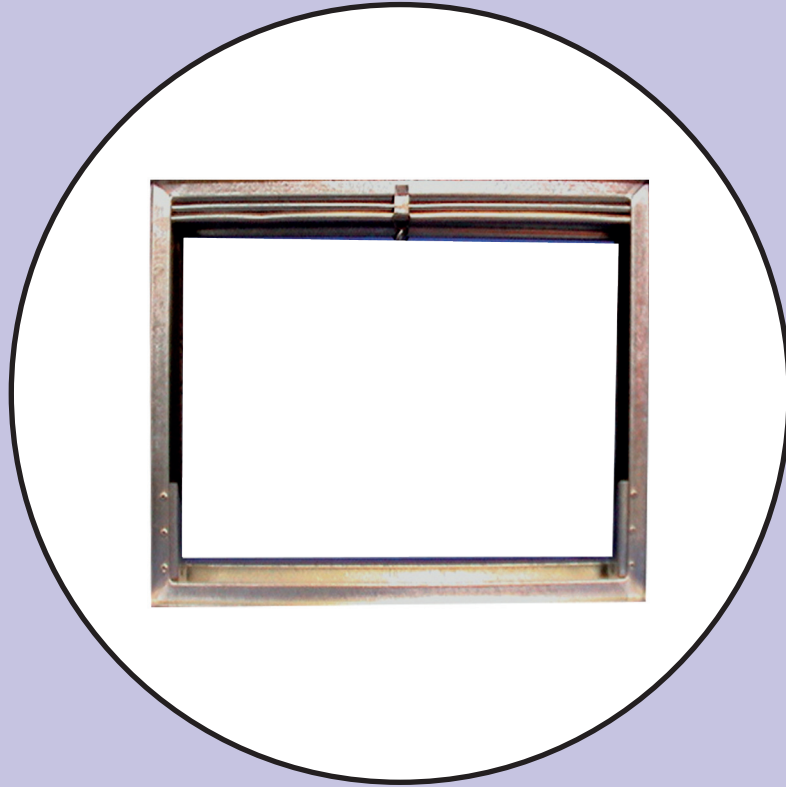


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GULF GRILLES CO.

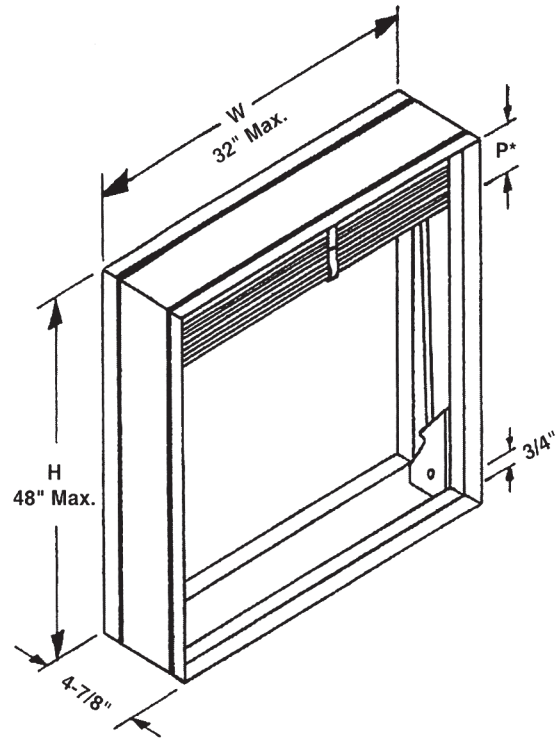


FIRE DAMPERS

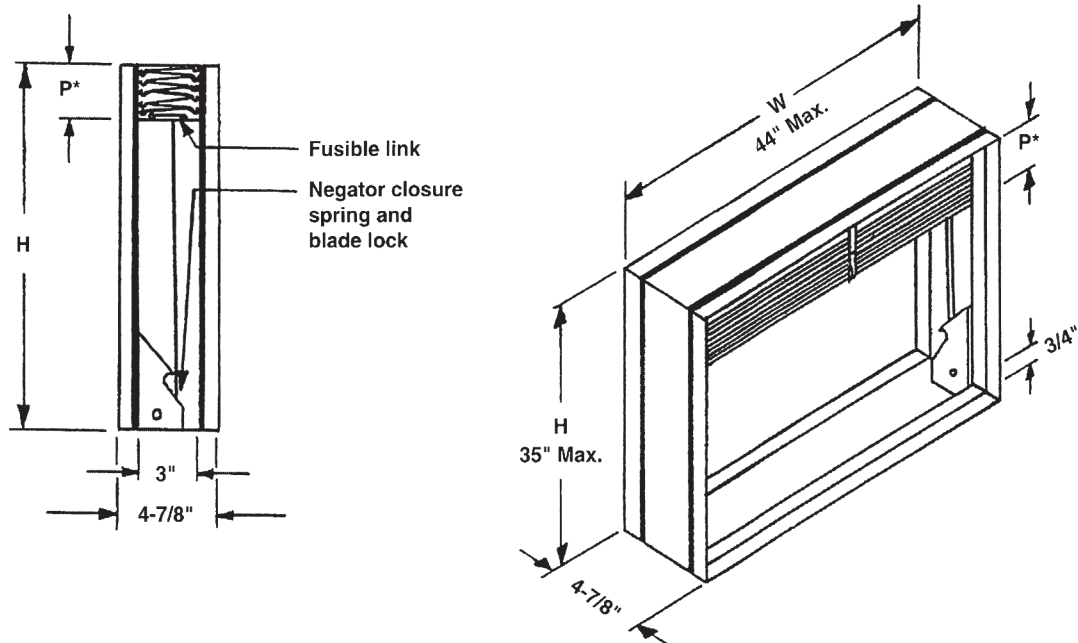
B02 FIRE DAMPERS

### STANDARD CONSTRUCTION

- **Frame** : 4-7/8" wide x 20 gauge roll formed galvanized steel.
- **Blades** : Interlocking type, 24 gauge galvanized steel.
- **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
- **Mounting** : Vertical.
- **Fire Rating** : 3 hours.
- **Springs** : Stainless steel closure springs.
- **Finish** : Mill galvanized.



### Dimensional Detail

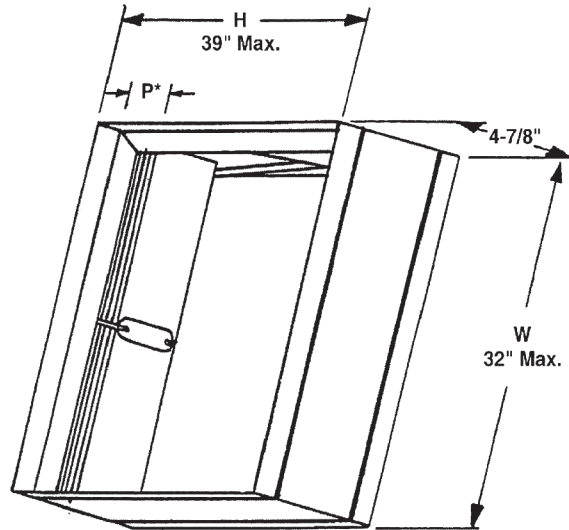


**Note** :- Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers. W and H dimension furnished approximately 1/4" undersize.

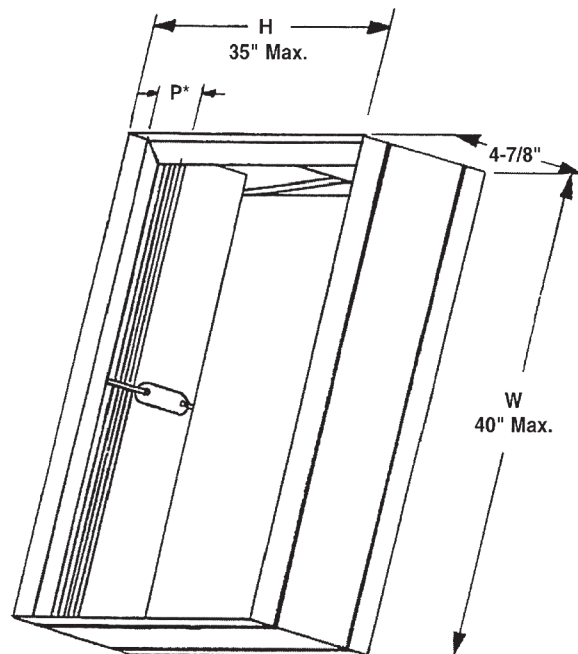
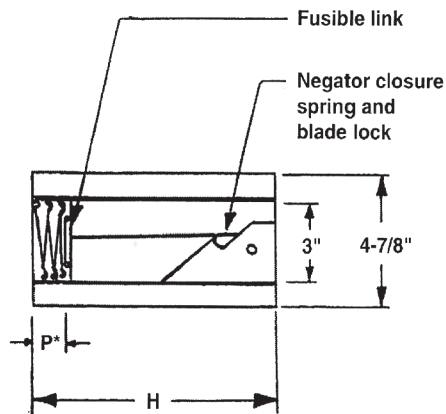
\* See Fire Damper Sizing Chart, on page 15-12.

