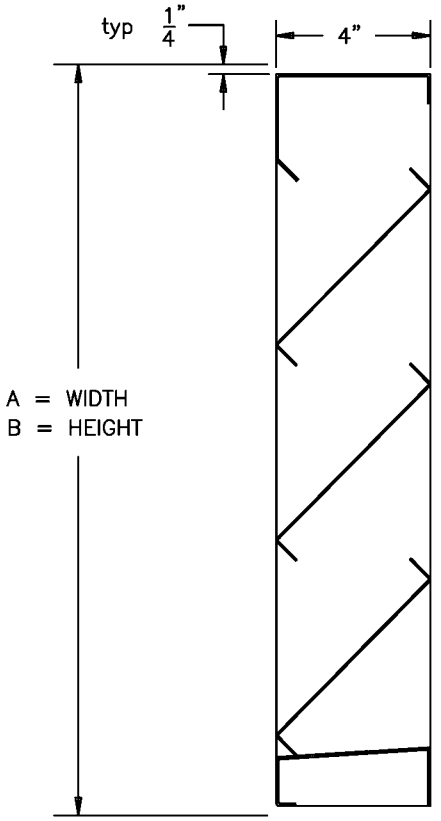
GALVANIZED STEEL, 4" DEEP, HEAVY GAUGE, J FIXED TYPE BLADE



SECTION VIEW

MODEL LF–47
STANDARD SPECIFICATIONS

FRAME: 4" DEEP CHANNEL, 16 GAUGE GALVANIZED STEEL.

BLADES: 16 GAUGE GALVANIZED STEEL.

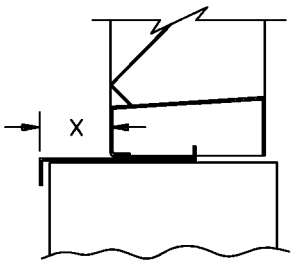
FINISH: MILL WITH TOUCH UP ON WELDS.

SCREEN: 1/2" REMOVABLE EXPANDED ALUMINUM BIRD SCREEN, LOCATED ON INTERIOR.

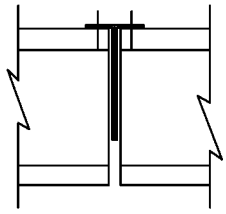
MAXIMUM PANEL SIZE: 96" x 96".

MINIMUM PANEL SIZE: 12" x 12".

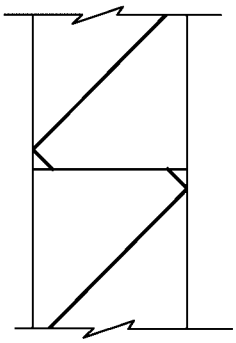
DIMENSIONS: "A" (WIDTH) AND "B" (HEIGHT) ARE OPENING SIZES. LOUVERS ARE MADE 1/2" UNDERSIZE.



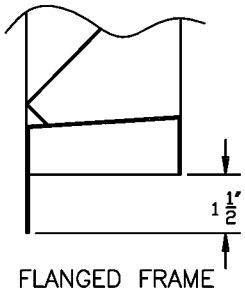
EXTENDED SILL
OPTIONAL



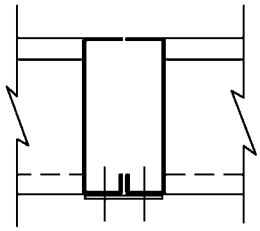
ARCHITECTURAL VERTICAL
MULLION OPTIONAL



STANDARD HORIZONTAL



FLANGED FRAME
OPTIONAL
(JAMB SHOWN)



STANDARD VERTICAL
MULLION

amca CERTIFIED RATINGS
WATER PENETRATION
AIR PERFORMANCE
AIR MOVEMENT AND CONTROL ASSOCIATION INC.

AWV certifies that the model LF–47 louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings.

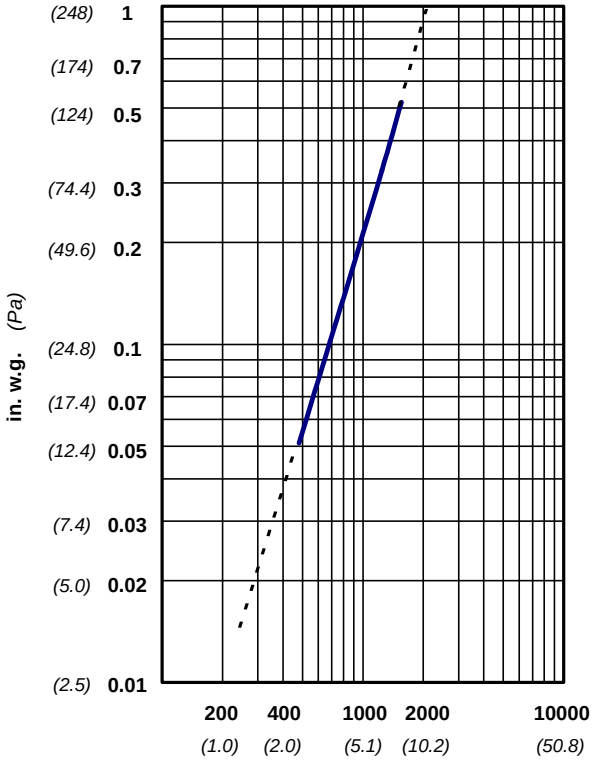
awv® american warming and ventilating
A MESTEK COMPANY
7301 INTERNATIONAL DRIVE HOLLAND, OHIO
Phone (419) 865–5000 Fax (419) 865–1375

