

## EXTRUDED ALUMINUM NARROW PROFILE LOUVER

|  |                                   |
|--|-----------------------------------|
| <b>Visible Mullion Louver Type</b> .....   | AC505                             |
| <b>Continuous Blade Louver Type</b> .....  | CB505                             |
| <b>Material</b> .....  | Extruded Aluminum (Alloy 6063-T5) |
| <b>Stationary Blade</b> .....  | 0.125 in. (3.2 mm)                |
| <b>Frame</b> .....   | 0.063 in. (1.6 mm)                |
| <b>Louver Depth</b> .....  | 1.5 in. (38.1 mm)                 |
| <b>Blade Angle</b> .....   | 30°                               |
| <b>Free Area – 4 ft. x 4 ft. Unit</b> .....  | 10.92 sq. ft. (1.01 sq m)         |
| <b>Percent Free Area</b> .....   | 68.3%                             |
| <b>Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H<sub>2</sub>O/sq. ft. Free Area</b> ..... | not rated                         |
| <b>Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit</b> .....                     | not rated                         |
| <b>Pressure Drop at Beginning Point of Water Penetration</b> .....   | not rated                         |



### RECOMMENDED SPECIFICATION

#### GENERAL

Furnish and install where indicated on plans or described in schedules Louver Type AC505 (or CB505) as designed and manufactured by The Airolite Company LLC, Schofield, Wisconsin. Louvers shall be furnished with bird screen, insect screen, supports, installation hardware and finishes as specified and as required for a complete installation.

#### SUBMITTALS

Manufacturer shall submit shop drawings incorporating key plans, elevations, sections and details showing profiles, angles and spacing of louver blades and frames; unit dimensions related to wall openings and construction; and, anchorage details and locations. Submit theoretical calculations prepared by a professional engineer specializing in the application of welding technology demonstrating that each fillet weld joining blade and frame members will withstand a minimum of 526 pounds of force in shear. Provide samples of manufacturer's finish and color charts showing the full range of colors available.

#### PRODUCTS

Louvers shall be Airolite Louver Type AC505 with visible vertical mullions (or Louver Type CB505 with concealed vertical mullions). Louvers shall be 1-1/2-inches (38.1 mm) deep and assembled entirely from extruded aluminum components. Blades shall be 0.125-inch (3.18 mm) and frames shall be 0.063-inch (1.6 mm) thick extruded aluminum, alloy 6063-T5. Blades shall be stationary, horizontal and spaced 1-inch (25.4 mm) on center.

#### ALL-WELDED ASSEMBLY

Join stationary blade and frames and frame members with fillet welds concealed from view, unless the size of the louver makes bolted connections between louver sections necessary. Louver blades shall be joined to each jamb frame with one fillet weld produced with the Pulsed Gas Metal Arc Welding (GMAW/Mig) process. Each weld shall be a minimum of 1-inch (25.4 mm) in length with a minimum 1/8-inch (3.175 mm) leg. Frames shall be joined at each corner with a full-length GMAW fillet weld with a minimum 1/8-inch (3.175 mm) throat.

#### STRUCTURAL DESIGN CRITERIA

Manufacturer shall design and furnish all supports required to withstand a wind force of not less than 25 pounds per square foot. Louvers larger than 84-inches wide x 72-inches high will be fabricated and installed in multiple sections. Louver blades, frames, mullions and anchorages shall be demonstrated to withstand the specified wind design load.

