

## N3 GRP Roof Panel



### Product Description

It is a three-indented lateral connected sandwich panel which is produced as pre-painted galvanize steel on top, with GRP on the bottom surface. Roofs with a 10% gradient can be covered. GRP panels are used in the facilities specifically in poultry farms where hygienic requirements are prioritized. Furthermore, it is a product that is mostly used for the facilities which has corrosion risk and for the projects requiring low budget solutions where a mechanical performance is not highly required. In order to facilitate the assembly of the product, tapes can be applied to the GRP part which is left long.

### Production Plant

Iskenderun

### Product Application

- Poultry Farms
  - Industrial Buildings
  - Military Buildings
  - Public Buildings
  - Agricultural Buildings
  - Sports Facilities
  - Construction Site Buildings
  - Silos
  - Hypermarkets
  - Shopping Centers
  - Storehouse Halls
- and all other concrete structures with steel or prefabricated load bearing systems.

## Performance Advantages

Best heat insulation values.

Fast and problem-free assembly saves both time and labor.

PIR does not keep water within its body and it does not accommodate bacteria and insects.

It has an environmentally friendly core filling.

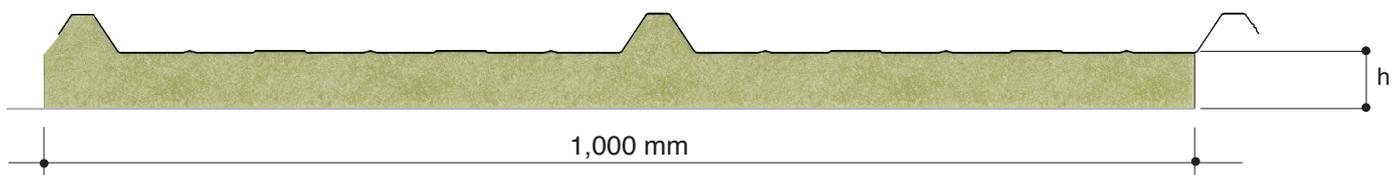
The colorful surface does not require additional coating like plaster or paint.

Color can be selected from the RAL catalogue.

There are surface paint options (Polyester, PvdF, Plastisol, PVC) suitable to the place of use.

