

# Out of Wall or Floor 1 1/2 Hour Rated Curtain Fire Dampers

Fire Damper Models: 119A, 15SA, 17SA, 117A, D19A, 15DA, 17DA, D17A

## STANDARD MATERIALS AND CONSTRUCTION

- FRAME:** 22-GA galvanized steel, one-piece rollformed
- BLADE:** 22-GA galvanized steel, curtain type
- FUSIBLE LINK:** UL-Listed 165°F; Replaceable
- CLOSURE SPRINGS:** Heat-treated Type 301 stainless steel constant force coiled negator type
- (When Required)**
- SLEEVE:** 20-GA galvanized steel
  - 8" long sleeve (1 1/2" grille clearance)
  - 10" long sleeve (3 1/2" grille clearance)
  - 12" long sleeve (5 1/2" grille clearance)
  - 14" long sleeve (7 1/2" grille clearance)
 with a 7/8" front flange.  
 Factory Installed Insulation  
 on 3 sides for vertical  
 on 4 sides for horizontal

**FINISH:** Mill

## OPTIONS

- Sleeve Gauge 18, 16, or 14
- 212°F Replaceable Fuse Link
- PK1202 Position Indicator Switch
- B-Pan, Round, Oval, or Square Transitions (non-flange side only)
- Tab-Lock Retaining Angles

## NOTES

Dampers are provided 1/4" undercut.

## DAMPER SIZES

Model	Maximum Panel/Assy.
Static Rated (Vertical)	36"W x 42"H
Dynamic Rated (Vertical)	36"W x 36"H
Static Rated (Horizontal)	36"W x 42"H
Dynamic Rated (Horizontal)	36"W x 36"H

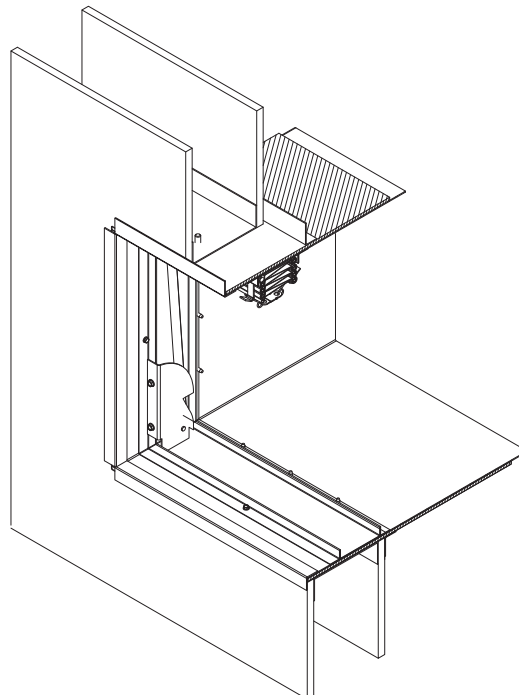
A Dimension	B Dimension
8" long sleeve	1-1/2" grille clearance
10" long sleeve	3-1/2" grille clearance
12" long sleeve	5-1/2" grille clearance
14" long sleeve	7-1/2" grille clearance

**UNDERWRITERS LABORATORIES INC.®**  
 CLASSIFIED FIRE DAMPER  
 FIRE RESISTANCE RATING 1 1/2 HR



This fire damper meets the construction and performance requirements of:

- Underwriters Laboratories Inc. Standard 555
- National Fire Protection Association Standard 80 and 90A
- ICC's International Building Code
- California State Fire Marshal Listed
- Underwriters Laboratories Inc. Classified for use in fire resistive ratings of less than 3 hours.



