

CFD7T SERIES

Installation Instructions

Ceiling Dampers For Wood Truss Assemblies
UL555C 1 Hour Rated



APPLICATION

Model CFD7T is designed to function as a heat barrier in HVAC openings penetrating ceilings constructed from wood trusses. The CFD7T has been UL tested to provide protection in UL ceiling design L528, L546, L558, L574, L585, L586, L592, P533, P538, P545, P548, P580 and H502. without the added requirement for insulated boots, boxes or plenums.

DAMPER MODELS

- ▶ CFD7T - No Plenum Box
- ▶ CFD7T-SB - Steel Plenum Box
- ▶ CFD7T-90-BT - 90 degree Boot
- ▶ CFD7T-END-BT - End Boot
- ▶ CFD7T-ST-BT - Stright Boot
- ▶ CFD7T-R6-DB - R6 Duct Board

SYSTEM COMPONENTS

The ceiling damper and associated components (air devices, duct, duct drop, etc.) must be constructed of steel. The grille/diffuser frame shall be minimum of 26 gauge (0.55) steel. Nonferrous air devices or through ceiling membrane penetration a steel plaster flange is required. Flexible duct must be class 0 or 1 type and bear the UL listing mark and shall be attached to the plenum collar with steel clamps, plastic straps, or minimum 18 gauge steel wire. Fiberglass ductboard plenum box shall be UL 181 listed. Field supplied plenum boxes not to exceed 10 lb. The installation and air device shown in these instructions illustrate general arrangements only. Installation must incorporate applicable requirements for the specific Floor/ceiling or Roof/ceiling construction in the UL Fire Resistance Directory.

CEILING PENETRATIONS

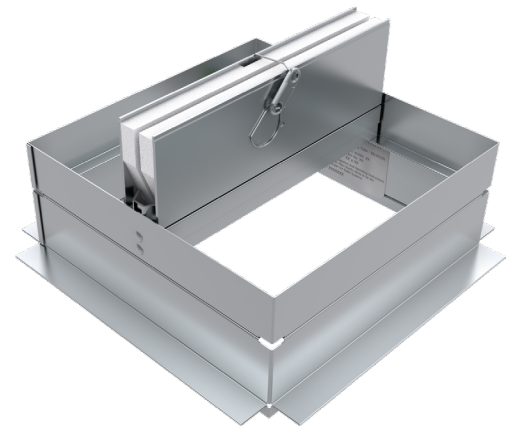
Ceiling penetrations should be located between adjacent truss and RC or Furring channels. If required, a maximum of one RC or Furring channel may be cut or notched to enable proper damper location. The clearance between the damper assembly and the cutout in the ceiling material shall be a maximum of 1/8" (3) on any side.

CEILING PENETRATIONS

- ▶ **Support Angle to Damper:** minimum of two #8 sheet metal screws, 3/16" (4) tubular rivets, tack or spot-welds per angle.
- ▶ **Support Angle to Truss:** minimum of #8 x 3/4" long screw or #6 penny nail 1" long (25).
- ▶ **Grill/Diffuser frame to damper:** minimum of two #8 x 1 1/4" (32) min. screws through the ceiling material and into the plaster flange or sub-frame.
- ▶ **Retaining Angle to Plaster Flange or Sub-frame:** minimum of #8 x 1 1/4" (32) min. screws through the ceiling material and into the plaster flange or sub-frame. One screw per side required on units 10" (254) long and under, and two screws per side on units above 10" (254) long. Round units maximum of 3 screws required.
- ▶ **Make sure fasteners do not interfere with the damper operation.**

NOTE:

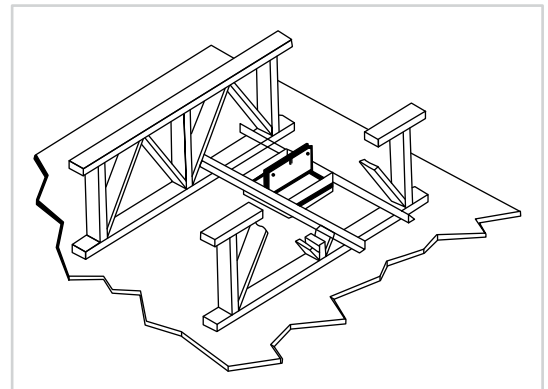
- Dimensions shown in parentheses () indicate millimeters.



