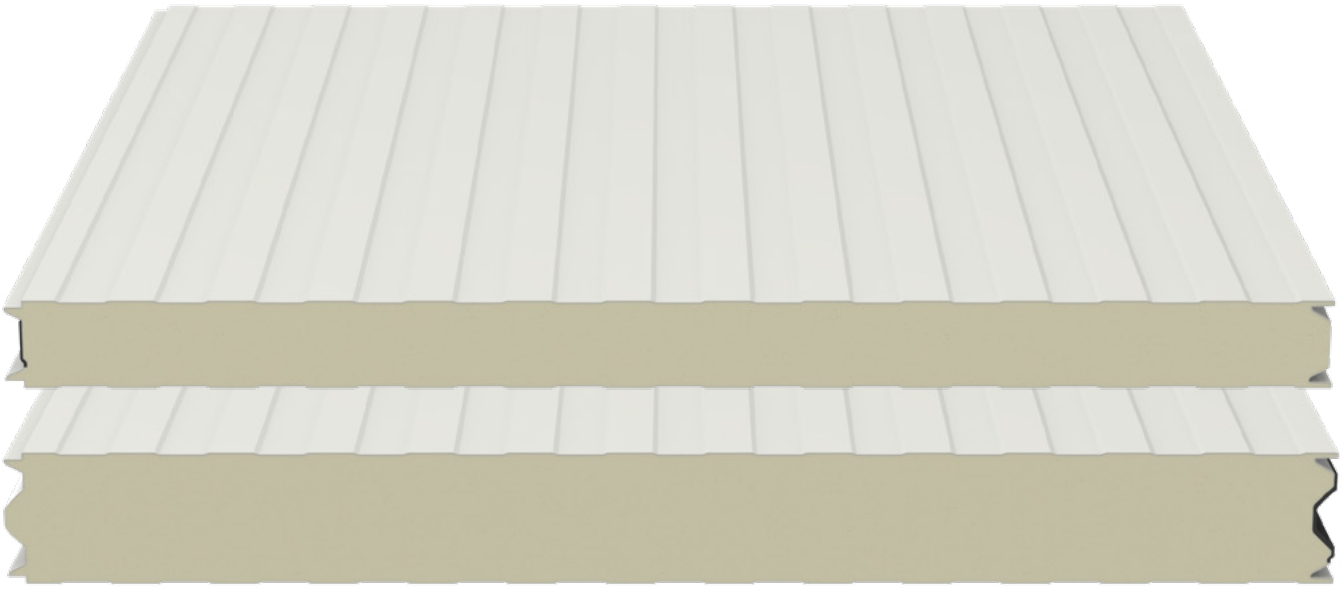
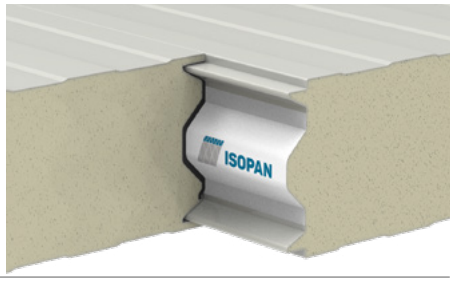
Isofrozen



Product Description

- Sandwich panel for external and internal walls of temperature-controlled rooms and cold rooms
- Double metal facing in pre-painted sheet metal
- Configurable aesthetic Surface finishes
- Polyurethane foam insulation



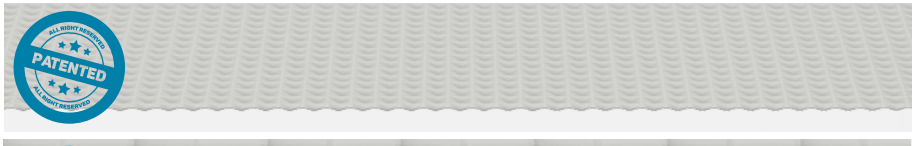
Surface finishes

Corrugated
(PLISSÉ / PLISSÉ D)

FLAT
to be evaluated based on the product configuration in the project

Lined
(BOX)

DIAMOND



EMERALD

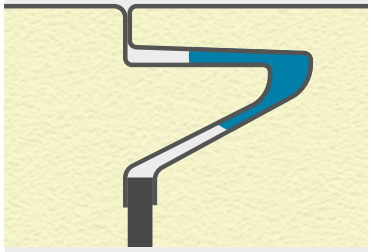
Graphic Guidelines

The surface finishes images shown in this catalog are rendered for illustrative purposes only and may not accurately reflect the actual proportions and characteristics of the product.

