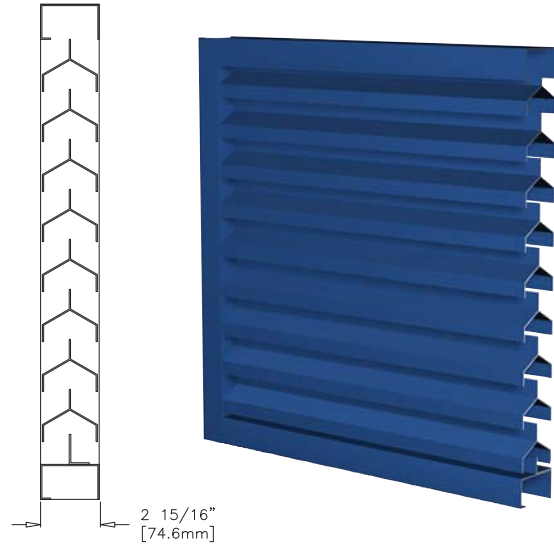


## SIGHTPROOF LOUVER

<b>Visible Mullion Louver Type</b> .....	T5833
<b>Concealed Mullion Louver Type</b> .....	CB5833
<b>Material</b> .....	Extruded Aluminum (Alloy 6063-T5)
<b>Stationary Blade</b> .....	0.063 in. (1.60 mm)
<b>Frame</b> .....	0.063 in. (1.60 mm)
<b>Louver Depth</b> .....	2 15/16 in. (74.61 mm)
<b>Blade Angle</b> .....	120°
<b>Free Area – 4 ft. x 4 ft. Unit</b> .....	.699 sq. ft. (0.65 sq m)
<b>Percent Free Area</b> .....	43.7%
<b>Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H<sub>2</sub>O/sq. ft. Free Area</b> .....	540 fpm (2.74 m/s)
<b>Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit</b> .....	3,775 cfm (1.78 m <sup>3</sup> /s)
<b>Pressure Drop at Beginning Point of Water Penetration</b> .....	0.18 in. H <sub>2</sub> O (0.045 kPa)



## RECOMMENDED SPECIFICATION

### GENERAL

Furnish and install where indicated on plans or described in schedules Airlite Louver Type T5833 (or CB5833) as designed and manufactured by The Airlite 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. For each type of product specified, submit free area, air performance and water penetration ratings determined in accordance with AMCA Standard 500-L.

### PRODUCTS

Louvers shall be sightproof Louver Type T5833 with visible vertical mullions (or Louver Type CB5833 with concealed vertical mullions). Louvers shall be 2-15/16-inches (74.61 mm) deep and assembled entirely from extruded aluminum components. Blades and frames shall be 0.063-inch (1.8 mm) thick aluminum, alloy 6063-T5. Blades shall be horizontal, inverted-V type and spaced 2-1/2-inches (63.5 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 a minimum of 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 60-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:	6.99 Square Feet (0.65 m <sup>2</sup> )
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	540 fpm (2.74 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	3,775 cfm (1.78 m <sup>3</sup> /s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.18 in. H <sub>2</sub> O (0.045 kPa)

