



2812

Steadman & Son

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2812-CPR-PA0002

EN14509

**Metal faced insulating panel for use in buildings**

Reference: AS35, Insulation: PIR, Density: 38-42 Kg/m<sup>3</sup>, Thickness: 100mm, Facings: Steel 0.5mm external, 0.4mm internal, Coating: HBP50µm, Mass: 12.38 Kg/m

**[Group CE2020]**

**Roofs**

**External Walls**

**Thermal Transmittance:**

0.20 W/m<sup>2</sup>K

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**Mechanical Resistance:**

Tensile Strength:

0.065 Mpa

0.065 Mpa

Shear Strength:

0.12 Mpa

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Reduced long term shear strength:

Shear modulus (core):

2.5 Mpa

2.5 Mpa

Compressive strength (core):

0.09 Mpa

0.09 Mpa

Creep coefficient      t = 2000 h

0.8

t = 100000 h

1.32

**Bending resistance in the span:**

- +ve bending:

10.15 kNm/m

10.15 kNm/m

- +ve bending, elevated temperature

9.03 kNm/m

9.03 kNm/m

- -ve bending:

8.27 kNm/m

8.27 kNm/m

- -ve bending, elevated temperature

7.36 kNm/m

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**Bending resistance at an internal support:**

- +ve bending:

5.41 kNm/m

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- +ve bending, elevated temperature

4.81 kNm/m

4.81 kNm/m

- -ve bending:

4.32 kNm/m

4.32 kNm/m

- -ve bending, elevated temperature

3.84 kNm/m

3.84 kNm/m

**Wrinkling Stress (external face):**

- in span

255 MPa

255 MPa

- in span, elevated temperature

247 MPa

247 MPa

- at central support:

190 MPa

190 MPa

- at central support, elevated temperature

168 MPa

168 MPa

**Wrinkling Stress (internal face):**

- in span

192 MPa

192 MPa

- at central support:

104 MPa

104 MPa

**Reaction to fire - with steel flashing details:**

B-s2, d0

B-s2, d0

**External fire performance:**

Broof (t4)

**Water permeability:**

NPD

NPD

**Water vapour permeability:**

Impermeable

Impermeable

**Airborne sound insulation:**

Rw(C:Ctr)>22

Rw(C:Ctr)>22