#### PERFORMANCE RATINGS

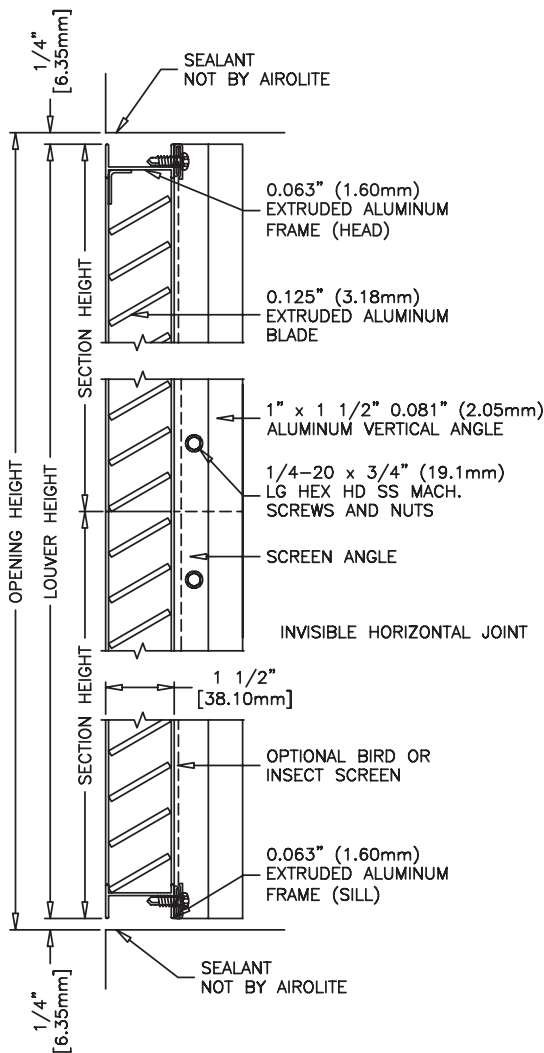
|   |  |
|---|--|
| FREE AREA:  | 10.92 Square Feet (1.01 m <sup>2</sup> ) |
| MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:   | not rated                                |
| MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration: | not rated                                |
| PRESSURE DROP at Beginning Point of Water Penetration:                | not rated                                |

See page 4 for complete finish options

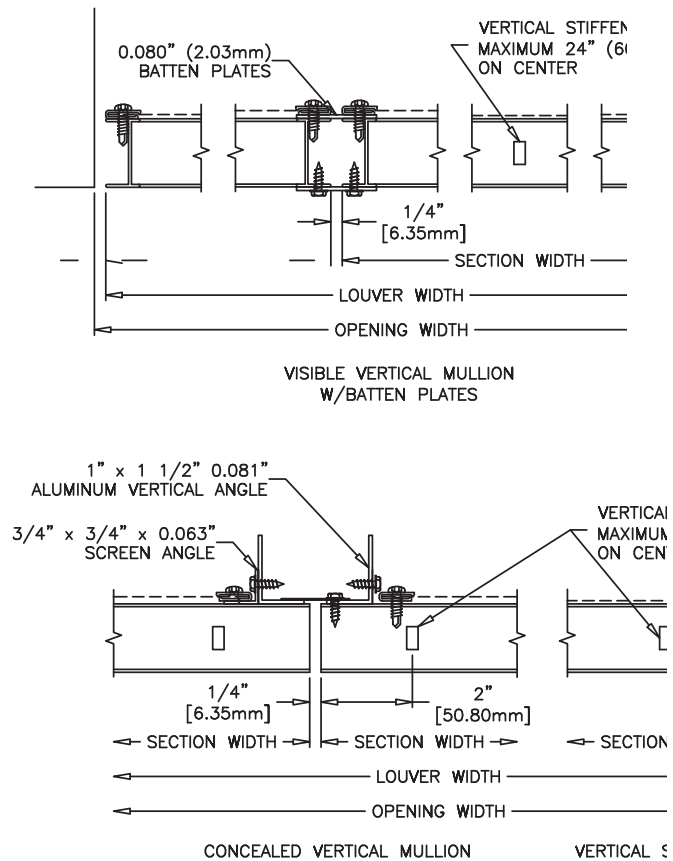
# LOUVER TYPE AC505 PRODUCT DESCRIPTION & DETAILS

**AIROLITE LOUVER TYPE AC505** is a versatile, horizontal blade, 1-1/2-inch (38.1 mm) deep architectural louver suitable for applications where optimum free area is required to support maximum air volume flow rates and weather protection is not a concern. Louver Type AC505 is available with both visible and concealed vertical mullions to complement and enhance exterior façade elements. Specify Louver Type AC505 with visible vertical mullions; and, Louver Type CB505 with concealed vertical mullions. Please contact your local Airolite representative or the factory for assistance with the layout and design of support systems when required.