### STANDARD CONSTRUCTION

- **Frame** : 4-7/8" wide x 20 gauge roll formed galvanized steel.
- **Blades** : Interlocking type, 24 gauge galvanized steel.
- **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
- **Mounting** : Horizontal.
- **Fire Rating** : 3 hours.
- **Springs** : Stainless steel closure springs.
- **Finish** : Mill galvanized.



### Dimensional Detail

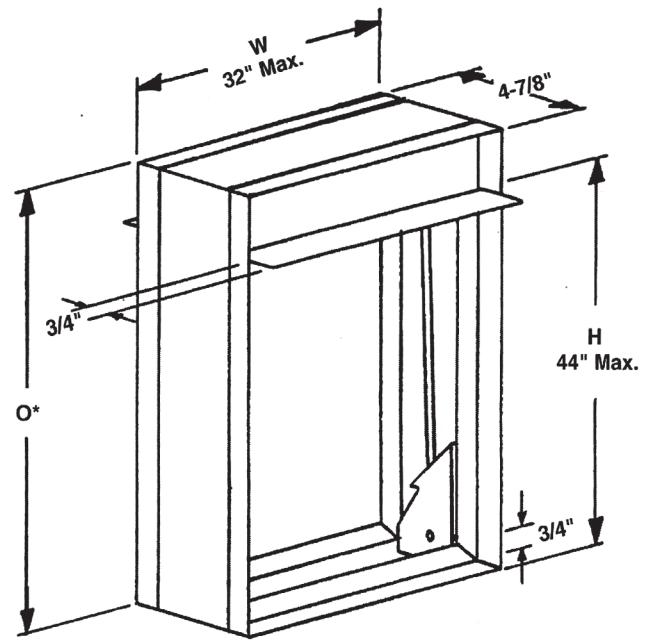


**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers.  
W and H dimension furnished approximately 1/4" undersize.

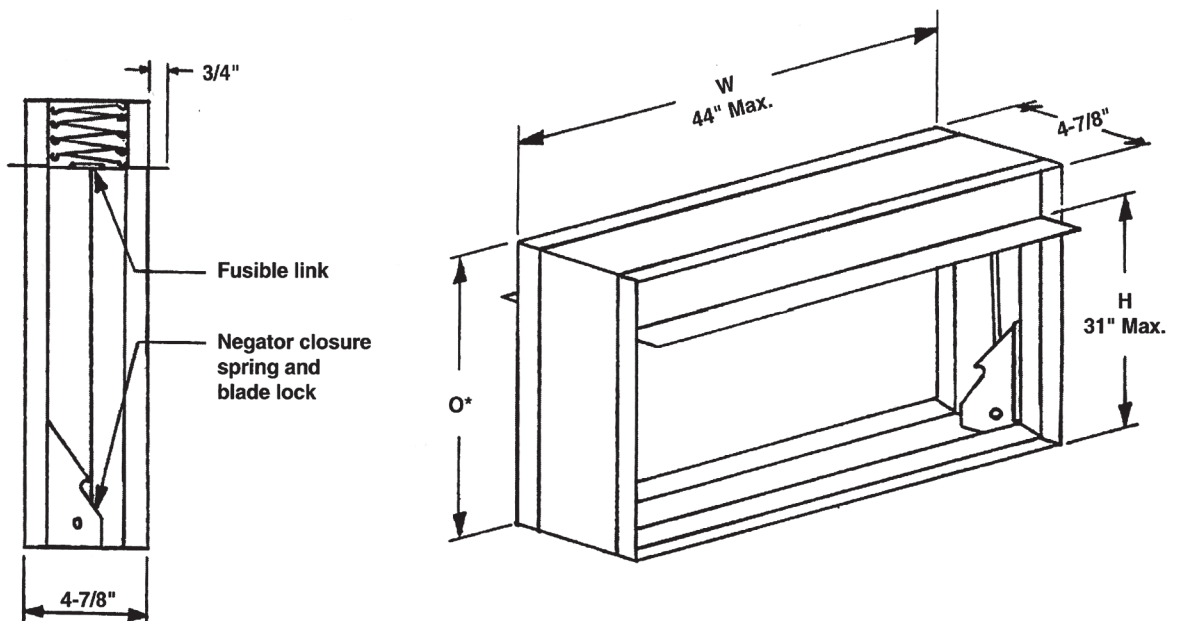
\* See Fire Damper Sizing Chart, on page 15-12.

### STANDARD CONSTRUCTION

- **Frame** : 4-7/8" wide x 20 gauge roll formed galvanized steel.
- **Blades** : Interlocking type, 24 gauge galvanized steel.
- **Enclosure** : 20 gauge galvanized steel.
- **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
- **Mounting** : Vertical.
- **Fire Rating** : 3 hours.
- **Springs** : Stainless steel closure springs.
- **Finish** : Mill galvanized.



### Dimensional Detail

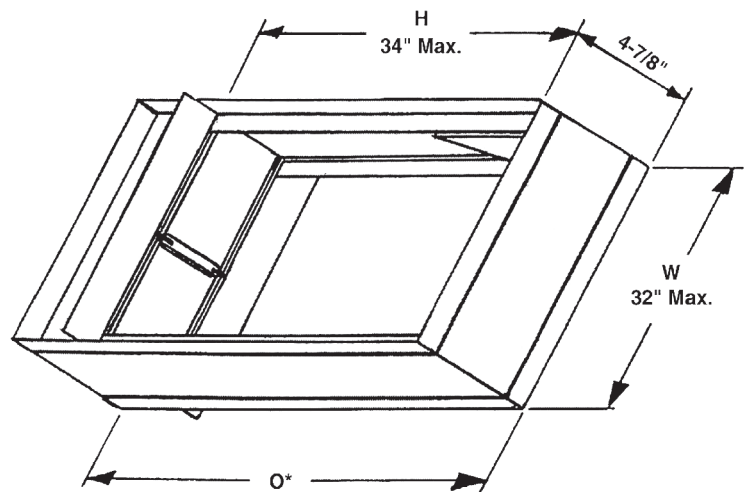
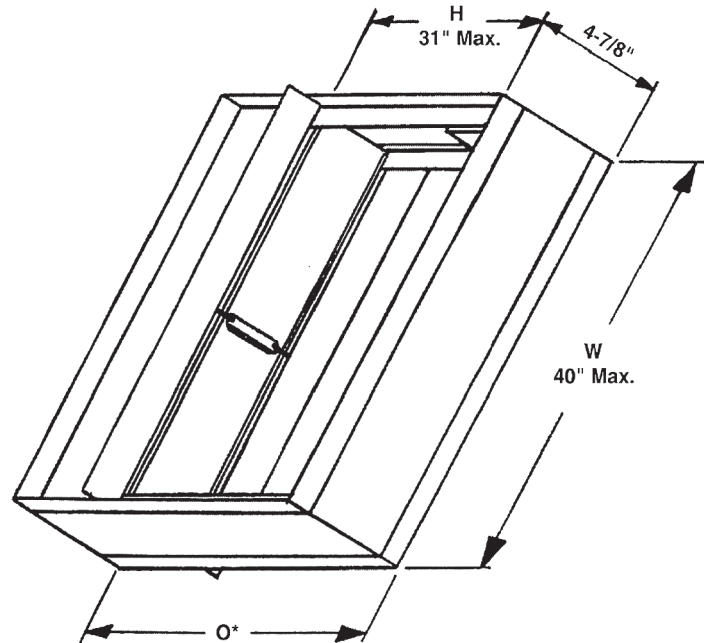


**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers. W and H dimension furnished approximately 1/4" undersize.

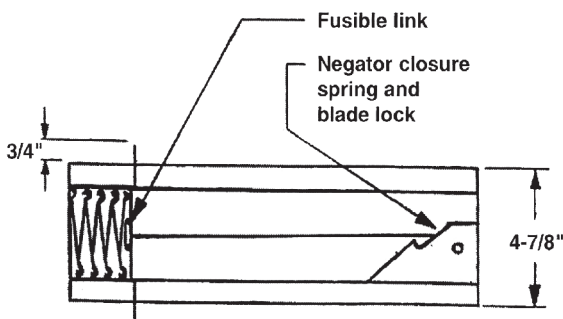
\* See Fire Damper Sizing Chart, on page 15-12.

### STANDARD CONSTRUCTION

- **Frame** : 4-7/8" wide x 20 gauge roll formed galvanized steel.
- **Blades** : Interlocking type, 24 gauge galvanized steel.
- **Enclosure** : 20 gauge galvanized steel.
- **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
- **Mounting** : Horizontal.
- **Fire Rating** : 3 hours.
- **Springs** : Stainless steel closure springs.
- **Finish** : Mill galvanized.



