

**MODEL SAFL-4**

**4" [102mm] ADJUSTABLE STEEL LOUVER**

**STANDARD CONSTRUCTION:**

**FRAME:** 18 ga. galvanized steel, 4.13" [105mm] deep

**BLADES:** J style, 18 ga. galvanized steel, positioned at 45° angles on approximately 4" [102mm] centers.

**BIRDSCREEN:** 0.50" x 0.050" [12.70mm x 1.27mm] Expanded flattened alum. in removable frame. Screen is mounted on inside (rear)

**OPERATOR:** Louvers without actuators will be supplied with Locking Quadrants

**FINISH:** Mill Galvanized

**MINIMUM SIZE:** 8"w x 10"h [203mm x 254mm]

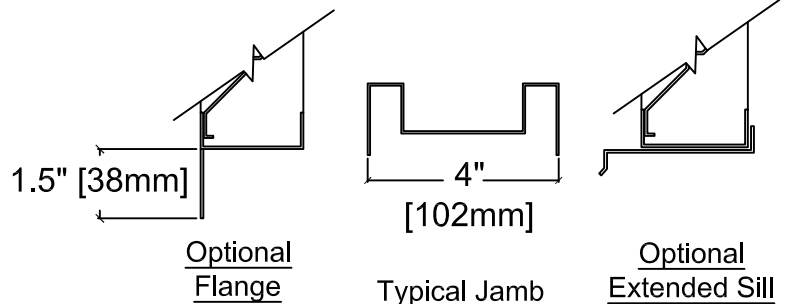
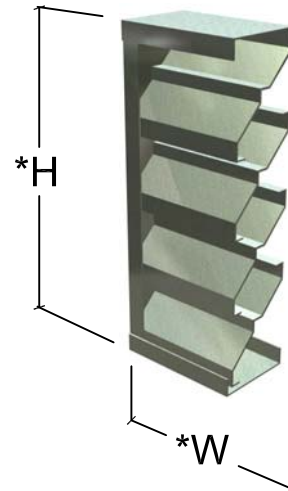
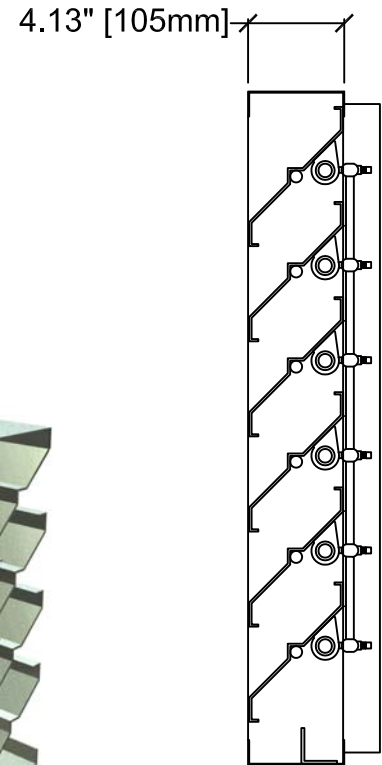
**MAXIMUM SIZE:** 48"w x 72"h [1219mm x 1829mm]  
Larger sizes made in multiple sections.

**OPTIONS:**

- ☐ Flanged Frame (1.5" std.) [38mm]
- ☐ Custom Flange (1", 2", or 3") [25mm, 51mm, or 76mm]
- ☐ Filter Racks (no screen)
- ☐ Hinged Sub Frame
- ☐ Welded Construction
- ☐ Insect Screen (Other Screens Available, See Screen Page)
- ☐ Actuator: See Actuator Selection Chart
- ☐ Aluminum Construction
- ☐ 304 Stainless Steel Construction
- ☐ 316 Stainless Steel Construction
- ☐ Blade Seals ☐ Extended Sill
- ☐ Jamb Seals ☐ Security Bars

**AVAILABLE FINISHES:**

- ☐ Durable Polyester Powder (AAMA 2604)
- ☐ Epoxy Powder
- ☐ Zinc Rich Gray Primer



\*W & H dimensions furnished approximately 1/4" [6.35mm] under size.