## VERTICAL SECTION DETAIL



## PLAN SECTION DETAIL



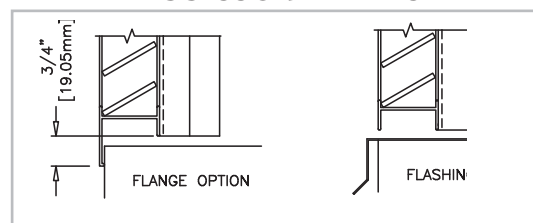
### Minimum Section Size:

12 in. (31 cm) W x 12 in. (31 cm) H

### Maximum Section Size:

84 in. (213 cm) W x 72 in. (183 cm) H

## ACCESSORY ITEMS

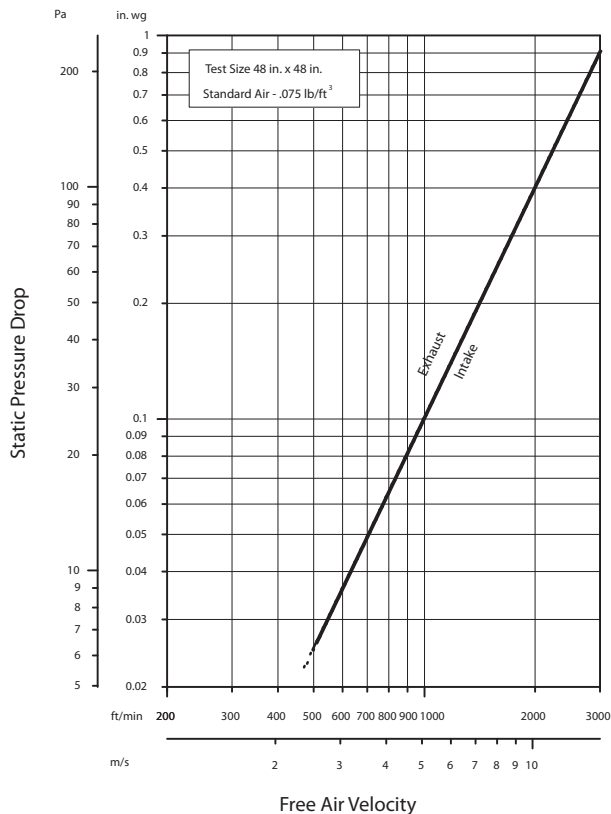


# LOUVER TYPE AC505 PERFORMANCE RATINGS

## FREE AREA CHART - in square feet

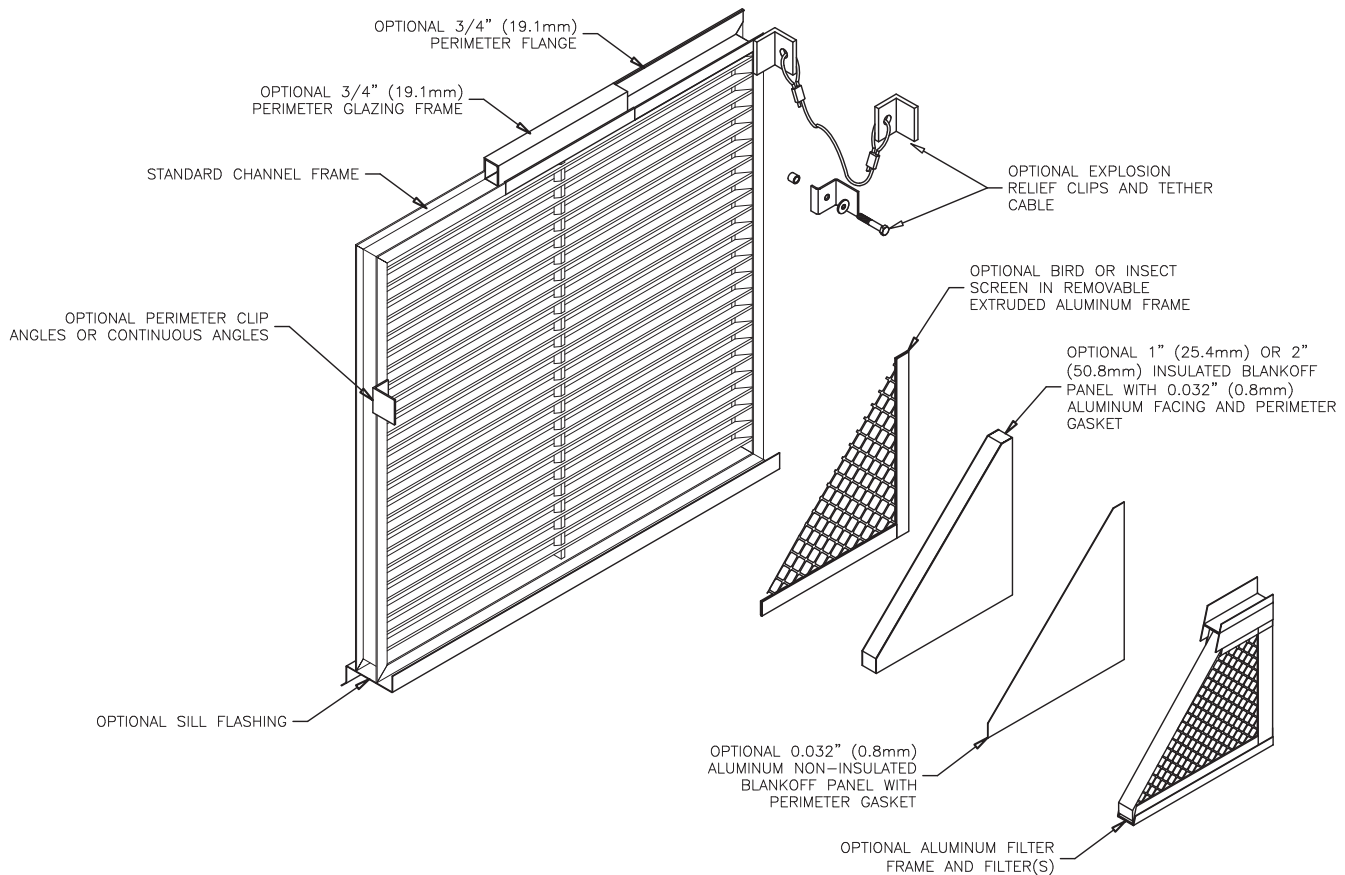
| Louver Height Inches | Louver Width in Inches |      |       |       |       |       |       |
|----------------------|------------------------|------|-------|-------|-------|-------|-------|
|                      | 12                     | 24   | 36    | 48    | 60    | 72    | 84    |
| 12                   | 0.55                   | 1.17 | 1.78  | 2.40  | 3.00  | 3.63  | 4.23  |
| 24                   | 1.20                   | 2.56 | 3.87  | 5.24  | 6.55  | 7.92  | 9.23  |
| 36                   | 1.85                   | 3.95 | 5.97  | 8.08  | 10.10 | 12.21 | 14.23 |
| 48                   | 2.49                   | 5.34 | 8.07  | 10.92 | 13.65 | 16.50 | 19.23 |
| 60                   | 3.14                   | 6.73 | 10.17 | 13.76 | 17.21 | 20.80 | 24.24 |
| 72                   | 3.79                   | 8.12 | 12.27 | 16.60 | 20.76 | 25.09 | 29.24 |