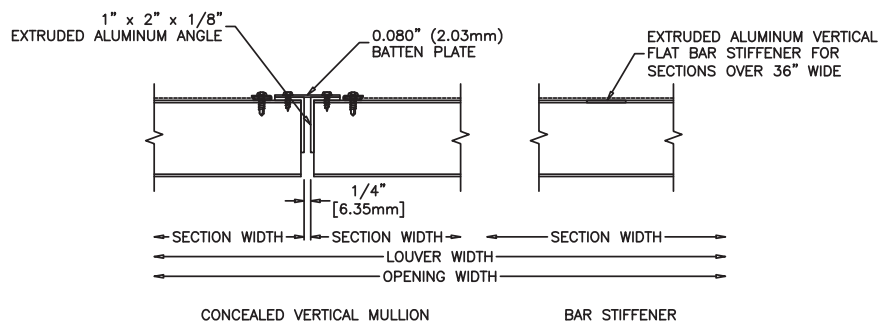
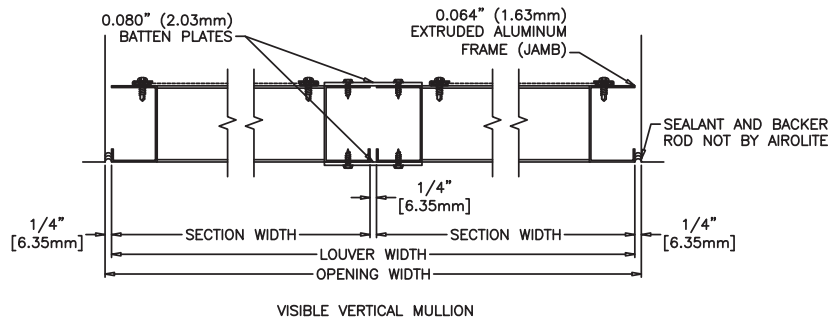
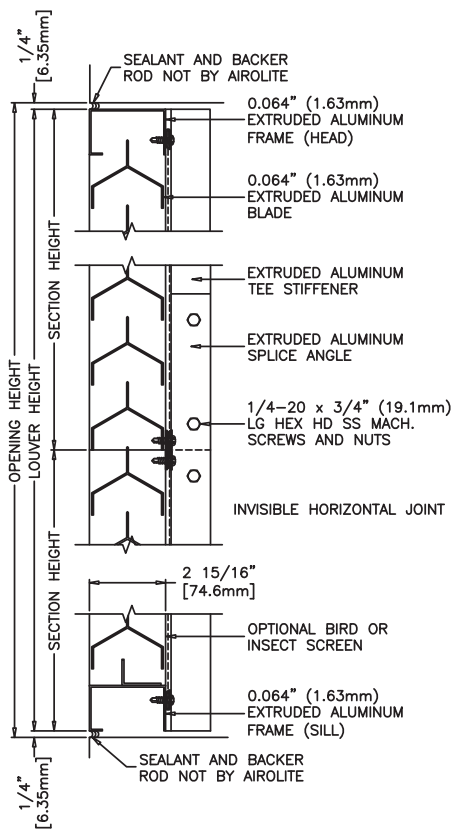
See page 4 for complete finish options

# LOUVER TYPE T5833 PRODUCT DESCRIPTION & DETAILS

**AIROLITE LOUVER TYPE T5833** is a 2 15/16-inch deep, extruded aluminum, sightproof louver. This design is especially suitable for applications with narrow or short openings that require greater free area than a four or six-inch deep sightproof louver can provide. The inverted V-blade is 100% sightproof when viewed from any orientation and provides additional strength and durability for applications at grade or exposed to abuse. Specify Louver Type T5833 with visible vertical mullions; and, Louver Type T5833 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



