

COMBINATION FIRE/SMOKE DAMPERS (STATIC AND DYNAMIC)

Supplemental Installation Instructions for shaft wall applications

NOTE: This set of instructions shall serve as a supplement to the original United Enertech installation instructions. Please refer to the fire damper and combination fire/smoke damper installation instructions for all applicable models before utilizing this document.



R25410

APPLICATION:

These installation instructions are intended for United Enertech models FD or FDD 1-1/2 hour rated fire dampers and models F/S-3V, F/S-AF, F/S-AFM combination fire and smoke dampers. This supplement shows how to install these dampers into 1 & 2 hours rated cavity shaft wall partitions with metal stud framing.

INSTALLATION:

- Gypsum panels must be screwed 12" (305mm) o.c. max. to all studs and runners around the perimeter of the opening. (See fig. 1 and fig. 2 for opening preparation details).
- Fire damper and sleeve assemblies 80" x 50" (2032x1270), 50" x 80" (1270x2032), or 40"x84" (1016x2134) and smaller can be installed with retaining angles on one side of the partition (see fig. 3 & 4 on page 2). Retaining angles must be attached to the partition and the sleeve. Larger damper assemblies require retaining angles on both sides of the partition.
- Retaining angles must be a minimum of 16 gauge steel and min. 1-1/2" x 1-1/2" (38x38) legs. For metal stud partitions only, the single side mounting angle may be attached directly to the metal stud or over the gypsum.
- Retaining angles must be attached to the partition and sleeve using one of the methods shown below:
 - Tack Welds, 1/2" (13mm) min. length
 - #10 sheet metal screws or bolts
 - Screw length - the screw must penetrate the stud/runner by a min. of 1/2" (13mm).
- Wall fasteners - A minimum of two connections per side, top and bottom, 12" (305mm) on center max. for openings 48"x36" (1219x2032) and less, and 6" (152mm) on center for openings 80"x50" (2032x1270), 50"x80" (1270x2032) and 40"x 84" (1016x2134) or less.
- Sleeve fasteners - 6" (152mm) max. on center.
- Retaining angles must overlap the partition by a minimum of 1" (25mm).

This supplemental instruction applies to the following UL Fire Resistance Directory design numbers: U438, U469, U497.

Figure 1: Opening prep. detail

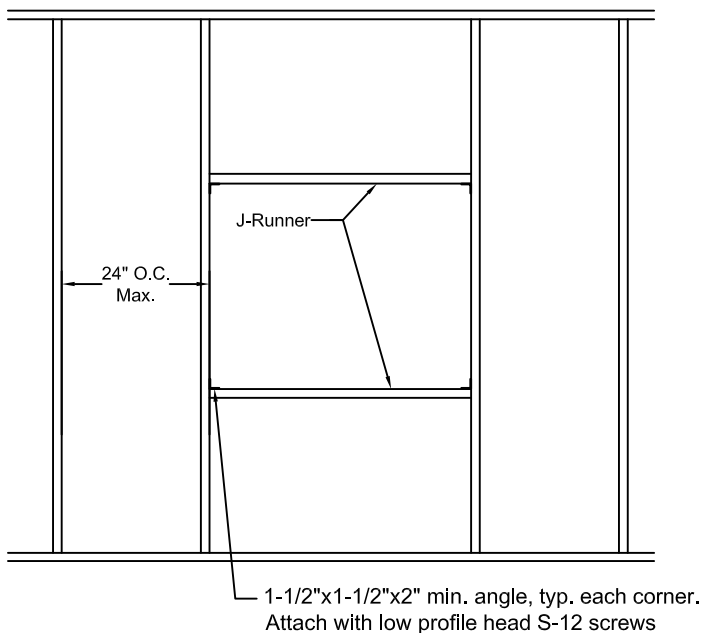
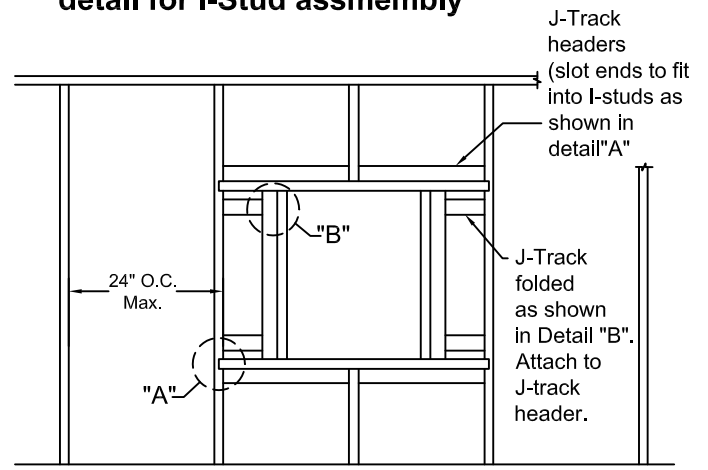


Figure 2: Optional opening preparation detail for I-Stud assembly



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for shaft wall applications (continued)

