

LOUVER TYPE **K6746X**

Florida Product Approval No.: FL7708.2, FL35290.2, FL35290.3 UL Classified: R25376

FLORIDA BUILDING CODE APPROVED DRAINARI F I OUVER

DIVAINABLE LOOVEIN	
Visible Mullion Louver Type	. K6746X
Material Extruded Aluminum (Alloy	6063-T5)
Stationary Blade 0.081 in. (2.06 mm)
Frame 0.081 in. (2.06 mm)
Louver Depth 6 in. (1.	52.4 mm)
Blade Angle	35°
Free Area – 4 ft. x 4 ft. Unit 9.41 sq. ft. (0	.88 sq m)
Percent Free Area	58.8%
Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H ₂ O/sq. ft. Free Area above 1,250 fpm ((6.35 m/s)
Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit 11,763 cfm (.	5.55 m³/s)
Pressure Drop at Beginning Point of Water Penetration 0.23 in. H ₂ O (0	.058 kPa)
Maximum Qualified Wind Design Load* +/- 200 PSF	(9.6 kPa)





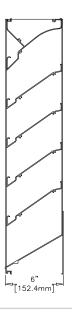
IMPACT RESISTANT LOUVER Enhanced Protection Level E

ಕ್ಷ This label does not sig AMCA airflow perform certification.

See www.AMCA.org for all certified or listed products



Florida Building Code approved for use in the High Velocity Hurricane Zone (HVHZ)





RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules drainable Louver Type K6746X as designed and manufactured by The Airolite Company LLC, Schofield, Wisconsin. Louvers shall be Florida Building Code approved for use in the High Velocity Hurricane Zone (HVHZ). Furnish louvers with bird screen, insect screen, sill pans, 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. 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, as well as tested in accordance with AMCA 540 Test Method for Louvers Impacted by Wind Borne Debris. Include Florida Building Code Approval for use in the High Velocity Hurricane Zone (HVHZ) as means to demonstrate compliance with applicable codes. Provide samples of manufacturer's finish and color charts showing the full range of colors available.

PRODUCTS

Louvers shall be drainable Louver Type K6746X with visible mullions and shall be Florida Building Code Approved. Louvers shall be 6-inches (152.4 mm) deep and assembled entirely from extruded aluminum components. Blades and frames shall be 0.081-inch (2 mm) thick aluminum, alloy 6063-T5. Blades shall be stationary, incorporate drainable gutters and be spaced approximately 4-inches (101.6 mm) on center. Jamb frames shall incorporate drainable gutters

to ensure resistance to water penetration.

STRUCTURAL DESIGN CRITERIA

Louver Type K6746X is tested and qualified per the following Florida test protocols: TAS 201 (Large Missile Impact), TAS 202 (Uniform Static Air Pressure) and TAS 203 (Cyclic Wind Loading). In addition, louvers shall be tested to wind forces up to 200 psf. Louvers must be secured to a structural substrate in accordance with Florida Building Code approved drawings. In addition, the structural substrate must be designed to accommodate the point loads transferred by the louvers when subject to the design wind loads. Structural reinforcing members along with any associated installation hardware is not provided by Airolite unless indicated otherwise by Airolite. Options and accessories are not subject to structural analysis unless indicated otherwise by Airolite.

PERFORMANCE RATINGS

FREE AREA: 9.41 Square Feet (0.88 m²)

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: 11,763 cfm (5.55 m³/s)

