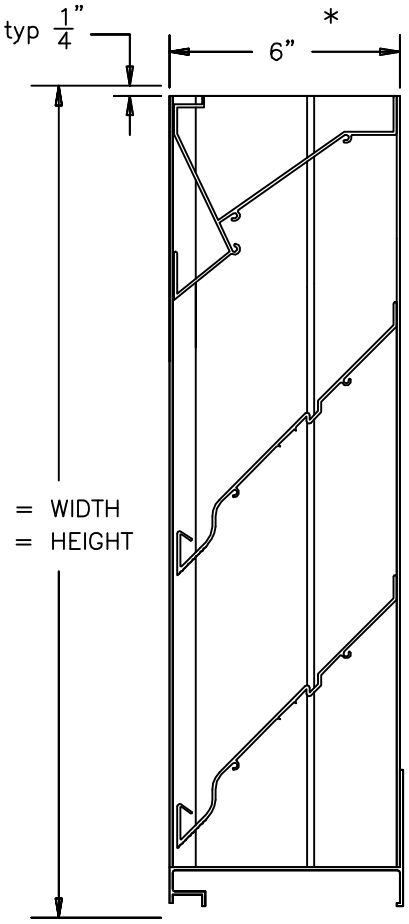
# EXTRUDED ALUMINUM, 6" DEEP, FIXED DRAINABLE TYPE BLADE




SECTION VIEW

MODEL IL–33
STANDARD SPECIFICATIONS

FRAME: 6" DEEP CHANNEL, .081" THICK 6063–T5 EXTRUDED ALUMINUM ALLOY.

BLADES: .081" THICK 6063–T5 EXTRUDED ALUMINUM ALLOY.

FINISH: MILL.

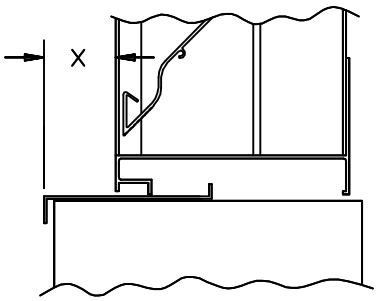
SCREEN: 1/2" REMOVABLE EXPANDED ALUMINUM BIRD SCREEN LOCATED ON INTERIOR.

MAXIMUM PANEL SIZE: 96" X 96".

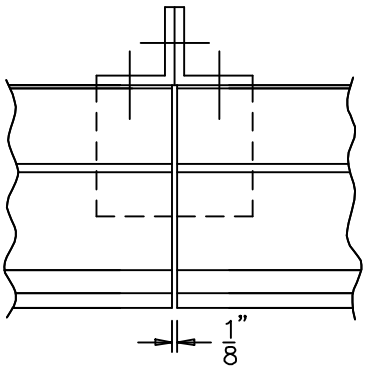
MINIMUM PANEL SIZE: 12" X 12".

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

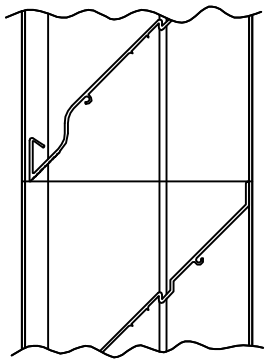
* PANELS OVER 48" WIDE WILL BE 7–1/2" DEEP DUE TO A VERTICAL



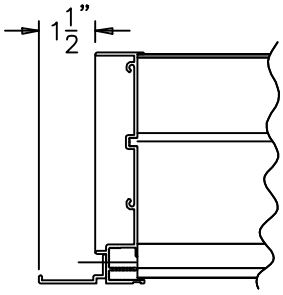

EXTENDED SILL
OPTIONAL



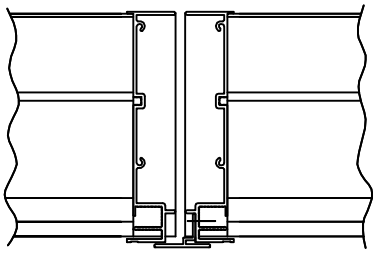

ARCHITECTURAL VERTICAL



MULLION




FLANGED FRAME
OPTIONAL
(JAMB SHOWN)




L&D certifies that the model IL–33 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.

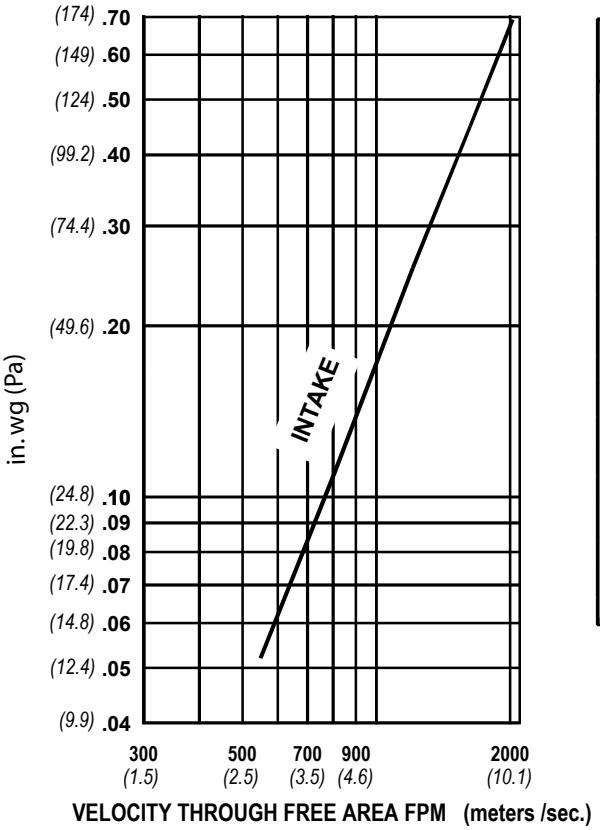
LOUVERS & DAMPERS
A MESTEK COMPANY
7435 INDUSTRIAL ROAD FLORENCE, KY
Phone (859) 647–2299 Fax (859) 647–7810

