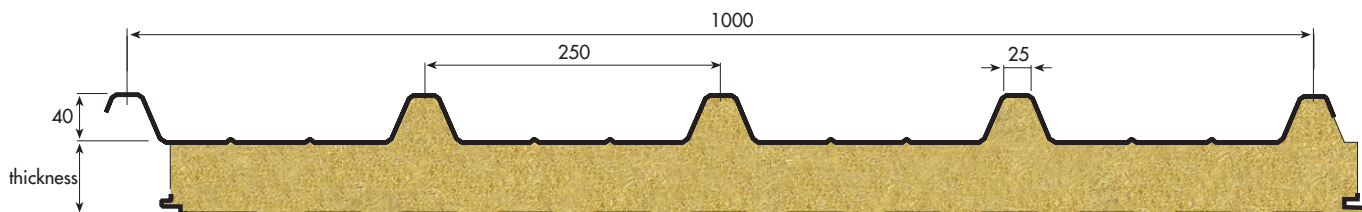
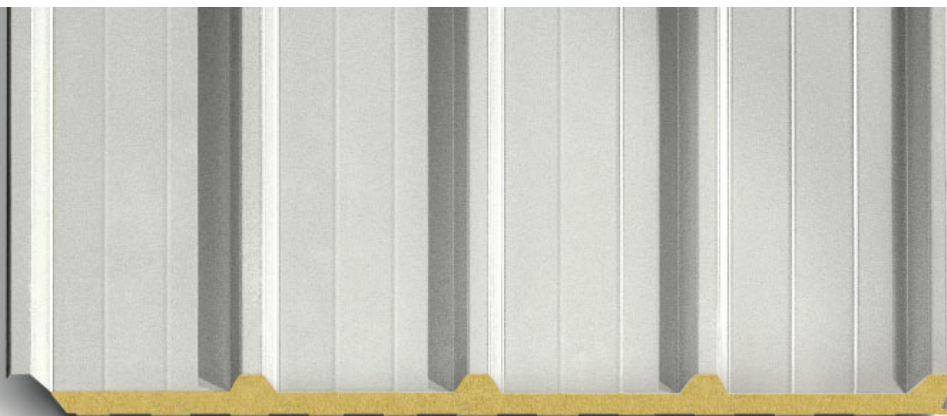




ISOFIRE ROOF 1000

This panel is designed for sloped roof use. Its mineral fibre core guarantees incombustibility, as well as assuring an excellent thermal insulation. ISOFIRE ROOF 1000 was designed to meet the growing requirements in terms of fire behaviour, guaranteeing at the same time high mechanical performances.



NOTES FOR CONSULTATION OF THE DATA CARD (reference should be made to norm AIPPEG¹ for anything not mentioned herein)

METAL SURFACES

- Sendzimir galvanised steel sheet (UNI-EN 10147).
- Galvanised steel sheet, pre-painted by means of a Coil Coating process.
- Aluminium alloy sheet, mill finish, stucco embossed or pre-painted (UNI 9003).
- Continuous pre-painting process with a 5 µm thick primer and a 20 µm paint on the item's visible side. Available in the following lines: PS-PX-PVDF (On request, ISOPAN can also supply very anticorrosive special products).

INSULATING LAYER

Insulating layer made of high-density mineral fibres (100 kg/m³, λ_m = 0.040 W/mK at 10°C).

LOAD LIMITS

- Deflection: a deflection equal to or lower than 1/200 L of the free span is admitted.
- Deflection: it is assumed that the bending stress is completely absorbed by the steel support sheets.

- Cut: it has been assumed that the cutting stress is absorbed partly by the steel support sheets and partly by the insulation material.

The data specified in tables 1 and 2 are to be considered as indicative. The designer will have to verify and adjust such details with regard to every specific application.

FIXING INSTRUCTIONS

The designer will have to evaluate the conditions of using the product, according to the local climatic situation. It will be necessary to adopt some particular precautions when fixing panels with aluminium or copper surfaces.

For further information, please refer to the "RECOMMENDATIONS FOR ASSEMBLING RIBBED SHEETS AND INSULATED METAL PANELS", issued by the AIPPEG Association.

The maximum recommended length for correctly handling mineral fibre panels is 6000 mm.

¹ - AIPPEG (Associazione Italiana Produttori Pannelli ed Elementi Grecati): Italian Association of Panels and Ribbed Items Manufacturers.

