

Isotego



Roof of a dairy centre in Cremona

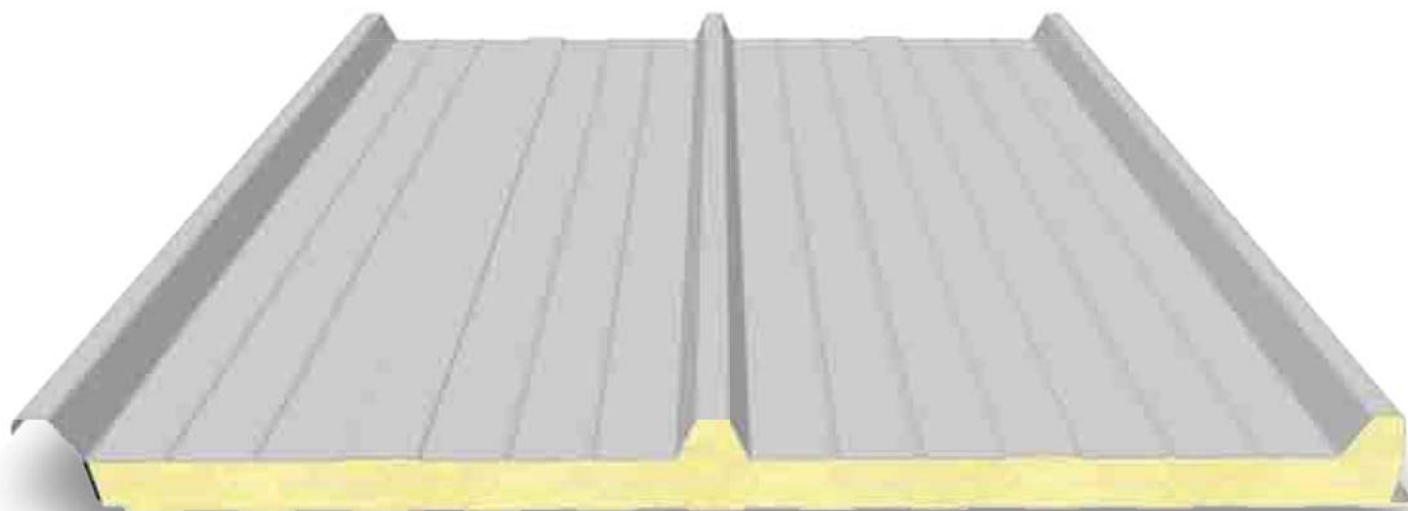


Detail of the roof



→ Legend pag. 18

Panel designed for pitched roofs. It is an economic solution, particularly appropriate for low-cost applications, while maintaining excellent aesthetics, reliability and robustness performances.



APPLICATION

Isotego is indicated for roofs. It is adaptable to industrial warehouses, office buildings and sports centres, but also to residential homes. It can be used vertically for walls cladding.

CHARACTERISTICS

It is a self-supporting double skin panel, insulated with polyurethane foam, with a tongue-and-groove joint. On large longitudinal pitches, the panel overlap can be foreseen. The panel is composed by 3 ribs that allow a good static resistance. It is available in different insulating core thicknesses for building's roofs. The panels can be used for pitched roof, but you can also use it vertically for walls cladding. The fixing system is a penetrating type with the possibility to use exposed caps, the number and the place of the fixing elements should guarantee the stresses resistance. On this panel, the LB1 system for fixing photovoltaic mono and polycrystalline modules, can be used. If you are using amorphous photovoltaic systems, the "flat" finishing aspect should be required on the external surface, as well as the PVDF steel to increase the adherence of the photovoltaic elements.

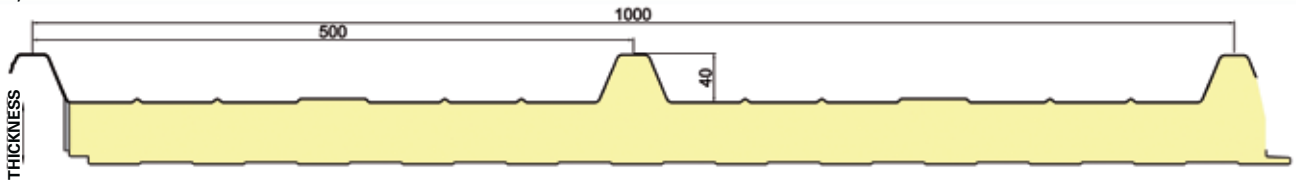
ADVANTAGES

- Mechanical and thermal resistance
- Reduced costs compared to other types of roofs
- Longitudinal overlapping
- Integration of roof windows and flashings
- Integration of amorphous photovoltaic systems

