

Isoparete Plissé



Geox Grand Theatre in Padova

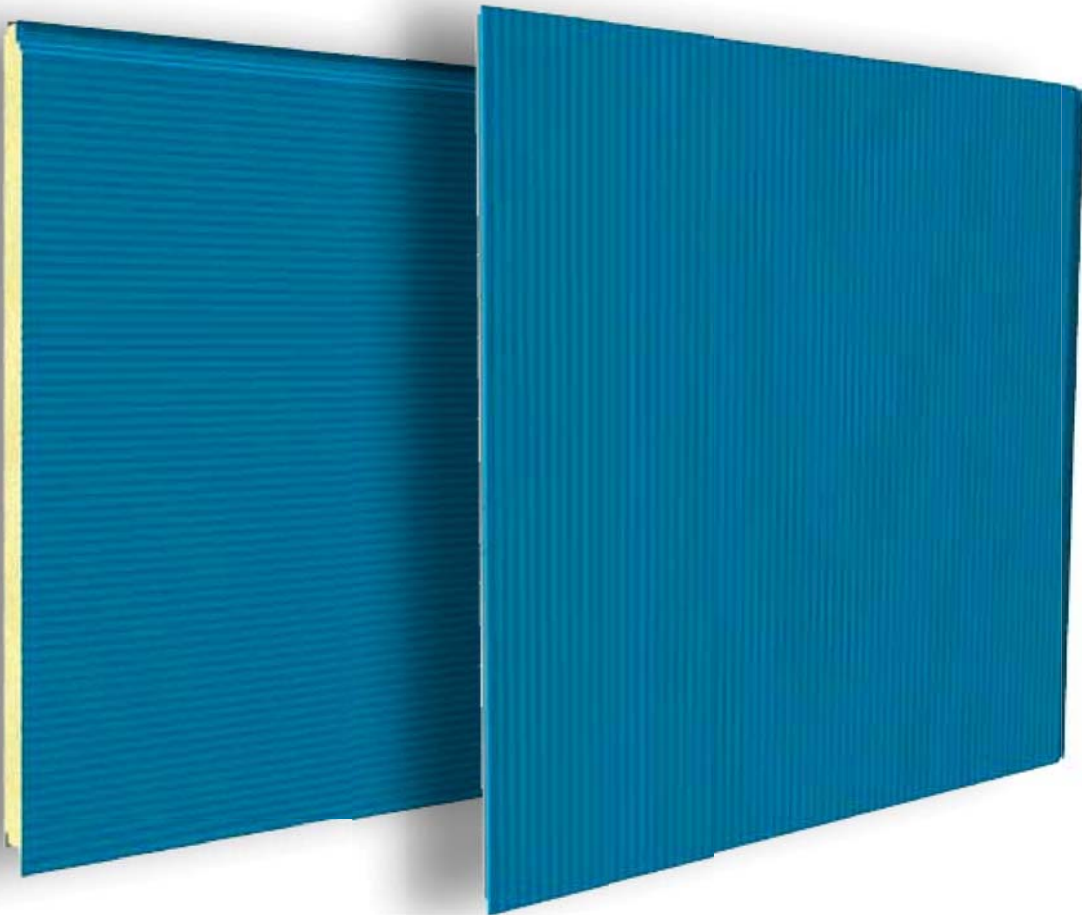


Detail of the wall



→ Legend pag. 18

A panel designed for wall use. Thanks to its tongue-and-groove system of concealed joint and thanks to the modular design of its surfaces, it provides long-lasting and aesthetically pleasing constructions characterised by regular folds. The possibility to horizontally and vertically fix them, the range of available colours and the particular design of the profile make Isoparete Plissé appropriate for the construction of facades with both a simple and elegant design. Can be combined with the Isoclass panel.



APPLICATION

Isoparete Plissé can be used for industrial, commercial and residential constructions with a remarkable architectural aesthetics result.

