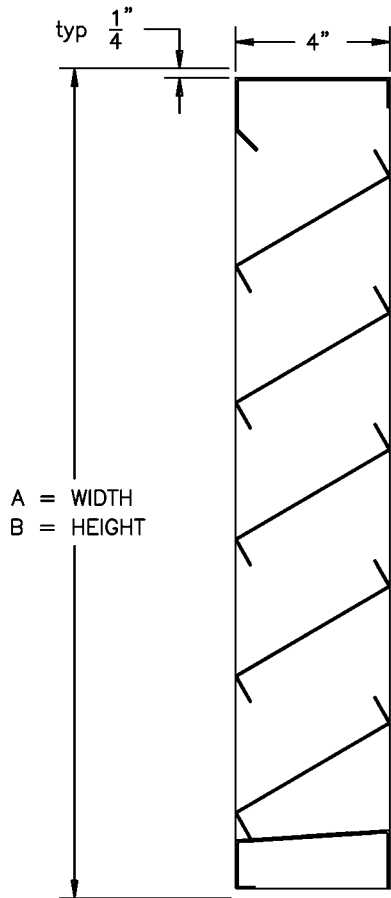


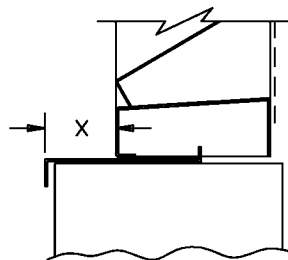
# GALVANIZED STEEL, 4" DEEP, HEAVY GAUGE, J FIXED TYPE BLADE



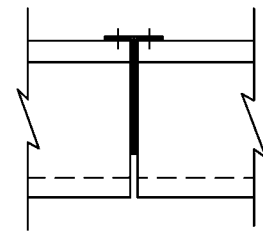
SECTION VIEW

## MODEL LF-49 STANDARD SPECIFICATIONS

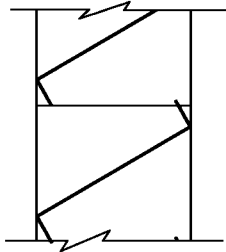
- FRAME: 4" DEEP CHANNEL, 16 GAUGE GALVANIZED STEEL.
- BLADES: 16 GAUGE GALVANIZED STEEL.
- FINISH: MILL WITH TOUCH UP ON WELDS.
- SCREEN: 1/2" REMOVABLE EXPANDED ALUMINUM BIRD SCREEN, LOCATED ON INTERIOR.
- MAXIMUM PANEL SIZE: 96" x 96".
- MINIMUM PANEL SIZE: 12" x 12".
- DIMENSIONS: "A" (WIDTH) AND "B" (HEIGHT) ARE OPENING SIZES. LOUVERS ARE MADE 1/2" UNDERSIZE.



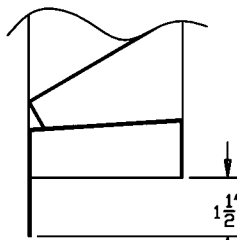
EXTENDED SILL  
OPTIONAL



ARCHITECTURAL VERTICAL  
MULLION OPTIONAL



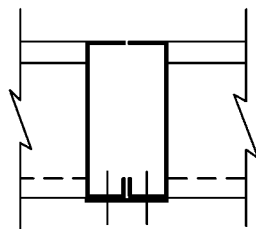
STANDARD HORIZONTAL  
MULLION



FLANGED FRAME  
OPTIONAL  
(SILL SHOWN)



AWV certifies that the model LF-49 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.



STANDARD VERTICAL  
MULLION

## awv american warming and ventilating

A MESTEK COMPANY

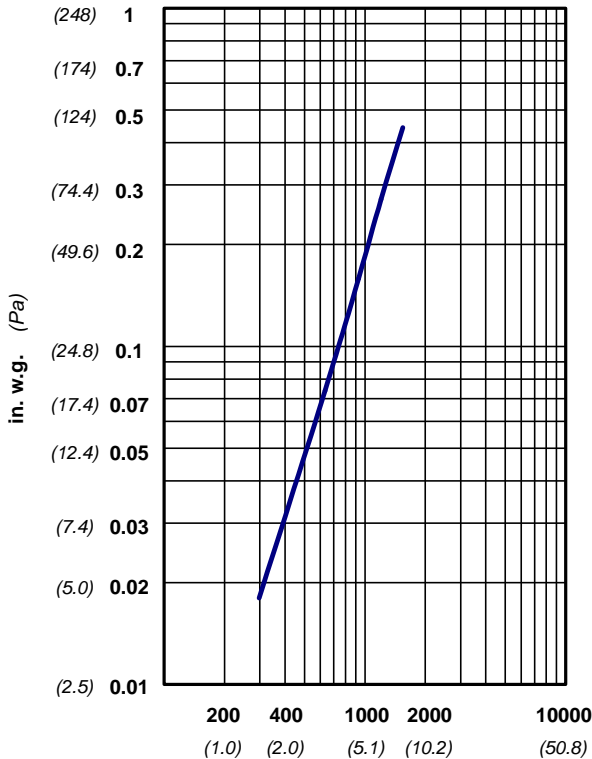
7301 INTERNATIONAL DRIVE HOLLAND, OHIO  
Phone (419) 865-5000 Fax (419) 865-1375

