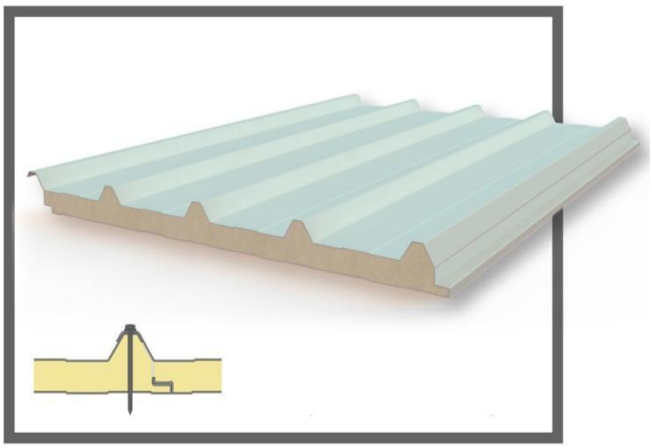
Roof Panels



These panels are composed of two steel sheets and polyurethane foam injection between the two sheets in a continuous manufacturing process.

Metallic Sheets

The outer faces, together with the insulating core, offer high insulation as both faces are adhered to the core and separated on both sides of the panel, breaking the thermal bridge between the steel sheets.

Core

There are different type of insulating core according to customer requirements, “PUR”, “PIR”, with a density of 40Kg/m³.

Panel Specifications

Panel Thickness (mm)	**30**	**35**	**40**	**45**	**50**	**60**	**80**
Panel length (mm)							
Panel width (mm)							

Core density							
Thermal conductivity coefficient							
Thermal transmission coefficient	0,56 0,54	0,61 0,58	0,46 0,40	0,48 0,46	0,38 0,37	0,33 0,32	0,26 0,25
Thermal resistance R Factor	R7,90 R8,26	R9,14 R9,55	R10,37 R10,84	R11,66 R12,13	R14,76 R15,74	R15,31 R16,00	R20,24 R21,16
Units per pack	14	14	12	12	10	8	6
Linear meter weight	10,4	10,4	10,8	18,8	11,2	11,6	12,4
Steel thickness 0,5mm ± (0,1mm)	+2	+2	+2	+2	+2	+2	+2

Panel Specifications

Panel Thickness (mm)	**30**	**40**	**50**	**60**	**80**
External fire behavior			B roof (t1)		
SBI Fire Classification (MP PUR B3)			F		
SBI Fire Classification (MP PUR B2)			Bs3d0		
SBI Fire Classification (MP ePIR)			Bs2d0		

Maximum Load Table

HYPOTHESIS PRESSURE LOAD: Sheet thickness 0.4mm

Panel Thickness (mm)	**1,5m**	**2m**	**2,5m**	**3m**	**3,5m**	**4m**	**5m**
30	279	218	161	119	84	58	24
40	328	247	192	150	107	76	33
50	370	286	229	190	152	118	82
60	430	322	248	199	156	121	93
80	491	397	334	282	234	194	127

HYPOTHESIS SUCTION LOAD: Sheet thickness 0.4mm

Panel Thickness (mm)	**1,5m**	**2m**	**2,5m**	**3m**	**3,5m**	**4m**	**5m**
30	307	240	177	131	92	64	26
40	361	272	211	175	118	84	36

50	407	315	252	227	167	130	90
60	473	354	273	240	172	133	102
80	540	437	367	338	257	213	140

Maximum Load Table

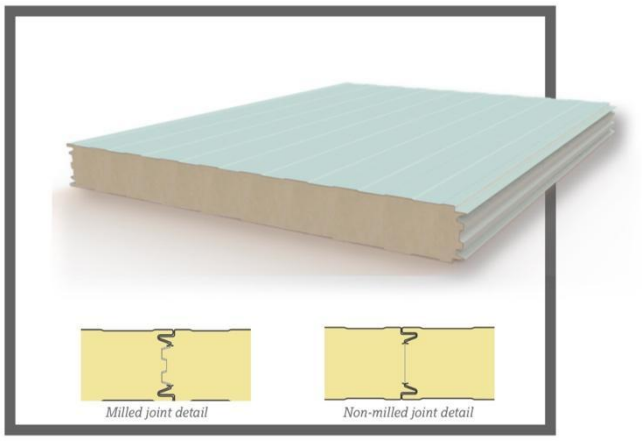
HYPOTHESIS PRESSURE LOAD: Sheet thickness 0.5mm

