

DOMOLAM ROOF PANELS - PR

DESCRIPTION:

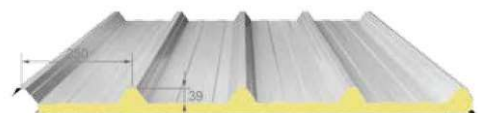
The products DOMOLAM **PR** are self-supporting double skin metal faced insulating panels, which are factory manufactured from two metal sheets joined together with polyurethane foam.



CODE / ΚΩΔ.: PR-3T 39/500



CODE / ΚΩΔ.: PR-4T 39/333



CODE / ΚΩΔ.: PR-5T 39/250

APPLICATION SCOPE:

The products are used for the covering of roofs 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 PUR B3 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:

PR-2T – 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 ²)	U-Value (W/m ² K)	Span (m)	Single span							
					1,50	2,00	2,50	3,00	3,50	4,00	4,50	5,00
30	0,50-0,45	9,48	0,66	q kN/m ²	2,31	1,00	0,50	0,27	0,16	0,10	0,06	0,04
40		9,92	0,51		3,30	1,50	0,77	0,43	0,26	0,16	0,11	0,07
50		10,36	0,41		4,33	2,03	1,07	0,61	0,37	0,24	0,16	0,11
60		10,80	0,35		5,38	2,57	1,39	0,81	0,50	0,32	0,22	0,15
80		11,68	0,27		7,48	3,71	2,06	1,23	0,78	0,51	0,35	0,25
100		12,55	0,21		9,61	4,88	2,77	1,69	1,09	0,73	0,50	0,36
120		13,41	0,18		11,74	6,06	3,50	2,17	1,41	0,96	0,67	0,48

PR-3T – 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 ²)	U-Value (W/m ² K)	Span (m)	Single span							
					1,50	2,00	2,50	3,00	3,50	4,00	4,50	5,00
30	0,50-0,45	9,73	0,63	q kN/m ²	2,32	1,01	0,51	0,28	0,16	0,10	0,07	0,05
40		10,17	0,49		3,31	1,51	0,78	0,44	0,26	0,17	0,11	0,08
50		10,60	0,40		4,34	2,04	1,08	0,62	0,38	0,24	0,16	0,11
60		11,04	0,34		5,38	2,59	1,40	0,82	0,51	0,33	0,22	0,15
80		11,92	0,26		7,50	3,72	2,07	1,25	0,79	0,52	0,36	0,25
100		12,79	0,21		9,64	4,88	2,78	1,70	1,10	0,74	0,51	0,36
120		13,70	0,18		11,80	6,07	3,51	2,18	1,43	0,97	0,68	0,49

PR-4T – 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 ²)	U-Value (W/m ² K)	Span (m)	Single span							
					1,50	2,00	2,50	3,00	3,50	4,00	4,50	5,00
30	0,50-0,45	9,70	0,60	q kN/m ²	2,33	1,02	0,51	0,28	0,17	0,10	0,07	0,05
40		10,10	0,47		3,32	1,52	0,79	0,44	0,27	0,17	0,11	0,08
50		10,51	0,39		4,34	2,04	1,09	0,63	0,38	0,25	0,16	0,11
60		10,92	0,33		5,38	2,59	1,41	0,83	0,51	0,33	0,22	0,16
80		11,74	0,25		7,49	3,72	2,08	1,25	0,80	0,53	0,36	0,25
100		12,55	0,20		9,62	4,88	2,79	1,71	1,10	0,74	0,52	0,37
120		13,53	0,18		11,77	6,06	3,51	2,19	1,43	0,97	0,68	0,49

PR-5T – 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 ²)	U-Value (W/m ² K)	Span (m)	Single span							
					1,50	2,00	2,50	3,00	3,50	4,00	4,50	5,00
30	0,50-0,45	10,07	0,57	q kN/m ²	2,45	1,07	0,53	0,29	0,17	0,11	0,07	0,05
40		10,50	0,45		3,51	1,59	0,82	0,46	0,28	0,17	0,12	0,08
50		10,94	0,37		4,61	2,16	1,14	0,65	0,40	0,25	0,17	0,12
60		11,38	0,32		5,73	2,74	1,48	0,86	0,53	0,34	0,23	0,16
80		12,25	0,25		8,01	3,96	2,20	1,32	0,83	0,55	0,37	0,26
100		13,14	0,20		10,31	5,20	2,95	1,80	1,16	0,78	0,54	0,38
120		14,05	0,18		12,63	6,47	3,73	2,31	1,51	1,02	0,71	0,51

DECLARATION OF PERFORMANCE

No.9/PUR B3/ROOF

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|---|---|
| 1. Unique identification code of the product-type: | DOMOLAM PUR B3 PR |
| 2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4): | PR-2T, PR-3T, PR-4T, PR-5T |
| 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 - Roofs |
| 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 4 |
| 7. In case of the declaration of performance concerning a construction product covered by a harmonized standard: | 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	30,40,50,60,80,100,120	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/m²K) PR-2T	Thickness	U - Value	EN ISO 10456
	30	0,66	
	40	0,51	
	50	0,41	
	60	0,35	
	80	0,27	
	100	0,21	
	120	0,18	
Thermal transmittance (W/m²K) PR-3T	Thickness	U - Value	
	30	0,63	
	40	0,49	
	50	0,40	
	60	0,33	
	80	0,26	
	100	0,21	
	120	0,18	
Thermal transmittance (W/m²K) PR-4T	Thickness	U - Value	
	30	0,60	
	40	0,47	
	50	0,39	
	60	0,33	
	80	0,25	
	100	0,20	
	120	0,18	

Thermal transmittance (W/m ² K) PR-5T	Thickness	U - Value
	30	0,57
	40	0,45
	50	0,37
	60	0,32
	80	0,25
	100	0,20
	120	0,18

External fire performance	Broof (t1)	CEN/TS 1187
Reaction to fire	C-s3-d0	EN 13501-1
Resistance to fire	Thickness	Resistance
	30	NPD
	40	
	50	
	60	
	80	
	100	
	120	

Water permeability	Class A	EN 12865
Water vapour permeability	Impermeable	EN 14509
Air permeability	0,16 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	
Creep coefficient t=2000h	1,85	

Creep coefficient t=2000h	2,95	
Wrinkling stress (external face) panel thickness for PR-4T	30	100
- in span (MPa)	206	180
- in span, elevated temperature (MPa)	194	172
- at central support (MPa)	186	160
- at central support, elevated temperature (MPa)	176	152
Wrinkling stress (internal face) panel thickness for PR-4T	30	100
- in span (MPa)	124	106
- at central support (MPa)	108	89

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