

## Isodomus and Isodomus Classic



Renovation of an agricultural building in Pienza



Detail of the roof



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The Isodomus panel represents the best aesthetic evolution of an insulating roofing panel made for public construction.

The design, with a standard tile or barrel tile shape, allows the creation of functional roofs that are aesthetically pleasing, light, safe, waterproof and fast and easy to install. The possibility for integration of many finishing accessories makes it an extremely complete and flexible solution. Thanks to its polyurethane core, it offers high values of thermal insulation.



## APPLICATION

Isodomus is appropriate for public and industrial buildings' roofs with sheds located in determined urbanised areas. It can be used for new buildings' roofs, but also for renovation of roofs that are obsolete.

## CHARACTERISTICS

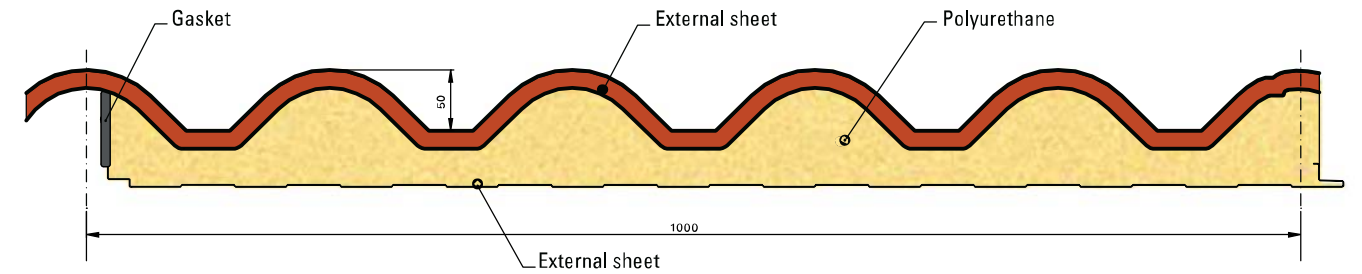
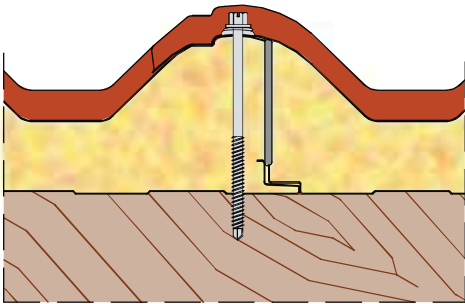
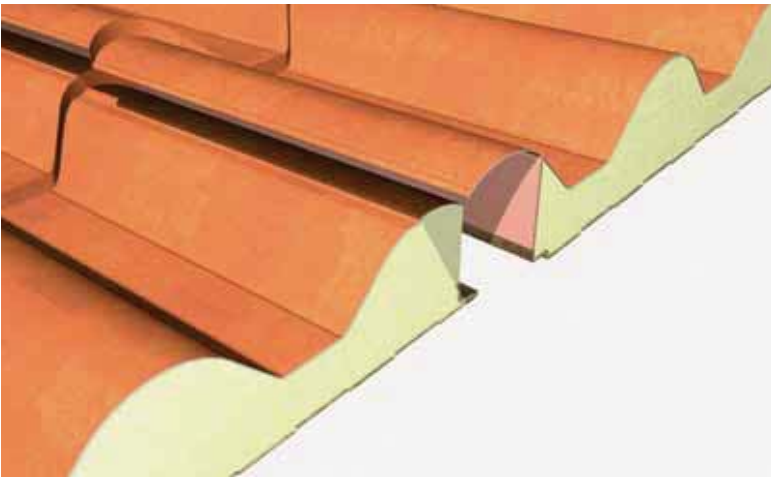
The standard tile or barrel tile shape makes this panel particular with a high aesthetic value that is suitable for public and rural sectors. The fixing system is a penetrating type with the possibility to use exposed caps, the number and the place of the fixing elements should guarantee the stresses resistance. This range of roof panels is characterised by a wide choice of colours; particularly, colours that simulate the traditional roofs.

