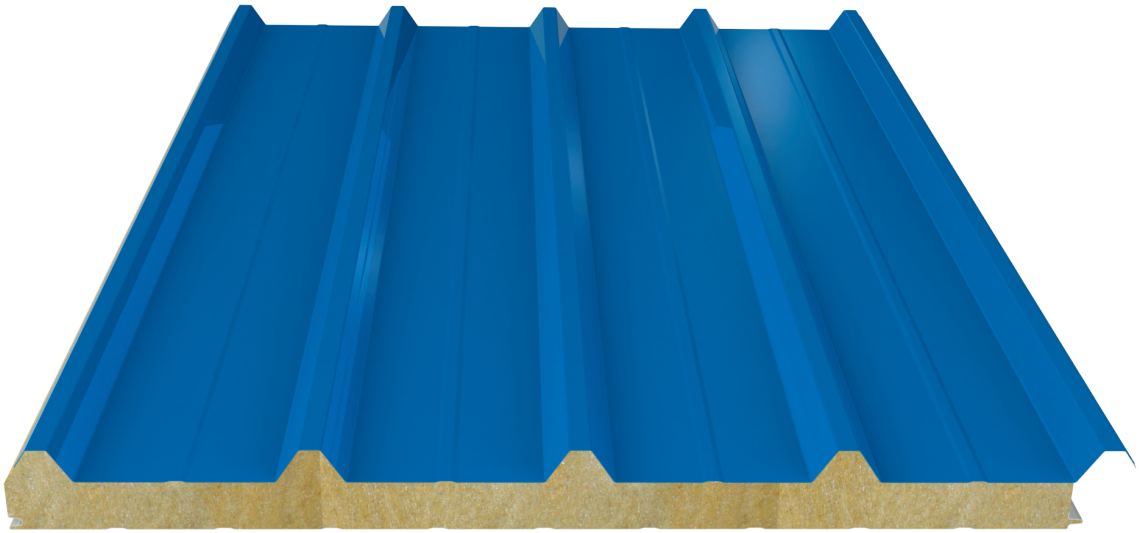
N5T Roof Panels



Product Information

It can be used safely in buildings where fire risk is high and in buildings where maximum fire resistance is required. With its five-ribbed form, it enables wide openings to be crossed safely. Roof covering with 10% slope The product, which can be made, provides advantages in fast assembly thanks to its lateral overlapping panel combination. Mineral wool inner filling It offers high acoustic performance thanks to its material.

Production Plant

Balıkesir

Product Application

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

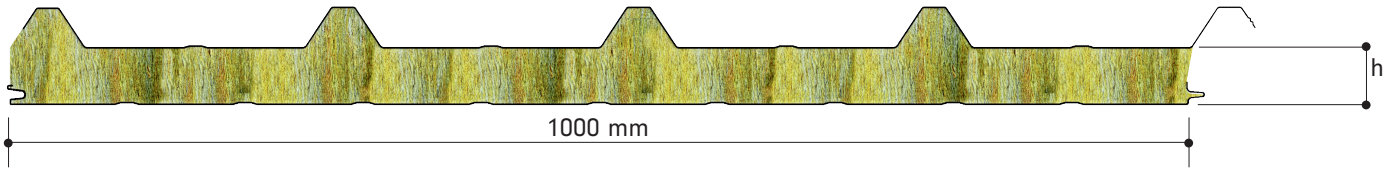
and all other concrete structures with steel or prefabricated load bearing systems.

EN.PRR.N5T.02

Performance Advantages

It has the best fire resistance values.
Fast and trouble-free installation saves both time and labor.
It has high performance in sound insulation as well as heat insulation.
Thanks to its colorful surface, there is no need for additional coatings such as plaster or paint.
There are surface paint (Polyester, PvdF, Plastisol, PVC) options suitable for the place of use.
Color selection can be made from the RAL catalogue.
It does not deteriorate, rot or mold over time.
Sound insulation performance is high.
It can be used as a roof covering with a minimum slope of 7%.

