FIRE DAMPER FOR STATIC SYSTEM - FDF MODEL - SINGLE SECTION

FEATURES :

- U.L. Classified for static systems in accordance with UL 555 & NFPA 90A.
- Civil Defense approved
- Fire rated for 1 ½ hour.
- 100% Free area (Blades out of air stream)

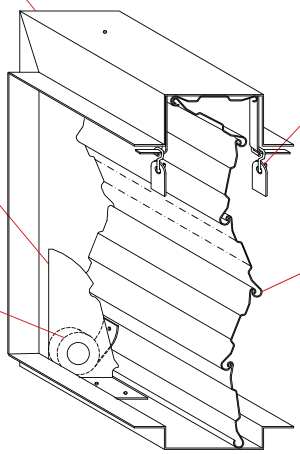
CONSTRUCTION

- Casings: 1.2 mm thick manufactured from corrosion resistant galvanized mild steel.
- Blades: Roll formed single skin interlocking galvanized curtain shutter of 0.8 mm thk
- Blade guide / Locking ramps: Galvanized steel locking ramps ensures positive blade closure within integral blade guide.
- Fusible Link: Typical "two-pieces" fusible links rated at 165° F.
- Springs: Stainless steel coil tension spring.
- Mounting: Horizontal / Vertical
- (Installation as per instruction on page no 4)
- Sizes: Maximum Width 31" & Maximum Height 33" (Out to Out)
- Sleeves: are optional. details are as per pages 3 & 4

Casings
Manufactured from corrosion Resistant galvanized steel as standard

Blade guide / Locking ramps
Galvanized steel locking ramps ensures positive blade closure within integral blade guides.

Springs
Stainless steel coil tension spring ensuring powerful blade closure when appropriate



Fusible links /
release mechanism
Typical "two-pieces" fusible links rated at 165° F
Alternative temperature rated fusible links mechanisms available

Blades
(Rollformed single skin interlocking galvanized high integrity curtain shutter of 0.8 mm thickness)