## ADVANTAGES

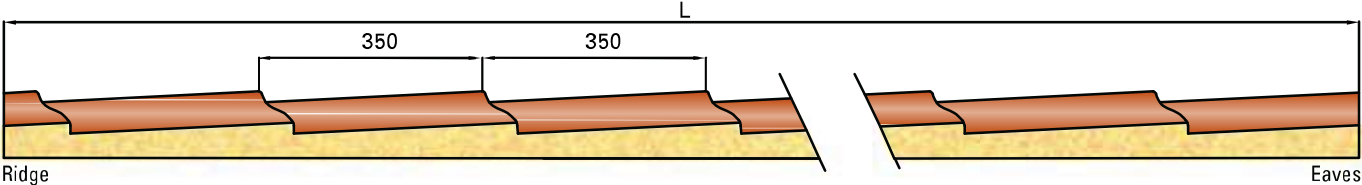
The Isodomus panel made of polyurethane foam allows a high thermal insulation. It is a functional panel fast and easy to install. Moreover, thanks to its special barrel tile shape, it can comply with the standards regarding landscape constraints.

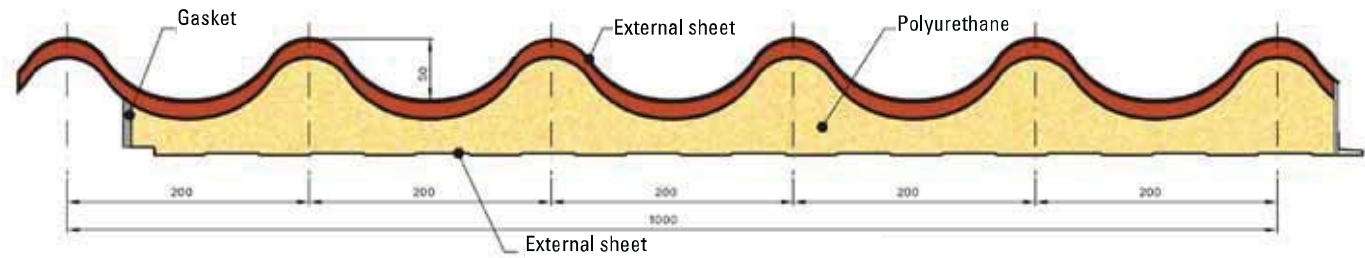
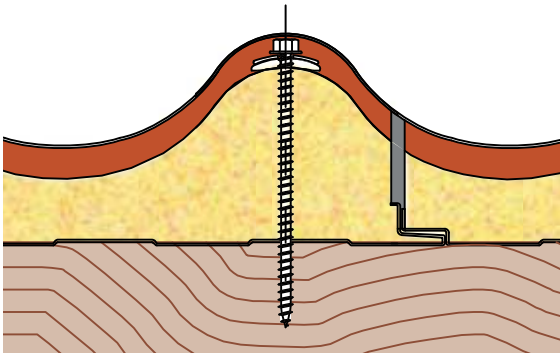
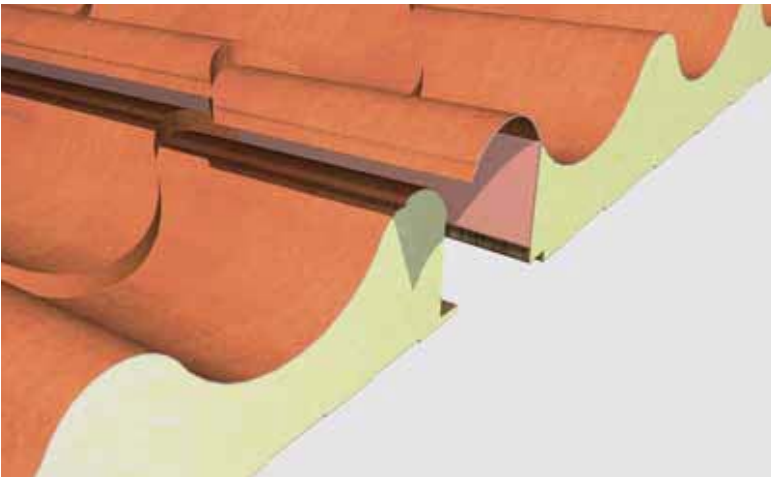
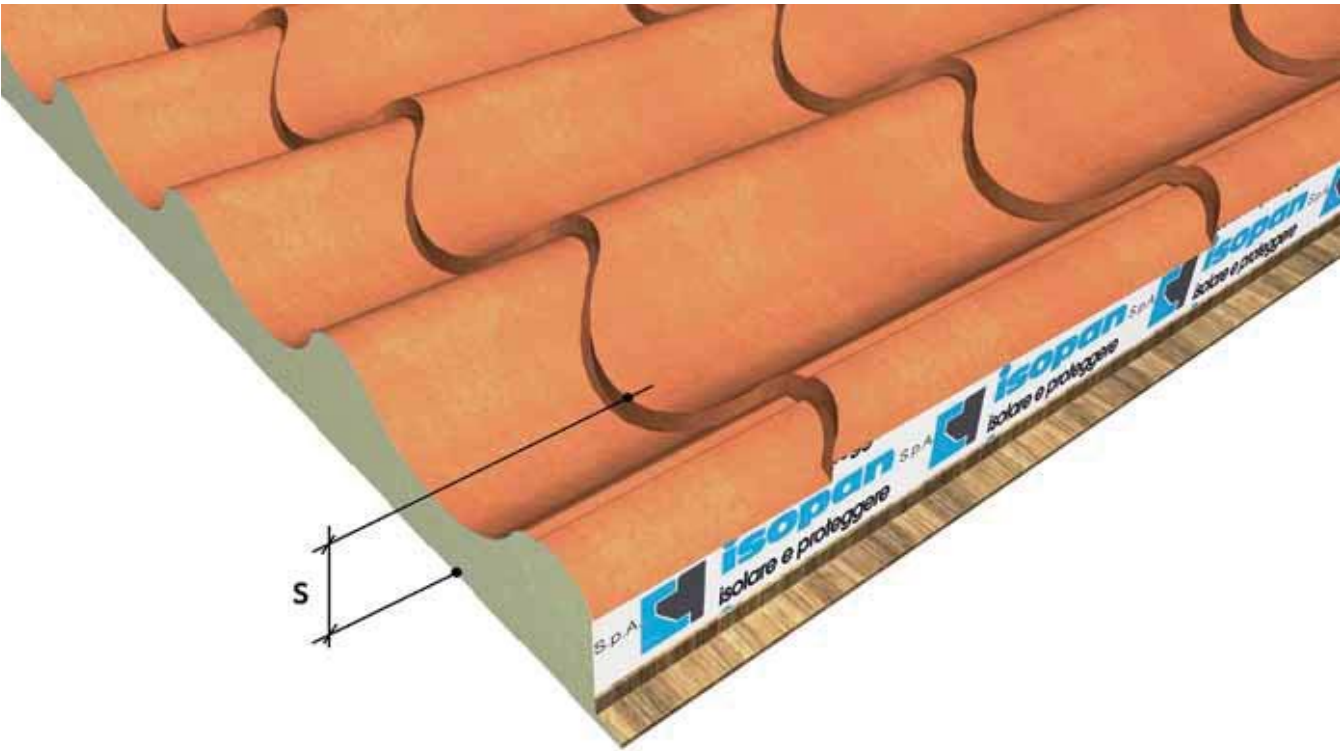
- Architectonic quality
- Earthquake safety
- Lightness
- Versatility
- Functional reliability
- Low cost solution
- Thermal efficiency