**MESTEK, INC.**  
 Commercial Damper  
 & Louver Group



# Out of Wall or Floor 1 ½ Hour Rated Curtain Fire Dampers

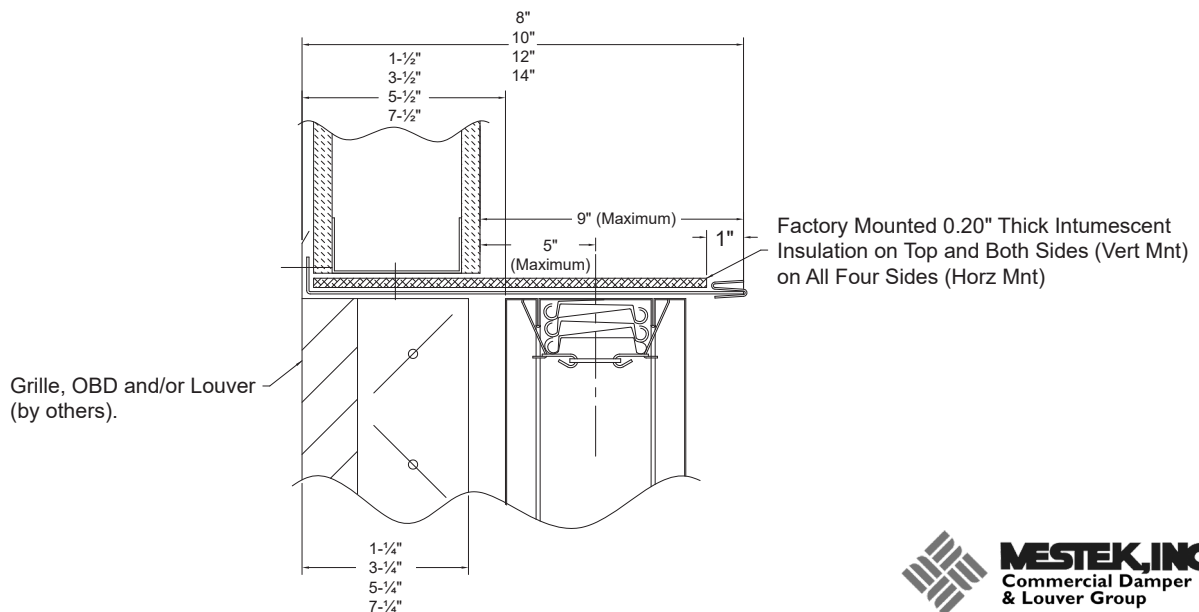
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## APPLICATION

This fire damper is intended to restrict the passage of flame. These installations allow the damper to be positioned so that the closed plane of the blades extends beyond the less than 3 hour rated wall or floor. Wall construction can be masonry/ concrete or metal or wood framed gypsum wallboard construction. Floor construction must be masonry/concrete construction. These instructions are supplemental to instructions II-FD-1.5.

