



AFG501 - RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules FEMA Louver Type AFG501 as designed and manufactured by The Airlite Company LLC, Schofield, Wisconsin. Louvers shall be AMCA Certified and be a UL Classified Wind-Storm Rated Assembly in accordance with FEMA Guidelines P-320 (2021) and P-361 (2021) storm shelter and safe room standards, and ICC 500 (2020) to static and cyclical design pressures of positive/negative 250 PSF and debris impact of a 15 lb 2 x 4 traveling at 100 MPH. Furnish louvers with bird screen, 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. For each type of product specified, submit free area, air performance, water penetration ratings. Provide samples of manufacturer's finish and color charts showing the standard colors available.

PRODUCTS

Louvers shall be FEMA Louver Type AFG501 with visible mullions and shall be AMCA Certified and a UL Classified Wind-Storm Rated Assembly in accordance with FEMA Guidelines P-320 (2021) and P-361 (2021) storm shelter and safe room standards, and ICC 500 (2020) to static and cyclical design pressures of positive/negative 250 PSF and debris impact of a 15 lb 2 x 4 traveling at 100 MPH. Louvers shall be 5.5-inches (139.7 mm) deep and assembled entirely from extruded and formed aluminum components. Blades and frames shall be 0.25-inch (6.35 mm) thick. Blades shall be horizontal, inverted-V-type.

WELDED ASSEMBLY

Join stationary blade, head, sill and jamb frames with welds concealed from view. Louver blades shall be joined to each jamb frame with fillet welds produced with the Pulsed Gas Metal Arc Welding (GMAW/Mig) process.

STRUCTURAL DESIGN CRITERIA

Manufacturer shall design and furnish all supports required to withstand a wind force of not less than 250 pounds per square foot and tested to comply with FEMA P-320 (2021) and FEMA P-361 (2021) storm shelter and safe room standards, and ICC 500 (2020) for debris impact and static and cyclical pressure resistance. FEMA Grilles may be fabricated and installed as multi-section wide assemblies w/o additional reinforcing. Louver blades, frames, mullions and anchorages shall be demonstrated to withstand the specified wind design load.

PERFORMANCE RATINGS

FREE AREA:	7.60 Square Feet (0.71 m ²)
MINIMUM FREE AREA VELOCITY	
at Beginning Point of Water Penetration:	634 fpm (3.22 m/s)
MINIMUM AIR VOLUME FLOW RATE	
at Beginning Point of Water Penetration:	4,821 cfm (2.28 m ³ /s)
MAXIMUM STATIC PRESSURE	
at Beginning Point of Water Penetration:	0.11 in. H ₂ O (0.027 kPa)