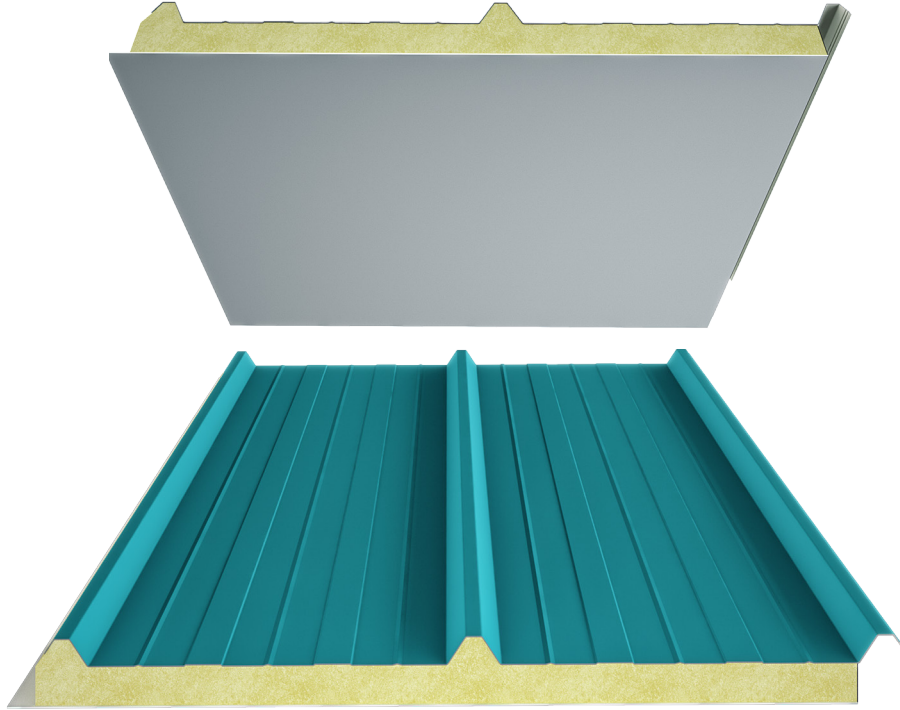


## N3 CTP Roof Panel



### Product Description

It is a three-indented lateral connected sandwich panel which is produced as pre-painted galvanized steel on top, with CTP on the bottom surface. Roofs with a 10% gradient can be covered. CTP panels are used in the facilities specifically in poultry farms where hygienic requirements are prioritized. Furthermore, it is a product that is mostly used for the facilities which has corrosion risk and for the projects requiring low budget solutions where a mechanical performance is not highly required. In order to facilitate the assembly of the product, tapes can be applied to the CTP part which is left long.

### Production Plant

Balıkesir

### Product Application

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

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.

Polyurethane 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.

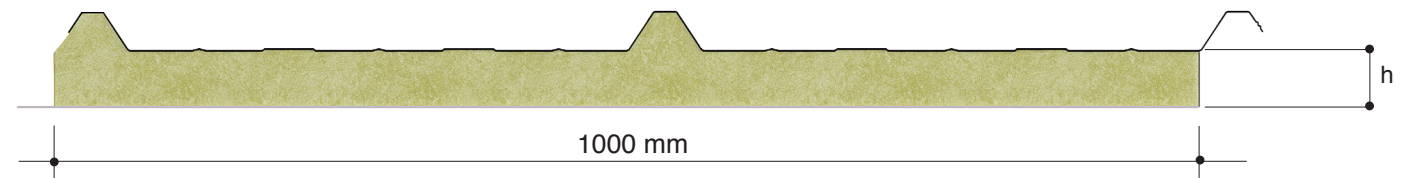
The colorful surface does not require additional coating like plaster or paint.

