

SCH401 - RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules Storm Class™ Louver Type SCH401 as designed and manufactured by The Aiolite 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, water penetration and wind-driven rain ratings determined in accordance with AMCA Standard 500-L 99 and licensed under the AMCA Certified Ratings Program.

PRODUCTS

Louvers shall be Storm Class™ type and rated to resist water penetration under wind-driven rain conditions. Louvers shall be 4-inches (101.6 mm) deep and assembled entirely from extruded aluminum components. Frames shall be 0.081-inch (2 mm) thick aluminum and blades shall be 0.063-inch (1.6 mm) thick aluminum, alloy 6063-T5. Blades shall be horizontal, inverted-V type with a center hook and spaced 1.875-inches (47.6 mm) on center.

OPTIONAL WELDED ASSEMBLY

Join stationary blade, head and jamb frames 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 two fillet welds 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) leg.

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 (213 cm) wide x 120-inches (305 cm) high or 120-inches (305 cm) wide x 84-inches (213 cm) 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:	6.72 Square Feet (0.63 m ²)
MINIMUM FREE AREA VELOCITY	
at Beginning Point of Water Penetration:	1,250 fpm (6.35 m/s)
MINIMUM AIR VOLUME FLOW RATE	
at Beginning Point of Water Penetration:	8,400 cfm (3.96 m ³ /s)
MAXIMUM STATIC PRESSURE	
at Beginning Point of Water Penetration:	0.30 in. H ₂ O (0.07 kPa)