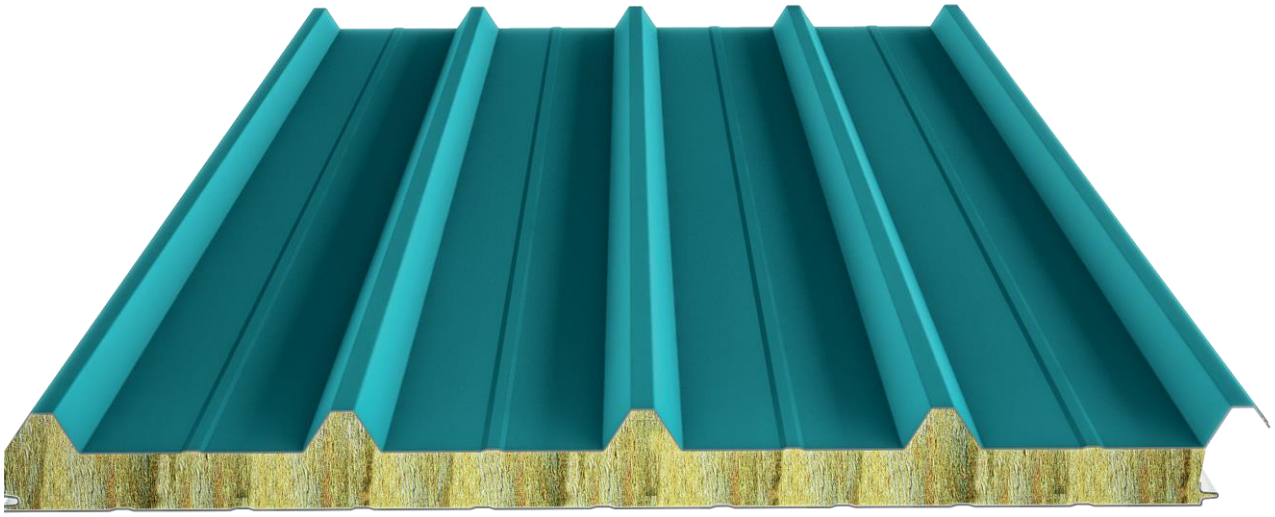
OPTİ 5T Roof Panel



Product Description

It can be safely used in buildings with high fire risk and in buildings where maximum fire resistance is required, while its five-rib form allows wide openings to be safely crossed. Roofing can be done with a 10% slope. Provides advantages in fast assemblies thanks to its lateral binned panel combination. Offers high acoustic performance thanks to its rockwool inner filling material.

Place of Production

Balıkesir

Fields of Application

Structures with steel or prefabricated concrete carrier system, such as:

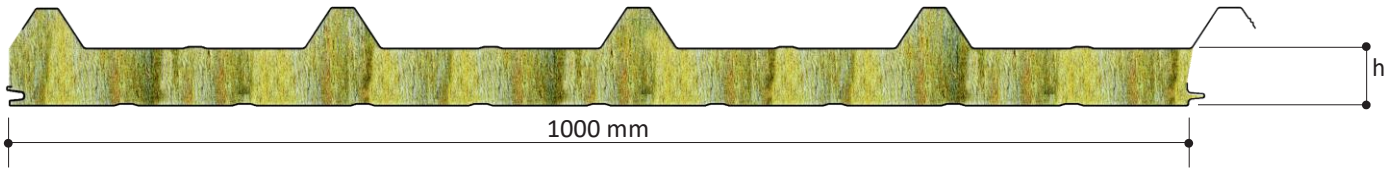
- Industrial Buildings
- Military Buildings
- Social Buildings
- Agricultural Buildings
- Sports facilities
- Worksite buildings
- Silos
- Hypermarkets
- Shopping malls
- Marketplace buildings
- Administrative buildings

N5T 1701

Performance Assessment

Offers the best fire resistance values.
Fast and smooth installation allows for saving both time and labor.
Provides high-quality sound insulation as well as thermal insulation.
Does not require any additional coating such as plaster, paint, etc. thanks to its color surface.
Exterior paint options (Polyester, PvdF, Plastisol, PVC, etc.) are available for application surface.
It does not degrade, rot or mold over time.
High sound insulation performance.
Applicable by minimum 10% elevation as roofing.