Panel Thickness (mm)	**1,5m**	**2m**	**2,5m**	**3m**	**3,5m**	**4m**	**5m**
30	303	225	162	119	81	56	35
40	357	268	206	159	117	83	44
50	402	311	245	206	165	139	91
60	452	350	267	218	175	140	108
80	521	431	363	307	254	211	163

HYPOTHESIS SUCTION LOAD: Sheet thickness 0.5mm

Panel Thickness (mm)	**1,5m**	**2m**	**2,5m**	**3m**	**3,5m**	**4m**	**5m**
30	330	248	178	131	89	62	39
40	393	295	227	175	129	91	48
50	442	342	270	227	182	153	100
60	497	385	294	240	193	154	119
80	573	474	399	338	279	232	179

Refrigeration



Panels are composed by two external steel sheets, and a rigid injected foam between them. It is manufactured in a continuous process using the latest machinery.


Food Safe


Thickness from 60mm to 200mm

Steel Sheets

The other faces, together with the insulating core, offer high insulation, since both faces are adhered to the core and separated on both sides of the panel, breaking the thermal bridge between the steel sheets.

Insulating Core

There are different types of insulating core according to customer requirements, “PUR”, “ePIR” and “PIR Stop Fire S1”, with a density of 40 Kg/m3.

Characteristics of the Panel

Panel Thickness (mm)	**60**	**80**	**100**	**120**	**150**	**180**	**200**
Panel length (mm)							
Panel width (mm)							
Core density							
Thermal conductivity coefficient							
Thermal transmission coefficient	0,36 0.35	0,28 0,26	0,22 0,21	0,19 0,18	0,15 0,14	0,13 0,12	0,11 0,11

Thermal resistance R Factor	R14,76 R15,74	R19,69 R21,01	R24,63 R26,28	R29,50 R31,48	R36,94 R39,42	R44,31 R47,29	R49,19 R52,5

Characteristics of the Panel

Panel Thickness (mm)	**60**	**80**	**100**	**120**	**150**	**180**	**200**
Units per pack (standard)	12	9	7	6	5	4	4
Linear meter weight Steel thickness	12±2	12,8±2	13,7±2	14,5±2	15,7±2	16,9±2	17,7±2
SBI Fire Classification (MP PUR B3)				F			
SBI Fire Classification (MP ePIR)				Bs2d0			
SBI Fire Classification (PIRM) PIR STOP FIRE				Bs1d0			
Standard FM	-	4880	4880	4880	4880	4880	4880

Maximum Load Tables

DISTANCE BETWEEN SUPPORTS (m)
HYPOTHESIS PRESSURE LOAD: Sheet thickness 0.4/0.5 mm

