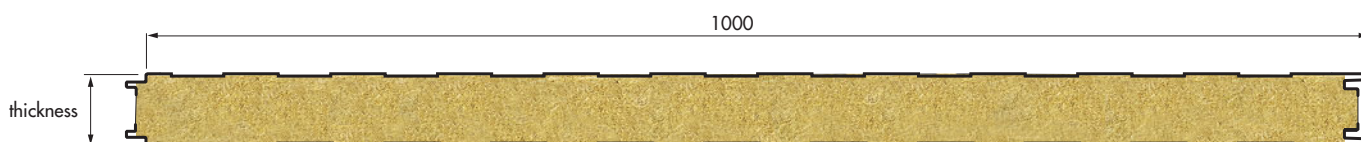




ISOFIRE WALL 1000

This panel is designed for sloped wall use. Its mineral fibre core guarantees incombustibility, as well as assuring an excellent thermal insulation. ISOFIRE WALL 1000 was designed to meet the growing requirements in terms of fire behaviour and is indicated for both external and internal partition walling.



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

- 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.

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

WALL APPLICATION

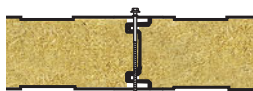
| | |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of fixing: | PVC screw-washer (*) |
| Screw type and shank: | self-tapping, 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 + 20 ÷ 30 mm |
| Quantity: | Two for each panel (terminal supports); one for each panel (intermediate supports) |

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

OVERLOADS - SPANS

| GALVANIZED STEEL SHEETS – 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 | | | | |
| 60 | 58 | 365 | 460 | 520 | 565 | 610 | 395 | 495 | 565 | 620 | 655 |
| 80 | 78 | 305 | 400 | 450 | 490 | 530 | 340 | 450 | 510 | 545 | 565 |
| 100 | 98 | 245 | 360 | 400 | 440 | 480 | 275 | 385 | 425 | 460 | 490 |
| 120 | 117 | 200 | 325 | 365 | 400 | 440 | 225 | 320 | 370 | 390 | 415 |
| 150 | 147 | 160 | 260 | 320 | 360 | 395 | 180 | 250 | 285 | 315 | 345 |

| GALVANIZED STEEL SHEETS – 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 | | | | |
| 60 | 58 | 390 | 495 | 555 | 605 | 655 | 420 | 530 | 600 | 660 | 700 |
| 80 | 78 | 325 | 430 | 480 | 525 | 565 | 360 | 480 | 540 | 580 | 600 |
| 100 | 98 | 260 | 385 | 430 | 470 | 510 | 290 | 410 | 455 | 490 | 520 |
| 120 | 117 | 215 | 345 | 390 | 430 | 470 | 240 | 340 | 395 | 420 | 445 |
| 150 | 147 | 170 | 280 | 345 | 385 | 425 | 190 | 270 | 310 | 340 | 375 |



WEIGHTS OF PANELS

| STEEL THICKNESS | WEIGHT | NOMINAL THICKNESS OF PANEL mm | | | | |
|-----------------|-------------------|-------------------------------|-------|-------|-------|-------|
| | | 50 | 80 | 100 | 120 | 150 |
| 0,5 | kg/m ² | 12,8 | 15,5 | 17,3 | 19,5 | 22,7 |
| 0,6 | kg/m ² | 14,50 | 17,20 | 19,00 | 21,40 | 24,40 |

THERMAL INSULATION

| K | NOMINAL THICKNESS OF PANEL mm | | | | |
|--------------------------|-------------------------------|------|------|------|------|
| | 50 | 80 | 100 | 120 | 150 |
| W/m ² K | 0,75 | 0,5 | 0,4 | 0,33 | 0,27 |
| kcal/m ² h °C | 0,67 | 0,44 | 0,35 | 0,30 | 0,24 |

DIMENSIONAL TOLERANCES

| DEVIATIONS mm | |
|-------------------------------|-----|
| Length | ± 5 |
| Net width | ± 1 |
| Thickness | ± 2 |
| Squareness and rectangularity | ± 3 |

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

FIRE REACTION

Panels ISOFIRE WALL 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 WALL 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.

DRAFT OF SPECIFICATIONS

| | |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal thickness: | mm _____ |
| Effective width: | mm 1000 |
| External support: | microribbed, in galvanised steel/aluminium, thickness mm _____, pre-painted visible side: line _____, with 5 microns of primer and 20 microns of painting _____, colour _____ |
| Internal support: | microribbed, in galvanised steel/aluminium, thickness mm _____, pre-painted 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 _____ |