

Isobox

Manufactured in: Italy, Germany, Spain, Romania

Isobox Plissé

Manufactured in: Germany

Isorighe

Manufactured in: Italy, Spain



Logistic centre in Verona

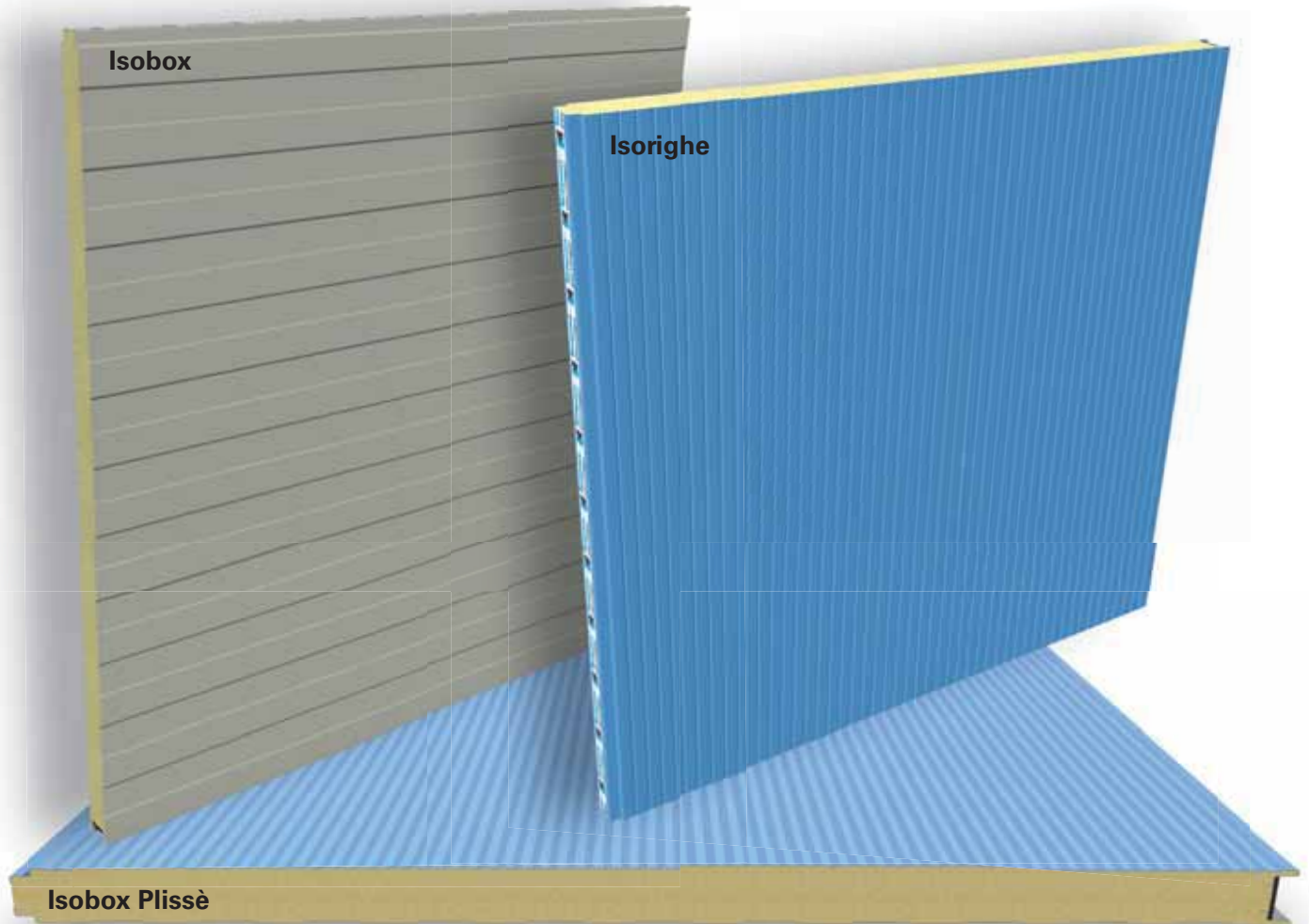


Detail of the wall



→ Legend pg. 18

Wall panel designed for many types and conditions of application. Available in a wide range of thicknesses, it combines the features of economy, practicality and functionality. Thanks to the classic lightly profiled sheet and the symmetrical section, it provides interesting aesthetic results for industrial use.