Due to continuing research, United Enertech reserves the right to change specifications without notice.

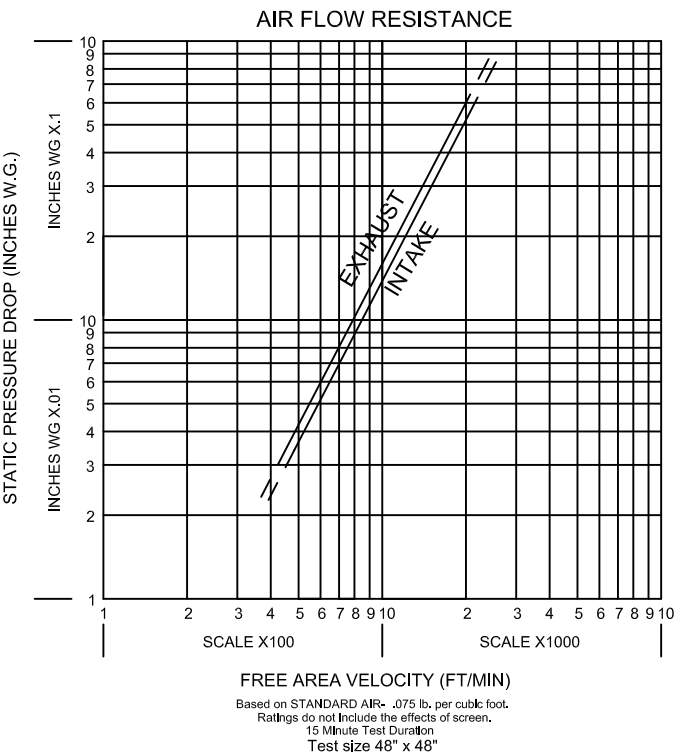


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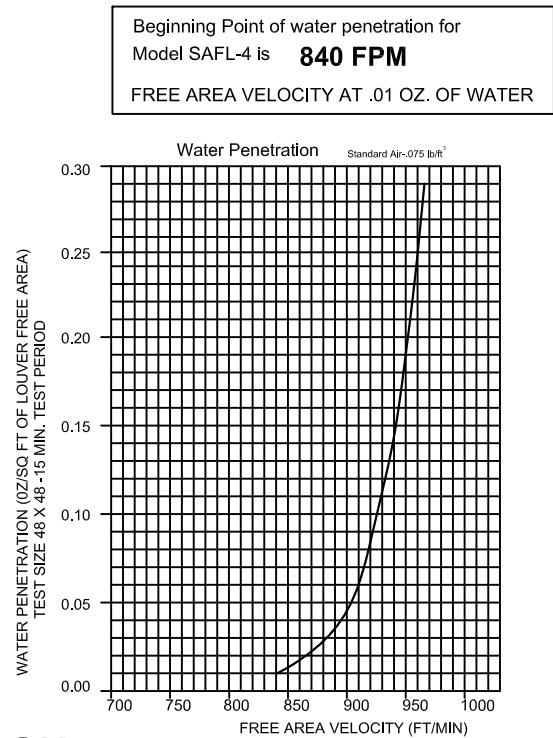
**MODEL SAFL-4 (4" [102mm] ADJUSTABLE STEEL LOUVER)**

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|------------------|-----------------|-----------------------|---------------|---------------------|-------------------|
| DRAWN BY:<br>MHM | DATE:<br>4-6-10 | REV. DATE:<br>4-12-13 | REV. NO.<br>3 | APPROVED BY:<br>BGT | DWG. NO.:<br>A-27 |
|------------------|-----------------|-----------------------|---------------|---------------------|-------------------|

# SAFL-4 LOUVER PERFORMANCE DATA



Model SAFL-4 resistance to airflow varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. See louver selection information.



## LOUVER SELECTION AND APPLICATION

Application of any louver involves selecting an airflow velocity through the louver free area (free area velocity in fpm) that produces an acceptable pressure drop and minimizes carry through of normally encountered rain water.

