

# Atmosphere® Duct Liner

Duct Liner is a flexible, mat-faced insulation manufactured from glass fibers bonded with ECOSE® Technology resin. It is faced with a tightly bonded woven glass fabric (WGF) facing to give the airstream a smooth, tough surface resisting damage during installation and operation. Provides an optimum combination of efficient sound absorption, low thermal conductivity and minimal airstream surface friction.

## **Application & Specification Guidelines**

#### Storage

Inside storage is recommended

## **Fabrication and Application**

- Fabricate in compliance with the latest edition of "NAIMA Fibrous Glass Duct Liner Standard"
- Liner shall be folded and compressed in the corners of rectangular duct sections or shall be cut and fit to assure lapped, compressed joints. Longitudinal joints in duct liner should occur at the corners of ducts. However, duct size and standard duct liner product dimensions may make exposed longitudinal joints necessary. In such cases, the exposed joints shall be coated with adhesive and additionally secured with mechanical fasteners in accordance with NAIMA Fibrous Glass Duct Liner Standard. All damaged areas of the air stream surface shall be repaired with an adhesive which conforms to ASTM C916.
- Liner should be adhered to the duct with 90% minimum area coverage of an adhesive which conforms to ASTM C916.
- Mechanical fasteners should not compress the insulation more than 1/8" (3 mm) and shall be installed perpendicular to the duct surface. All fasteners should comply with the guidelines of NAIMA's "Fibrous Glass Duct Liner Standard and the Mechanical Fastener's Standard MF-1-1975."
- Securely install metal nosings (either channel or zee profile) over transverse liner edges facing the airstream at fan discharge and at any point where lined duct is preceded by unlined duct. In addition, where air velocities exceed 4,000 FPM (20.3 m/sec), install metal nosing on upstream edges of lined duct sections.

## Limitations

Should not be used in systems operating at velocities exceeding 6,000 ft./min. (30.5 m/sec.) or at temperatures above 250° F (121° C).

#### Health & Safety

Glasswool may cause temporary skin irritation. Wear long-sleeved, loose-fitting clothing, head covering, gloves and eye protection when handling and applying material. Wash with soap and warm water after handling. Wash work clothes separately and rinse washer. A disposable mask designed for nuisance type dusts should be used where sensitivity to dust and airborne particles may cause irritation to the nose or throat.

#### Fiberglass and Mold

Glasswool insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated. Carefully inspect any insulation that has been exposed to water. If it shows any sign of mold, it must be discarded. If the material is wet but shows no evidence of mold, it should be dried rapidly and thoroughly. If it shows signs of facing degradation from wetting, it should be replaced. Air handling insulation used in the air stream must be discarded if exposed to water.

#### Notes

The chemical and physical properties of Atmosphere Duct Liner represent typical average values determined in accordance with accepted test methods. The data is subject to normal manufacturing and testing variations.

When condensation is permitted to occur between nested Duct Liner and galvanized steel panels, discoloration of the metal may occur. If necessary, can be cleaned in accordance with NAIMA's "Cleaning Fibrous Glass Insulated Air Duct Systems Recommended Practices". Check with your Knauf Exeed Insulation sales representative to assure information is current.

## Maintained Duct Systems are key

The best way to ensure that an HVAC system, whether bare metal or internally insulated, will continue to provide efficient, quiet air delivery, occupant comfort, and cost-effectiveness is by following a regular system operation and maintenance schedule. This, along with a high-efficiency filtration system, assures protection of both HVAC system components and building occupants. Maintenance procedures include inspection, detection, and remediation of proable sources of airborne contaminants and moisture.

