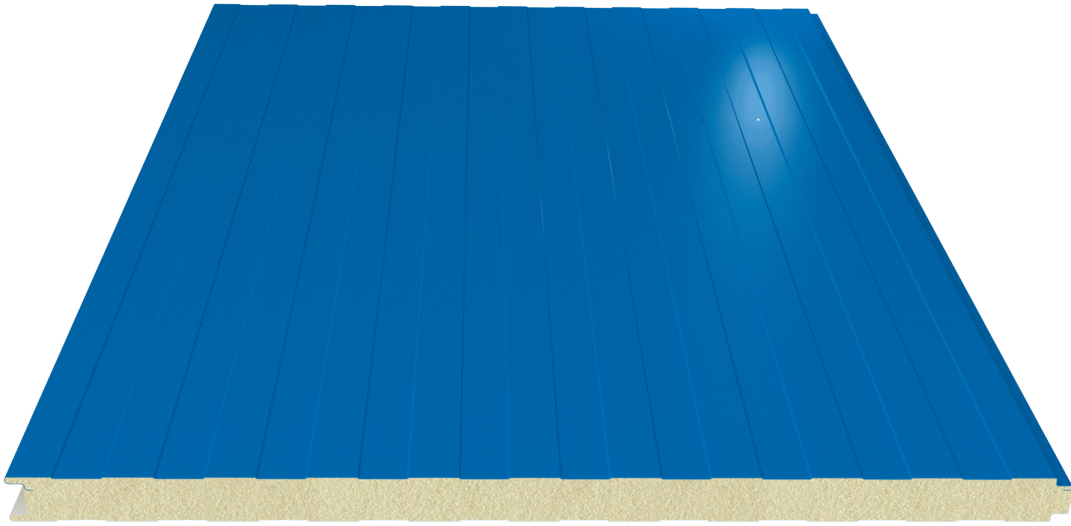


## W Prefabricated Wall Panel



### 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

Istanbul, 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.

## Performance Advantages

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

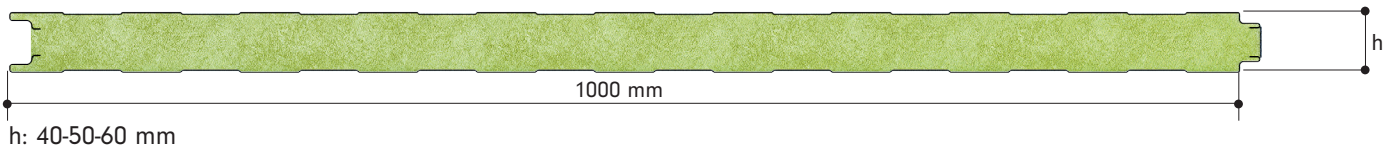
Fast and problem-free assembly saves time and labor.

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



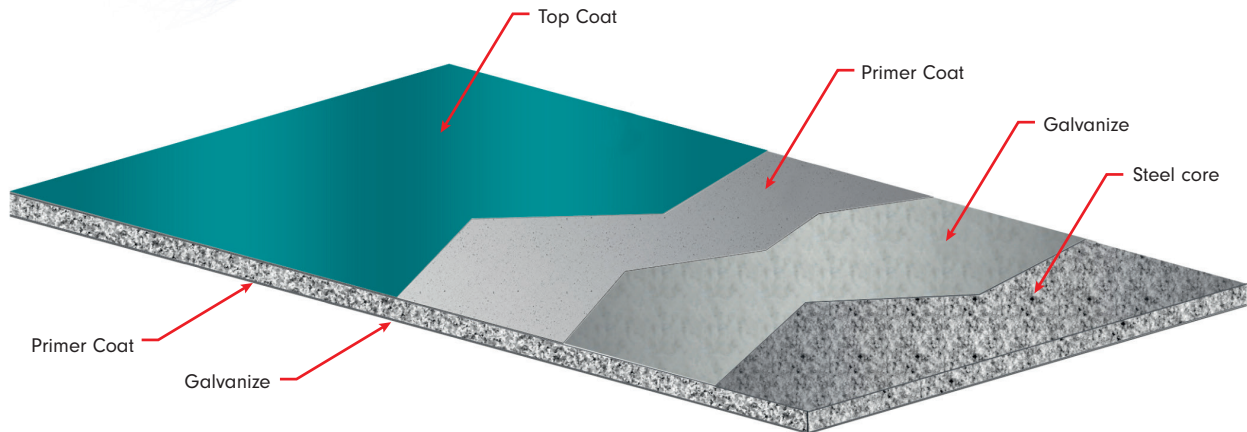
|                       |                                  |
|-----------------------|----------------------------------|
| <b>Modular Width</b>  | 1000 mm                          |
| <b>Minimum Length</b> | 3 meter                          |
| <b>Maximum Length</b> | Depends on transport conditions. |

