RUSKIN®

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SUPPORT MULLIONS FOR DAMPERS IN OVERSIZED WALL OPENINGS

INSTALLATION INSTRUCTIONS SUPPLEMENT

APPLICATION

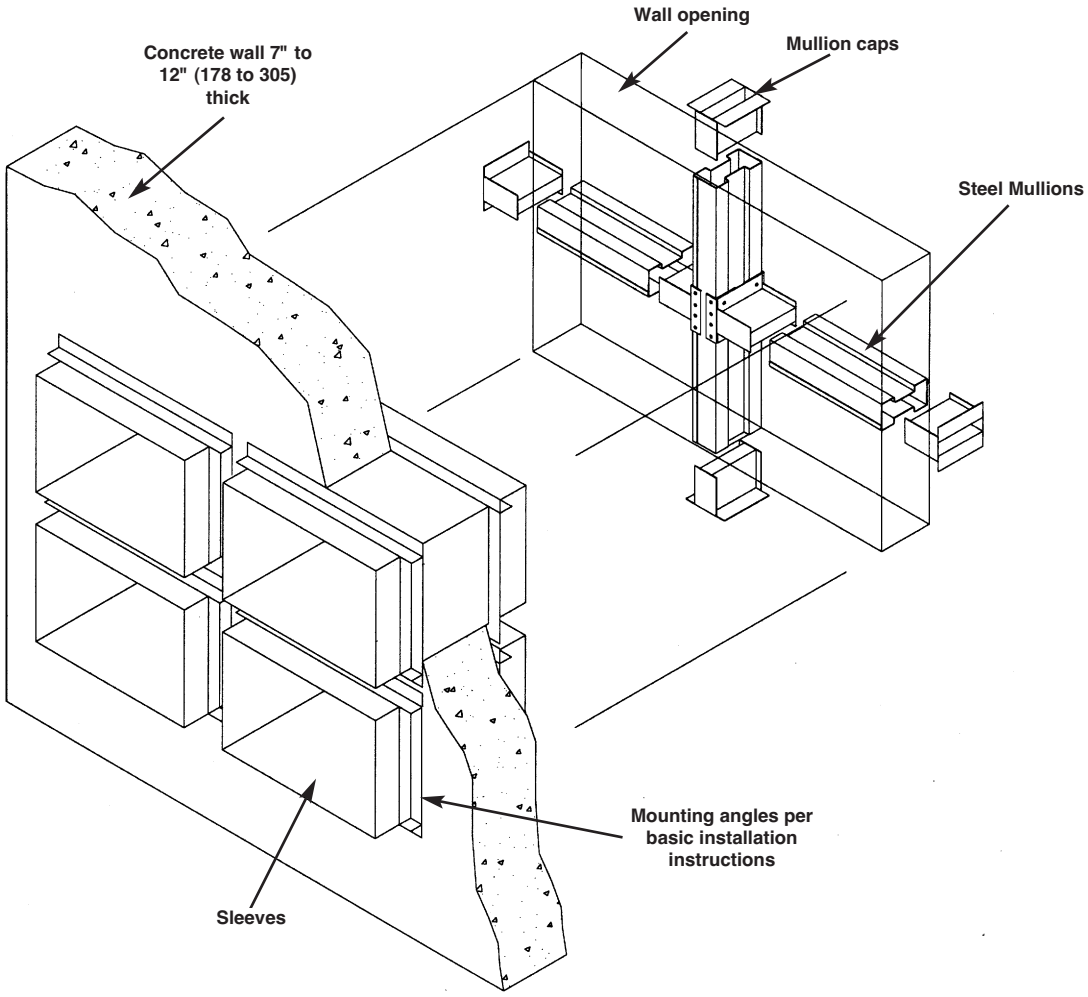
Fire dampers are UL classified for their maximum size or maximum assembly size. Steel support mullions can be used to separate openings in concrete block or poured concrete walls that are larger than the maximum UL damper assembly size. The opening must not exceed a maximum 120" (3048) high, but can be any width provided a vertical support mullion is used a maximum of every 120" (3048). The walls must be a minimum 7" (178) to a maximum 12" (305) thick. Hollow concrete block walls must be suitably filled with 3500 minimum psi concrete for proper securing of mullions. The fire resistance rating of the barrier must be less than 3 hours. Steel support mullions are not intended to be part of the ductwork or in the airstream.

Refer to the appropriate Ruskin product specification sheet for UL damper size limitations. When the duct size exceeds the maximum damper width or height, the opening must be divided into two or more separate openings with a support mullion installed between damper sections. The mullion consists of a vertical and or horizontal mullion and mullion caps (one cap for each mullion end).

Important Note: Underwriters Laboratories does not recognize steel support mullions for use with dynamic fire dampers.

