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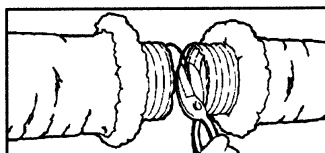
# Alternate INSTALLATION INSTRUCTIONS

## *Air Ducts and Air Connectors Nonmetallic with Plain Ends*

### **Connections and Splices**

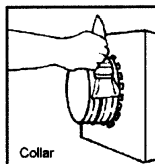
#### **Step 1**

After desired length is determined, cut completely around and through duct with knife or scissors. Cut wire with wire cutters. Pull back jacket and insulation from core.

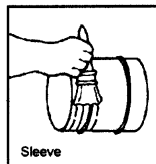


#### **Step 2**

Apply mastic approximately 2" [50 mm] wide uniformly around the collar of the metal fitting or over the ends of a 4" [100 mm] metal sleeve. Reference data on mastic container for application rate, application thickness, cure times and handling information.



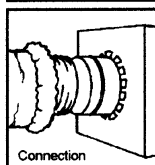
Collar



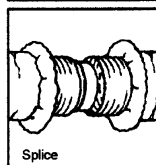
Sleeve

#### **Step 3**

Slide at least 2" [50 mm] of core over the fitting or sleeve ends and past the bead.



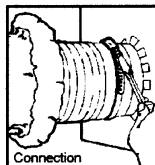
Connection



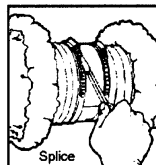
Splice

#### **Step 4**

Secure core to collar with a clamp applied past the bead. Secure cores to sleeve ends with 2 clamps applied past the beads.



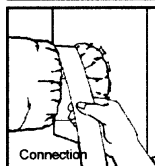
Connection



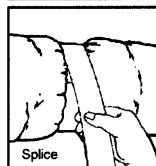
Splice

#### **Step 5**

Pull jacket and insulation back over core ends. Tape jacket(s) with at least 2 wraps of duct tape. A clamp may be used in place of or in combination with the duct tape.



Connection



Splice

#### **NOTES:**

1. For uninsulated air ducts and air connectors, disregard references to insulation and jacket.
2. Use beaded sheet metal fittings and sleeves.
3. Use mastics listed and labeled in accordance with Standard UL 181B and marked "181B-M" on container.
4. Use tapes listed and labeled in accordance with Standard UL 181B and marked "181B-FX".
5. Nonmetallic clamps shall be listed and labeled in accordance with Standard UL 181B and marked "181B-C".  
Use of nonmetallic clamps shall be limited to 6 in. w.g. [1500 Pa] positive pressure.

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**Tapes:** Shall be listed and labeled in accordance with UL 181B and marked "UL 181B-FX". California Title 24 states "Joints & seams of duct systems shall not be sealed with cloth back rubber duct tapes unless such tape is used in combination with mastic and drawbands."

**Clamps:** Metal – 1/2" wide aluminum, stainless steel or galvanized steel.  
Nonmetallic – shall be listed and labeled in accordance with UL 181B and marked "UL 181B-C"

**Mastics:** Shall be listed and labeled in accordance with UL 181B and marked "UL 181B-M".  
Installed Length Restrictions:

Air Duct – None

Air Connector – 14' Max



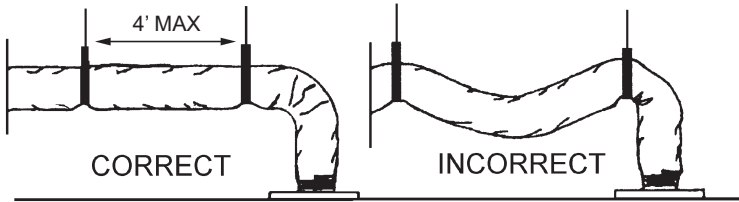
UL Files MH11637, MH12148

Fresno, CA • Denver, CO • Knoxville, TN • Lakeland, FL

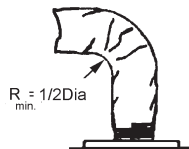


## INSTALLATION GUIDELINES

- Exposure to direct sun/ultraviolet light will cause jacket deterioration. Avoid locations where sunlight enters thru skylights, turbine vents, windows, etc.
- Exposure to direct UV-c/germicidal light can cause deterioration of the inner liner of the duct and should be avoided. JPL suggests a minimum 1 foot distance from the UV source on Foil-backed core products, 2 feet on all standard polyester inner cores (Black) and 5 feet on Blue or White Nylon core product installations.
- Terminal devices shall be supported independently of the flexible duct.
- The duct should be supported at 4' maximum intervals by means of min 1.5" wide straps, ceiling joists, truss supports, or other hanging devices approved by the "authority having jurisdiction". Connections to rigid duct or equipment shall be considered a support joint.



- The duct should be supported such that the "sag" between supports does not exceed 1/2" per foot of support spacing.
- Vertical runs of duct should be secured at 6' maximum intervals.
- Avoid sharp bends. The inside radius of any bend should not be less than 1/2 the ID of the duct.



- Avoid installing excess duct. For an efficient system always install the duct fully extended and use the minimum length necessary.
- Repair any tears in the vapor barrier with UL 181B-FX tape. Damaged inner core should be replaced or spliced with a collar.
- Do not install where the outer jacket will contact any surface exceeding 200 deg F.
- Additional installation information can be found in the Uniform Mechanical Code(UMC) and the Air Duct Council's Flexible Duct Performance & Installations Standard (Green Book).
- Additional information about our products can be found on our website [www.jplflex.com](http://www.jplflex.com)