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## Climacoustic® Rigid Plenum Liner (Faced)

### Description

Climacoustic Rigid Plenum Liner (Faced) is a high-density black glass tissue faced glasswool board bonded with ECOSE® Technology, a revolutionary binder based on rapidly renewable materials instead of petro-based chemicals. ECOSE Technology reduces binder embodied energy and contains no added phenol, formaldehyde, acrylics or artificial colours found in traditional glasswool insulation.

### Application

Climacoustic Rigid Plenum Liner (Faced) with ECOSE Technology is 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. The base board is brown with a black tissue facing to give the airstream a smooth, tough surface, that resists damage during installation and operation.

### Technical Data

#### Temperature Range (ASTM C 411)

Operating temperature up to 120°C.

#### Air Velocity (ASTM C 1071)

Maximum 1500 mpm.

Tested to 3800 mpm.

#### Corrosiveness (ASTM C665)

Will not accelerate corrosion of aluminum, steel or copper.

#### Corrosion (ASTM C 1617)

The corrosion rate in mils/yr will not exceed that of the 1 ppm chloride solution.

#### Resists Microbial Growth (ASTM C 1338, G21)

Does not promote or support the growth of mould, fungi or bacteria.

#### Water Vapor Sorption (ASTM C 1104)

Less than 5% by weight when exposed to air at 49°C and 95% humidity for 96 hours.

#### Fire Resistance (AS 1530.1:1994)

- Non-combustible.



**EARTHWOOL® GLASSWOOL**  
the feel good glasswool insulation

with **ECOSE®** TECHNOLOGY

## Climacoustic® Rigid Plenum Liner

### 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 Rigid Plenum Liner 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 Rigid Plenum Liner is not classified as hazardous according to the NOHSC criteria.

### Features

#### 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 Rigid Plenum Liner is odourless, rot proof, non-hygroscopic, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria.

### Benefits

#### 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.

### Application and Specification Guidelines

#### Storage

- Protect material from water damage or other abuse. Cartons are not designed for outside storage. Vacuum packaged material can be stored outside if care is taken not to puncture the poly bag.

Knauf Insulation's Climacoustic products with ECOSE® Technology benefit from a formaldehyde-free binder based on rapidly renewable materials instead of petro-based chemicals which is up to 70% less energy intensive. 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 dye or artificial colours – the colour is completely natural.



For more information please visit  
[www.knaufinsulation.co.nz](http://www.knaufinsulation.co.nz)

## Climacoustic® Rigid Plenum Liner

### Fabrication and Application

- Install Climacoustic Rigid Plenum Liner in metal duct and plenums operating at 120°C service temperature or less and velocities of 1500mpm or less.
- Liner shall be applied with the treated surface facing toward the air stream.
- Mechanical fasteners shall not compress the liner more than 3mm and shall be installed perpendicular to the airstream surface. All fasteners must meet "Standard for Mechanical Fasteners MF-1-1975."
- Adhesives which conform to ASTM C 916 shall be applied to the sheet metal with at least 90% coverage.
- All internal duct areas designated to be lined shall be completely covered with liner. Transverse joints shall be firmly butted together with no gaps, and coated with adhesive. All exposed leading edges shall be coated with adhesive.
- Mechanical fasteners shall be used to secure the Rigid Plenum Liner.
- Corner joints shall be overlapped so no gaps are present. Top pieces shall be supported by side pieces.
- All longitudinal joints shall be coated with adhesive conforming to ASTM C 916 at velocities over 750mpm.
- All damaged areas to the airstream surface shall be repaired with an adhesive that conforms to ASTM C 916.

SAP Code	Density (kg/m <sup>3</sup> )	R-Value (m <sup>2</sup> K/W)	Thickness (mm)	Width (mm)	Length (mm)	Boards/ Container
463077	32	0.7	25	1200	3000	730
463081	32	1.6	50	1200	3000	360
TBA	32	2.4	75	1200	3000	236
TBA	32	3.1	100	1200	3000	176

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