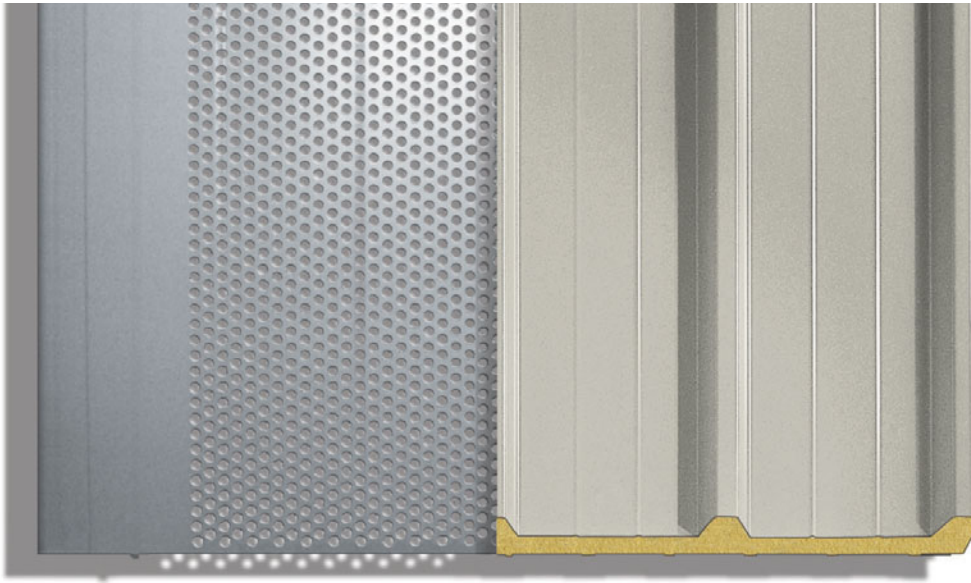
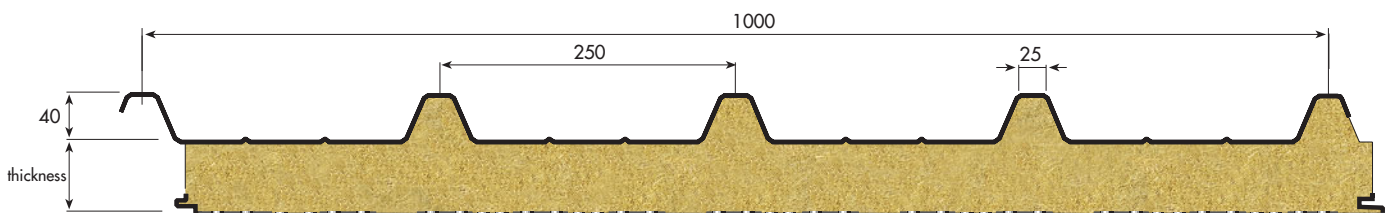




# ISO FIRE ROOF - FONO



The range of "FONO" panels was designed to satisfy the increasing demands for performance in sandwich panels in terms of soundproofing, guaranteeing the non-combustibility of the product at all times. The ISO FIRE ROOF FONO panel is designed for use in sloped roofing.



## NOTES FOR CONSULTATION OF THE DATA CARD (reference should be made to norm AIPPEG<sup>1</sup> for anything not mentioned herein)

### METAL SUPPORTS

- 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 fibre (100 kg/m<sup>3</sup>, λ<sub>m</sub> = 0.040 W/mK at 10°C).

### LOAD LIMITS

- Deformation: 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.

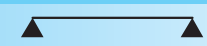

1 - **AIPPEG** (Associazione Italiana Produttori Pannelli ed Elementi Grecati): Italian Association of Panels and Ribbed Items Manufacturers.

## FIXING INSTRUCTIONS

### USE OF ISO FIRE ROOF - FONO

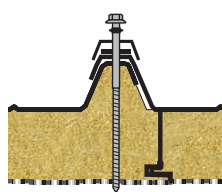
- Type of fixing: screw-PVC washer (\*)
- Screw type and shank: self-tapping, Ø 6.0 mm for ≥ 3 mm thick supports;  
self-threading, Ø 6.3 mm for < 3 mm thick supports,  
with false incorporated washer;  
length: panel nominal thickness + 60 ÷ 70 mm
- Quantity: One for each rib (terminal or overlapping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

(\*) in the case of strong depression the use of a Ø 50 mm washer is recommended. For panels with aluminium or copper supports, please ask for specific instructions.

| EVENLY DISTRIBUTED LOAD |                    | SHEET STEEL THICKNESS 0.6 mm  |     |     |     |     |   |     |     |     |     |
|-------------------------|--------------------|---|-----|-----|-----|-----|---|-----|-----|-----|-----|
|                         |                    | <br>PANEL THICKNESS mm |     |     |     |     | <br>PANEL THICKNESS mm |     |     |     |     |
|                         |                    | 50  | 80  | 100 | 120 | 150 | 50  | 80  | 100 | 120 | 150 |
|                         |                    | MAX. SPAN cm  |     |     |     |     | MAX. SPAN cm  |     |     |     |     |
| kg/m <sup>2</sup>       | daN/m <sup>2</sup> |   |     |     |     |     |   |     |     |     |     |
| 80                      | 78                 | 240   | 350 | 380 | 395 | 404 | 325   | 390 | 435 | 470 | 500 |
| 100                     | 98                 | 235   | 310 | 365 | 390 | 400 | 315   | 375 | 405 | 420 | 435 |
| 120                     | 117                | 225   | 290 | 345 | 365 | 380 | 305   | 365 | 385 | 410 | 420 |
| 150                     | 147                | 188   | 270 | 305 | 320 | 325 | 288   | 348 | 375 | 391 | 398 |
| 200                     | 196                | 165   | 230 | 275 | 290 | 305 | 260   | 315 | 345 | 368 | 380 |

WEIGHTS OF PANELS

| STEEL THICKNESS | WEIGHT            | NOMINAL THICKNESS OF PANEL mm |       |       |       |       |
|-----------------|-------------------|-------------------------------|-------|-------|-------|-------|
|                 |                   | 50                            | 80    | 100   | 120   | 150   |
| 0,6             | kg/m <sup>2</sup> | 13,82                         | 16,62 | 18,52 | 20,62 | 23,62 |



Isofire Roof Fono panel assembly system



THERMAL INSULATION

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

DIMENSIONAL TOLERANCES

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

On request ISOPAN can issue the following certifications concerning noise behaviour:

SOUND INSULATION

Rw = 30 dB; Rw = 32 dB - (Roof fono, 50 and 80 thick)

NOISE ABSORPTION

Δ LA,Str = 17.2 dB (as>1)

Δ LA,Str = 18.9 dB (as>1) - (Roof fono 50 and 80 thick)