### LF-49 STATIONARY LOUVER

|                  |                       |      |
|------------------|-----------------------|------|
| DRN. BY<br>JP    | DWG. NO.<br><br>LF-49 | REV. |
| DATE<br>12-14-00 |                       |      |

**Water Penetration** : 0.01 oz (3.0 g) at 631 fpm (3.2 m/s) recommended free area velocity  
**Pressure Drop** : 0.074 in wg (18.3 Pa.) at 631 fpm (3.2 m/s) and 5490 scfm (2.59 scm/s)  
**Free Area** : 8.7 sq ft (0.808 sq m) = 54.4% 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



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**LF-49**

Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 631 fpm (3.2 m/s).

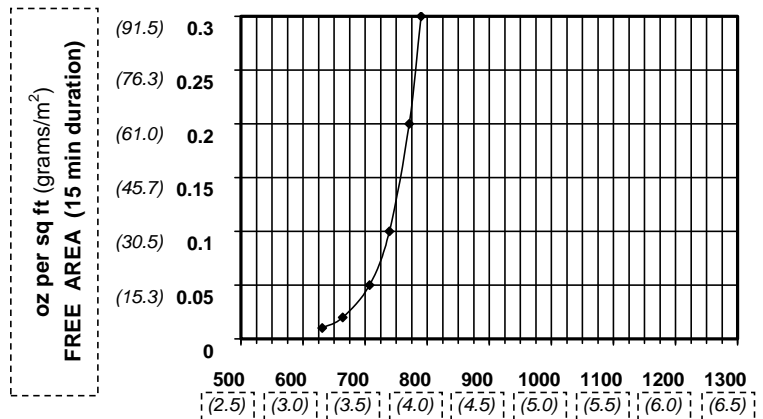
To determine minimum free area required for louver:

- 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.

**FREE AREA IN SQUARE FEET (sq meters)**

|        |            | WIDTH     |           |           |           |            |            |            |            |            |
|--------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|
|        |            | in.<br>mm | 12<br>305 | 24<br>610 | 36<br>914 | 48<br>1219 | 60<br>1524 | 72<br>1829 | 84<br>2134 | 96<br>2438 |
| HEIGHT | 12<br>305  | 0.30      | 0.69      | 1.08      | 1.46      | 1.85       | 2.19       | 2.58       | 2.97       |            |
|        | 24<br>610  | 0.078     | 1.79      | 2.79      | 3.80      | 4.81       | 5.69       | 6.70       | 7.71       |            |
|        | 36<br>914  | 0.122     | 0.280     | 0.439     | 0.596     | 0.754      | 0.893      | 1.051      | 1.209      |            |
|        | 48<br>1219 | 0.165     | 0.380     | 0.594     | 0.809     | 1.023      | 1.211      | 1.425      | 1.640      |            |
|        | 60<br>1524 | 0.214     | 0.491     | 0.769     | 1.047     | 1.325      | 1.568      | 1.846      | 2.123      |            |
|        | 72<br>1829 | 0.259     | 0.595     | 0.931     | 1.267     | 1.603      | 1.897      | 2.233      | 2.569      |            |
|        | 84<br>2134 | 0.307     | 0.704     | 1.102     | 1.499     | 1.897      | 2.245      | 2.642      | 3.040      |            |
|        | 96<br>2438 | 0.355     | 0.815     | 1.275     | 1.734     | 2.194      | 2.597      | 3.057      | 3.516      |            |

**WATER PENETRATION**



**VELOCITY THROUGH FREE AREA fpm (m/s)**

Both maximum recommended free area velocity and beginning of water penetration are 631 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.

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.**

Example: Given: 15000 CFM design flow

**Step #1:**

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

$$= \frac{15000}{631} = 23.77 \text{ sq ft}$$

**Step #2:** From the free area table above the approximate louver size is 84" x 72" = (24.04 sq ft)