

## CLIMACOUSTIC® RIGID PLENUM LINER (FACED)

August 2019



### APPLICATION



### DESCRIPTION

Climacoustic® Rigid Plenum liner (faced) is a high-density black tissue faced glasswool board. Climacoustic® Rigid Plenum liner (faced) 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 mat facing to give the airstream a smooth, tough surface, that resists damage during installation and operation. Climacoustic® Rigid Plenum liner (faced) is made using up to 80% recycled glass and with ECOSE® Technology, a sustainable bio-based binder that contains no added formaldehyde.

### PERFORMANCE

<b>Temperature Range</b>	Operating temperature up to 120°C.
<b>Air Velocity</b>	Maximum 1500 mpm. Tested to 3800 mpm.
<b>Water Vapour Absorption</b> Water vapour resistivity:	Less than 5% by weight when exposed to air at 49°C and 95% humidity for 96 hours.
<b>Resists Microbial Growth</b>	Does not promote or support the growth of mould, fungi or bacteria.
<b>Corrosiveness</b>	Will not accelerate corrosion of aluminum, steel or copper.
<b>Corrosion</b>	The corrosion rate in mils/yr will not exceed that of the 1 ppm chloride solution.

### 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® Rigid Plenum liner \*kg/m<sup>3</sup>, \*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 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 international 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 for 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 (faced) 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. Cartons are not designed for outside storage. Vacuum packaged material can be stored outside if care is taken not to puncture the poly bag.

#### Fabrication and Application

- Install Climacoustic® Rigid Plenum liner (faced) 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.

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### SPECIFICATIONS

Product Code	Density (kg/m <sup>3</sup> )	Thickness (mm)	Length (mm)	Width (mm)	Boards/ Container
TBA	32	25	3000	1200	730
TBA	32	50	3000	1200	360
TBA	32	75	3000	1200	236
TBA	32	100	3000	1200	176



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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