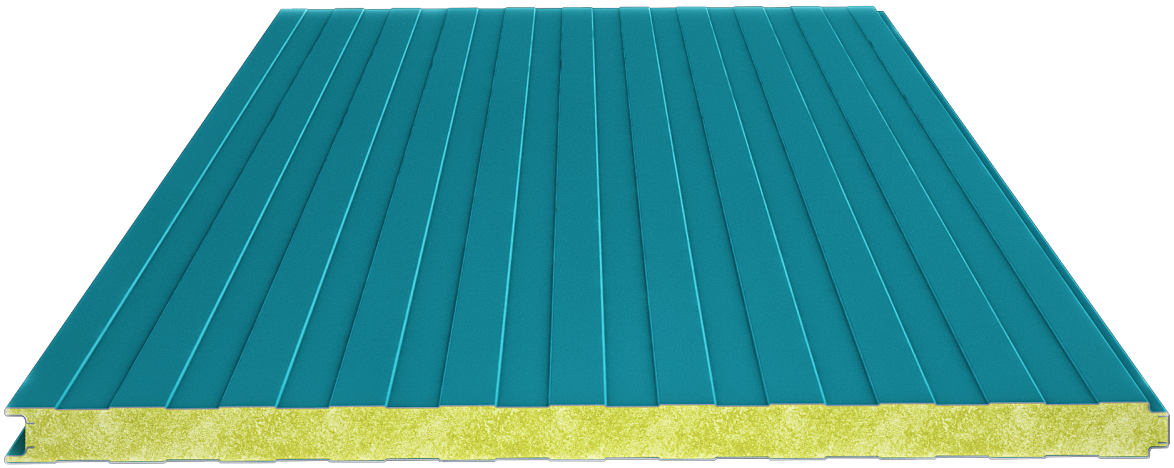
W Prefabricated Wall Panel



Product Description

In addition to the durable attachment it provides with double sided tongue-in-groove sections, the fast assembly capability make these panels preferable for prefabricated buildings . Generally produced in micro pressed form to achieve an aesthetic appearance for walls. The ability to use them both laterally and vertically provides assembly flexibility and good solutions for designers.

Production Location

İstanbul, İskenderun

Product Application

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

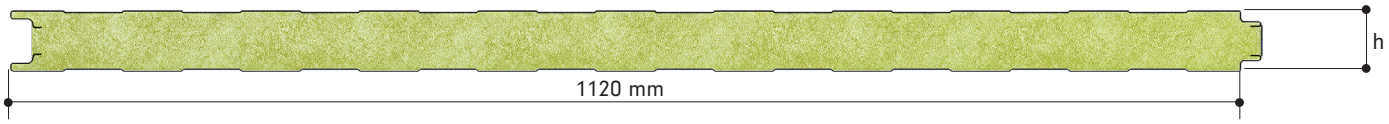
and all other concrete structures with steel or prefabricated load bearing systems.

W Prefabrik 1701

Performance Advantages

Provides ideal thermal insulation with thinner panels compared to alternative insulation materials.
Fast and problem-free assembly saves time and labor.
The polyurethane structure does not retain water and allow bacteria and pests to develop.
The use of n-Penthane gas in inflating polyurethane prevent environmental damage.
The colorful surface eliminates the need for additional coatings like plaster and paint.
Color options available in the RAL catalogue.
Surface paint options available according to application (Polyester, PvdF, Plastisol, PVC).

Measurements



h: 40-50mm

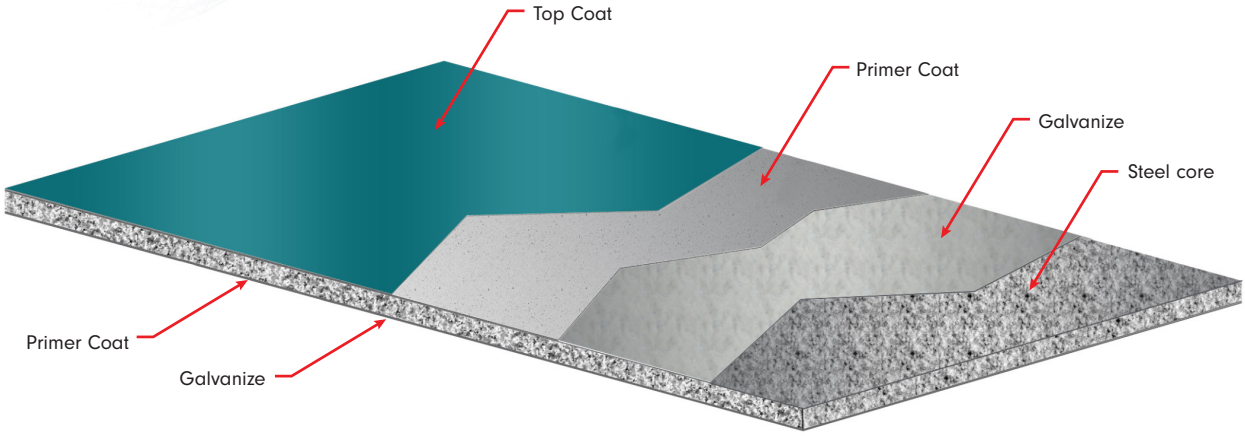
Modular Width	1000-1149 mm
Minimum Length	3 metre
Maximum Length	Depends on transport conditions.

