

## KNAUF INSULATION CLIMACOUSTIC DUCTWRAP

November 2021

### APPLICATION



### DESCRIPTION

Knauf Insulation Climacoustic Ductwrap (faced) with ECOSE® Technology is used as external insulation on commercial or residential heating or air conditioning ducts. It is suitable for the exterior of rectangular or round sheet metal ducts and spaces or surfaces where temperature and condensation must be controlled. Knauf Insulation Climacoustic Ductwrap (faced) is made using up to 80% recycled glass and with ECOSE® Technology, a sustainable, bio-based binder that contains no added formaldehyde.

The super-soft and easy to handle benefits of Climacoustic insulation have been further enhanced with TwinTech®. TwinTech® heralds another advancement in insulation manufacture - the dual forming technique ensures there is a smooth finish on both sides of the insulation.

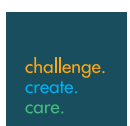
### PERFORMANCE

<b>Maximum Service Temperature (EN 14706)</b>	230°C.
<b>Combustibility (AS 1530.1)</b>	Non-combustible.
<b>Temperature Range</b>	Operating temperatures up to 121°C.
<b>Water Vapour Permeance</b>	FSK and white PSK facings have maximum water vapour permeance of .02 perms.
<b>Corrosiveness</b>	Will not accelerate corrosion of aluminium, steel or copper.
<b>Corrosion</b>	The corrosion rate in mils/yr will not exceed that of the 5 ppm chloride solution.
<b>Resists Microbial Growth</b>	Does not promote or support the growth of mould, fungi or bacteria.
<b>Water Vapour Absorption</b>	Less than 5% by weight when tested for 96 hours at 120°F (49°C) and 95% relative humidity.

### BENEFITS

- ✓ High thermal performance
- ✓ TwinTech® - smooth finish on both sides
- ✓ Sound absorbing
- ✓ 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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### SPECIFICATIONS

Product Code	R-Value (m <sup>2</sup> K/W)	Density (kg/m <sup>3</sup> )	Thickness (mm)	Width (mm)	Length (mm)	Area per pack (m <sup>2</sup> )
683677*	0.7	28	25	1200	18000	21.6
683676	1.2	28	40	1200	12000	14.4
690950	1.5	28	50	1200	9000	10.8

The Aluminium facing can be exposed to temperatures up to 80°C. | Nominal thickness. | \*Without TwinTech®.

Properties	Symbol	Description / Data			Unit	Test method / Standards
Heat conductivity	ϑ	15	50	100	°C	-
Air inside duct (ambient 20°C)	λ	0.034	0.041	0.050	W/mK	-

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### ADDITIONAL INFORMATION

#### Specification Guide

The insulation shall be Knauf Insulation Climacoustic Ductwrap \*kg/m<sup>3</sup>, \*mm thick, AS/NZS 4859.1:2018 compliant. The product will be non-combustible, Red List Free as labelled by Declare, 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 Knauf Insulation Climacoustic Ductwrap 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 NZ Work-Safe requirements. Knauf Insulation Climacoustic Ductwrap is classified as a non-hazardous substance in line with NOHSC: 1088 3rd Edition.

#### 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

- Knauf Insulation Climacoustic Ductwrap is odourless, rot proof, non-hygroscopic, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria.

#### Proven Performance

- Knauf Insulation glasswool is preferred by professional installers concerned with quality, appearance and productivity.
- Knauf Insulation glasswool has 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.

#### Preparation

- Install Knauf Insulation Climacoustic Ductwrap over clean, dry sheet metal ducts.
- All sheet metal joints and seams must be sealed to prevent air leakage from the duct.

#### Application

- Install Knauf Insulation Climacoustic Ductwrap with facing to the outside to obtain specified R-value using a maximum of 25% compression.
- Butt all insulation joints firmly together. Longitudinal seam of the vapour retarder must be overlapped a minimum of 50mm. A 50mm tab is provided for the circumferential seam and must be overlapped.
- Where vapour retarder performance is necessary, all penetrations, joints, seams and damage to the facing should be sealed with an FSK, PSK or foil tape or glass fabric and mastic prior to system start-up.
- Pressure sensitive tapes should be a minimum 75mm wide and be applied with moving pressure using an appropriate sealing tool. Staples should be outward clinch and placed approximately 150mm on centre.
- For rectangular ducts over 600mm wide, secure the insulation to the bottom side of the duct with mechanical fasteners spaced on 450mm centers to reduce sag.
- Care should be taken to avoid overcompressing the insulation with the retaining washer.
- It is neither necessary nor desirable to adhere duct roll to duct surfaces with adhesive.



Knauf Insulation 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. Knauf Insulation products made with ECOSE® Technology contain no added dyes or artificial colours.

#### Knauf Insulation Ltd

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challenge.  
create.  
care.