MAXIMUM STATIC PRESSURE

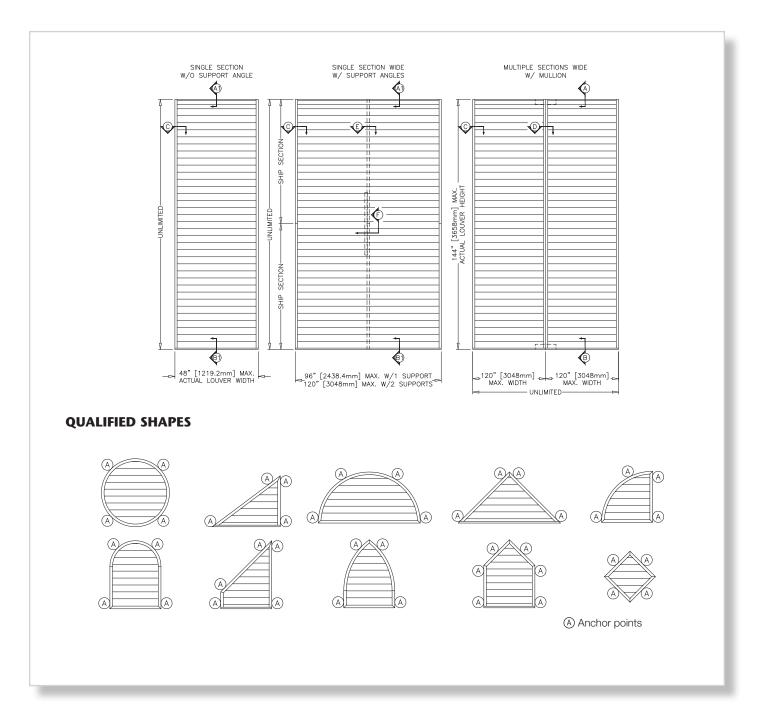
at Beginning Point of Water Penetration: 0.23 in. H,O (0.058 kPa)

See page 6 for complete finish options

^{*}UL Classified as a Wind Restrictive Building Component 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 (Florida Building Code TAS-202-94).

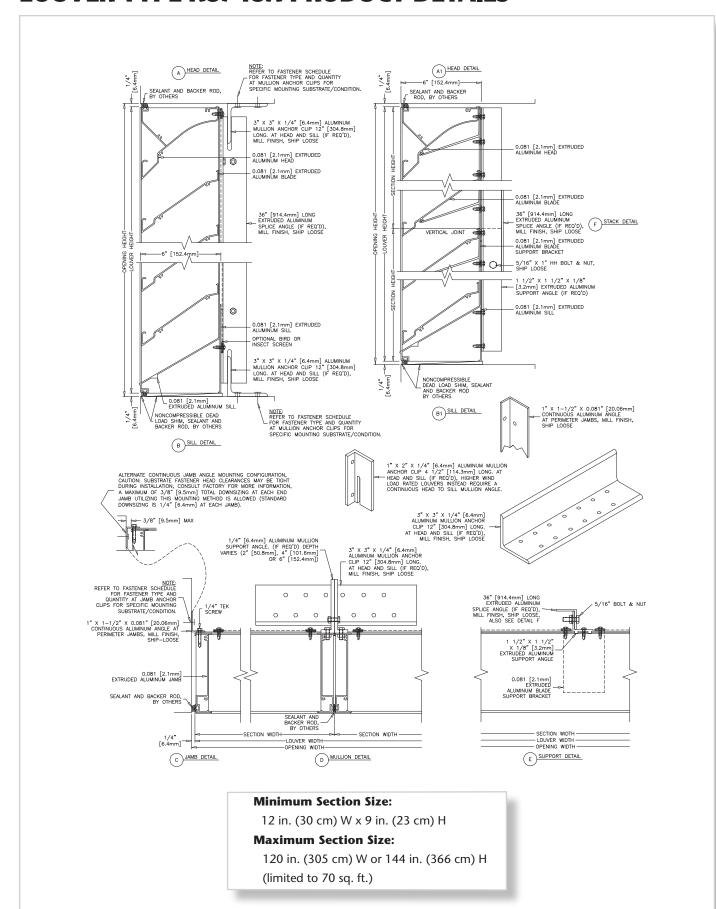
LOUVER TYPE K6746X PRODUCT DESCRIPTION & DETAILS

AIROLITE LOUVER TYPE K6746X is a 6-inch (152.4 mm) deep, drainable louver that is Florida Building Code approved for use in the Wind-Borne Debris Zone and the High Velocity Hurricane Zone (HVHZ). Louver Type K6746X is tested and qualified per the following Florida test protocols: TAS 201 (Large Missile Impact), TAS 202 (Uniform Static Air Pressure) and TAS 203 (Cyclic Wind Loading). Drainable louvers incorporate gutters in the front edge of each blade and jamb frame to prevent water droplets from cascading from blade to blade and from becoming entrained in the intake air flow. Consequently, Louver Type K6746X is a highly effective louver with AMCA Licensed air performance and water penetration ratings, as well as tested in accordance with AMCA 540 Test Method for Louvers Impacted by Wind Borne Debris that enable designers to select and specify this product with confidence. Please contact your local Airolite representative or the factory for assistance with the layout and design of support systems when required.





