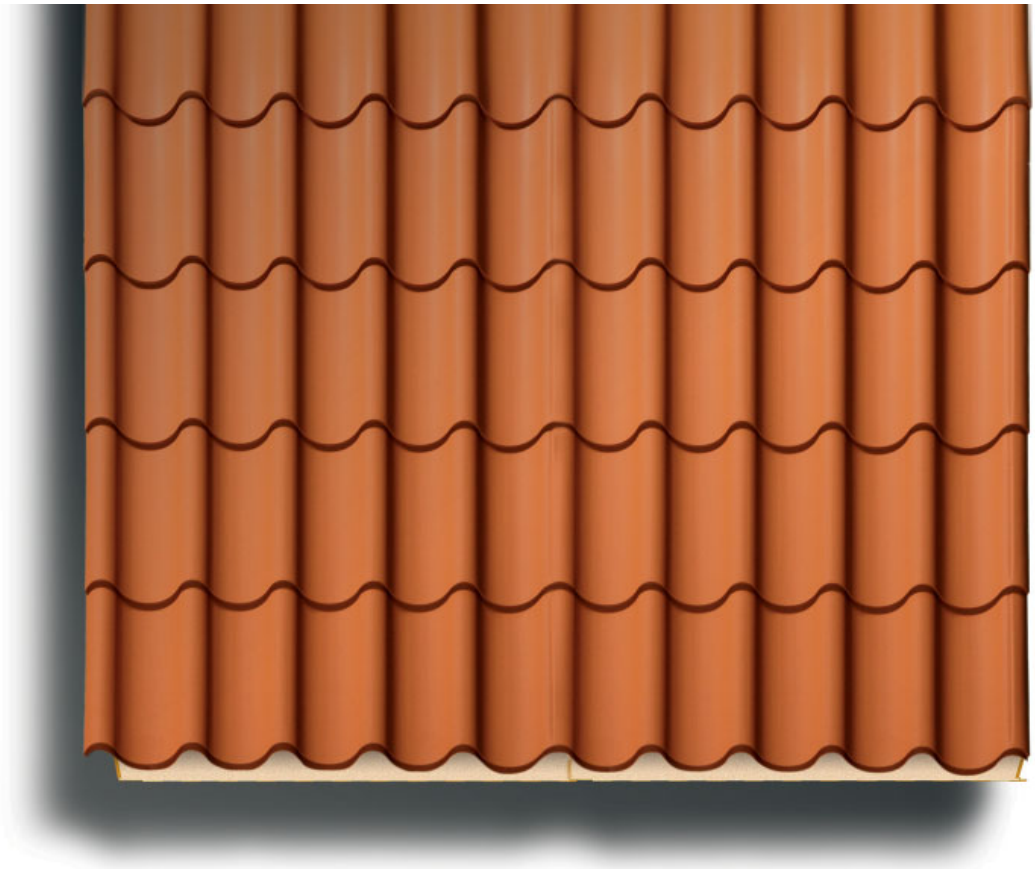
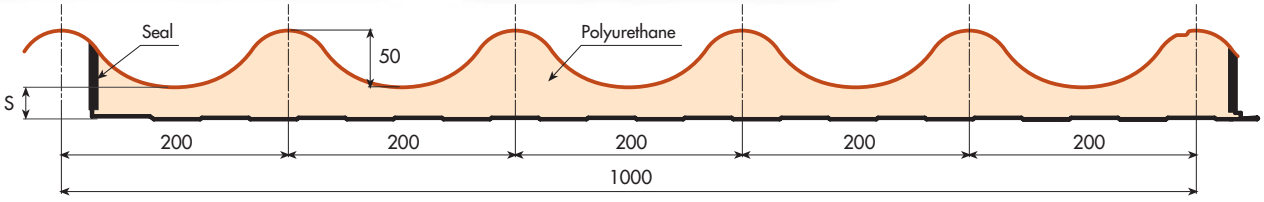
ISODOMUS
(INSULATED)



ISODOMUS represents the greatest evolution in terms of aesthetics for insulated roofing panels used in civil construction.
ISODOMUS Insulated is an expanded polyurethane panel with an architectural roof tile pattern, which allows it to be used as a functional roof covering, while at the same time being greatly appreciated for its appearance; it is lightweight, safe, easy to install and waterproof, in order to satisfy the strictest landscape regulations.
ISODOMUS Insulated is the perfect combination of the best ISOPAN technology and traditional roof coverings, guaranteeing the high thermal insulation values that are typical of polyurethane-based products.



NOTES FOR CONSULTATION OF THE DATA CARD **(reference should be made to norm AIPPEG [1] 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).
- Copper sheet (DIN 1787/17670/1791).

INSULATING LAYER
Highly insulating rigid expanded polyurethane resin-based self-extinguishing materials (PUR), with the following quality standards:
- thermal conductivity at 10°C: λ_m = 0.020 W/mK
- total density: 42 kg/m^3 ±10%
- support adhesion value: 0.10 N/mm^2
- compression value at 10% deformation: 0.11 N/mm^2

THERMAL INSULATION
The thermal transmission coefficients K specified in the product data sheet are to be considered as design specifications at 10° C; reckoning takes into account the two laminar resistances - external and internal - and useful thermal conductivity calculated at 10° C (obtained by applying the increase factor m = 10% to λ_m): λ = 0.022 W/mK.

