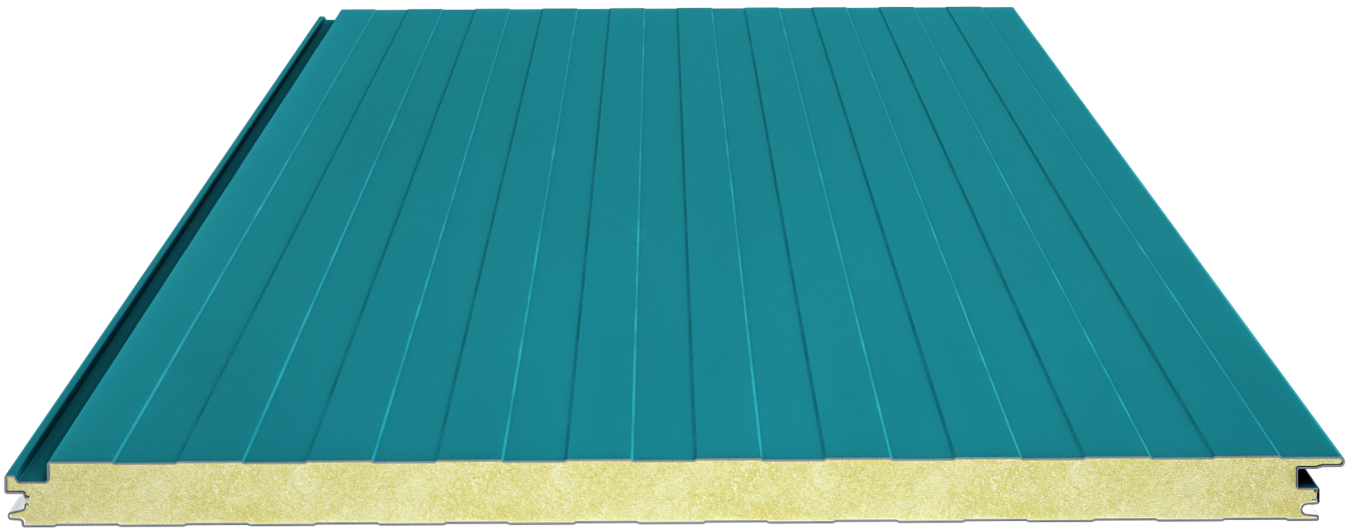
W Wall Panel



Product Description

The wall panels are suitable for use on walls due to the system that conceals joint elements. The ability to use them both laterally and vertically provides assembly flexibility and good solutions for designers. Generally produced in micro pressed form to achieve an aesthetic appearance for walls.

Production Location

İstanbul, İskenderun

Product Application

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

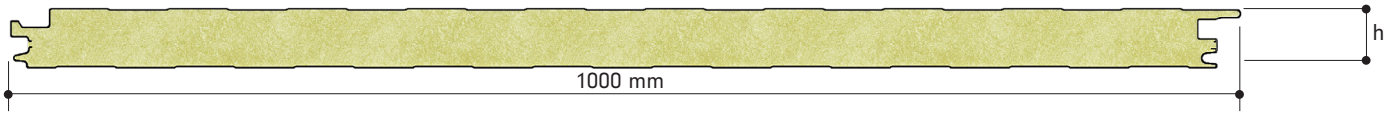
And all other concrete structures with steel or prefabricated load bearing systems.

W 1701

Performance Advantages

Has the best thermal insulation values.
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).
Applicable both laterally and vertically.
The fastening elements being concealed provides visual advantage on walls.

