

Refer to:  
 'Installation Instructions for FD, DFD, SSFD, & KFD Models' (Part Number 452763)  
 or  
 'Installation Instructions for FSD-XXX, DFD-XXX, CFSD-XXX, & SSFSD-XXX Series Fire & Combination Fire Smoke Dampers' (Part Number 461336)  
 or  
 'Installation Instructions for FD & DFD 150X Series Curtain Fire Dampers' (Part Number 453946) for additional details.

**Metal Stud Framing for Fire Dampers in Drywall Partitions Utilizing One Retaining Angle**

**FD & DFD Series**

**1½ Hour Curtain Fire Dampers and**

**FSD Series**

**1½ Hour Combination Fire Smoke Dampers Vertical Mount**

**"UL Classified (see complete marking on product)"**  
**"UL Classified to Canadian safety standards (see complete marking on product)"**  
 Standards UL555 & UL555S  
 Classifications filed at UL under Listing R13317



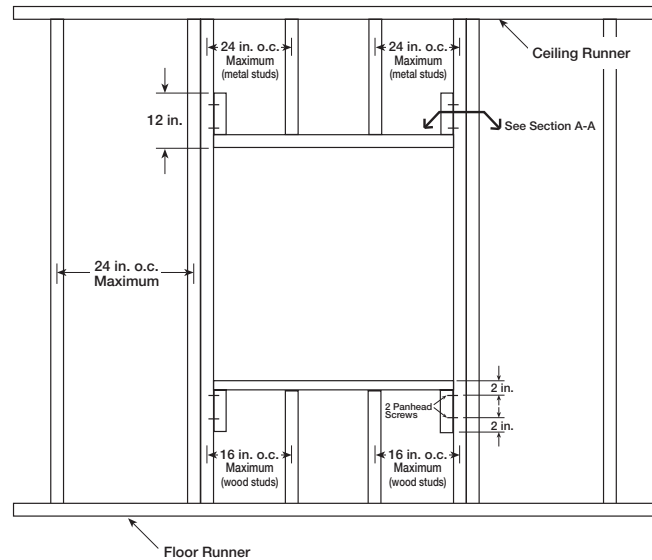
**Notes**

- Gypsum panels must be screwed 12 in. (305mm) on center maximum to all stud and runner flanges surrounding opening. (See **Figure 1** and **Figure 2**).
  - Fire damper and sleeve assemblies 80 in. W x 50 in. H (2032mm x 1270mm), 50 in. W x 80 in. H (1270mm x 2032mm), or 40 in. W x 100 in. H (1016mm x 2540mm) and smaller only require retaining angles on one side of the partition (See **Figure 3** and **Figure 4**). Retaining angles must be attached to the sleeve and the partition. Larger damper assemblies require retaining angles on both side of the partition. Retaining angles must be attached to the sleeve.
- Retaining angles must be a minimum of 16 gauge (1.5mm) steel and have a minimum of 1½ in. x 1½ in. (38mm x 38mm) legs.
  - Retaining angles must be attached to the sleeve using one of the methods shown below:
    - tack or spot welds
    - #10 sheet metal screws and bolts
  - Retaining angles must be attached to the partition using drywall screws of a length such that the screw engages the stud/track by a minimum of ½ in. (13mm).
  - A minimum of two connections per side, top, and bottom, 12 in. (305mm) on center maximum for openings of 48 in. W x 36 in. H (1219mm x 914mm) and less, and 6 in. (152mm) on center for openings 80 in. W x 50 in. H (2032mm x 1270mm), 50 in. W x 80 in. H (1270mm x 2032mm), or 40 in. W x 100 in. H (1016mm x 2540mm) or less.
  - Retaining angles must overlap the partition a minimum of 1 in. (25mm).

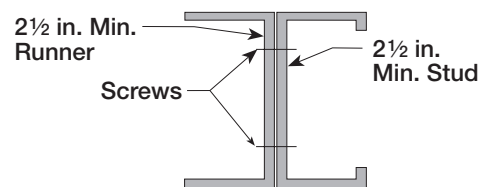
**Grille Installations** (Dampers up to 36 in. x 36 in. [914mm x 914mm] maximum)

- Angle legs may be reversed and one leg inserted into the wall/floor opening. Retaining angles used in conjunction with grille installations must be a minimum of 16 gauge (1.5mm) steel and have a minimum of 5/8 in. x 1 in. (15mm x 25mm) of sleeve into the studs. Space screws a maximum of 6 in. (152mm) on center and a maximum of 2 in. (51mm) from the corners (minimum of 2 screws per side). See **Figure 5** and **Figure 6**.

