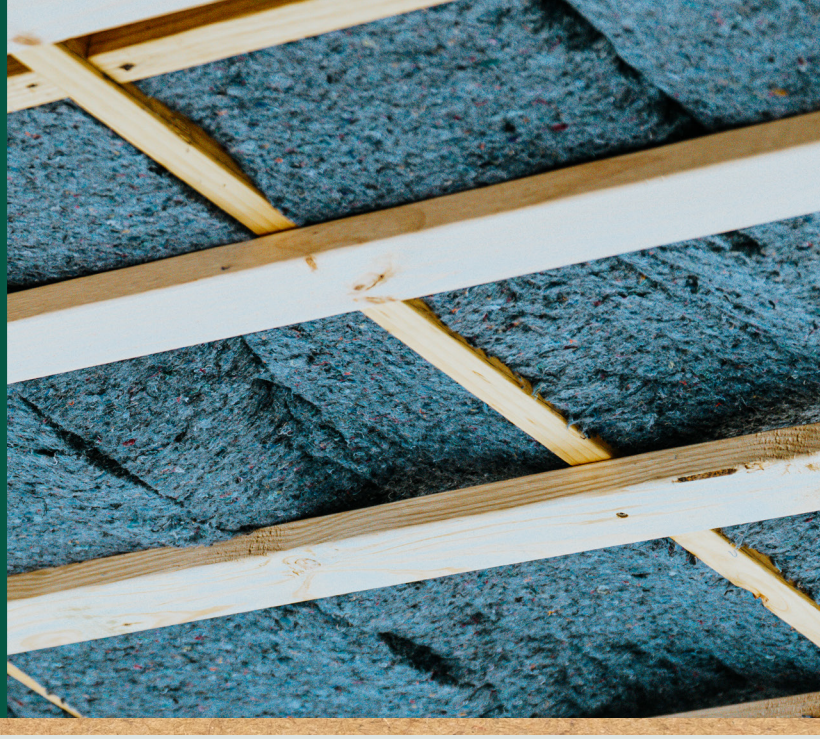
Jeanius™ DENIM INSULATION

by Planet Protector

PRODUCT DATA SHEET

JEANIUS™ DENIM INSULATION



Product Type & Application

Planet Protector Jeanius™ Insulation is a sustainable thermal insulation made from recycled denim fibres. It is designed for use in walls and ceilings of residential and commercial buildings to provide a combination of high acoustic protection along with excellent thermal insulation. Our Jeanius™ Insulation is soft to touch, safe to handle, and free from added harmful chemicals.

Compliance with Australian Standards

When correctly specified and installed, this product provides the following compliance:

- Thermal Performance: Thermal resistance (R values) have been measured in accordance with AS/NZS 4859.1 as required by the National Construction Code (NCC). Meets NCC requirements through compliance with AS/NZS 4859.1
- Fire Hazard Properties: Tested in accordance with AS/NZS 1530.3 meeting requirements of the NCC for "other insulation materials"
- Acoustic testing to ISO 354 has shown that recycled denim insulation provides higher sound absorption compared to standard polyester insulation of the same thickness and density, particularly in low-to-mid frequency ranges.

Installation Guide – Jeanius Denim Insulation Batts

Read this guide carefully before installation to ensure compliance, performance, and safety. Failure to follow proper installation practices may affect thermal efficiency and void compliance claims.

Pre-Installation Checklist

- Confirm that the product is the correct R-Value and size for the application (walls, ceilings, underfloor).
- Ensure the cavity depth matches the insulation thickness; do not compress batts, as this reduces thermal performance.
- Store batts in a dry, covered location, away from direct sunlight and moisture until installation.
    - While the insulation is made primarily from recycled denim and is low-irritant, we recommend wearing PPE such as gloves, safety glasses, and a dust mask (especially when cutting indoors).

Electrical Safety

- Isolate power before installation.
- Electrical cables and equipment partially or completely surrounded by bulk insulation may overheat and fail.
  - If wiring is not compliant with current Australian standards or is installed to older standards, seek advice from a licensed electrician.
- Do not cover downlights unless they are clearly marked as IC, IC-F, or IC-4 rated in accordance with AS/NZS 60598.2.2.

Installation Steps

Prepare the Work Area

- Remove debris, sharp objects, and moisture sources from the installation cavity
- Ensure wall frames, ceiling joists, or sub floor structures are in good condition

Cutting Batts

- Use a sharp insulation knife or shears for a clean cut.
- Cut batts slightly oversize to ensure a snug fit without gaps.

Positioning Insulation

- Install batts so that they form a continuous thermal layer, overlapping adjoining pieces
- Fit insulation firmly between studs, joists, or rafters without compressing the material
- Where pipes, wires, or services are present:
  - Split the batt to fit around the obstacle.
- **Do not leave gaps or voids behind services.**

Maintaining Nominal Thickness

- Do not squash, fold, or overly compress the insulation.
- Where insulation crosses framing or obstructions, maintain nominal thickness wherever possible to prevent cold spots.

Ceiling Applications

- Take care around manholes and light fittings—maintain clearance for fire safety.

Wall Applications

- Ensure the cavity depth equals or exceeds the batt thickness.
- Avoid forcing batts into spaces that are too small, as this can deform wall linings.

Moisture and Ventilation

- Denim insulation should be installed in dry conditions.
- Avoid contact with water or condensation sources—moisture can reduce insulation performance and cause mould growth.
- Ensure appropriate vapor barriers and ventilation where required by the building code.

Post-Installation

- Inspect the area to ensure:
  - All cavities are filled without gaps or compression
  - Insulation is aligned with framing
- Planet Protector recycles the Denim insulation off cuts. In the event of removal or disposal of the Planet Protector product, please check with your retailer if they have an associated recycling program.

Suitability & Limitations

- Suitable for enclosed applications where protected from direct UV light, water, and wind pressure.
- Not suitable for use as an exposed lining or in areas requiring UV or mechanical resistance.
- Not suitable where a Group Number or non-combustibility is required in accordance with AS 1530.1 or AS 5637.1.
- Does not function as a water or vapor barrier, use appropriate membranes where required.

Conditions of Storage & Maintenance

- Store in original packaging in a cool, dry area, away from moisture and direct sunlight
- Keep product sealed until use.
- Avoid prolonged exposure to high-humidity environments during storage.

Denim Insulation Batts			
Thermal Resistance (R-VALUE $m^2 \cdot K/W$)	Thickness (mm)	Standard Dimensions (L × W mm)	Insulation Type
R2.5	90	1160 × 430/580	Wall
R4.0	140	1160 × 430/580	Wall
R6.0	240	1160 × 430/580	Ceiling
R3.0	140	Flexible	Underfloor

Nominal Density: 26 kg/m^3
Material Composition: Recycled denim, binding agent

Fire Hazard Properties (AS/NZS 1530.3)

Denim insulation falls under the “Other Insulation Material” category according to the standard AS/NZS 1530.3 and Table S7C7 of the NCC.

AS/NZS 1530.3 Testing index	NCC Criterion	Test Result*
Spread of Flame	≤ 9	8
Smoke Developed	≤ 8	<4

*Tested at the Australian Wool Testing Authority (AWTA)

Testing conducted by AWTA confirms that the product is compliant with the fire hazard requirements of the NCC.