



### QUALIFICATIONS:

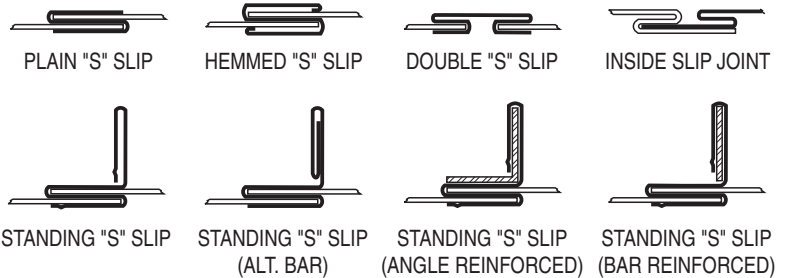
- Meets all the requirements of UL 555.
- CAN/ULC-S112 Fire Damper Assemblies.
- Meets the requirements for BOCA, SBCCI, UBC, IBC, NBC (Canada) and associated local building codes.
- California State Fire Marshal Listing No. 03225-0935:100/113.
- City of New York Board of Standards and Appeals. Cal. No. 460-88-SA.

### NOTES:

1. Installation shall be in accordance with the appropriate requirements of the National Fire Protection Association Standard NFPA 90A latest edition.
2. **Damper Sleeve:** Sleeve thickness must be equal to or thicker than the duct connected to it. Sleeve gauge requirements are listed in the SMACNA Fire, Smoke and Radiation Damper Installation Guide for HVAC Systems and in NFPA 90A. If a break-away style duct/sleeve connection is not used, damper sleeves up to 24" (610 x 610) high of not less than 16 gauge (1.61) coated steel may be attached to the duct with screws or other types of mechanical fasteners. The maximum sleeve thickness for such rigid joints is 10 gauge (3.51) for coated steel. The connecting duct shall not be continuous thru the wall or floor opening but shall terminate at the sleeve. Sleeves shall extend a maximum of 6" (152) from the wall or floor opening.

### 3. Break-away duct/sleeve connections:

- a. Rectangular ducts must use one or more of the following connections if the gauge is less than the requirement in note 2 for rigid connections:



In addition:

- A maximum of two #10 sheet metal screws on each side and on the bottom, located in the center of the slip pocket and penetrating both sides of the slip pocket may be used.
- One of the above connections on the top and bottom joints with flat drive slip connections on the side joints may be used for dampers up to 20" (508) in height.

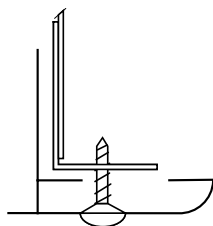
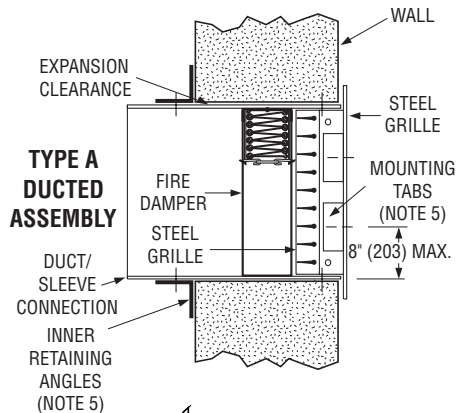


FLAT DRIVE SLIP

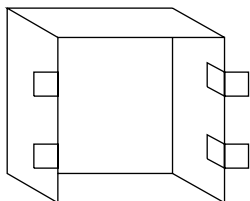
- b. Round and oval duct may be attached to the round or oval collar which is part of the damper/sleeve in the following manner:
  - Duct diameters 22" (559) and smaller must use three #10 sheet metal screws equally spaced around the circumference.

**Note:** When optional sealing of these break-away connections is desired, the duct sealant shall be PA2084T Duct Sealant by Precision or water based DP1010 by Design Polymetrics.

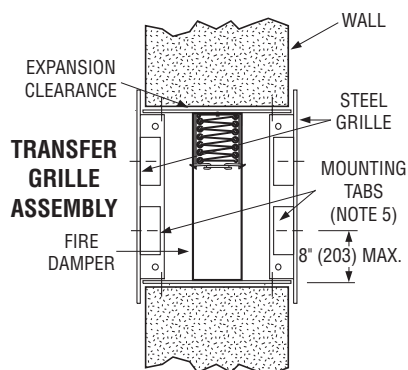
- c. For the use of approved alternative Ductmate or TDC/TDF break-away connections, refer to the supplements noted on next page.



