

# ELF81S30

## Stationary Louver Extruded Aluminum



### APPLICATION

The ELF81S30 is a 4" deep, extruded aluminum, architecturally styled, stationary louver with a hidden mullion option which allows for a continuous appearance. This louver is designed to protect air intake and exhaust openings on exterior walls.

### STANDARD CONSTRUCTION

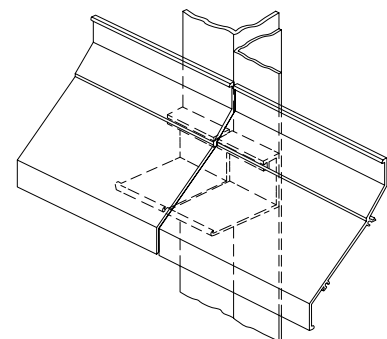
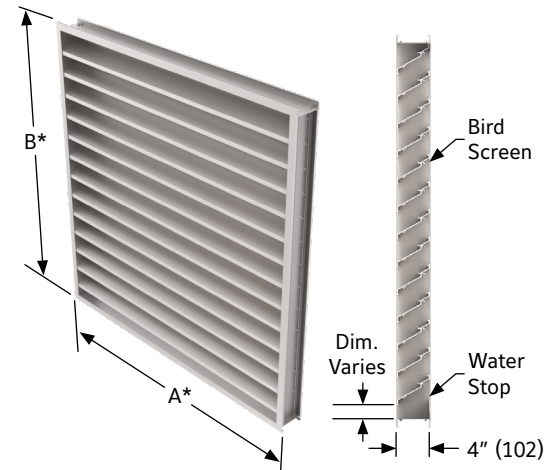
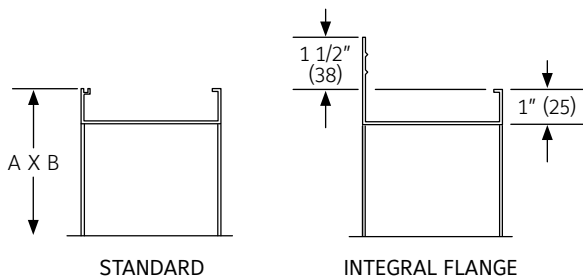
|                                      |                                                                                                                                                                                                                  |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Frame</b>                         | 4" (102) deep, 6063T6 extruded aluminum with .080" (2) wall thickness. Caulking slots provided.                                                                                                                  |
| <b>Blades</b>                        | 6063T6 extruded aluminum with .080" (2) nominal wall thickness. K-style blades (formerly "stormproof") are positioned at 30° angle and spaced approximately 3 1/4" (83) center to center.                        |
| <b>Screen</b>                        | 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.                                                                        |
| <b>Finish</b>                        | Mill.                                                                                                                                                                                                            |
| <b>Minimum Size</b>                  | 6"w x 8"h (152 x 203).                                                                                                                                                                                           |
| <b>Approximate Shipping Weight</b>   | 4 lbs. per sq. ft. (20 kg/m²).                                                                                                                                                                                   |
| <b>Maximum Factory Assembly Size</b> | Shall be 75 (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).<br>Louvers larger than the maximum factory assembly size will require field assembly of smaller sections. |
| <b>Supports</b>                      | Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.                                                        |

Consult Ruskin for additional information.

### FEATURES

- ▶ 53% free area
- ▶ Architecturally styled, hidden mullions for attractive appearance
- ▶ All aluminum construction for high resistance to corrosion
- ▶ Outstanding durability and low maintenance
- ▶ Low pressure drop with high free area

### FRAME CONSTRUCTION



Architectural Style  
Hidden Mullion

### VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- ▶ Extended sill
  - ▶ Hinged frame
  - ▶ Front or rear security bars
  - ▶ Filter racks
  - ▶ Installation angles
  - ▶ A variety of bird and insect screens
  - ▶ Optional finishes available at additional cost. Please see [Paint Finishes and Color Guide](#) and [Finish Type Model Chart](#) for more details.
- Contact [louversales@ruskin.com](mailto:louversales@ruskin.com) with questions
- Consult Ruskin for other special requirements.

#### NOTES:

- Dimensions in parenthesis ( ) indicate millimeters.
- \*Units furnished 1/4" (6) smaller than given opening dimensions.

