

## DOMOLAM MW WALL PANELS – PW

### DESCRIPTION:

The products DOMOLAM **MW PW** are self-supporting double skin metal faced insulating panels, which are factory manufactured from two metal sheets joined together with mineral wool.

### APPLICATION SCOPE:

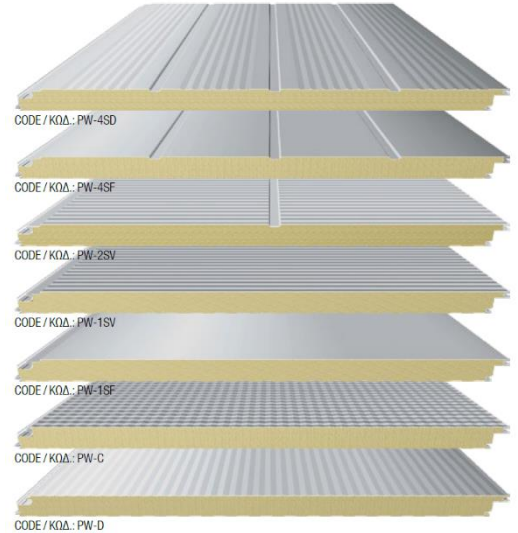
The products are used for the covering of external and internal walls, as well as ceilings at several types of buildings, providing fire resistance, water and air tightness and thermal insulation.

### QUALITY:

Products are submitted to tests according to the EN 14509:2013.

### ENVIRONMENTAL PROTECTION:

Mineral wool is produced from mineral rocks and is a natural inorganic fibrous insulating material, internationally recognized for its thermal and sound insulating properties, as well as for its excellent behavior in high temperatures and fire.



### TECHNICAL CHARACTERISTICS:

**PW** – The loads calculated are the necessities to obtain the max deformation in mm [span\*10] according to EN14509

Panel thickness (mm)	Metal sheet thickness (mm)	Weight (kg/m <sup>2</sup> )	U-Value (W/m <sup>2</sup> K)	Span (m)	Single span									
					1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0		
50	0,50-0,45	12,86	0,66	q (kN/m <sup>2</sup> )	1,25	0,80	0,65	0,50						
60		13,86	0,55		1,55	1,10	0,80	0,65	0,40					
80		15,85	0,41		2,20	1,80	1,25	0,90	0,65	0,40				
100		17,85	0,33		2,85	2,10	1,60	1,20	0,80	0,60	0,40			
120		19,86	0,27		3,50	2,60	2,00	1,55	1,05	0,70	0,55	0,35		

## DECLARATION OF PERFORMANCE No.11/MW/WALL

- |   |   |
|---|---|
| 1. Unique identification code of the product-type:  | DOMOLAM MW PW   |
| 2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):             | PW-D, PW-MD, PW-LC, PW-MLC, PW-4SD, PW-1SD, PW-1SC, PW-C  |
| 3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer: | Self-supporting double skin metal faced insulating panels - External or internal walls & ceilings |
| 4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):                      | PAGOUNI S.A., 57008 Echedoros, Thessaloniki, Greece   |
| 5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):                   | Not relevant  |
| 6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:                          | AVCP – System 1   |
| 7. In case of the declaration of performance concerning a construction product covered by a harmonized standard:  | CSI SPA No. 0497 – EN 14509:2013  |
| 8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:                   | Not relevant  |

9. Declared performance

Essential characteristics	Performance	Harmonized technical specification
External pre-painted galvanized steel	S280+Z140	EN 10346
Internal pre-painted galvanized steel	S280+Z140	
<b>Thickness in mm</b>	50,60,80,100,120	EN 14509
External pre-painted galvanized steel thickness	0,40;0,45;0,50;0,55;0,60	EN 10143
Internal pre-painted galvanized steel thickness	0,40;0,45;0,50;0,55;0,60	
External coating (µm)	Standard Polyester 20+5	EN 10169
Internal coating (µm)		
Density (kg/m <sup>3</sup> )	100±5	EN 1602

<b>Thermal conductivity (W/mK)</b>	0,033		EN 13162
<b>Thermal transmittance (W/m<sup>2</sup>K)</b>	<b>Thickness</b>	<b>U - Value</b>	EN ISO 10456
	50	0,66	
	60	0,55	
	80	0,41	
	100	0,33	
	120	0,27	

<b>Reaction to fire</b>	A2-s1-d0		EN 13501-1
<b>Resistance to fire</b>	<b>Thickness</b>	<b>Resistance</b>	EN 13501-2
	50	EI 30 : E 90	
	60	EI 45 : E 90	
	80	EI 90 : E 120	
	100	EI 120	
	120	EI 180: E 240	

Water permeability	Class A	EN 12865
Water vapour permeability	Impermeable	EN 14509
Air permeability	0,19 m <sup>3</sup> /m <sup>2</sup> /h at 50 Pa	EN 12114

Airborne sound insulation $R_w$ (dB)	30	EN ISO 717-1
Sound absorption $a_w$	1,00	EN ISO 11654
Durability	Pass	EN 14509

**Mechanical resistance**

Tensile strength (MPa)	0,05			EN 14509
Compressive strength (MPa)	0,06			
Shear strength (MPa)	0,05			
Shear modulus (MPa)	1,80			
Wrinkling stress (external face) panel thickness	<b>50</b>	<b>80</b>	<b>120</b>	
- in span (MPa)	86	105	120	
- in span, elevated temperature (MPa)	84	100	110	
- at central support (MPa)	82	96	108	
- at central support, elevated temperature (MPa)	80	92	104	
Wrinkling stress (internal face) panel thickness	<b>50</b>	<b>80</b>	<b>120</b>	
- in span (MPa)	86	105	120	
- at central support (MPa)	84	100	110	

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:



Vrellas Charisis - Quality Engineer of Pagouni SA

Thessaloniki 15.04.2024