## NOTES

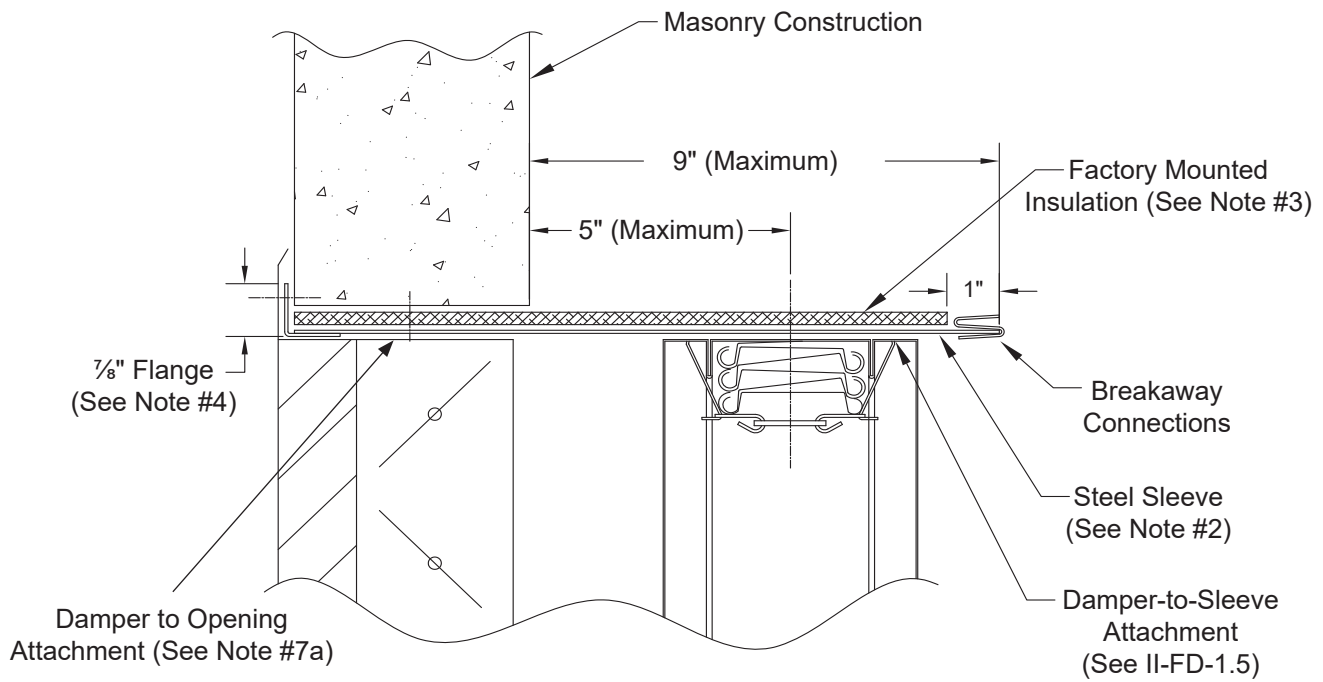
- Opening Framing Details:** See II-FD-1.5.
- Sleeve:** Damper to be factory mounted into an insulated sleeve. Steel sleeve is 20-GA minimum, 14-GA maximum.
- Sleeve Insulation:** Insulation is factory mounted 0.20" thick intumescent insulation on top and both sides when damper is wall mounted, on all four sides when floor mounted. It is attached to the damper sleeve with either a double row of flat head screws on 24" maximum c/c or a double row of self-piercing steel rivets on 8" maximum c/c.
- Flange:** 7/8" x 16-GA steel spot welded or Tog-L-Loc'ed to the sleeve or integral part of sleeve.
- Grille:** A minimum 26-GA steel frame is required, core of grille can be aluminum or nonmetallic. If a thinner or non-steel grille frame is used, then open corners of flanged sleeve must be closed off with 20-GA (minimum) steel corner tabs (by others) riveted to flanges.
- Opening Size:** No expansion clearance is required, but sufficient clearance between the damper assembly and the opening is required for the insulation and for mounting. The minimum opening width and height shall be 3/8" larger than the nominal damper width and height. The maximum opening width and height shall be no more than 5/8" larger than the nominal damper width and height.
- Mounting Damper to Opening:**
  - Flange mounted in metal framed gypsum wallboard or masonry/concrete construction -- This installation requires no perimeter mounting angles. Insert the damper into the opening until the flange contacts the face of the wall or top face of floor. Through the grille clearance area of the sleeve, secure the damper assembly to the metal framing using #10 steel screws 12" c/c (maximum), 6" (maximum) from each corner, minimum of one fastener per side. For masonry construction, use #10 (minimum) steel concrete screws or anchors 12" c/c (maximum), 6" (maximum) from each corner, minimum one fastener per side.
  - Un-flanged mounted and flanged mounted into wood frame construction -- These installations require at least one set of perimeter mounting angles. Perimeter angles a minimum size of 1-1/2" x 7/8" x 16-GA with the 1-1/2" leg overlapping the opening. Angles attached to the damper sleeve only using #10 steel sheet metal screws or 3/16" steel rivets at 6" (maximum) c/c.
- Ramp/Lock Orientation:** When the damper is supplied with closure springs, to facilitate reopening the teeth of the two ramps/locks, are to point away from the grille.
- Duct Mounting:** When duct work is connected to the non-flanged end of the damper sleeve, the following applies: Sleeves shall be steel of the same gauge or heavier as the duct to which it is attached. Sleeve gauge to be 20 GA. minimum and 14 GA. maximum. Connecting ducts shall not be continuous, but terminate at the damper sleeve. Duct connections to the sleeve will be either breakaway or rigid types. The following determines if the connections are rigid or breakaway: For rigid type duct connections, the sleeve shall be a minimum of 16 GA. on dampers not exceeding 24"H and 14 GA. for larger units. The standard factory-supplied sleeve is 20 GA. galvanized steel and requires that a breakaway type duct connection will be employed. The following breakaway duct-to-sleeve connections may be used: Plain "S" Slip, Double "S" Slip, Inside Slip, Hemmed "S" Slip, Standing "S" Slip (Bar or Angle Reinforced), Standing "S" Slip (Alternate Bar). Various flanged connection systems are also approved as breakaway connections. Consult manufacturer's instructions for specific details.
- Caulking:** Caulk that is exposed to the airstream (ie on the inside of the damper sleeve) shall be one of the following: Dow Corning RTV732, Silco Sil-Bond RTV 4500, General Electric IS808, or Novagard RTV300. Breakaway flange caulking shall be Design Polymeric's DP1010 or Precision's PA2084T. Caulk that is not exposed to the airstream (ie on the outside of the damper sleeve) can be of any type that is certified (UL Classified) to have a fire/smoke developed index of 25/50 or less and is approved by the local authority having jurisdiction. Caulking is allowed on any external/exposed portions of the damper sleeve, but is not permitted to be in the annular space between the fire barrier and the damper sleeve.