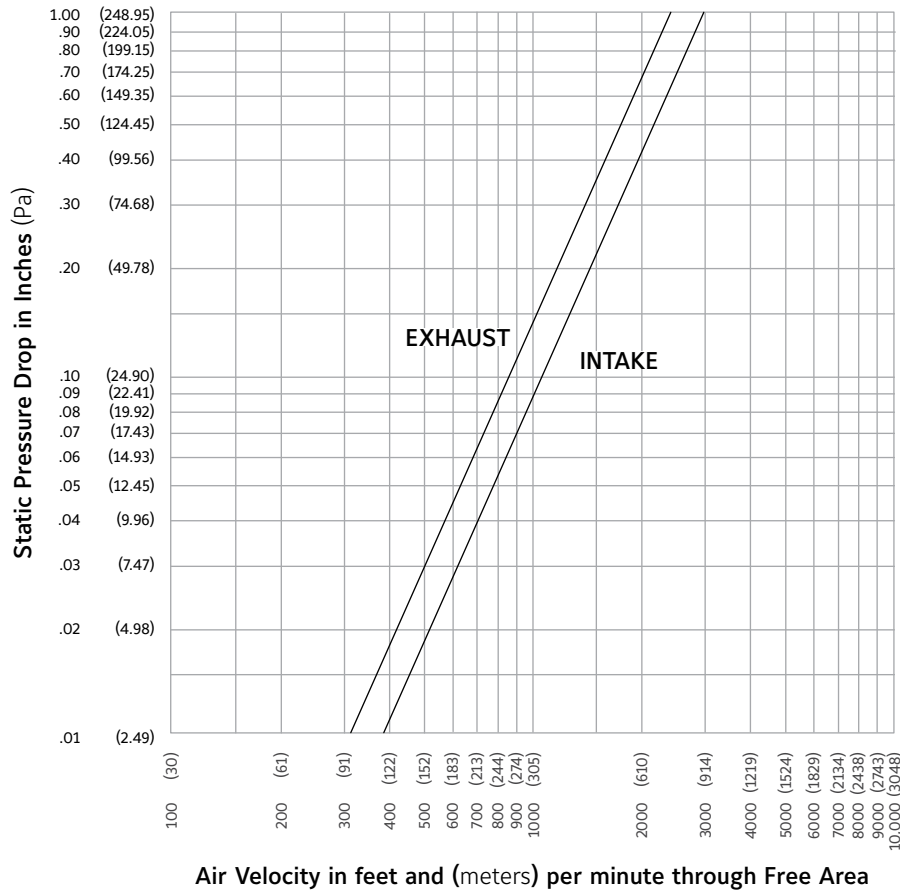
## FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of ELF81S30.