APPLICATION

Self-supporting metal faced panel, micro-ribbed on both sides, insulated with polyurethane foam, used for the construction of facades and walls of industrial buildings and prefabricated structures for construction site, dry storage, and divisions in general. Available in several colours, it contributes to a new architecture : clear, simple and regular.

CHARACTERISTICS

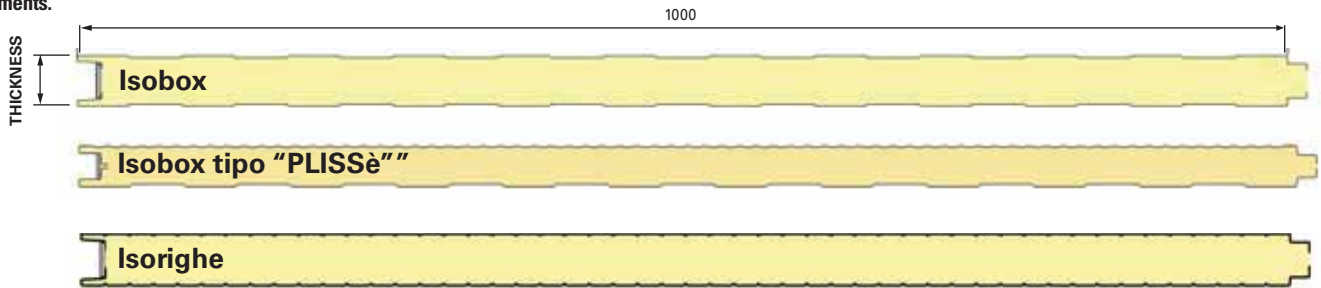
It is a self-supporting metal faced panel insulated with polyurethane foam with a tongue-and-groove joint. The fixing elements are exposed; their number and place should guarantee the stresses resistance. The walls made of these products are obtained by coupling the panels.

ADVANTAGES

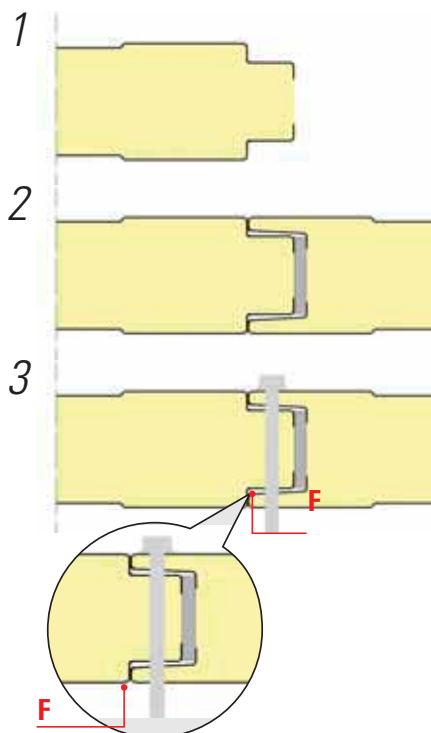
- High thermal resistance
- Mechanical stability
- Speed of installation
- Dimensional stability and lightness
- Easy to clean the surfaces
- Design flexibility
- It is possible to choose the external metal profile

INSTRUCTIONS OF USE

For the use of the panels and the related limits, please consult the technical data sheet available on www.isopan.it under the section "technical data sheet" and the "recommendations for the assembly of ribbed sheets and metal faced insulating panels" defined by AIPPEG Association of Italian Producers of Panels and Ribbed Elements.



