

CLIMACOUSTIC® HVAC SEMI RIGID BOARD (UNFACED)

October 2019



with **ECOSE** TECHNOLOGY

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.

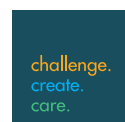
PERFORMANCE

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.
Combustibility (AS 1530.1)	Non-combustible.
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 install fast.
 - Highly resilient insulation recovers quickly to full thickness.

CERTIFICATION



CLIMACOUSTIC® HVAC SEMI RIGID BOARD (UNFACED)

October 2019

ADDITIONAL INFORMATION

Specification Guidance

The HVAC insulation shall be Climacoustic® Semi Rigid board (unfaced) *kg/m³, *mm thick, AS/NZS 4859.1:2002 compliant. The product will be non-combustible, CFC/HCFC 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 to insert details of products used.

Specification Compliance

AS/NZS 4859.1: 2002 Materials used in the Thermal Insulation of Buildings and comply with the New Zealand Building Code requirements: B2 – Durability, E3 – External Moisture, F2 – Hazardous Building Materials, and H1 – Energy Efficiency.

Bio-solubility

The formulation used for Climacoustic® Semi Rigid board has been independently assessed to meet the requirements of the stringent Note Q international standard (and is therefore consistent with the highest 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® Semi Rigid board is not classified as hazardous according to the NOHSC criteria.

Proven Performance

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

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.

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.

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 HVAC 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.
 - Fasteners should be located a maximum of 75mm from each edge and spaced no greater than 450mm on centre.
 - Tapes and mastics (dry) should have a UL 723 rating of 25 flame spread, 50 smoke developed.

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.

CLIMACOUSTIC® HVAC SEMI RIGID BOARD (UNFACED)

October 2019

SPECIFICATIONS

Product Code	R-Value (m²K/W)	Density (kg/m³)	Thickness (mm)	Width (mm)	Length (mm)	Boards per Pallet
450915	0.7	32	25	1200	3000	44
450913	1.6	32	50	1200	3000	22
450909	2.4	32	75	1200	3000	15
450897	3.1	32	100	1200	3000	11

SOUND ABSORPTION

Thickness (mm)	Density (kg/m³)	Frequency						NRC
		125	250	500	1000	2000	4000	
25	32	0.05	0.24	0.59	0.86	0.96	0.97	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

ASTMC 423, Type A Mounting



Earthwool® glasswool 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. Earthwool® glasswool products made with ECOSE® Technology contain no added dyes or artificial colours.

Knauf Insulation Ltd

PO Box 217 063, Botany Junction,
Auckland, 2013, New Zealand

Customer Service: Tel: 0800 562 834
Fax: +61 7 3902 0613

Technical Advisory Centre: tech.nz@knaufinsulation.com

All rights reserved, including those of photomechanical reproduction and storage in electronic media. Extreme caution was observed when putting together and processing the information, texts and illustrations in this document. Nevertheless, errors cannot quite be ruled out. The publisher and editors cannot assume legal responsibility or any liability whatever for incorrect information and the consequences thereof. The publisher and editors will be grateful for improvement suggestions and details of possible errors pointed out.

KINZ1214147DS

Updated October 2019

challenge.
create.
care.