CLASSIFIED C UL US

SEE COMPLETE MARKING ON PRODUCT



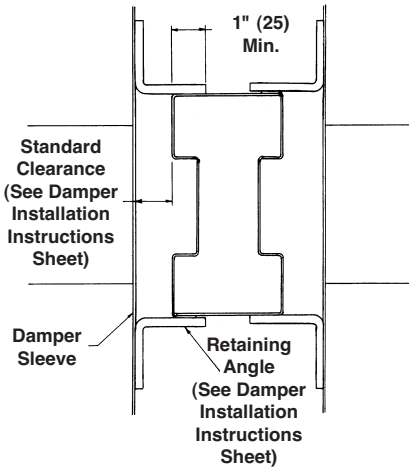
GENERAL INSTALLATION

Fabricate mullion of 16 gage (1.6) galvanized steel as shown in Figure 1. Two mullion pieces are joined with 3/16" (5) diameter steel pop rivets or 3/4" (19) long welds located 6" (152) maximum from each end and 12" (305) on center maximum. The mullion should permit clearance between the mullion and top cap. Required clearance is 1/8" (3) per foot or wall opening height. Maximum permitted clearance is 1 1/4" (31) (for example, permitted clearance for an 8" (203) high opening is 1/8" (3) x 8" = 1" (25) +).

Fabricate two caps per each mullion of 12 gage (2.8) galvanized steel as shown in Figure 2 for vertical mullions and horizontal mullions. Caps must permit mullion to overlap each cap by 3" (76) minimum. Cap height is calculated by adding 3" (76) to permitted mullion expansion clearance which is 1/8" (3) per foot of wall opening height.

Insert mullion caps into mullion ends allowing mullion to float between the caps. DO NOT fasten mullion to caps in any way. Locate within opening to provide correct expansion clearance for dampers.

Drill holes in caps and concrete for anchoring steel mullion caps with 1/4" (6) - 20 x 5/16" (8) steel screws and 3/8" (10) diameter x 1" (25) concrete expansion anchors as shown in Figure 2. Set horizontal mullion caps at vertical mullions as shown in Figure 3 as required. If steel lintels are present, four 1" (25) welds (two per mullion cap leg) may be used to anchor each mullion cap.



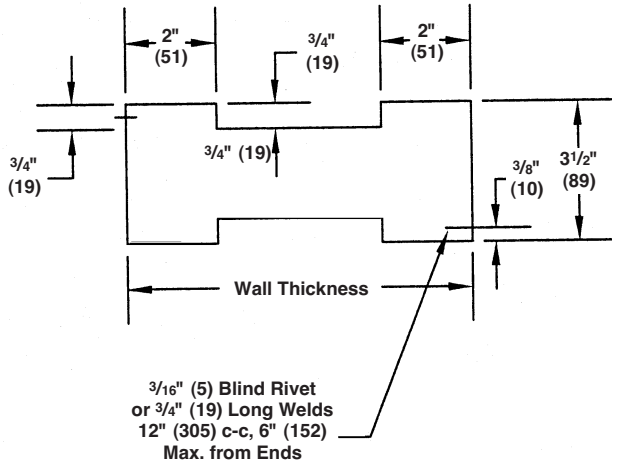


FIGURE 1
Mullion Cross Section 16 ga Galvanized Steel

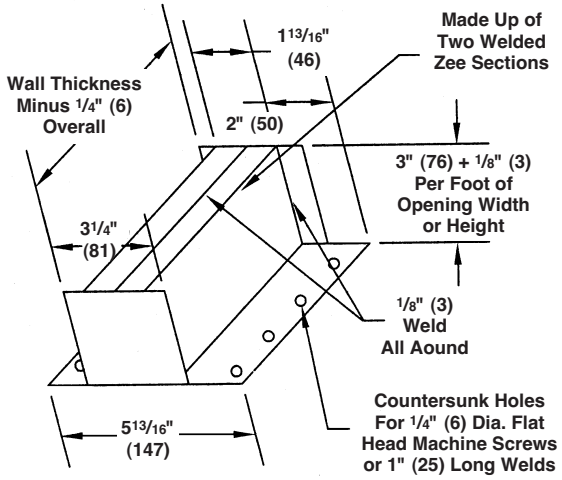
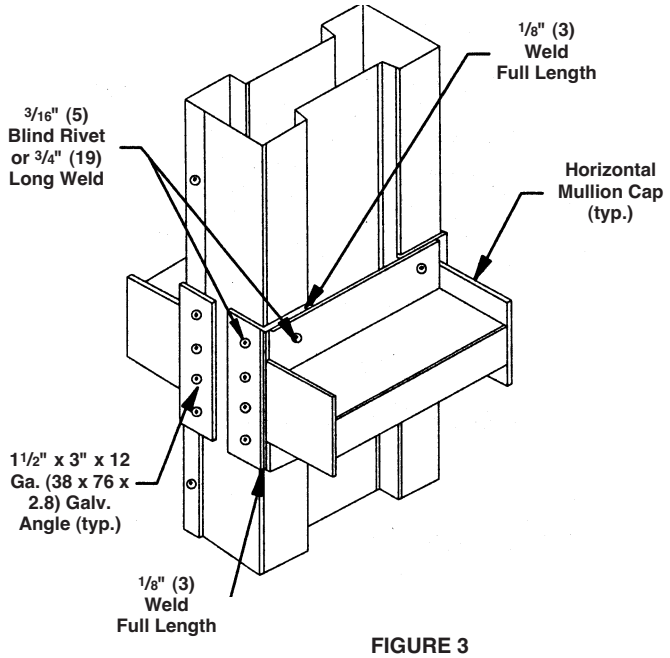


FIGURE 2
Mullion Cap



NOTE: Dimensions shown in parentheses ( ) indicate millimeters.

FIGURE 3