ASSEMBLY INSTRUCTIONS



INSTALLATION PHASES

- 1 - Position the panel
 - 2 - Install the following panel
 - 3 - Place the fixing elements
- Repeat these steps for the entire wall.

Isopan recommends to verify the number and the place of the fixing elements in order to guarantee the stresses resistance, including depression loads. It is also recommended to control the proper alignment of the supports.

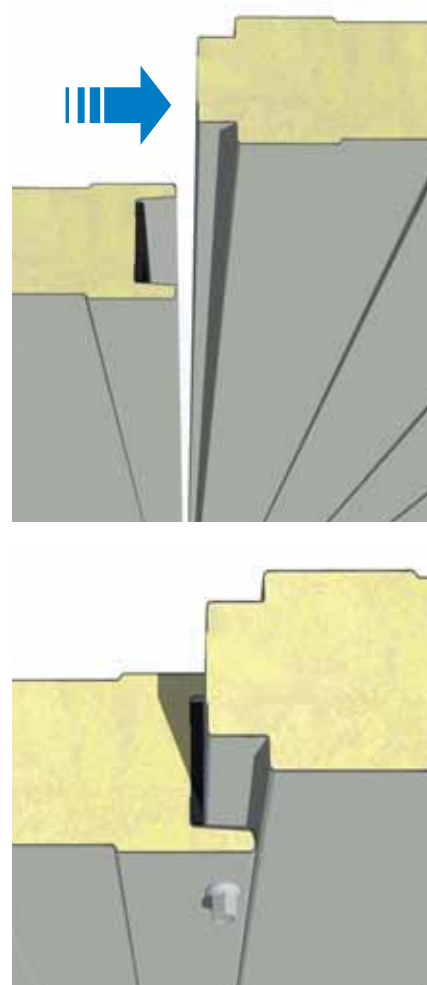
PANELS WEIGHT

SHEET THICKNESS		PANEL NOMINAL THICKNESS									
		25	30	35	40	50	60	80	100	120	
0,4	kg/m ²	7,4	7,7	7,9	8,2	8,5	8,9	9,6	10,3	11,2	
0,5	kg/m ²	9,2	9,3	9,5	9,6	10,1	10,4	11,2	12,2	12,9	
0,6	kg/m ²	11,2	11,4	11,6	11,8	12,2	12,6	13,4	14,2	14,9	

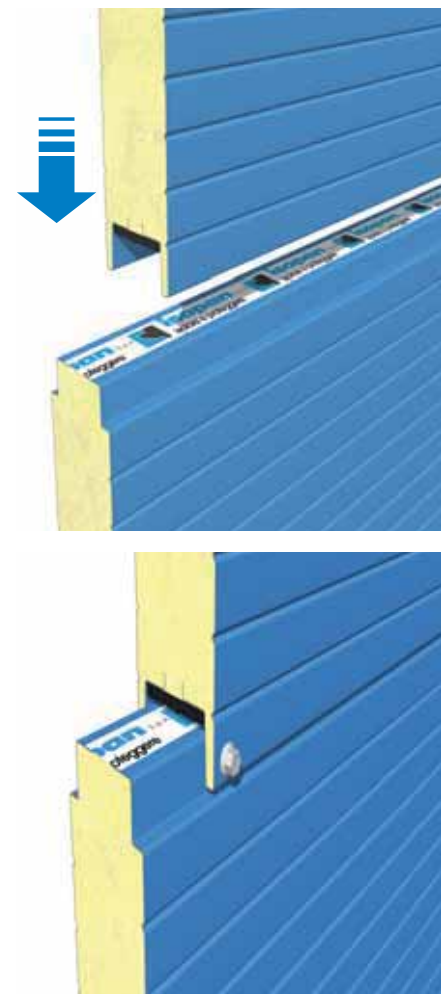
FIRE CHARACTERISTICS

Regarding the specifications related to the fire characteristics of the panels, it is possible to consult the synthesis available in the catalogue or on the website www.isopan.it.

