

N5M Membrane Roof Panel



Product Description

It is used in terrace roof covering. Bottom face of the panel is metal (pre-painted galvanized steel), whereas top surface is produced either with PVC membrane or TPO membrane. This way, after the assembly at the construction site, there is no need for covering water insulation material and it saves time and labour. The panels are connected to the bearing system with its own threaded screws. After that, the lug over the other panel is stuck by lamination method.

Production Plant

Istanbul, Balıkesir

Product Application

- Industrial Buildings
 - Military Buildings
 - Public Buildings
 - Agricultural Buildings
 - Sports Facilities
 - Construction Site Buildings
 - Silos
 - Hypermarkets
 - Shopping Centers
 - Storehouse Halls
 - Administrative Buildings
- 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.

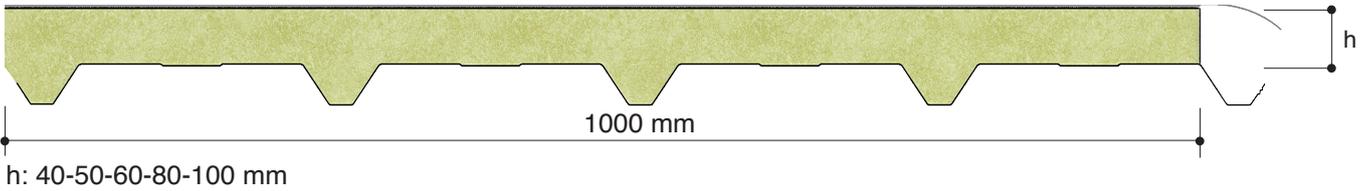
Color can be selected from the RAL catalogue.

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

It is highly demanded for heavy loads thanks to its 5-indented form.

It can be used with 1,5% slope as roof covering.

Ölçüler



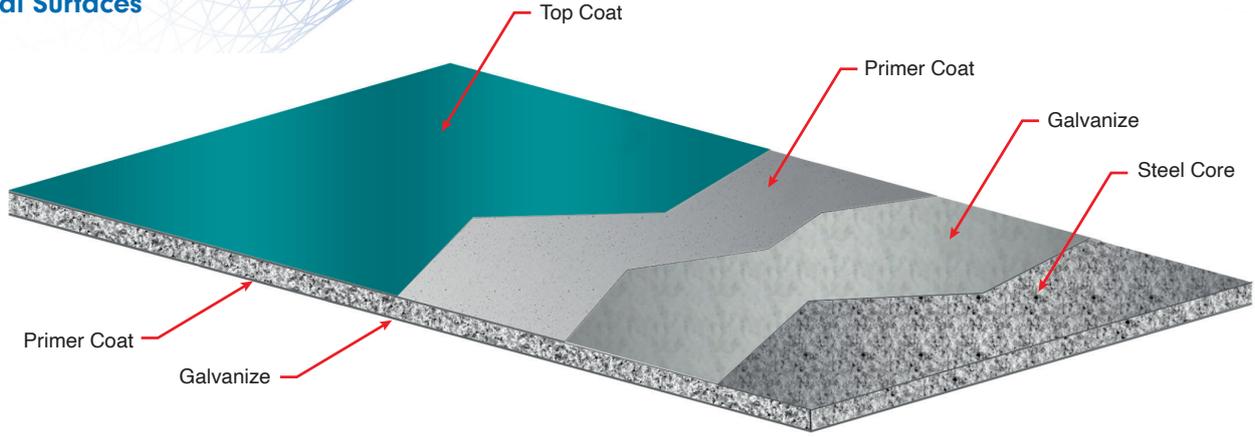
Favourable Width	1000 mm
Minimum Length	3 meters
Maximum Length	Depends on Transport Conditions

SmartCore - PIR Elite - PIR



Density (EN 1602)	PIR: 40 (±2) kg/m ³ & SmartCore-PIR Elite: 41 (±2) kg/m ³
Thickness	40-50-60-80-100 mm
Thermal Conductivity (EN 13165)	PIR Elite-PIR: 0,022-0,024 & SmartCore: 0,019 W/mK
Dimensional Stability (EN 13165)	Level DS (TH) 11
Reaction to Fire (13501)	SmartCore-PIR Elite: B-s1,d0 & PIR: B-s2,d0
Water Absorption (EN ISO 354)	By Volume 2% (168 hours)
Closed Cell Percentage (EN 14509)	95%
Vapour Diffusion Resistance (EN 12086)	30-100
Heat Resistance	-200 /+110 °C

Metal Surfaces



Prepainted Galvanized Steel Surface

Type	Prepainted Galvanized Steel
External Facing Thickness	0,40-0,80 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