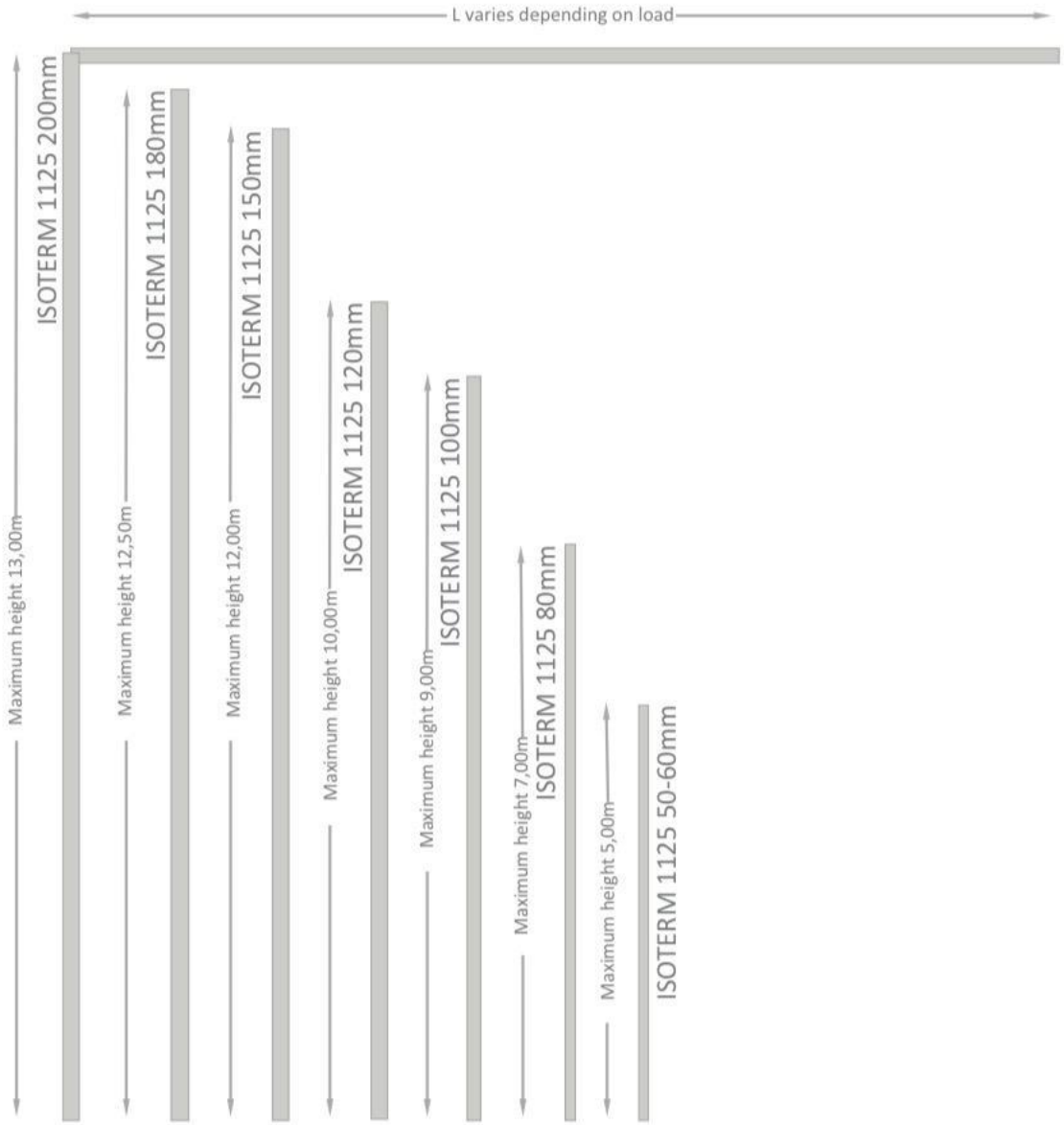
Panel Thickness (mm)	**1,5m**		**2m**		**2,5m**		**3m**		**3,5m**		**4m**		**5m**	
	0,4	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**
60	416	545	319	304	228	274	180	188	148	158	110	118	68	74
80	549	628	366	413	279	355	217	249	200	223	142	153	93	99
100	617	746	400	424	298	370	293	370	224	243	196	209	102	107
120	632	765	432	451	351	446	305	413	266	279	217	225	111	117
150	761	794	442	483	401	472	357	449	290	312	251	270	126	130
180	782	824	454	521	436	493	379	465	329	347	281	308	142	147
200	801	828	464	547	454	501	399	471	354	383	323	344	165	172

DISTANCE BETWEEN SUPPORTS (m)
HYPOTHESIS SUCTION LOAD: Sheet thickness 0.4/0.5 mm

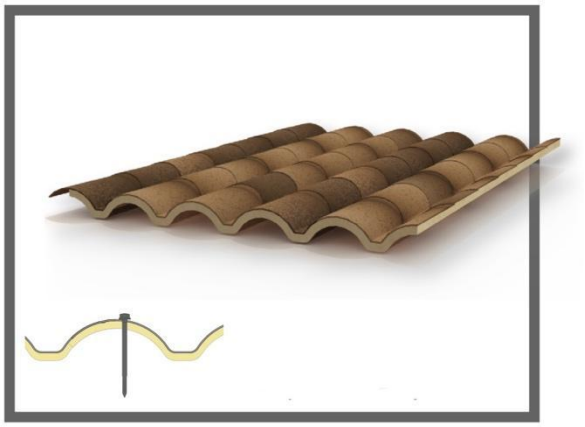
Panel Thickness (mm)	**1,5m**		**2m**		**2,5m**		**3m**		**3,5m**		**4m**		**5m**	
	0,4	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**	**0,4**	**0,5**
60	433	565	334	350	243	277	195	224	162	172	124	135	109	113
80	609	652	412	426	304	372	280	298	232	240	189	197	128	132
100	642	772	451	477	332	385	314	328	247	263	124	222	158	165

120	702	784	484	503	386	452	385	402	295	311	258	264	194	207
150	825	859	494	511	443	461	418	459	336	352	295	301	221	235
180	876	891	499	519	469	481	442	479	359	367	314	320	227	239
200	907	913	515	523	477	495	452	490	383	398	344	358	239	246

Max. Length Recommendation for Assembly Vertical Position



Tile Effect - Slim



These types of panels are made up of a pre-lacquered steel sheet on the upper part and a thin layer of embossed aluminum on the lower part, between them a core of rigid foam injected between the two sheets in a continuous manufacturing process (PUR).