LOUVER TYPE K6746X PRODUCT DETAILS





LOUVER TYPE K6746X INSTALLATION DETAILS

WOOD OPENING MASONRY OPENING STEEL STUD OPENING STRUCTURAL STEEL OPENING A HEAD DETAIL AT MULLION A HEAD DETAIL AT MULLION A HEAD DETAIL AT MULLION (A) HEAD DETAIL AT MULLION (SILL DETAIL SIMILAR) (SILL DETAIL SIMILAR) (SILL DETAIL SIMILAR) \C2/ (B) SILL DETAIL AT MULLION (B) SILL DETAIL AT MULLION (B) SILL DETAIL AT MULLION WITH 3/16" F STEEL F REINFORCEMENT D E © JAMB DETAIL © JAMB DETAIL © JAMB DETAIL C JAMB DETAIL

FASTENER SCHEDULE (FIELD INSTALLED - NOT BY AIROLITE)										
MOUNTING SUBSTRATE	FASTENER TYPE	DESCRIPTION	ANCHOR CLIP LOCATION	QUANTITY	MIN. EMBED.	MIN. EDGE DIST.	SPACING			
WOOD	А	1/2" DIA. LAG SCREW	JAMB	VARIES	3"	2 1/2"	6.5"			
WOOD	В	1/4" DIA. LAG SCREW	VERT. MULLION (HEAD/SILL)	12 PER CLIP	3"	1/2"	2"			
CONCRETE	C1	1/4" DIA. TAPCON ANCH.	JAMB	VARIES	1.25"	1"	3.25"			
CONCRETE	C2	1/4" DIA. TAPCON ANCH.	VERT. MULLION (HEAD/SILL)	7 PER CLIP	1.75"	2.5"	2"			
MASONRY BLOCK	C1	1/4" DIA. TAPCON ANCH.	JAMB	VARIES	1.25"	1"	3.25"			
MASONRY BLOCK	C2	1/4" DIA. TAPCON ANCH.	VERT. MULLION (HEAD/SILL)	7 PER CLIP	1.75"	2.5"	2"			
STEEL STUD	D & E	1/4" DIA. BOLT & NUT	JAMB	VARIES	THRU BOLT	1/2"	6.5"			
STEEL STUD (3/16" STEEL REINFORCED)	F	1/4" DIA. DRILL FLEX	JAMB	VARIES	FULL	1/2"	6.5"			
STEEL STUD	F	1/4" DIA. DRILL FLEX	VERT. MULLION (HEAD/SILL)	12 PER CLIP	FULL	1/2"	2"			
STRUCTURAL STEEL	D & E	1/4" DIA. BOLT & NUT	JAMB	VARIES	THRU BOLT	1/2"	6.5"			
STRUCTURAL STEEL	D	1/4" DIA. BOLT	JAMB (FIELD DRILL & TAP HOLE)	VARIES	FULL	1/2"	6.5"			
STRUCTURAL STEEL	F	1/4" DIA. DRILL FLEX	JAMB	VARIES	FULL	1/2"	6.5"			
STRUCTURAL STEEL	D & E	1/4" DIA. BOLT & NUT	VERT. MULLION (HEAD/SILL)	4 PER CLIP	THRU BOLT	1/2"	6.5"			
STRUCTURAL STEEL	D	1/4" DIA. BOLT	VERT. MULLION (HEAD/SILL) FIELD DRILL & TAP HOLE	4 PER CLIP	FULL	1/2"	6.5"			
STRUCTURAL STEEL	F	1/4" DIA. DRILL FLEX	JAMB	VARIES	FULL	1/2"	6.5"			

- 1. IT SHALL BE THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE TO SUPPORT THE LOADS SUPERIM-POSED BY THE LOUVERS.

- 2. INSTALLER TO PROVIDE SEPARATION OF DISSIMILAR MATERIALS AS REQUIRED.

