Childers®

Mastics, Coatings, Adhesives, Sealants

CHIL-DUCT™ CP-148 Sealant/Mastic

INDOOR / OUTDOOR WATER-BASED DUCT SEALANT AND MASTIC

DESCRIPTION
CP-148 Chil-Duct™ is a fibrated water-based duct sealant and mastic developed for use on all heating, ventilating, and air conditioning duct systems. It is easily applied by brush and will not drip or sag. When dry, it forms a tough, flexible, UV- and water-resistant air seal.

USES
CP-148 is used to seal all high, medium and low pressure HVAC systems, including metal and flexible ductwork and fiberglass duct board. Application by trowel or brush readily fills the joints of round or rectangular ductwork, diffusers, and mixing boxes. CP-148 is also ideal as a duct closure mastic for vapor sealing ASJ, FRK and FSK jackets and board facings at joints, laps and over staple and weld pin punctures.

ADVANTAGES
- Water-based for personal & environmental safety
- Application is quick & easy for economical installation
- Dries firmly & forms a strong, resilient, fibrated seal
- Creates a permanently flexible seal (even when system cycles between high & low temperatures)
- Resistant to fire, oxidation, cracking, moisture & water
- Long service life, both indoors and out
- Quick & efficient cleanup of tools with hot water when sealant is wet

LIMITATIONS
- Store and apply between 40°F (4°C) and 100°F (38°C); protect from freezing
- To resist rain washoff, allow at least 16 hours drying time above 40°F (4°C), with a relative humidity of 50%
- Always test foil and paper facings for acceptable adhesion
- Outdoor horizontal surfaces must always drain completely. A pitch of at least ¼ inch per foot (2 cm/m) is required
- Mechanical fasteners of the type and number normally used for duct assemblies are required to provide rigidity to the duct system

CERTIFIED
- MAS Certified Green®
- California Dept. of Public Health Standard Method v1.2
- VOC Emissions and Content requirements to contribute to **LEED v4** EQ Credit: Low Emitting Materials – Paints and Coatings
- VOC Content: 45 g/l, less water and exempt solvents
- Collaborative for High Performance Schools EQ 7.1
- **CP-148 Chil-Duct™** is produced under the classification and follow-up service of Underwriter's Laboratories, Inc.
- Meets NFPA 90A and 90B 25/50 requirements
- Meets all SMACNA pressure classes up to 10" w.g. and SMACNA seal classes A, B and C on ducts constructed to SMACNA standards

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COLOR
Gray

WET WEIGHT (ASTM D1475)
11.6 lbs. (1.35 kg/l)

AVERAGE NON-VOLATILE (ASTM D2369)
69% by Weight / 55% by Volume

SERVICE TEMPERATURE RANGE
Temperature to which dry film is subjected
20°F to 200°F (-7°C to 93°C)

DRYING TIME
To Touch: 2 hours
Through: 16-24 hours
Temperature, humidity and film thickness will affect drying time

COVERAGE:
Brush: 25 – 50 sq. ft./gal. (0.6 – 1.2 m^2/l) 0.064 in. – 0.032 in. (1.6 mm – 0.8 mm) wet film thickness
Caulking Gun: 125 linear ft. per 10.5 fluid oz. tube, 1/8 in. bead (38 m per 0.31 liter tube, 3.2 mm bead)
30 linear ft. per 10.5 fluid oz. tube, 1/4 in. bead (9 m per 0.31 liter tube, 6.4 mm bead)

FUNGAL GROWTH RESISTANCE (ASTM G21)
Rating = 0, no fungal growth on surface

SHORE HARDNESS (ASTM D2240)
Type A: 80

WET FLAMMABILITY
No flash to boiling, over 210°F (99°C)

WATER VAPOR PERMEANCE(ASTM E96, PROCEDURE A)
0.45 perms (0.30 metric perms) at 35 mils (.9 mm) dry

CLEAN-UP
Warm soapy water.

SURFACE BURNING CHARACTERISTICS ASTM E84

UL LISTED

UL 181B-M
6P84
ALSO CLASSIFIED for
Surface Burning Characteristics

Applied to Inorganic Reinforced Cement Board

Flame Spread:	5
Smoke Developed:	0

Tested as applied in two 2 in. wide strips spaced 8 in. on center at a coverage rate of 25.0 sq. ft./gal.
312U

H.B. Fuller Construction Products Inc.
6107 Industrial Way ● Houston, TX 77011 ● 833-849-3700

Application Guide and Suggested Procedures

CHIL-DUCT™ CP-148

MATERIAL PREPARATION

All surfaces where sealant will be applied must be clean, dry, and free of oil or grease prior to application. Do not thin. Keep container closed when not in use.

APPLICATION

UL 181B MASTIC CLOSURE OF UL-181 FLEXIBLE AIR DUCTS:
Apply to clean, dry, oil-free surfaces by brush, trowel or power extrusion. Uniformly brush out a 2" wide coat over the joint, at the nominal rate of 2 gal./100 sq. ft. (0.8 l/m^2). Total coverage rate to be 45-55 sq. ft./gal. (1.1-1.4 m^2/l). Allow the completed joint to dry at least 24 hours above 70ºF (21ºC) before pressure testing. High humidities (over 70%) and/or cooler temperatures may retard drying. Total wet film thickness to be 32 mils ± 3 mils.

MASTIC CLOSURE OF RIGID FIBERGLASS AIR DUCTS:
Apply to the surface by brush, trowel or power extrusion. Uniformly brush out a 3"-4" wide tack coat over the stapled and smoothed joint, at the nominal rate of 1 gal./100 sq. ft. (0.4 l/m^2). Embed the reinforcing membrane into the tack coat, taking care that all of the mesh is filled. Pull the membrane taut and apply a second coat at the nominal rate of 1 gal./100 sq. ft. (0.4 l/m^2). Allow the completed joint to dry at least 24 hours above 70ºF (21ºC) before pressure testing. High humidities (over 70%) and/or cooler temperatures may retard drying. Total (mastic plus scrim plus mastic) wet film thickness to be 32 mils. Fiberglass scrim to be 5 mils thick, 20x10 plain weave weighing 1.75 oz./yd^2 (59 g/m^2).

OTHER SEALING APPLICATIONS:
Apply a continuous film of **CP-148 Chil-Duct™** over all areas of the indoor or outdoor metal and flexible duct systems where air leakage may occur. A brush may be used to work the sealant into joints and remove excess. On spiral ducts, apply a coat of CP-148 to the male end of the coupling prior to fitting the straight run of spiral duct over it. Brush excess CP-148 over the joint to complete the seal. Screw holes and flanges should also be sealed with a coat of CP-148. Over ASJ, FRK and FSK jackets and board facings at joints, laps and over staple and weld pin punctures apply at a rate of 2 gal./100 sq. ft. (0.8 l/m^2).

POWER EXTRUSION:
CP-148 Duct Sealant may be applied using a wide variety of power (pressure) extrusion equipment suitable for use with water-based sealants. It is a soft buttery gel with a typical viscosity range of 130,000 – 160,000 cps. Corrosion resistant pumps and fittings are suggested.

CLEAN UP

Use fresh water to clean brushes and equipment before product dries. Dry product may be removed with hot soapy water or strong solvents such as chlorinated solvent (non-flammable) or xylol (flammable).

CUSTOMER SERVICE: 833-849-3700

For professional use only. Keep out of reach of children.
Consult Safety Data Sheet and container label for further information.