Measurements



h: 50-60-80-100 mm

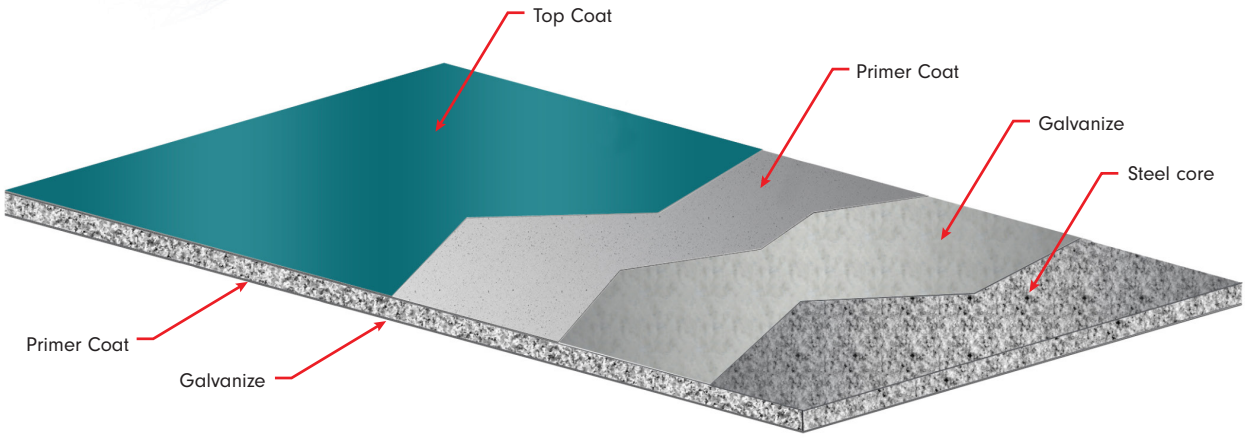
Modular Width	1000 mm
Minimum Length	3 metre
Maximum Length	Depends on transport conditions.

(PUR) – Polyisocyanurate (PIR)



Polyurethane (PUR) / Polyisocyanurate (PIR) Density (EN 1602)	40 (±2) kg/m³ / 41 (±2) kg/m³
Polyurethane (PUR) / Polyisocyanurate (PIR) Thickness	50-60-70-80-100 mm
Thermal Conductivity (EN 13165)	0,022-0,024 W/mK
Dimensional Stability (EN 13165)	Level DS (TH) 11
Reaction to Fire (13501)	B.s2.d0 / B.s1.d0
Water Absorption (EN ISO 354)	By Volume 2% (168 hours)
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	0,50-0,70 mm (20-25 mic paint thickness is included)
Internal Facing Thickness	0,40-0,70 mm (20-25 mic paint thickness is included)
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 (included in total sheet thickness)
Paint Type	Polyester, PvdF, Plastisol, PVC, RAL 7037

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	50	302	215	149	121
0,5	0,4	60	337	263	179	134
0,5	0,4	80	400	320	245	145
0,5	0,4	100	474	389	335	156

• Load values kg/m3 • Limit value L/200 • BGS: Painted Galvanized Steel

Coefficient of Thermal Conductivity

Polyurethane Thermal Conductivity Values			
Panel Thickness	**U Thermal Conductivity (W/m^{2}K)**	**R Thermal Conductivity (m^{2}K/W)**	**R Thermal Conductivity (ft^2 °F h/Btu)**
50 mm	0,406	2,465	14,000
60 mm	0,342	2,921	16,584
80 mm	0,261	3,830	21,747
100 mm	0,211	4,739	26,911

According to TSE EN 14509 .

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
Shear Strength after Long-Term 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. 1,5 KNm/m
Wrinkling Stress in Span	min. 100 Mpa

AccoVrding 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)

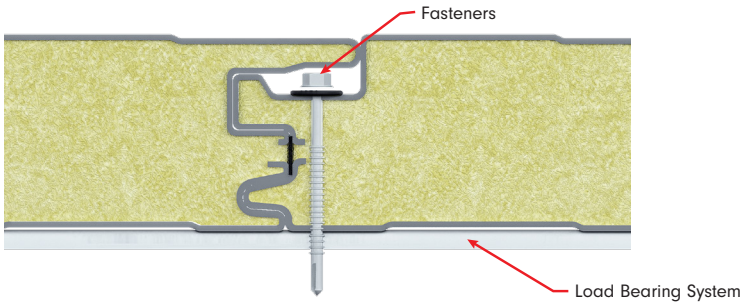
Standard Package

Thickness (mm)	50	60	80
Quantity	20	18	14

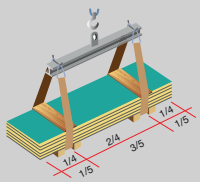
Standard Color Options

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

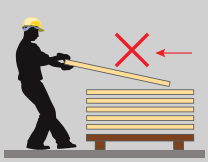
Joint Details



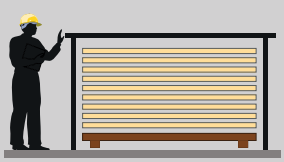
Transportation and protection of sandwich panel



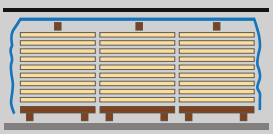
During hoisting take precautionfor the sling.



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.