

AIS Party Wall Firestop Roll

AIS Party Wall Firestop Rolls are flexible, non-combustible stonewool (rock mineral wool) roll insulation engineered to seal and protect openings, junctions and linear gaps in fire-resistant separating elements. Manufactured from spun volcanic rock fibre bonded with a thermosetting resin, the product is dimensionally stable, water-repellent and retains its integrity at temperatures in excess of 1000 °C. Rolls are supplied plain or with a reinforced aluminium foil facing on one side for a reflective, low-emissivity and moisture-resistant surface.

The flexible roll format compresses to suit irregular gap widths, making it well suited to firestopping the perimeter and head-of-wall junctions of inter-tenancy (party) walls where continuity of the fire separation must be maintained.



Example shown with foil facing (one side).

TYPICAL APPLICATIONS

- Inter-tenancy / party wall firestopping in Class 1a, 2 & 3 residential buildings
- Head-of-wall and perimeter gap sealing to fire-resistant separating walls
- Sealing the junction of separating walls to non-combustible roof and floor structures
- Linear gap and cavity infill within fire-rated wall systems
- Acoustic and thermal infill to separating elements
- General non-combustible packing where fire integrity is required

Always confirm suitability, fixing method and the achievable FRL with the relevant authority and the tested/assessed wall system before installation.

FEATURES & BENEFITS

- **Non-combustible** – unfaced core non-combustible to AS 1530.1 (CSIRO FCO-3526)
- **Low fire hazard** – AS/NZS 1530.3 indices 0, 0, 0, ≤2 (CSIRO FCO-3532)
- **Flexible & compressible** – conforms to irregular gaps for a tight seal
- **Water-repellent** – very low short-term water absorption
- **Thermal & acoustic** – contributes insulation and sound-absorption to the element
- **Foil-faced option** – reflective, low-emissivity, vapour-resistant facing
- **Dimensionally stable** – will not slump, rot or support vermin/mould
- **Bio-soluble fibre** – manufactured from exonerated mineral wool

PRODUCT RANGE & DIMENSIONS

Product Code	Facing	Thickness (mm)	R-Value (m ² K/W)	Nominal Length (mm)	Nominal Width (mm)	Coverage (m ² /roll)	Pack Qty
115001505.50-200	N/A (unfaced)	50	1.45	5000	200	1.0	3
115001505.50-300	N/A (unfaced)	50	1.45	5000	300	1.5	2
115001505.50-200F	Foil facing (one side)	50	1.45	5000	200	1.0	3
115001505.50-300F	Foil facing (one side)	50	1.45	5000	300	1.5	2

Coverage per roll = nominal length × nominal width. Non-standard widths and lengths may be available on request — contact AIS.

PHYSICAL & THERMAL PROPERTIES

Property	Test / Reference Standard	Unit	Performance
Material	—	—	Bio-soluble stonewool (Ca-Mg-Al-silicate rock fibre)
Delivered density	EN 13470	kg/m ³	100

Property	Test / Reference Standard	Unit	Performance
Melting point	ASTM E794	°C	>1000
Thermal conductivity (λ , mean 23 °C) ¹	AS/NZS 4859.1	W/m·K	≈ 0.034
Thermal resistance (R-Value), 50 mm	AS/NZS 4859.1	m²K/W	1.45
Water absorption (partial immersion)	EN 1609	kg/m²	0.5
Maximum service temperature ²	—	°C	≈ 750 (core fibre)
Water vapour / moisture behaviour	—	—	Non-hygroscopic, water-repellent

¹ Thermal conductivity derived from the declared 50 mm R-Value ($\lambda = 0.050 \text{ m} \div 1.45 \text{ m}^2\text{K/W}$). ² Indicative core-fibre service temperature — confirm against application. Values to be verified against the current AIS test records before formal specification.

FIRE PERFORMANCE

The stonewool core is inorganic and non-combustible. In service the product is used to maintain the continuity of a fire-resistant separating element; the fire resistance level (FRL) achieved is a property of the complete tested or assessed wall system, not of the roll in isolation.

Characteristic	Test Method	Result / Status
Combustibility — unfaced stonewool core	AS 1530.1-1994	Non-combustible (CSIRO FCO-3526)
Early fire hazard indices — unfaced ¹	AS/NZS 1530.3-1999	0, 0, 0, 1 (CSIRO FCO-3532)
Early fire hazard indices — foil-faced ¹	AS/NZS 1530.3-1999	0, 0, 0, ≤2 (CSIRO FCO-3532)
Group Number (wall & ceiling lining)	AS 5637.1 / NCC 2022	Not required — see note
Fire resistance level (FRL) ²	AS 1530.4-2005	-/240/240 (either direction) — tested configuration

Non-combustibility — CSIRO Assessment FCO-3526. The unfaced AIS stonewool core is assessed by CSIRO (NATA-registered laboratory) as **non-combustible** to AS 1530.1-1994, for the purpose of NCC 2022 Vol 1 & 2 Clause A5G3(d), across a density range of 40–175 kg/m³ and thickness 10–200 mm. Valid to **30 November 2028**.

Early fire hazard — CSIRO Assessment FCO-3532. Both the unfaced and foil-faced AIS stonewool are assessed by CSIRO as achieving AS/NZS 1530.3-1999 indices of **0, 0, 0, ≤2** (Ignitability / Spread of Flame / Heat Evolved / Smoke Developed) when exposed from either side, for the purpose of NCC 2022 Clause A5G3(1)(d) and Specification 3. The assessment covers density 40–175 kg/m³ and thickness 10–200 mm, and includes specimens incorporating holes, joints and perforations (CSIRO FNE 13131 / FNE 13134) as required by NCC Specification 3. Assessment FCO-3532 is valid to **28 February 2029**.

