

# 1000 WDT 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**

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.

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# **Performance Advantages**

Provides ideal fire insulation with thinner panels compared to alternative insulation materials.

Fast and problem-free assembly saves time and labor.

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: 50-60-80-100-120-150-170 mm

| Modular Width  | 1,000 mm                         |
|----------------|----------------------------------|
| Minimum Length | 3 meters                         |
| Maximum Length | Depends on transport conditions. |

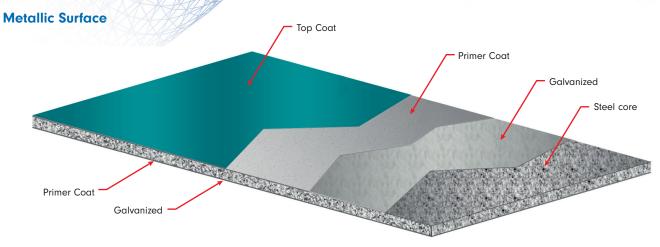
# **Mineral Wool**



| Mineral Wool Density              | 100 (± 10) kg/m³            |  |  |
|-----------------------------------|-----------------------------|--|--|
| Mineral Wool Thickness            | 50-60-80-100-120-150-170 mm |  |  |
| Thermal Conductivity Coefficient  | 0.043 W/mK                  |  |  |
| Inflammability Class (EN 13501-1) | A1                          |  |  |
| Water Absorption                  | By Volume 2%                |  |  |
| Heat Resistance                   | 600 °C                      |  |  |
| Sound Insulation Rw [dB] ≥        | 30                          |  |  |
| Water Vapour Diffusion (EN 12086) | 1                           |  |  |







### **Prepainted Galvanized Steel Surface**

| Туре                                     | Prepainted Galvanized Steel  |
|--|--|
| External Facing Thickness                | 0.50-0.80 mm   |
| Internal Facing Thickness                | 0.50-0.80 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                             | Multi Span                        |        |        |        |        |
|-------------------------------|----------------------------------|-----------------------------------|--------|--------|--------|--------|
| External Sheet Thickness (mm) | Internal Sheet<br>Thickness (mm) | Mineral Wool<br>Thickness<br>(mm) | 150 cm | 200 cm | 250 cm | 300 cm |
| 0.5                           | 0.5                              | 50                                | 242    | 164    | 119    | 89     |
| 0.5                           | 0.5                              | 60                                | 300    | 206    | 153    | 114    |
| 0.5                           | 0.5                              | 80                                | 417    | 291    | 215    | 166    |
| 0.5                           | 0.5                              | 100                               | 535    | 376    | 282    | 219    |
| 0.5                           | 0.5                              | 120                               | 655    | 463    | 349    | 274    |
| 0.5                           | 0.5                              | 130                               | 715    | 508    | 383    | 301    |
| 0.5                           | 0.5                              | 150                               | 835    | 595    | 452    | 357    |

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

# **Coefficient of Thermal Conductivity**

| Panel Thickness | U Thermal Conductivity (W/m²K) | R Thermal Resistance<br>(m²K/W) | R Thermal Resistance<br>(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                                 |  |
| 100 mm          | 0.420                          | 2.381                           | 13.519                                 |  |
| 120 mm          | 0.350                          | 2.857                           | 16.223                                 |  |
| 130 mm          | 0.323                          | 3.095                           | 17.575                                 |  |
| 150 mm          | 0.280                          | 3.571                           | 20.279                                 |  |
| 170 mm          | 0.247                          | 4.048                           | 22.983                                 |  |

According to TS EN 14509





# **Mechanical Properties**

| Steel Faces Yield Strength                  | min. 220 N/mm²   |  |  |
|---|--|--|--|
| Tensile Strength of Panel                   | min. 0.018 MPa   |  |  |
| Shear Strength of Core Material             | min. 0.03 MPa  |  |  |
| Shear Modulus of Core Material              | min. 3.0 MPa   |  |  |
| Compressive Strength of Core Material       | min. 0.05 MPa  |  |  |
| Bending Moment Capacity in Span             | min. 1.8 KNm/m (Straight)<br>min. 1.5 KNm/m (Reverse)  |  |  |
| Shear Strength After Long-Continued Loading | t: 1,000 hours min. 0.02 MPa<br>t: 2,000 hours min. 0.019 MPa<br>t: 100,000 hours min. 0.017 MPa |  |  |
| Torsion Stress in Span                      | min. 40 MPa (Reverse)<br>min 50 MPa (Straight)   |  |  |

According to TS EN 14509

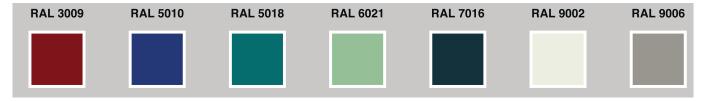
#### **Tolerances**

| Panel Length                            | Panel Thickness   | Panel Cover Width       | Rectangularity                                      |
|---|-------------------|-------------------------|---|
| = 3,000 mm ± 5 mm<br>• 3,000 mm ± 10 mm | D ≤ 100 mm ± 2 mm | ± 2 mm for all profiles | 0.6% of s ≤ nominal cover thickness (Width x 0.006) |

### **Standard Package**

| Thickness (mm) | 50 | 60 | 80 | 100 | 120 | 130 | 150 | 170 |
|----------------|----|----|----|-----|-----|-----|-----|-----|
| Quantity       | 19 | 16 | 12 | 9   | 8   | 7   | 6   | 5   |

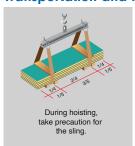
# **Standard Color Options**



### **Joint Details**

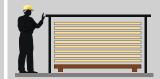


### **Transportation and Protection of Sandwich Panel**

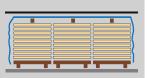




Do not drag panels in a pile, or on the roof purlins. Lift panels from both ends when moving or laying in place.



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.

