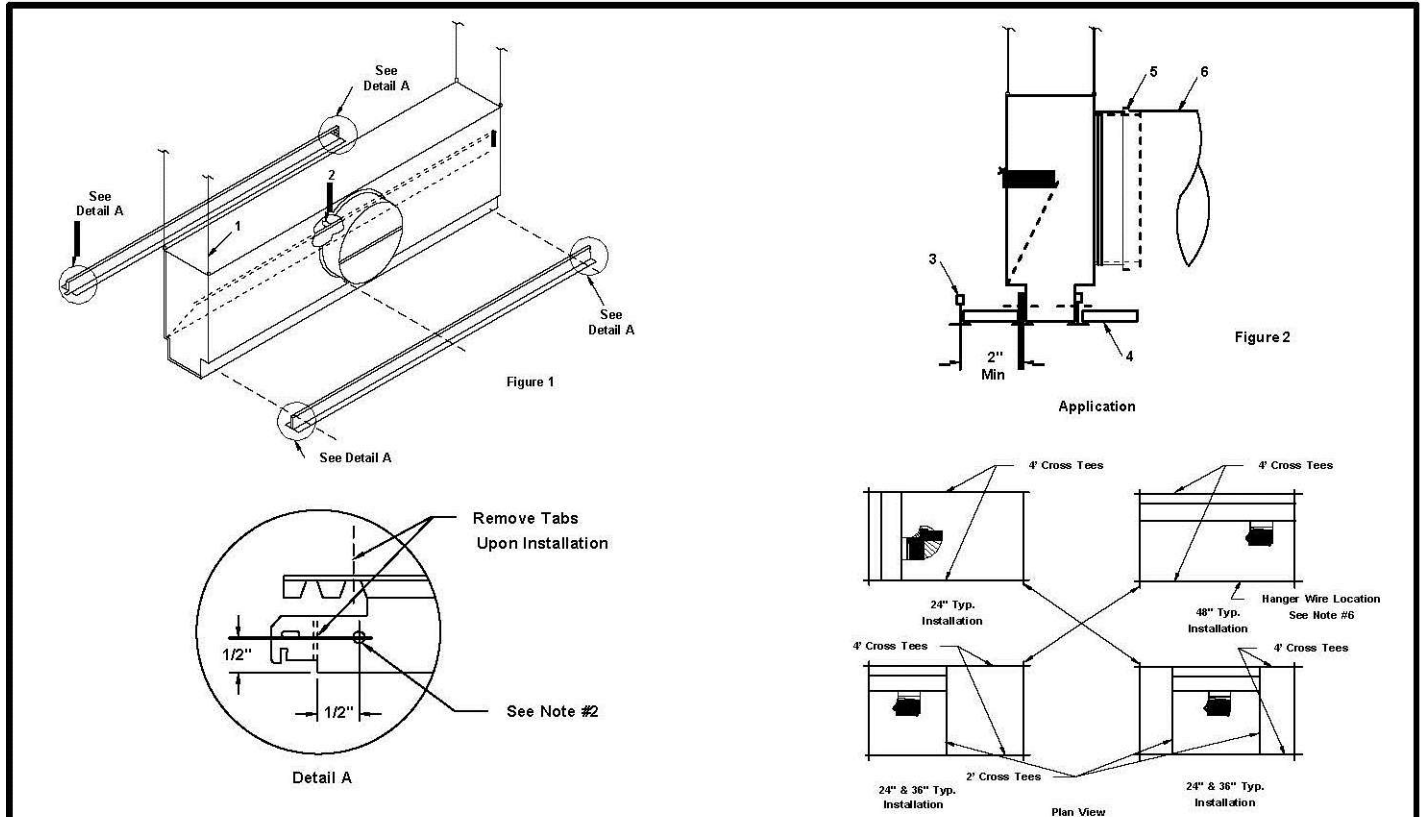


## Fire-Rated Plenum Slot Diffuser

TBD-FR Supply

TBDR-FR Return



### ITEM DESCRIPTION :

(Figures 1 and 2)

1. #12 SWG Steel Hanger Wire
2. Fusible Link, UL Listed
3. Ceiling Grid, UL Classified
4. Ceiling Panel, UL Classified
5. Steel Clamp or 16 GA. Steel Wires
6. Flexible Duct (Optional)

### APPLICATION :

Diffusers above are UL Classified for use in Floor Ceiling Designs with a 3 hour or less Restrained or Unrestrained Assembly Rating as an alternate to the sheet metal Air Duct with 12 inch diameter or larger duct outlet. A maximum of 4 lineal feet of single slot, or 4 lineal feet of dual slot diffuser is allowed for each 113 square inches, or larger, duct outlet area permitted in a specific design.

Refer to Figure 1 for general installation requirements. When unit is installed in the field for ceiling assembly refer to Figure 2 and plan view as shown. See reverse side information for units installed adjacent to cross tees.

