N5TM Membrane Roof Panel

Product Information

In particular, thanks to the tongue-and-groove form of the upper metal and its close fit, it closes the thermal insulation weakness caused by the gap that may occur between the core materials after the connection. It eliminates the risk of possible condensation in the structure. The membrane mineral wool sandwich panel offers high fire resistance performance due to its fire-class mineral wool filling. Since it is filled with mineral wool, its sound insulation performance is higher than other organic-filled sandwich panel systems. Coating material with higher acoustic performance is obtained if perforated sheet metal is preferred as the bottom metal. Unlike on-site application systems, it provides architectural visuality as no exposed screws are visible on the interior ceiling surface.

Production Plant

Balıkesir

Product Application

- Sanayi yapıları
- Askeri yapılar
- Sosyal yapılar
- Zirai yapılar
- Spor tesisleri
- Şantiye binaları
- Silolar
- Hipermarketler
- Alışveriş merkezleri
- Hal binaları
- İdari binalar

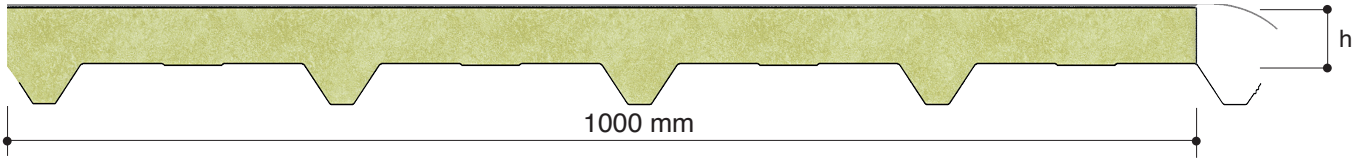
gibi taşıyıcı sistemi çelik veya prefabrike beton olan yapılarda kullanılır.

EN_PRR_N5TM.02

Performance Advantages

The best fire resistance capacity.
Fast and problem-free assembly saves both time and labor.
High performance in both heat and sound insulation.
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.
Does not develop defects, rot or mold over time.
High sound insulation performance.

Measurements



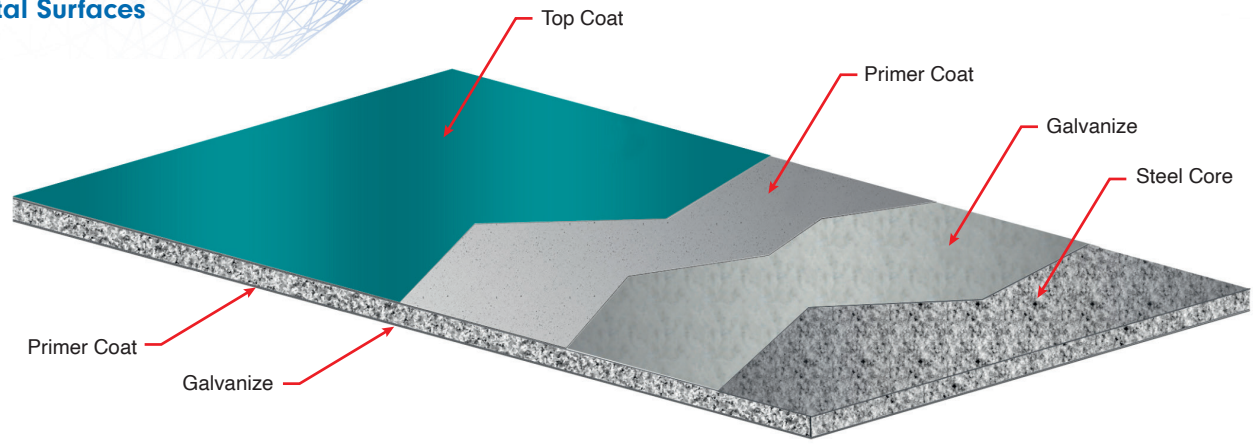
h: 50-60-80-100 mm

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

Mineral Wool

Mineral Wool Density	100 (±10) kg/m^3
Mineral Wool Thickness	50-60-80-100 mm
Heat Insulation Coefficient	0,043 W/mK
Inflammability Class (EN 13501-1)	A1
Water Absorption	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

PVC Membrane

Thickness	1,2 mm
Unit Weight in Area	1,55 kg/m² ±5%
Tensile Strength	≥500 N/cm
Puncture Strength	≥450
Elongation at Break	≥80%
Shrinkage after 6 hours at 80 °C	≤-0,1%
Bending in Cold	≤-20 °C
Accelerated Beam Aging (18,000 MJ/m²)	No cracks
Behavior under Hydrostatic Pressure, 24 hours at 2 bar	Impermeable
Accelerated Beam Aging 56 days at 80 °C	≤-2,5%
Standard View	Light grey, mat

Mineral Wool Thermal Conductivity

Panel Thickness	U Thermal Conductivity (W/m²K)	R Thermal Conductivity (m²K/W)	R Thermal Conductivity (ft² °F h/Btu)
50	0,840	1,190	6,760
60	0,700	1,429	8,111
80	0,525	1,905	10,815
100	0,420	2,381	13,519

According to TS EN 14509

Tolerances

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

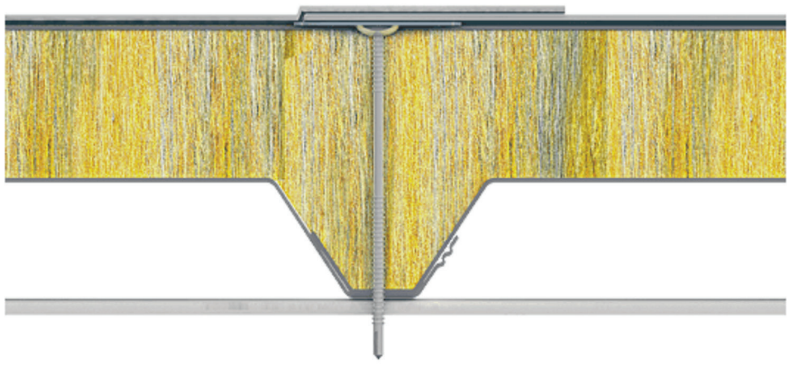
Standard Package

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

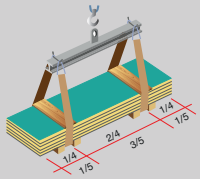
Standard Color Options

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

Joint Details

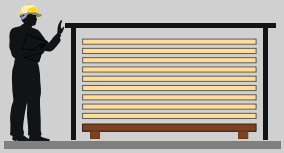


Transportation and Protection of Sandwich Panel

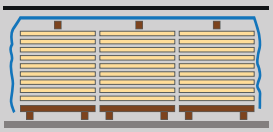


During hoisting take precaution for the sling.

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.