

Installation, Operation and Maintenance Instructions

Receiving and Handling

Upon receiving dampers, check for both obvious and hidden damage. If damage is found, record all necessary information on the bill of lading and file a claim with the final carrier. Check to be sure that all parts of the shipment, including accessories, are accounted for.

Dampers must be kept dry and clean. Indoor storage and protection from dirt, dust and the weather is highly recommended. Do not store at temperatures in excess of 100°F (38°C).

CRD-1WJ Dampers are intended for installation in accordance with ceiling radiation damper requirements established by:

National Fire Protection Association
NFPA Standards 80, 90A, 92A, 92B, 101, & 105
IBC International Building Codes



Safety Warning:

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

“UL CLASSIFIED (see complete marking on product)”
UL Standard 555C (Classification #R13446)

These instructions describe the installation of a CRD-1WJ in designs: L501, L502, L503, L506, L507, L508, L512, L513, L514, L515, L516, L517, L519, L533, L537 and L545 as detailed in the UL Fire Resistance Directory.

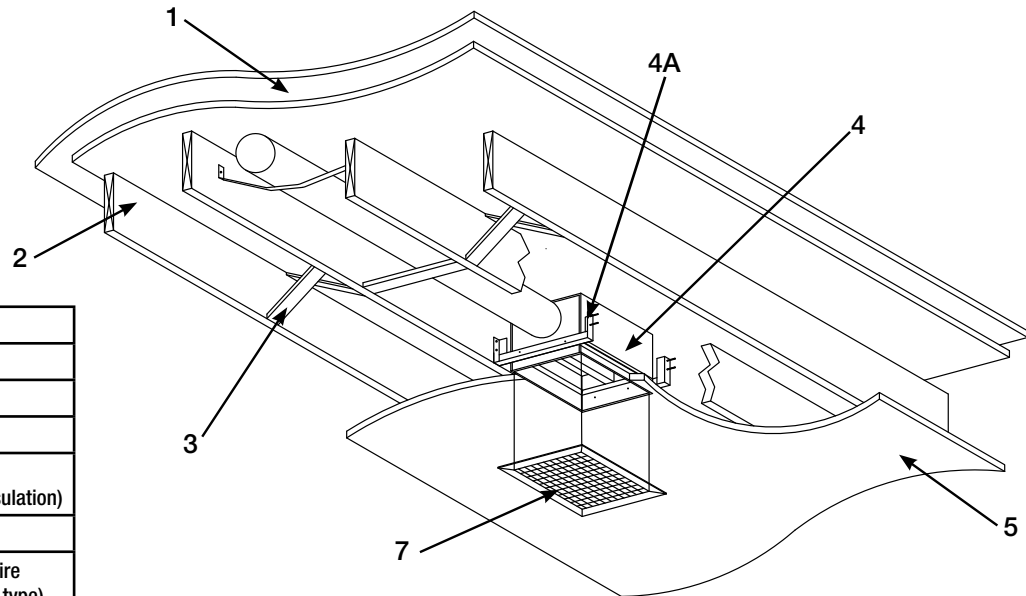


Figure 1

Number	Description
1	Flooring Systems
2	Wood Joists
3	Cross Bridging
4	CRD-1WJ Assembly (damper, steel box, & insulation)
4A	Mounting angle
5	Gypsum board (see UL Fire Resistance Directory for type)
6	Finishing System (not shown)
7	Grille

Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of one year from the purchase date. Any units or parts which prove to be defective during the warranty period will be repaired or replaced at our option. Greenheck shall not be liable for damages resulting from misapplication or misuse of its products. Greenheck will not be responsible for any installation or removal costs. Greenheck will not be responsible for any service work or backcharges without prior written authorization.

Due to continuing research, Greenheck reserves the right to change specifications without notice.

This manual is the property of the owner, and is required for future maintenance. Please leave it with the owner when the job is complete.

Installation Guidelines

- 1) CRD's are shipped from the factory with the blades in the closed position. The fusible link must be installed at the time of installation such that the blades are held open as shown in Figure 2.
- 2) Fasteners (screws, bolts, rivet, etc.) used for installation **must not interfere with blade operation**.
- 3) Flexible duct must be Class I or 0 type, bearing the UL listed mark. Steel duct must be a minimum 28 ga. (.5mm) and maximum 20 ga. (1mm).
- 4) Ceiling damper must be installed as described in these installations.
- 5) Ceiling penetration shall be located between floor/ceiling joists.

