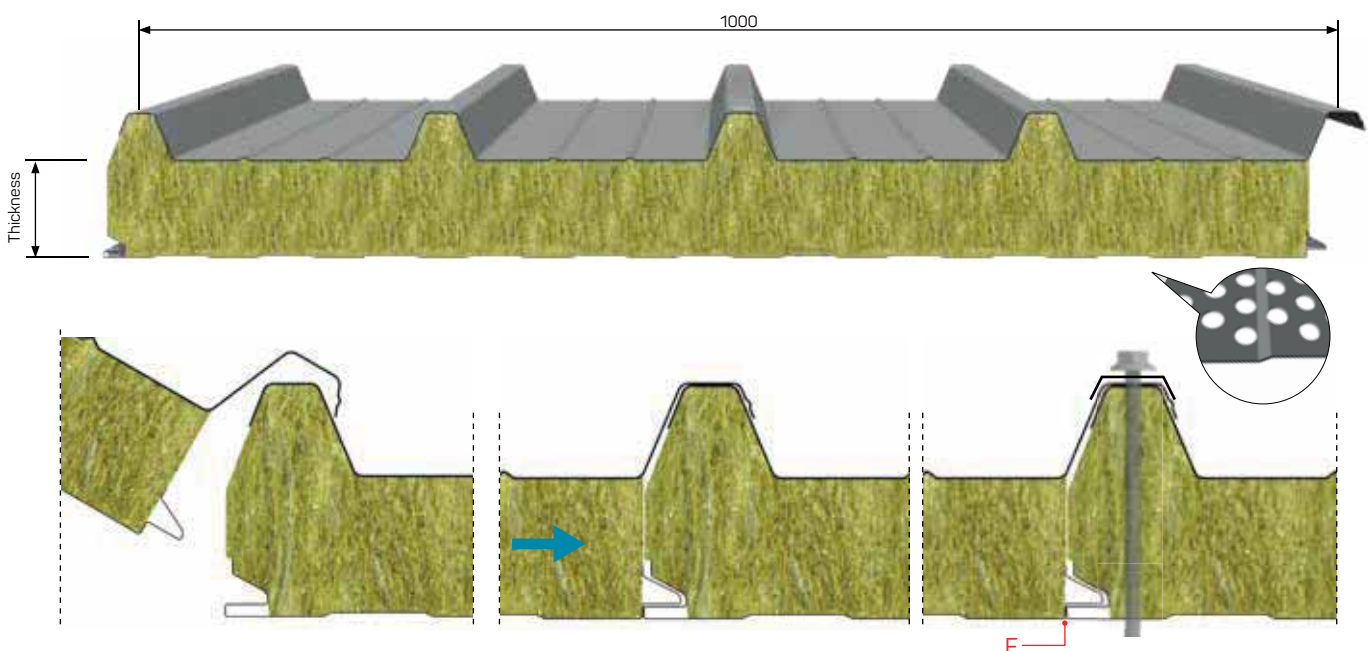


# Isofire Roof Fono

Manufactured in: Italy



Isofire Roof FONO is a self-supporting double skin panel, insulated with mineral wool fibre made with an exclusive insulation layer composed of mineral wool strips. The fixing system is a penetrating type with the possibility to use exposed caps. The internal sheet is characterised by a micro-drilling that enhances acoustic performances; meaning the sound absorption and insulation.



## INSTRUCTIONS OF USE

For the use of the panels and the related limits, please consult the Technical Manual available on [www.isopan.com](http://www.isopan.com), General Sales Terms and Annexes defined by ISOPAN.



