CEILING BATTS TECHNICAL DATA SHEET



DESCRIPTION

ECOWOOL ceiling batts, our new generation range of glass mineral wool insulation, manufactured in partnership with PGF Insulation are intended for both thermal and acoustic insulation application. They are manufactured using recycled glass and with SensiTouch Technology, employs a binder which incorporates a natural anti-formaldehyde ingredient, and has no harmful chemicals. The ECOWOOL insulation batt range encompasses multiple densities, thicknesses and dimensions to suit typical timber or steel framed construction and to satisfy a broad spectrum of building requirements.

SensiTouch TECHNOLOGY

Formaldehyde has traditionally been used as part of the binder in glass mineral wool insulation. Although there is no health risk with the traditional product, formaldehyde at a higher level may cause irritation and sensitivity. ECOWOOL utilises SensiTouch Technology, this innovative new binder incorporates a natural anti formaldehyde ingredient and is low in volatile organic compounds, making for a safer and more pleasant installation process.

AS/NZS 4859.1:2018 COMPLIANT

All ECOWOOL products have received Third Party Product Certification that they comply with AS/NZS 4859.1. 2018. This independent assurance gives you peace of mind that you are fulfilling all your obligations as required under the Building Code of Australia.

SUSTAINABLE PRODUCT

ECOWOOL Insulation is committed to providing environmentally sustainable products. ECOWOOL ceiling batts are free from CFCs, HCFCs and any other material, with ozone depletion, potential in their manufacture/composition content, and represent no known threat to the environment. Made from nearly 80% recycled glass and locally sourced raw materials, the ceiling batts are perfectly in tune with sustainability and environmental concerns.

APPLICATION

ECOWOOL ceiling batts are designed to be used in ceiling systems in residential and commercial buildings for enhanced thermal and acoustic performance. They are installed by laying them on top of the ceiling in between the ceiling joists enabling complete coverage for optimal effectiveness.

INDIVIDUAL VOLATILE ORGANIC COMPOUNDS (VOC's) EMISSION

Safe to use due to the low Volatile Organic Compounds (VOC's) content. This ensures that no harmful levels of VOC's are released. Compliant with ISO 16000-9:2006.





ADVANTAGES

Soft to touch and less itchy. Specifically engineered to produce a softer feel and less itchy product compared to conventional glass wool.

Firm Friction Fit. The rigidity of the ceiling batts assures users the product will leave no gaps or voids. Gaps or voids can lead to the loss of thermal and acoustic performance.

Hypoallergenic. Unlikely to cause an allergic reaction.

Reduced sound transmission. Exceptional acoustic performance. Designed to reduce transmission of unwanted noise, ECOWOOL minimizes sound transfer through ceiling systems in residential or commercial buildings.

SensiTouch Technology. innovative new binder incorporates a natural anti-formaldehyde ingredient and is low in volatile organic compounds, making for a safer and more pleasant installation. Compliant with ISO 16000-9:2006.

Mould Growth. Does not encourage growth of mould, fungus, bacteria or rodents. Tested in accordance with ASTM C1338-08.

Corrosiveness. Chemically inert. Hydrogen ion concentration at pH $6\sim7$. Will not cause or accelerate corrosion of steel, stainless steel, copper or aluminum. Tested in accordance with ASTM C665-12.

Water Vapor Absorption. When tested in accordance with ASTM C1104, this product has been determined to be <0.02% by volume.

Maximum service temperature. Maximum service temperature of 350°C.









FIRE HAZARD PROPERTIES

ECOWOOL insulation achieved the following Early Fire Hazard Performance Indices of; Ignitability 0, Spread of Flame 0, Heat Evolved 0, Smoke Developed 0-1, in accordance with AS/NZS 1530.3:1999.

COMBUSTIBILITY PROPERTIES

Inherently non-combustible and therefore the wall batts won't burn if exposed to fire. ECOWOOL insulation is non-combustible when tested in accordance with:

o AS/NZS1530 Part 1: 1994

SURFACE BURNING CHARACTERISTICS

Meets the surface burning characteristics and limited combustibility of the following standard:

o ASTM E84

ACOUSTICAL PERFORMANCE

The National Construction Code (NCC) has adopted the Weighted Sound Reduction Index (Rw) as a measure of the sound isolating properties of building elements. A building ceiling system with a higher Rw rating isolates sound better than a system with a lower Rw rating. ECOWOOL ceiling batts act as a natural and effective sound barrier. They minimize sound transfer and achieve excellent Rw ratings. Please contact one of our ECOWOOL Insulation representative for further information relating to the acoustic performance.

THERMAL PERFORMANCE

The thermal resistance value was determined at mean temperature of 23°C as per AS/NZS 4859.1:2018/Amdt 1:2006. This assures users the products deliver the specified thermal resistance which contribute to the operational efficiencies of the building. Please refer to the table on 'Products Available' for more information on the thermal resistance values.

BIOSOLUBILITY

Ecowool is manufactured with bio-soluble fibers creating a low allergen product that is safe to use in any residential, commercial or industrial application. Bio-soluble fibres have been extensively researched and shown to pose no long term health risks.

PRODUCT WARRANTY

This product is covered by a 70 year product warranty. For full details, please go to www.pgfinsulation.com.au. Terms & conditions apply.



SPECIFICATION NOTES

The insulation material shall be ECOWOOL ceiling batts. R $\,$ m 2 K/W_x_x_mmm (specify material R-value, width, length, thickness) as manufactured by PGF Insulation.

PRODUCTS AVAILABLE

| R-value (m²K W) | Thickness (mm) | Width (mm) | Length (mm) | Single pack (pcs) | Area Per Pack (m²) | Product Code |
|--------------------|-------------------|------------|-------------|----------------------|-----------------------|--------------|
| R 2.5 | 120 | 430 | 1160 | 19 | 9.48 | 602001 |
| R 2.5 | 120 | 580 | 1160 | 19 | 12.78 | 602002 |
| R 3.0 | 145 | 430 | 1160 | 19 | 9.48 | 602016 |
| R 3.0 | 145 | 580 | 1160 | 15 | 10.09 | 602017 |
| R 3.5 | 165 | 430 | 1160 | 14 | 6.98 | 602005 |
| R 3.5 | 165 | 580 | 1160 | 12 | 8.07 | 602006 |
| R 4.1 | 195 | 430 | 1160 | 12 | 5.99 | 602007 |
| R 4.1 | 195 | 580 | 1160 | 11 | 7.40 | 602015 |
| R 5.0 | 230 | 430 | 1160 | 8 | 3.99 | 602009 |
| R 5.0 | 230 | 580 | 1160 | 8 | 5.38 | 602010 |
| R 6.0 | 278 | 430 | 1160 | 6 | 2.99 | 602011 |
| R 6.0 | 278 | 580 | 1160 | 7 | 4.04 | 602012 |
| R 7.0 | 285 | 430 | 1160 | 5 | 2.49 | 602013 |
| R 7.0 | 285 | 580 | 1160 | 5 | 3.36 | 602014 |

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of glass mineral wool insulation listed herein represent typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Warranty and liability upon delivery shall be in accordance with our General Terms and Conditions. No responsibility is assumed for the correctness of this information. Version of 23rd August 2022.







