

# CFDR7T

## Installation Instructions

Ceiling Dampers For Wood Truss Assemblies  
UL555C 1 Hour Rated



### APPLICATION

Model CFDR7T is designed to function as a heat barrier in HVAC openings penetrating ceilings constructed from wood trusses. The CFDR7T has been UL tested to provide protection in UL ceiling design L528, L546, L558, L574, L585, L586, L592, P533, P538, P545, P548 and P580. without the added requirement for insulated boots, boxes or plenums.

### 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.

### FASTENERS

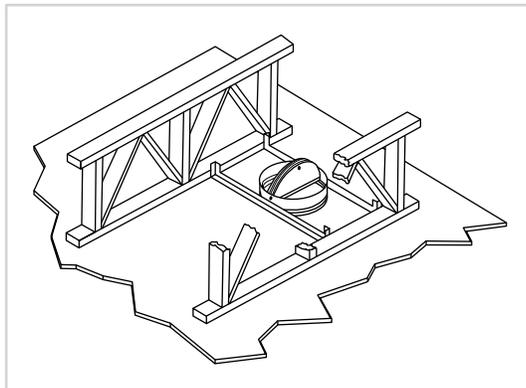
- ▶ **Support Angle to Damper:** minimum of two #8 sheet metal screws, 3/16" (4) tubular rivets, tack or spot-welds per angle.
- ▶ **Support Angle to Truss:** minimum of #8 x 3/4" long screw or #6 penny nail 1" long (25).
- ▶ **Grill/Diffuser frame to damper:** minimum of two #8 x 11/4" (32) min. screws through the ceiling material and into the plaster flange or sub-frame.
- ▶ **Retaining Angle to Plaster Flange or Sub-frame:** minimum of #8 x 11/4" (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.**



SEE COMPLETE  
MARKING ON PRODUCT

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

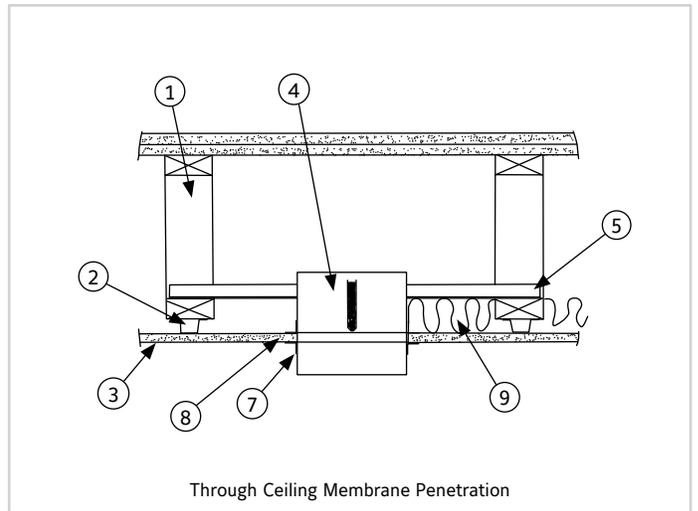
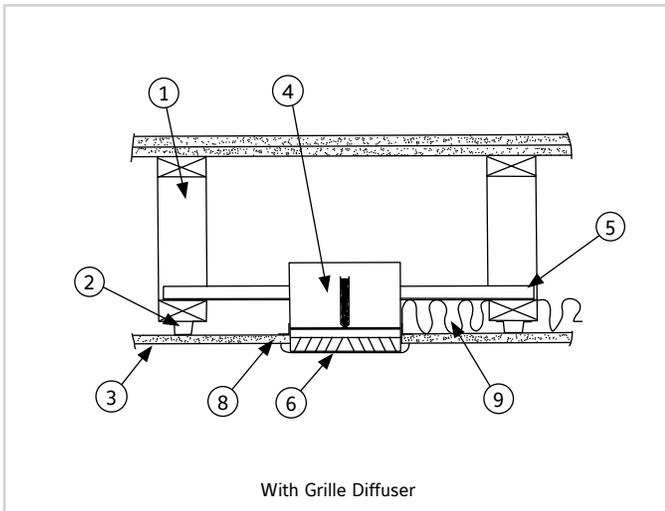
**UL CLASSIFIED**  
UL555C Listing R8039



#### NOTE:

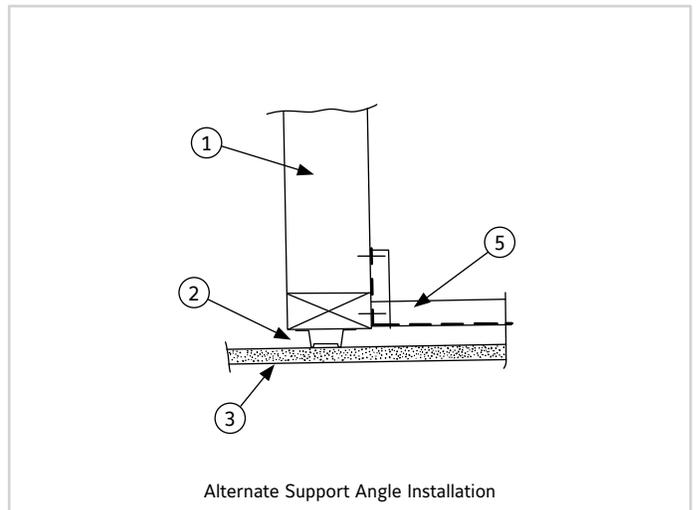
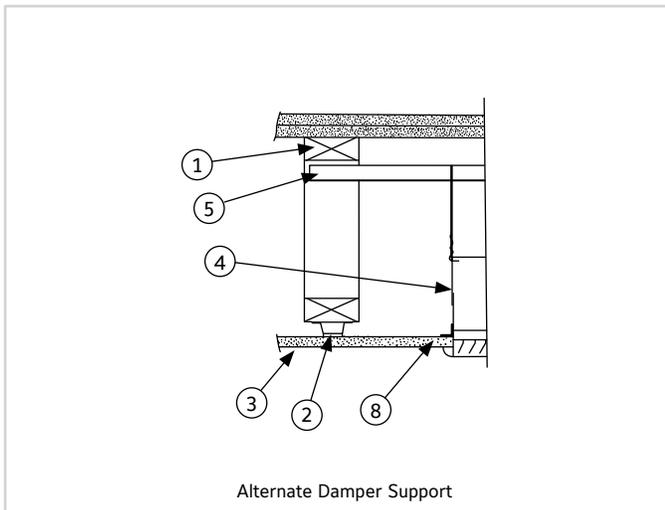
- Dimensions shown in parentheses ( ) indicate millimeters.

# INSTALLATION 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.

Click here to watch the Ruskin Installation videos:

[CFD7 Installation](#)

## LINKS TO IMPORTANT DOCUMENTS

Document Title
Quick Select Sheet
Product Data/submittals



3900 Doctor Greaves Road  
Grandview, MO 64030  
Website: [www.ruskin.com](http://www.ruskin.com)  
Phone: (816) 761-7476