### Width – Inches (Meters)

| Height – Inches (Meters) |      | 6    | 12   | 18    | 24    | 30    | 36    | 42    | 48    | 54    | 60    | 66    | 72    | 78    | 84    | 90    | 96    | 102   | 108   | 114   | 120   |
|--------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                          |      | 0.15 | 0.30 | 0.45  | 0.60  | 0.75  | 0.90  | 1.05  | 1.20  | 1.35  | 1.50  | 1.65  | 1.80  | 1.95  | 2.10  | 2.25  | 2.40  | 2.55  | 2.70  | 2.85  | 3.00  |
|                          | 8    | 0.06 | 0.15 | 0.24  | 0.34  | 0.43  | 0.52  | 0.62  | 0.71  | 0.80  | 0.90  | 0.99  | 1.08  | 1.17  | 1.27  | 1.36  | 1.45  | 1.55  | 1.64  | 1.73  | 1.82  |
|                          | 12   | 0.13 | 0.33 | 0.54  | 0.74  | 0.95  | 1.15  | 1.36  | 1.56  | 1.76  | 1.97  | 2.17  | 2.38  | 2.58  | 2.79  | 2.99  | 3.19  | 3.40  | 3.60  | 3.81  | 4.01  |
|                          | 18   | 0.22 | 0.57 | 0.91  | 1.26  | 1.60  | 1.95  | 2.29  | 2.64  | 2.98  | 3.33  | 3.68  | 4.02  | 4.37  | 4.71  | 5.06  | 5.40  | 5.75  | 6.09  | 6.44  | 6.79  |
|                          | 24   | 0.31 | 0.80 | 1.28  | 1.77  | 2.26  | 2.74  | 3.23  | 3.72  | 4.20  | 4.69  | 5.18  | 5.66  | 6.15  | 6.64  | 7.12  | 7.61  | 8.10  | 8.59  | 9.07  | 9.56  |
|                          | 30   | 0.40 | 1.03 | 1.66  | 2.28  | 2.91  | 3.54  | 4.17  | 4.80  | 5.42  | 6.05  | 6.68  | 7.31  | 7.94  | 8.56  | 9.19  | 9.82  | 10.45 | 11.08 | 11.70 | 12.33 |
|                          | 36   | 0.52 | 1.34 | 2.16  | 2.98  | 3.81  | 4.63  | 5.45  | 6.27  | 7.09  | 7.91  | 8.73  | 9.55  | 10.37 | 11.20 | 12.02 | 12.84 | 13.66 | 14.48 | 15.30 | 16.12 |
|                          | 42   | 0.61 | 1.57 | 2.54  | 3.50  | 4.46  | 5.42  | 6.39  | 7.35  | 8.31  | 9.27  | 10.23 | 11.20 | 12.16 | 13.12 | 14.08 | 15.05 | 16.01 | 16.97 | 17.93 | 18.90 |
|                          | 48   | 0.70 | 1.80 | 2.91  | 4.01  | 5.12  | 6.22  | 7.32  | 8.43  | 9.53  | 10.63 | 11.74 | 12.84 | 13.94 | 15.05 | 16.15 | 17.25 | 18.36 | 19.46 | 20.57 | 21.67 |
|                          | 54   | 0.79 | 2.04 | 3.28  | 4.52  | 5.77  | 7.01  | 8.26  | 9.50  | 10.75 | 11.99 | 13.24 | 14.48 | 15.73 | 16.97 | 18.22 | 19.46 | 20.71 | 21.95 | 23.20 | 24.44 |
|                          | 60   | 0.88 | 2.27 | 3.65  | 5.04  | 6.42  | 7.81  | 9.20  | 10.58 | 11.97 | 13.35 | 14.74 | 16.13 | 17.51 | 18.90 | 20.29 | 21.67 | 23.06 | 24.44 | 25.83 | 27.22 |
|                          | 66   | 1.00 | 2.58 | 4.16  | 5.74  | 7.32  | 8.90  | 10.48 | 12.06 | 13.64 | 15.21 | 16.79 | 18.37 | 19.95 | 21.53 | 23.11 | 24.69 | 26.27 | 27.85 | 29.43 | 31.01 |
|                          | 72   | 1.09 | 2.81 | 4.53  | 6.25  | 7.97  | 9.69  | 11.41 | 13.13 | 14.86 | 16.58 | 18.30 | 20.02 | 21.74 | 23.46 | 25.18 | 26.90 | 28.62 | 30.34 | 32.06 | 33.78 |
|                          | 78   | 1.18 | 3.04 | 4.91  | 6.77  | 8.63  | 10.49 | 12.35 | 14.21 | 16.07 | 17.94 | 19.80 | 21.66 | 23.52 | 25.38 | 27.24 | 29.11 | 30.97 | 32.83 | 34.69 | 36.55 |
|                          | 84   | 1.27 | 3.27 | 5.28  | 7.28  | 9.28  | 11.29 | 13.29 | 15.29 | 17.29 | 19.30 | 21.30 | 23.30 | 25.31 | 27.31 | 29.31 | 31.31 | 33.32 | 35.32 | 37.32 | 39.33 |
|                          | 90   | 1.39 | 3.59 | 5.79  | 7.98  | 10.18 | 12.37 | 14.57 | 16.77 | 18.96 | 21.16 | 23.35 | 25.55 | 27.74 | 29.94 | 32.14 | 34.33 | 36.53 | 38.72 | 40.92 | 43.12 |
|                          | 96   | 1.48 | 3.82 | 6.16  | 8.50  | 10.83 | 13.17 | 15.51 | 17.84 | 20.18 | 22.52 | 24.85 | 27.19 | 29.53 | 31.87 | 34.20 | 36.54 | 38.88 | 41.21 | 43.55 | 45.89 |
|                          | 102  | 1.57 | 4.05 | 6.53  | 9.01  | 11.49 | 13.97 | 16.44 | 18.92 | 21.40 | 23.88 | 26.36 | 28.84 | 31.31 | 33.79 | 36.27 | 38.75 | 41.23 | 43.71 | 46.18 | 48.66 |
|                          | 108  | 1.66 | 4.28 | 6.90  | 9.52  | 12.14 | 14.76 | 17.38 | 20.00 | 22.62 | 25.24 | 27.86 | 30.48 | 33.10 | 35.72 | 38.34 | 40.96 | 43.58 | 46.20 | 48.82 | 51.44 |
| 114                      | 1.75 | 4.51 | 7.27 | 10.04 | 12.80 | 15.56 | 18.32 | 21.08 | 23.84 | 26.60 | 29.36 | 32.12 | 34.88 | 37.64 | 40.40 | 43.17 | 45.93 | 48.69 | 51.45 | 54.21 |       |
| 120                      | 1.88 | 4.83 | 7.78 | 10.74 | 13.69 | 16.64 | 19.60 | 22.55 | 25.51 | 28.46 | 31.41 | 34.37 | 37.32 | 40.28 | 43.23 | 46.18 | 49.14 | 52.09 | 55.04 | 58.00 |       |

