

Power Vac Insulation Coating

Anti-Erosion Coating For Acoustic Duct Insulation

PROPERTIES

Colour:

Black

Weight Per U.S. Gallon (MIL STD 45662A):

10.5 pounds (1.26 kg/l)

Base:

Neoprene Polymer

Solvent:

Water

Solids (ASTM D2697):

49% by weight

Viscosity (ASTM D562)

66 KU

Volatile Organic Compounds (VOC's):

5.8 g/l

Application Methods:

Brush, Roller, Sprayer

Coverage:

Wet coverage insulation surfaces is up to 400 sq.ft. per gallon (9.8 sq.m/l) per coat. Coverage rate will vary depending on surface conditions and application method.

Service Temperature:

Continuous service temperature at coated surface -50°F to 212°F (-50°C to 100°C)

Drying Time:

Drying time when applied on fiberglass insulation is 6 to 24 hours depending on applied thickness and ambient conditions. Heat and air movement will speed up the drying process.

Surface Burning Characteristics (ASTM E-84):

Flame spread = 15, Smoke Developed = 20, at coverage rate 400 sq. ft. per gallon on ¼" (6.4mm) inorganic cement board. Surface burning characteristics may vary with actual applications or conditions.

User should test before proceeding with full application to ensure results will be acceptable. This product is for industrial use.

DATA

Coating is a water based, black, washable, durable neoprene coating designed to seal the face of acoustic duct insulation inside of HVAC air ducts and plenums to prevent fibre erosion and encapsulate dust and fibres.

Coating is also used to coat the inside of fiberglass ducts as a low cost effective alternative to replacing them with metal ducts.

Coating improves the damage and water resistance of the acoustic facing, and restores and extends the useful life of acoustic duct insulation. Coating is formulated to penetrate into the top layer of insulation only to form a durable acoustic facing while maintaining acoustical performance of the insulation. Insulation coated with coating is easier to clean. Coating is a breather type coating which means it will not trap moisture in the insulation. Special additives make coating resist setting in pail, prevent clogging of spray equipment, and easy to clean-up before it is dry.

Coating meets SMACNA international standards for acoustic duct insulation installed inside HVAC ducts and plenums, and LEED building requirements.

Coating does not contain any asbestos, lead, mercury, or mercury compounds. Non-carcinogenic and non-toxic. Mild odour when wet, no odour when dry, low VOC's.

Coating is acceptable for use in all types of HVAC systems in government, military, commercial, industrial, office, multi-family, food processing, and hospital buildings. Coating is compatible with all flexible and rigid mineral fibre and glass fibre duct insulations with or without factory applied acoustic facing.

Coating contains anti-microbial and anti-fungal additives that do not promote growth of a broad range of bacteria and fungus, including E-coil, Legionella, and microbes relative to ASTM G-21 and ASTM G-22.

Special Instructions:

Always use mechanical fasteners plus adhesive to install internal duct insulation. Avoid exposure to freezing and moisture until coating is dried through. Storage and application temperatures should be between 36°F and 135°F (2°C and 57°C). If coating is frozen in pail, let thaw then mix before use.



Power Vac Services Ltd.

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Preparation:

1. Before applying Liner Coat, ensure duct liner surface is clean, and free of liquids, oil, grease, dust, and dirt. Also ensure that existing insulation has been sanitized before applying Liner Coat, and the insulation is properly secured to the duct or plenum with no loose pieces as per SMACNA standards.
2. Open pail and ensure that dirt or foreign materials do not contaminate contents of pail. Seal pail with lid when not being used. Liner Coat is formulated so that it will not settle in the pail under normal conditions. In the unlikely event that setting occurs, stir before use until consistent throughout. Use Liner Coat full strength, do not thin.

Specification LC-1: To Encapsulate Dust and Fibres, and Improve Insulation Damage Resistance:

1. If required, cut the metal ducts for the access doors that may be needed to apply Liner Coat.
2. Apply one coat of Liner Coat full strength at a rate of 300 sq. ft. per gallon to the surface of the acoustic duct insulation that faces the air stream.
3. Cut, install, and seal the access doors as per SMACNA standards. Use Power Vac's Duct Seal-WB for sealing the doors indoors, and Power Vac's RT-80 solvent Based sealer for outdoors.

Specification LC-2: To Repair Damaged Acoustic Insulation:

1. Remove any loose materials then apply two heavy coats of Liner Coat waiting at least 10 minutes between coats. Each coat should cover the damaged area so that there would be no loose fibres left after the coating is dry.
2. Extend the coating coverage at least 3 feet in all directions beyond the damaged insulation area.

Specification LC-3: To Coat The Inside of Fiberglass Ducts Instead of Replacing Them With Metal Ducts:

1. Cut access doors in the fiberglass ducts the size and frequency as required to apply Liner Coat. Cut only 3 sides of the rectangular doors so the 4th side will act as a door hinge.
2. Spray Liner Coat inside the ducts through the access doors at a rate of 200 sq. ft. per gallon. This coverage can be achieved with 1 heavy coat of Liner Coat. Ensure that all inside surfaces of the ducts are fully coated and the inside of the ducts are a uniform dark black colour.
3. Seal the access doors with a brush coat of Power Vac's Mastic (white, water based, Non-toxic insulation sealant). Apply Power Vac's Mastic to all of the cut insulation edges of each door and doorway. Close the door so it is flush with surrounding duct surfaces. Apply a brush coat of Power Vac's Mastic about 2" (50mm) wide centred over the sealed joints of each closed door. Wait until the mastic sealant is dry before activating the HVAC system.

Important Notes:

1. Exhaust the air from inside the ducts and plenums to the outdoors during application. Keep exhausting the air from inside the ducts and plenums to the outdoors until the coating is dry and all the coating odour is gone. While Liner Coat odour is mild and safe like standard latex house paint, the applicator should take all steps to ensure that the indoor air of the building will not have any odours that may be objectionable to building occupants.
2. Follow project specifications and best work practices. Visually inspect completed work before moving to next work area. Let Liner Coat dry fully before exposure to freezing temperatures or moisture. Liner Coat dries faster in warm, dry conditions, and with some air movement.
3. Use a paint brush or roller suitable for water based products. Keep brush or roller loaded with Liner Coat. Use air atomizing or airless spray equipment as recommended by your spray equipment supplier.

Clean Up:

Clean up equipment and work area with water before Liner Coat is dry. After fully dried, scrape off or wire brush the excess then finish cleaning with warm aqueous detergent solution.



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