

### MIAMI-DADE APPROVED STORM CLASS™ LOUVER PENTHOUSE



<b>Visible Mullion Louver Type</b> .....	SCH601PD
<b>Material</b> .....	Extruded Aluminum (Alloy 6063-T5)
<b>Blade</b> .....	0.081 in. (2.06 mm)
<b>Frame</b> .....	0.081 in. (2.06 mm)
<b>Louver Depth</b> .....	6 in. (152.4 mm)
<b>Free Area – 4 ft. x 4 ft. Unit</b> .....	7.58 sq. ft. (0.704 m <sup>2</sup> )
<b>Percent Free Area</b> .....	47.4%
<b>Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H<sub>2</sub>O/sq. ft. Free Area</b> .....	
above 1,250 fpm (6.35 m/s)	
<b>Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit</b> .....	
9,475 cfm (4.47 m <sup>3</sup> /s)	
<b>Pressure Drop at Beginning Point of Water Penetration</b> .....	
0.32 in. H <sub>2</sub> O (0.081 kPa)	
<b>Wind-Driven Rain Water Penetration Data</b>	
Exterior Wind Velocity .....	29 mph (13 m/s)
Rainfall Rate .....	.3 in. (75 mm)/hour
Effectiveness .....	.99.8%
Core Ventilation Rate .....	763 fpm (3.9 m/s)
Exterior Wind Velocity .....	50 mph (22 m/s)
Rainfall Rate .....	.8 in. (200 mm)/hour
Effectiveness .....	.99.2%
Core Ventilation Rate .....	676 fpm (3.4 m/s)
<b>Maximum Qualified Wind Design Load</b> .....	
+/- 115 PSF (5.5 kPa)	



\*Performance data above is based on Louver Type SCH601.  
Specific performance data for Louver Penthouse SCH601 can be found on page 2.

## RECOMMENDED SPECIFICATION

### GENERAL

Furnish and install where indicated on plans or described in schedules Storm Class™ Louver Penthouse SCH601PD as designed and manufactured by The Airlite Company LLC, Schofield, Wisconsin. Louver penthouses shall be Florida Building Code approved for use in the High Velocity Hurricane Zone and Miami-Dade approved for installations where the enclosed space is designed to drain or otherwise accommodate water penetration (wet rooms). Louver penthouses 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 penthouse blades and frames; unit dimensions related to construction; and, anchorage details and locations. For each type of product specified, submit free area, air performance, water penetration and wind-driven rain water penetration ratings based on the performance of Louver Type SCH601. Include Miami-Dade Notice of Acceptance to demonstrate compliance with applicable code. Provide samples of manufacturer's finish and color charts showing the full range of colors available.

### PRODUCTS

Louver penthouses shall be Florida Building Code and Miami-Dade Approved Storm Class™ Louver Penthouse SCH601PD. Louver penthouses shall be 6-inches (152.4 mm) deep and assembled entirely

from extruded aluminum components. Louver penthouse blades and frames shall be 0.081-inch (2 mm) thick aluminum, alloy 6063-T5. Blades shall be horizontal, inverted V-type with center hook and spaced 2-inches on center.

### STRUCTURAL DESIGN CRITERIA

Louver penthouses shall be certified to comply with the requirements of Miami-Dade protocols TAS-201, TAS-202 and TAS-203 and Miami-Dade approved for building envelope protection for single unit sizes up to a max throat size of 84 inches wide x 108 inches long and a max height of 84 inches, for wet room protection. Louver penthouses shall be tested for wind forces up to 115 psf. Louver penthouses must be secured to a structural substrate in accordance with Dade County Product Approval Drawings. In addition, the structural substrate must be designed to accommodate the point loads transferred by the louver penthouses when subject to the design wind loads.

### PERFORMANCE RATINGS

FREE AREA:	7.58 Square Feet (0.704 m <sup>2</sup> )
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:	9,475 cfm (4.47 m <sup>3</sup> /s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.32 in. H <sub>2</sub> O (0.081 kPa)

See page 8 for complete finish options

# LOUVER PENTHOUSE SCH601PD PRODUCT DESCRIPTION

**Airolite Louver Penthouse SCH601PD** is a 6-inch (152.4 mm) deep, sightproof, horizontal blade Storm Class™ Louver Penthouse that is Florida Building Code approved for use in the High Velocity Hurricane Zone and Miami-Dade approved for installations where the enclosed space is designed to drain or otherwise accommodate water penetration (wet rooms). This product complies with Dade County protocols TAS-201, *Large and Small Missile Impact*; TAS-202, *Criteria for Testing Impact and Not Impact Resistant Building Envelope Components Using Static Uniform Air Pressure*; and, TAS-203, *Criteria for Testing Product Subject to Cyclic Wind Pressure*. In addition, Louver Penthouse SCH601PD is rated 99.2% effective against water penetration at a core ventilation rate of 676 fpm (3.4 m/s) when tested under a 50 mph (22 m/s) wind velocity and 8-inch (200 mm) per hour rainfall rate. Louver Penthouse SCH601PD is a highly effective louver 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.