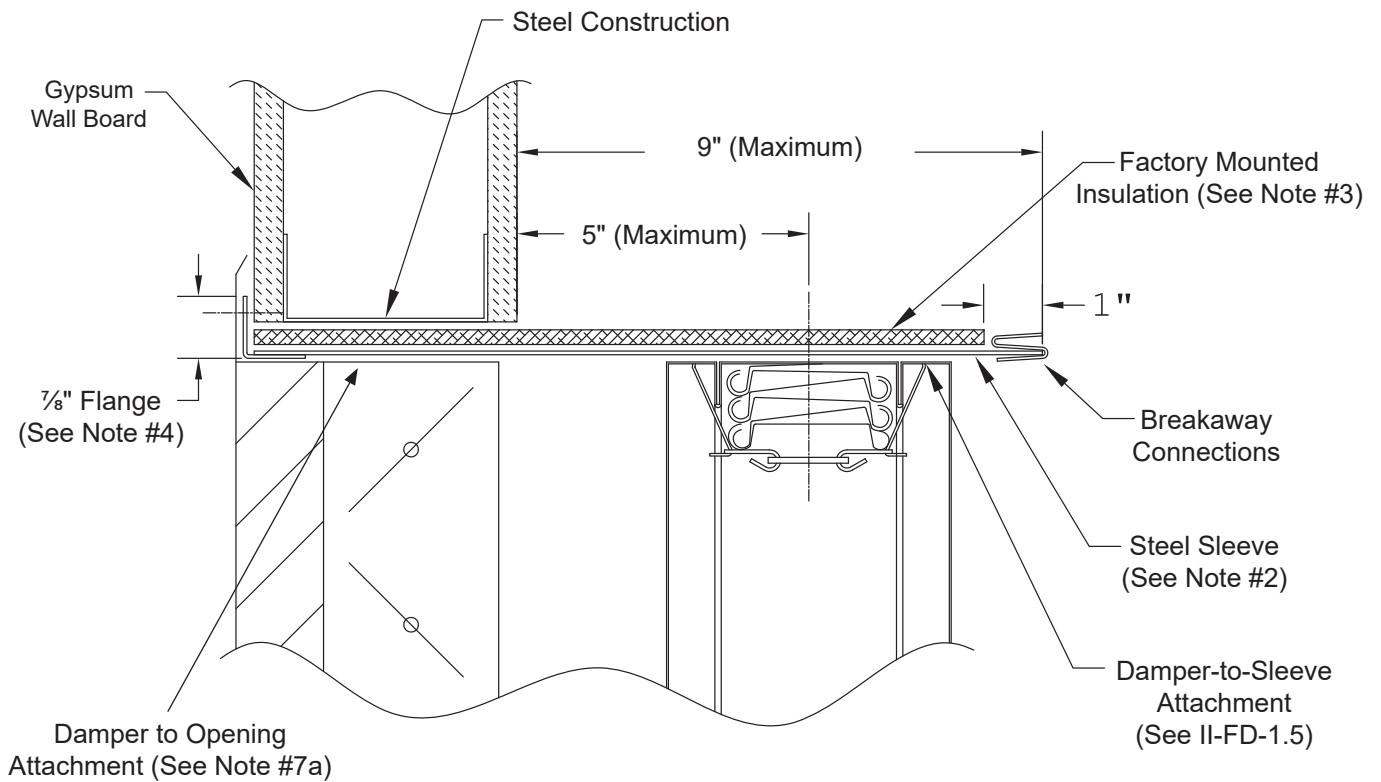
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## OUT OF WALL for MASONRY OPENING