No louver manufacturer warrants their louver to prevent water penetration under all possible combinations of wind and rain. Water penetration through SAFL-4 begins at approximately 840 FPM free area velocity. Intake air louver selection using free area velocity below 840 FPM is recommended. Louver selection involves the following two steps, and depending on air conditions, either step may come first.

### Select Free Area Velocity:

Using the Airflow Resistance Chart, select a free area velocity that produces an acceptable pressure drop with minimal water penetration. (Water penetration need not be considered when selecting exhaust louvers.)

### Determine Louver Free Area:

Using the free area velocity from the previous step and total CFM, determine Louver Free Area required. Using Louver Free Area Chart, select a louver with the required free area. If louver size is given, determine free area from chart and work backwards to determine maximum airflow. See examples below.

## Free Area Chart (square feet):

| Louver Height Inches | Louver Width in Inches |      |      |      |      |       |       |       |       |       | Louver Height Inches |
|----------------------|------------------------|------|------|------|------|-------|-------|-------|-------|-------|----------------------|
|                      | 8                      | 12   | 18   | 24   | 30   | 36    | 42    | 48    | 54    | 60    |                      |
| 10                   | 0.07                   | 0.11 | 0.19 | 0.26 | 0.34 | 0.41  | 0.49  | 0.56  | 0.64  | 0.71  | 10                   |
| 12                   | 0.13                   | 0.23 | 0.38 | 0.53 | 0.68 | 0.83  | 0.98  | 1.13  | 1.28  | 1.43  | 12                   |
| 18                   | 0.23                   | 0.41 | 0.67 | 0.93 | 1.20 | 1.46  | 1.73  | 1.99  | 2.25  | 2.52  | 18                   |
| 24                   | 0.38                   | 0.67 | 1.10 | 1.54 | 1.97 | 2.40  | 2.84  | 3.27  | 3.70  | 4.14  | 24                   |
| 30                   | 0.48                   | 0.84 | 1.39 | 1.94 | 2.49 | 3.04  | 3.58  | 4.13  | 4.68  | 5.23  | 30                   |
| 36                   | 0.63                   | 1.11 | 1.82 | 2.54 | 3.26 | 3.98  | 4.69  | 5.41  | 6.13  | 6.85  | 36                   |
| 42                   | 0.73                   | 1.28 | 2.11 | 2.95 | 3.78 | 4.61  | 5.44  | 6.27  | 7.11  | 7.94  | 42                   |
| 48                   | 0.88                   | 1.54 | 2.55 | 3.55 | 4.55 | 5.55  | 6.55  | 7.55  | 8.56  | 9.56  | 48                   |
| 54                   | 0.98                   | 1.72 | 2.84 | 3.95 | 5.07 | 6.18  | 7.30  | 8.42  | 9.53  | 10.65 | 54                   |
| 60                   | 1.12                   | 1.98 | 3.27 | 4.55 | 5.84 | 7.12  | 8.41  | 9.70  | 10.98 | 12.27 | 60                   |
| 66                   | 1.22                   | 2.16 | 3.56 | 4.96 | 6.36 | 7.76  | 9.16  | 10.56 | 11.96 | 13.36 | 66                   |
| 72                   | 1.37                   | 2.42 | 3.99 | 5.56 | 7.13 | 8.70  | 10.27 | 11.84 | 13.41 | 14.98 | 72                   |
| 78                   | 1.47                   | 2.60 | 4.28 | 5.96 | 7.65 | 9.33  | 11.02 | 12.70 | 14.38 | 16.07 | 78                   |
| 84                   | 1.62                   | 2.86 | 4.71 | 6.57 | 8.42 | 10.27 | 12.13 | 13.98 | 15.83 | 17.69 | 84                   |
| 90                   | 1.72                   | 3.03 | 5.00 | 6.97 | 8.94 | 10.91 | 12.87 | 14.84 | 16.81 | 18.78 | 90                   |
| 96                   | 1.87                   | 3.30 | 5.43 | 7.57 | 9.71 | 11.85 | 13.98 | 16.12 | 18.26 | 20.40 | 96                   |