Available Sealing Types

Their effectiveness directly impacts:

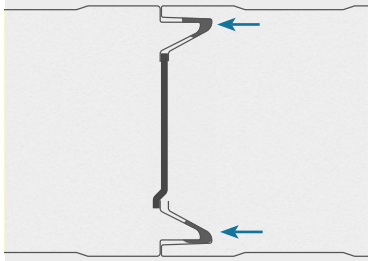
- Airtightness
- Thermal Transmittance
- Energy efficiency
- Humidity control



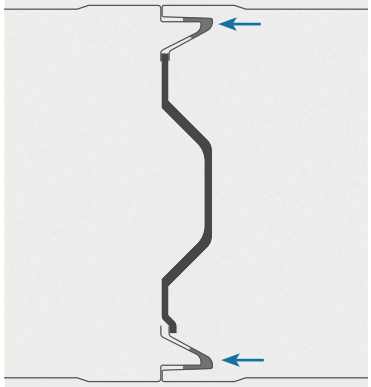
Standard Joint – Ready to Use	Off-Site Gasket – Ready to Use
Includes factory-installed PU/PE gasket.	Additional gaskets pre-installed at the factory.
Limited airtightness for cold environments.	No further on-site work required.
Air permeability up to 1.60 m^3/mh at 1000 Pa (positive pressure).	Excellent airtightness: only 0.53 m^3/mh at 1000 Pa (positive pressure).

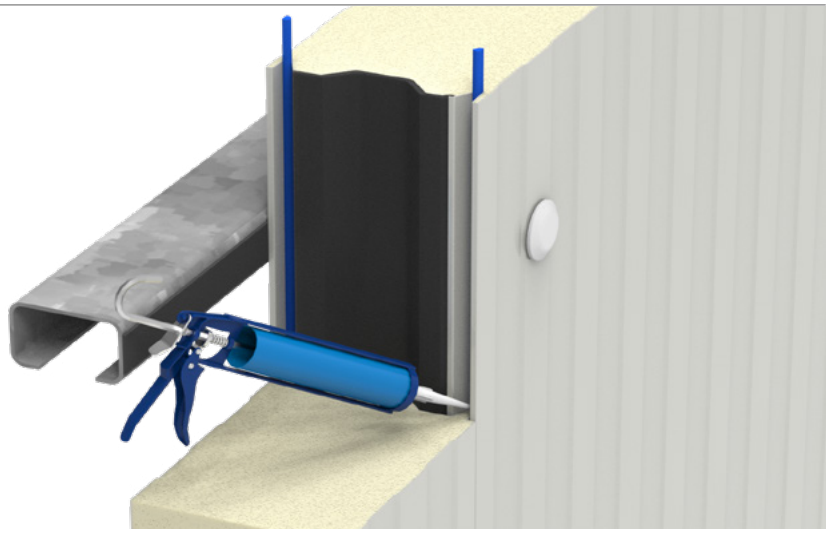
Bituminous Tape – On Site	Thixotropic Sealant – On Site
Two tapes installed on site inside the female joint channels.	Applied on site using a dispensing gun.
Good barrier against air and moisture.	Ideal for very low temperatures.
Air permeability up to 1.32 m^3/mh at 1000 Pa (positive pressure).	Excellent airtightness: only 0.56 m^3/mh at 1000 Pa (positive pressure).

