T9106/9106/CB9106/FCB9106 - RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules Acoustic Louver Type T9106 designed and manufactured by The Airolite Company LLC, Marietta, Ohio. Louvers shall be furnished with bird screen, insect screen, supports, installation hardware and finishes as specified and as required for a complete installation. If aluminum construction is preferred, specify Louver Type T9106 with visible vertical mullions or Louver Type CB9106 with concealed vertical mullions. If galvanized steel construction is preferred, specify Louver Type 9106 with visible mullions or Louver Type FCB9106 with concealed vertical mullions.

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 99 and licensed under the AMCA Certified Ratings Program.

PRODUCTS

Louvers shall be acoustic type incorporating stationary, parallelogram blades in a single frame. Louvers shall be 6-inches (152.4 mm) deep and assembled entirely from fabricated aluminum components (or select material type from the table above). Blades and frames shall be 0.080-inch (2 mm) thick aluminum, alloy 3003-H32 (or select material thickness and material from the table above). Blades shall be positioned at 45-degrees and spaced 5-inches (127 mm) on center. Each blade and top and bottom frame cavity shall be filled with fiberglass acoustic insulation to absorb the transmission of sound. Acoustic insulation shall be held in place by perforated aluminum panels.

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 3/16-inch (4.76 mm) leg. Frames shall be joined at each corner with a full-length GMAW fillet weld with a minimum 3/16-inch (4.76 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 (100 mph). Louvers larger than 60-inches (152 cm) wide x 96-inches (244 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:	4.89 Square Feet (0.45 m^2)
MINIMUM FREE AREA VELOCITY	
at Beginning Point of Water Penetration:	799 fpm (4.059 m/s)
MINIMUM AIR VOLUME FLOW RATE	
at Beginning Point of Water Penetration:	3,907 cfm (1.84 m^3/s)
MAXIMUM STATIC PRESSURE	
at Beginning Point of Water Penetration:	0.060 in. H_2O (0.016 kPa)