### Dimensional Detail

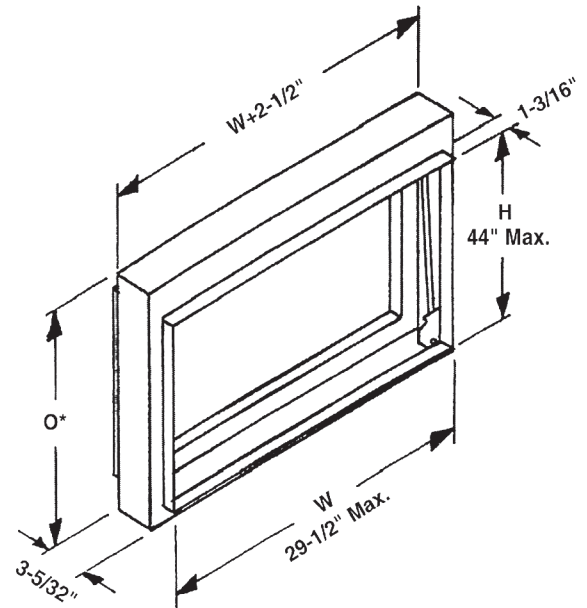


**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers. W and H dimension furnished approximately 1/4" undersize.

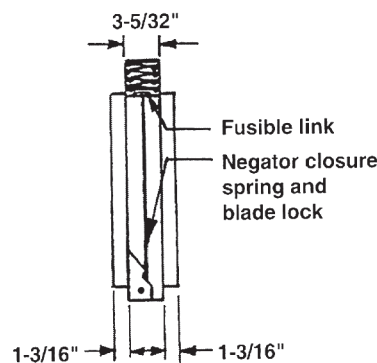
\* See Fire Damper Sizing Chart, on page 15-12.

### STANDARD CONSTRUCTION

- **Frame** : 3-5/32" wide x 20 gauge galvanized steel channel.
  - **Blades** : Interlocking type, 24 gauge galvanized steel.
  - **Enclosure** : 20 gauge galvanized steel.
  - **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
  - **Mounting** : Vertical.
  - **Fire Rating** : 3 hours.
  - **Springs** : Stainless steel closure springs.
  - **Finish** : Mill galvanized.
- Model** : **FD20-VC** (Square or Rectangular design provides a nominal 100% free area Fire Damper).



### Dimensional Detail

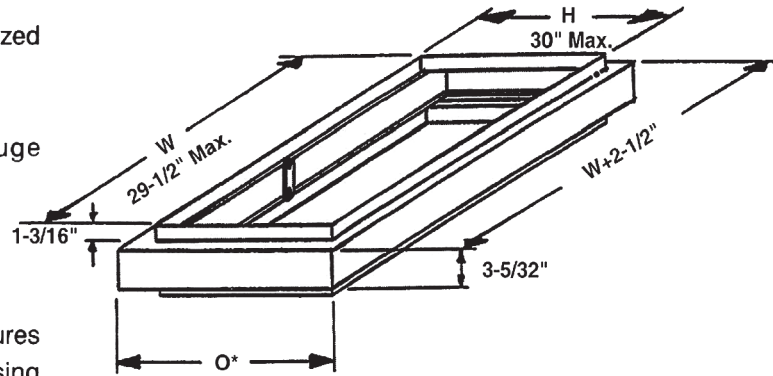


**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers.  
W and H dimension furnished approximately 1/4" undersize.

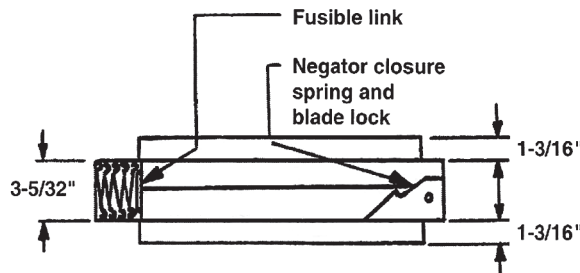
\* See Fire Damper Sizing Chart, on page 15-12.

### STANDARD CONSTRUCTION

- **Frame** : 3-5/32" wide x 20 gauge galvanized steel channel.
  - **Blades** : Interlocking type, 24 gauge galvanized steel.
  - **Enclosure** : 20 gauge galvanized steel.
  - **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
  - **Mounting** : Horizontal.
  - **Fire Rating** : 3 hours.
  - **Springs** : Stainless steel closure springs.
  - **Finish** : Mill galvanized.
- Model** : **FD20-HC** (Square or Rectangular design provides a nominal 100% free area Fire Damper).



### Dimensional Detail

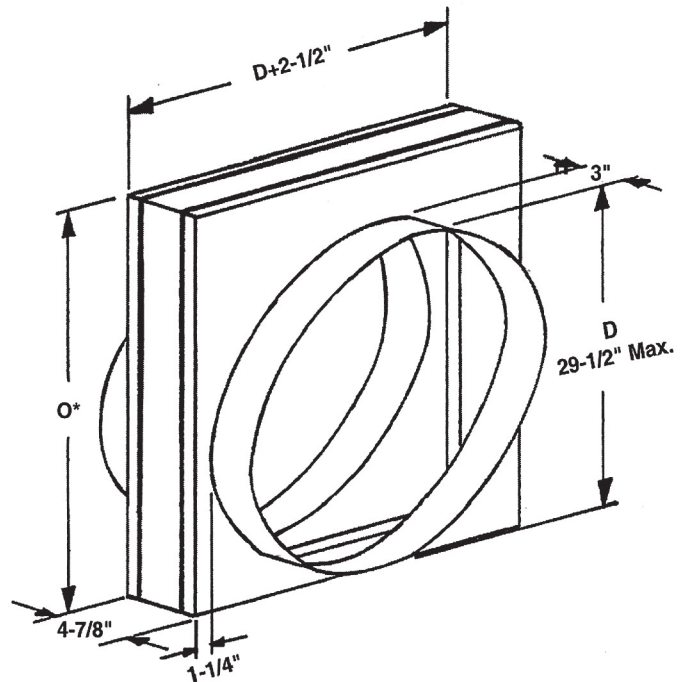


**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers.  
W and H dimension furnished approximately 1/4" undersize.

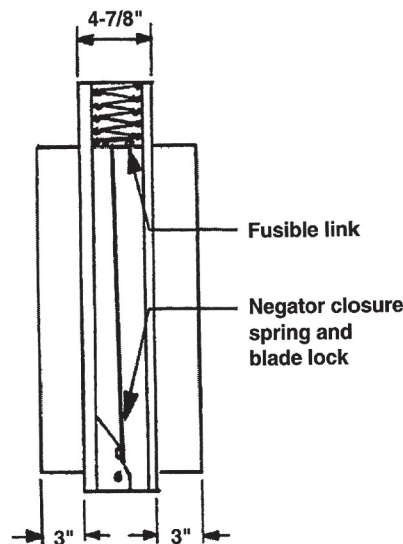
\* See Fire Damper Sizing Chart, on page 15-12.

### STANDARD CONSTRUCTION

- **Frame** : 4-7/8" wide x 20 gauge roll formed galvanized steel.
  - **Blades** : Interlocking type, 24 gauge galvanized steel.
  - **Enclosure** : 20 gauge galvanized steel.
  - **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
  - **Mounting** : Vertical.
  - **Fire Rating** : 3 hours.
  - **Springs** : Stainless steel closure springs.
  - **Finish** : Mill galvanized.
- Model** : **FD20-VCR** (Round design provides a nominal 100% free area Fire Damper).



Dimensional Detail



**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers.

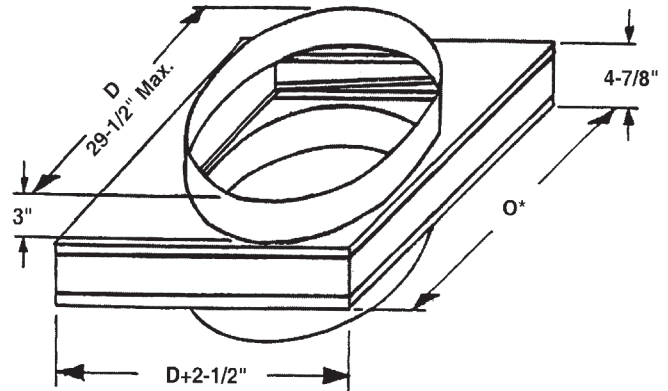
D dimension furnished approximately 1/4" undersize.

\* See Fire Damper Sizing Chart, on page 15-12.

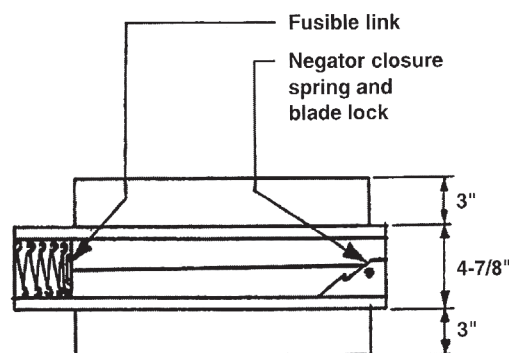


### STANDARD CONSTRUCTION

- **Frame** : 4-7/8" wide x 20 gauge roll formed galvanized steel.
  - **Blades** : Interlocking type, 24 gauge galvanized steel.
  - **Enclosure** : 20 gauge galvanized steel.
  - **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
  - **Mounting** : Horizontal.
  - **Fire Rating** : 3 hours.
  - **Springs** : Stainless steel closure springs.
  - **Finish** : Mill galvanized.
- Model** : FD20-HCR (Round design provides a nominal 100% free area Fire Damper).



