

CLIMACOUSTIC® HVAC SEMI RIGID BOARD (UNFACED)

August 2019



APPLICATION



DESCRIPTION

Climacoustic® Semi Rigid board (unfaced) with ECOSE® Technology is a high density board, specifically designed as an interior insulation material for heating, ventilating and air conditioning plenums and sheet metal ducts. It offers an optimum combination of efficient sound absorption, low thermal conductivity and minimal air surface friction. Climacoustic® Semi Rigid board (unfaced) is made using up to 80% recycled glass and with ECOSE® Technology, a sustainable, bio-based binder that contains no added formaldehyde.

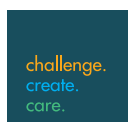
PERFORMANCE

| | |
|-------------------------------|--|
| Temperature Range | Operating temperatures from -18°C to 230°C (unfaced). |
| Fire Hazard Properties | Ignitability: 0, Spread of flame: 0, Heat Evolved: 0, Smoke Developed: 0-1. |
| Moisture Absorption | Less than 0.2% by volume when left in an atmosphere of 50°C and 95% relative humidity for four days. |
| Thermal Compliance | Complies with AS/NZS 4859.1 Materials for the thermal insulation of buildings. |
| Combustibility | Non-combustible. |
| Corrosion | pH 7.5-8.0: Incapable of corroding steel, aluminium or copper. |

BENEFITS

- ✓ High thermal performance
- ✓ Sound absorbing
- ✓ Non-combustible
- ✓ No added formaldehyde
- ✓ Odourless
- ✓ Superior Handling
 - Consistent quality materials cut easily and installs fast.
 - Highly resilient insulation recovers quickly to full thickness

CERTIFICATION



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ADDITIONAL INFORMATION

Specification Guide

The insulation shall be Climacoustic® Semi Rigid board *kg/m³, *mm thick, AS/NZS 4859.1:2002 compliant. The product will be non-combustible, CFC/HCF free, zero ODP and GWP, glasswool insulation with high post-consumer recycled glass content and with ECOSE® Technology. It will be manufactured under Quality Assurance Standards ISO 9001:2008 and ISO 14001:2004 by Knauf Insulation and shall be installed in accordance with the instructions issued by them.

*architect specifier to insert details of products used.

Bio-solubility

The formulation used for Climacoustic® insulation has been independently assessed to meet the requirements of the stringent Note Q standard (and is therefore consistent with the highest Australian and New Zealand industry standards), and also assessed by Knauf Insulation against the criteria of the Australian Safety and Compensation Council ASCC Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008 3rd Edition]. As a result of this assessment, Climacoustic® insulation is not classified as hazardous according to the NOHSC criteria.

Superior Handling

- Highly resilient insulation recovers quickly to full thickness for a snug fit and superior finished aesthetics.
- Consistent quality materials feel good, cut easily and install fast.
- Low dust for easier handling and increased productivity.

Durability

- Climacoustic® Semi Rigid board is odourless, rot proof, non-hygroscopic, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria.

Proven Performance

- Preferred by professional installers concerned with quality, appearance and productivity.
- Excellent acoustical properties reduce sound transmission.

Superior Service and Support

- Knauf Insulation is totally focused on providing first class customer service, producing high quality product and 'on time in full' deliveries.
- Knauf Insulation supports a professional network of distributors and re-sellers in order to service a growing insulation market.
- Knauf Insulation is committed to providing a comprehensive range of relevant sales and marketing literature and web-based technical information to support specifiers and customers.

Storage

- Protect material from water damage or other abuse. Pallets are not designed for outside storage.

Preparation

- Apply the product on clean, dry surfaces. Metal ducts must be sealed before application. Pre-score Semi Rigid board where necessary to conform to curved surfaces.

General

- All insulation joints must be firmly butted. Insulation can be secured with adhesive, mechanical fasteners or banded. Minimum compression is to be used to assure firm fit and still maintain thermal performance.

Vessels, Tanks and Equipment

- For outdoor application, Climacoustic® Semi Rigid board must be covered with appropriate jacketing, mastic or other vapour retarder. All exposed surfaces must be protected.
- Apply jacketing, mastics and other vapour retarders in accordance with manufacturer's instructions.

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SPECIFICATIONS

| Product Code | R-Value (m ² K/W) | Density (kg/m ³) | Thickness (mm) | Length (mm) | Width (mm) |
|--------------|------------------------------|------------------------------|----------------|-------------|------------|
| TBA | 0.7 | 32 | 25 | 3000 | 1200 |
| TBA | 1.5 | 32 | 50 | 3000 | 1200 |
| TBA | 2.3 | 32 | 75 | 3000 | 1200 |
| TBA | 3.0 | 32 | 100 | 3000 | 1200 |

SOUND ABSORPTION

| Thickness (mm) | Density (kg/m ³) | Frequency | | | | | | |
|----------------|------------------------------|-----------|------|------|------|------|------|------|
| | | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
| 25 | 32 | 0.05 | 0.24 | 0.59 | 0.86 | 0.97 | 1.00 | 0.65 |
| 50 | 32 | 0.17 | 0.49 | 0.93 | 1.03 | 1.03 | 0.99 | 0.85 |
| 75 | 32 | 0.26 | 0.62 | 1.05 | 1.07 | 1.04 | 1.05 | 0.95 |
| 100 | 32 | 0.31 | 0.86 | 1.05 | 1.08 | 1.05 | 1.05 | 1.00 |

Acoustic ratings are based on ASTM 423, Type A Mounting



Climacoustic® products made with ECOSE® Technology benefit from a no added formaldehyde binder, which is less energy intensive than traditional binders and is based on rapidly renewable, bio-based materials instead of petro-based chemicals. The technology has been developed for Knauf Insulation's glass and rock mineral wool products, enhancing their environmental credentials without affecting the thermal, acoustic or fire performance. Climacoustic® products made with ECOSE® Technology contain no added dyes or artificial colours.

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