

# Fiberglass insulation

## Description

Flexible duct liner insulation is made from strong, glass fibers bonded with a thermosetting resin. The airstream surface is protected with a reinforced coating system, which combines a state-of-the-art acrylic coating with a flexible glass mat reinforcement to provide a smooth airstream surface.

## Advantages

- Improves indoor environmental quality by helping to control both temperature and sound.
- The tough, acrylic polymer coating helps guard against the incursion of dust or dirt into the substrate, minimizing the potential for biological growth.
- Coating is formulated with an immobilized, EPA-registered, protective agent to protect the coating from potential growth of fungus and bacteria. Duct liner meets all requirements for fungi and bacterial resistance. Tests were conducted in accordance with ASTM C 1338 and ASTM G 21 (fungi testing) and ASTM G 22 (bacteria resistance testing). **Note:** As with any type of surface, microbial growth may occur in accumulated duct system dirt, given certain conditions. This risk is minimized with proper design, filtration, maintenance and operation of the HVAC system.
- The reinforced coating surface provides superior resistance to penetration of incidental water into the fiber glass wool core.
- GREENGUARD® certification is proof that the product meets the Environmental Institute's indoor air quality standards for VOCs.

## Thermal performance

Thickness		R-value		Conductance	
in	mm	hr•ft <sup>2</sup> •°F/Btu	m <sup>2</sup> •°C/W	Btu/(hr•ft <sup>2</sup> •°F)	W/m <sup>2</sup> •°C
1/2	13	2.2	0.38	0.46	2.61
1	25	4.2	0.74	0.24	1.36

R-value and conductance are calculated from the material thermal conductivity tested in accordance with ASTM C 518 at 75 °F (24 °C) mean temperature

## Sound absorption coefficients (type "A" mounting)

Thickness		Sound absorption coefficient at frequency (cycles per second) of						
in	mm	125	250	500	1000	2000	4000	NRC
1/2	13	0.07	0.20	0.44	0.66	0.84	0.93	0.55
1	25	0.08	0.31	0.04	0.84	0.97	1.03	0.70

Coefficients were tested in accordance with Test Method ASTM C 423-90 and ASTM E 795



## General properties

- Operating temperature (max.): ASTM C 411 250°F (121°C)
- Air velocity (max.): ASTM C 1071 6,000 fpm (30.5 m/sec)
- Water repellency: INDA IST 80.6-92
- Fungi resistance: ASTM C 1338 Does not breed or promote
- Fungi resistance: ASTM G 21 No growth
- Bacteria resistance: ASTM G 22 No growth

## Surface burning characteristics

- Meets the surface burning characteristics and limited combustibility of the following standards: standard/test method
  - ◆ ASTM E 84
  - ◆ UL 723
  - ◆ NFPA 255
  - ◆ NFPA 90A and 90B, FHC 25/50 and limited combustibility
  - ◆ NFPA 259
  - ◆ CAN/ULC S102-M88
- Flame spread: not over 25
- Smoke developed: not over 50

## Specification compliance

- ASTM C 1071, Type I
- ASTM G 21 and G 22
- ICC Compliant
- California Title 24
- ASHRAE 62-2001
- SMACNA Application Standards for Duct Liners
- NAIMA Fibrous Glass Duct Liner Installation Standard
- Canada: CGSB 51-GP-11M and CAN/CGSB 51.11