Metal faced insulating panel for use in buildings

Reference: AS35, Insulation: PIR, Density: 38-42 Kg/m³, Thickness: 100mm, Facings: Steel 0.7mm external, 0.4mm internal, Coating: PVC(P)200µm, Mass: 14.24 Kg/m³

Warnell, Welton, Carlisle, Cumbria CA5 7HH

A Steadman & Son
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1224-CPR-0344

EN14509

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- **Thermal Transmittance:**
  - Roofs: 0.20 W/m²K
  - External Walls: 0.20 W/m²K

- **Mechanical Resistance:**
  - **Tensile Strength:** 0.07 Mpa
  - **Shear Strength:** 0.12 Mpa
  - **Reduced long term shear strength:**
    - 2.5 Mpa
  - **Compressive strength (core):** 0.07 Mpa
  - **Creep coefficient:**
    - t = 2000 h: 0.8
    - t = 100000 h: 1.32

- **Bending resistance in the span:**
  - +ve bending: 10.15 kNm/m
  - +ve bending, elevated temperature: 9.03 kNm/m
  - -ve bending: 8.27 kNm/m
  - -ve bending, elevated temperature: 7.36 kNm/m

- **Bending resistance at an internal support:**
  - +ve bending: 5.41 kNm/m
  - +ve bending, elevated temperature: 4.81 kNm/m
  - -ve bending: 4.32 kNm/m
  - -ve bending, elevated temperature: 3.84 kNm/m

- **Wrinkling Stress (external face):**
  - in span: 256 MPa
  - in span, elevated temperature: 247 MPa
  - at central point: 192 MPa
  - at central point, elevated temperature: 171 MPa

- **Wrinkling Stress (internal face):**
  - in span: 192 MPa
  - at central point: 104 MPa

- **Reaction to fire - with steel flashing details:** B-s2, d0
- **Reaction to fire - all applications:** Broof

- **Fire resistance:**
  - Broof

- **Water permeability:**
  - Impermeable

- **Airborne sound insulation:**
  - Roofs: Rw(C;Ctr) = ≥ 22 (0;-1) dB
  - External Walls: Rw(C;Ctr) = ≥ 22 (0;-1) dB