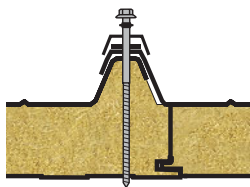
FIXING INSTRUCTIONS

	ROOF APPLICATION	WALL APPLICATION
Type of fixing:	PVC screw-washer (*)	PVC screw-washer (*)
Screw type and shank:	self-tapping, Ø 6.0 mm for ≥ 3 mm thick supports; self-threading, Ø 6.3 mm for < 3 mm thick supports, with an incorporated drive washer; length: panel nominal thickness + 60 ÷ 70 mm	self-tapping, Ø 6.0 mm for ≥ 3 mm thick supports; self-threading, Ø 6.3 mm for < 3 mm thick supports, with an incorporated drive washer; length: panel nominal thickness + 20 ÷ 30 mm
Quantity:	One for each rib (terminal or overlapping supports); one every two ribs (intermediate supports)	Two for each panel (terminal supports); one for each panel (intermediate supports)

(*) In the event of a considerable structural load, it is advisable to interpose a 50 Ø mm washer. For panels with aluminium or copper supports, please require ISOPAN's special instructions.

SHEET STEEL THICKNESS 0.5 mm											
EVENLY DISTRIBUTED LOAD		▲————▲					▲————▲————▲				
		PANEL THICKNESS mm					PANEL THICKNESS mm				
		50	80	100	120	150	50	80	100	120	150
kg/m ²	daN/m ²	MAX. SPAN cm					MAX. SPAN cm				
80	78	330	420	460	500	535	365	465	510	550	575
100	98	305	390	435	470	500	330	415	455	480	505
120	117	270	400	415	450	480	290	395	405	435	440
150	147	220	335	390	420	450	240	325	350	365	365
200	196	165	255	310	365	420	175	275	285	290	305

SHEET STEEL THICKNESS 0.6 mm											
EVENLY DISTRIBUTED LOAD		▲————▲					▲————▲————▲				
		PANEL THICKNESS mm					PANEL THICKNESS mm				
		50	80	100	120	150	50	80	100	120	150
kg/m ²	daN/m ²	MAX. SPAN cm					MAX. SPAN cm				
80	78	350	450	495	535	570	390	500	550	590	615
100	98	325	420	465	505	540	355	450	490	520	550
120	117	290	400	445	480	515	315	400	440	470	480
150	147	235	355	415	450	480	260	350	380	400	400
200	196	180	275	340	400	460	195	300	320	330	350



Isofire Roof panel assembly system



THERMAL INSULATION

K	NOMINAL THICKNESS OF PANEL mm				
	50	80	100	120	150
W/m ² K	0,72	0,44	0,36	0,3	0,25
kcal/m ² h °C	0,64	0,38	0,32	0,26	0,22

On request, ISOPAN can issue the following fire behaviour certifications:

FIRE REACTION

Panels ISOFIRE ROOF 1000 field-tested in accordance with the Ministerial Decree dated 26th June 1984, have been granted the fire reaction category 0-0.

FIRE RESISTANCE (circular letter number 91, dated 14th September 1961)

Panels ISOFIRE ROOF 1000 field-tested have obtained the following results:
 REI level 30 for 50 mm thick panels
 REI level 60 for 80 mm thick panels
 REI level 120 for 100 mm thick panels
 REI level 180 for 150 mm thick panels

WEIGHTS OF PANELS

STEEL THICKNESS	WEIGHT	NOMINAL THICKNESS OF PANEL mm				
		50	80	100	120	150
0,5	kg/m ²	13,5	16,4	18,5	20,4	23,2
0,6	kg/m ²	15,50	18,30	20,20	22,30	25,30

DIMENSIONAL TOLERANCES

DEVIATIONS mm	
Length	± 5
Effective width	± 5
Thickness	± 2
Orthometry and rectangularity	± 3
Misalignment of internal metal facing	± 3

DRAFT OF SPECIFICATIONS

Nominal thickness:	mm _____
Effective width:	mm 1000
External support:	ribbed (40 mm high ribs, 250 mm axle spacing), in galvanised steel/aluminium, thickness mm _____, prepainted visible side: line _____, with 5 microns of primer and 20 microns of painting _____, colour _____
Internal support:	microribbed, in galvanised steel/aluminium, thickness mm _____, prepainted visible side: line _____ with 5 microns of primer and 20 microns of painting _____, colour _____
Insulation:	carried out by high-density mineral fibres (100 kg/m ³)
Coeff. of thermal transmission: K = _____ W/m ² , K = _____ kcal/m ² h °C	
Fixing:	type of fixing device _____; type of screw _____; quantity _____