

INSTALLATION INSTRUCTIONS

Series 50 Rectangular - CRD

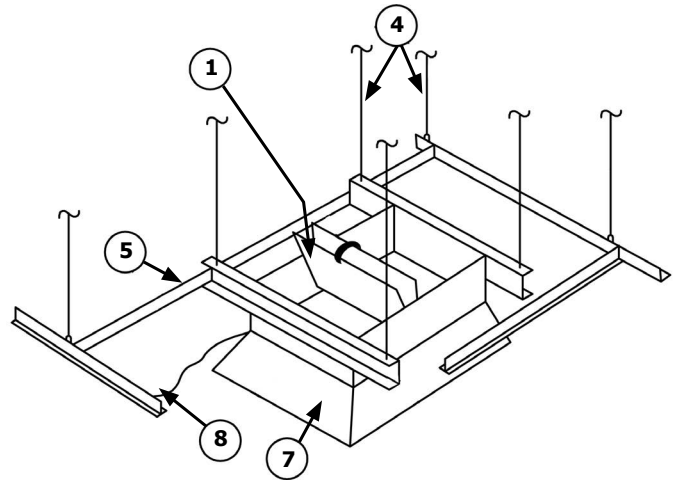
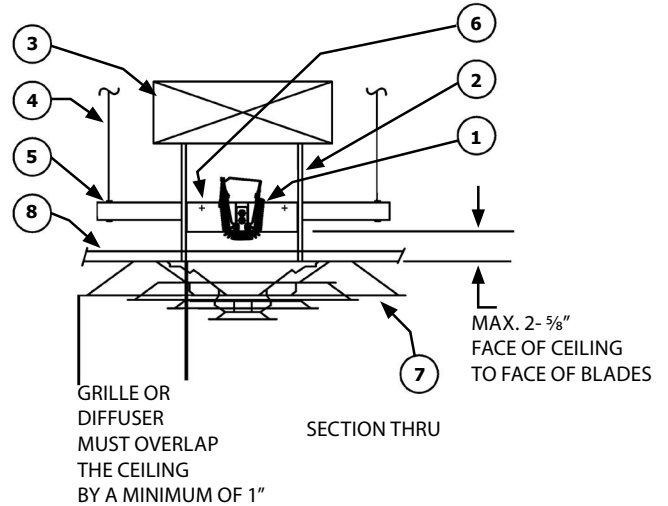
Non-combustible Partition Ratings Of 3 Hours Or Less Ducted Supply Or Return

GENERAL NOTES:

These ceiling dampers are Classified by Underwriters Laboratories, Inc. as to heat barriers in the Fire Resistance Directory under the category of Ceiling Dampers (CABS). Refer to the Classification information in the back of the Fire Resistance Directory regarding the use of these dampers in the various floor-ceiling or roof-ceiling assemblies. Ceiling dampers and the associated components (surface mounted diffusers or grilles, ducts, etc.) which are to be constructed of steel, are installed in the ceiling to maintain the hourly ratings of the floor-ceiling or roof-ceiling assemblies which are rated 3 hours or less.

INSTALLATION INSTRUCTIONS:


1. Set fusible link in place before installing dampers.
2. Support the duct with (2) 16 ga. cold-rolled steel support channel, 1½" or 2" deep with ½" flanges. Place the support channels at the bottom of the duct adjacent to both sides of the duct drop. Attach in 2 places each side. Use 12 SWG galvanized steel hanger wire to independently support channels from the structural members of the floor or roof above. Use fasteners specified in #3 below to secure channel to ducting/register box. All hanger wires shall supported directly from the structural members of the floor or the roof by vertical (not diagonal) hanger wires. Cold-rolled channels shall be used as required to insure that the grid and damper are supported from the structural members by vertical hanger wires (not diagonal).
3. Install the ceiling damper in the duct drop using ¾" diameter by ½" long steel bolts, No. 8 by ½" steel sheet metal screws at 3" o.c., minimum of 1 per side.
4. The clearance between each side of the ceiling damper and the duct drop shall be ⅛" maximum.
5. Maximum single section size = 576 sq in.
6. Duct outlets in lay-in ceilings should be field located in an acoustical ceiling panel or tile. Where it is necessary to cut a main runner or cross tee, each cut end shall be supported by a vertical 12 gauge hanger wire. A ½" clearance shall be maintained between the duct outlet and each cut end of main runner or cross tee. The duct outlet shall be located so that no more than one main runner or cross tee is cut when penetrating the ceiling membrane.
7. Steel grille or diffuser to be attached to the duct drop or ceiling damper using No. 8 by ½" long sheet metal screws, ¾" bolts, or ¼" tack welds, 6" o.c.



1. Model 50 CRD (Rectangular) Ceiling Radiation Damper
2. Steel Duct Drop
3. Branch Duct
4. 12 SWG hanger wires (4) min reqd.
5. Steel support channels
6. Mounting fasteners (bolts, screws)
7. Surface mounted steel grille, diffuser, or drop ducting to plenum
8. Ceiling: Acoustical panel (lay-in) Acoustical tile or gypsum wallboard

RECTANGULAR CEILING DAMPER SIZE LIMITATIONS

MODEL	MAXIMUM WIDTH	MAXIMUM HEIGHT	MINIMUM WIDTH	MINIMUM HEIGHT
50SL	24"	24"	4"	4"
50EA	24"	24"	6"	6"



Installation Instructions In Conformance To Underwriters Laboratories Requirements

These instructions have been reviewed by UL and found to comply with all applicable requirements of UL 555C at the time of evaluation.