VERTICAL USE



HORIZONTAL USE



DIMENSION TOLERANCE (in accordance with EN 14509)

	DEVIATION mm	
Length	L ≤ 3 m	± 5 mm
	L > 3 m	± 10 mm
Working length	± 2 mm	
Thickness	D ≤ 100 mm	± 2 mm
	D > 100 mm	± 2 %
Deviation from perpendicularity	6 mm	
Misalignment of the internal metal faces	± 3 mm	
Sheets coupling	F = 0 + 3 mm	

L means the working length, D means the panels thickness and F means the sheets coupling

OVERLOAD SPANS

STEEL SHEET 0.5 mm – support 120 mm																	
UNIFORMLY DISTRIBUTED LOAD	PANEL NOMINAL THICKNESS mm								SPANEL NOMINAL THICKNESS mm								
	MAX SPANS cm								MAX SPANS cm								
	25	30	40	50	60	80	100	120	25	30	40	50	60	80	100	120	
kg/m ²																	
50	220	260	320	380	440	550	640	730	260	300	380	450	520	650	740	800	
60	215	240	300	350	410	500	590	680	240	270	340	410	470	590	660	710	
80	180	205	260	310	350	440	520	600	200	230	290	350	410	500	550	600	
100	155	180	230	275	320	395	470	540	170	200	260	310	360	440	490	510	
120	140	165	210	250	290	360	430	490	140	170	230	280	320	390	430	460	
140	125	150	190	230	265	330	395	455	130	150	200	250	295	360	390	420	
160	115	135	175	210	245	310	370	425	120	130	185	220	265	330	360	385	
180	105	125	165	195	230	290	345	400	110	120	160	200	240	305	340	360	
200	100	115	155	185	215	270	325	375	100	110	145	180	215	285	315	335	

ALUMINUM SHEET 0.6 mm – support 120 mm																	
UNIFORMLY DISTRIBUTED LOAD	PANEL NOMINAL THICKNESS mm								PANEL NOMINAL THICKNESS mm								
	MAX SPANS cm								MAX SPANS cm								
	25	30	40	50	60	80	100	120	25	30	40	50	60	80	100	120	
kg/m ²																	
50	170	200	240	290	330	410	480	550	190	230	290	350	400	490	580	570	
60	150	180	230	270	310	380	450	510	175	210	270	320	360	450	530	560	
80	135	160	200	240	270	335	390	450	150	185	235	280	320	400	470	540	
100	120	145	180	215	245	305	360	400	130	160	210	250	285	360	420	480	
120	110	135	165	195	220	280	330	380	120	150	190	225	260	330	390	445	
140	105	125	155	185	210	260	310	355	110	135	170	210	240	300	360	410	
160	100	115	140	170	195	240	285	335	105	125	160	190	220	280	330	380	
180	90	110	135	160	185	230	275	310	95	110	150	180	210	265	310	360	
200	85	100	125	150	175	220	260	300	85	100	140	170	195	245	285	335	

Calculation for static sizing according to the Annex E of the UNI EN 14509 standard.
Deflection limit 1/200 ℓ

THERMAL INSULATION

In accordance with the new standard EN 14509 Annex 10

U	PANEL NOMINAL THICKNESS mm								
	25	30	35	40	50	60	80	100	120
W/m ² K	0,83	0,70	0,61	0,54	0,44	0,37	0,28	0,22	0,19
kcal/m ² h °C	0,71	0,60	0,52	0,46	0,38	0,32	0,24	0,19	0,16

According to the calculation method EN ISO 69646

K	PANEL NOMINAL THICKNESS mm								
	25	30	35	40	50	60	80	100	120
W/m ² K	0,75	0,64	0,56	0,50	0,40	0,34	0,26	0,21	0,18
kcal/m ² h °C	0,67	0,57	0,49	0,44	0,35	0,30	0,23	0,18	0,15

AVAILABLE COLOURS (the colour should be chosen according to the final-use, the installation area and the standard thicknesses in stock)