PVC Membrane

Thickness	1,2 mm
Unit Weight on Field	1,55 kg/m ² ±5%
Tensile Strength	≥500 N/cm
Puncture Strength	≥450
Elongation at Break	≥80%
Tensile at 80 °C after 6 hours	≤-0,1%
Soğukta Bükülme	≤-20 °C
Hızlandırılmış Işın Yaşlanması (18.000 MJ/m ²)	No Cracks
Behaviour Under Hydrostatical Pressure, at 2 bar 24 hrs	Impermeable
Accelerated Ray Aging at 80 °C	≤-2,5%
Standard Appearance	Light grey, matte

Thermal Conductivity Values

Panel Kalınlığı	U Isıl Geçirgenlik (W/m ² K)	R Isıl Geçirgenlik (m ² K/W)	R Isıl Geçirgenlik (ft ² °F h/Btu)
40 mm	0,550	1,818	10,324
50 mm	0,440	2,273	12,905
60 mm	0,367	2,727	15,485
80 mm	0,275	3,636	20,647
100 mm	0,220	4,545	25,809

TSE EN 14509'a göre

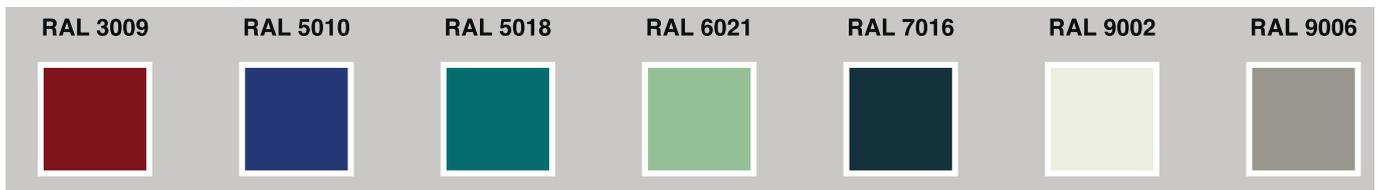
Tolerance Values

Panel Length	Panel Thickness	Panel Cover Width	Rectangularity
If $L \leq 3000$ mm., ± 5 mm If $L > 3000$ mm., ± 10 mm	$D \leq 100$ mm ± 2 mm	± 2 mm for all profiles	0.6% of $s \leq$ nominal cover thickness (Width x 0.006)

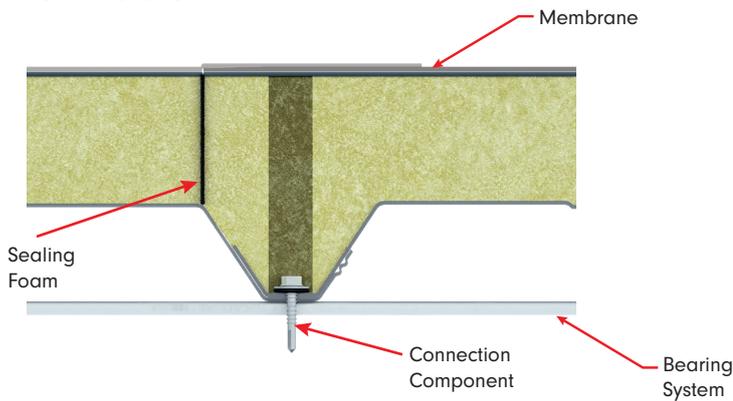
Standard Package

Thickness (mm)	40	50	60	80	100
Number	16	14	13	10	9

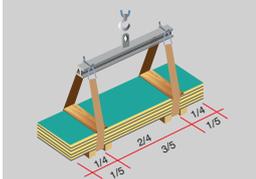
Standard Color Options



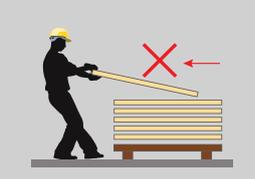
Joint Details



Transportation and Protection of Sandwich panel



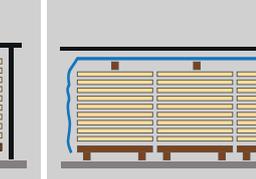
During hoisting take precaution for the sling.



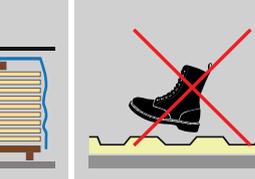
Do not drag panels in a pile, or on the roof purlins. Lift panels from both ends when moving or laying in place.



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.



For shorter periods, stacks should be arranged on sloppy areas with a simple scaffolding and polyethilen cover, leaving space for ventilation. Place stacks on a simple wedge.



Do not walk on panels.