.5	1.5	3.4	2.2	2.2	2.2	2.2
Wrinkling strength (external face)							
in span (N/mm^2)	106.1	106.1	121.3	66.5	66.5	66.5	66.5
in span, elevated temperature (N/mm^2)	91.1	91.1	104.2	57.1	57.1	57.1	57.1
at internal support (N/mm^2)	85.6	85.6	98.6	42.3	42.3	42.3	42.3
at internal support, elevated temperature (N/mm^2)	73.5	73.5	84.6	36.3	36.3	36.3	36.3
Wrinkling strength (internal face)							
in span (N/mm^2)	106.1	106.1	121.3	66.5	66.5	66.5	66.5
in span, elevated temperature (N/mm^2)	85.6	85.6	98.6	42.3	42.3	42.3	42.3
Reaction to fire	B-s2, d0						
Fire resistance	NPD	EI 15; E20	EI 20; E30	EI 30	EI 30	EI 30	EI 30
External fire performance	NPD						
Water permeability	NPD						
Air permeability	NPD						
Water vapour permeability	NPD						
Airborne sound insulation	NPD						
Durability	Pass-all colours						

*Other characteristics of the fire resistance limit values: galvanized self-cutting corset screws were used for the overlays of the sandwich panel, with a rubber washer 500 mm on the outer side of the panel and 150 mm on the fire-exposed side of the panel. The connection between the steel receiving profile on the edges of the model and the sandwich panel was also formed with galvanized self-cutting corset screws, the distance of the screws was 300 mm. The panels are attached to the intermediate selemen with a self-drilling screw at a distance of up to 300 mm.

- The performance of the product specified in points 1 and 2 corresponds to the declaration performance indicated in point 7. Only the manufacturer specified in point 4 shall be responsible for issuing this performance declaration.

Debrecen, 2023.05.15. v.4.

METÁL-SHEET KFT.
 Approved By: Debrecen, Csereerdő utca 10.
 HBm-i (qualified person) 09-010857
 Adószám: 13321701-2-09
 Szlasz: 10916001-00000007-07680002
 Tel: 06-40-644444 / 06-40-644444 / 06-40-644444

 Headquarter: Hungary, 4002 Debrecen, Csereerdő utca 10.
 minosegiranyitas@metal-sheet.hu