

AIS Stonewool™ Soffit Slab

Foil-Faced Rigid Stone Wool Soffit Insulation

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Product Description

AIS Stonewool™ Soffit Slab is a rigid, non-combustible stone wool insulation board manufactured from FBS-1 bio-soluble fibre. It is designed to provide combined fire resistance, thermal insulation and acoustic absorption to concrete soffits, including exposed car park and basement soffits beneath occupied spaces.

The board is supplied here with a bonded aluminium-foil facing (aluminium foil over a fibreglass scrim, polyethylene-bonded), giving a clean, durable, wipeable finish suited to exposed soffit applications. Unfaced, black-mat and white-mat faced options are also available.

Typical Applications

- Concrete car park and floor soffits beneath Class 2, 3 and 5–9 occupancies
- Industrial (Class 7–8) soffit and floor fire/thermal separation
- Exposed soffits where a non-combustible alternative to PIR / phenolic board is specified
- Fire-rated separating elements and perimeter fire stopping

Features & Benefits

- Non-combustible to AS 1530.1 — full compliance for fire-sensitive and post-Grenfell specifications
- FBS-1 bio-soluble stone wool
- Excellent acoustic absorption — Noise Reduction Coefficient up to 0.95
- Dimensionally stable; thermal performance does not degrade over service life
- Water-repellent, non-hygroscopic and vapour-permeable
- Durable foil facing for exposed applications; easily cut to accommodate services

Product Specifications

Product	AIS Stonewool™ Soffit Slab — Foil Faced (80 SL FF)
Core material	FBS-1 bio-soluble stone wool (non-combustible)
Facing	Aluminium foil over fibreglass scrim, PE-bonded (also available unfaced, black-mat or white-mat faced)
Board dimensions (L × W)	1200 × 600 mm (standard)
Available thicknesses	25, 40, 50, 64, 75, 90, 100 mm (50–100 mm typical for soffit)
Nominal density	80 kg/m ³ standard for foil-faced soffit board; also supplied in 40, 60 and 100 kg/m ³ grades
Max. service temperature	Up to 650°C (at 100 kg/m ³)
Moisture behaviour	Water-repellent, non-hygroscopic, vapour-permeable

Thermal Performance

Nominal thermal resistance for the 40–100 kg/m³ slab range (R1.35–R2.9), declared to AS/NZS 4859.1 at 10°C mean temperature; equivalent thermal conductivity $\lambda \approx 0.035$ W/m·K. Confirm the declared value for the specified thickness and density against the current AS/NZS 4859.1 test certificate.

Thickness (mm)	Nominal Thermal Resistance R (m ² ·K/W)
50	R1.35

Thickness (mm)	Nominal Thermal Resistance R (m ² ·K/W)
75	R2.05
100	R2.90

Fire Performance

Combustibility	Non-combustible to AS 1530.1 (stone wool core)
Reaction to fire — AS/NZS 1530.3	Ignitability 0 · Spread-of-Flame 0 · Heat Evolved 0 · Smoke-Developed ≤ 2 (foil-faced or unfaced, exposed from either side). Per CSIRO Assessment FCO-3532 to AS/NZS 1530.3:1999 — valid to 28 Feb 2029, covering AIS Stonewool 40–175 across 40–175 kg/m ³ and 10–200 mm thickness.
Material properties	Compliant to AS/NZS 4859.1 (thermal); Group 1 material (NCC fire hazard properties)
Fire-resistance level (FRL)	Conditional / performance solution. An FRL to AS 1530.4 is achieved through a tested system specific to the build-up (thickness, density, fixings, substrate), not as a blanket board rating. A soffit/floor FRL must be substantiated for the project assembly; the party-wall result below is supporting evidence.
Supporting FRL test (party wall)	CSIRO Certificate of Test No. 3880 (Report FSP 2384), FRL -/240/120 to AS 1530.4:2014, tested at 80 kg/m ³ / 120 mm.
NCC references	A5G3 & Spec. 3 (fire hazard properties) · C2D8, C2D10 (fire) · J4D2, J4D3 (energy efficiency) · Spec. 43; Group Number Spec.

Acoustic Performance

The open fibrous structure of AIS Stonewool provides genuine sound absorption, achieving a Noise Reduction Coefficient (NRC) of up to 0.95 — meaningful where the soffit sits beneath, or above, noise-sensitive occupancies.

Facing Specification — Aluminium Foil

The foil facing comprises an aluminium foil (nominal 18 µm) over a fibreglass scrim (nominal 95 µm), bonded to the stone wool with polyethylene adhesive at approximately 25 g/m². Aluminium is non-combustible and does not contribute to flame spread; in AS/NZS 1530.3 testing (CSIRO FCO-3532) the facing remained intact and the assembly did not ignite.

Handling, Storage & Installation

Store flat, dry and under cover. Boards are fixed direct to the concrete soffit using fire-rated mechanical fixings and washers in the recommended pattern, butt-jointed and staggered. Refer to the AIS Concrete Soffit System installation guide for fixing selection and spacing.

Health & Safety

Refer to the current AIS Stonewool Safety Data Sheet (SDS ref 3323-1 V2) for full handling, PPE and disposal guidance. The SDS is available at www.ais-group.com.au.

Disclaimer

Information provided in good faith and believed accurate at the date of issue. The specifier, certifier and installer remain responsible for confirming suitability and verifying compliance against the relevant test evidence and the NCC. AIS reserves the right to amend specifications without notice.