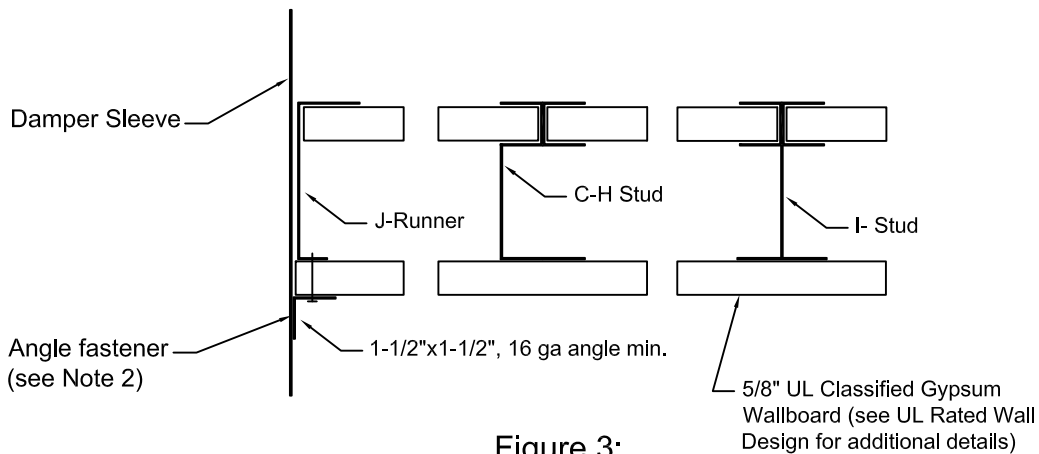
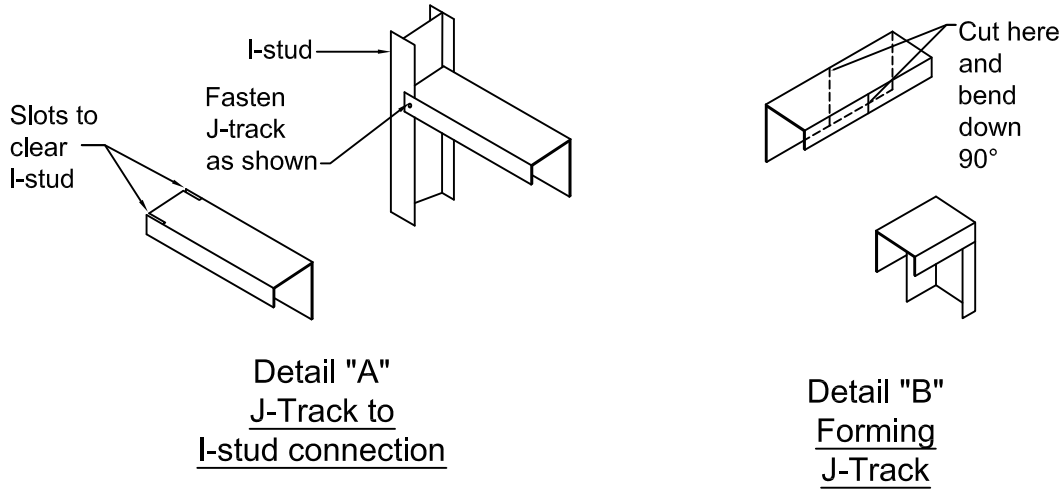


Figure 3:
1 Hour Shaft wall Rating

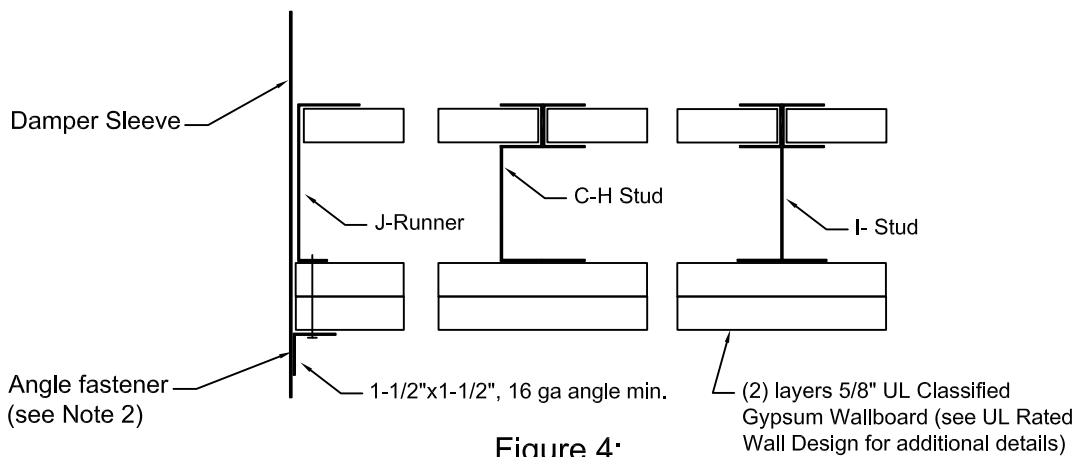


Figure 4:
2 Hour Shaft wall Rating