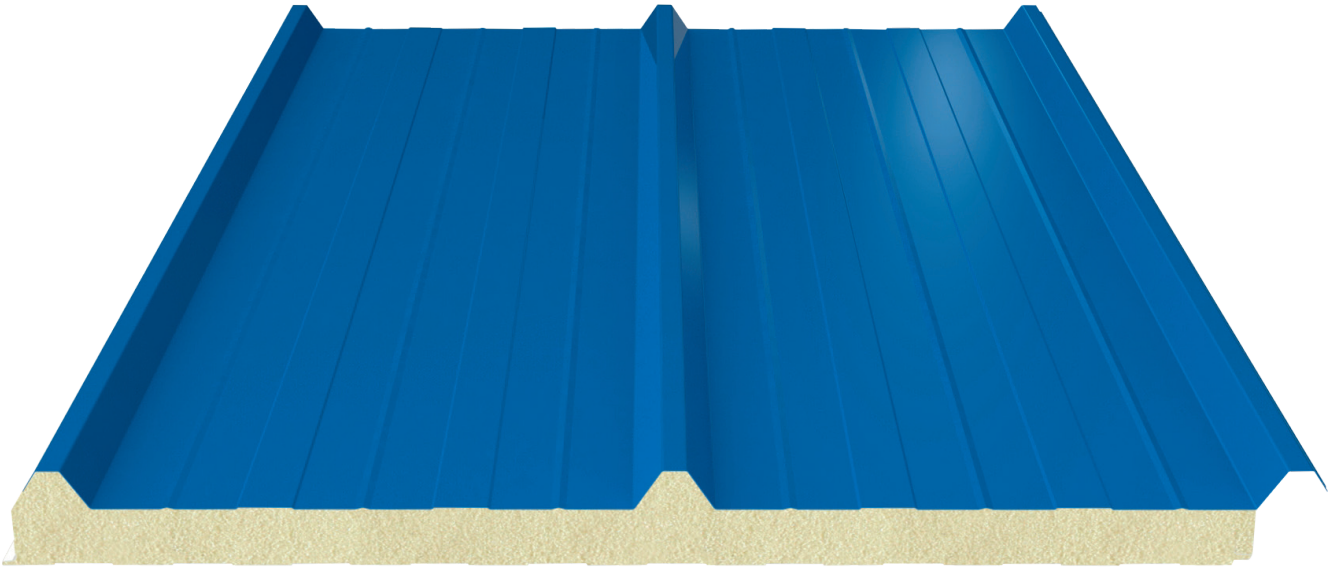


N3 Roof Panel



Product Information

It is a three-indented lateral connected sandwich panel. Roofs with a 10% gradient can be covered. Its biggest advantage is that it enables fast assembly thanks to lateral connected panel connection.

Production Plant

İstanbul, İskenderun, 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.

Thanks to n-Pentane which is used to inflate the Polyurethane, no damage is caused to nature.

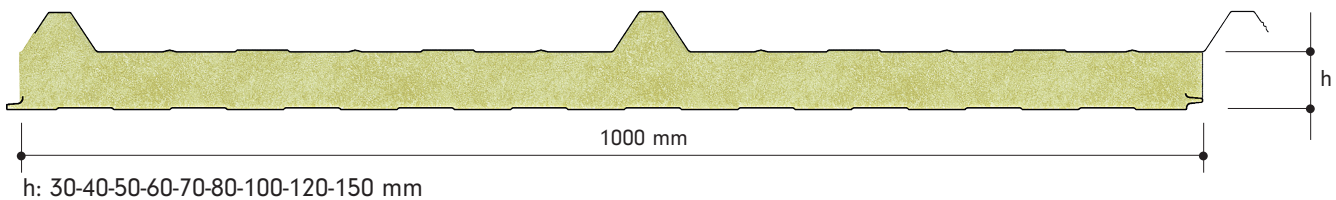
The colorful surface does not require additional coating like plaster or paint.

Color can be selected from the RAL catalogue.