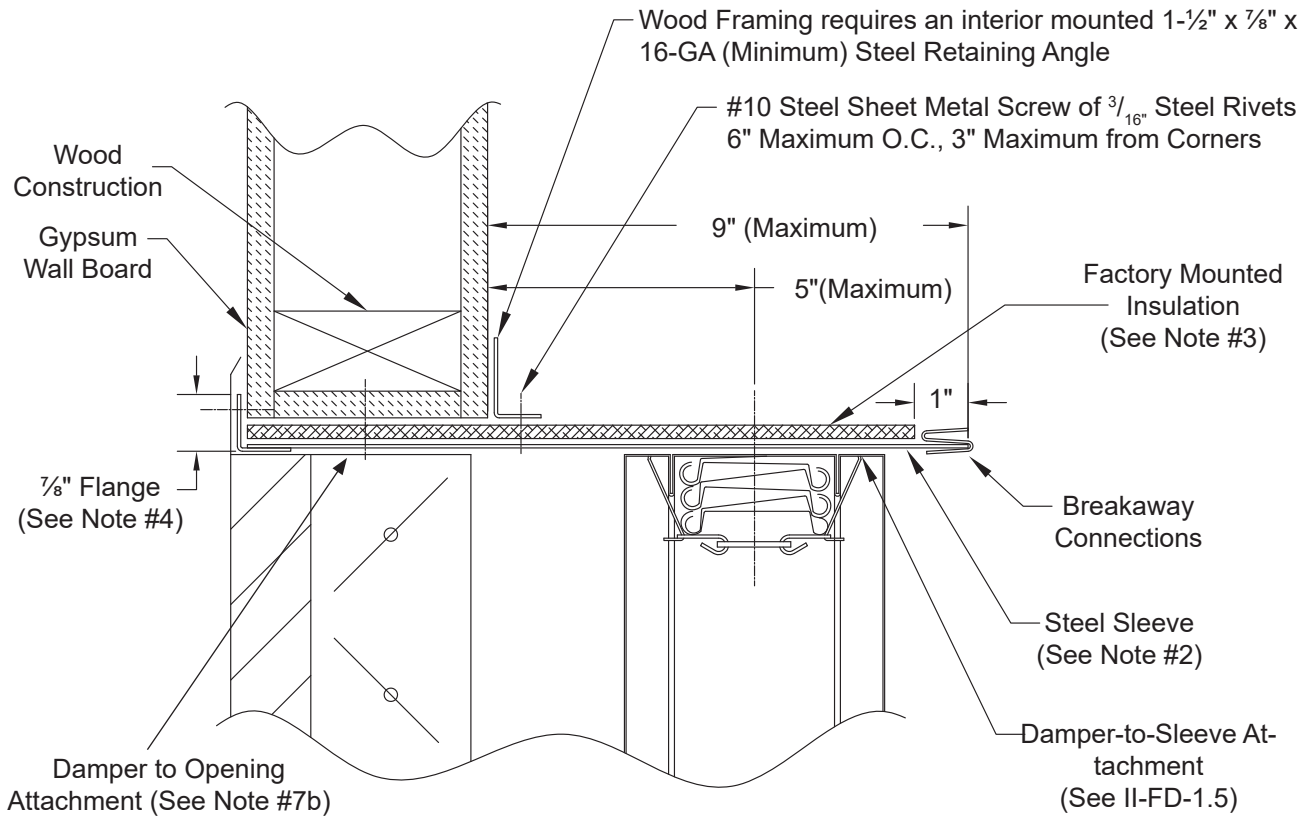
## OUT OF WALL for STEEL FRAMED OPENING



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