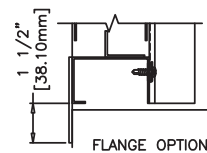
## ACCESSORY ITEMS

### Minimum Section Size:

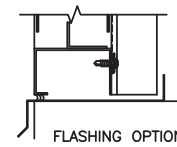
12 in. (30 cm) W x 12 in. (30 cm) H

### Maximum Section Size:

60 in. (152 cm) W x 72 in. (183 cm) H



FLANGE OPTION



FLASHING OPTION

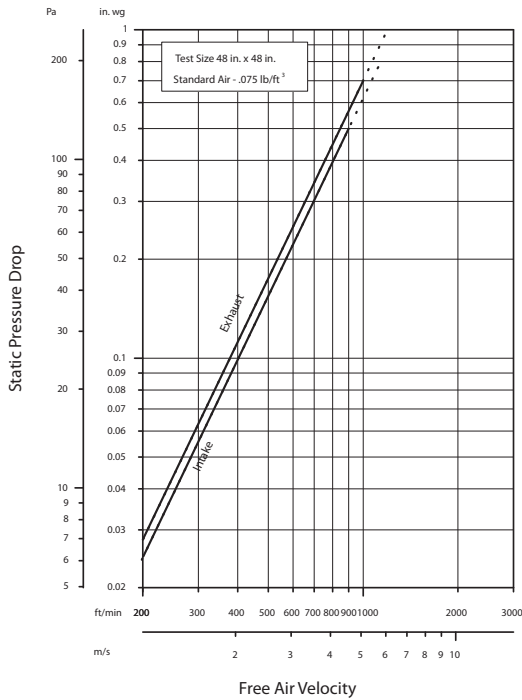
# LOUVER TYPE T5833 PERFORMANCE RATINGS

## FREE AREA CHART - in square feet

Louver Height Inches	Louver Width in Inches					
	12	24	36	48	60	72
12	0.27	0.65	1.04	1.42	1.80	2.18
24	0.63	1.53	2.42	3.32	4.21	5.11
36	0.99	2.38	3.77	5.16	6.55	7.94
48	1.34	3.22	5.10	6.99	8.87	10.76
60	1.71	4.11	6.52	8.93	11.33	13.74
72	2.08	5.02	7.96	10.90	13.84	16.78
84	2.45	5.90	9.35	12.80	16.25	19.71
96	2.80	6.75	10.69	14.64	18.59	22.54
108	3.15	7.59	12.03	16.48	20.92	25.36
120	3.52	8.48	13.45	18.41	23.38	28.34

## AIRFLOW RESISTANCE

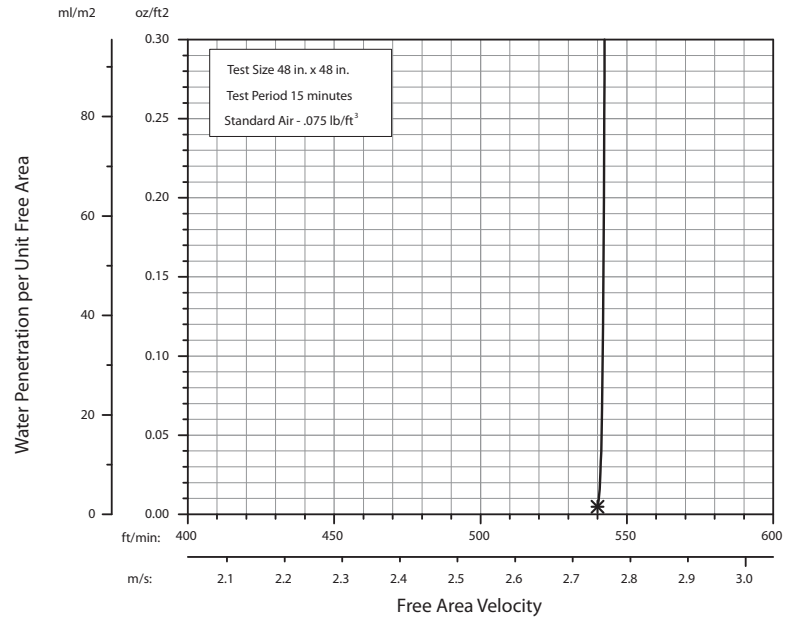
(Standard Air - .075 lb./ft.<sup>3</sup>)



Louver Type T5833 resistance to airflow is shown with louver blades fully open. Resistance (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.

