

HVAC BLANKET TECHNICAL DATA SHEET



Ecowool CondenShield HVAC Plus Blanket

Ecowool CondenShield Plus HVAC blanket is a flexible insulating layer intended for use as an external lagging for sheet metal ducting, industrial appliances, and equipment with low to medium temperatures. If preferred, it can also be utilized as a general insulating roofing blanket for residential or commercial buildings. Ecowool CondenShield HVAC Plus is commonly utilized in applications such as hot water tanks, air conditioning ductwork, and as a useful material for energy conservation on process vessels that operate at temperatures up to 300°C.



KEY PERFORMANCE

THERMAL INSULATION	Greatly reduces heat gains or losses through the duct walls so that energy costs are reduced and conditioned air reaches the outlet at the required temperature.
ACOUSTIC INSULATION	Reduces the transmission of HVAC noises such as air turbulence, popping and cracking.
FIRE PROTECTION	Made from non-combustible glass mineral wool and complies with the National Construction Code of Australia (NCC).

ADVANTAGES



SensiTouch TECHNOLOGY

Ecowool utilizes SensiTouch Technology, this innovative new binder incorporates a natural anti formaldehyde ingredient and is ultra low in volatile organic compounds (VOC) and formaldehyde emissions, providing a safer and

more pleasant installation process. Tested in accordance with ISO 16000-9:2006.

Less dusty and less itchy. Specifically engineered to produce a comfortable and less dusty insulation. The insulation creates a pleasant work experience by reducing the tingling feeling during installation.

Better fibre network. Fine, longer and evenly distributed fibre network helps in creating better tensile strength allowing the insulation to demonstrate superior durability, flexibility and feeling much softer.

Absorbs disturbing sound. Exceptional sound-absorbing properties, specially designed to reduce transmission of reduces the transmission of HVAC noises such as air turbulence, popping and cracking

Optimal fibre diameter. Optimal fibre diameter ranging produces more air chamber which enables the insulation to provide a better and enhanced performance.

Corrosiveness. Chemically inert. Hydrogen on concentration at pH9. 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.

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



All Insulation And HVAC **Supplies**

80 Mica Street Carole Park Phone: 1300 180 926 All Insulation E-mail: Matthew@aiandhs.com.au Website: www.aiandhs.com.au





Technical specifications as shown in this literature are intended to be used as general guidelines only. Product facings may Technical specifications as shown in this filterature are intended to be used as general guidelines only. Product tracings may vary, The physical and chemical properties of glass mineral wool insultion instellate 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 withhour hout ca. Any references to numerical flame spread or smake 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, Vesion 13 Oct 2022.





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 National Construction Code of Australia (NCC).

SUSTAINABLE PRODUCT

Ecowool CondenShield HVAC Plus blanket is made from nearly 80% recycled glass and locally sourced raw materials, the insulation blanket is perfectly in tune with sustainability and environmental concerns.

THERMAL PERFORMANCE

The thermal resistance value was determined at mean temperature of 23°C as per AS/NZS 4859.1:2018. 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 'Product Available' for more information on the thermal resistance value.

FIRE HAZARD PROPERTIES

Ecowool CondenShield HVAC Plus blanket 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.

SURFACE BURNING CHARACTERISTICS

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

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 system with a higher Rw rating isolates sound better than a system with a lower Rw rating. Ecowool CondenShield HVAC Plus blanket acts as a natural and effective sound barrier. It minimizes sound transfer and achieves excellent Rw ratings. Please contact one of our All Insulation Insulation representatives for further information relating to the acoustic performance.

R-value (m²K W)	Density (kg/m³)	Thickness (mm)	Width (mm)	Length (mm)	Area Per Pack (m²)
R 2.0	18	75	1200	10,000	12
R 1.5	18	55	1200	10,000	12

Health and Safety

Ecowool is manufactured with bio-soluble fibers creating a low allergen product that is safe to use in any residential, commercial or industrial application.

Product Limitations of Use

- Not to be used/exposed to weather in any condition including prior, during and after installation.
- Product must be kept dry at all times.
- Not suitable for applications where high humidity is present within building (wet climates for a long period).
- This product can not be classified to AS 1530.1 as an assembly, and is not suitable where non-combustible material is required.
- This product does not have a group number in accordance with AS 5637.1 and is not suitable for exposed applications where a group number is required.
- Product needs to be allowed to fully recover before installation.
- The facing is a vapour barrier, not to be used where vapour permeable product is required.

All Insulation And HVAC Supplies 80 Mica Street Carole Park

Phone: 1300 180 926 All Insulation E-mail: <u>Matthew@aiandhs.com.au</u> Website: <u>www.aiandhs.com.au</u>

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.



Specification Notes

Insulation material shown on drawings or specified herein shall be of Ecowool CondenShield HVAC Plus blanket, Material Rvalue of R 1.5 and 2.0 m²K/W (specify Material R-value) at a nominal thickness of 55mm and 75mm (specify nominal thickness).





Technical specifications as shown in this literature are intended to be used as general guidelines only. Product facings may Technical specifications as shown in this ifterature are intended to be used as general guidelnes only. Product facings may vary, The physical and chemical properties of glass mineral wool insulation listed herein represent Hypical average value obtained in accordance with accepted test methods and are subject to normal manufactuling variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread o smake developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Warronty and liability upon delivery shall be in accordance with our General Terms and Conditions. No responsibility is assumed for the correctness of this information. Vesion 13 Oct 2022.