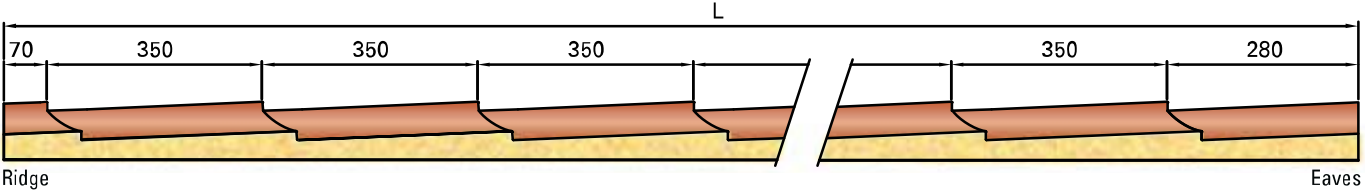


SIDE SECTION





SIDE SECTION



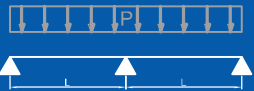
**INSTRUCTIONS OF USE**

For the use of the panels and the related limits, please consult the technical data sheet available on [www.isopan.it](http://www.isopan.it) under the section "technical data sheet" and the "recommendations for the assembly of ribbed sheets and metal faced insulating panels" defined by AIPPEG Association of Italian Producers of Panels and Ribbed Elements).

**ACCEPTABLE LOADS kg/m²**

|  | INSULATING CORE THICKNESS mm | SPAN mm |      |      |      |      |       |       |       |
|-----------------------------------------------------------------------------------|------------------------------|---------|------|------|------|------|-------|-------|-------|
|                                                                                   |                              | 1050    | 1400 | 1750 | 2100 | 2450 | 2800* | 3150* | 3500* |
| External steel sheet 0.5 mm<br>Internal steel sheet 0.4 mm                        | 40                           | 440     | 314  | 237  | 176  | 121  | 95    | 68    | 53    |
| External aluminium sheet 0.6 mm<br>Internal steel sheet 0.4 mm                    | 40                           | 319     | 264  | 253  | 187  | 126  | 74    | 58    | 42    |
| External copper sheet 0.5 mm<br>Internal steel sheet 0.4 mm                       | 40                           | 462     | 330  | 253  | 182  | 116  | 84    | 63    | 47    |

|  | INSULATING CORE THICKNESS mm | SPAN mm |      |      |      |      |       |       |       |
|-----------------------------------------------------------------------------------|------------------------------|---------|------|------|------|------|-------|-------|-------|
|                                                                                   |                              | 1050    | 1400 | 1750 | 2100 | 2450 | 2800* | 3150* | 3500* |
| External steel sheet 0.5 mm<br>Internal steel sheet 0.4 mm                        | 50                           | 463     | 333  | 257  | 193  | 134  | 106   | 77    | 59    |
| External aluminium sheet 0.6 mm<br>Internal steel sheet 0.4 mm                    | 50                           | 349     | 294  | 285  | 210  | 143  | 85    | 66    | 48    |
| External copper sheet 0.5 mm<br>Internal steel sheet 0.4 mm                       | 50                           | 497     | 363  | 282  | 204  | 131  | 96    | 71    | 50    |

|  | INSULATING CORE THICKNESS mm | SPAN mm |      |      |      |      |       |       |       |
|-------------------------------------------------------------------------------------|------------------------------|---------|------|------|------|------|-------|-------|-------|
|                                                                                     |                              | 1050    | 1400 | 1750 | 2100 | 2450 | 2800* | 3150* | 3500* |
| External steel sheet 0.5 mm<br>Internal steel sheet 0.4 mm                          | 60                           | 528     | 386  | 311  | 234  | 164  | 131   | 94    | 73    |
| External aluminium sheet 0.6 mm<br>Internal steel sheet 0.4 mm                      | 60                           | 419     | 355  | 353  | 258  | 177  | 105   | 83    | 60    |
| External copper sheet 0.5 mm<br>Internal steel sheet 0.4 mm                         | 60                           | 631     | 468  | 342  | 246  | 160  | 120   | 88    | 58    |

\* On grey facing, no foot traffic on spans

Deflection limit 1/200 ℓ

The indicated values, obtained after laboratory tests on panels not fixed to supports, take into account an adequate safety coefficient. We recommend, during the inspection for maintenance and roof cleaning, to be careful in order to avoid the sheet crush on the deepest ribs. It is recommended to wear shoes with rubber soles and carefully use the tools and / or equipments that could scratch the paint and the underlying zinc, impeding corrosion. It is recommended also to periodically inspect (at least once a year) the roof, to remove eventual wastes that could create unwanted stagnant water. The data's reported in the tables are only indicative. The designer has to check these data's according to the specific application.