CHARACTERISTICS

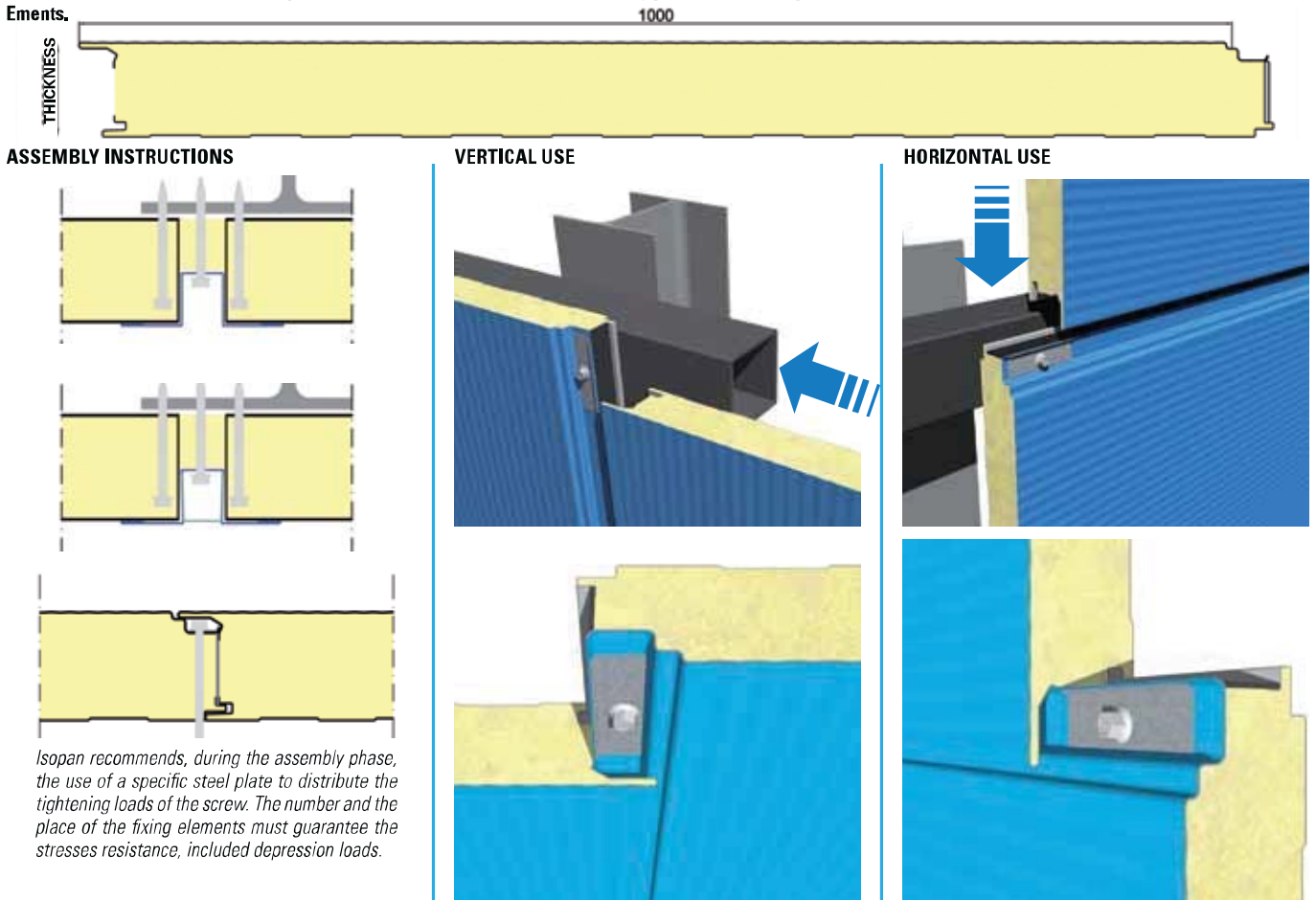
Isoparete Plissé is a self-supporting metal faced panel insulated with polyurethane foam; the labyrinth configuration and the tongue-and-groove joint with a special place for the screw determine the fully concealed fixing element. The number and the place of the fixing elements must guarantee the stresses resistance, included depression loads. The walls made of these panels are obtained by assembling them in sequence.