ALL INSTALLATIONS ARE SUBJECT TO LOCAL AUTHORITY APPROVAL PRIOR TO ORDERING DAMPERS AND DAMPER INSTALLATION

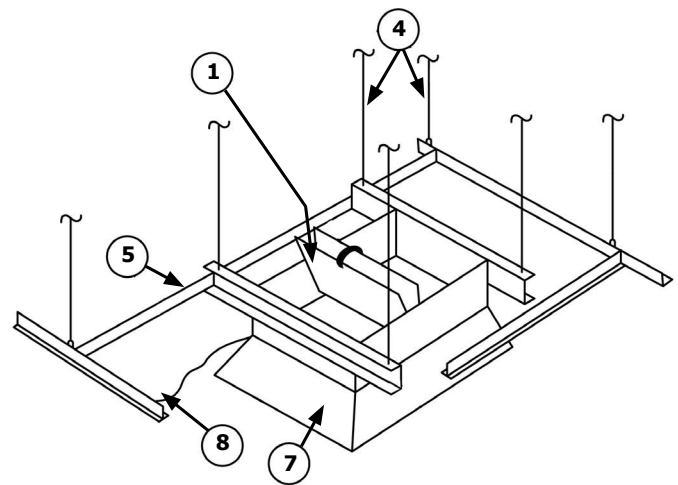
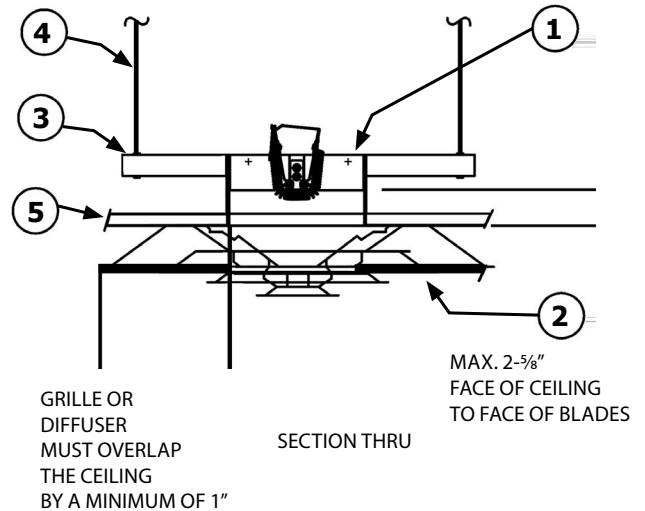
INSTALLATION INSTRUCTIONS

Series 50 Rectangular - CRD

Non-combustible Partition Ratings Of 3 Hours Or Less Non-Ducted Supply Or Return

INSTALLATION INSTRUCTIONS:

1. Set fusible link in place before installing dampers.
2. Support the damper with (2) 16 ga. cold-rolled steel support channels, 1½ or 2" deep with ½" flanges. Place the support channels at the lower end of the damper frame, adjacent to opposite sides of the damper. Attach in 2 places each side. Use 12 SWG galvanized steel hanger wire to independently support channels on each end, from the structural members of the floor or roof above. Use fasteners specified in #3 below to secure channel to ducting/register box. Refer to #3 for locations. Use fasteners specified in line item #3 to secure channel to damper. Refer to line item #7 for locations. All hanger wires shall be supported directly from the structural members of the floor or the roof by vertical (not diagonal) hanger wires. Cold-rolled channels shall be used as required to insure that the grid and damper are supported from the structural members by vertical hanger wires (not diagonal).
3. Fasten the ceiling damper to channels using ⅜" diameter x ½" long steel bolts, No. 8 x ½" steel sheet metal screws, ⅜" diameter steel rivets or spot welds at 3" on center maximum and a minimum of 2 places. Pre-assembly of ceiling radiation dampers to channels is permitted using the listed fastening methods.
4. The clearance between each side of the ceiling damper and lay-in panel shall be ⅛" maximum.
5. Damper outlets in lay-in ceilings should be field located in an acoustical ceiling panel or tile. Where it is necessary to cut a main runner or cross tee, each cut end shall be supported by a vertical 12 ga. hanger wire. A ½" clearance shall be maintained between the duct outlet and each cut end of main runner or cross tee. The duct outlet shall be located so that no more than one main runner or cross tee is cut when penetrating the ceiling membrane, and only if necessary.
6. Steel grille or diffuser to be attached to the sleeve or ceiling damper using No. 8 x 1½" long sheet metal screws, or ¼" tack welds.
7. Fastener positions must not interfere with damper blade operation.



ITEM DESCRIPTION

1. 3 HOUR RATED SERIES 50
2. MOUNTED STEEL GRILLE, DIFFUSER, OR DROP DUCTING TO PLENUM
3. STEEL SUPPORT CHANNELS
4. 12 GAGE SWG HANGER WIRES (4) MIN. REQ'D.
5. CEILING: ACOUSTICAL PANEL/TILE (LAY-IN) or GYPSUM WALLBOARD