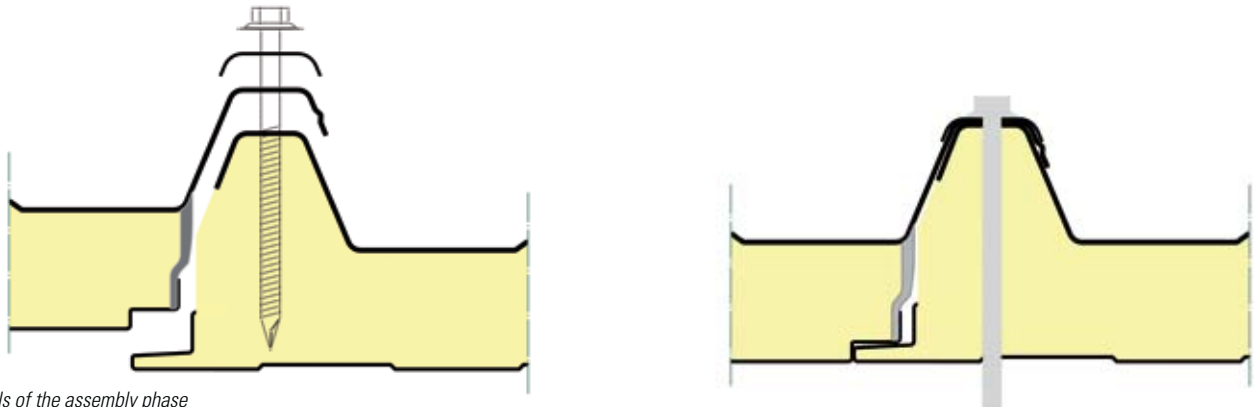


INSTRUCTIONS OF USE

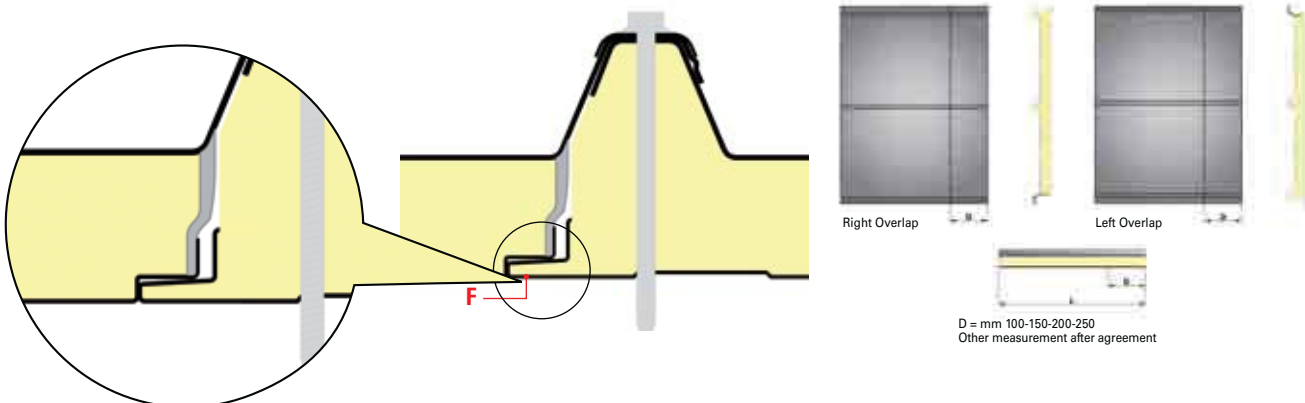
For the use of the panels and the related limits, please consult the technical data sheet available on www.isopan.it under the section "technical data sheet" and the "recommendations for the assembly of ribbed sheets and metal faced insulating panels" defined by AIPPEG Association of Italian Producers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