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

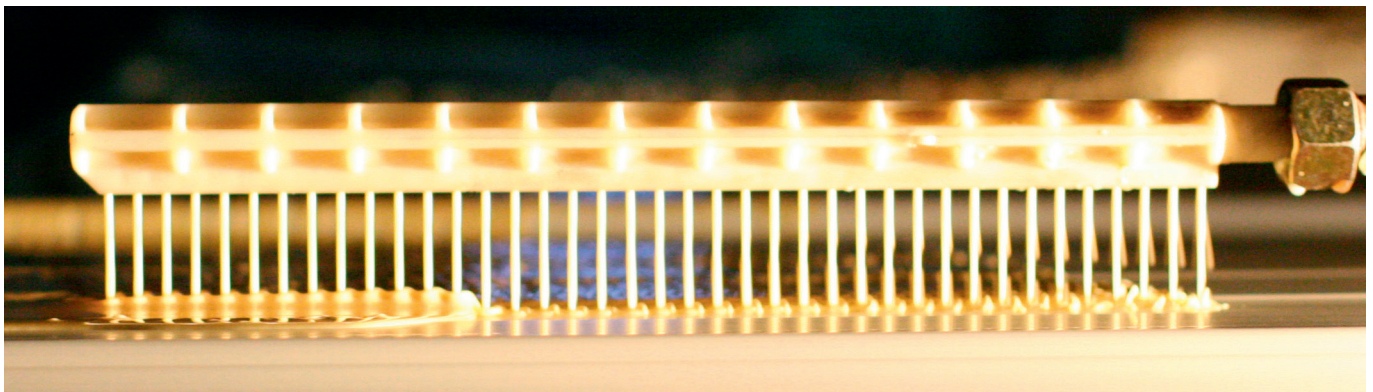
Usable as a roof cover for minimum 10% slope.

Measurements



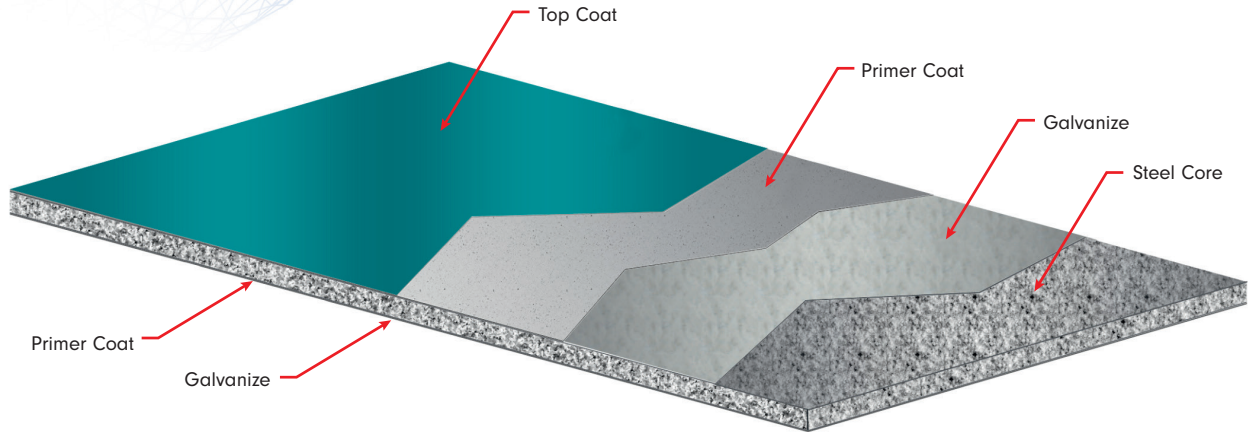
Favorable Width	1000 mm
Minimum Length	3 meters
Minimum Length	Depends on the transport conditions

SmartCore - PIR Elite - PIR



Density (EN 1602)	PIR: 40 (±2) kg/m ³ & SmartCore-PIR Elite: 41 (±2) kg/m ³
Thickness	30-40-50-60-70-80-100-120-150 mm
Thermal Conductivity (EN 13165)	PIR Elite-PIR: 0,022-0,024 & SmartCore: 0,018-0,019 W/mK
Dimensional Stability (EN 13165)	Level DS (TH) 11
Reaction to Fire (EN 13501)	SmartCore-PIR Elite: B-s1,d0 & PIR: B-s2,d0
Water Absorption (EN ISO 354)	2% by volume (168 hrs)
Closed cell rate (EN 14509)	95%
Vapour Diffusion Resistance (EN 12086)	30-100
Heat Resistance	-200 /+110 °C