**STANDARD LENGTHS**

| PANEL STANDARD LENGTHS mm |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |      |
|---------------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 2100                      | 2450 | 2800 | 3150 | 3500 | 3850 | 4200  | 4550  | 4900  | 5250  | 5600  | 5950  | 6300  | 6650  | 7000  | 7350  | 7700 |
| 8050                      | 8400 | 8750 | 9100 | 9450 | 9800 | 10150 | 10500 | 10850 | 11200 | 11550 | 11900 | 12250 | 12600 | 12950 | 13300 |      |

## PANELS WEIGHT

## ISODOMUS

## ISODOMUS PANELS WEIGHT (steel sheet)

| SHEET<br>THICKNESS | WEIGHT            | PANEL NOMINAL THICKNESS S mm |      |      |
|--------------------|-------------------|------------------------------|------|------|
|                    |                   | 40                           | 50   | 60   |
| 0,5                | kg/m <sup>2</sup> | 10,9                         | 11,3 | 11,7 |

## ISODOMUS MONO-SHEET PANELS WEIGHT (steel sheet)

| SHEET<br>THICKNESS | WEIGHT            | PANEL NOMINAL THICKNESS S mm |     |     |
|--------------------|-------------------|------------------------------|-----|-----|
|                    |                   | 40                           | 50  | 60  |
| 0,5                | kg/m <sup>2</sup> | 7,7                          | 8,1 | 8,5 |

## ISODOMUS CLASSIC

## ISODOMUS PANELS WEIGHT (steel sheet)

| SHEET<br>THICKNESS | WEIGHT            | PANEL NOMINAL THICKNESS S mm |      |      |
|--------------------|-------------------|------------------------------|------|------|
|                    |                   | 40                           | 50   | 60   |
| 0,5                | kg/m <sup>2</sup> | 11,2                         | 11,6 | 12,0 |

## ISODOMUS MONO-SHEET PANELS WEIGHT (steel sheet)

| SHEET<br>THICKNESS | WEIGHT            | PANEL NOMINAL THICKNESS S mm |     |     |
|--------------------|-------------------|------------------------------|-----|-----|
|                    |                   | 40                           | 50  | 60  |
| 0,5                | kg/m <sup>2</sup> | 8,0                          | 8,4 | 8,8 |

## THERMAL INSULATION

| K                          | PANEL NOMINAL THICKNESS S mm |      |      |
|----------------------------|------------------------------|------|------|
|                            | 40                           | 50   | 60   |
| W / m <sup>2</sup> K       | 0,36                         | 0,31 | 0,27 |
| Kcal / m <sup>2</sup> h °C | 0,32                         | 0,27 | 0,23 |

## THERMAL INSULATION

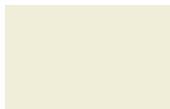
| K                          | PANEL NOMINAL THICKNESS S mm |      |      |
|----------------------------|------------------------------|------|------|
|                            | 40                           | 50   | 60   |
| W / m <sup>2</sup> K       | 0,36                         | 0,31 | 0,27 |
| Kcal / m <sup>2</sup> h °C | 0,32                         | 0,27 | 0,23 |

## DIMENSION TOLERANCE (in accordance with 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     |         |

L means the working length, D means the panels thickness and F means the sheets coupling

## AVAILABLE COLOURS (the colour should be chosen according to the final-use, the installation area and the standard thicknesses in stock)

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| bianco grigio                                                                       | bianco G9002                                                                        | bianco G9010                                                                        | avorio chiaro G1015                                                                 | testa di moro                                                                        | blu grigiastro G5008                                                                  | grigio antracite G7016                                                                |
|  |  |  |  |  |  |  |
| blu genziana G5010                                                                  | verde muschio G6005                                                                 | verde antico                                                                        | rosso ossido G3009                                                                  | rosso antico                                                                         | reale antico                                                                          |                                                                                       |
|  |  |  |  |  |  |                                                                                       |