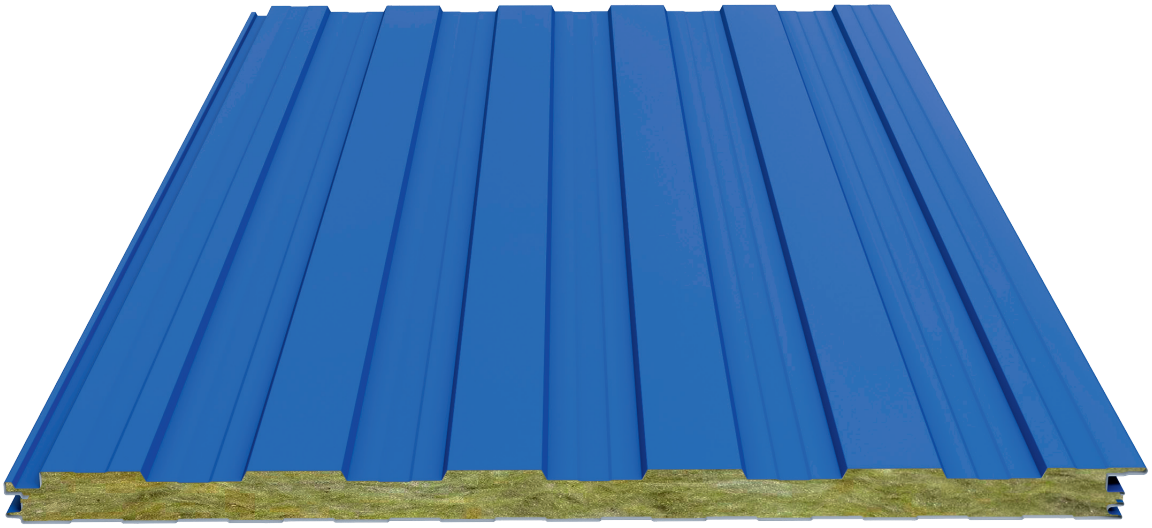
WDWT Wall Panel



Product Description

It is suitable for use on aesthetic facades with its system that hides the fastener. It can be applied both horizontally and vertically. In this way, it offers alternative solutions to designers with the assembly flexibility it provides. It has high strength with its deep micro indented form. It allows to pass wide openings on the facades.

Production Location

Balıkesir

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

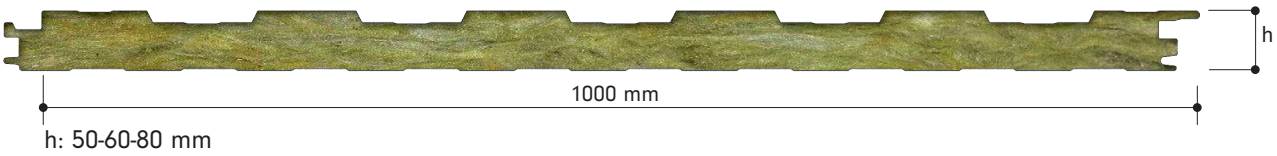
and all other concrete structures with steel or prefabricated load bearing systems

EN.PRW.WDWT.02

Performance Advantages

Has the best fire resistance values.
Fast and problem-free assembly saves time and labor.
High performance in both fire insulation and sound insulation.
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.
High sound insulation performance.