Figure - 1

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R21930

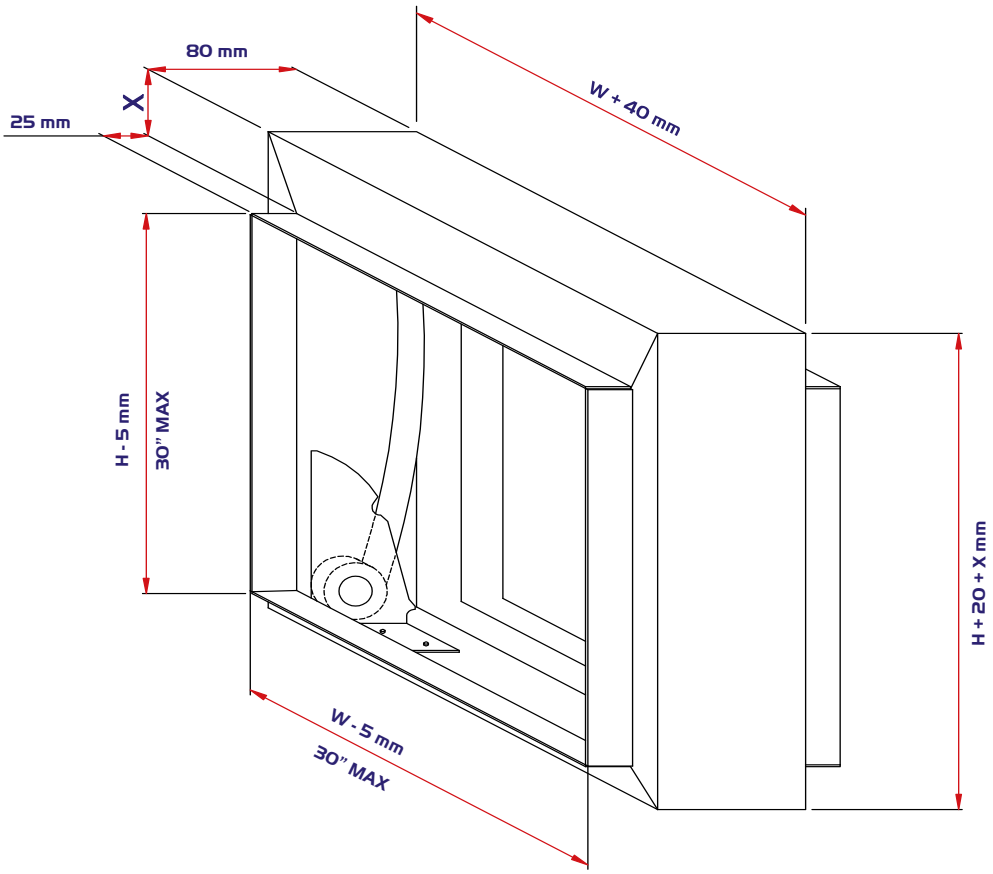

Figure - 2

X-DIMENSIONAL

FDF	
Height (mm)	X (mm)
100-400	40
401-750	60

CROSS SECTION DETAIL

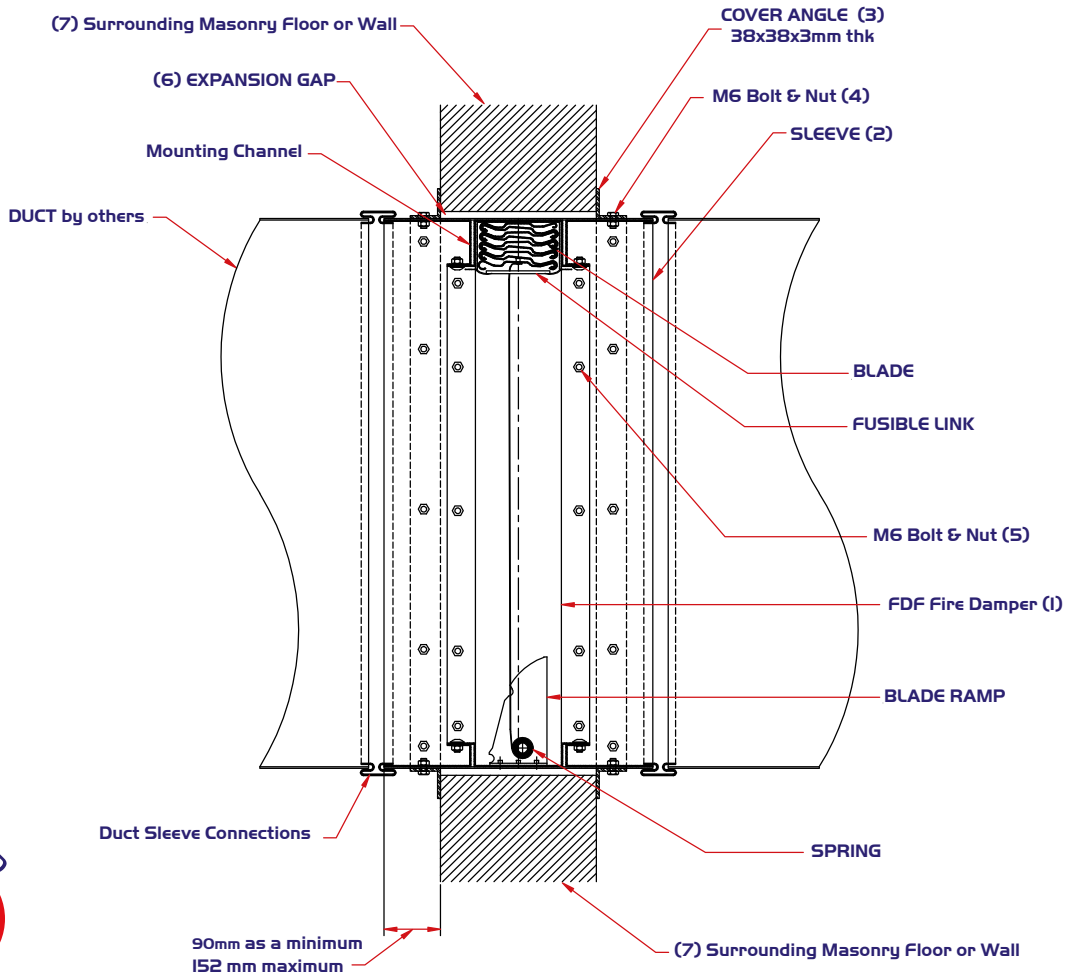

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Figure - 3

Ordering Key:

SMACNA

F	D	F	W	X	H	S	L	V	F	1	2
100% FREE AREA FIRE DAMPER FOR VERTICAL & HORIZONTAL MOUNTING FOR STATIC APPLICATIONS											
SIZE: WIDTH X HEIGHT UP TO 31"X33" OUT-TO-OUT DIMENSIONS.											
- : WITHOUT SLEEVE (STANDARD) SLVF12 : WITH 1.2MM THICK G.I. SLEEVE											

INSTALLATION & OPERATING INSTRUCTIONS

1 >> The damper ① should be installed centrally within the surrounding masonry floor or wall ⑦

2 >> The damper ① should be installed in a rectangular galvanized steel sleeve ② with a min. thickness of 1.2 mm This sleeve should be attached to the damper not to the builder's work using the mounting channels by 6mm dia ⑤ bolts spaced at not more than 225mm centres. Bolts for mounting channels located maximum 45 and 145mm from corners of sleeve and frame, respectively.

3 >> The damper is suitable only for rectangular space and can not be used for annular space.

4 >> Allowance for expansion between sleeve and builder's work in both horizontal and vertical planes to be 3mm per 305mm of length.

5 >> The sleeve ② should be of suitable length to extend through the wall to enable the fitting of the cover angles and ductwork. Minimum of 90mm and maximum of 152mm beyond the floor or wall.

6 >> The cover angles should be attached to the sleeve by 6mm dia ④ bolts at a minimum of 225mm centres, and should form a complete frame around the sleeve and cover over the expansion gap ⑥ required between sleeve and wall opening. The four corner of the cover angles are not to be welded.

The bolts connecting the cover angles to the sleeve to be 102mm maximum from the corners.

7 >> The expansion gap ⑥ should be filled with compressible, non-combustible material (mineral wool).

8 >> The cover angle ③ should be of such a size as always to form a cover over the wall opening by 25mm minimum and should be manufactured from a minimum size of 38*38*3mm steel angle.

9 >> A fusible link UL tested Elsie brand which is rated at 165 degree F is used.

10 >> The duct-sleeve connection to be of double "S" slip type.

Breakaway Joints shown shall have no more than two No. 10 (4.8 mm dia) sheet metal screws on each side and on the bottom located in the center of the slip pocket and shall penetrate both sides of the slip pocket.

Breakaway Joints for horizontal ducts (vertical fire damper) shall be provided on the top, bottom and on the sides with double "S" slip type as illustrated.

Breakaway Joints for vertical ducts (horizontal fire damper) shall be provided on both other opposite sides with double "S" slip type.

Connecting ducts shall not be continued and shall terminate at the sleeve. Installation shall comply with NFPA 90A.

11 >> All fixing of frames must be positioned clear of the damper blade path so as not to impede proper closure.

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