



2812

Steadman & Son

Warnell, Welton, Carlisle, Cumbria CA5 7HH

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2812-CPR-PA0002

EN14509

Metal faced insulating panel for use in buildings

Reference: AS35, Insulation: PIR, Density: 38-42 Kg/m³, Thickness: 100mm, Facings: Steel 0.5mm external, 0.4mm internal, Coating: HBP50µm, Mass: 14.29 Kg/m

[Group CE2021]

Roofs

External Walls

Thermal Transmittance:

0.20 W/m²K

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Mechanical Resistance:

Tensile Strength:

0.065 Mpa

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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

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Creep coefficient t = 2000 h

0.8

t = 100000 h

1.32

Bending resistance in the span:

- +ve bending:

10.15 kNm/m

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- +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

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- -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