K638HP/CB638HP - RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules drain-able Louver Type K638HP (or CB638HP) 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. For each type of product specified, submit free area, air performance and water penetration ratings.

PRODUCTS

Louvers shall be drainable Louver Type K638HP with visible vertical mullions (or Louver Type CB638HP with concealed vertical mullions). Louvers shall be 4-inches (101.6 mm) deep and assembled entirely from extruded aluminum components. Blades and frames shall be 0.081-inch (2.0 mm) thick extruded aluminum, alloy 6063-T5. Blades shall be stationary, non-drainable, and spaced 4,/03-inches (104.8 mm) on center. Head and jamb frame members shall incorporate drainable gutters to provide resistance to water penetration.

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 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) 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 84-inches wide x 120-inches high or 120-inches wide by 84-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:	8.49 Square Feet (0.79 m^2)
MINIMUM FREE AREA VELOCITY	
at Beginning Point of Water Penetration:	934 fpm (4.74 m/s)
MINIMUM AIR VOLUME FLOW RATE	
at Beginning Point of Water Penetration:	7,960 cfm (3.75 m^3/s)
MAXIMUM STATIC PRESSURE	
at Beginning Point of Water Penetration:	0.14 in. H_2O (0.035 kPa)