

**Fire Resistant Ventilation Duct Assembly
for Fire Dampers (DFD and FD series)
and Combination Fire Smoke Dampers
(CFSD, OFSD, FSD Series)**

These instructions are for installing vertical mount fire and combination fire smoke dampers in a fire resistant ventilation duct (UL Ventilation duct Assembly HNLN.V-5)

Refer to:

'Installation Instructions for FD, DFD, DFD X series, and FD X series Fire Damper Models' (Part #481324)

or

'Installation Instructions for FSD-XXX, DFD-XXX, and SSFSD-XXX Series Fire & Combination Fire Smoke Dampers' (Part #481318)

or

'Installation Instructions for OFSD, ODFD, OFD, and OSSFD Series Dampers' (Part #461337) for additional details.

"UL CLASSIFIED (see complete marking on product)"

"UL CLASSIFIED to Canadian safety standards (see complete marking on product)"

Standard 555 and 555S (Listing #R13317)

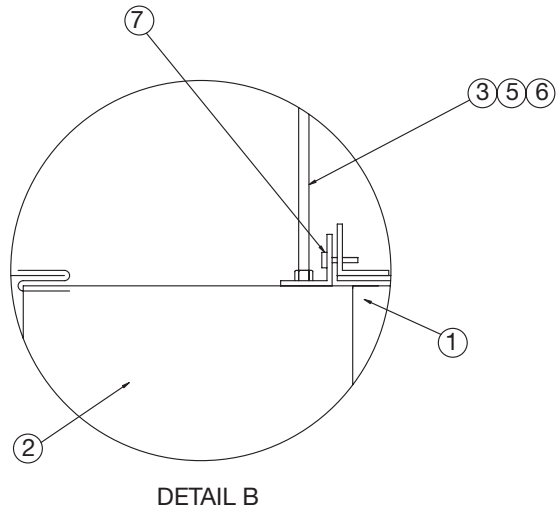
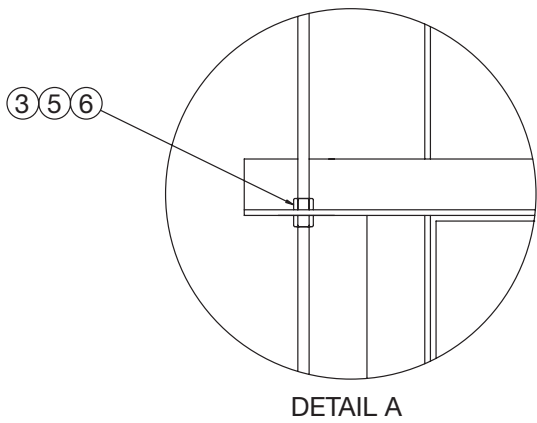
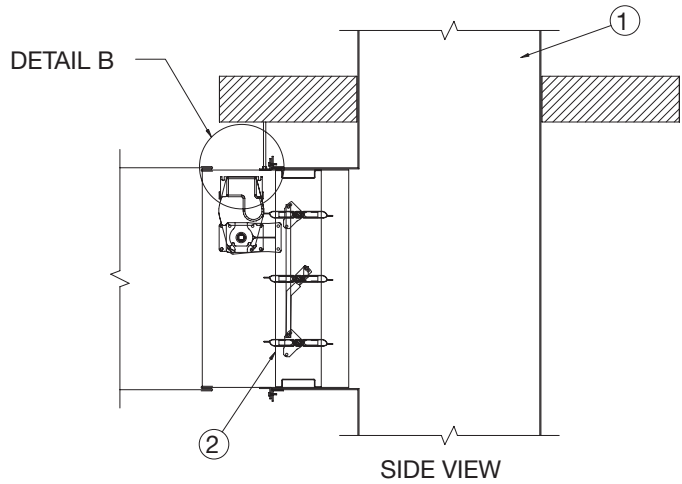
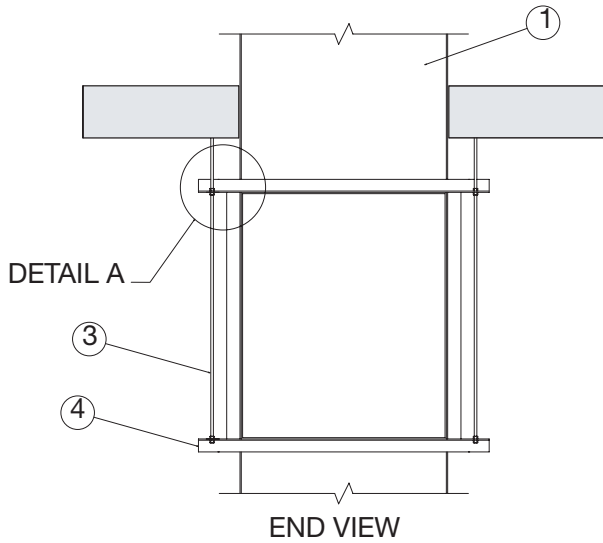


- 1) The damper sleeve must slip inside the fire resistant duct spool. Damper sleeve assembly will be ¼ in. (6mm), ½ in. (13mm) maximum, smaller than duct spool size.
- 2) Damper is to be supplied with factory mounted sleeve. Sleeve gauge will be minimum of 16 ga. (1.5mm) for dampers up to 36 in. wide x 24 in. (914mm x 610mm) high and 14 ga. (2mm) for dampers exceeding 36 in. wide x 24 in. high (914mm x 610mm).
- 3) Mounting angles need to be the following sizes:
 - 1½ in. x 1½ in. x ¼ in. up to 24 in. (38mm x 38mm x 6mm up to 610mm)
 - 2 in. x 2 in. x ¼ in. over 24 in. up to 32 in. (51mm x 51mm x 6mm over 610mm up to 813mm)
 - 2½ in. x 2½ in. x ¼ in. over 32 in. up to 40 in. (64mm x 64mm x 6mm over 813mm up to 1016mm)
 - 3 in. x 3 in. x ¼ in. above 40 in. (76mm x 76mm x 6mm above 1016mm)
- 4) Mounting angle fasteners:
 - #10 bolts or screws
 - ⅜ in. (4.7mm) steel rivets
 - ½ in. (13mm) long welds
- 5) Mounting Angle Fasteners Spacing:
 - Mounting angles to dampers, space fasteners on 6 in. (152mm) on center.
 - Mounting angle to spool flange, space fasteners on 12 in. (305mm) on center.
 - Minimum 2 fasteners per side



- 6) Hanger rods:
 - ⅝ inch threaded rod anchored to the floor above and attached to the mounting angles through hole in the angles and secured with hex nut and washer (Items 5 & 6). Anchor to masonry per assembly No. V-5.
- 7) Duct to Damper Sleeve Connection:
 - See the fire damper or the combination fire smoke installation instructions for breakaway, flanged, or non-breakaway connections.

Item	Description
1	Fire resistant ventilation duct (UL HNLN Assembly No. V-5)
2	Fire damper or combination fire smoke damper
3	Hanger rods in accordance with assembly no. V-5
4	Mounting angles (see instruction #3)
5	3/8 in. (10mm) hex nuts
6	3/8 in. (10mm) flat washer
7	Mounting angle fasteners (see instructions #4)



Our Commitment

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

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