Steel Surfaces



Prepainted Galvanized Steel Structure

External Facing Thickness	0,35-0,80 mm
Internal Facing Thickness	0,35-0,80 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

Load Bearing Tables

PPGS	PPGS	Double Span					
External Sheet Thickness (mm)	Internal Sheet Thickness (mm)	PIR (mm)	150 cm	200 cm	250 cm	300 cm	350 cm
0,5	0,4	30	280	132	74	46	31
0,5	0,4	40	361	184	110	72	50
0,5	0,4	50	424	229	142	96	68
0,5	0,4	60	485	271	174	121	88
0,5	0,4	70	531	308	204	145	107
0,5	0,4	80	607	358	240	173	129
0,5	0,4	100	730	447	308	227	173
0,5	0,4	120	838	529	373	279	216
0,5	0,4	150	1023	664	477	363	286

Thermal Conductivity Values

Panel Kalınlığı	U Isıl Geçirgenlik (W/m²K)	R Isıl Geçirgenlik (m²K/W)	R Isıl Geçirgenlik (ft² °F h/Btu)
30 mm	0,733	1,364	7,743
40 mm	0,550	1,818	10,324
50 mm	0,440	2,273	12,905
60 mm	0,367	2,727	15,485
70 mm	0,314	3,182	18,066
80 mm	0,275	3,636	20,647
100 mm	0,220	4,545	25,809
120 mm	0,183	5,445	30,971
150 mm	0,147	6,818	38,714

Mechanical Properties

Steel Surface Yield Strength	min. 220 N/mm ²
Panel Tensile Strength	min. 0,018 Mpa
Shear Strength of Core Material	min. 0,11 Mpa
Shear Strength of Core Material	min. 2,0 Mpa
Shear Strength of Core Material	min. 0,095 Mpa
Yield Coefficient	t=100.000 (hrs (Free Load): 7,0 t=100.000 (hrs(Snow Load): 2,4
Sheer Strength After Long-Continued Loading	t: 1.000 hrs min. 0,04 Mpa t: 2.000 hrs min. 0,03 Mpa t: 100.000 hrs min. 0,01 Mpa
Bending Moment Capacity in Span	min. 2,3 KNm/m (Upwards) min. 2,0 KNm/m (Downwards)
Torsion Stress in span	min. 100 Mpa (Upwards) min. 115 Mpa (Downwards)

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)

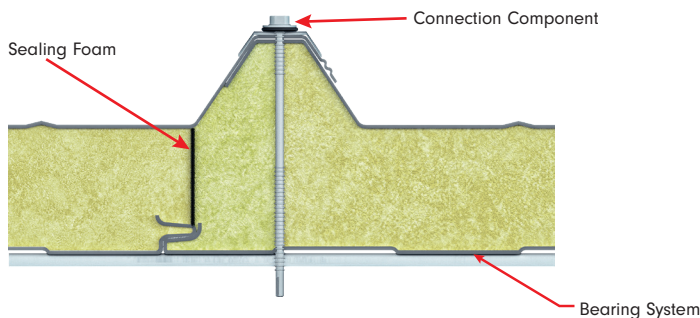
Standard Package

Thickness (mm)	30	40	50	60	70	80	100	120	150
Number	22	20	16	14	12	10	8	6	6

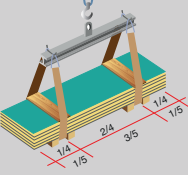
Standard Colour Options

RAL 3009	RAL 5010	RAL 5018	RAL 6021	RAL 7016	RAL 9002	RAL 9006
						

Joint Details



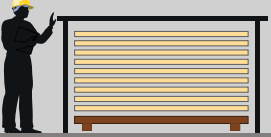
Transportation and Protection of Sandwich Panel



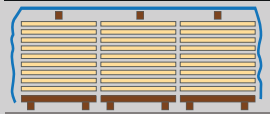
During hoisting take precaution for the sling.



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 polyethylen cover, leaving space for ventilation. Place stacks on a simple wedge.



Do not walk on panels.