Sizes



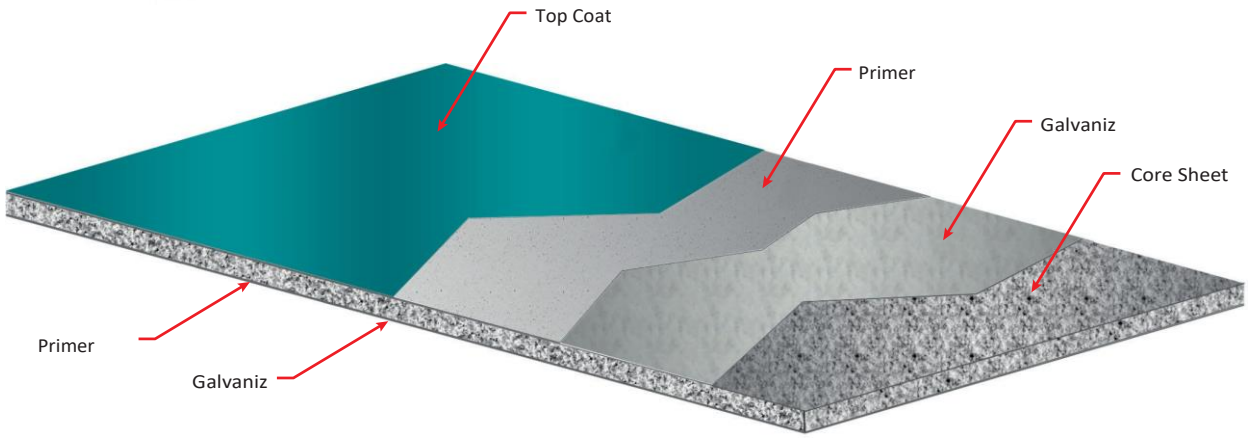
h: 50-60 mm

Effective Width	1000 mm
Minimum length	3 meter
Maximum length	Depends on Shipping Conditions

Rockwool

Rockwool Density	95 (±10) kg/m³
Rockwool thickness	50- 60 mm
Heat Conduction Coefficient	0.033 W/mK
Fire Classification (EN 13501-1)	A1
Water absorption	2 by volume
Temperature Resistance	600 ºC
Acoustic Insulation Rw [dB] ≥	30
Water Vapor Diffusion (EN 12086)	1

Metal Surfaces



Prepainted Galvanized Sheet Metal Surface

Metal Type	Prepainted Galvanized Sheet
Upper Metal Thickness	0.50 mm
Lower Metal Thickness	0.40 mm
Thickness Tolerance (EN 10143)	Nominal
Sheet Quality (EN 10327)	DX51 D+Z Painted Galvanized Sheet (polyester finish on primer)
Paint Type	Polyester, PvdF, Plastisol, PVC

Thermal Conductivity Values

Rockwool Thermal Conductivity Values

Panel Thickness	U Thermal Conductivity (W/m^2K)	R Thermal Conductivity (m^2K/W)	R Thermal Conductivity (ft^2 °F h/Btu)
50 mm	0.585	1.708	9.698
60 mm	0.497	2.011	11.418

According to TSE EN 14509

Mechanical

Yield Strength of Steel Surfaces	min. 220 N/mm^2
Panel Tensile Strength	Min. 0.018 Mpa
High-Temperature Transverse Tensile Modulus	min. 0.04 Mpa
Core Material Shear Resistance	min. 0.06 Mpa
Core Material Shear Modulus	min. 3.0 Mpa
Core Material Compression Resistance	min. 0.07 Mpa
Free Bending Moment Capacity	min. 2.5 KNm/m (Straight) min. 1.5 KNm/m (Reverse)

According to TSE EN 14509

Tolerance Values

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

Standard Package Quantities

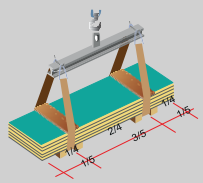
Thickness (mm)	50	60
Quantity	14	12

Standart Colour Options

RAL 9002

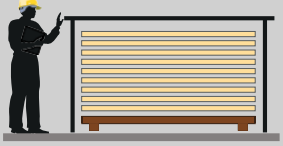
Joint Details

Protection of Sandwich Panels

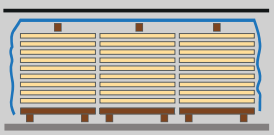


When lifting by crane, protect the material from sling crushing and place the lower carriers to the proper dimensions.

Stowed panels should be lifted at both ends if the panel is short, and at the ends and in the middle if the panel is long. Do not drag the panel. Dragging can cause scratches, especially on painted panels.



Even in short periods of time, protect the panels from external factors, and if possible, choose an area with very little slope to prevent water accumulation.



Panels to be stored on site for long periods should be stacked in covered areas, if possible.

Do not step on panels.