Polyurethane (PUR) – Polyisocyanurate (PIR)



Polyurethane/Polyisocyanurate Density (EN 1602)	PUR: 40 (±2) kg/m^3 / PIR: 41 (±2) kg/m^3
Polyurethane (PUR)/Polyisocyanurate (PIR) Thickness	40-50 mm
Thermal Conductivity (EN 13165)	0,022-0,024 W/mK
Dimensional Stability (EN 13165)	Seviye DS (TH) 11
Reaction to Fire (13501)	PUR: B. S2 . d0 / PIR: B. S1 . d0
Water Absorption (EN ISO 354)	Hacimce %2 (168 saat)
Closed Cell Percentage (EN 14509)	%95
Vapour Diffusion Resistance (EN 12086)	30-100
Heat Resistance	-200/+110 °C

Metallic Surface



Prepainted Galvanized Steel Surface

Type	Prepainted Galvanized Steel
External Facing Thickness	0,50 mm
Internal Facing Thickness	0,40 mm
Thickness Tolerance (EN 10143)	Nominal
Steel Quality (EN 10327)	Dx51 D+Z Prepainted Galvanized Steel (last coat polyester paint on primer
Hot Dipped Coated Steel Grade (EN 10327)	100-275 gr/m^2
Paint Type	Polyester, PvdF, Plastisol, PVC

Load / Span Table

BGS	**BGS**	**Double Span**				
External Sheet Thickness (mm)	**Internal Sheet Thickness (mm)**	**PUR (mm)**	**100 cm**	**150 cm**	**200 cm**	**250 cm**
0,5	0,4	40	257	182	124	98
0,5	0,4	50	302	215	149	121

• Yük Değerleri kg/m^2 • Limit değeri L/200 • BGS: Boyalı Galvaniz Sac

Coefficient of Thermal Conductivity

Polyurethane Thermal Conductivity			
Panel Thickness	**U Thermal Conductivity (W/m^{2}K)**	**R Thermal Conductivity (m^{2}K/W)**	**R Thermal Conductivity (ft^2 °F h/Btu)**
40 mm	0,497	2,011	11,418
50 mm	0,406	2,465	14,000

TSE EN 14509'a göre.

Mechanical Properties

Steel Faces Yield Strength	min. 220 N/mm^2
Tensile Strength of Panel	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

According to TSE EN 14509.

Tolerances

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

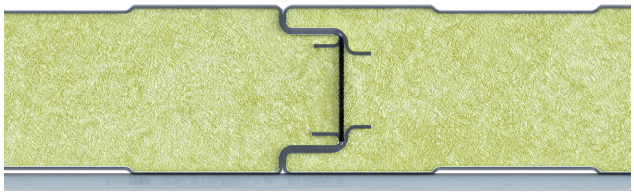
Standard Package

Thickness (mm)	40	50
Quantity	23	25

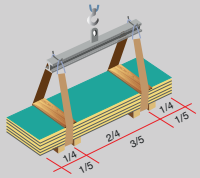
Standard Color Options

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

Joint Details



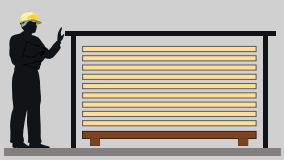
Transportation and protection of sandwich panel



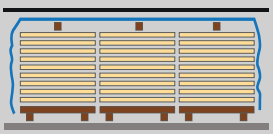
During hoisting take precautionfor the sling.



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 strored on site for long periods should be stacked in covered areas. Wherever possible, always place stackes 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.