

T9106X - RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules Acoustic Louver Type T9106X 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 certified reports demonstrating that Louver Type T9106X is tested by UL Laboratories Inc in accordance with ASTM E330-02, Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Uniform Static Air Pressure Difference, to a maximum wind design load of +/- 200 psf (9.6 kPa) in compliance with the Florida Building Code. Manufacturer shall submit certified reports demonstrating that Louver Type T9106X achieves a minimum Sound Transmission Classification of 8 when tested by an independent laboratory in accordance with ASTM E90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements, and ASTM E413, Standard Classification for Determination of Sound Transmission Class. 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. 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 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. Blades and frames shall be 0.080-inch (2 mm) thick aluminum, alloy 3003-H32. 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 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 wind forces in accordance with the Florida Building Code. Maximum louver size: 60-inches (1,520 mm) wide x 96-inches (2,438 mm) high. Larger units 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 (4.06 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 ₂ O (0.016 kPa)