NCC context. Under the National Construction Code, walls separating sole-occupancy units (e.g. attached Class 1a dwellings and Class 2/3 units) must achieve a required FRL — commonly 60/60/60. AIS Party Wall Firestop Roll is used to seal gaps and junctions so the required FRL and smoke separation of the separating wall are not compromised. The roll must be installed in accordance with the fixing detail of the tested or assessed system.

Fire resistance — Certificate of Test No. 2073 (CSIRO, FSP 1311). Tested to AS 1530.4-2005, a foil-faced stone wool control-joint seal in a masonry wall opening achieved no failure of Integrity or Insulation at 241 minutes — an **FRL of -/240/240**, applicable to fire from either direction, for the tested configuration.

¹ Index order: Ignitability (0–20) / Spread of Flame (0–10) / Heat Evolved (0–10) / Smoke Developed (0–10); the unfaced core returns Smoke Developed 1 and the foil-faced up to 2. The unfaced core is non-combustible to AS 1530.1, which deems it to satisfy the reaction-to-fire (lining) provisions without a Group Number — non-combustibility is a higher classification than Group 1. For both variants, fire hazard properties for NCC purposes are established directly by the AS/NZS 1530.3 indices above, so an AS 5637.1 Group Number is not required.

² FRL determined for the specific control-joint configuration described in Certificate of Test No. 2073 (CSIRO, 2008; investigation report FSP 1311); the FRL applies to that tested configuration.

ACOUSTIC PERFORMANCE

Stonewool is an effective sound-absorbing infill. Installed within a separating wall cavity or gap, the product's open fibrous structure and high airflow resistivity dampen airborne sound and support the acoustic separation ($R_w / R_w + C_{tr}$) required of inter-tenancy walls under the NCC. As with fire resistance, the achieved acoustic rating is a property of the complete wall system.

Typical sound absorption coefficients for the **unfaced** 50 mm product (ISO 354 / ASTM C423, Type A direct mount):

Frequency (Hz)	125	250	500	1000	2000	4000	NRC
Absorption coefficient, α_s ¹	0.20	0.65	0.95	1.00	1.00	1.00	≈ 0.90
Airflow resistivity (ISO 9053) ¹	≈ 40–60 kPa·s/m² (typical for 100 kg/m³ stonewool)						

¹ Typical / indicative values for stonewool of this class — not a test result for this product; confirm by ASTM C423 / ISO 354 testing before specification. Absorption is mounting- and air-gap-dependent (an air space behind the product lifts low-mid absorption, with NRC approaching 1.00). The **foil-faced** variant performs differently: the reflective foil reduces mid-to-high frequency absorption, giving a materially lower NRC (typically ≈ 0.5–0.65), so the unfaced values above must not be applied to the foil-faced product.

FOIL FACING (F VARIANTS)

The foil-faced variants carry a reinforced aluminium foil laminate on one face, providing a reflective low-emissivity surface, a vapour/moisture-resistant barrier and added tensile strength for handling. The facing comprises an aluminium foil (nominal 18 µm) over a fibreglass scrim (nominal 95 µm), bonded to the stonewool with a polyethylene adhesive at a nominal 25 g/m². During AS/NZS 1530.3 testing the aluminium facing remained intact, did not ignite and screened the core (CSIRO FCO-3532). Where facing joints occur, seal with AIS reinforced foil tape to maintain continuity of the facing.

STANDARDS & TEST METHODS REFERENCE

Standard	What it evaluates
AS 1530.1-1994	Combustibility test for materials — determines non-combustibility (assessed under CSIRO FCO-3526 for unfaced AIS stonewool)
AS/ NZS 1530.3-1999	Early fire hazard indices — ignitability, spread of flame, heat evolved, smoke developed (assessed under CSIRO FCO-3532 for unfaced & foil-faced AIS stonewool)
AS 1530.4-2005	Fire-resistance test of building elements — determines FRL (Certificate of Test No. 2073 / FSP 1311 for the tested control-joint system)
AS 5637.1	Determination of fire hazard properties — assigns Group Number (1–4) for combustible linings; non-combustible materials are exempt
AS/NZS 4859.1	Thermal insulation materials — determination of material R-Value / conductivity
ASTM E794	Melting and crystallisation temperature by thermal analysis
EN 13470	Determination of the apparent (nominal) density of insulation products
EN 1609	Short-term water absorption by partial immersion
ASTM C423 / ISO 354	Sound absorption coefficient / NRC in a reverberation room

HANDLING, STORAGE & INSTALLATION

Storage

- Store flat and dry, off the ground, in original packaging until use
- Protect from prolonged weather exposure, water and mechanical damage
- Do not stack heavy loads on packed rolls

Installation

- Cut to length with a sharp knife; friction-fit into the gap, compressing to suit
- Ensure continuous, gap-free packing along the full junction
- Install per the fixing detail of the tested/assessed fire-rated system
- Seal foil-faced joints with AIS reinforced foil tape where required

HEALTH, SAFETY & SUSTAINABILITY

AIS stonewool is manufactured from bio-soluble mineral wool fibres that meet the exoneration criteria for man-made vitreous (silicate) fibres and are **not** classified as carcinogenic. Follow the product SDS: use gloves, eye protection and a dust mask when cutting, and ventilate the work area. The material is inert, rot-proof, does not sustain vermin or mould, contains no ozone-depleting agents, has zero ozone-depletion and negligible global-warming potential in use, and is recyclable at end of life.

Health & safety classification statements to be confirmed against the current AIS Safety Data Sheet for this product.

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