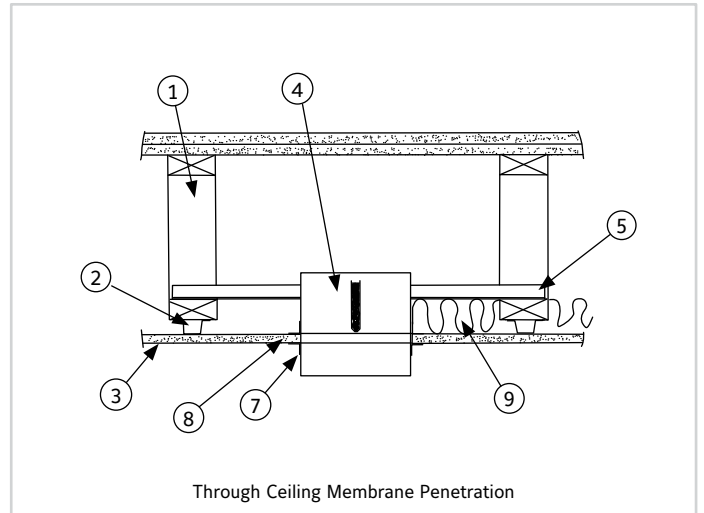
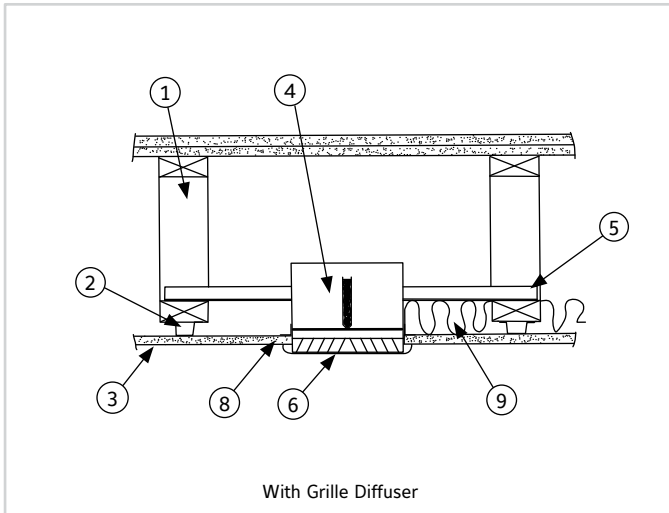
SEE COMPLETE
MARKING ON PRODUCT

