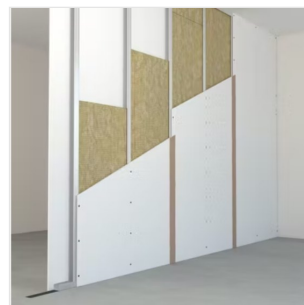


AIS Stonewool™ Slab

Rigid Non-Combustible Stone Wool Insulation Board

AIS Stonewool™ Slab is a strong, rigid, non-combustible stone wool insulation board manufactured from FBS-1 bio-soluble fibre spun from basalt. It combines fire resistance with thermal and acoustic performance and is suitable for residential, commercial and industrial applications. It is available in a range of densities (40–100 kg/m³) and thicknesses (25–100 mm), supplied unfaced or with a pre-applied aluminium-foil, black-mat or white-mat facing on request.

The stone wool core is non-combustible to AS 1530.1 (CSIRO FCO-3526) with AS/NZS 1530.3 early fire hazard indices of 0, 0, 0, ≤2 across the full density and thickness range (CSIRO FCO-3532), and retains its integrity at temperatures in excess of 1000 °C.



AIS Stonewool™ Slab installed within a plasterboard partition wall system.

TYPICAL APPLICATIONS

- Thermal and acoustic insulation to internal walls, partitions and ceilings
- Fire-rated separating elements and perimeter fire stopping (slab-edge barriers)
- Curtain wall spandrel / backpan infill and ventilated rainscreen façades ¹
- Concrete floor and car-park soffits (faced options)
- Industrial, plant-room and mechanical-services insulation
- Commercial and residential applications requiring a non-combustible board

¹ Refer to the AIS Stonewool Installation Guide for curtain-wall, rainscreen, perimeter-barrier and soffit fixing details. Where installed within a fire-rated system, the FRL is a property of the complete tested/assessed system — see Fire Performance.

FEATURES & BENEFITS

- **Non-combustible** – to AS 1530.1 (CSIRO Assessment FCO-3526; Test FNC13104 at 80 kg/m³) — suitable for fire-sensitive and post-Grenfell specifications
- **Low fire hazard** – AS/NZS 1530.3 indices 0, 0, 0, ≤2 across 40–175 kg/m³ and 10–200 mm (CSIRO FCO-3532); Group Number not required — non-combustibility is the higher classification
- **FBS-1 bio-soluble stone wool** – spun from basalt
- **Density range** – 40, 60, 80 and 100 kg/m³ in 25–100 mm thicknesses (others on request)
- **Facing options** – unfaced standard; aluminium-foil, black-mat or white-mat on request
- **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

PRODUCT SPECIFICATIONS

Property	Detail
Product	AIS Stonewool™ Slab (40 / 60 / 80 / 100 SL)
Core material	FBS-1 bio-soluble stone wool (non-combustible), spun from basalt
Facing options	Unfaced (standard); pre-applied aluminium foil, black-mat or white-mat on request
Board dimensions (L × W)	1200 × 600 mm (standard); other sizes on request
Available thicknesses	25, 50, 75 and 100 mm (other thicknesses on request)
Nominal densities	40, 60, 80 and 100 kg/m ³ (EN 13470); higher densities on request
Melting point	>1000 °C (ASTM E794)
Max. service temperature	Up to 650 °C (at 100 kg/m ³ ; density-dependent — confirm against application)
Water vapour absorption	<0.04 Vol % (ASTM C1104)
Moisture behaviour	Water-repellent, non-hygrosopic, vapour-permeable

THERMAL PERFORMANCE — MATERIAL R-VALUES

Product	Nominal Density (kg/m ³)	25 mm	50 mm	75 mm	100 mm
AIS Stonewool™ 40 SL	40	N/A	R1.35	R2.05	R2.70
AIS Stonewool™ 60 SL	60	N/A	R1.45	R2.15	R2.85
AIS Stonewool™ 80 SL	80	N/A	R1.45	R2.20	R2.95
AIS Stonewool™ 100 SL	100	R0.75	R1.45	R2.20	R2.95

Material R-Values (m²K/W) are determined to ASTM C518 at 23 °C mean temperature. The equivalent thermal conductivity ranges from $\lambda \approx 0.037$ W/m·K at 40 kg/m³ to $\lambda \approx 0.034$ W/m·K at 80–100 kg/m³. Nominal thermal resistance is declared in accordance with AS/NZS 4859.1 — confirm the declared value for the specified thickness and density against the current AS/NZS 4859.1 test certificate before formal specification.

