



2812

Steadman & Son

Warnell, Welton, Carlisle, Cumbria CA5 7HH

20

2812-CPR-PA0002

EN14509

Metal faced insulating panel for use in buildings

Reference: AS35, Insulation: PIR, Density: 38-42 Kg/m³, Thickness: 80mm, Facings: Steel 0.5mm external, 0.4mm internal, Coating: HBP50µm, Mass: 13.53 Kg/m

[Group CE2038]

Roofs

External Walls

Thermal Transmittance:

0.25 W/m²K

0.25 W/m²K

Mechanical Resistance:

Tensile Strength:

0.065 Mpa

0.065 Mpa

Shear Strength:

0.12 Mpa

0.12 Mpa

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:

10.53 kNm/m

10.53 kNm/m

- +ve bending, elevated temperature

9.37 kNm/m

9.37 kNm/m

- -ve bending:

6.26 kNm/m

6.26 kNm/m

- -ve bending, elevated temperature

5.57 kNm/m

5.57 kNm/m

Bending resistance at an internal support:

- +ve bending:

4.96 kNm/m

4.96 kNm/m

- +ve bending, elevated temperature

4.41 kNm/m

4.41 kNm/m

- -ve bending:

3.68 kNm/m

3.68 kNm/m

- -ve bending, elevated temperature

3.27 kNm/m

3.27 kNm/m

Wrinkling Stress (external face):

- in span

280 MPa

280 MPa

- in span, elevated temperature

280 MPa

280 MPa

- at central support:

219 MPa

219 MPa

- at central support, elevated temperature

194 MPa

194 MPa

Wrinkling Stress (internal face):

- in span

179 MPa

179 MPa

- at central support:

106 MPa

106 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