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## Atmosphere™ Duct Liner Slab

### For HVAC lining

#### Description

Atmosphere™ Duct Liner Slab is a flexible, mat-faced insulation bonded with ECOSE® Technology. It is faced with a tightly bonded mat to give the airstream a smooth, tough surface, resisting damage during installation and operation.

#### Application

Specifically designed as an interior insulation material for sheet metal ducts used in heating, ventilating and air conditioning. Provides an optimum combination of efficient sound absorption, low thermal conductivity and minimal airstream surface friction.

#### Standards

Atmosphere™ Duct Liner Slab is manufactured in accordance with BS EN 13162, OHSAS 18001 Occupational Health and Safety Management Systems, ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems, as certified by Bureau Veritas.

#### Durability

Atmosphere™ Duct Liner Slab is odourless, rot proof, non-hygroscopic, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria.

### Performance

#### Acoustic

Atmosphere™ Duct Liner Slab has a noise reduction coefficient ranging from 0.40 to 0.85 NRC

#### Air Velocity

Maximum 1800 mpm, textured to 4500 mpm

#### Fire

Atmosphere™ Duct Liner Slab does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E84.

#### Service Temperature

Operating temperatures up to 120 C

### Benefits

- Low thermal conductivity.
- Fire-resistant, non-corrosive and durable.
- Tough, tightly bonded mat facing.
- Excellent sound absorption.
- Lowers operating costs.
- Greatly reduces noise from fans and mechanical equipment as well as cross-talk and air movement.
- Low emitting for indoor air quality

## Duct Liner Slab

### Certification

Atmosphere™ Duct Liner Slab are certified under ASTM E84, DCL Product Conformity, EUCEB for conformity of fibres produced with the requirements of Note Q of the Regulation (EC) No 1272.2008 of EP and EC, EUROFINs Indoor Air Quality Gold, SASO Product Conformity.

### Environmental

Atmosphere™ Duct Liner Slab represents no known threat to the environment and has zero Ozone Depletion Potential and zero Global Warming Potential.

### Indoor Air Quality

The new Atmosphere line from Knauf Insulation aims to offer a healthier series of air handling products for improved indoor air quality. Using ECOSE technology, it is the only such insulation available that's free of both formaldehyde and Decabromodiphenyl ether (decaBDE) and the only insulation to received the coveted Eurofins Indoor Air Quality Gold Standard.

### Water Vapour Sorption

Atmosphere™ Duct Liner Roll Ultimate has a sorption less than 3% by its weight as per ASTM C 1104.

### Handling and storage

Atmosphere™ Duct Liner Slab is easy to handle and install, being lightweight and easily cut to size, where necessary. It is supplied enclosed in polythene which is designed for short term protection only. For longer term protection on site, the product should be stored either indoors, or under cover and off the ground. Atmosphere™ Duct Liner Slab should not be left permanently exposed to the elements.

### Product specifications

Facing	Thickness	Length	Width	Area per pack	Thermal Conductivity	R Value	Density	No.Slabs
	(mm)	(m)	(mm)	(m <sup>2</sup> )	(W/m.K)	(m <sup>2</sup> .K/W)	(kg/m <sup>3</sup> )	in pack
WGF	25	1.20	1000	14.40	0.031	0.81	48	12
WGF	15	1.20	1000	24.00	0.031	0.48	48	20

All dimensions are nominal

### Sound Absorption Coefficients (ASTM C423 - Mounting Type A as per ASTM E795)

Density	Thickness	Absorption Coefficient of one-third octave Band center Frequency Hz						
		125	250	500	1000	2000	4000	NRC
(kg/m <sup>3</sup> )	(mm)							
48	25	0.23	0.53	0.87	1.07	0.91	0.84	0.85
	15	0.05	0.12	0.29	0.51	0.68	0.80	0.40

Knauf Insulation mineral wool products made with ECOSE® Technology benefit from a no added formaldehyde binder, which is up to 70% less energy intensive than traditional binders and is made from rapidly renewable bio-based materials instead of petroleum-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. Insulation products made with ECOSE Technology contain no dye or artificial colours.

