







## DESCRIPTION

Insulated Internal Wall Panel with a low-cost visible screw connection system. Its insulating core is manufactured in **high density PUR and PIR foams, at 40 kg/m<sup>3</sup>**, to ensure good thermal insulation for all types of situations.

Its simple assembly represents great savings for the customer: the panel incorporates a tongue and groove system that facilitates **the correct meeting between the panels and ensures correct sealing against leaks** and humidity. It allows its installation vertically and horizontally; some clients even install this facade panel in the roof position.

Special galvanized and pre-lacquered steels are used in its manufacture, which comply with the **EN 508-1 standard**, with PET, Plastisol, PVC, PVDF, PS50, PS55 and PS200 coatings, among others, according to customer requirements.

## TECHNICAL DATA OF THE INSULATED INTERNAL WALL PANEL

Outer Side	Inner Side	Insulation	Thickness	Length
Pre-lacquered steel	Pre-lacquered steel	Polyurethane (PUR) and Polyisocionurate (PIR)	35 / 40 / 50	Up to 16,2 m
Most popular colours				
 White Pyrenees	 Blue Lake	 Red Tile	 Silver Metallic	

	Thickness (mm)		
	30	40	50
Length (mm)	Standard 2500 to 16000		
Width (mm)	1000		
Core density (kg/m <sup>3</sup> )	40 (±2)		
Thermal conductivity (W/mK)	0,025		
Coefficient of thermal transmission (W/m <sup>2</sup> k)	0,68	0,53	0,44
Weight (kg/m <sup>2</sup> )	11,00	11,40	11,80
Reaction to Fire (PUR-UNE 13501-1)	=30mm :Bs3d0 >30mm :Cs3d0		

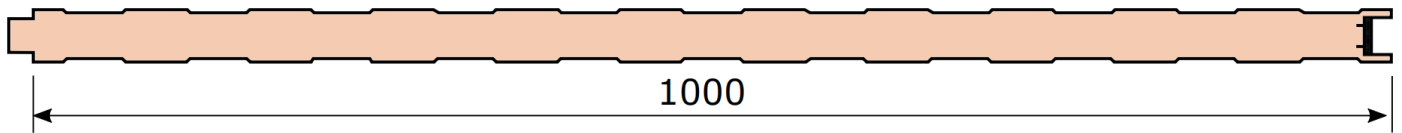
Deviation (mm)			Acoustic Insulation							
Length	L ≤ 3 m	± 5 mm	Experimental values for 30 mm Sandwich Panel							
	L > 3 m	± 10 mm	Frequency (Hz)	125	250	500	1000	2000	4000	
Usable width	± 2 mm		Sound insulation (dB)	25	27,5	29	28,5	31	37,5	
Thickness	D ≤ 100 mm	± 2 mm	Thermal Insulation							
Deviation from perpendicularity	D > 100 m	± 2 %	Thickness	Thermal Transmission		Weight				
De-linearization of the internal metallic parameters	6 mm		mm	Kcal/m <sup>2</sup> h°C	W/m <sup>2</sup> °k	Kg/m <sup>2</sup>				
Coupling of bottom plates	± 3 mm		30	0,58	0,68	11,00				
	F = 0 +3 mm		40	0,45	0,53	11,40				
			50	0,37	0,44	11,80				

## LOADS TABLES OF THE INSULATED INTERNAL WALL PANEL

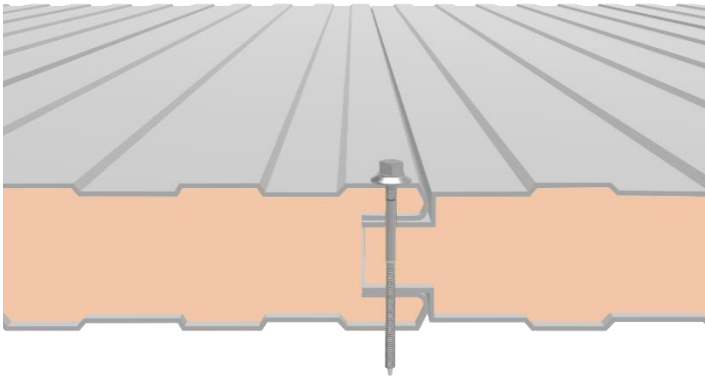
Thickness (mm)	Light for 1 span												
	1,4	1,6	1,8	2	2,2	2,4	2,6	2,8	3	3,2	3,4	3,6	3,8
30	250/250	194/194	153/153	122/122	99/99	81/81	67/67	56/56	47/47	40/40	34/34	29/29	25/25
40	344/344	283/283	223/223	181/181	150/150	126/126	107/107	92/92	80/80	68/68	59/59	51/51	44/44
50	415/415	338/338	266/266	216/216	179/179	151/151	127/127	110/110	96/96	82/82	71/71	62/62	53/53

Thickness (mm)	Light for 2 span												
	1,4	1,6	1,8	2	2,2	2,4	2,6	2,8	3	3,2	3,4	3,6	3,8
30	157/157	136/136	120/120	107/107	92/97	75/88	63/81	53/74	46/63	40/55	35/48	31/43	28/38
40	172/172	149/149	131/131	117/117	105/105	96/96	88/88	75/82	64/76	56/71	49/67	43/60	38/53
50	187/187	162/162	142/142	135/126	132/113	117/103	106/95	90/94	77/93	67/87	59/81	51/73	46/64

## CROSS SECTION OF THE INSULATED INTERNAL WALL PANEL



## PANEL JOINTS



## INSTALLATION



These wall panels have a simple tongue and groove system that facilitates a perfect coupling between one sandwich plate and another, while reducing **possible internal thermal leaks, humidity or leaks**. Our facade panels are not only optimized to fit perfectly between them, they have also been designed to be fixed directly to the structure using self-drilling screws, without the need for additional fixing materials. In this way, a strong and resistant structure is achieved, where it **is practically impossible for accidents or detachments to occur**. All this means a saving for the client in time, labor or machine rental.

## PHOTOS



See our range of sandwich panels and accessories on our website <https://sandwich-panel.net>