California State Fire Marshal Listing No. 3226-0245:0123

UL CLASSIFIED
UL555C Listing R8039

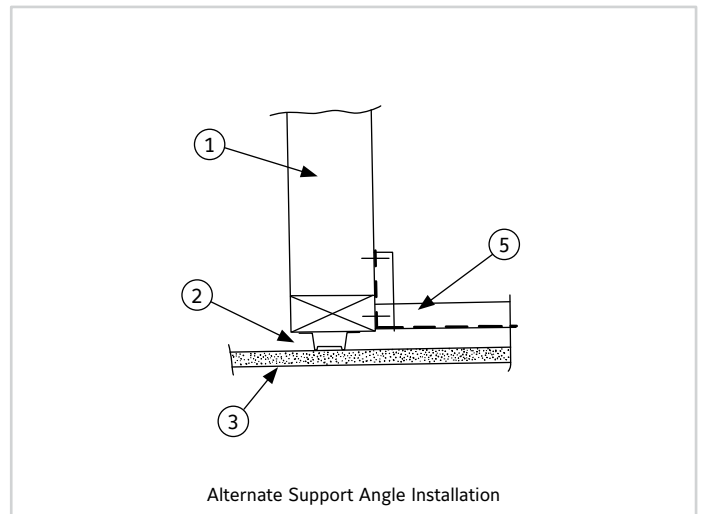
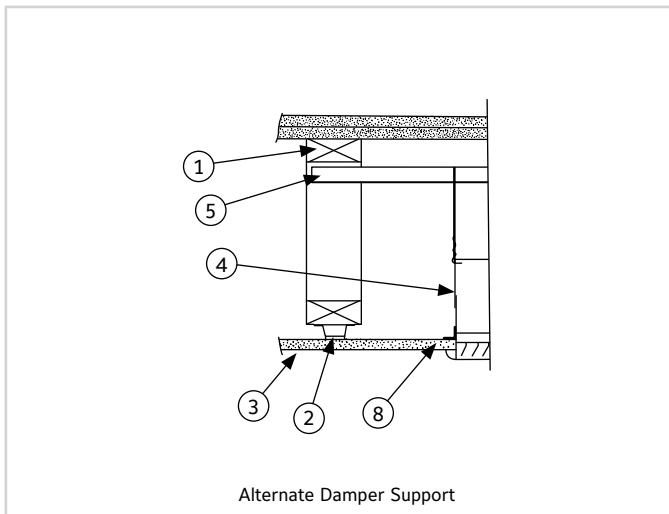


CFD7T UNDUCTED OR FLEX DUCT



ITEM	DESCRIPTION
1	Wood Truss Assembly (Refer to UL Fire Resistance Directory)
2	RC Channel or Furring Channel or Steel Framing Members
3	UL rated gypsum wallboard (See UL design No.)
4	Ceiling Radiation Damper
5	3/4" x 3/4" x 16ga. (19 x 19 x 1.61) or 11/2" x 11/2" x 22 ga. (38 x 38 x .85) Support Angle (2 sides) See Note 1

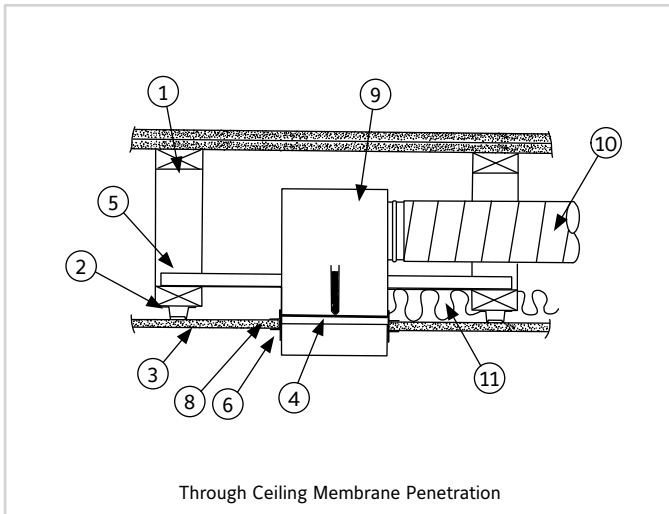
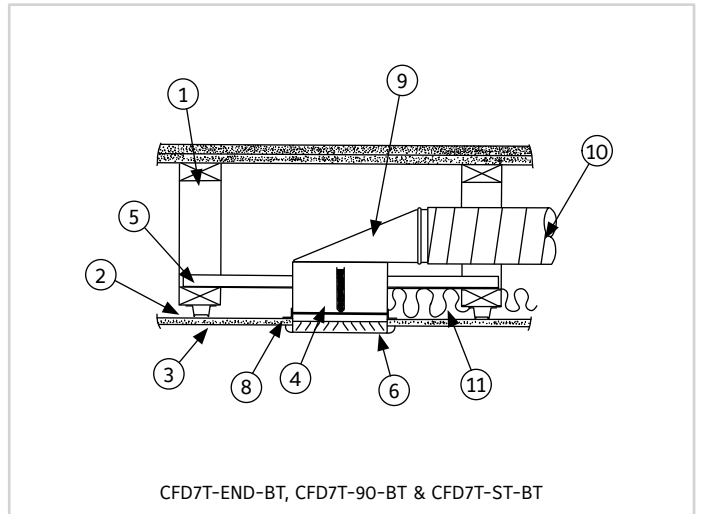
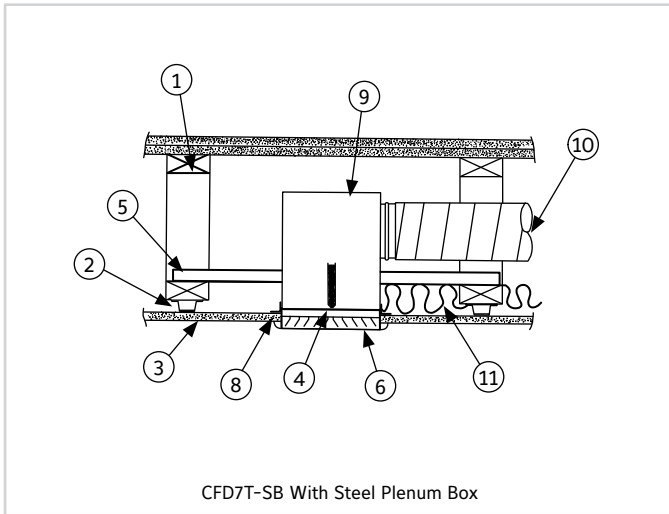
ITEM	DESCRIPTION
6	Steel Frame Grille Diffuser
7	1" x 1" x 22 ga. (25 x 25 x .85) Retaining Angle on all 4 sides
8	Sub-frame or plaster flange
9	Insulation (optional)