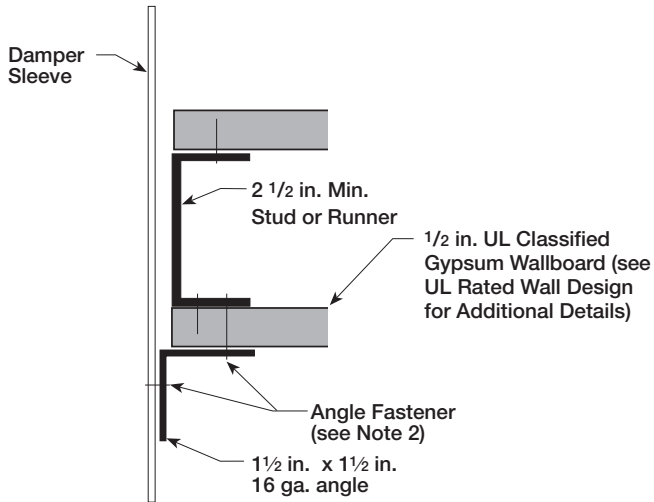
Note: Screws used to attach grille are allowed to penetrate reversed angle leg.



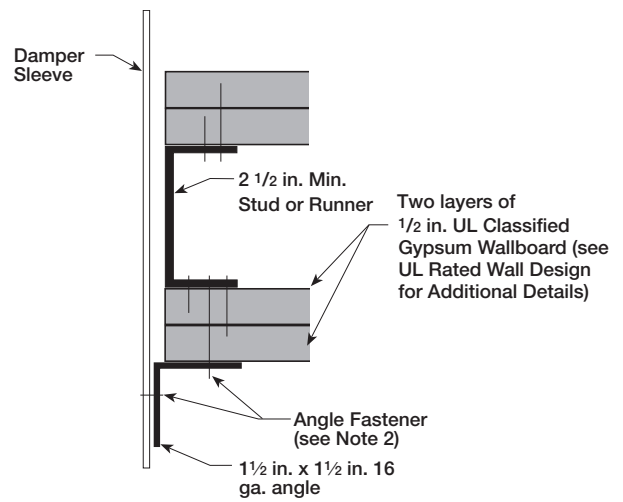
**Figure 1: Opening Preparation Detail** (Double vertical studs are not required for openings 36 in. x 36 in. (914mm x 914mm) or smaller.



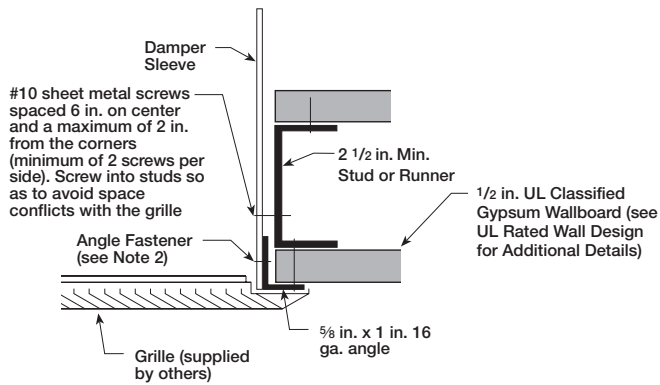
**Figure 2: Section A-A**



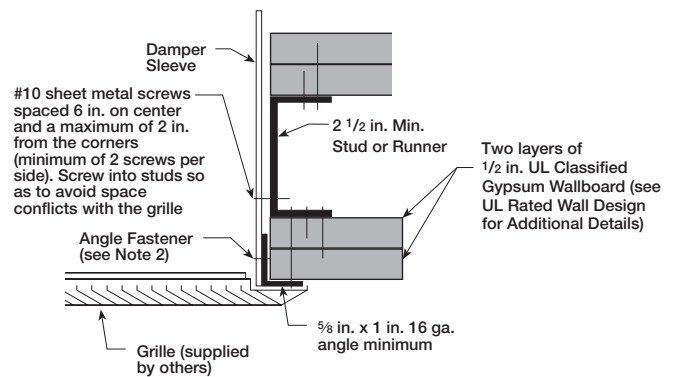
**Figure 3: 1 Hour Wall Rating**



**Figure 4: 2 Hour Wall Rating**



**Figure 5: 1 Hour Wall Rating**



**Figure 6: 2 Hour Wall Rating**

