

## INSTALLATION INSTRUCTIONS CEILING FIRE DAMPERS MODEL CFD7

### APPLICATION

Ceiling fire dampers maintain the integrity of the fire resistive ceiling assembly. The floor/ceiling and roof/ceiling designs are illustrated in the current UL Fire Resistance Directory. These installation instructions depict a ceiling fire damper installed in ceiling design L-501, L-502, L-503, L-506, L-507, L-508, L-512, L-513, L-514, L-515, L-516, L-517, L-519, L-522, L-523, L-524, L-533, L-537, L-545 and M-525

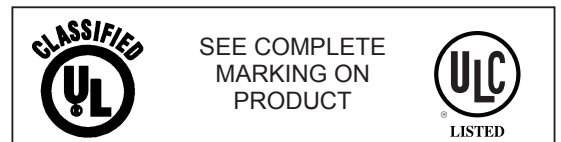
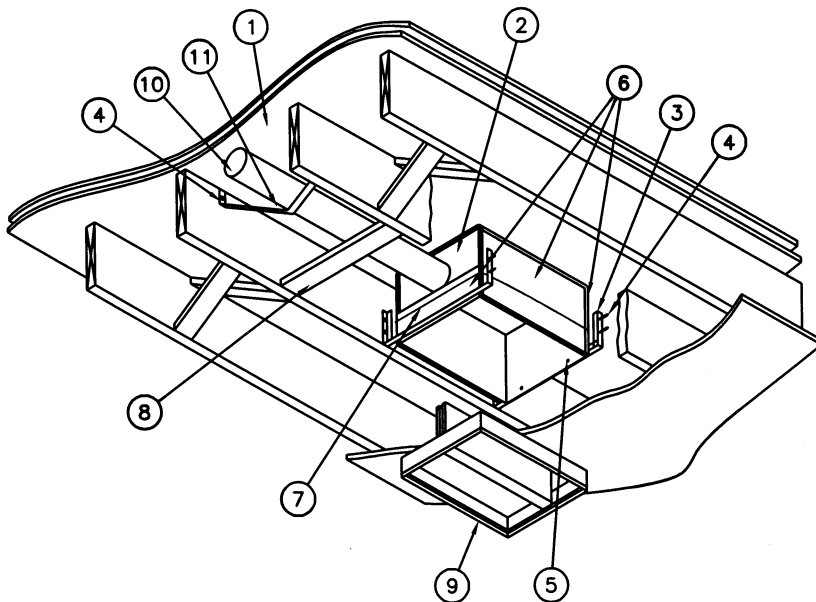
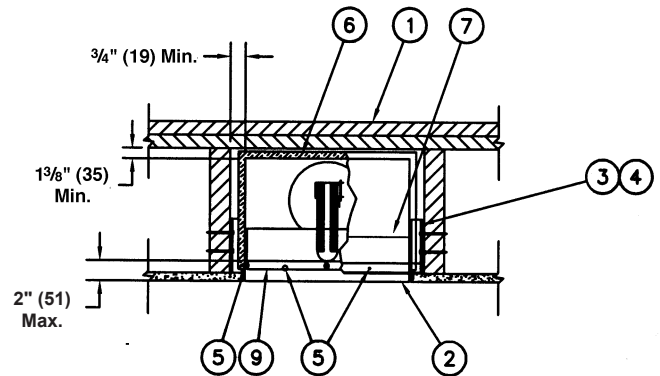
ITEM	DESCRIPTION
1.	Floor - Ceiling UL rated (See application section for design number).
2.	Steel box minimum of 24 gauge.
3.	3/4" x 3/4" 20 gauge Mounting Angle
4.	#6 Nail or #8 Wood Screw
5.	#8 Sheet metal Screw or Rivet
6.	1/2" thick Thermal Blanket (all sides)
7.	16 SWG Steel wire, Steel Clamp or Nylon Zip Tie
8.	2" x 4" Wood Brace
9.	Damper Assembly
10.	Duct (if required)
11.	24 gauge x 1" wide Duct Support on 24" centers

### Notes:

1. CFD's are shipped from the factory with the blades in the closed position. The fusible link must be installed to hold the blades in the open position at the time of installation.
2. Screws, bolts, rivets, etc. **MUST NOT INTERFERE WITH BLADE OPERATION.**
3. Flex duct must be UL listed class I or O. Steel duct minimum 28 (.50) gauge and maximum of 20 (.9) gauge.
4. The ceiling damper and its components must be installed and supported as illustrated.
5. Minimum clearance between the damper and joist 3/4" (19).