Dimensional Detail



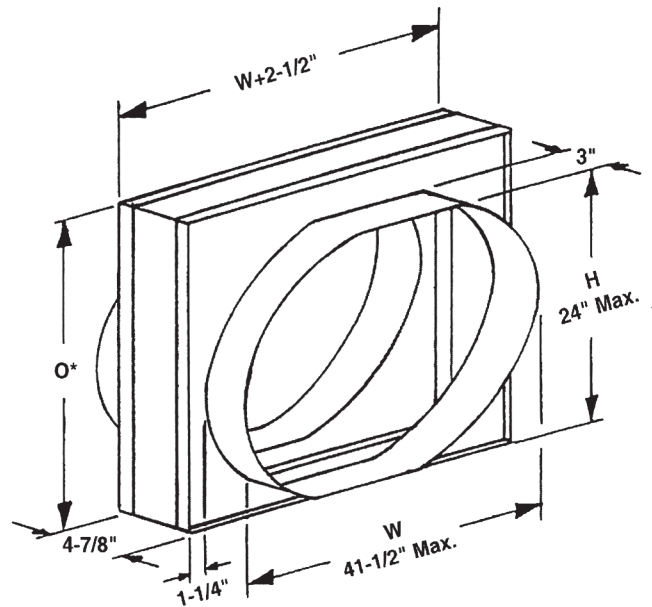
**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers.

D dimension furnished approximately 1/4" undersize.

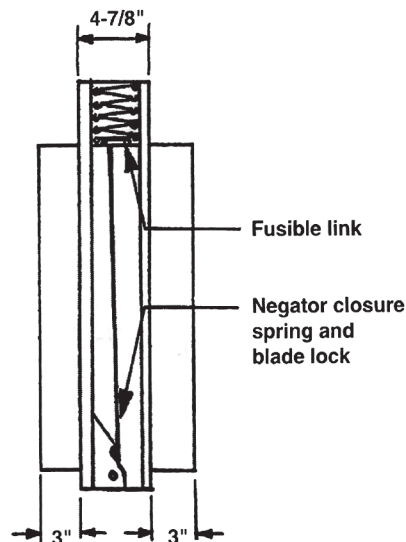
\* See Fire Damper Sizing Chart, on page 15-12.

### STANDARD CONSTRUCTION

- **Frame** : 4-7/8" wide x 20 gauge roll formed galvanized steel.
  - **Blades** : Interlocking type, 24 gauge galvanized steel.
  - **Enclosure** : 20 gauge galvanized steel.
  - **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
  - **Mounting** : Vertical.
  - **Fire Rating** : 3 hours.
  - **Springs** : Stainless steel closure springs.
  - **Finish** : Mill galvanized.
- Model** : **FD20-VCO** (Oval design provides a nominal 100% free area Fire Damper).



Dimensional Detail

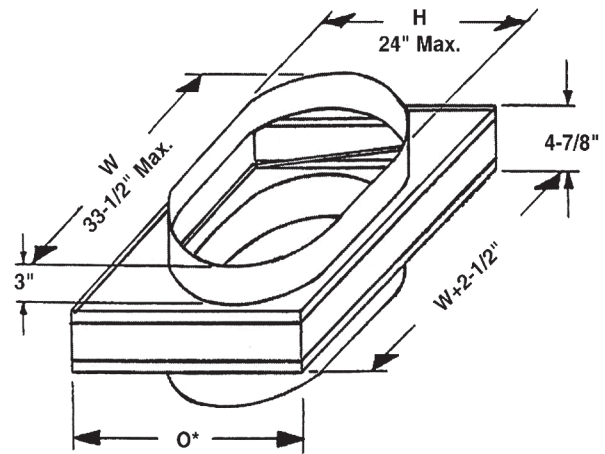


**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers.  
W and H dimension furnished approximately 1/4" undersize.

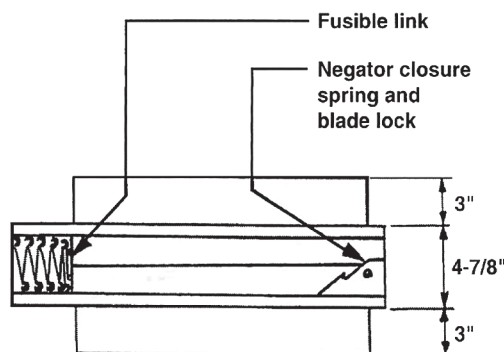
\* See Fire Damper Sizing Chart, on page 15-12.

### STANDARD CONSTRUCTION

- **Frame** : 4-7/8" wide x 20 gauge roll formed galvanized steel.
  - **Blades** : Interlocking type, 24 gauge galvanized steel.
  - **Enclosure** : 20 gauge galvanized steel.
  - **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
  - **Mounting** : Horizontal.
  - **Fire Rating** : 3 hours.
  - **Springs** : Stainless steel closure springs.
  - **Finish** : Mill galvanized.
- Model** : **FD20-HCO** (Oval design provides a nominal 100% free area Fire Damper).



### Dimensional Detail



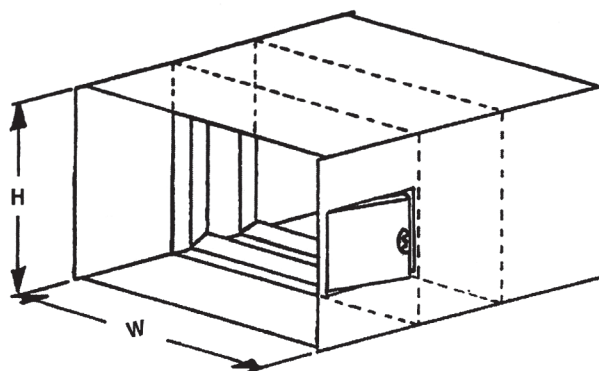
**Note** : - Dampers for openings larger than maximum single section sizes shown above are assembled from equal size single section dampers.  
W and H dimension furnished approximately 1/4" undersize.

\* See Fire Damper Sizing Chart, on page 15-12.

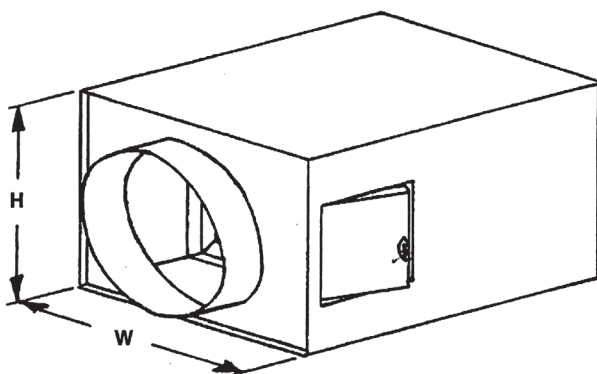
# FIRE DAMPER INTERLOCKING BLADE, CURTAIN TYPE FIRE DAMPER WITH SLEEVE.

## STANDARD CONSTRUCTION

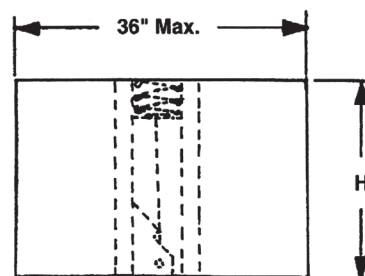
- **Frame** : 4-7/8" wide x 20 gauge galvanized steel channel.
- **Blades** : Interlocking type, 24 gauge galvanized steel.
- **Sleeves** : Maximum 36" length x 20 gauge galvanized steel.
- **Enclosures** : 20 gauge galvanized steel.
- **Fusible Link** : Standard for fusing temperatures of 165°F. UL listed. Other fusing temperatures are available on request.
- **Mounting** : Vertical or Horizontal.
- **Finish** : Mill galvanized.



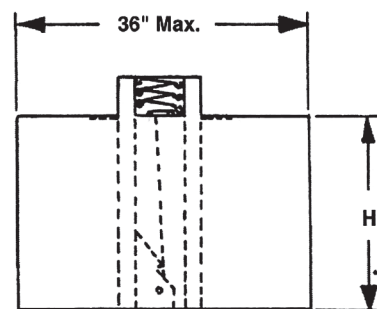
**Model : FD25 - A**



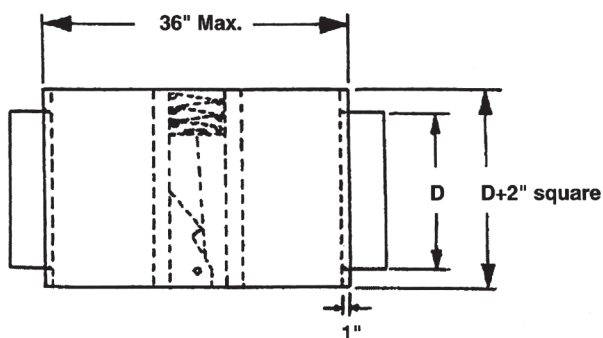
**Model : FD25 - CR**



**Model : FD25 - A**



**Model : FD25 - B**



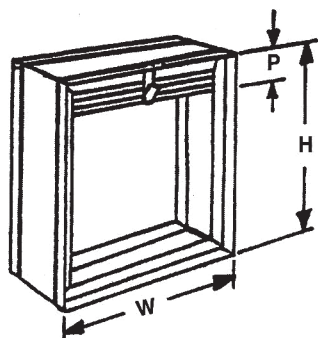
**Model : FD25 - CR**

**Model :** 25CR Low pressure system only.  
W x H Dimension are equal. Diameter is always W minus 2".

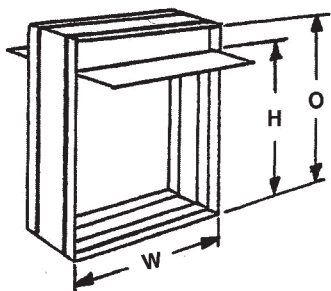
**Note :-** No additional slip sleeve is required when using 's' slip connections.

