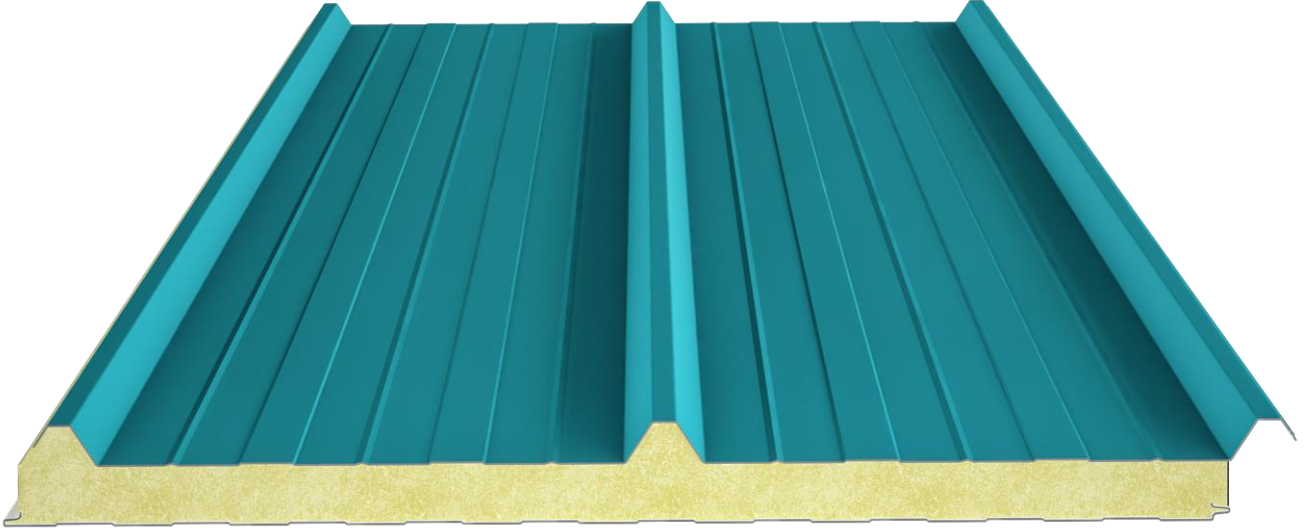


## Opti Panel PIR N3



### Product Description

Opti Panel PIR N3 3 is a three-rib lateral binned sandwich panel. It can be roofed with a slope of 7%. The biggest advantage is fast assembly thanks to the lateral binned panel joint.

### Place of Production

Istanbul, İskenderun, Balıkesir

### Fields of Application

Structures with steel or prefabricated concrete carrier system, such as

- Industrial Buildings
- Military Buildings
- Social Buildings
- Agricultural Buildings
- Sports facilities
- Worksite buildings
- Silos
- Hypermarkets
- Shopping malls
- Marketplace buildings
- Administrative buildings

The information provided herein about Assan Panel products, in particular advice on their application and end use, is given in good faith based on Assan Panel's current knowledge and experience of the proper handling, storage, treatment and application of these products under normal conditions and in accordance with Assan Panel's recommendations. The application surfaces and application areas for the products vary considerably in practice. For this reason, when using Assan Panel products, make sure that you apply the right product, under the right conditions, in the right way and in the right place, and strictly follow the information and instructions provided by Assan Panel regarding commercial suitability and/or suitability for a specific purpose. Otherwise, Assan Panel is not responsible for any damages that may occur. The user (user) of the product should test the suitability of the product for the application and purpose for which they intend to use the product. Assan Panel reserves the right to modify the specifications of its products. The property rights of third parties shall be respected. All orders are accepted on the basis of our current terms of sale and transportation. Users should always refer to the latest edition of the Local Product Data Sheet of the relevant product, which can be obtained by contacting Assan Panel.

## Performance Assessment

The best thermal insulation values.

Fast and smooth installation allows for saving both time and labor.

Polyisocyanurate does not retain water, it does not host any bacteria or pests.

It is eco-friendly as n-Pentane gas is used as blowing agent for polyisocyanurate.

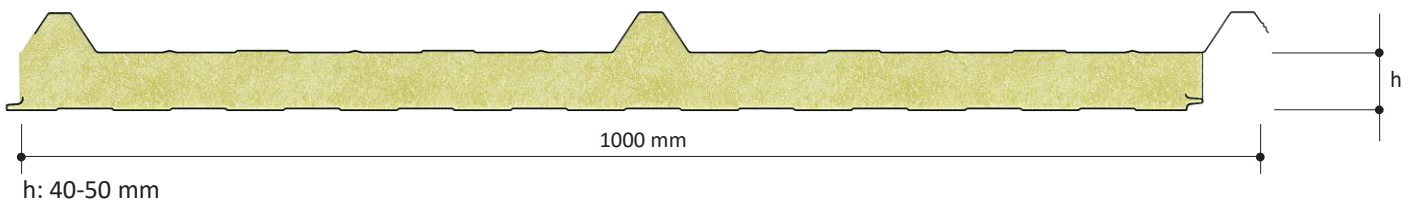
Does not require any additional coating such as plaster, paint, etc. thanks to its color surface

Color options are available in RAL catalog.

Exterior paint options (Polyester, PvdF, Plastisol, PVC, etc.) are available for application surface.

Applicable by minimum 7% elevation as roofing.