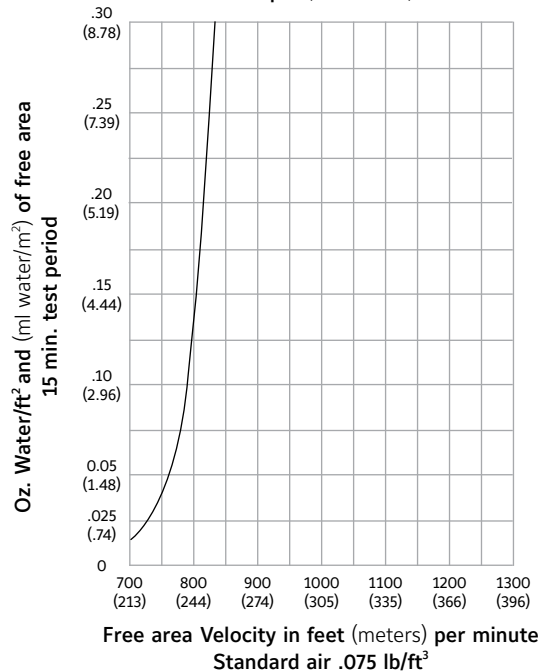
## PRESSURE DROP



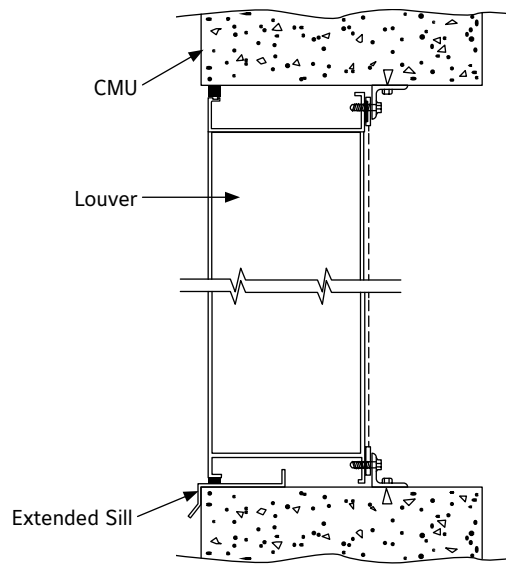
Ratings do not include the effect of a bird screen.

## WATER PENETRATION GRAPH

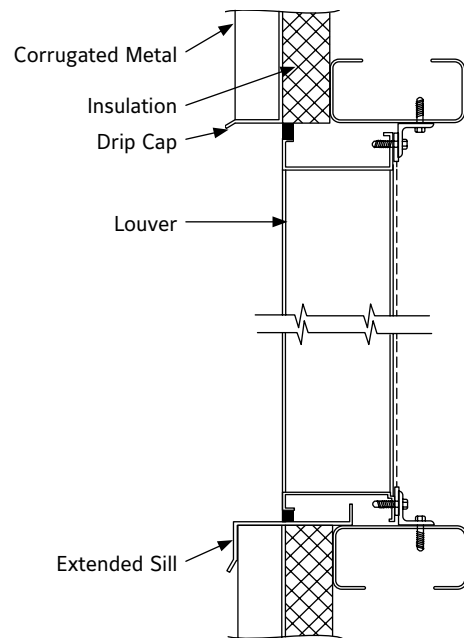
**Water penetration**  
**Test size 48" wide X 48" high (1219 X 1219)**  
**Beginning point of water penetration at .01 oz. /sq. ft. is**  
**644 fpm (196 m/min).**