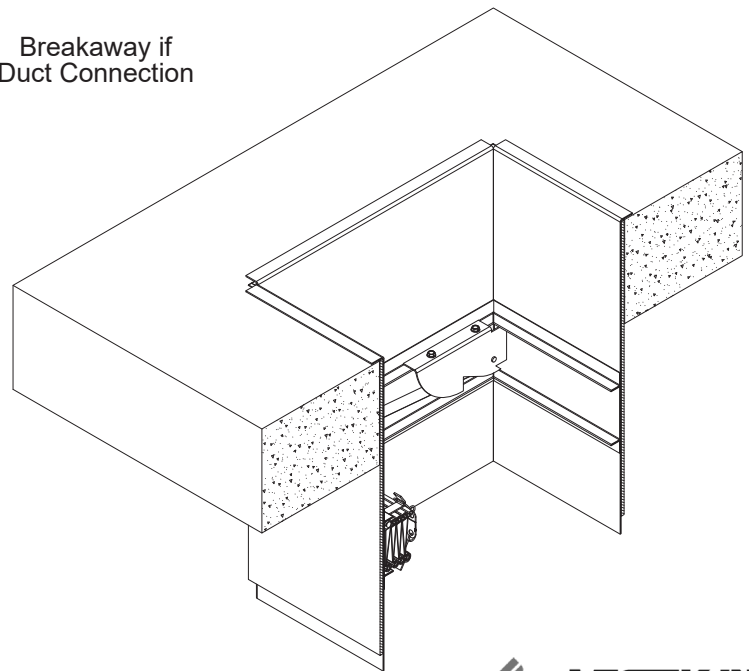
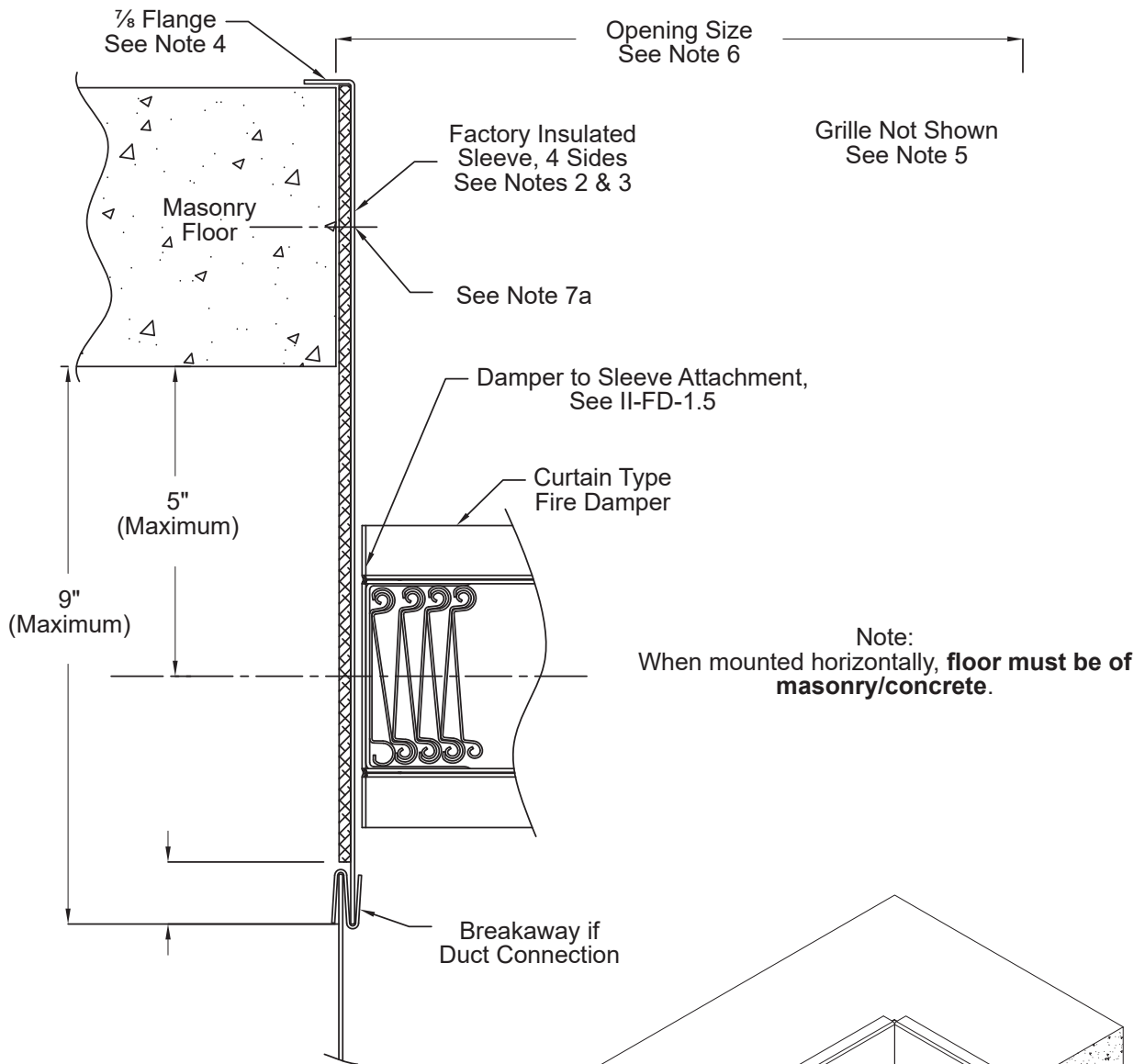
## OUT OF WALL for WOOD FRAMED OPENING