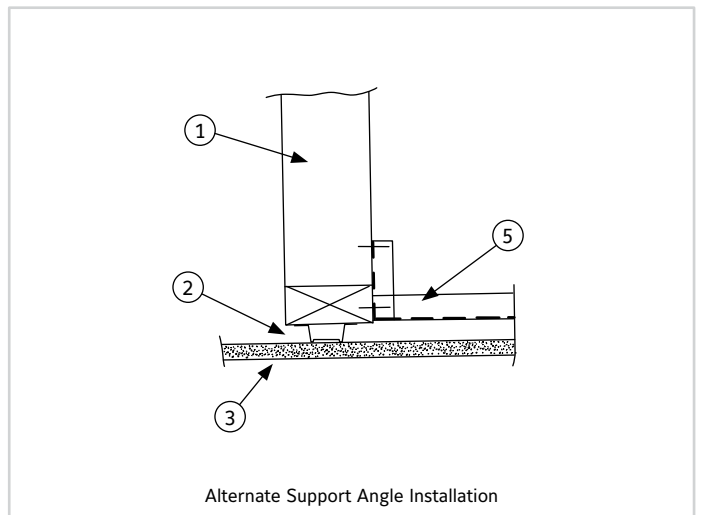
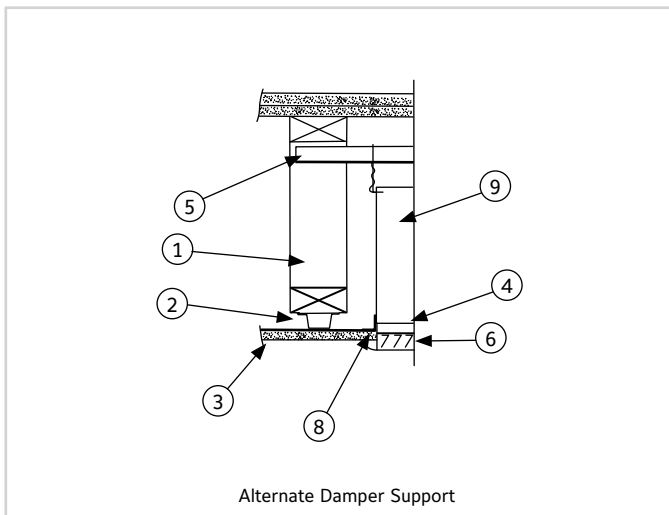
Damper support may be achieved by suspending the damper from support angles Item #5 or 2" x 4" (51 x 102) wood stud fastened to adjacent trusses and the damper suspended with four 18 swg steel wire or 3/4" x 3/4" x 26ga. (16 x 16 x .55) angle tabs spaced evenly around the damper.