# FIRE DAMPERS

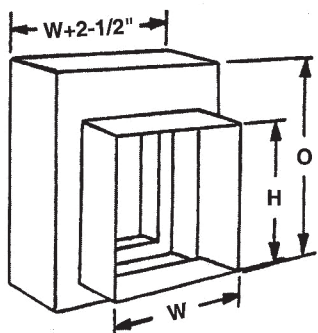
## FD SERIES FIRE DAMPER SIZING CHART



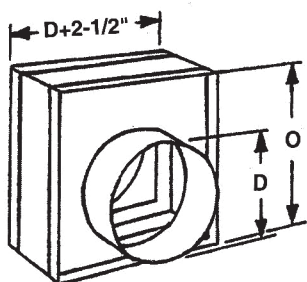
**FD20-VA  
FD20-HA**



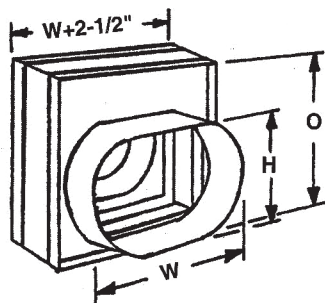
**FD20-VB  
FD20-HB**



**FD20-VC  
FD20-HC**



**FD20-VCR  
FD20-HCR**

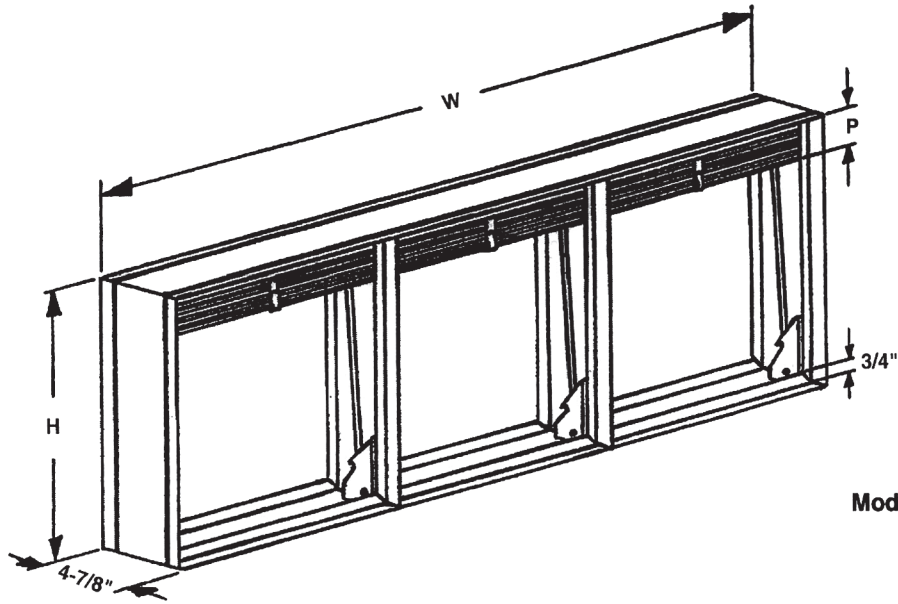


**FD20-VCO  
FD20-HCO**

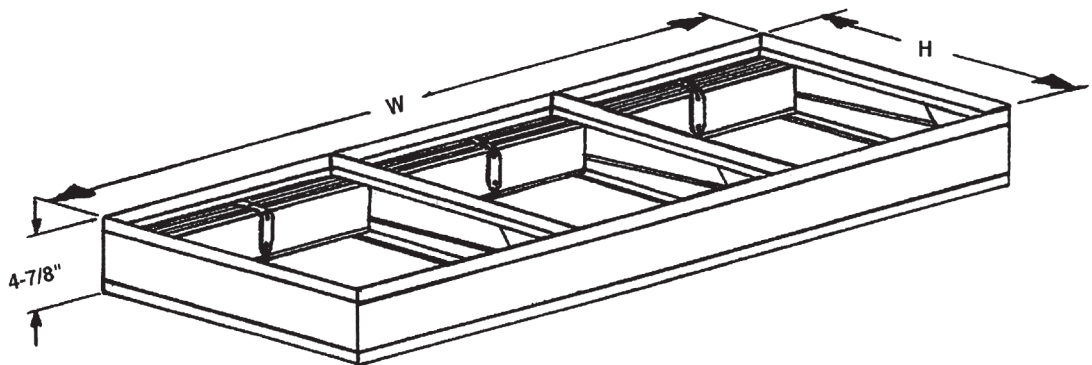
H or D Dimension  (in.)	FD Models		
	FD20-VA FD20-HA  P (in.)	FD20-VB FD20-HB  O (in.)	FD20-VC FD20-HC FD20-VCR FD20-HCR FD20-VCO FD20-HCO  O (in.)
6	1	7 - 7/16	8 - 5/8
7	1 - 1/4	8 - 5/8	9 - 3/4
8	1 - 1/4	9 - 5/8	10 - 3/4
9	1 - 1/2	10 - 7/8	12 - 3/64
10	1 - 1/2	11 - 7/8	13 - 1/32
11	1 - 3/4	13 - 1/8	14 - 5/16
12	1 - 3/4	14 - 1/8	15 - 5/16
13	1 - 3/4	15 - 1/8	16 - 9/32
14	2	16 - 3/8	17 - 9/16
15	2	17 - 3/8	18 - 9/16
16	2	18 - 3/8	19 - 9/16
17	2 - 1/4	19 - 5/8	20 - 3/4
18	2 - 1/4	20 - 5/8	21 - 3/4
19	2 - 1/2	21 - 7/8	23 - 1/32
20	2 - 1/2	22 - 7/8	24 - 1/64
21	2 - 3/4	24 - 3/32	25 - 9/32
22	2 - 3/4	25 - 3/32	26 - 1/4
23	2 - 3/4	26 - 3/32	27 - 9/32
24	3	27 - 3/8	28 - 9/16
25	3	28 - 3/8	29 - 9/16
26	3	29 - 3/8	30 - 1/2
27	3 - 7/32	30 - 5/8	31 - 3/4
28	3 - 7/32	31 - 5/8	32 - 3/4
29	3 - 1/2	32 - 7/8	34 - 1/64
30	3 - 1/2	33 - 7/8	35
31	3 - 1/2	34 - 7/8	36 - 1/64
32	3 - 3/4	36 - 1/16	37 - 1/4
33	3 - 3/4	37 - 5/64	38 - 1/4
34	4	38 - 3/8	39 - 1/2
35	4	39 - 3/8	40 - 1/2
36	4	40 - 5/16	41 - 1/2
37	4 - 1/4	41 - 9/16	42 - 3/4
38	4 - 1/4	42 - 9/16	43 - 3/4
39	4 - 1/4	43 - 5/8	44 - 3/4
40	4 - 1/2	44 - 7/8	46
41	4 - 1/2	45 - 7/8	47
42	4 - 3/4	47 - 5/64	48 - 7/32
43	4 - 3/4	48 - 5/64	49 - 1/4
44	4 - 3/4	49 - 1/16	50 - 1/4
45	5	-	-
46	5	-	-
47	5 - 1/4	-	-
48	5 - 1/4	-	-