→ see pag. 16

**OVERLOAD SPANS**

UNIFORMLY DISTRIBUTED LOAD kg/m <sup>2</sup>	STEEL SHEETS 0,5 / 0,5 mm - Support 120 mm						STEEL SHEETS 0,6 / 0,6 mm - Support 120 mm					
	PANEL NOMINAL THICKNESS mm						PANEL NOMINAL THICKNESS mm					
	50	60	80	100	120	150	50	60	80	100	120	150
	MAX SPANS cm						MAX SPANS cm					
80	280	305	360	405	440	470	295	315	360	415	455	510
100	260	280	315	360	410	450	265	285	335	380	425	490
120	230	260	295	335	370	435	250	265	305	350	385	440
140	220	230	270	310	350	405	230	250	280	315	360	415
160	210	225	260	285	325	370	220	230	265	305	335	385
180	195	210	240	270	305	350	210	220	250	280	310	360
200	180	195	230	260	285	335	195	210	240	265	295	340
220	170	180	220	245	270	315	180	205	225	260	285	325
250	150	170	200	230	255	295	165	180	210	240	265	305

Calculation for static sizing according to the Annex E of the UNI EN 14509 standard. Deflection limit 1/200 ℓ. Thermal load is not considered.

**PANELS WEIGHT (Steel sheets)**

THICKNESS SHEETS mm		PANEL NOMINAL THICKNESS mm					
		50	60	80	100	120	150
0,5 / 0,5	kg/m <sup>2</sup>	12,9	13,9	15,9	17,9	19,9	22,9
0,6 / 0,6	kg/m <sup>2</sup>	14,7	15,7	17,7	19,7	21,7	24,7

**DIMENSION TOLERANCE (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 = working length, D = panels thickness, F = sheets coupling



**ACOUSTIC PERFORMANCES**

On client's request, Isopan can provide the following certificates related to the acoustic behaviour:

**ACOUSTIC INSULATION**

Rw = 31 dB (Roof - Fono 50 mm )  
Rw = 34 dB (Roof - Fono 100 mm )  
Rw = 35 dB (Roof - Fono 80 mm )

**ACOUSTIC ABSORPTION**

coefficient of sound absorption αw = 1



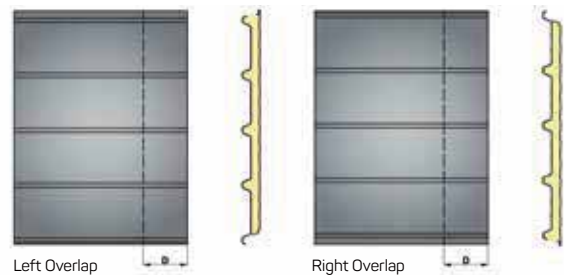
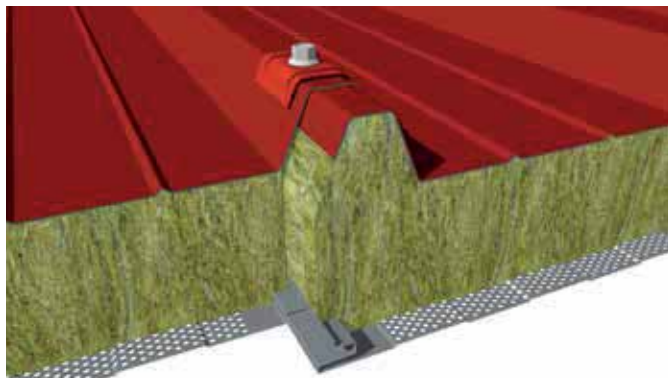
**FIRE PERFORMANCES**

Regarding the specifications related to the fire characteristics, please consult the synthesis available in the catalogue or on the website.