## AIRFLOW RESISTANCE (Standard Air - .075 lb./ft.<sup>3</sup>)



Louver Type AC505 resistance to airflow (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size.

# LOUVER TYPE AC505 METHOD OF INSTALLATION & ACCESSORY OPTIONS



## FINISHES (Select one of the following)

**ACRYLIC ENAMEL:** Louvers shall be cleaned, pretreated and FINISHED-AFTER-ASSEMBLY with an oven-cured thermosetting acrylic enamel finish that meets or exceeds the performance requirements of AAMA 2603, "Voluntary Specification Performance Requirements and Test Procedures for Pigmented Organic Coatings."

**2-COAT FLUOROPOLYMER:** Louvers shall be cleaned, pretreated and FINISHED-AFTER-ASSEMBLY with an inhibitive primer and oven-cured Kynar 500® / Hylar 5000® resin coating with minimum 1.2 mils dry-film coating thickness that meets or exceeds the performance requirements of AAMA 2605, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels."

**3-COAT FLUOROPOLYMER:** Louvers shall be cleaned, pretreated and FINISHED-AFTER-ASSEMBLY with an inhibitive primer and oven-cured Kynar 500® / Hylar 5000® resin coating with minimum 2.0 mils dry-film coating thickness that meets or exceeds the performance requirements of AAMA 2605, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels."

**CLEAR ANODIZE:** Louvers shall be FINISHED-AFTER-ASSEMBLY with a Class I clear anodized coating (AA-M10C22A41) that complies with the performance requirements of AAMA Specification 611-98, "Voluntary Specification for Anodized Architectural Aluminum."

**COLOR ANODIZE:** Louvers shall be FINISHED-AFTER-ASSEMBLY with a Class I electrolytically color anodized coating (AA-M10C22A42/44) that complies with the performance requirements of AAMA Specification 611-98, "Voluntary Specification for Anodized Architectural Aluminum." Color shall be (select one): Champagne, Light Bronze, Medium Bronze, Dark Bronze, Extra Dark Bronze or Black Anodize.



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Submittal AC505 May 2006, Revision 3  
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**THE ALL-WELDED ADVANTAGE** 