LF–47 STATIONARY LOUVER

DRN. BY JP	DWG. NO.	REV.
DATE 12–03–03	LF–47	

Water Penetration : 0.01 oz (3.0 g) at 627 fpm (3.18 m/s) recommended free area velocity
Pressure Drop : 0.084 in wg (20.9 Pa.) at 627 fpm (3.18 m/s) and 4552 scfm (2.15 scm/s)
Free Area : 7.26 sq ft (0.674 sq m) = 45.4% for 48" x 48" (1.22m x 1.22m) test size

INTAKE PRESSURE DROP

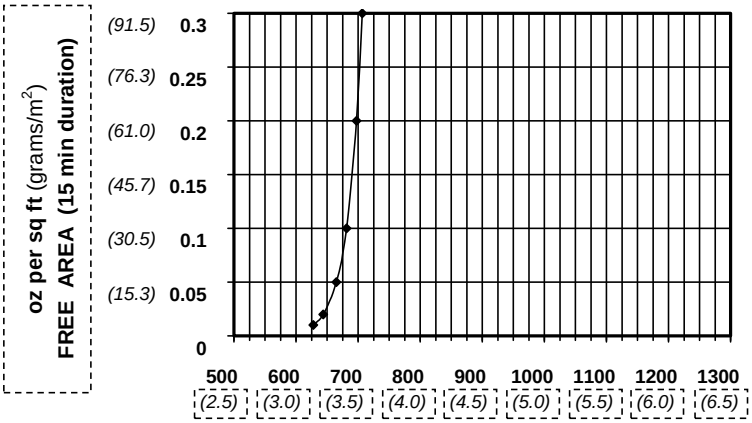


VELOCITY THROUGH FREE AREA fpm (m/s)
standard air- .075 lbs per cu ft
Ratings do not include the effect of a wire bird screen
Test based on a 48" x 48" test size per AMCA Standard 511

FREE AREA IN SQUARE FEET *(sq meters)*

HEIGHT	WIDTH								
	in.	**12**	**24**	**36**	**48**	**60**	**72**	**84**	**96**
	mm	*305*	*610*	*914*	*1219*	*1524*	*1829*	*2134*	*2438*
	12	**0.18**	**0.42**	**0.66**	**0.90**	**1.13**	**1.34**	**1.58**	**1.82**
	305	*0.017*	*0.039*	*0.061*	*0.084*	*0.105*	*0.124*	*0.147*	*0.169*
	24	**0.65**	**1.49**	**2.33**	**3.17**	**4.01**	**4.74**	**5.58**	**6.42**
	610	*0.060*	*0.138*	*0.216*	*0.295*	*0.373*	*0.440*	*0.518*	*0.596*
	36	**1.06**	**2.44**	**3.81**	**5.19**	**6.56**	**7.77**	**9.14**	**10.52**
	914	*0.098*	*0.227*	*0.354*	*0.482*	*0.609*	*0.722*	*0.849*	*0.977*
	48	**1.48**	**3.41**	**5.33**	**7.26**	**9.18**	**10.86**	**12.79**	**14.71**
	1219	*0.138*	*0.317*	*0.495*	*0.674*	*0.853*	*1.009*	*1.188*	*1.367*
	60	**1.96**	**4.49**	**7.03**	**9.57**	**12.10**	**14.32**	**16.86**	**19.39**
	1524	*0.182*	*0.417*	*0.653*	*0.889*	*1.124*	*1.330*	*1.566*	*1.801*
	72	**2.33**	**5.35**	**8.38**	**11.40**	**14.42**	**17.07**	**20.09**	**23.12**
	1829	*0.216*	*0.497*	*0.779*	*1.059*	*1.340*	*1.586*	*1.866*	*2.148*
	84	**2.79**	**6.42**	**10.05**	**13.67**	**17.30**	**20.47**	**24.10**	**27.72**
	2134	*0.259*	*0.596*	*0.934*	*1.270*	*1.607*	*1.902*	*2.239*	*2.575*
	96	**3.21**	**7.37**	**11.53**	**15.69**	**19.85**	**23.50**	**27.66**	**31.82**
	2438	*0.298*	*0.685*	*1.071*	*1.458*	*1.844*	*2.183*	*2.570*	*2.956*

WATER PENETRATION



VELOCITY THROUGH FREE AREA fpm (m/s)

Both maximum recommended free area velocity and beginning of water penetration are 627 fpm at standard air -.075 lbs per cu ft. The above water penetration data is based on mill finish, 48" x 48" test size per AMCA Standard 511.

AMCA CERTIFIED RATINGS — WATER PENETRATION — AIR PERFORMANCE
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LF-47

Openings that require multiple louver panels in both width and height will require internal structural supports. It is recommended that large openings be divided with structural members so that the louvers will span either width or height with a single panel. Unusually high wind loading may require structural supports on non-multiple wide and multiple high assemblies. **Structural supports and mounting accessories are not supplied as a standard**.

Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 627 fpm (3.18 m/s).

To determine minimum free area required for louver:

Step #1: Divide the required CFM flow by the maximum recommended free area velocity.

Step #2: Select the most desirable louver size, from the free area table, that meets the minimum free area requirement.

Step #3: Compare specified performance to the certified water penetration and pressure drop ratings.

Example: Given: 15000 CFM design flow

Step #1:

$$\text{min. free area} = \frac{\text{Design CFM}}{\text{Max. Recommended Velocity}}$$

$$= \frac{15000}{627} = \textbf{23.92 sq ft}$$

Step #2: From the free area table above the approximate louver size is 84" x 84" = (24.1 sq ft)