

**Refer to:**

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

or

'Installation Instructions for FD, DFD, SSFD, SSDFD, & KFD Series Curtain Fire Dampers' (Part #481324)  
for additional details



## 1. GAUGES AND LENGTHS OF FIRE DAMPER SLEEVES

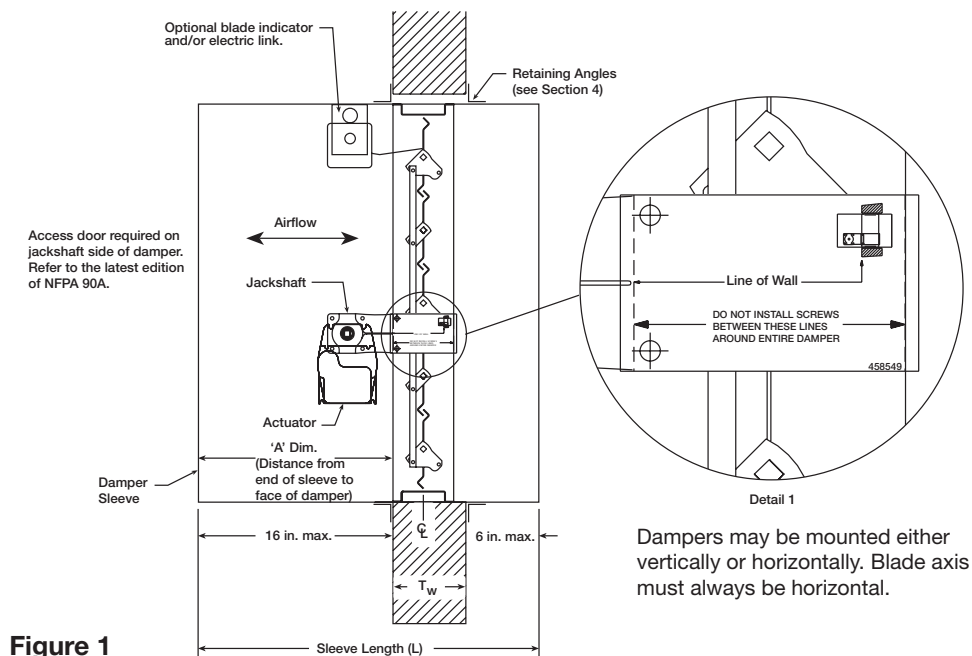
All fire smoke dampers must be installed in a steel sleeve of the required gauge and length. See Table 1 for required minimum sleeve gauges. Maximum sleeve thickness is 10 gauge (3.5 mm). Sleeve inside dimensions must equal damper outside dimensions.

Sleeves shall extend a maximum of 16 in. (406 mm) beyond the wall or floor on the actuator or manual quadrant side of the damper (see **Figure 1**). When an access door is incorporated as a part of the sleeve on the side opposite the actuator or manual quadrant, the sleeve shall also extend a maximum of 16 in. (406 mm) beyond the wall or floor. When there is no access door incorporated as part of the sleeve, the sleeve shall extend a maximum of 6 in. (152 mm) beyond the wall or floor on the side of the damper opposite the actuator or manual quadrant.

## 2. ATTACHING FIRE DAMPERS SLEEVES

All four sides of the damper frame must be attached to the sleeve with one row of attachments on each side of the frame. Attachments must be spaced a maximum of 6 in. (152 mm) on centers and a maximum of 2 in. (51 mm) from corners. A minimum of 4 attachments (2 on each side of the frame) per side (16 per damper) are required. One of the methods of attachment shown below must be used.

- tack or spot welds
- #10 sheet metal screws
- ¼ in. (6 mm) bolts and nuts
- ⅜ in. (4.7 mm) steel pop rivets



Dampers may be mounted either vertically or horizontally. Blade axis must always be horizontal.

Minimum Sleeve Thickness for Fire Dampers			
Type of Duct to Sleeve Connection	Duct	Duct Dimension in. (mm)	Sleeve Gauge
Rigid	Round Rectangular	24 in. (610mm) max. diameter 36 in. (914 mm) max. width or 24 in. (610mm) max. height	16 (.060 in.) [1.5 mm]
Rigid	Round Rectangular	over 24 in. (610mm) diameter over 36 in. (914 mm) width or over 24 in. (610mm) height	14 (.075 in.) [2 mm]
Breakaway (or no duct)	Round or Rectangular	12 in. (305 mm) wide and under 13 in. - 30 in. (330 mm - 762 mm) wide 31 in. - 54 in. (787 mm - 1371 mm) wide 55 in. - 84 in. (1397 mm - 2134 mm) wide 85 in. (2159 mm) wide and over	26 (.018 in.) [.46 mm] 24 (.024 in.) [.6 mm] 22 (.030 in.) [.76 mm] 20 (.036 in.) [.9 mm] 18 (.048 in.) [1.2 mm]
Important Note: Sleeve thickness must not be less than the gauge of the connecting duct. UL Standard 555 requires all ducts to terminate at the fire damper sleeves or the damper frames.			

**Table 1: Minimum sleeve thickness for fire dampers.**

## Our Commitment

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

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