

Mastics, Coatings, Adhesives, Sealants

# CHIL-FLEX™ CP-146 Duct Sealant

## INDOOR / OUTDOOR WATER-BASED DUCT SEALANT

#### DESCRIPTION

CP-146 is a water-based duct sealant developed for use in all heating, ventilating, and air conditioning metal ductwork systems. It is easily applied, and its metallic gray color blends well with ductwork.

#### **USES**

CP-146 is used to seal all metal joints in high, medium, and low pressure air handling ductwork systems. Application by trowel, brush or extrusion readily fills the joints of round, rectangular, rigid or flexible ductwork, diffusers, and mixing boxes.

#### **ADVANTAGES**

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

#### **LIMITATIONS**

- Store and apply between 40°F (4°C) and 100°F (38°C); protect from freezing.
- To resist rain wash off, allow at least 16 hours drying time above 40°F (4°C), with a relative humidity of 50%. Higher humidity or lower temperatures may retard drying.
- Always test foil and paper facings for acceptable adhesion.
- Outdoor horizontal surfaces must always drain completely. A pitch of at least 1/4 inch per foot (2 cm/m) is required.
- If used between two impermeable surfaces, drying time will be extended.

### **CERTIFIED**

- CP-146 Duct Sealant is produced under the classification and followup service of Underwriter's Laboratories, Inc. and meets NFPA 90A and 90B 25/50 requirements.
- Meets requirements for LEED IEQ 4.1 Low-emitting Materials, Adhesives and Sealants. VOC: 24 g/l, less water and exempt solvents.
- CP-146 meets all SMACNA pressure classes up to 10" w.g. and SMACNA seal classes A, B, and C on ducts constructed to SMACNA standards. It has been tested up to 15" w.g. and passed with no sealant blow out.

#### **COLOR**

Gray

#### **WET WEIGHT**

11.7 lbs (1.4 kg/l)

#### **AVERAGE NON-VOLATILE**

70% by Weight

#### 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 with affect drying time.

#### COVERAGE

(Varies with substrate.)
40 sq. ft./U.S. gallon (1.13 sq. meters/liter)
103 lineal ft. per 1/12 gallon cartridge for 1/8" (3.2mm) bead

#### **SHORE HARDNESS**

Type A: 72

#### **FUNGAL GROWTH RESISTANCE (ASTM G-21)**

Rating = 0, no fungal growth on surface.

#### CLEAN-UP

Warm, soapy water (wet), xylol (dry)

### UL 181 B-M Listed

CHILDERS CHIL-FLEX SEALANT is listed by Underwriters Laboratories, Inc. under Standard 181B, Mastic Closure of UL 181 Flexible Air Ducts.



Underwriter's Laboratories Inc.® CLASSIFIED Adhesive Surface Burning Characteristics 312U

Applied to inorganic reinforced

cement board 0

Flame Spread: 0 Smoke Developed: 0

Tested as applied in two 2 in. wide strips spaced 8 in. on center at a coverage rate of 45.0 sq ft/gal.

CP-146 contains no asbestos, lead, mercury, or mercury compounds.

## H.B. Fuller Construction Products Inc.

<sup>™</sup> of H.B. Fuller Construction Products Inc.

# Application Guide and Suggested Procedures

## 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. Brush CP-146 out uniformly in a 2" wide coat over the joint at the nominal rate of 2 gal/100 sq. ft. (0.8 l/m2). Total coverage rate to be 45-55 ft./gal (1.1-1.4 m2/l). Allow the completed joint to dry at least 24 hours above 70°F (21°C) before pressure testing. High humidities (over 70%) and/or cooler temperatures may retard drying. Total wet film thickness to be 32 mils + 3 mils.

### OTHER SEALING APPLICATIONS - NOT UL-181:

Apply a continuous film of CP-146 Duct Sealant over all areas of the indoor or outdoor duct system 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-146 to the male end of the coupling prior to fitting the straight run of spiral duct over it. Brush excess CP-146 over the joint to complete the seal. Screw holes and flanges should also be sealed with a coat of CP-146. They may be applied to the inside or the outside of the duct.

#### **TOP COATING:**

After it is completely dry, CP-146 may be top coated with good quality water base paint.

#### **POWER EXTRUSION:**

CP-146 Duct Sealant may be applied using a wide variety of power (pressure) extrusion equipment suitable for use with water-base sealants. It is a soft buttery gel with a typical viscosity range of 130,000 - 180,000 cps. Corrosion resistant pumps and fittings are suggested.



# **CUSTOMER SERVICE: (800) 832-9002**

IMPORTANT: H.B. Fuller Construction Products Inc. warrants that each of its products will be manufactured in accordance with the specifications in effect on the date of manufacture. WE MAKE NO OTHER WARRANTIES AND EXPRESSLY DISCLAIM ANY WARRANTIES OF MERCHANTIBILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a product fails to meet this limited warranty, purchaser's sole and exclusive remedy is replacement of the product or, at our option, refund of the purchase price. OUR ACCEPTANCE OF ANY ORDERS FOR THE PRODUCT IS EXPRESSLY CONDITIONAL UPON PURCHASER'S ASSENT TO THE TERMS ON THE APPLICABLE INVOICE.

ADEQUATE TESTS: The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. The warranted shelf life of our products is six months from date of shipment to the original purchaser.

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