

## Plenum Take-Off Installation Instructions

### Fiberglass Plenum (2-inch duct only)

Tools required:

- 2-inch fiberglass hole cutter ("cookie cutter"), Unico Part no. UPC-55.
- Utility knife

The Spin-in Take-off (Unico part No. UPC-23) is designed for 1-inch (25 mm) thick fiberglass plenum. The plenum can be either 1-inch rigid round duct or 1-inch duct board. The Spin-in Take-off (Unico part No. UPC-22) is designed for 1½-inch (37 ½ mm) thick plenum.

**STEP 1.** Use the "cookie" cutter to make a neat 2-inch (51 mm) hole in the plenum (Fig. 1). It may be necessary to first cut the outside jacket with a utility knife to prevent tearing of the outside jacket. After the hole is cut, be sure to remove any excess fiberglass in the opening. For square the best position is usually in the side of the duct as shown in Figure 1, but it can go on any side.

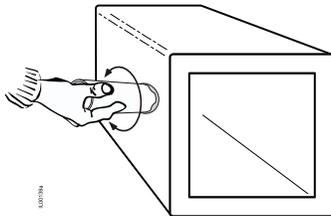


FIG. 1

**STEP 2.** Cut a ½-inch (13 mm) slit in the plenum jacket (Fig. 2).

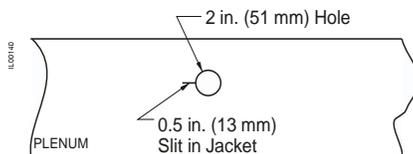


FIG. 2

**STEP 3.** Bend the starting edge of the spin-in takeoff thread flange as shown in Fig. 3. Then twist the spin-in into the hole.

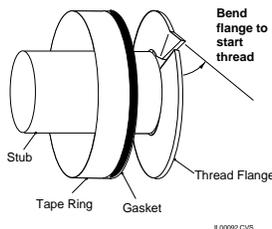


FIG. 3

Be sure that the bottom flange is fully engaged on the inside of the plenum. It may be necessary to apply some pressure as you spin the takeoff a full 360° around. Inspect the inside of the takeoff for insulation in the air stream. Continue to spin the takeoff until no excess insulation can be seen down inside the stub of the takeoff.

### Metal Plenum Duct (2-inch or 2.5-inch)

The Flanged Take-off (Unico part No. UPC-28) is designed for metal plenum. The plenum can be snap-lock or spiral duct.

#### Option 1 [Recommended] (For all size ducts and plenum R-factor)

Tools required:

- 2-inch (or 2.5-inch if using 2.5-inch supply) metal hole saw
- UL-181B duct tape
- Self-tapping screws ½-inch to ¾-inch

1. Install and fully insulate the metal plenum before connecting plenum takeoffs.
2. Slit the outer insulation wrap in an "X" pattern about 4 inches across. Then peel the wrap back to expose the duct.
3. Cut a 2-inch (or 2.5") hole into the duct and attach Flanged Takeoff (UPC-28/UPC-228) with take-off gasket to the duct with self-tapping sheet metal screws.

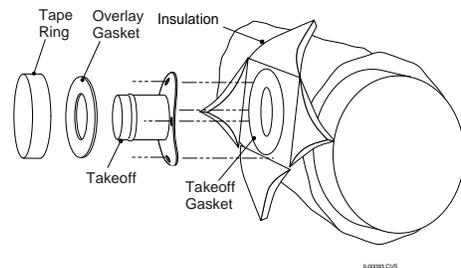


FIG. 4

4. Smooth out the wrap and seal the "X" with tape and large overlay gasket.
5. Push tape ring onto stub as far as it will go.

#### Option 2 (2-inch duct only, less than R-6 plenum)

Tools required:

- 1 7/8-inch metal hole saw
- UL-181B duct tape
- Self tapping screws ½-inch to ¾-inch

Instructions for installing the Flanged Take-off with metal plenum can be found on the reverse of this page. Figure 5 shows an exploded view of the parts required for this installation.

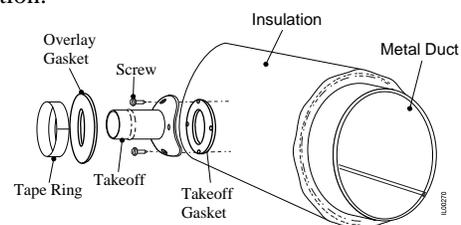


FIG. 5

## METAL PLENUM TAKE-OFF INSTALLATION INSTRUCTIONS

### OPTION 2 (2-inch duct only, R-4.2 plenum maximum)

Parts Required:

1. UPC-28.....Flanged Take-off
2. A00127-002.....Take-off Gasket
3. A00127-013.....Overlay Gasket
4. 1-7/8 inch Metal Hole Saw

Use the following Instructions to install the Flanged Take-off with metal plenum systems.

**STEP 1.** Apply Take-off gasket to underside of take-off.



**STEP 2.** Attach Take-off directly to insulated plenum using four sheet metal screws



**STEP 3.** Use a 1-7/8-inch diameter hole saw (with extension if necessary) to cut through the insulation and duct.



**STEP 4.** Visually inspect the hole for any excess metal or insulation.



**STEP 5.** Peel the adhesive backing from the underside of the overlay gasket, slip it over the take-off and stick it to the vapor barrier. Apply even pressure around to secure.



**STEP 6.** Once the gasket is sealed against the insulation vapor barrier, peel off the backing on the top side to secure the tapering in the next step.



**STEP 7.** Slip the tape ring over the take-off and seal it against the gasket, then connect the branch duct using a clamp and seal the outer vapor seal against the tapering with UL tape.

