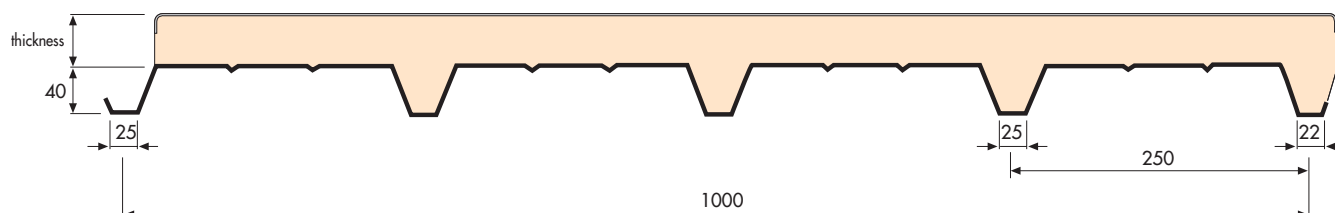




# ISODECK 40 1000

A panel designed for waterproof roofing on flat or pitched roof structures. This is a single sheet-steel panel, with its second surface made from bitumenised felt board. The waterproof roofing must be completed with a final layer of bitumenised sheath.



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

### METAL SUPPORTS

- Laminates of galvanized steel Sendzimir (UNI-EN 10147)
- Laminates of galvanized steel, prevarnished with a Coil Coating procedure
- Laminates of aluminium alloy, with a natural finish, embossed and prevarnished (UNI 9003)
- Prevarnishing carried out by means of a continual-cycle process, with a thickness of the visible side of 5 microns of primer and 20 microns of paint, as follows: PS-PX-PVDF (special products with a high level of anticorrosion are available upon request).
- Laminates of copper (DIN 1787/17670/1791).

### INSULATING MASS

Rigid plastic with a high level of insulating power, made from polyurethane resins (PUR) and poliisocianurates (PIR) both self-extinguishable, with the following standards of quality:

- thermal conductivity at 10°C:  $\lambda_m = 0.020 \text{ W/mK}$
- total density:  $40 \text{ kg/m}^3 \pm 10\%$
- value of adhesion to supports:  $0.10 \text{ N/mm}^2$
- value of compression at 10% of deformation:  $0.11 \text{ N/mm}^2$ .

### THERMAL INSULATION

The coefficients of thermal transmission "K" mentioned in the data card

should be considered useful for projects, at 10°C; calculations have taken into consideration the two external and internal laminate resistances and the thermal conductivity at 10°C (obtained by applying the oversize  $m = 10\%$  to  $\lambda_m$ ):  $\lambda = 0.022 \text{ W/mK}$ .

### WEIGHT CAPACITY

- Deformation: an indicator, similar to or below 1/200 L is established
  - Flexion: it is believed that the pressure of flexion is entirely absorbed by the supporting steel
  - Kerf: it is believed that the pressure of the cut is partly absorbed by the supporting steel and in part by the resin.
- Information indicated in tables 1 and 2 is to be considered indicative. The project manager should check this data according to the specific applications.

### FIXING INSTRUCTIONS

The project manager should evaluate the conditions of use according to the local climatic situation. Particular attention should be paid to the fixing of panels with aluminium or copper supports.

For further information, please consult "RECOMMENDATIONS FOR THE FIXING OF STEEL PANELS AND OF INSULATED METAL PANELS" issued by AIPPEG.

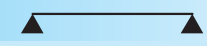
<sup>1</sup> - AIPPEG (Associazione Italiana Produttori Pannelli ed Elementi Grecati): Italian Association of Panels and Ribbed Items Manufacturers.

## FIXING INSTRUCTIONS

### FOR USE IN ROOFING

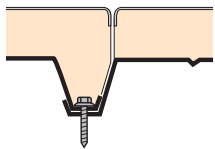
Type of fixing:	screw
Screw type and shank:	- self-tapping diam. 6.0 mm for surface support $\geq 3$ mm - self-threading diam. 6.3 mm for surface support $< 3$ mm with a false washer incorporated, length 25÷30 mm
Quantity:	One for each ridge for extreme external supports or heading overlaps One for every two ridges for intermediate supports The longitudinal overlapping ridges should be fixed together by means of rivets or screws, with a maximum distance of 75 cm.

## OVERLOADS - SPANS

EVENLY DISTRIBUTED LOAD		SHEET STEEL									
		 NOMINAL THICKNESS STEEL mm					 NOMINAL THICKNESS STEEL mm				
		0,5	0,6	0,7	0,8	1,0	0,5	0,6	0,7	0,8	1,0
		MAX. SPAN cm					MAX. SPAN cm				
kg/m <sup>2</sup>	daN/m <sup>2</sup>										
60	58	245	260	275	290	315	275	295	310	325	350
80	78	220*	235	250	265	285	250*	270	285	295	320
100	98	200*	220*	235	245	265	220*	245*	260	275	295
120	117	180*	200*	215*	230	250	200*	225*	240*	260	280
140	137	165*	185*	200*	215*	235	185*	205*	225*	240*	265
160	156	155*	170*	185*	200*	225	175*	195*	210*	225*	255
180	176	145*	160*	175*	190*	215*	165*	180*	200*	210*	240*
200	196	140*	155*	165*	180*	200*	155*	170*	185*	200*	225*

\* Rates with strain limitations.

## WEIGHTS OF PANELS



WEIGHT	NOMINAL THICKNESS OF PANEL mm			
	30	40	50	60
kg/m <sup>2</sup>	6.90	7.30	7.70	8.10

## THERMAL INSULATION

K	NOMINAL THICKNESS OF PANEL mm			
	30	40	50	60
W/m <sup>2</sup> K	0.55	0.44	0.36	0.31
kcal/m <sup>2</sup> h °C	0.48	0.38	0.32	0.27

## DIMENSIONAL TOLERANCES

DEVIATIONS mm	
Length	± 10
Effective width	± 5
Thickness	± 2
Orthometry and rectangularity	± 3

## DRAFT OF SPECIFICATIONS

Nominal thickness:	mm _____ out of ridge
Effective width:	mm 1000
External support:	asphaltic felt g/m <sup>2</sup> 500
Internal support:	ridged (height of ridge 40 mm, distance 250 mm) made from galvanized steel, thickness mm _____ prevarnished on the visible side series _____ with 5 microns of primer and 20 microns of paint _____ colour _____
Insulation:	made of rigid plastic with a high level of insulating power made from polyurethane resins, total density kg/m <sup>3</sup> 40 ±10%
Coeff. of thermal transmission: K =	_____ W/m <sup>2</sup> K = _____ kcal/m <sup>2</sup> h °C
Fixing:	type of fixing _____ ; screw type and shank _____ ; qty _____