INSTALLATION, MAINTENANCE AND INSPECTION
Regulation reference: UNI 10372, with the following remarks:
- We recommend to install the product with a minimum slope of 11%, to allow a correct water drain.
- Where roof walkability should be necessary, we recommend not to over pass a span of 2.4 m between the main supports (Minimum free span available for a 40 mm th, Isodomus panel)
- For a long durability of the product, we recommend to check periodically the roof covering, and to remove any possible leafage or other sediments, that could cause stagnation.

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

INSTALLATION EXAMPLES

LOAD LIMITS

P P / l l	Insulation thickness (mm)	Distance in between fixing points (mm)							
		1050	1400	1750	2100	2450	2800*	3150*	3500*
External steel surface th. 0.5 mm Internal steel surface th. 0.4 mm	**40**	400 *480*	285 *360*	215 *280*	160 *230*	115 *200*	90 *150*	65 *130*	50 *110*
External aluminium surface th. 0.6 mm Internal steel surface th. 0.4 mm	**40**	290	240	230	170	120	70	55	40
External copper surface th. 0.5 mm Internal steel surface th. 0.4 mm	**40**	420	300	230	165	110	80	60	45

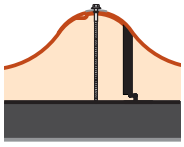
The values shown in red have no limit conditions as far as deflection is concerned. **** On grey background lights for preventing pedestien access.***

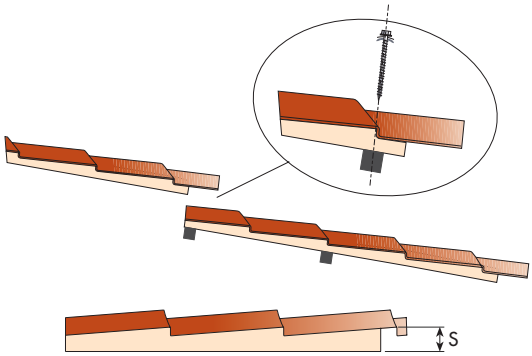
The values shown, taken from laboratory tests carried out on panels not fixed to any support, consider a suitable safety coefficient. During inspections for maintenance and cleaning it is advisable to use suitable precautions in order not to crush the sheet near the deepest curves.
Rubber-soled shoes should be worn and care must be taken in the use of tools and equipment, as these could scratch the paint and underlying galvanization, which could lead to rusting. The covering should be inspected periodically (at least once a year) and any sediment that could cause unwanted water stagnation should be removed.

STANDARD LENGTHS

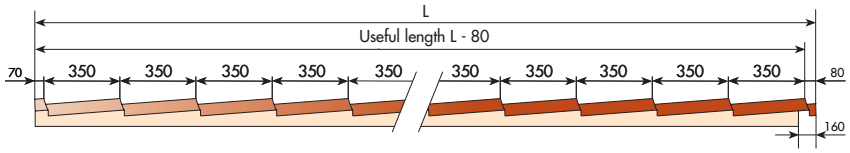
STANDARD PANEL LENGTHS																			
mm	1200	2250	2950	4000	4700	5050	5750	6100	6450	6800	7150	7500	7850	8200	8550	8900	9250	9600	9950	10300

FIXING EXAMPLES

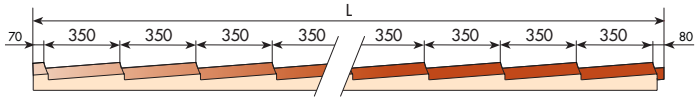




A. Overlapping panel – pitch N x 350 + 70 + 80



B. Gutter panel – pitch N x 350 + 70 + 80



WEIGHTS OF PANELS

WEIGHT	NOMINAL THICKNESS OF PANEL mm		
	40	50	60
kg/m²	10,90	11,30	11,70

DIMENSIONAL TOLERANCES

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

THERMAL INSULATION

K	NOMINAL THICKNESS OF PANEL mm		
	40	50	60
W/m² K	0,44	0,36	0,31
kcal/m² h °C	0,38	0,32	0,27

DRAFT OF SPECIFICATIONS

Nominal thickness: *mm _____ outside ribbing*
Effective width: *mm 1000*
External support: *corrugated false roof tiles (rib height 50 mm, distance between ribs 200 mm) in galvanised steel/aluminium/copper thickness mm _____ pre-painted on visible side series _____ with 5 µm of primer and 20 µm of paint _____ colour _____*
Internal support: *micro-ribbed in galvanised steel/aluminium/copper thickness mm _____ pre-painted on visible side series _____ with 5 µm of primer and 20 µm of paint _____ colour _____*
Insulation: *in stiff high insulating, expanded polyurethane resin, total density 42 ±10% kg/m³*
Coeff. of thermal transmission: *K = _____ W/m² K ≡ _____ kcal/m² h °C*
Fixing: *type of fixing: _____ type of screw: _____ quantity: _____*