**THERMAL INSULATION**

**According to EN 14509 Annex 10**

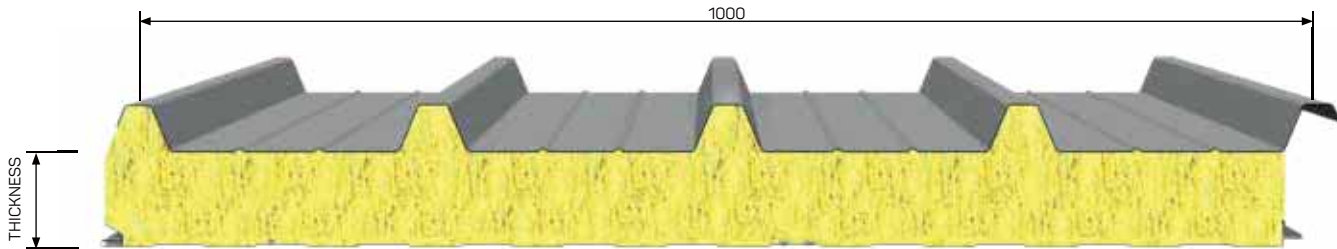
U	PANEL NOMINAL THICKNESS mm						
	50	60	80	100	120	150	
W/m <sup>2</sup> K	0,78	0,66	0,50	0,41	0,34	0,28	
kcal/m <sup>2</sup> h °C	0,67	0,57	0,43	0,35	0,29	0,24	



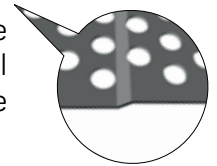
D = mm 100-150-200-250  
Other measurement after agreement

# Isofire Roof FG Fono

Manufactured in: Italy



Isofire Roof FONO FG is a self-supporting double skin panel, insulated with **Glass wool**. The fixing system is a penetrating type with the possibility to use exposed caps. The internal sheet is characterised by a micro-drilling that enhances acoustic performances; meaning the sound absorption and insulation.



## PANELS WEIGHT (Steel sheets)

THICKNESS SHEETS		PANEL NOMINAL THICKNESS mm					
		50	60	80	100	120	150
0,5 / 0,5	kg/m <sup>2</sup>	10,3	10,9	12,0	13,1	14,2	15,8
0,6 / 0,6	kg/m <sup>2</sup>	12,1	12,7	13,8	14,9	16,0	17,6

## THERMAL INSULATION According to EN 14509 Annex 10

U		PANEL NOMINAL THICKNESS mm					
		50	60	80	100	120	150
W/m <sup>2</sup> K		0,75	0,63	0,48	0,38	0,32	0,26
kcal/m <sup>2</sup> h °C		0,65	0,54	0,41	0,33	0,28	0,22

## DIMENSION TOLERANCE (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 = working length, D = panels thickness, F = sheets coupling



**ACOUSTIC INSULATION:** On client's request, Isopan can provide the following certificates for the acoustic behaviour:

## ACOUSTIC INSULATION

R<sub>w</sub> = 31 dB (50 mm)  
 R<sub>w</sub> = 34 dB (100 mm)  
 R<sub>w</sub> = 35 dB (80 mm)

## FONOASSORBIMENTO

coefficiente di assorbimento acustico pesato α<sub>w</sub> = 1

## OVERLOAD SPANS

UNIFORMLY DISTRIBUTED LOAD	STEEL SHEETS 0,5 / 0,5 mm - Support 120 mm						STEEL SHEETS 0,6 / 0,6 mm - Support 120 mm					
	PANEL NOMINAL THICKNESS mm						PANEL NOMINAL THICKNESS mm					
	50	60	80	100	120	150	50	60	80	100	120	150
kg/m <sup>2</sup>	MAX SPANS cm						MAX SPANS cm					
80	250	270	320	360	395	420	265	280	320	370	405	455
100	230	250	280	320	365	405	235	255	300	340	380	440
120	205	230	265	300	330	390	225	235	270	315	345	395
160	185	200	230	255	290	330	195	205	235	270	300	345
200	160	175	205	230	255	300	175	185	215	235	265	305
250	135	150	180	205	225	265	145	160	185	215	235	270

Calculation for static sizing according to the Annex E of the UNI EN 14509 standard. Deflection limit 1/200 ℓ. Thermal load is not considered.



**INSTRUCTIONS OF USE:** For the use of the panels and the related limits, please consult the Technical Manual available on [www.isopan.com](http://www.isopan.com), General Sales Terms and Annexes defined by ISOPAN.