Interior Embossed Aluminum Face

50 µ ± 5% embossed aluminum sheet, with 2 g/m2 exterior matt transparent polyester lacquer and 0.3 g/m2 PUR primer. The sheet has a breaking load greater than 130 MPa and elongation greater than 2%.

External Metallic Sheet

The outer face, together with the insulating core, offer high insulation, since both faces are adhered to the core and separated on both sides, breaking the thermal bridge between the steel sheets.

Main Specifications

- This type of roof sheeting is the perfect option when good aesthetic is important, ideal for rural, civil and rehabilitation areas as it does not touch the structure, freeing it from any effort.
- Offers maximum performance with minimum weight.
- Great thermal and acoustic insulation.
- Great practicality and safety.
- They are very light pieces that provide great impermeability to ceilings.
- They are fixed directly to the wood/straps providing great security of fixing to the structure.
- In addition to the standard measurements detailed in the table, these panels can be customized depending on the size of the order.

Panel Specifications

Panel Thickness (mm)	**25**
Panel length (mm)	Standard from 2000 mm to 10000mm
Panel width (mm)	1000 mm
Core density	40 kg/m3
Thermal conductivity coefficient	PUR 0,023 W/MK
Thermal transmission coefficient	PUR 0,79
R Factor	R1,26
Thermal resistance R Factor	R6,80
Linear meter weight	6,58 Kg/mL

Maximum Load Table

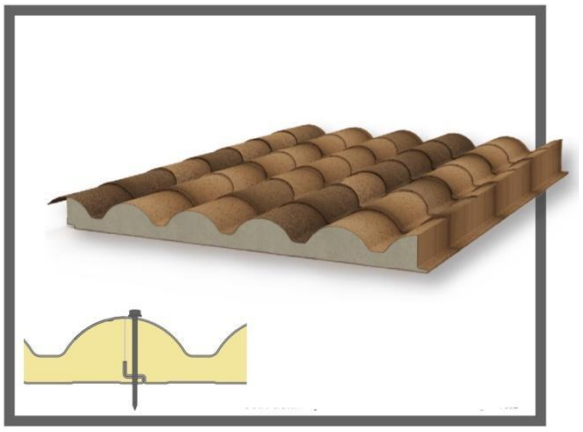
Hypothesis Pressure Load: Sheet thickness 0.4mm
DISTANCE BETWEEEN SUPPORTS (m)

Panel thickness (mm)	**1,5m**	**2m**	**2,5m**	**3m**	**3,5m**
2 SUPPORTS 25 mm	105,20	56,20	33,50	22,30	15,30

Hypothesis Suction Load: Sheet thickness 0.4mm
DISTANCE BETWEEEN SUPPORTS (m)

Panel thickness (mm)	**1,5m**	**2m**	**2,5m**	**3m**	**3,5m**
2 SUPPORTS 25 mm	10,10	8,30	4,90	4,40	4,60

Tile Effect - Standard



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Core

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Metallic Sheets

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- In addition to the standard measurements detailed in the table, these panels can be customized depending on the size of the order.

Panel Specifications

Panel Thickness (mm)	**65**

Panel thickness on thinner point	30 mm y 40 mm
Panel thickness on peak point	80 mm y 90 mm
Panel length	Standard from 2000 mm to 16000mm
Panel width	1000 mm
Core density	40 kg/m3
Thermal conductivity coefficient	PUR 0,023 W/MK / PIR 0.022 W/mK
Thermal transmission coefficient PUR	0,35 2/m2L
Linear meter weight (per panel)	10,21 Kg/m2
Tensile strength	0,10 Mpa
Flexural strength	1,28 KNm/m
Air permeability	1,75 m3/h/m2
Water permeability	Class A
SBI fire classification (PUR)	F

Maximum Load Table

Hypothesis Pressure Load: Sheet thickness 0.4mm
DISTANCE BETWEEEN SUPPORTS (m)

Panel thickness (mm)	**1,5m**	**2m**	**2,5m**	**3m**	**3,5m**
2 SUPPORTS Peak 80 mm Trough 30 mm	175,90	103	69	56,30	43,60

Hypothesis Suction Load: Sheet thickness 0.4mm
DISTANCE BETWEEEN SUPPORTS (m)

Panel thickness (mm)	**1,5m**	**2m**	**2,5m**	**3m**	**3,5m**
2 SUPPORTS Peak 80 mm Trough 30 mm	178,20	124,10	95,90	65,30	49,80