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



h: 40-50 mm

<b>Favourable Width</b>	1000 mm
<b>Minimum Length</b>	3 meters
<b>Maximum Length</b>	9 meters

## Polyurethane (PUR) – Polyisocyanurate (PIR)



## Surfaces

### Prepainted Galvanized Steel Surface

<b>Type</b>	Prepainted Galvanized Steel
<b>External Facing Thickness</b>	0,50 mm
<b>Thickness Tolerance (EN 10143)</b>	Nominal
<b>Steel Quality (EN 10327)</b>	Dx51 D+Z Prepainted Galvanized Steel (last coat polyester paint on primer)
<b>Hot Dipped Coated Steel Grade (EN 10327)</b>	100-275 gr/m <sup>2</sup>
<b>Paint Type</b>	Polyester, PvdF, Plastisol, PVC

## Surfaces

### Fiberglass Reinforced Polyester Surface

Type	CTP
External Facing Thickness	0,70 mm
Glass amount (TS 1177/ISO 1172)	28,2%
Barcol Hardness (TS EN 59)	>30-35%
Tensile Strength ( ISO547-4/2/2)	54 N/mm <sup>2</sup>
Elongation at Break (ISO 547-4/2/2)	2,08%

## Load Bearing Tables

BGS	CTP								
External Sheet Thickness (mm)	Internal Sheet Thickness (mm)	PUR (mm)	100 cm	125 cm	150 cm	175 cm	200 cm	225 cm	250 cm
0,5	0,7	40	560	386	275	228	185	138	104
0,5	0,7	50	596	421	320	257	205	154	119

Load : kg/m<sup>2</sup> \*Deflexion: L/200 •BGS: Prepainted Galvanized Sheet

## Thermal Conductivity

### Polyurethane Thermal Conductivity Values

Panel Thickness	U Thermal Conductivity (W/m <sup>2</sup> K)	R Thermal Conductivity ( m <sup>2</sup> K/W)	R Thermal Conductivity (öft2 °Fh/Btu)
40 mm	0,497	2,011	11,418
50 mm	0,406	2,465	14,000

According to TSE EN 14509.

## Mechanical Properties

Steel Surface Yield Strength	min. 220 N/mm <sup>2</sup>
Panel Tensile Strength	min. 0,018 Mpa
Panel Tensile Modulus at Elevated Temperature	min. 0,04 Mpa
Shear Strength of Core Material	min. 0,11 Mpa
Shear Modulus of Core Material	min. 1,5 Mpa
Compressive Strength of Core Material	min. 0,095 Mpa
Yield Coefficient	t=100.000 (hrs (Free Load) t=100.000 (hrs (Snow Load): 2,4
Sheer Strength After Long-Continued Loading	t: 1.000 saat min. 35% t: 2.000 saat min. 30% t: 100.000 saat min. 7%
Bending Moment Capacity in Span	min. 2,5 KNm/m (Upwards) min. 1,5 KNm/m (Downwards)
Açıklıkta Burulma Gerilmesi	min. 100 Mpa

According to TSE EN 14509.








### Tolerance Values

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

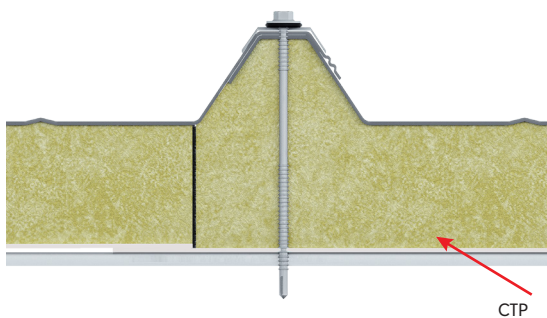
### Standard Package

Thickness (mm)	40	50	80	100	120	130	150
Number	20	18	10	9	8	7	6

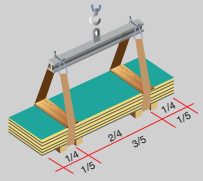
### Standard Colour Options

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


### Joint Details



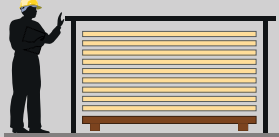
### Transportation and protection of sandwich panel



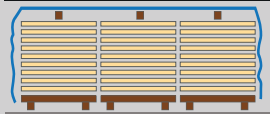
During hoisting take precaution for the sling.




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



Panel's 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 coverleaving space for ventilation. Place stacks on a simple wedge.



Do not walk on panels.