Panel transversal section

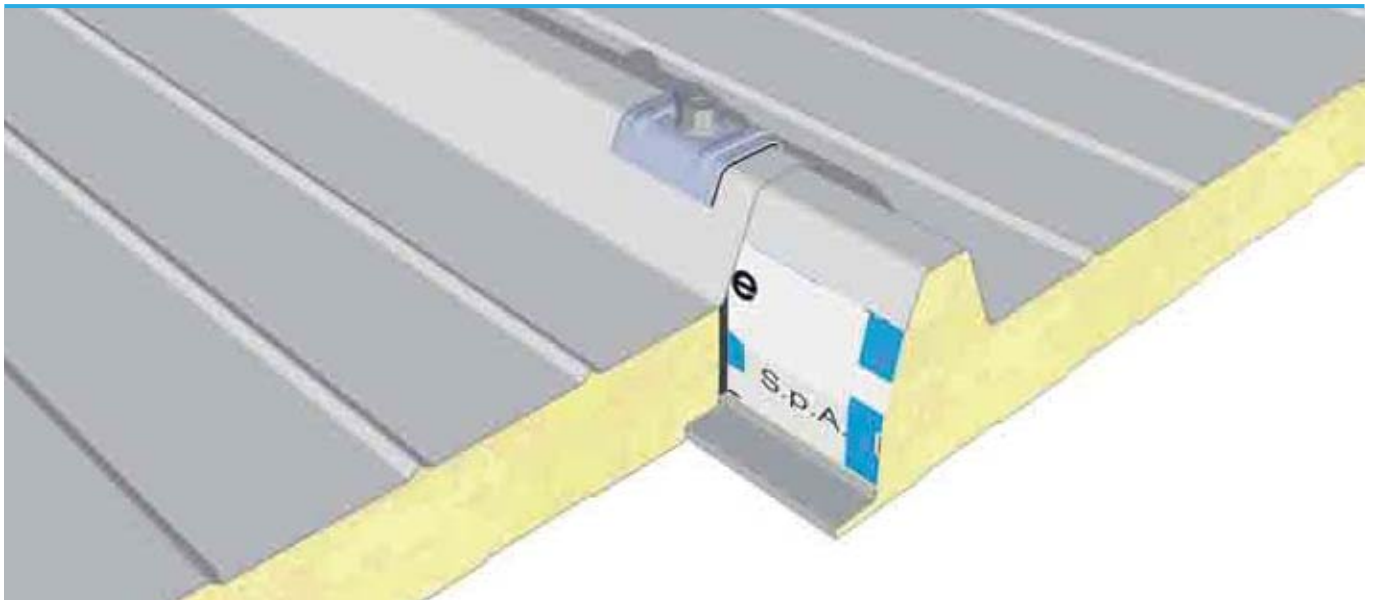


Details of the assembly phase



Details of the fixing system and the coupling tolerance

Details of the overlapping system



OVERLOAD SPANS

UNIFORMLY DISTRIBUTED LOAD kg/m ²	Steel sheet 0.5 mm – support 120 mm					Steel sheet 0.6 – support 120 mm				
	PANEL NOMINAL THICKNESS mm					PANEL NOMINAL THICKNESS mm				
	30	40	50	60	80	30	40	50	60	80
	MAX SPANS cm					MAX SPANS cm				
80	270	310	350	390	480	300	340	370	410	480
100	230	270	300	340	420	270	310	340	380	440
120	210	240	270	300	380	250	280	320	350	410
140	190	210	240	270	340	220	260	290	330	380
160	175	195	220	250	300	200	240	270	300	360
180	160	180	200	220	270	170	220	250	280	340
200	150	170	180	210	250	160	200	230	260	320
250	120	140	155	170	200	120	160	190	220	270

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

PANELS WEIGHT

WEIGHT kg/m ²	PANEL NOMINAL THICKNESS mm						
	30	40	50	60	80	100	120
	10,10	10,50	10,90	11,30	12,1	12,9	13,7

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	
Bottom sheet coupling	F = 0 + 3 mm	

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

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.

THERMAL INSULATION

In accordance with the new standard EN 14509 Annex 10

U	PANEL NOMINAL THICKNESS mm						
	30	40	50	60	80	100	120
W/m ² K	0,71	0,54	0,44	0,37	0,28	0,22	0,19
kcal/m ² h °C	0,61	0,47	0,38	0,32	0,24	0,19	0,16

According to the calculation method EN ISO 69646

K	PANEL NOMINAL THICKNESS mm						
	30	40	50	60	80	100	120
W/m ² K	0,59	0,47	0,39	0,33	0,25	0,20	0,17
kcal/m ² h °C	0,52	0,41	0,34	0,29	0,22	0,17	0,15

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

bianco grigio



silver G9006



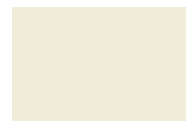
bianco G9002



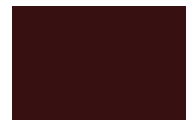
verde muschio G6005



bianco G9010



testa di moro



grigio antracite G7016



rosso ossido G3009