### CEILING PENETRATION

Ceiling penetrations should be located in-between floor/ceiling joist. The opening in the gypsum board should have no gaps larger than 1/16" (1.5) between the damper frame and the gypsum board.



## Support

The damper assembly is to be supported by 2 - 3/4" x 3/4" (19 x 19) angle bent into a channel and attached to the joist with a minimum of (2) #6 nails.

## Installation

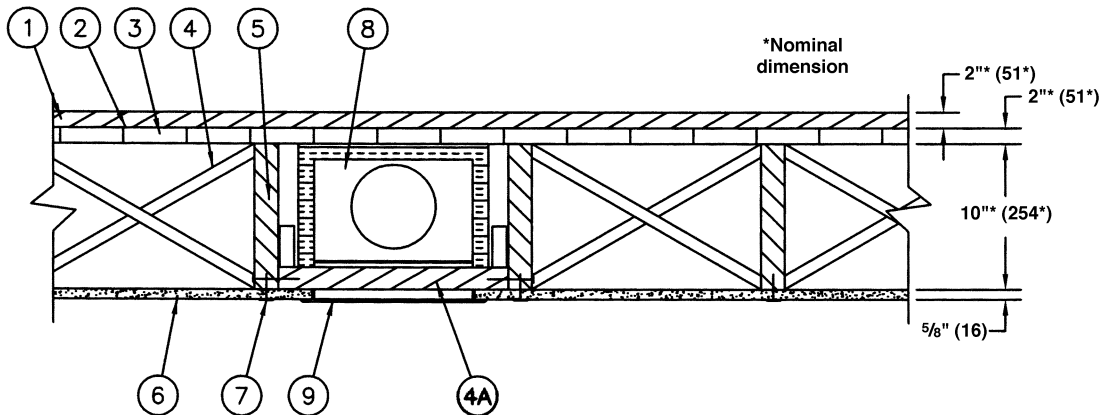
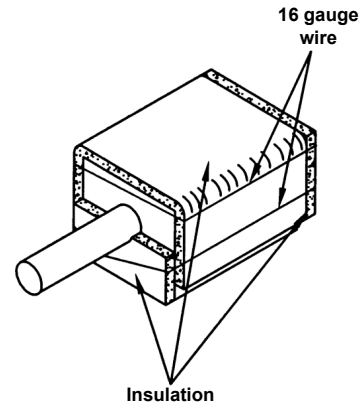
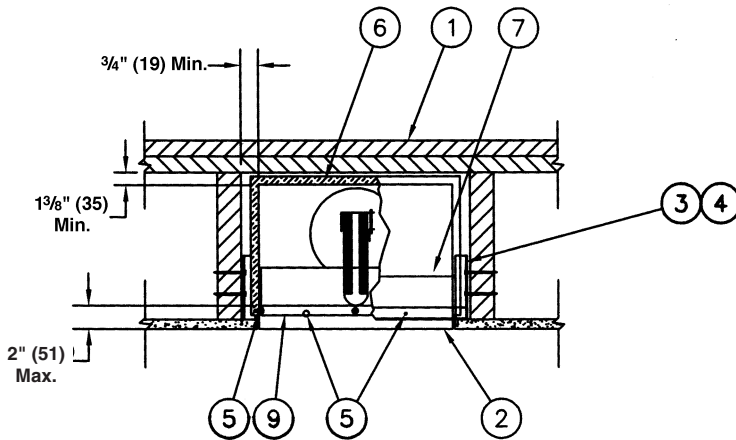
1. Attach the damper to the mounting angles with minimum of #8 sheet metal screw or 3/16" (4.5) dia. rivet. Minimum 2 per angle and maximum of 2" (51) from edge to damper.
2. The damper assembly is to be attached to the wood joist by the 2 - 3/4" x 3/4" (19 x 19) angle bent into a channel and fastened to the joist with a minimum of (2) #6 nails per side.
3. Wrap the damper assembly with 1/2" (13) thick Thermal Blanket (supplied by Ruskin). Secure the thermal blanket to the damper with minimum of 16 SWG steel wire or steel clamp (supplied by others).

