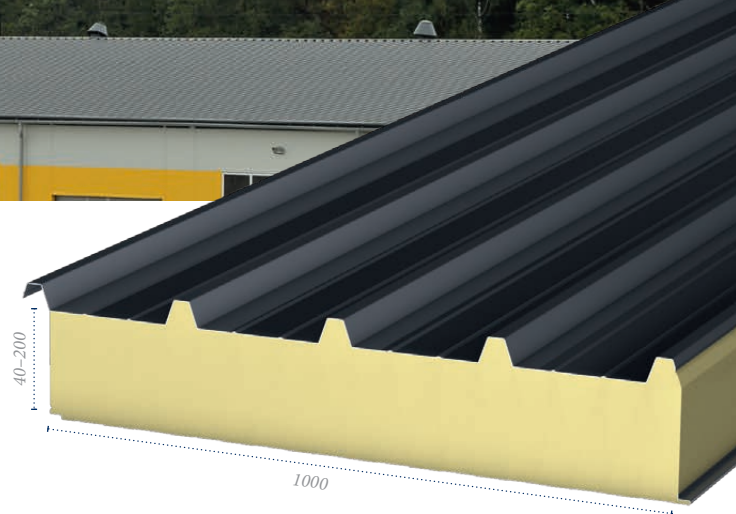


# Profiled panels with PIR core

TENAX TR PIR S

for roofs



## PRODUCT DESCRIPTION

Sandwich panels TENAX are manufactured in a wide range of thickness, with different thermal insulation cores, panel joints and profiling of the steel facings, all of which have a significant influence on the performance characteristics and the appearance of the structure. Sandwich panels TENAX with polyisocyanurate foam (PIR) core are particularly suitable for the structures with very high thermal performance and fire safety requirements, as well as for the structures with the risk of water condensation in the thermal insulation. Together with the sandwich panels TENAX the customer can also benefit from the panel design and calculation services, as well as instructions, detail drawings, accessories and materials necessary for panel handling and assembly.

## APPLICATION

Profiled sandwich panels TENAX TR are particularly designed for multi-span roof structures, with a minimum slope of 5°.

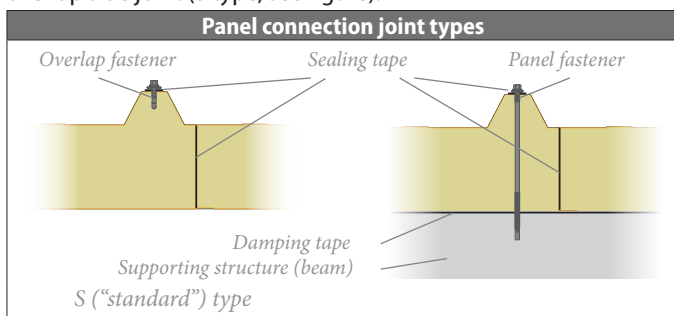
The storage, handling and assembly of the sandwich panels must be carried out strictly in accordance with the manufacturer's instructions (see Technical Guidelines).

## ADVANTAGES

- Excellent thermal performance (for the structure with an equivalent thermal resistance, two times thicker mineral wool panel is required).
- Very short delivery time, especially for the panels with polyester coating from the standard colour palette.
- Easy and fast assembly due to the small area weight.
- Possibility to install the PVC frame windows in the roof retaining the continuous profiling of the roof covering.

## PANEL CONNECTION JOINT

Profiled sandwich panels TENAX TR are manufactured with overlap side joint (S type, see figure).



For the panels with S type side joints, the profile of the lateral sides of the panels is designed to achieve a tight joint in the connections of the steel facings and thermal insulation after panel assembly.

Sandwich panels TENAX are available with gaskets integrated in the steel joints, which significantly improves the air, water and water vapour tightness of the structure.

## TECHNICAL DATA

Characteristic	Nominal value						
Panel width / cover width, mm	1065/1000						
Length, mm	from 2000 to 13500 (increment 10 mm)						
Height of profile, mm	40						
Pitch of profile, mm	250						
Thickness, mm	40	50	80	100	120	150	200
Design area weight, kg/m <sup>2</sup> (for steel thickness 0,5 mm/0,5 mm)	11,4	11,8	12,9	13,7	14,5	15,7	17,6
Thermal transmittance (U-value), W/m <sup>2</sup> ·K	0,49	0,40	0,25	0,20	0,17	0,14	0,10
Reaction to fire (class, EN 13501-1)	- B-s2,d0						

## ATTESTATION OF CONFORMITY

Sandwich panels TENAX comply with the European harmonized standard EN 14509 "Self-supporting double skin metal faced insulating panels – Factory made products - Specifications" and are marked with CE mark.