Measurements



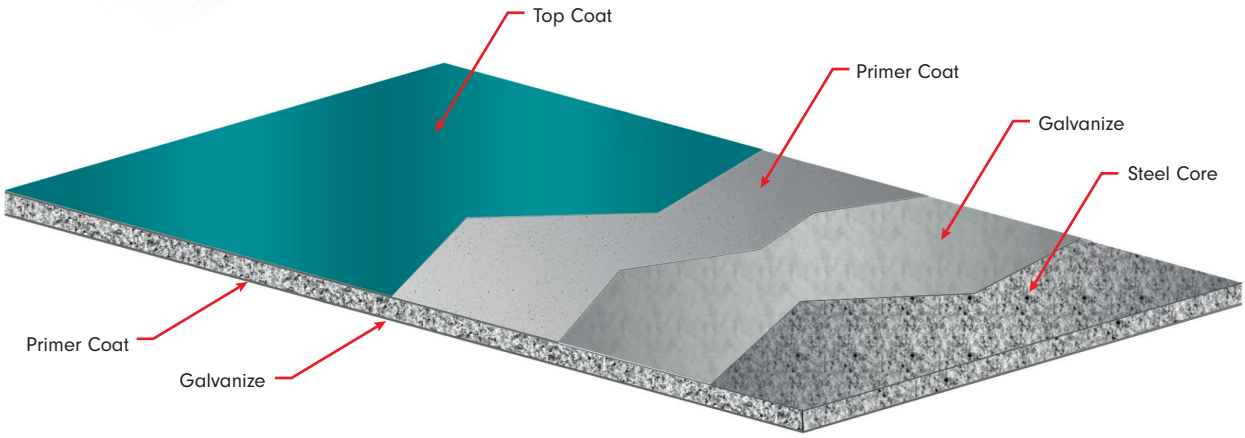
h: 50-60-80 mm

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

Mineral Wool

Mineral Wool Density	100 (±10) kg/m^3
Mineral Wool Thickness	50-60-80 mm
Thermal Conductivity	0.043 W/mK
Reaction to Fire (EN 13501)	A1
Water Absorption	By Volume %2
Closed Cell Percentage	30
Sound Insulation Rw [dB] ≥	1
Heat Resistance	600 °C

Metallic Surface



Prepainted Galvanized Steel Surface

Metal Type	Prepainted Galvanized Steel
External Facing Thickness	0,50-0,70 mm
Internal Facing Thickness	0,40-0,70 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 g/m²
Paint Type	Polyester, PVDF, Plastisol, PVC

Load / Span Table

PPGS	PPGS	Double Span				
External Sheet Thickness (mm)	**Internal Sheet Thickness (mm)**	**Stone Wool (mm)**	**100 cm**	**150 cm**	**200 cm**	**250 cm**
0.5	0.4	50	243	166	119	90
0.5	0.4	60	301	207	152	115
0.5	0.4	80	418	277	216	167

• Load values kg/m² • Limit value L/200 • PPGS: Painted Galvanized Steel

Coefficient of Thermal Conductivity

Stone Wool Coefficient of Thermal Conductivity			
Panel Thickness	**U Thermal Conductivity (W/m²K)**	**R Thermal Conductivity (W/m²K)**	**R Thermal Conductivity (ft² °F h/BTU)**
50 mm	0,840	1,190	6,760
60 mm	0,700	1,429	8,111
80 mm	0,525	1,905	10,815

According to TS EN 14509

Mechanical Properties

Steel Faces Yield Strength	min. 220 N/mm^2
Tensile Strength of Panel	min. 0.018 MPa
Shear Strength of Core Material	min. 0.03 MPa
Core Material Shear Modulus	min. 3.0 MPa
Compressive Strength of Core Material	min. 0.05 MPa
Bending Moment Capacity in Span	min. 1.8 KNm/m (Straight) min. 1.5 KNm/m (Reverse)
Shear Strength After Long-Continued Loading	t: 1.000 hours min. 0,02 Mpa t: 2.000 hours min. 0,019 Mpa t: 100.000 hours min. 0,017 Mpa
Torsion Stress in Span	min. 40 Mpa (Reverse) min 50 Mpa (Straight)

According to TS EN 14509.

Tolerance Limits

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

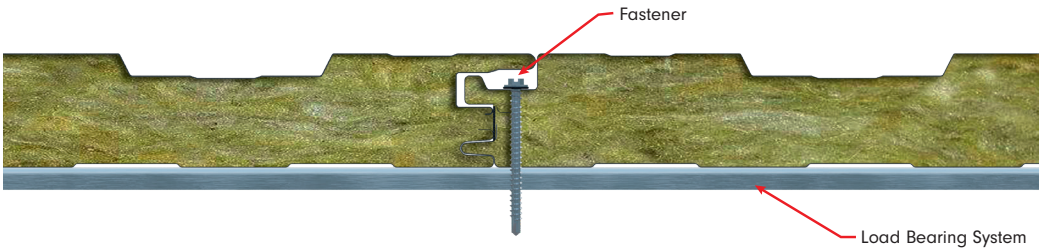
Standard Package Quantities

Thickness (mm)	50	60	80
Quantity	19	16	12

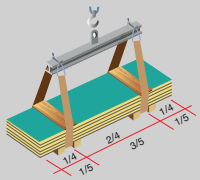
Standard Color Options

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

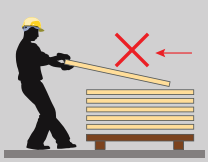
Joint Details



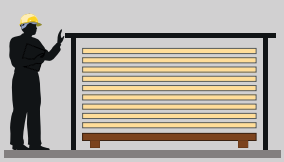
Transportation and Protection of Sandwich Panel



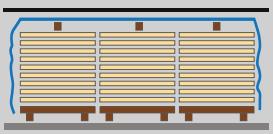
During hoisting take precaution for the sling.



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.