DOMOLAM **WALL PANELS - PW**

DESCRIPTION:

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

APPLICATION SCOPE:

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

QUALITY:

Products are submitted to tests according to the

EN 14509:2013.

ENVIRONMENTAL PROTECTION:

The PIR foam consists of closed cells, is chemically neutral, non toxic, and is produced from environmentally friendly technology with N-Pentane as blow agent without the use of CFC, HCFC.

TECHNICAL CHARACTERISTICS:

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

Panel thickness	Metal sheet thickness	Weight	U-Value	Span	Single span							
(mm)	(mm)	(kg/m^2)	(W/m^{2}K)	(m)	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0
30	0,50-0,45	9,44	0,72	q (kN/m^2)	2,08	0,93	0,47	0,26	0,16	0,10	0,06	0,04
40		9,85	0,54		3,02	1,41	0,74	0,42	0,25	0,16	0,11	0,07
50		10,26	0,43		3,99	1,91	1,03	0,59	0,37	0,24	0,16	0,11
60		10,67	0,36		4,98	2,43	1,33	0,78	0,49	0,32	0,22	0,15
80		11,49	0,27		6,98	3,51	1,97	1,19	0,76	0,51	0,35	0,25
100		12,31	0,22		9,01	4,61	2,64	1,63	1,06	0,71	0,50	0,35

DECLARATION OF PERFORMANCE
No.4/PIR/WALL

1. Unique identification code of the product-type:	DOMOLAM PIR 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-F, PW-D, PW-LC, PW-C, PW-B, PW-V, PW-LCV, PW-1SF, PW-2SF, PW-4SF, PW-1SV, PW-2SV, PW-4SV, PW-1SC, PW-LCV, PW-4SC, PW-1SD, PW-4SD
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	
Thickness in mm	30,40,50,60,80,100	EN 14509
External pre-painted galvanized steel thickness	0,35;0,40;0,45;0,50;0,55	EN 10143
Internal pre-painted galvanized steel thickness	0,30;0,35;0,40;0,45;0,50	
External coating (μm)	Standard Polyester 20+5	EN 10169
Internal coating (μm)		
Density (kg/m^3)	40±2	EN 1602

Thermal conductivity (W/mK)	0,0215		EN 13165
Thermal transmittance (W/m^{2}K)	**Thickness**	**U - Value**	EN ISO 10456
	30	0,72	
	40	0,54	
	50	0,43	
	60	0,36	
	80	0,27	
	100	0,22	

Reaction to fire	B-s2-d0		EN 13501-1
Resistance to fire	**Thickness**	**Resistance**	EN 13501-2
	30	NPD	
	40		
	50		
	60		
	80		
	100		

Water permeability	Class A	EN 12865
Water vapour permeability	Impermeable	EN 14509
Air permeability	0,19 $m^3/m^2/h$ at 50 Pa	EN 12114
Airborne sound insulation Rw (dB)	25	EN ISO 717-1
Sound absorption a_w	0,10	EN ISO 11654
Durability	Pass	EN 14509

Mechanical resistance

Tensile strength (MPa)	0,10			EN 14509
Compressive strength (MPa)	0,12			
Shear strength (MPa)	0,10			
Shear modulus (MPa)	2.80			
Wrinkling stress (external face) panel thickness	**30**	**60**	**100**	
- in span (MPa)	96	115	140	
- in span, elevated temperature (MPa)	94	112	134	
- at central support (MPa)	92	100	129	
- at central support, elevated temperature (MPa)	90	98	127	
Wrinkling stress (internal face) panel thickness	**30**	**60**	**100**	
- in span (MPa)	85	90	110	
- at central support (MPa)	80	86	95	

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 15.06.2016