Usable as a roof cover for minimum 10% slope

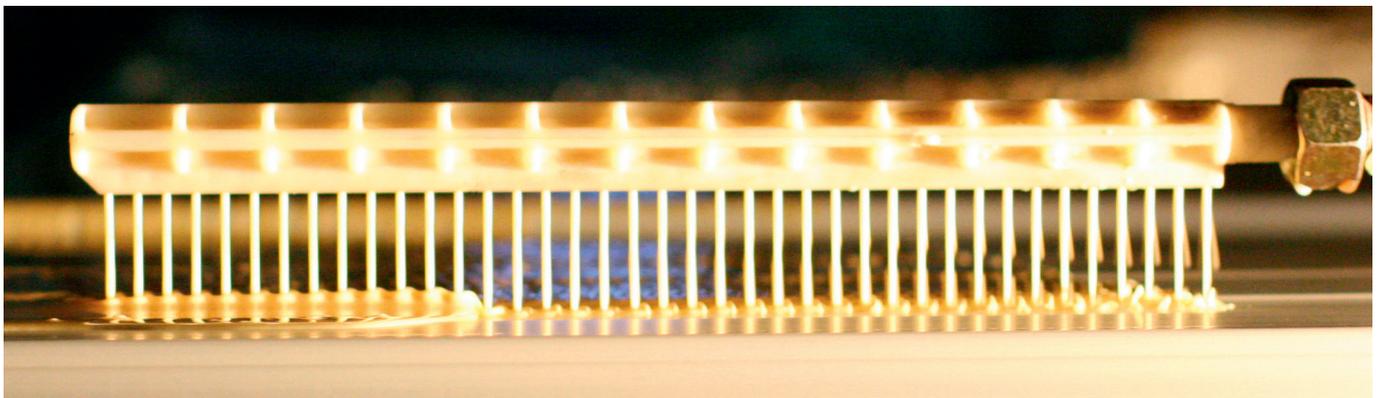
## Measurements



h: 40-50 mm

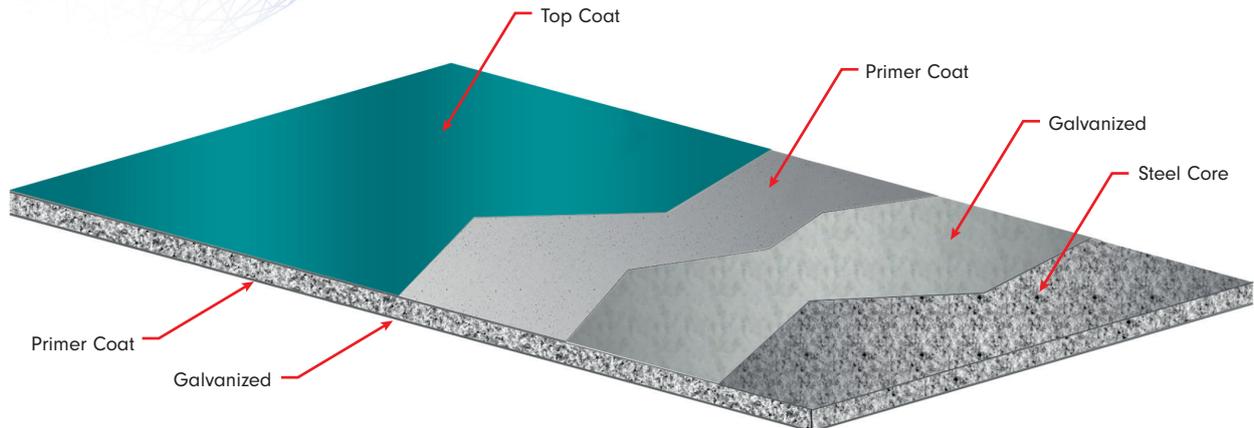
<b>Favourable Width</b>	1,000 mm
<b>Minimum Length</b>	3 meters
<b>Maximum Length</b>	9 meters

## SmartCore – PIR Elite – PIR



<b>Density (EN 1602)</b>	PIR: 40 (± 2) kg/m <sup>3</sup> & SmartCore-PIR Elite: 41 (± 2) kg/m <sup>3</sup>
<b>Thickness</b>	40-50 mm
<b>Thermal Conductivity (EN 13165)</b>	PIR Elite-PIR: 0.022-0.024 & SmartCore: 0.019 W/mK
<b>Dimensional Stability (EN 13165)</b>	Level DS (TH) 11
<b>Reaction to Fire (EN 13501)</b>	PIR Elite: B-s1,d0 & PIR: B-s2,d0
<b>Water Absorption (EN ISO 354)</b>	2% by volume (168 hrs)
<b>Closed Cell Rate (EN 14509)</b>	95%
<b>Vapour Diffusion Resistance (EN 12086)</b>	30-100
<b>Heat Resistance</b>	-200 /+110 °C

## Metal Surfaces



## Surfaces

Type	Prepainted Galvanized Steel
External Facing Thickness	0.50 mm
Thickness Tolerance (EN 10143)	Nominal
Steel Quality (EN 10327)	Dx51 D+Z Prepainted Galvanized Steel (last coat polyester paint on primer)
Paint Type	Polyester, PvdF, Plastisol, PVC

## Surfaces

Type	GRP
External Facing Thickness	0.70 mm
Glass amount (TS 1177/ISO 1172)	28.2%
Barcol Hardness (TS EN 59)	> 30-35%
Tensile Strength (ISO547-4/2/2)	54 N/mm <sup>2</sup>
Elongation at Break (ISO 547-4/2/2)	2.08%

## Thermal Conductivity

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	0.550	1.818	10.324
50 mm	0.440	2.273	12.905

## Tolerance Values

Panel Length	Panel Thickness	Panel Cover Width	Rectangularity
If L ≤ 3000 mm, - ±5 mm; If L > 3000 mm, ±10 mm	D ≤ 100 mm ±2 mm	±2 mm for all profiles	s ≤ 0.6% of the nominal cover thickness (w). / (Width x 0.006)

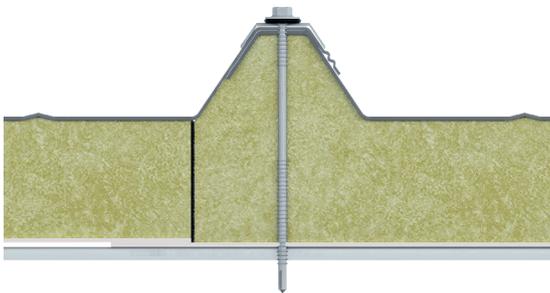
## Standard Package

Thickness (mm)	40	50
Quantity	20	18

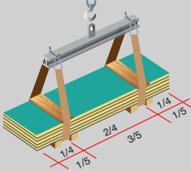
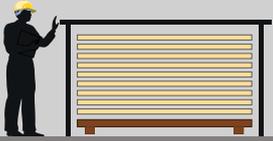
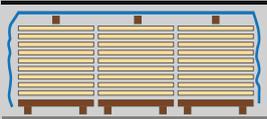
### Standard Colour Options



### Joint Details



### Transportation and Protection of Sandwich Panel

 <p>During hoisting, take precaution for the sling.</p>	 <p>Do not drag panels in a pile, or on the roof purlins. Lift panels from both ends when moving or laying in place.</p>	 <p>Panels to be stored on site for long periods should be stacked in covered areas. Wherever possible, always place stacks preferably on wooden wedges, against ground water.</p>	 <p>For shorter periods, stacks should be arranged on sloppy areas with a simple scaffolding and polyethylen cover, leaving space for ventilation. Place stacks on a simple wedge.</p>	 <p>Do not walk on panels.</p>
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