 3. WOOD SUBSTRATE TO BE MINIMUM G = 0.42 DENSITY.

 4A. CONCRETE SUBSTRATE TO BE MINIMUM 3,192 PSI CONCRETE OR 3,192 PSI GROUT FILLED ASTM C-90 HOLLOW BLOCK AT HEAD/SILL MULLION ANCHORS.
- 4B. CONCRETE SUBSTRATE TO BE MINIMUM 3,192 PSI CONCRETE OR ASTM C-90 HOLLOW BLOCK AT JAMB ANCHORS.
- 5. STEEL STUD OPENINGS (16 GA. MINIMUM THICKNESS) TO BE MINIMUM Fy = 33 ksi.
- 6. STRUCTURAL STEEL OPENINGS (1/4" MINIMUM THICKNESS) TO BE MINIMUM Fy = 36 ksi.



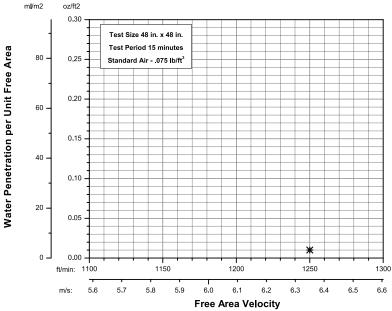
LOUVER TYPE K6746X PERFORMANCE RATINGS

FREE AREA CHART - in square feet

Louver	Louver Width Inches														
Height Inches	12	18	24	36	42	48	60	66	72	84	90	96	108	114	120
12	0.19	0.32	0.44	0.69	0.82	0.94	1.16	1.29	1.41	1.66	1.79	1.91	2.13	2.26	2.38
24	0.77	1.27	1.77	2.77	3.27	3.76	4.64	5.14	5.64	6.63	7.13	7.63	8.51	9.01	9.50
30	1.05	1.73	2.41	3.77	4.45	5.13	6.32	7.01	7.69	9.05	9.73	10.41	11.60	12.28	12.96
42	1.62	2.67	3.71	5.81	6.86	7.91	9.74	10.79	11.84	13.94	14.99	16.03	17.87	18.92	19.97
48	1.92	3.17	4.42	6.91	8.16	9.41	11.59	12.84	14.09	16.58	17.83	19.08	21.26	22.51	23.75
60	2.49	4.10	5.71	8.94	10.55	12.16	14.98	16.59	18.21	21.43	23.04	24.66	27.48	29.09	30.70
66	2.75	4.53	6.32	9.88	11.67	13.45	16.57	18.36	20.14	23.71	25.49	27.27	30.40	32.18	33.96
78	3.31	5.46	7.61	11.91	14.06	16.21	19.98	22.13	24.28	28.58	30.73	32.88	36.64	38.79	40.94
84	3.62	5.96	8.31	13.00	15.35	17.69	21.80	24.15	26.49	31.19	33.53	35.88	39.98	42.33	44.68
96	4.18	6.90	9.61	15.04	17.75	20.46	25.21	27.92	30.64	36.06					
102	4.44	7.33	10.21	15.98	18.86	21.74	26.79	29.67	32.55	38.32					
114	5.01	8.26	11.51	18.01	21.26	24.51	30.20	33.45	36.70	43.20					
120	5.31	8.76	12.21	19.10	22.55	26.00	32.03	35.48	38.92	45.82					
132	5.88	9.69	13.51	21.14	24.95	28.77	35.44	39.26	43.07	50.70					
138	6.17	10.17	14.14	22.18	26.18	30.18	37.19	41.19	45.19	53.20					
144	6.45	10.63	14.81	23.17	27.36	31.4	38.85	43.04	47.22	55.58					

WATER PENETRATION

(Standard Air - .075 lb./ft.3; Test Size - 48 in. x 48 in.; Test Duration - 15 min.)



The AMCA Water Penetration Test provides a method for comparing various louver models and designs as to their efficiency in resisting the penetration of rainfall under specific laboratory test conditions. The point of zero water penetration is defined as that velocity where the water penetration curve projects through .01 oz. of water (penetration) per sq. ft. of louver free area. *The beginning point of water penetration for Louver Type K6746X is above 1250 fpm (6.35 m/s) free area velocity. These performance ratings do not guarantee a louver to be weatherproof or stormproof and should be used in combination with other factors including good engineering judgement in selecting louvers.





The Airolite Company, LLC certifies that Louver Type K6746X shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified

Ratings Program. The AMCA Certified Ratings Seal applies to Water Penetration and Air Performance.