FIRE PERFORMANCE

Characteristic	Result / Status
Combustibility — stone wool core	Non-combustible to AS 1530.1-1994 — CSIRO Assessment FCO-3526 (density 40–175 kg/m ³ , thickness 10–200 mm, valid to 30 Nov 2028); supported by CSIRO Test FNC13104 (80 kg/m ³)
Reaction to fire — AS/NZS 1530.3:1999	Unfaced: 0, 0, 0, 1 · Foil-faced: 0, 0, 0, ≤2 (Ignitability / Spread of Flame / Heat Evolved / Smoke Developed) — CSIRO Assessment FCO-3532, covering 40–175 kg/m ³ and 10–200 mm, exposed from either side; valid to 28 Feb 2029
Group Number (wall & ceiling lining)	Not required — the core is non-combustible to AS 1530.1, a higher classification than a Group Number under AS 5637.1
Fire-resistance level (FRL)	System property — an FRL to AS 1530.4 is achieved through a tested or assessed system specific to the build-up (thickness, density, fixings, substrate), not as a blanket board rating; substantiate for the project assembly
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 in a concrete-slab control joint
NCC references	A5G3 & Specification 3 (fire hazard properties) · C2D8, C2D10 (fire) · J4D2, J4D3 (energy efficiency)

ACOUSTIC PERFORMANCE

The open fibrous structure of AIS Stonewool provides genuine sound absorption, achieving a Noise Reduction Coefficient (NRC) of up to 0.95 — valuable where the element separates noise-sensitive occupancies. Confirm the declared NRC for the specified thickness and density against the current AS ISO 354 test report.

FACING OPTIONS

AIS Stonewool™ Slab is supplied unfaced as standard, or with a pre-applied aluminium-foil, black-mat or white-mat facing on request. The aluminium-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; the foil-faced product is covered by CSIRO FCO-3532 (indices 0, 0, 0, ≤2).

SUPPORTING DOCUMENTATION

Document	Issuer	Scope
Assessment FCO-3526	CSIRO	Non-combustibility to AS 1530.1 for NCC A5G3(d) — 40–175 kg/m ³ , 10–200 mm; valid to 30 Nov 2028
Assessment FCO-3532	CSIRO	AS/NZS 1530.3 indices 0,0,0,≤2, unfaced & foil-faced; valid to 28 Feb 2029
Certificate of Test FNC13104	CSIRO (NATA No. 165)	AS 1530.1-1994 combustibility — AIS Stonewool 80: NOT deemed combustible
Certificate of Test No. 3880 (FSP 2384)	CSIRO	AS 1530.4:2014 — FRL –/240/120, party-wall control-joint system at 80 kg/m ³ / 120 mm
AIS Stonewool Installation Guide	AIS	Curtain wall, rainscreen, party wall firestop and soffit fixing details
Safety Data Sheet (SDS ref 3323-1 V2)	AIS	Handling, PPE and disposal guidance

Copies available on request from AIS — sales@ais-group.com.au. No CodeMark certificate or third-party appraisal is currently held for this product.

HANDLING, STORAGE & INSTALLATION

Storage

- Store flat, dry and under cover, in original packaging until use
- Protect from prolonged weather exposure, water and mechanical damage
- Do not stack heavy loads on packed boards

Installation

- Cut to size with a sharp knife or fine-tooth saw; install butt-jointed without gaps, joints staggered between rows
- For fire-rated or mechanically-fixed applications, fix per the relevant tested system using fire-rated fixings and washers in the specified pattern
- Foil-faced boards: orient the foil per the project's vapour/radiant strategy; overtape joints with AIS aluminium foil tape
- Refer to the applicable AIS installation guide for the system being built

HEALTH & SAFETY

AIS stone wool is manufactured from FBS-1 bio-soluble mineral wool fibres and is not classified as carcinogenic. The mechanical effect of fibres in contact with skin may cause temporary itching — rinse in cold water before washing. Refer to the current AIS Stonewool Safety Data Sheet (SDS ref 3323-1 V2) for full handling, PPE and disposal guidance, available at www.ais-group.com.au.

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