# FIRE DAMPERS

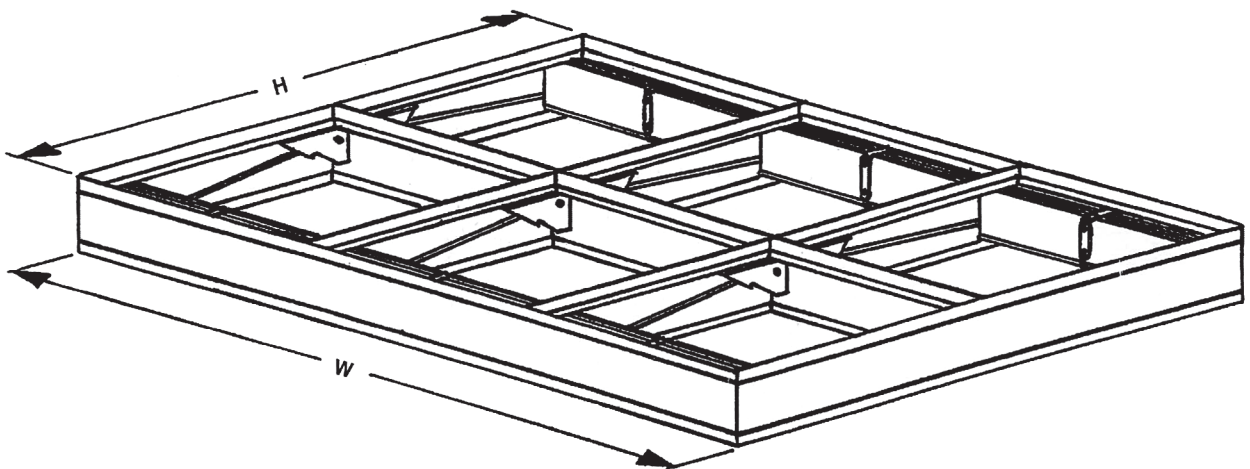
## MULTI-SECTION FIRE DAMPER



Model : FD20-VA



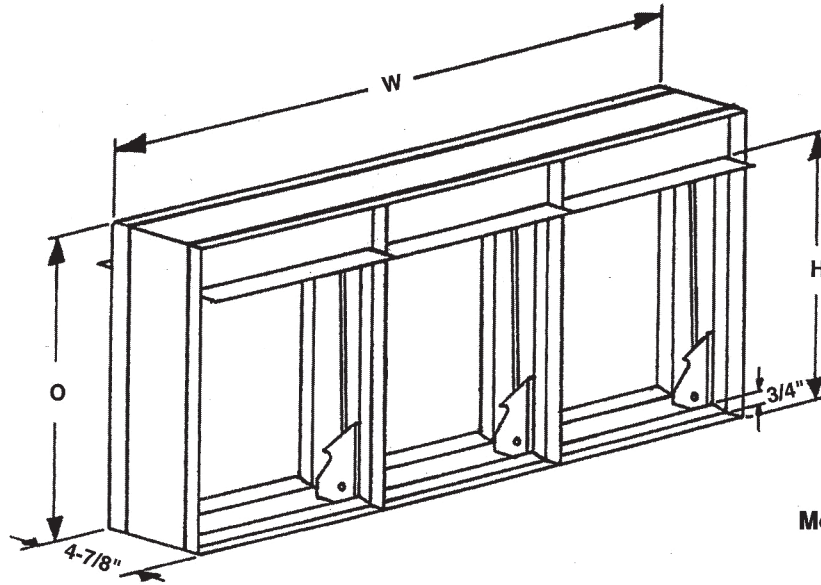
Model : FD20-HA



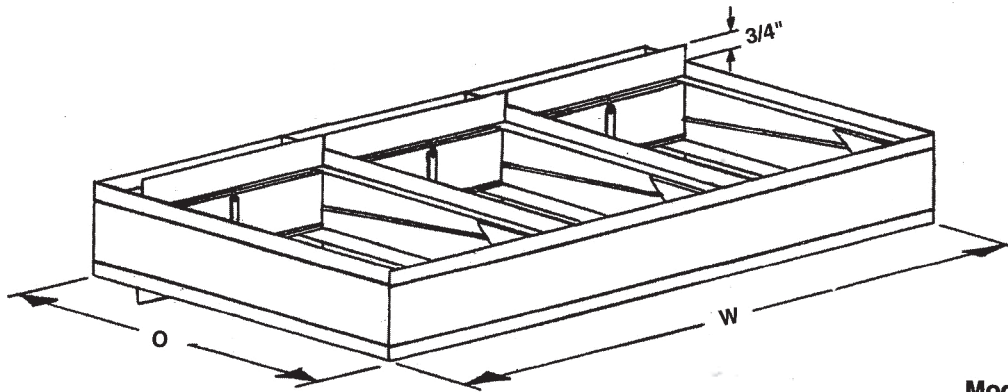
Model : FD20-HA

# FIRE DAMPERS

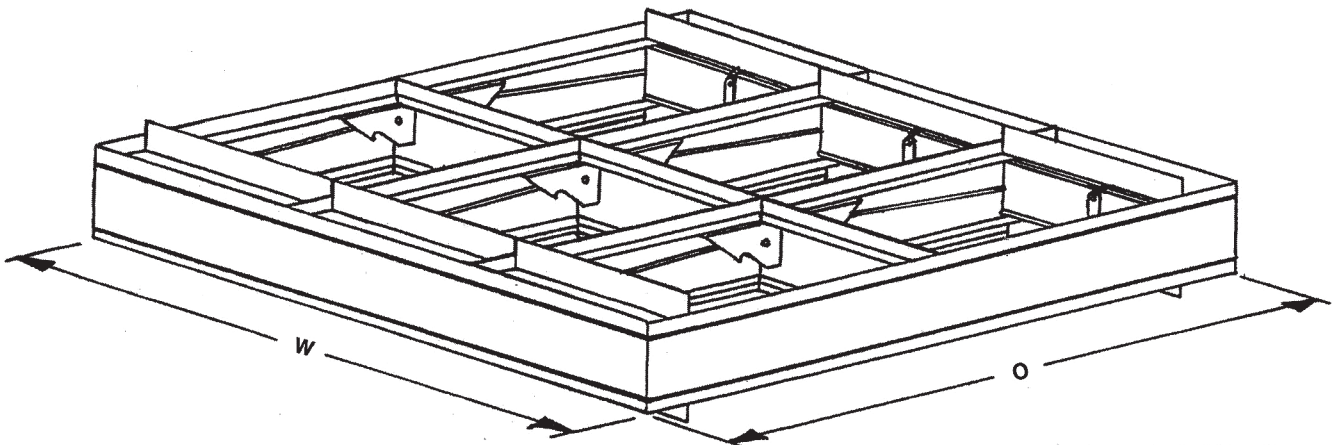
## MULTI-SECTION FIRE DAMPER



Model : FD20-VB

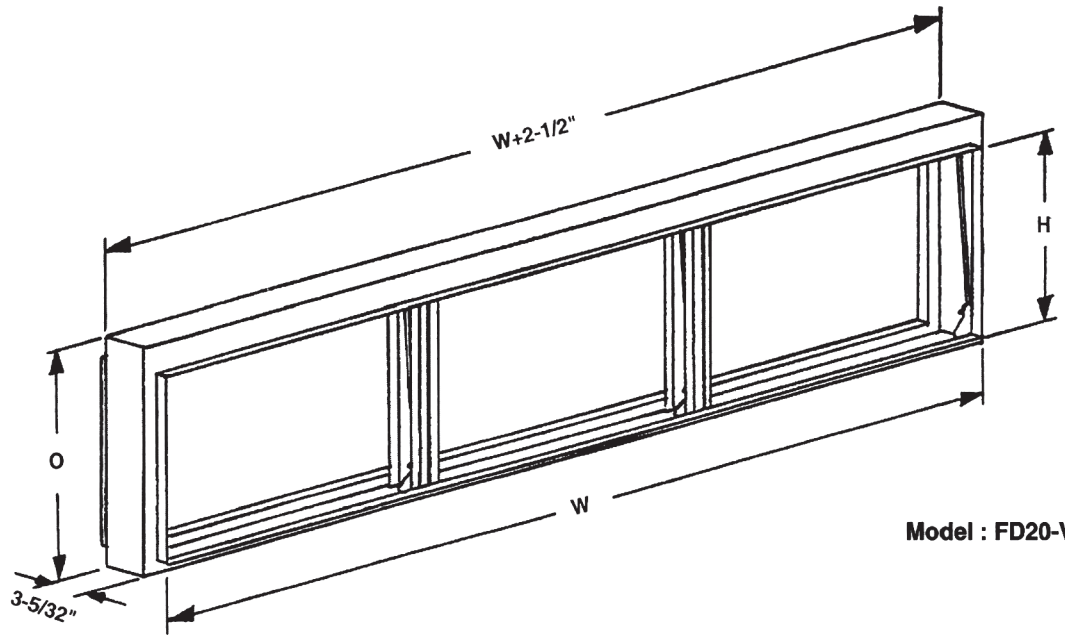


Model : FD20-HB

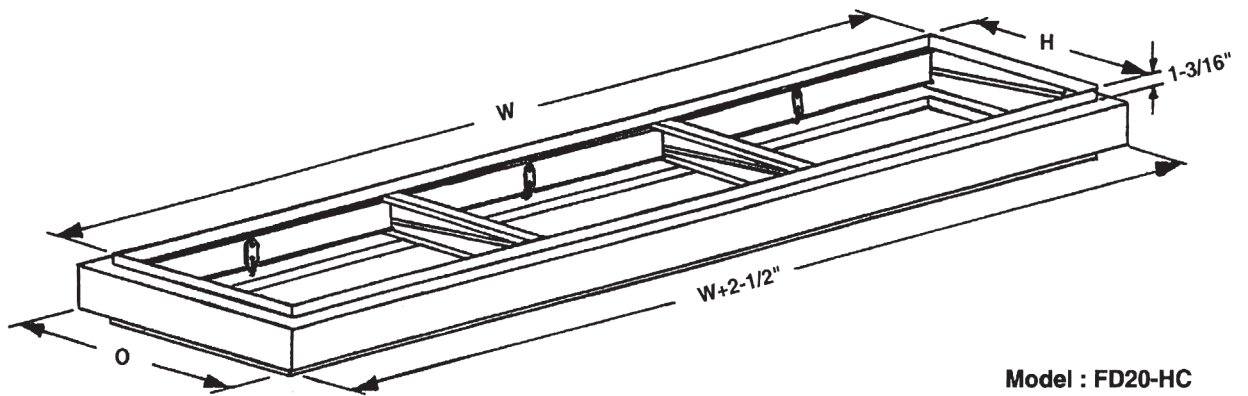


Model : FD20-HB

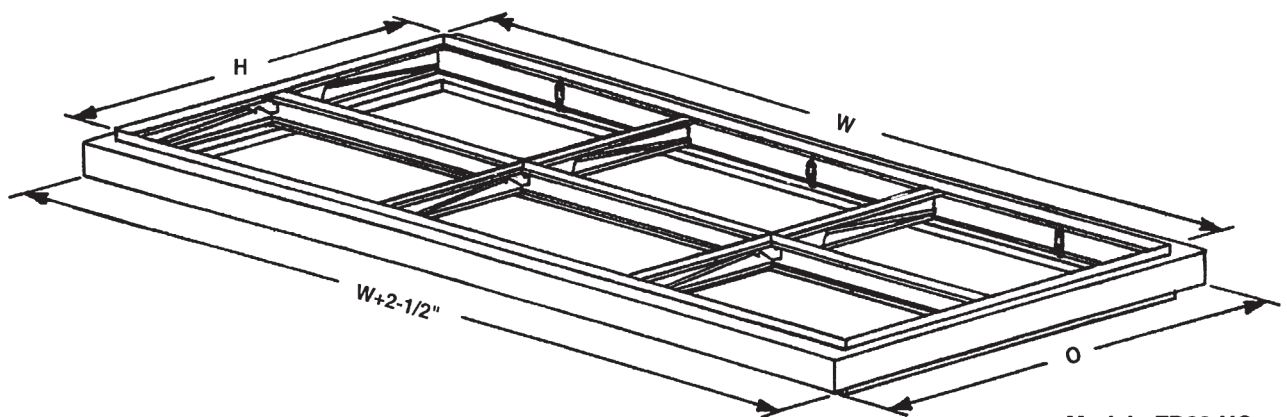
# FIRE DAMPERS MULTI-SECTION FIRE DAMPER