## SmartCore - PIR Elite - PIR



|                                               |                                                                                 |
|-----------------------------------------------|---------------------------------------------------------------------------------|
| <b>Density (EN 1602)</b>                      | PIR: 40 (±2) kg/m <sup>3</sup> & SmartCore-PIR Elite: 41 (±2) kg/m <sup>3</sup> |
| <b>Thickness</b>                              | 40-50-60 mm                                                                     |
| <b>Thermal Conductivity (EN 13165)</b>        | PIR Elite-PIR: 0,022-0,024 & SmartCore: 0,018-0,019 W/mK                        |
| <b>Dimensional Stability (EN 13165)</b>       | Seviye DS (TH) 11                                                               |
| <b>Reaction to Fire (13501)</b>               | SmartCore-PIR Elite: B-s1,d0 & PIR: B-s2,d0                                     |
| <b>Water Absorption (EN ISO 354)</b>          | Hacimce %2 (168 saat)                                                           |
| <b>Closed Cell Percentage (EN 14509)</b>      | %95                                                                             |
| <b>Vapour Diffusion Resistance (EN 12086)</b> | 30-100                                                                          |
| <b>Heat Resistance</b>                        | -200/+110 °C                                                                    |

## Metallic Surface



## Prepainted Galvanized Steel Surface

|                                          |                                                                            |
|------------------------------------------|----------------------------------------------------------------------------|
| Type                                     | Prepainted Galvanized Steel                                                |
| External Facing Thickness                | 0,35-0,80 mm                                                               |
| Internal Facing Thickness                | 0,35-0,80 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 gr/m <sup>2</sup>                                                  |
| Paint Type                               | Polyester, PvdF, Plastisol, PVC                                            |

## Load / Span Table

| PPGS                          | PPGS                          | Double Span |        |        |        |        |
|-------------------------------|-------------------------------|-------------|--------|--------|--------|--------|
| External Sheet Thickness (mm) | Internal Sheet Thickness (mm) | PIR (mm)    | 100 cm | 150 cm | 200 cm | 250 cm |
| 0,5                           | 0,4                           | 40          | 320    | 191    | 127    | 90     |
| 0,5                           | 0,4                           | 50          | 425    | 258    | 174    | 125    |
| 0,5                           | 0,4                           | 60          | 521    | 319    | 219    | 159    |

• Load values kg/m<sup>3</sup> • Limit value L/200 • PPGS: Painted Galvanized Steel

## Coefficient of Thermal Conductivity

| Thermal Conductivity |                                             |                                             |                                                   |
|----------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------------|
| Panel Thickness      | U Thermal Conductivity (W/m <sup>2</sup> K) | R Thermal Conductivity (m <sup>2</sup> K/W) | R Thermal Conductivity (ft <sup>2</sup> °F h/Btu) |
| 40 mm                | 0,550                                       | 1,818                                       | 10,322                                            |
| 50 mm                | 0,440                                       | 2,273                                       | 12,910                                            |
| 60 mm                | 0,367                                       | 2,727                                       | 15,483                                            |

According to TS EN 14509.

## Mechanical Properties

|                                               |                                                                                            |
|-----------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Steel Faces Yield Strength</b>             | min. 220 N/mm <sup>2</sup>                                                                 |
| <b>Tensile Strength of Panel</b>              | min. 0,018 Mpa                                                                             |
| <b>Shear Strength of Core Material</b>        | min. 0,11 Mpa                                                                              |
| <b>Shear Modulus of Core Material</b>         | min. 2,0 Mpa                                                                               |
| <b>Compressive Strength of Core Material</b>  | min. 0,095 Mpa                                                                             |
| <b>Shear Strength after Long-Term Loading</b> | t:1.000 hours min. 0,04 Mpa<br>t:2.000 hours min. 0,03 Mpa<br>t:100.000 hours min.0,03 Mpa |
| <b>Bending Moment Capacity in Span</b>        | min. 2,3 KNm/m (Upwards)<br>min. 2,0 KNm/m (Downwards)                                     |
| <b>Wrinkling Stress in Span</b>               | min. 100 Mpa (Downwards)<br>min. 115 Mpa (Upwards)                                         |

According to TS EN 14509.

## Tolerances

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

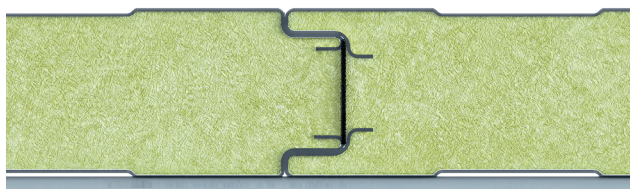
## Standard Package

| Thickness (mm) | 40 | 50 | 60 |
|----------------|----|----|----|
| Quantity       | 23 | 19 | 16 |

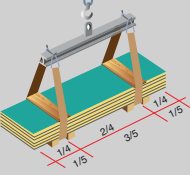
## Standard Color Options

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

## Joint Details



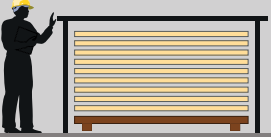
## Transportation and protection of sandwich panel



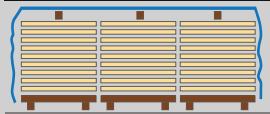
During hoisting take precaution for the sling.



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 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 cover, leaving space for ventilation. Place stacks on a simple wedge.



Do not walk on panels.