ISOFROZEN



ISOFROZEN HT

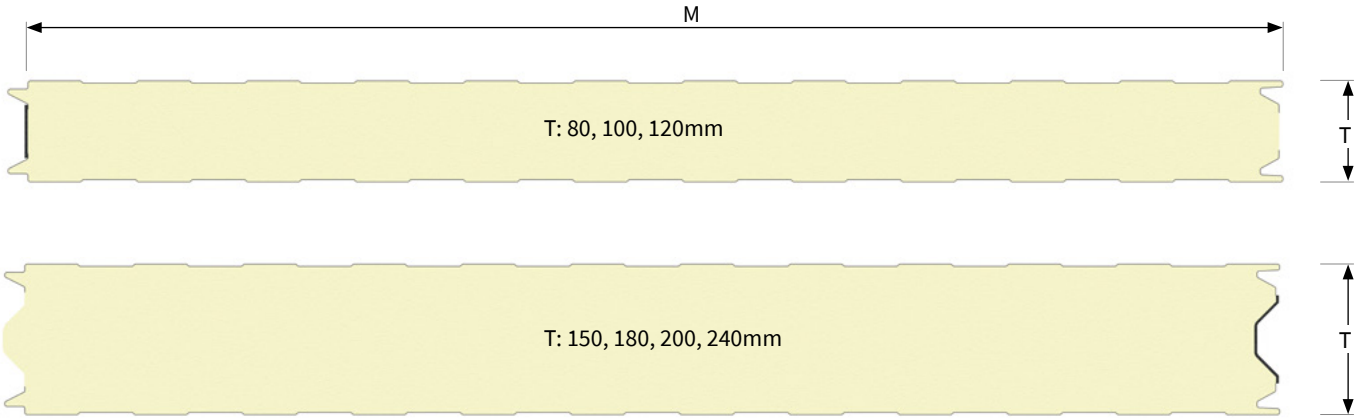


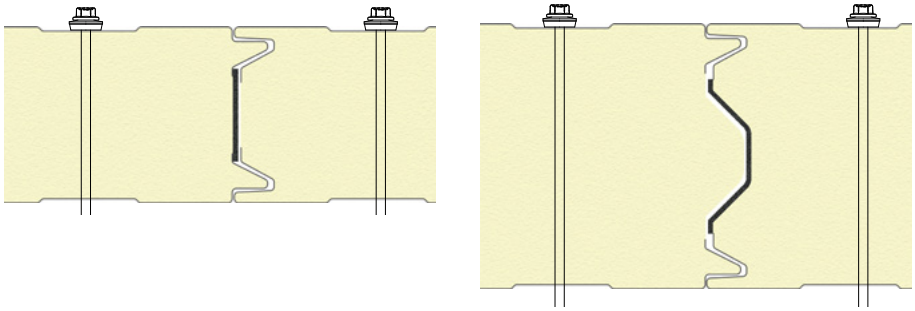


Upgradable joint

Please refer to the dedicated Cold Solutions catalogue for further information.

Isofrozen
Isopan SpA - Trevenzuolo (VR) - Patrica (FR) - Italy
Isopan Iberica - Spain | Isopan Est - Romania



Detail of modular interlocking	
Useful width - "M"	1000 mm 1120 mm 1150 mm
Available length	On request
Insulation	Polyurethane foam (PU) Polyisocyanurate foam (PIR) Nominal density 40 kg/m³ Available with LEAF insulation
Metal sheets	External metal sheet: Pre-painted sheet Internal metal sheet: Pre-painted sheet

Fire Performance

Any fire performance must be specifically requested when ordering. For more technical information, please contact Isopan.

Reaction to fire (EN 13501-1)	Fire resistance (EN 13501-2)
Up to B-s1,d0 (PIR, LEAF)	EI 60* - PIR 200mm EI 30* - PIR 100mm *performance with non-standard installation modes

FM Approved

On request, available with FM Approved certification

Capacity tables

Steel sheets

Sheet thickness
0,5 mm - External
0,5 mm - Internal

Support width 120mm

UNIFORMLY DISTRIBUTED LOAD	NOMINAL SHEET THICKNESS [mm]					
[kg/m²]	80	100	120	150	180	≥ 200
	Maximum Span "l" [cm]					
50	530	630	700	850	890	920
60	490	580	660	750	780	900
80	430	500	580	680	720	840
100	380	450	510	610	700	760
120	340	410	470	560	640	690
140	290	340	430	510	590	640
160	270	320	400	480	550	600
180	270	320	370	440	510	560
200	250	300	350	420	480	520

Capacity tables

Steel sheets

Sheet thickness
0,5 mm - External
0,5 mm - Internal

Support width 120mm

UNIFORMLY DISTRIBUTED LOAD	NOMINAL SHEET THICKNESS [mm]					
[kg/m²]	80	100	120	150	180	≥ 200
	Maximum Span "l" [cm]					
50	630	740	840	900	930	960
60	570	650	770	870	900	920
80	480	580	670	790	830	850
100	420	510	640	680	710	730
120	380	460	590	590	620	630
140	340	410	530	530	550	560
160	310	380	470	480	490	500
180	290	350	430	435	440	445
200	270	320	400	400	405	410

Calculation for static dimensioning carried out according to the contents of Annex E of EN standard 14509. Deflection limit 1/200 ℓ.
The values shown in the capacity tables do not take into account the thermal load.

Technical specifications
Available thickness 'T'

Thermal Transmittance 'U' according to EN 14509 - A.10.
The weight considers panels with steel sheets, nominal thickness indicated in the table.

Thermal Transmittance LEAF

T	Thermal Transmittance - U				Weight - [Kg/m²]	
[mm]	[W/m²K]		[kcal/m² h °C]		0,5mm	0,6mm
80	0,27	0,31	0,23	0,26	11,4	13,1
100	0,22	0,23	0,19	0,19	12,2	13,9
120	0,18	0,15	0,15	0,13	13,0	14,7
150	0,15	0,12	0,13	0,10	14,2	15,9
180	0,12	0,10	0,10	0,08	15,6	17,1
200	0,11	0,09	0,09	0,07	16,2	17,9
240	0,09	0,08	0,08	0,06	18,2	19,7

Instructions for use and dimensional tolerances

consult the Technical Manual, General Sales Conditions and Annexes available on the website.