STEEL GRILLE FRAME  
(Minimum 0.019" Material)



ISOMETRIC OF TYPICAL SLEEVE/  
MOUNTING TABS (NOTE 5)



**4. Damper/sleeve attachment:** The standard blade damper shall be secured to the sleeve with 1/4" (6) long welds, 3/16" (4.76) steel rivets, 1/4" (6.35) bolts and nuts, #8 sheet metal screws, or 3/16" (4.76) buttonlocks on both sides at 6" (152) centers and a maximum of 4" (102) from the corners of the damper on all four sides. The thinline blade damper shall be secured to the sleeve with 1/4" (6) long welds on both sides at 6" (152) on center, or 3/4" x 3/4" x 18 gauge (19 x 19 x 1.37 ga.) angles all around on both sides attached to the sleeve with 1/4" (6.35) bolts and nuts, 3/16" (4.76) steel rivets, or #8 sheet metal screws at 6" (152) on center and 2" (51) maximum from the corner of the damper on all four sides.

**5. Retaining angles:** The inner retaining angles shall be a minimum of 1 1/2" x 1 1/2" x 16 gauge (38 x 38 x 1.61). Secure the inner retaining angles, where used, to the sleeve with 1/2" (12.7) long welds, 1/4" (6.35) bolts and nuts, 3/16" (4.76) steel rivets, or #8 sheet metal screws at not less than 8" (203) on centers, and 2" (51) maximum from the corners of the sleeve on all four sides. The inner retaining angles must lap the structural opening by 1" (25.4) minimum. Where the sleeve terminates at the wall, either on one or both sides, 1 1/2" x 2" x 20 gauge (32 x 51 x 1.00) mounting angle tabs are fastened to the sleeve. Mounting tabs may be installed on top and bottom, or sides, or a combination of both. Tabs are bent over to a 3/4" (19) flange after installing the damper in the opening. A steel grille frame with a minimum 1" (25.4) flange is then fastened to the mounting angle tabs with sheet metal screws.

**6. Expansion clearance** between the sleeve and the wall opening shall be a minimum 1/8" (3.18) per foot of the sleeve in either dimension. The maximum size of the opening shall be 1/8" (3.18) larger in each dimension than the allowable minimum size. For example: a sleeve dimension of 24" x 24" (610 x 610) shall have an opening size of 24 1/4" x 24 1/4" (616 x 616) minimum and 24 3/8" x 24 3/8" (619 x 619) maximum.

**7.** The Type A fire damper sizes and installation limitations are as follows:

| Model Series | System            | Mounting               |                   | Minimum Size        | Maximum Size          |
|--------------|-------------------|------------------------|-------------------|---------------------|-----------------------|
| 0200G        | Static            | Vertical or Horizontal | (1 1/2 hr. label) | 4" x 4" (102 x 102) | 24" x 24" (610 x 610) |
| D0100G       | Dynamic or Static | Vertical or Horizontal | (1 1/2 hr. label) | 6" x 6" (152 x 152) | 24" x 24" (610 x 610) |
| 0100G        | Static            | Vertical or Horizontal | (1 1/2 hr. label) | 4" x 4" (102 x 102) | 24" x 24" (610 x 610) |

Multiple section assemblies are not permitted.

**IMPORTANT**

DO NOT CAST DAMPER IN PLACE.  
 DO NOT FASTEN RETAINING ANGLES OR DAMPER DIRECTLY TO WALL OR FLOOR.  
 DO NOT INSTALL DAMPER OUT OF SQUARE OR OUT OF FLAT.  
 VERTICAL MOUNTING SHOWN ON MASONRY WALL.  
 FOR INSTALLATION IN DRYWALL FRAMING, SEE DOC. FDSWSFINST.  
 HORIZONTAL MOUNTING SIMILAR FOR MASONRY FLOOR.

**REFER TO THE APPROPRIATE NAILOR INSTALLATION INSTRUCTION SUPPLEMENTS FOR THE FOLLOWING SPECIAL REQUIREMENTS:**

|                                 |            |
|---------------------------------|------------|
| STEEL AND WOOD STUD FRAMING     | FDSWSFINST |
| CAVITY SHAFT WALL PARTITIONS    | FDCSWINST  |
| DUCTMATE BREAKAWAY CONNECTIONS  | FDDMINST   |
| TDC/TDF FLANGED DUCT CONNECTION | FDTDCFINST |
| QUICK-SET RETAINING ANGLES      | FDQSRA     |