Cut the vertical leg of the support angle and fold up 90° both ends. Attach support angle to the inside leg of the truss with minimum of 2 - #8 screws or nails per angle.

CFD7T-SB, CFD7T-END-BT, CFD7T-90-BT & CFD7T-ST-BT UNDUCTED OR FLEX DUCT



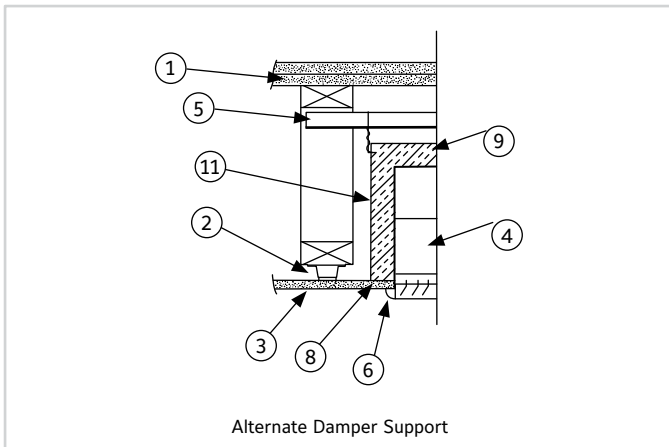
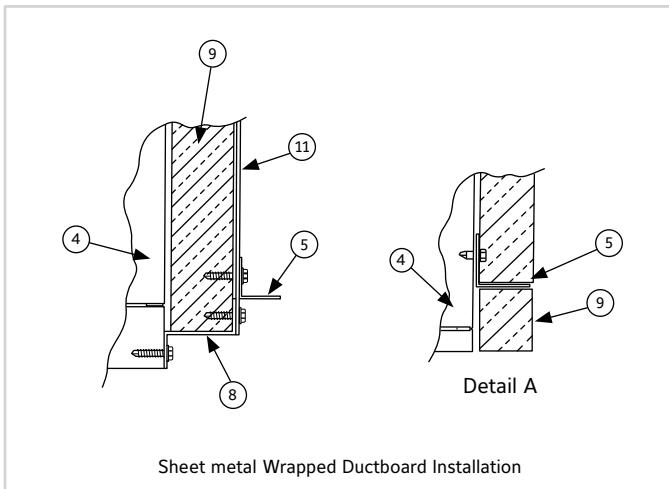
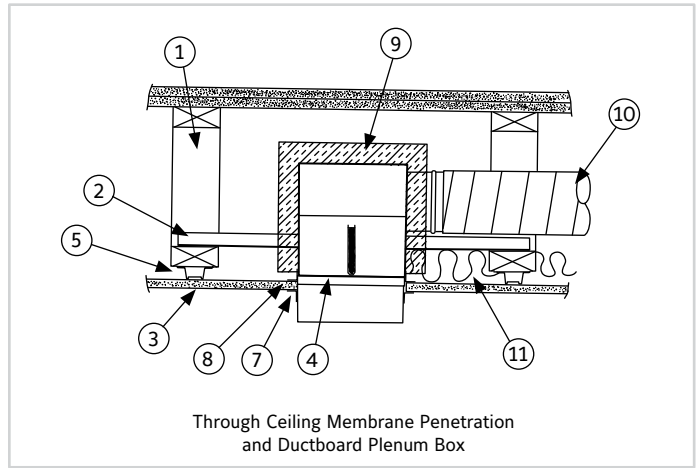
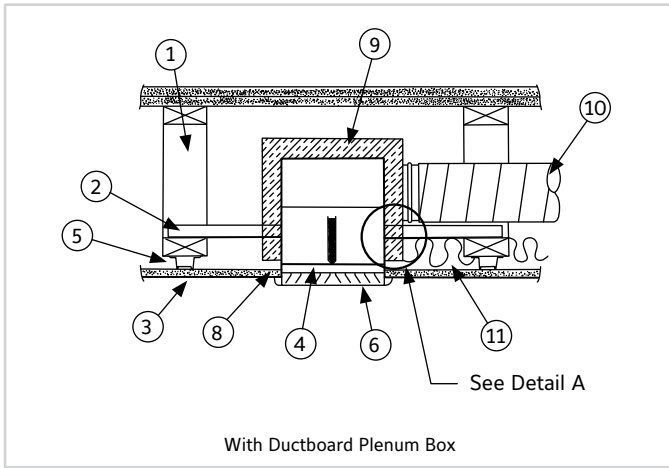
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6	Steel Frame Grille Diffuser
7	1" x 1" x 22 ga. (25 x 25 x .85) Retaining Angle on all 4 sides
8	Sub-frame or plaster flange
9	Steel Plenum Box or Boot
10	Duct (optional)
11	Insulation (optional)



