

## Technical Data Sheet

# CS PIR INSULATION PANEL

WITH P-ZACS® PREPAINTED STEEL SKIN



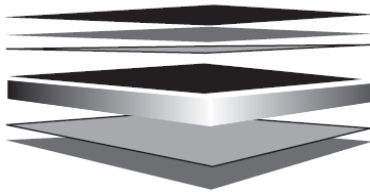
### General Technical Properties

| Property                     | Test Method                   | Unit              | Typical Value |
|------------------------------|-------------------------------|-------------------|---------------|
| Overall Density              | EN ISO 845                    | kg/m <sup>3</sup> | 40-42         |
| Thermal Conductivity         | ASTM C518 +24°C<br>Initial    | mW/m·K            | 20-22         |
| Closed Cell Content          | EN ISO 4590                   | %                 | ≥ 90          |
| Operating Temperature Limits | Upper Limit                   | °C                | +60           |
|                              | Lower Limit                   | °C                | -40           |
| Compressive Strength         | ISO 844<br>Parallel           | kPa               | ≥ 150         |
|                              | Perpendicular                 | kPa               | ≥ 110         |
| Linear Dimensional Stability | EN 1604<br>+70°C for 48 hours | %                 | ≤ 1           |
|                              | -30°C for 48 hours            | %                 | ≤ 1           |
| Water Absorption             | DIN 53428                     | %                 | ≤ 3           |

### Technical Information for P-ZACS® Prepainted Steel Skin

P-ZACS® prepainted steel is an economical but high-quality material specifically for the manufacture of insulated sandwich panels requires USDA approvable. The product offers excellent formability coupled with good durability and protection.

|                     |   |
|---------------------|---|
| Preferred Substrate | 55% Al/Zn G300S AZ100 steel (Aluminum/Zinc alloy-coated steel)  |
| Pretreatment        | Corrosion resistant proprietary conversion coating  |
| Primer Coat         | Universal corrosion inhibitive primer. Nominal dry film thickness 5µm on top primer                         |
| Finish Coat         | Custom formulated USDA approvable paint system. Nominal dry film thickness 20µm on the top or weather side. |
| Backing Coat        | Custom formulated Epoxy Grey Backer. Nominal dry film thickness 7µm   |
| Colour              | CS White colour is available. Other specifically required colours may be available on request.              |



Finish Coat (Nominal 20µm) Universal Corrosion Inhibitive Primer (Nominal 5µm) Conversion Coating

55% Aluminium/Zinc Alloy Coated Steel Substrate AZ100 Conversion Coating

Backing Coat (Epoxy Grey Backer, Nominal 7µm)

### Fire Classifications

| Property          | Test Method    | Typical Result   |
|-------------------|----------------|--|
| Reaction to fire  | EN 13501-1     | B - s1, d0 / B - s2, d0  |
| Fire Rated        | BS 476 - 22    | 1 hour fire rating (200mm thick Panel only)  |
| Toxicity          | BS EN 45545-2  | CIT < 0.75   |
| Bomba Certificate | BS 476 - 6 & 7 | *Class 0   |
| Fire propagation  | BS 476-6       | Index of performance (I) not exceeding 12 and sub-index (i <sub>1</sub> ) not exceeding 6* |
| Flame spread      | BS 476-7       | Class 1  |

\*Combination of the BS 476-6 & BS 476-7 test results above will classify as Class 0