Measurements



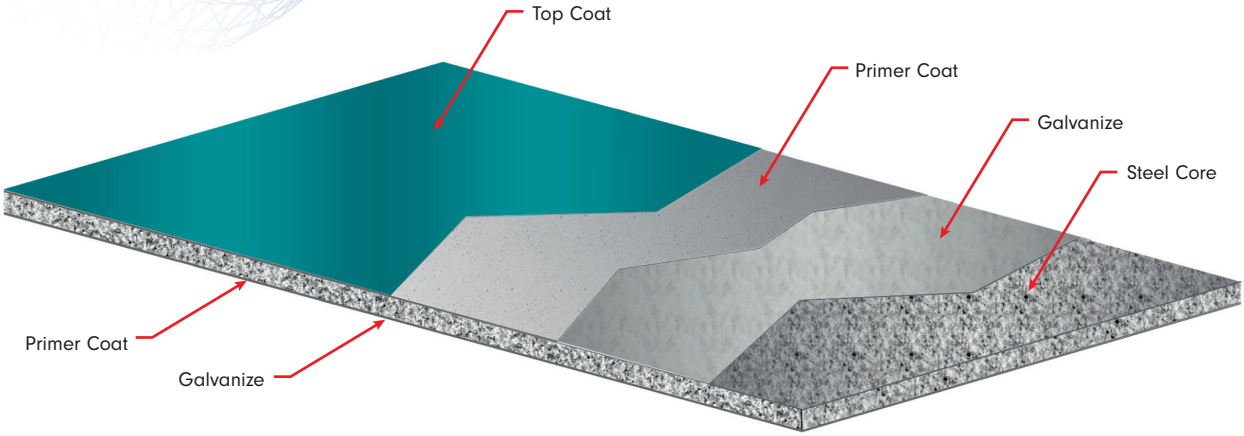
h: 50-60-70-80-100-120-130-150 mm

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

Mineral Wool

Mineral Wool Density	100 (±10) kg/m^3
Mineral Wool Thickness	50-60-70-80-100-120-130-150 mm
Heat Insulation Coefficient	0,043 W/mK
Inflammability Class (EN 13501-1)	A1
Water Absorption	%2 by volume
Heat Resistance	600 °C
Sound Insulation Rw (dB) ≥	30
Water Vapor Diffusion (EN 12086)	1

Metal Surfaces



Prepainted Galvanized Steel Surface

Metal Type	Prepainted Galvanized Steel
External Facing Thickness	0,55-0,80 mm
Internal Facing Thickness	0,50-0,80 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 / Span Table

PPGS	PPGS	Mutli Span					
External Sheet Thickness (mm)	**Internal Sheet Thickness (mm)**	**Mineral Wool Thickness (mm)**	**150 cm**	**200 cm**	**250 cm**	**300 cm**	**350 cm**
0,5	0,5	50	498	261	160	108	76
0,5	0,5	60	556	301	191	132	96
0,5	0,5	70	614	343	223	157	116
0,5	0,5	80	672	386	255	183	138
0,5	0,5	100	789	470	320	235	180
0,5	0,5	120	906	556	386	288	224
0,5	0,5	130	965	599	419	315	246
0,5	0,5	150	1082	684	486	369	290

Load Values: kg/m² • Limit Value: L/200 • PPGS: Prepainted Galvanized Sheet

Mineral Wool Thermal Conductivity

Panel Thickness	U Thermal Conductivity (W/m²K)	R Thermal Conductivity (m²K/W)	R Thermal Conductivity (ft2 °F h/Btu)
50 mm	0,840	1,190	6,760
60 mm	0,700	1,429	8,111
70 mm	0,600	1,667	9,463
80 mm	0,525	1,905	10,815
100 mm	0,420	2,381	13,519
120 mm	0,350	2,857	16,223
130 mm	0,323	3,095	17,575
150 mm	0,280	3,571	20,279

According to TS EN 14509

Mechanical Properties

Steel Faces Yield Strength	min. 220 N/mm^2
Panel Tensile Strength	min. 0,018 Mpa
Panel Horizontal Tensile Strength	min. 0,03 Mpa
Shear Strength of Core Material	min. 3,0 Mpa
Shear Modulus of Core Material	min. 0,05 Mpa
Bending Moment Capacity in Span	min. 1,8 KNm/m (Upwards) min. 1,5 KNm/m (Downwards)
Slip Strength After Long-Term Loading	t:1.000 hours min. 0,02 Mpa t:2.000 hours min. 0,019 Mpa t:100.000 hours min. 0,017 Mpa
Torsional Stress in Span	min. 40 Mpa (Downwards) min. 50 Mpa (Upwards)

According to TS EN 14509

Tolerance Values

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

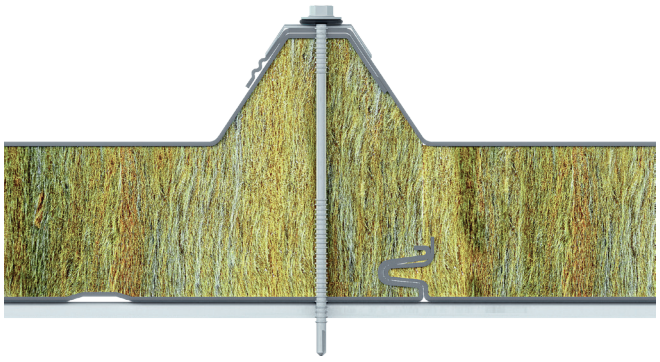
Standard Package

Thickness (mm)	50	60	70	80	100	120	130	150
Number	14	12	10	10	8	6	6	6

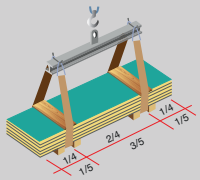
Standard Color Options

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

Joint Details

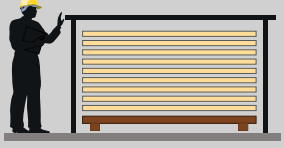


Transportation and Protection of Sandwich panel

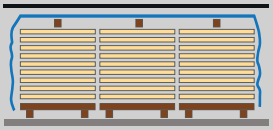


During hoisting take precaution for the sling.

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 strored 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.