Installation

The damper assembly is to be attached to the joists using 2 - 1 in. x 1/2 in. x 20 ga. (25mm x 13mm x 1mm) mounting angles. See Figure 3.

- 1) Attach the mounting angles to the damper box on the sides of the box without the supplied flanges. Attach the mounting angles 5/8 in. (16mm) above the bottom of the box (i.e. even with the flanges) using minimum #8 sheet metal screws or 3/16 in. (4.5mm) dia. steel rivets. Minimum 2 fasteners per angle and a maximum of 2 in. (51mm) from the corner of the box.
- 2) Insert the damper assembly, with attached mounting angles, between ceiling joists and attach to joists using minimum 2 - #8 x 3/4 in. (19mm) nails per side - see Figure 4.

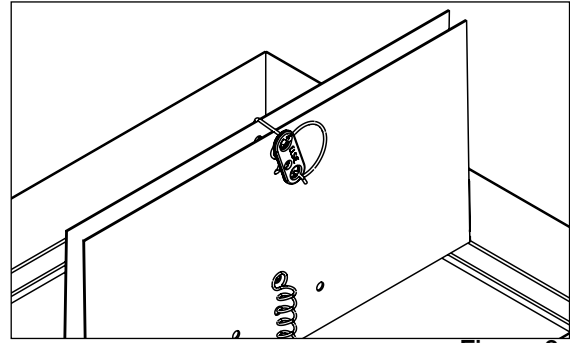


Figure 2

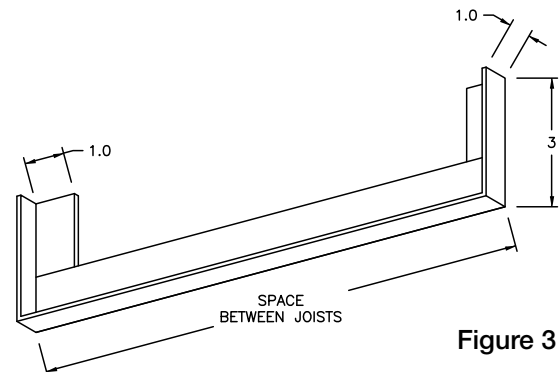


Figure 3

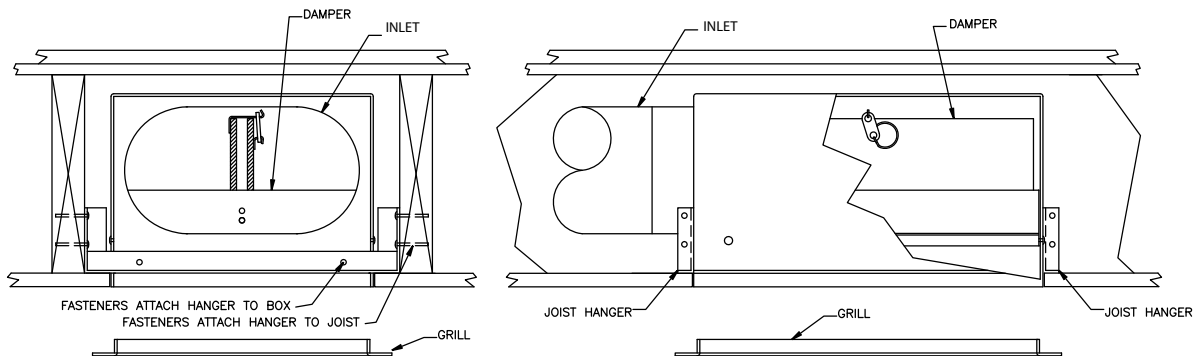


Figure 4

Damper Maintenance

Dampers do not typically require maintenance as long as they are kept dry and clean. If cleaning is necessary, use mild detergents or solvents. If lubrication is desired for components such as axle bearings, do not use oil-based lubricants or any other lubricants that attract contaminants such as dust.

Dampers and their actuator(s) must be maintained, cycled, and tested a minimum in accordance with:

- The latest editions of NFPA 80, 90A, 92A, 92B, 101, 105, UL864, AMCA 503-03 and local codes.