Model : FD20-VC



Model : FD20-HC

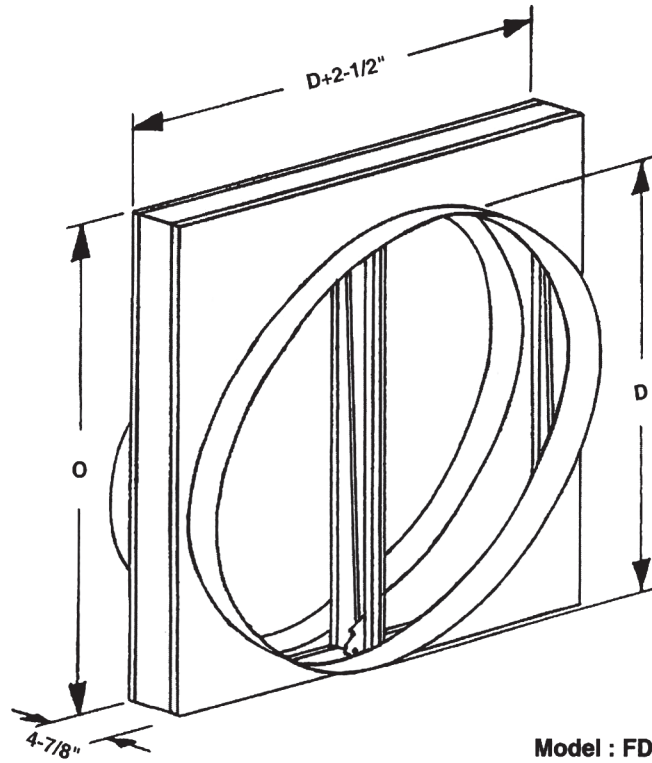


Model : FD20-HC

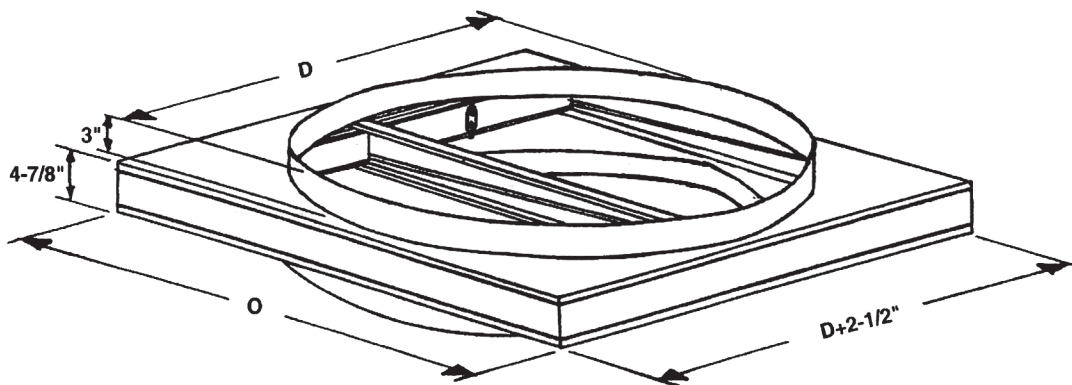


# FIRE DAMPERS

## MULTI-SECTION FIRE DAMPER



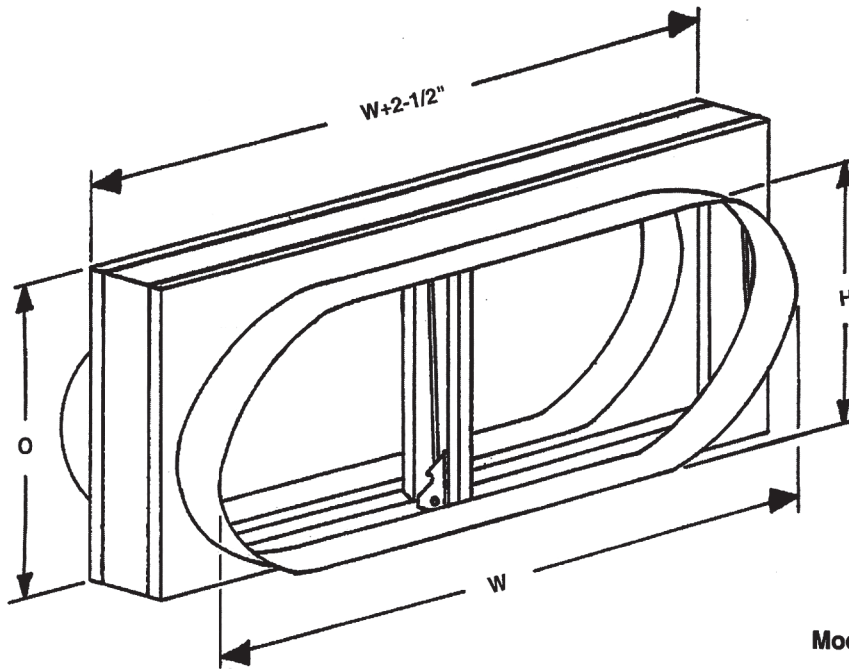
Model : FD20-VCR



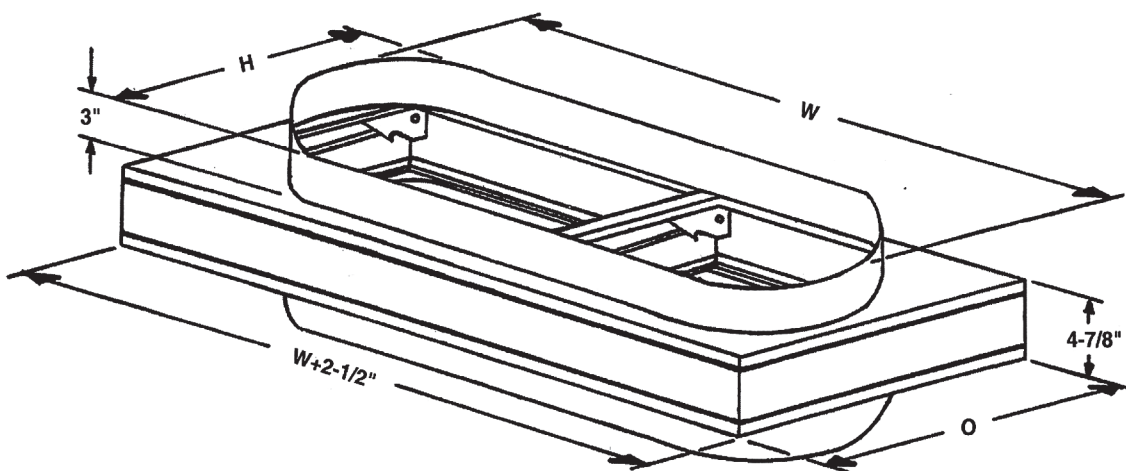
Model : FD20-HCR

# FIRE DAMPERS

## MULTI-SECTION FIRE DAMPER



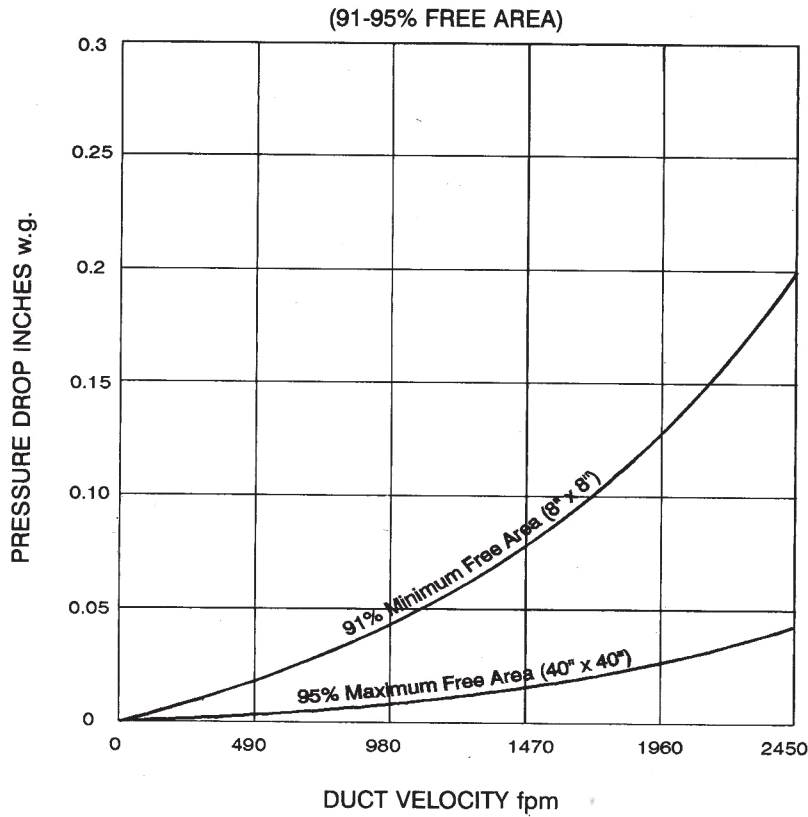
Model : FD20-VCO



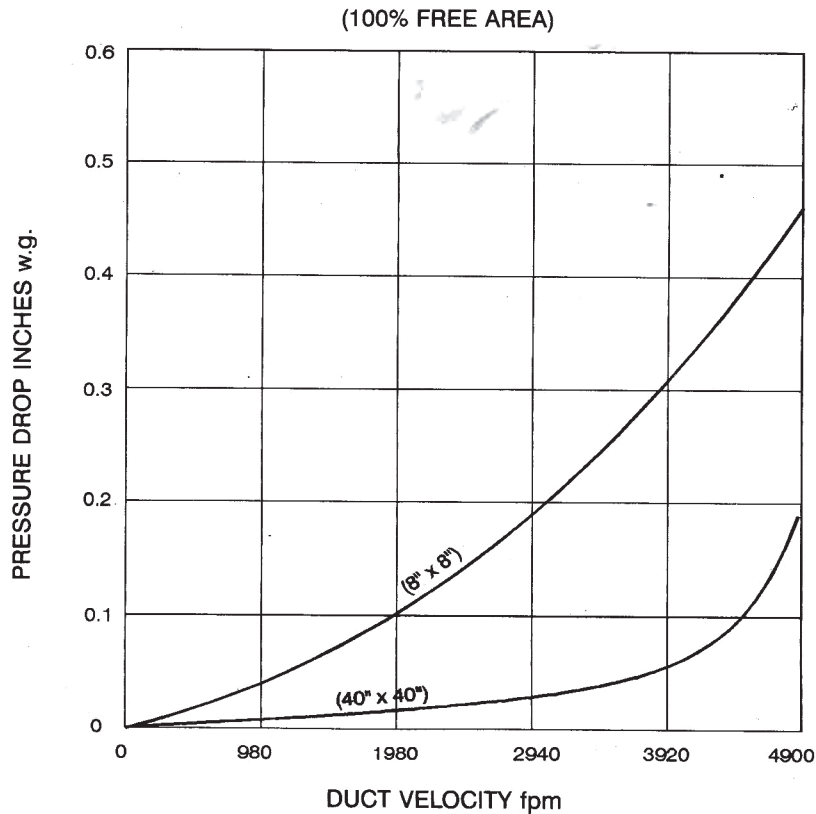
Model : FD20-HCO

# FIRE DAMPERS PERFORMANCE DATA

Applicable to FD20-VA, VB, HA, and HB Models  
Recommended for low and medium velocities.

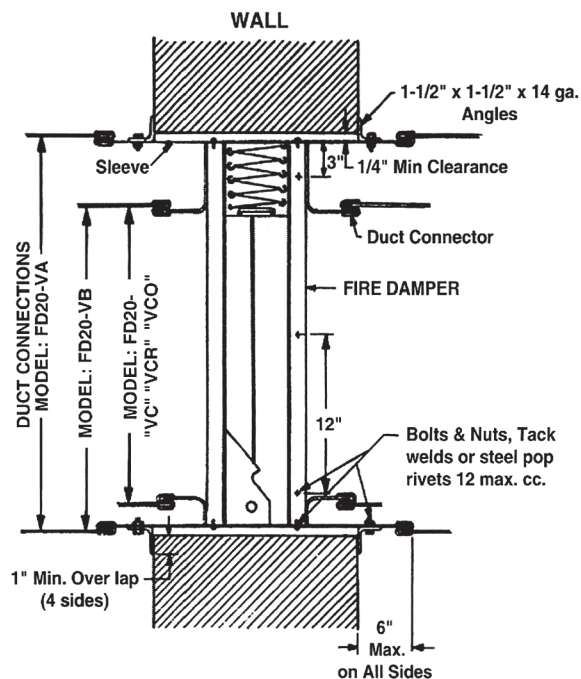


Applicable to FD20-VC, HC, VCR, HCR, VCO, and HCO, Models  
Recommended for high velocities.

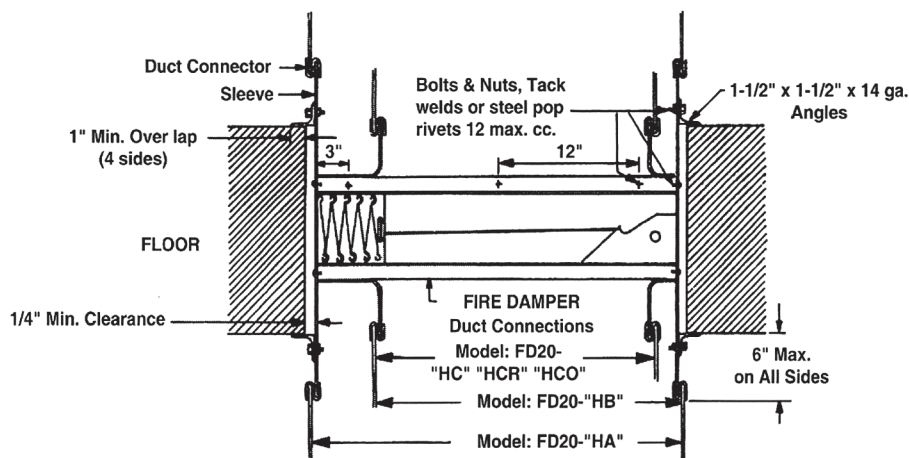


# FIRE DAMPERS INSTALLATION INSTRUCTION

## VERTICAL INSTALLATION



## HORIZONTAL INSTALLATION



**NOTE :** Figures show the vertical and horizontal installation details for a specific requirements for installation.

1. Minimum clearance of 1/4" shall be provided between the sleeve and wall or floor openings.
2. Sleeve shall be of the same or heavier gauge as the duct to which is attached. Gauges shall conform to SMACNA or ASHRAE duct standards. Sleeve shall be extended approximately 6" maximum on either side of wall or floor to facilitate the joining of the sleeve to the duct.
3. The following duct sleeve connection may be used on all systems: I. Inside Slip, II. Plain 'S' Slip, III. Hemmed 'S' Slip, IV. Alternate bar Slip (standard Slip), V. Reinforced standing 'S' Slip, VI. Single Slip, VII. Double 'S' Slip, VIII. Cup Slip, IX. Drive Slip, X. Pocket Lock.
4. Mounting angles shall be minimum of 1-1/2" x 1-1/2" x 14 ga. fasten to sleeve only, with 1/4" dia. nuts and bolts, tack welds or pop rivets at 12" maximum spacing with a minimum of two connections on each side, top and bottom. Mounting angles shall overlap wall a minimum of 1" on all four sides.
5. Damper shall be bolted, tack welded or screwed to sleeve on same spacing as angles.