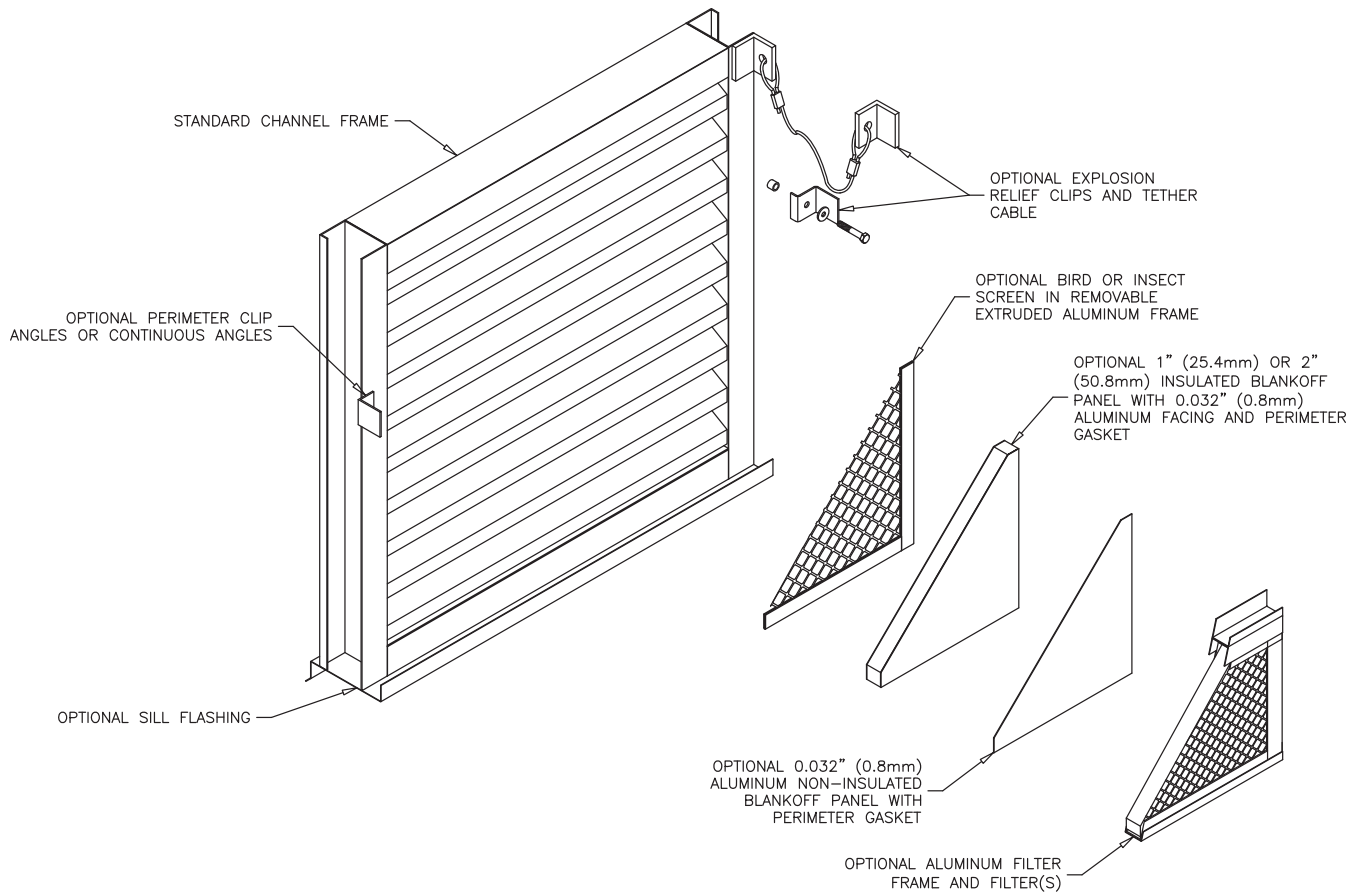
## WATER PENETRATION

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



The AMCA Water Penetration Test provides a method for comparing various louver models and designs as to their efficiency in resisting the penetration of rainfall under specific laboratory test conditions. The point of zero water penetration is defined as that velocity where the water penetration curve projects through .01 oz. of water (penetration) per sq. ft. of louver free area. **\*The beginning point of water penetration for Louver Type T5833 is 540 fpm free area velocity.** These performance ratings do not guarantee a louver to be weatherproof or stormproof and should be used in combination with other factors including good engineering judgement in selecting louvers.

# LOUVER TYPE T5833 METHOD OF INSTALLATION & ACCESSORY OPTIONS



## FINISHES (Select one of the following)

**ACRYLIC ENAMEL:** Louvers shall be cleaned, pretreated and Finished 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 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 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 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 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.



P.O. Box 410, 525 Western Road, Schofield, WI 54476-0410 USA  
715.841.8757 • fax 715.841.8773 • www.airolite.com

Submittal T5833 June 2006, Revision 4  
Copyright ©2006 The Airolite Company, LLC

The Airolite Company, LLC reserves the right to make product changes.

**THE ALL-WELDED ADVANTAGE**