Damper support may be achieved by suspending the damper from support angles Item #5 or 2" x 4" (51 x 102) wood stud fastened to adjacent trusses and the damper suspended with four 18 swg steel wire or 3/4" x 3/4" x 26ga. (16 x 16 x .55) angle tabs spaced evenly around the damper.

Cut the vertical leg of the support angle and fold up 90° both ends. Attach support angle to the inside leg of the truss with minimum of 2 - #8 screws or nails per angle.

CFD7T-R6-DB UNDUCTED OR FLEX DUCT



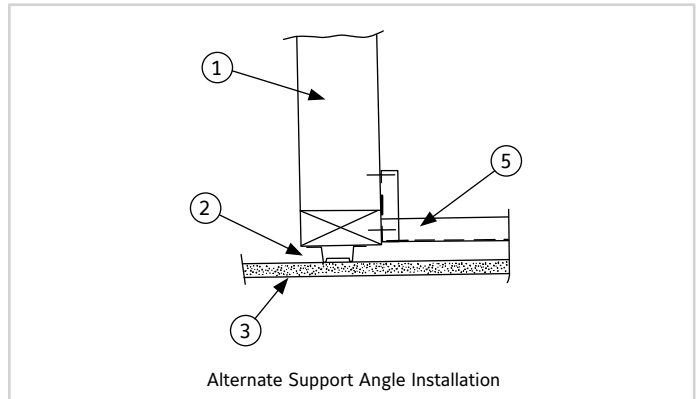
Damper support may be achieved by suspending the damper from support angles Item #5 or 2" x 4" (51 x 102) wood stud fastened to adjacent trusses and the damper suspended with four 18 swg steel wire or 3/4" x 3/4" x 26ga. (16 x 16 x .55) angle tabs spaced evenly around the damper.

LINKS TO IMPORTANT DOCUMENTS

Document Title
Quick Select Sheet
Product Data/submittals

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6	Steel Frame Grille Diffuser
7	1" x 1" x 22 ga. (25 x 25 x .85) Retaining Angle on all 4 sides
8	Sub-frame or plaster flange
9	Ductboard Plenum Box
10	Duct
11	30 ga. (.25) Steel Sleeve min.

Note: See Supplemental Installation Instruction for ductboard Plenum construction.



Cut the vertical leg of the support angle and fold up 90° both ends. Attach support angle to the inside leg of the truss with minimum of 2 - #8 screws or nails per angle.



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