ADVANTAGES

- Aesthetic quality that valorises the building
- Concealed fixing elements
- Extremely easy and quick installation
- Thermal resistance
- Can be combined with the Isoclass panel

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

VERTICAL USE

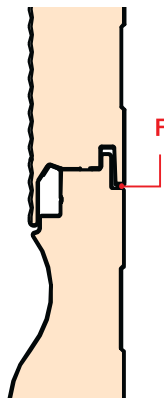
HORIZONTAL USE

Isopan recommends, during the assembly phase, the use of a specific steel plate to distribute the tightening loads of the screw. The number and the place of the fixing elements must guarantee the stresses resistance, included depression loads.

COMBINATION OF ISOPARETE PLISSE AND ISOCLASS

The Isoparete Plissé can be combined with the Isoclass panel. In fact, both panels have a compatible labyrinth tongue-and-groove joint that allows for a very pleasant architectonic effect.

Example of a modular assembly of the Isoclass panel with the Isoparete Plissé panel
 72 mm thick ISOCLASS with 60 mm thick ISOPARETE PLISSE
 92 mm thick ISOCLASS with 80 mm thick ISOPARETE PLISSE



PANELS WEIGHT

	PANEL NOMINAL THICKNESS mm				
	40	50	60	80	100
kg/m ²	10,3	10,7	11,1	11,9	12,7

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

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.

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 DI-DISTRIBUTED LOAD	PANEL NOMINAL THICKNESS mm					PANEL NOMINAL THICKNESS mm				
	40	50	60	80	100	40	50	60	80	100
kg/m ²	MAX SPANS cm					MAX SPANS cm				
50	320	380	440	550	640	380	450	520	650	740
60	300	350	410	500	590	340	410	470	590	660
80	260	310	350	440	520	290	250	410	500	550
100	230	275	320	395	470	260	310	360	440	490
120	210	250	290	360	430	230	280	320	390	430
140	190	230	265	330	395	200	250	295	360	390
160	175	210	245	310	370	185	220	265	330	360
180	165	195	230	290	345	160	200	240	305	340
200	155	185	215	270	325	145	180	215	285	315

ALUMINUM SHEET 0.6 mm – support 120 mm										
UNIFORMLY DI-DISTRIBUTED LOAD	PANEL NOMINAL THICKNESS mm					PANEL NOMINAL THICKNESS mm				
	40	50	60	80	100	40	50	60	80	100
kg/m ²	MAX SPANS cm					MAX SPANS cm				
50	240	290	330	410	480	290	350	400	490	580
60	230	470	310	380	450	270	320	360	450	530
80	200	240	270	335	390	235	280	320	400	470
100	180	215	245	305	360	210	250	285	360	420
120	165	195	220	280	330	190	225	260	330	390
140	155	185	210	260	310	170	210	240	300	360
160	140	170	195	240	285	160	190	220	280	330
180	135	160	185	230	275	150	180	210	265	310
200	125	150	175	220	260	140	170	195	245	285

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				
	40	50	60	80	100
W/m ² K	0,64	0,49	0,41	0,29	0,23
kcal/m ² h °C	0,55	0,42	0,35	0,25	0,20

According to the calculation method EN ISO 69646

K	PANEL NOMINAL THICKNESS mm				
	40	50	60	80	100
W/m ² K	0,50	0,40	0,34	0,26	0,21
kcal/m ² h °C	0,44	0,35	0,30	0,23	0,18

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

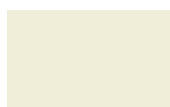
bianco grigio



bianco G9002



bianco G9010



avorio chiaro G1015



giallo cadmio RAL1021



blu genziana G5010



silver G9006



verde muschio G6005



grigio antracite G7016



rosso fuoco G3000