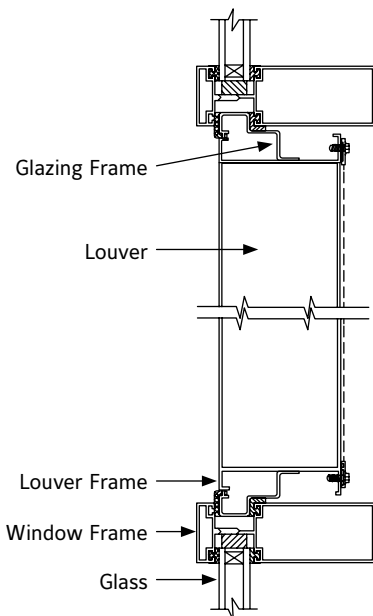
## TYPICAL INSTALLATION DETAILS



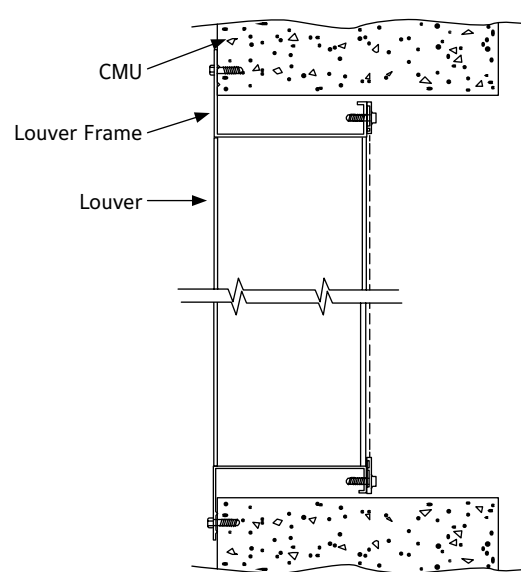
**MASONRY WALL**



**METAL PANEL WALL**

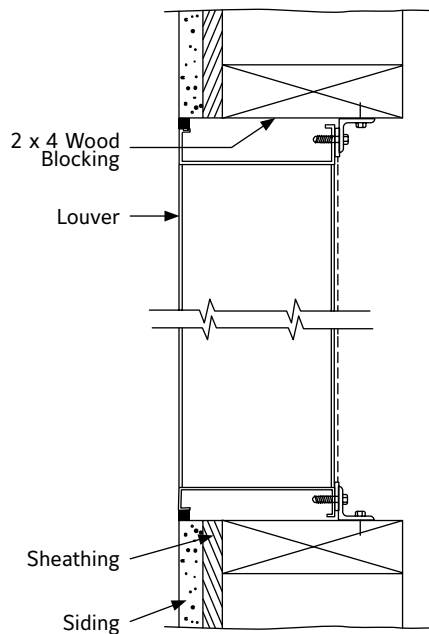


**GLAZING FRAME**

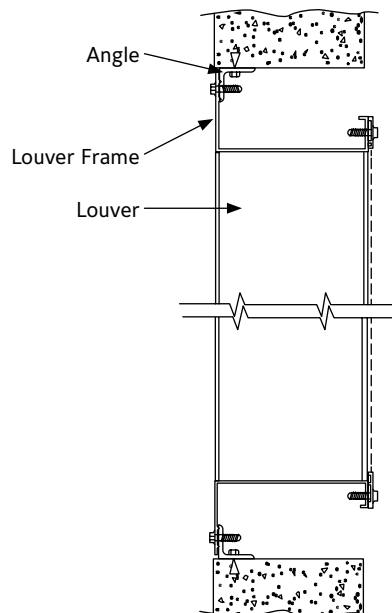


**FLANGE MOUNT**

## TYPICAL INSTALLATION DETAILS



**WOOD INSTALLATION**



**ANGLE SUBFRAME**

Accessories at additional cost.

## SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type entirely contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 30 lbs. per sq. ft. (1.44 kPa) (equivalent of a 110 mph wind (177 KPH) – specifier may substitute any loading required).

Louvers shall be architectural style with continuous appearing stationary blades – intermediate support mullions shall not interrupt blade appearance when viewed from outside of louver.

Louvers shall be Ruskin Model ELF81S30 6063T6 extruded aluminum alloy construction as follows:

Frame: .080" (2) wall thickness.

Blades: .080" (2) wall thickness positioned at 30° angle and spaced approximately 3 1/4" (83) center to center.

Screen: 3/4" x .051" (19 x 1) expanded, flattened aluminum in removable frame.

Finish: Select finish specification from Ruskin Finishes Brochure.

### **i** LINKS TO IMPORTANT DOCUMENTS

#### Document Title

Paint Finishes and Color Guide

Limited Warranty Document



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