## PRODUCT DESIGNATION EXAMPLE

**TENAX TR100 PIR S11**

TENAX - product trademark

TR - profiled panel, mainly for roofs

100 - panel thickness, mm

PIR - core material of the sandwich panel (rigid polyisocyanurate foam)

S11 - type of the sandwich panel lateral joint

## PACKAGING

Sandwich panels are supplied in the rectangular packages with height up to 1,2 meters, wrapped with polyethylene shrinkage film and reinforced with polypropylene tension straps. Other types of packaging are possible.

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## TENAX TR PIR S

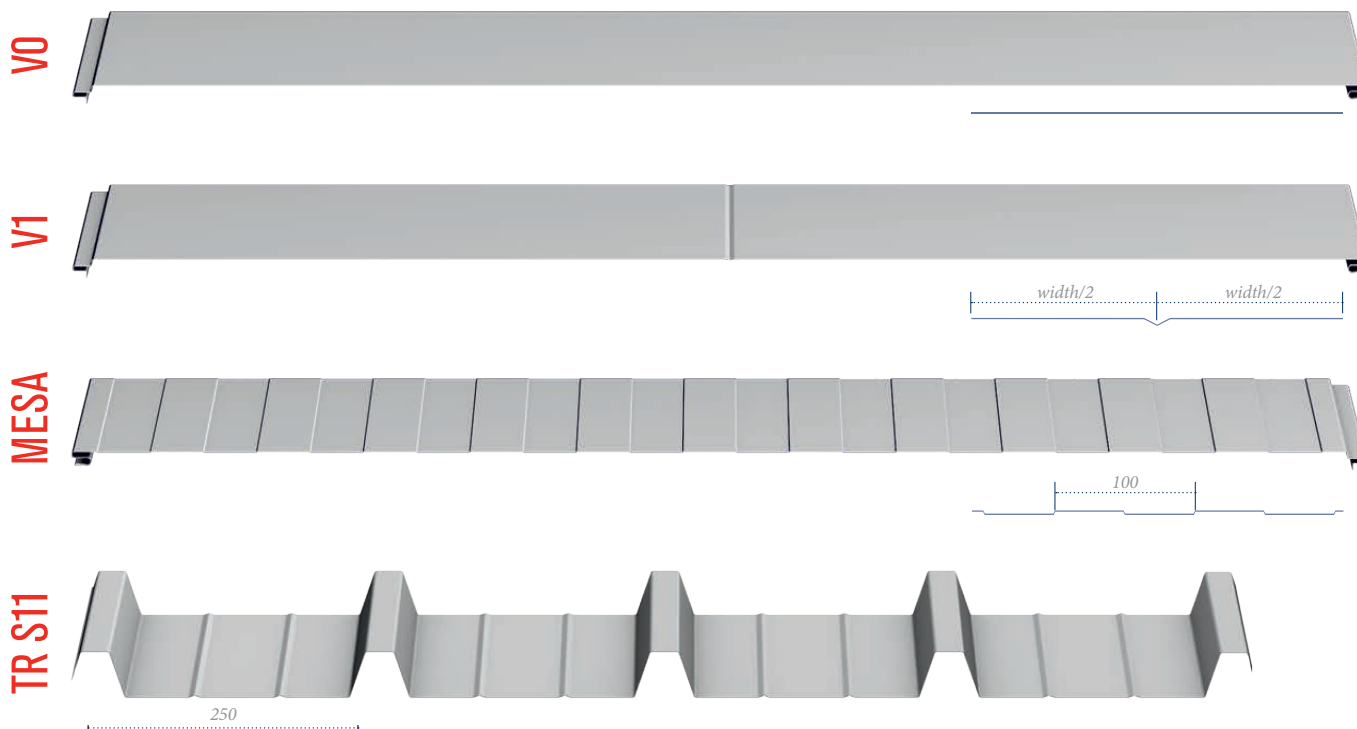
for roofs

### PROFILE OF THE STEEL FACINGS <sup>1), 2)</sup>

Panel facing	Profiling			
	V0	V1	MESA	TR40
Facing on the building's outer surface				✓
Facing on the building's inner surface	✓	✓	✓	

1) Dimensions and shape of the facing profiling are given below.

2) The given profiling relates to the panels cover width 1000.



### COATING AND COLOUR OF THE STEEL FACINGS

Sandwich panels are manufactured with polyester (SP), polyurethane (PUR), polyvinylidene chloride (PVDC) and plastisol (PVC) coatings. The lead times for the sandwich panels with 25 micron SP coating belonging to standard colour palette are significantly shorter.

#### RAL Standard colour palette

9010	9007	9006	9002	8017	7040	7035	7024
6020	5012	5010	3009	1021	1015	1002	

Other colours are available on request.

### LEGAL NOTES

The information given above and relating to the products manufactured by TENAPORS is based on the current knowledge and the experience of the manufacturer. This information remains valid only as long as the product is stored, handled and installed in accordance with manufacturer's recommendations.

TENAPORS reserves the rights to change the properties of its products. In all cases, the most recent version of the description applies. To get additional information on products manufactured by TENAPORS, please contact TENAPORS sales representative.