## Sizes



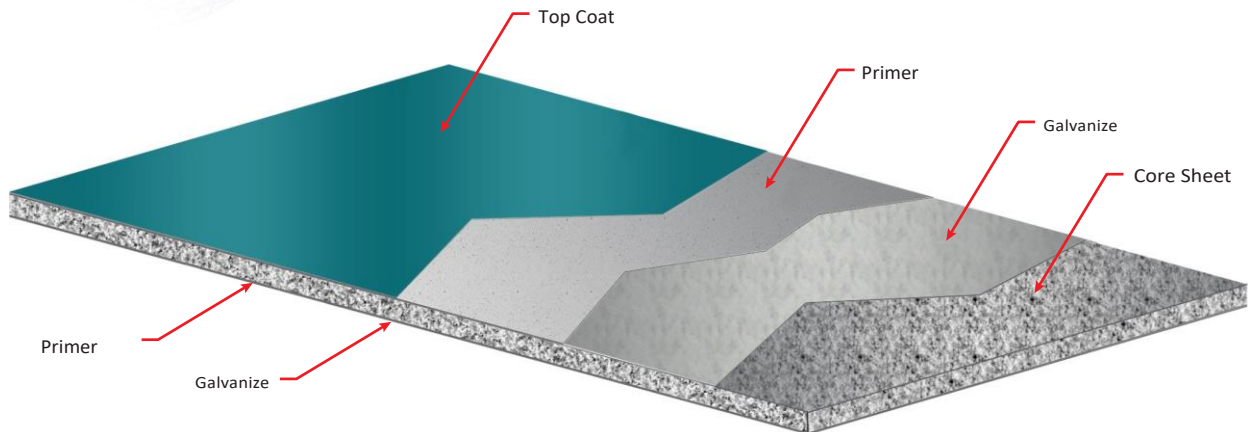
<b>Effective Width</b>	1000 mm
<b>Minimum length</b>	3 m
<b>Maximum length</b>	Depends on Shipping Conditions

## Polyisocyanurate (PIR)



<b>Polyisocyanurate Density (EN1602)</b>	38 (±2) kg/m <sup>3</sup>
<b>Polyisocyanurate Thickness</b>	40-50 mm
<b>Thermal Conductivity Coefficient (EN 13165)</b>	0.022-0.024 W/mK
<b>Dimensional Stability (EN 13165)</b>	DS Level (TH) 11
<b>Fire Classification (EN 13501)</b>	b.s2.d0
<b>Water absorption (EN ISO 354)</b>	2% by volume (168 hours)
<b>Closed-cell rate (EN 14509)</b>	95%
<b>Vapor Diffusion Resistance (EN 12086)</b>	30-100
<b>Temperature Resistance</b>	-200 /+110 °C

## Metal Surfaces



### Prepainted Galvanized Sheet Metal Surface

<b>Upper Metal Thickness</b>	0.50-0.70 mm
<b>Lower Metal Thickness</b>	0.40-0.70 mm
<b>Thickness Tolerance (EN 10143)</b>	Nominal
<b>Sheet Quality (EN 10327)</b>	DX51 D+Z Painted Galvanized Sheet (polyester finish on primer)
<b>Paint Type</b>	Polyester, PvdF, Plastisol, PVC

### Thermal Conductivity Values

Panel Thickness	U Thermal Conductivity (W/m <sup>2</sup> K)	R Thermal Conductivity (m <sup>2</sup> K /W)	R Thermal Conductivity (ft <sup>2</sup> °F h/Btu)
40 mm	0.497	2.011	11.418
50 mm	0.406	2.465	14.000

## Mechanical

<b>Yield Strength of Steel Surfaces</b>	min. 220 N/mm <sup>2</sup>
<b>Panel Tensile Strength</b>	min. 0.018 Mpa
<b>High-Temperature Transverse Tensile Modulus</b>	min. 0.04 Mpa
<b>Core Material Shear Resistance</b>	min. 0.11 Mpa
<b>Core Material Shear Modulus</b>	min. 1.5 Mpa
<b>Core Material Compression Resistance</b>	Min. 0.095 Mpa
<b>Creep Factor</b>	t=100.000 hours (Free Load): 7 t=100,000 hours (Snow Load): 2.4
<b>Shear Strength after Long Term Loading</b>	t:1.000 hours min. 35% t:2.000 hours min. 30% t:100.000 hours min. 7%
<b>Free Bending Moment Capacity</b>	min. 2.5 KNm/m (Straight) min. 1.5 KNm/m (Reverse)
<b>Free Torsional Stress</b>	min. 100 Mpa

## Tolerance Values

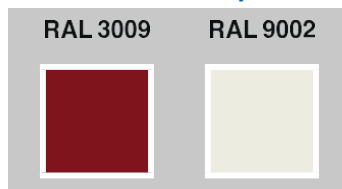
Panel Height	Panel Thickness	Panel Cover Width	Squareness Deviation
if L≤3000 mm., ±5 mm., if L>3000 mm., ±10 mm.	D ≤ 100mm ±2mm	±2mm for all profiles	0.6% of s ≤ nominal cover thickness / (Width (w) x 0.006)

## Standard Package Quantities

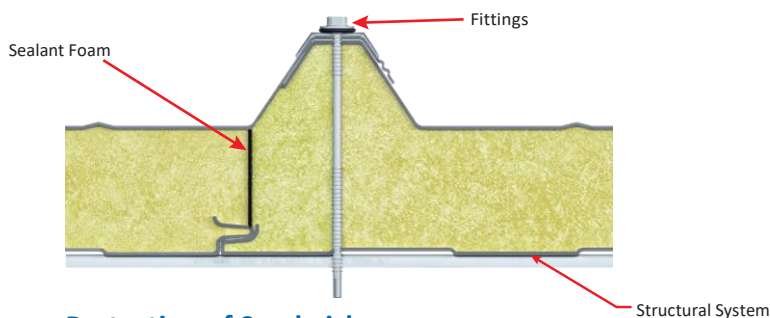
According to TSE EN 14509

Thickness (mm)	30	40	50
Quantity	22	20	16

## Standart Colour Options



## Joint Details



## Protection of Sandwich Panels