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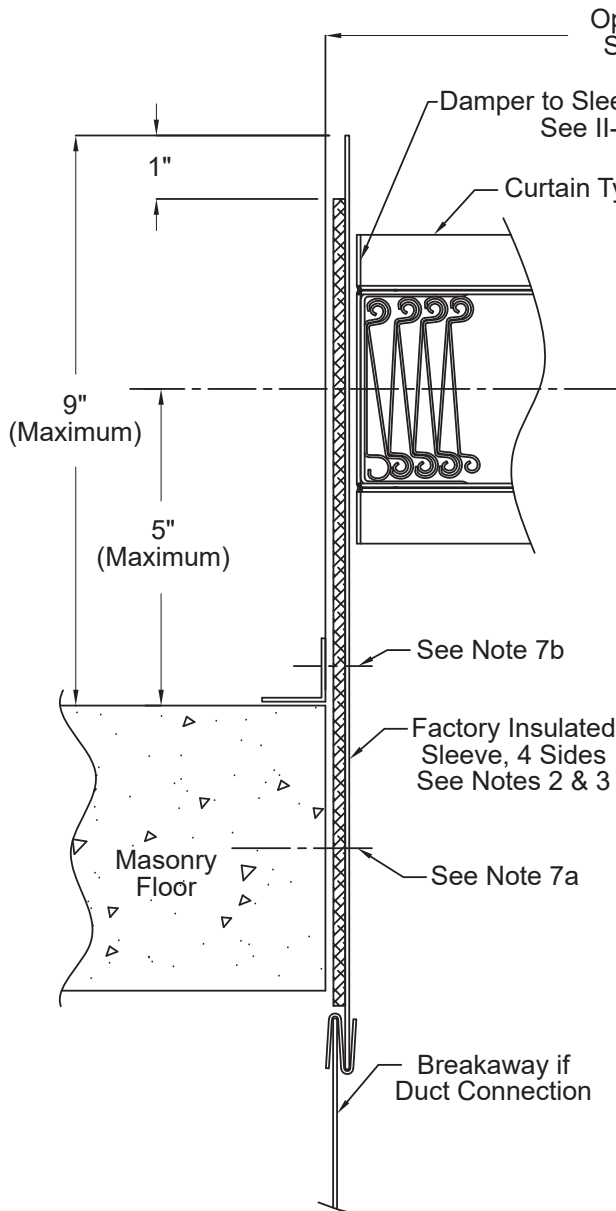
## OUT OF FLOOR FLANGED MOUNTED



# Out of Wall or Floor 1 1/2 Hour Rated Curtain Fire Dampers

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## OUT OF FLOOR UN-FLANGED



Notes:  
 When mounted horizontally;  
 Floor must be of masonry/  
 concrete.

Damper may be above the  
 floor (as shown) or below the  
 floor so long as the blade  
 centerline does not exceed 5"  
 from the nearest floor face.

In-lieu of fasteners into  
 concrete, a second set of  
 perimeter angles on the  
 bottom of the floor can be  
 used, see note 7b.

Note:  
 When mounted horizontally, **floor must be of  
 masonry/concrete.**

