



ASSEMBLY SPECIFIC CEILING RADIATION DAMPER INSTALLATION INSTRUCTION

MODELS: MRCDHC AND MSCDHC

APPLICATION:

Metal-Fab Ceiling Radiation Damper Models MRCDHC and MSCDHC have been investigated and classified by Underwriters Laboratories for use in UL Fire Resistance Floor-Ceiling and Roof-Ceiling Designs as listed in the UL Fire Resistance Directory. These dampers are covered for use in designs L501, L502, L503, L506, L507, L508, L512, L513, L514, L515, L516, L517, L519, L522, L523, L533, L537, L545, L581, and L583. Metal-Fab Model MRCDHC and MSCDHC ceiling radiation dampers may also be substituted into any UL design which incorporates a hinged metal blade damper as outlined in the UL Fire resistance Directory.

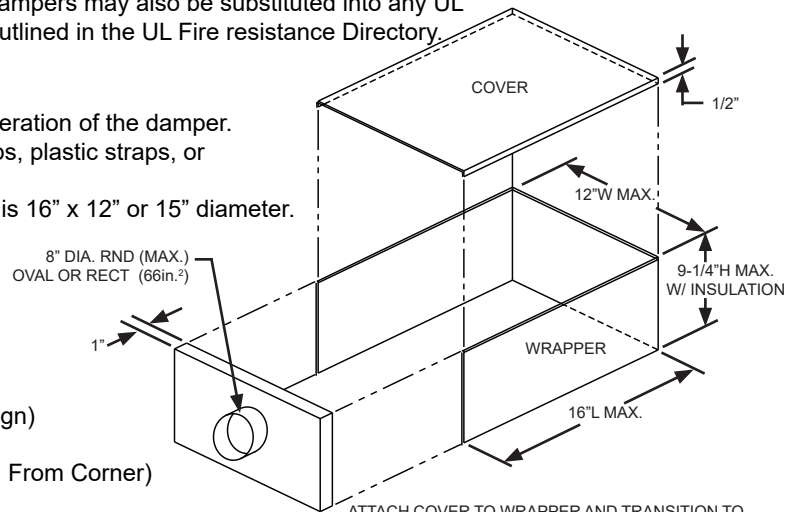


GENERAL NOTES:

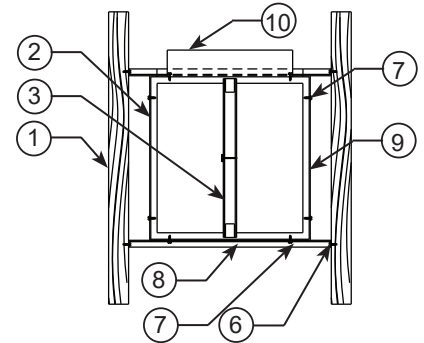
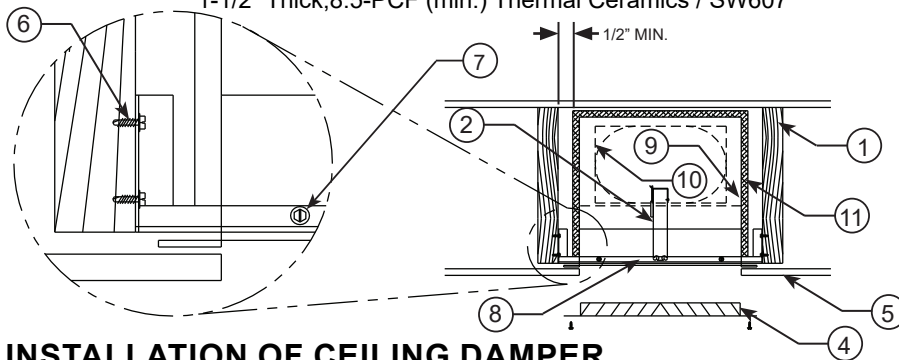
- Fasteners must be placed, so not to interfere with the operation of the damper.
- UL Classified flex duct must be attached with steel clamps, plastic straps, or 18 swg (minimum) steel wires.
- The maximum size damper approved for this installation is 16" x 12" or 15" diameter.

COMPONENTS:

1. Wood Joist
2. Ceiling Damper
3. Insulating Blanket (Damper Blade)
4. Grille
5. Gypsum Wallboard (5/8" Thick - Refer to UL Ceiling Design)
6. #8 Screw (min.) or 6 Penny Nail
7. #8 Screw (min.) or 3/16" Steel Rivet (8 each, 2-1/2" Max. From Corner)
8. 1" x 1/2" x 20 Ga. Steel Mounting Angle
9. Metal Box (30 Ga. Steel Min., Can Be Supplied By Contractor/Installer)
10. Metal Box Collar (Round 8" Dia., Oval or Rectangular - 66 in.² max.)
11. Insulation - 1/2" Thick, 8-PCF (min.) Thermal Ceramics/Kaowool
1-1/2" Thick, 8.5-PCF (min.) Thermal Ceramics / SW607



ATTACH COVER TO WRAPPER AND TRANSITION TO WRAPPER/COVER ASSEMBLY WITH 1/4" WELDS, 3/16" STEEL RIVETS, #10 SHEET METAL SCREWS, OR 1/4" NUT AND BOLT SPACED ON 5" CENTER WITH A MIN. OF TWO FASTENERS PER SIDE AND A MAX. OF 2" FROM THE CORNERS.



INSTALLATION OF CEILING DAMPER

- Measure spacing between framing members. Cut angle to distance between members plus six inches. Two full lengths of 1" x 1/2" x 20 Ga. steel mounting angles will be required for each damper. NOTE: 1/2" leg rests on ceiling materials.
- Cut a slit in the 1" leg, three inches from each end. Bend each end of the mounting angle 90°.
- Attach the bent section of one of the mounting angles to the wood framing member using #8 screws or 6 penny nails. Use a minimum of 2 fasteners per bent section. The mounting angles are to be placed such that 1/2" faces the ceiling.
- Attach the ceiling damper to the 1" x 1/2" mounting angle using #8 screws or 3/16" rivets. A minimum of 2 fasteners per angle on the square/rectangular damper and one fastener per angle on the round damper required (minimum).
- Position the remaining mounting angle on the opposite side of the damper between the joists. Attach one of the 3" bent angle to the wood joist with two #8 screws or 6 penny nails. The mounting angles are to be placed such that 1/2" leg rest on the ceiling.
- Attach the remaining end of the 3" bent angle to the wood joist with two #8 screws or 6 penny nails.
- The damper plenum box is externally insulated in the field with Thermal Ceramics, Kaowool, 1/2" thick, 8-PCF minimum density, UL Classified Material. (See Item 11). Wrap insulation around the vertical walls of the plenum box starting at the side wall opposite of the collar. Completely wrap side walls of plenum box and overlap the starting point by a minimum 2 inches. Secure insulation at overlap seam with a minimum (2) two steel rivets. Cut a hole 1/4" smaller than the collar diameter to ensure tight fitment. Apply a layer of insulation on the top of the plenum box and secure with spray on adhesive.