1. Using 12 SWG galvanized steel wire, support all four (4) corners of the grid module in which unit is to be installed in and at center of 4' cross tees.
2. As shown in Figure 1 cut off ends of tabs of adjacent cross tees and secure with 3 #6 x 1/2" sheet metal screws. Avoid distorting cross tees when tightening screws.

3. Loop 12 SWG galvanized steel hanger wire through four end suspension points to support the diffuser. Connect hanger wire to structural floor member above. Wires should not be kinked or slack and should support the entire weight of the unit without lifting it off the grid members. Hanger wire must be vertical (not splayed).
4. Lay-in ceiling panels cut to fit the remainder of the module(s) shall provide a minimum of 3/8" bearing on the flange of grid "T"s and "T"s secured to the sides of the unit, as shown in Figure 2.
5. Fasten flexible Air Duct to neck with clamp or #16 SWG (min.) wire. The flexible Air Duct shall be Class 0 or Class 1 type bearing the UL Listing Mark. Refer to the UL "Gas & Oil Equipment Directory". Maximum length of the flexible Air Duct shall not exceed 14'-0". The flexible Air Duct shall not rest on the back surface of the ceiling grid or panels and a minimum of 4" clearance must be provided.
6. Hanger wire on 4' cross tees may be offset 6" maximum to clear inlet if required.

\*NOTES: This installation can only be used in Floor-Ceiling Designs in which the UL Classified 4' cross tees are provided with slots for engaging two foot cross tees at the required locations.

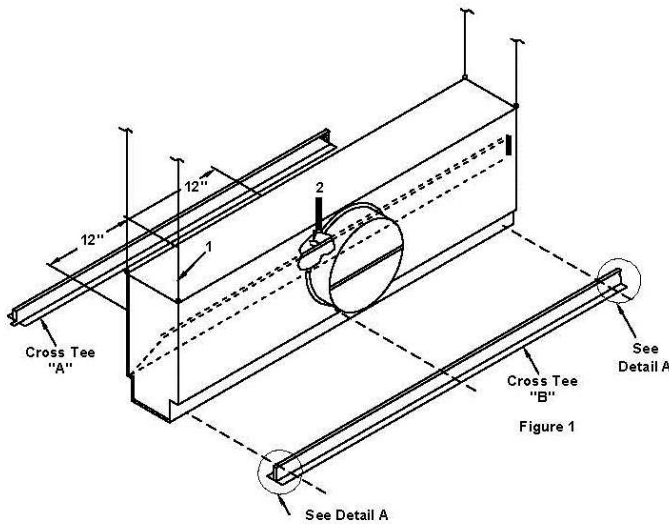


Figure 1

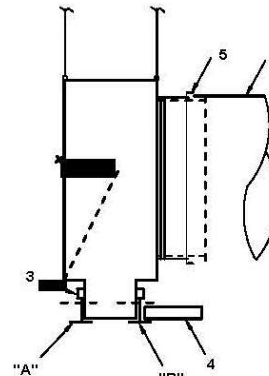
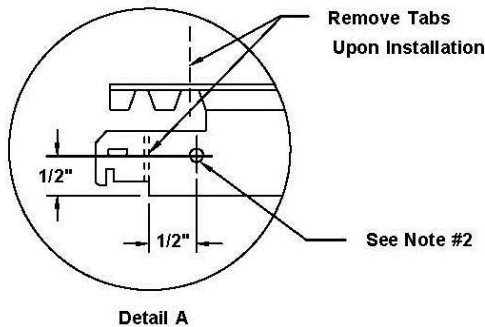
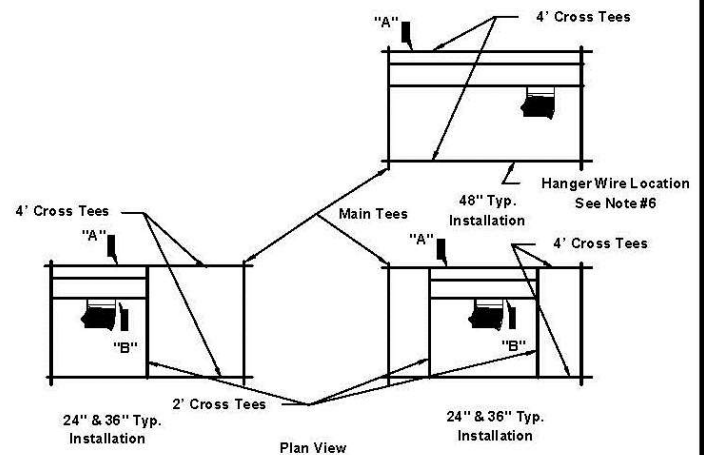


Figure 2

Application



Detail A



Plan View

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**(Figures 1 and 2)**

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