IL–33 STATIONARY LOUVER

| DRN. BY | DWG. NO. | REV. |
|---|---|---|
| ESS | IL–33 | |
| DATE 12-20-00 | | |

**Water Penetration : .01 oz.** *(3.0 g.)* **at 1029 fpm** *(5.22 m/s)* **recommended free area velocity**
**Pressure Drop : .17 in. wg.** *(42.2 Pa.)* **at 1029 fpm** *(5.22 m/s)* **and 8232 SCFM** *(3.88 scm/s)*
**Free Area : 8.0 sq.ft.** *(0.743 sq. m.)* **= 50.% for 48" x 48"** *(1.22 m x 1.22 m)* **test size**

## PRESSURE DROP

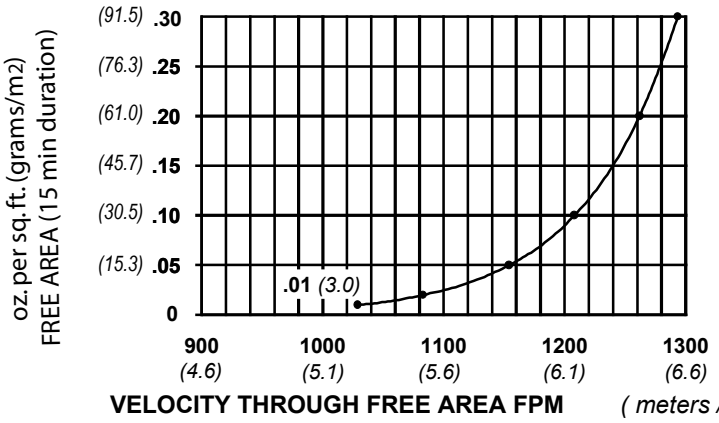



standard air - .075 lbs. per cu. ft.
Ratings do not include the effect of a bird screen

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

| HEIGHT | WIDTH | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **in.** | **12** | **24** | **36** | **48** | **60** | **72** | **84** | **96** |
| | *mm* | *304* | *609* | *914* | *1219* | *1524* | *1828* | *2133* | *2438* |
| | **12** | **.247** | **.568** | **.889** | **1.21** | **1.49** | **1.81** | **2.13** | **2.45** |
| | *304* | *.023* | *.053* | *.083* | *.112* | *.138* | *.168* | *.198* | *.228* |
| | **24** | **.761** | **1.75** | **2.74** | **3.72** | **4.59** | **5.58** | **6.56** | **7.55** |
| | *609* | *.071* | *.162* | *.254* | *.346* | *.426* | *.518* | *.610* | *.702* |
| | **36** | **1.19** | **2.73** | **4.27** | **5.81** | **7.16** | **8.70** | **10.24** | **11.78** |
| | *914* | *.110* | *.254* | *.397* | *.540* | *.665* | *.808* | *.951* | *1.09* |
| | **48** | **1.63** | **3.76** | **5.88** | **8.00** | **9.85** | **11.97** | **14.09** | **16.22** |
| | *1219* | *.152* | *.349* | *.546* | *.743* | *.915* | *1.11* | *1.31* | *1.51* |
| | **60** | **2.25** | **5.18** | **8.10** | **11.03** | **13.59** | **16.51** | **19.43** | **22.36** |
| | *1524* | *.209* | *.481* | *.753* | *1.024* | *1.26* | *1.53* | *1.81* | *2.08* |
| | **72** | **2.58** | **5.92** | **9.26** | **12.60** | **15.52** | **18.86** | **22.20** | **25.54** |
| | *1828* | *.239* | *.550* | *.860* | *1.17* | *1.44* | *1.75* | *2.06* | *2.37* |
| | **84** | **3.07** | **7.04** | **11.02** | **15.00** | **18.48** | **22.46** | **26.43** | **30.41** |
| | *2133* | *.285* | *.654* | *1.02* | *1.39* | *1.72* | *2.09* | *2.46* | *2.83* |
| | **96** | **3.58** | **8.22** | **12.86** | **17.50** | **21.56** | **26.20** | **30.84** | **35.48** |
| | *2438* | *.332* | *.763* | *1.19* | *1.63* | *2.00* | *2.43* | *2.87* | *3.30* |

## WATER PENETRATION




Both maximum recommended free area velocity and begining of water penetration are 1029 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
AIR MOVEMENT AND CONTROL ASSOCIATION INC.

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**IL-33**

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. Unusally 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 1029 fpm *(5.22 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 15,000 CFM design flow
**Step #1:**

$$\text{min. free area} = \frac{\text{Design CFM}}{\text{Max. Recommended Velocity}} = \frac{15{,}000}{1029} = \textbf{14.57 sq. ft.}$$

**Step #2:** From the free area table above the approximate louver size is **60" x 72"** = (15.52 sq. ft.)