### Note:

Installation without the insulation does not provide protection of the opening. Insulation must cover surfaces as shown.

## ITEM DESCRIPTION

- | ITEM | DESCRIPTION        |
|------|--------------------|
| 1.   | Finish Flooring    |
| 2.   | Vapor Barrier      |
| 3.   | Sub Flooring       |
| 4.   | Cross Bridging     |
| 4A.  | 2" x 4" wood Brace |
| 5.   | Wood Joist         |
| 6.   | Gypsum Board       |
| 7.   | Finishing System   |
| 8.   | Damper Assembly    |
| 9.   | Metallic Grille    |



# OPTIONAL FIELD INSTALLED SLEEVE

## Damper Sleeve and End Cap

Sleeve thickness to be minimum of 24 gauge (.7) steel and constructed per SMACNA HVAC Duct Construction Standards or see below for option.

## Branch Connections

Round or Square connections cannot exceed 51 sq. in. and connected to the sleeve per SMACNA HVAC Duct Construction Standards or see below for option.

## Fasteners

#8 bolts or screws, 1/8" (3) steel rivets, spot welds or 1/2" (13) long tack welds.

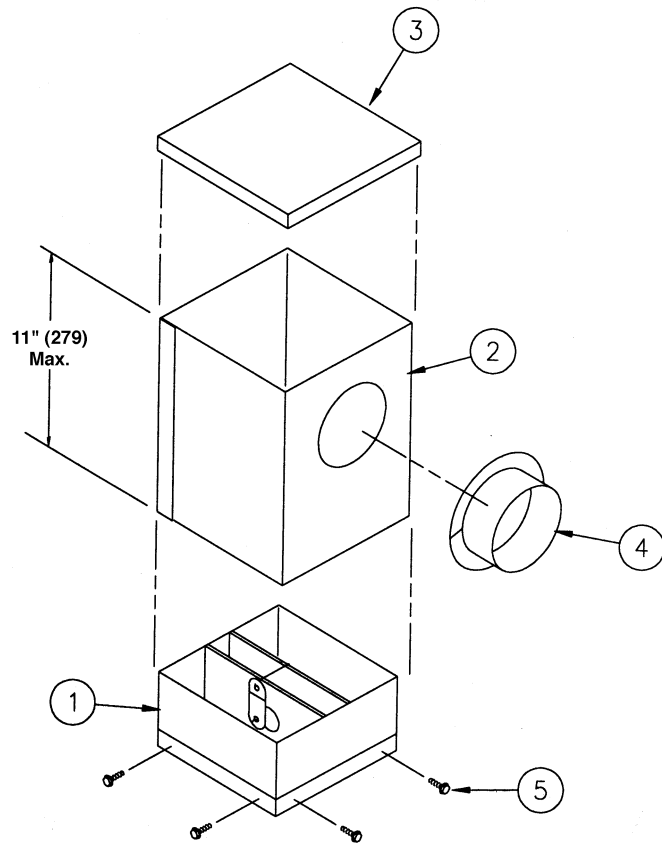
## Fastener Spacing

Fasten the sleeve to the CFD7 with minimum of 2 bolts, screw, rivets or welds per side.

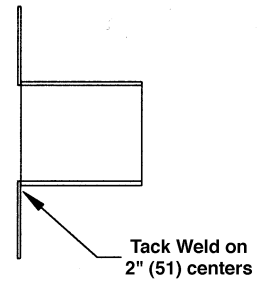
## ITEM DESCRIPTION

1. CFD7 Ceiling Fire Damper
2. Sleeve 24 ga. (.7) minimum
3. End Cap 24 ga. (.7) minimum
4. Collar
5. Fasteners

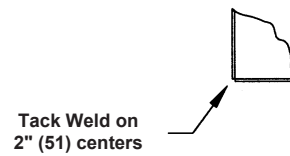
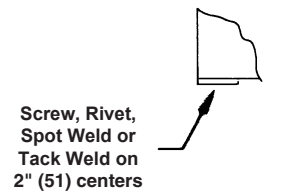
**Note:** CFD7 are shipped with 1/2" (13) thick thermal blanket for field installation.



## Optional Branch Connection



## Optional Sleeve and End Cap Seams



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