IMPACT RESISTANT **LOUVER** Basic Protection Level D

... See www.AMCA.ora for all certified or listed products

With 0.081 in. blade and frame material.



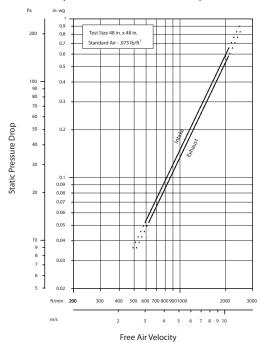
IMPACT RESISTANT LOUVER Enhanced Protection Level E

See www.AMCA.ora for all certified or listed products With 0.125 in, blade and frame material.

The Airolite Company, LLC certifies that Louver Type K6746X shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program. The AMCA Listing Label applies to Wind Borne Debris Impact Resistant Louvers.

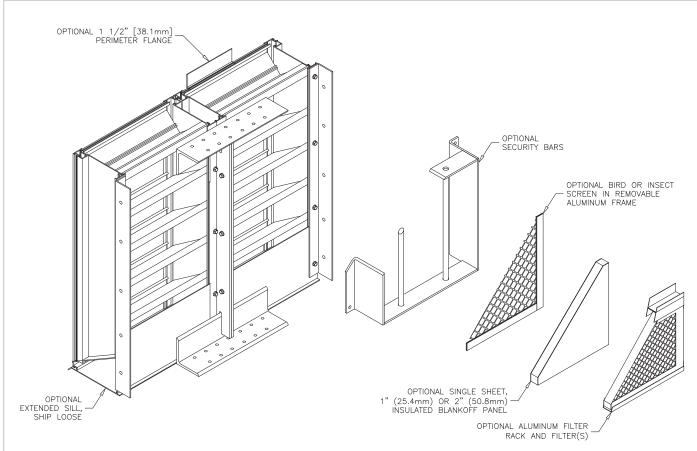
AIRFLOW RESISTANCE

(Standard Air - .075 lb./ft.3)



Louver Type K6746X resistance to airflow is shown with louver blades fully open. Resistance (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. (Test Figure: 5.5-6.5)

LOUVER TYPE K6746X METHOD OF INSTALLATION & ACCESSORY OPTIONS



FINISHES

Finish Type	Description/Application	Color Selection	Standard Warranty (Aluminum)				
AAMA 2605 100% Fluoropolymer (FEVE) 2-Coat 70% Kynar® (PVDF) 3-Coat 70% Kynar® (PVDF) 4-Coat 70% Kynar® (PVDF)	"Best." The premier finish for extruded aluminum. Tough, long-lasting coating has superior color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.	Standard Colors: Any of the 27 standard colors shown can be furnished in 70% or 50% Kynar®, 100% Fluoropolymer or Baked Enamel. Mica Colors: Airolite offers 6 standard Mica colors for 70% Kynar® or 100% Fluoropolymer. Custom Colors: Custom color matching is available. Consult your Airolite	10 Years (20 Years Optional)				
AAMA 2603 Baked Enamel	"Good." Provides good adhesion and resistance to weathering, corrosion and chemical stain.	representative for cost and/or lead-time implications if a custom color is required.	1 Year				
AA-M10C22A42 Integral Color Anodize	"Two-step" anodizing is produced by following the normal anodizing step with a second, colorfast process.	Light, Medium, Dark or Extra Dark Bronze; Champagne; Black	5 years				
AA-M10C22A41 Clear Anodize 215 R-1	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	5 years				
AA-M10C22A31 Clear Anodize 204	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	1 Year				
Prime Coat	Louvers or architectural products shall be cleaned, pre-treated and receive a prime coat finish suitable for field painting. Airolite does not recommend prime coat or field painting of materials.						
Mill	Materials may be supplied in natural aluminum or galvanized steel finish when normal weathering is acceptable and there is no concern for color or color change.						

Finishes meet or exceed AAMA 2605, AAMA 2604, and AAMA 2603 requirements. Please consult www.airolite.com for complete information on standard and extended paint warranties. Paint finish warranties are not applicable to steel products.



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P.O. Box 410, 525 Western Road, Schofield, WI 54476-0410 USA 715.841.8757 • fax 715.841.8773 • www.airolite.com