Throat W x L	Recommended Louver Height	Louver Throat Area (sq. ft.)	Intake CFM / Pressure Drop			Exhaust CFM / Pressure Drop			
			Throat Velocity			Throat Velocity			
			400 cfm 0.046	600 cfm 0.102	800 cfm 0.184	400 cfm 0.030	600 cfm 0.067	800 cfm 0.119	1000 cfm 0.184
12 x 12	16	1.06	400	600	800	400	600	800	1000
12 x 24	16	2.09	800	1200	1600	800	1200	1600	2000
24 x 24	20	4.13	1600	2400	3200	1600	2400	3200	4000
24 x 48	24	8.19	3200	4800	6400	3200	4800	6400	8000
36 x 36	26	9.19	3600	5400	6400	3600	5400	6400	9000
36 x 72	30	18.28	7200	10,800	14,400	7200	10,800	14,400	18,000
48 x 48	32	16.25	6400	9600	12,800	6400	9600	12,800	16,000
48 x 96	40	32.38	14,400	21,600	28,800	14,400	21,600	28,800	36,000
60 x 60	36	25.31	10,000	15,000	20,000	10,000	15,000	20,000	25,000
60 x 108	46	45.44	18,000	27,000	36,000	18,000	27,000	36,000	45,000
72 x 72	46	36.38	14,400	21,600	28,800	14,400	21,600	28,800	36,000
72 x 96	48	48.44	19,200	28,800	38,400	19,200	28,800	38,400	48,000
84 x 84	50	49.44	19,600	29,400	39,200	19,600	29,400	39,200	49,000
84 x 96	52	56.47	22,400	33,600	44,800	22,400	33,600	44,800	56,000
84 x 108	54	63.05	25,200	37,800	50,400	25,200	37,800	50,400	63,000

Performance data shown herein is a result of in-house airflow resistance testing procedures in an AMCA Accredited Laboratory. The static pressure drops shown at given throat velocities include the pressure drop through the throat of the product as well as through the louvers themselves. The recommended height shown herein allows for equal to or greater than effective louver free area to that of the penthouse inside throat area. Increasing the product height will have minimal affect on the static pressure drop. The static pressure drops shown do not include the effects of bird screen, insect screen or any other appurtenance.

**Minimum Throat Size:**

12 in. (30 cm) W x 12 in. (30 cm) H

**Maximum Throat Size:**

84 in. (213 cm) W x 108 in. (274 cm) H

**Minimum Louver Height:**

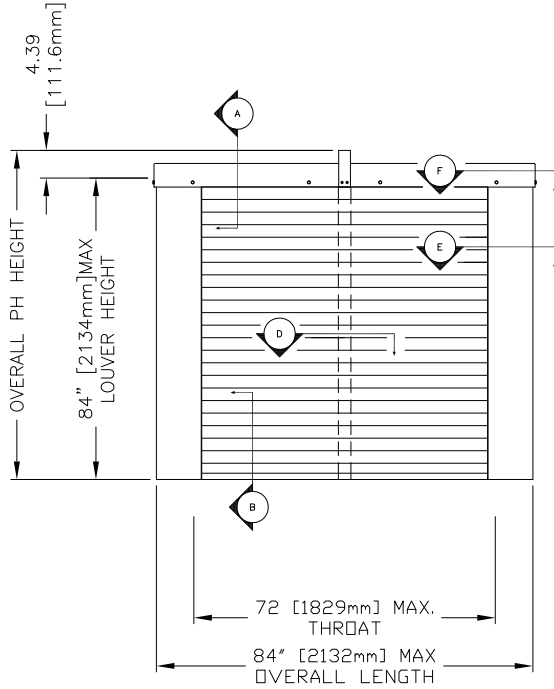
12 in. (30 cm)

**Maximum Louver Height:**

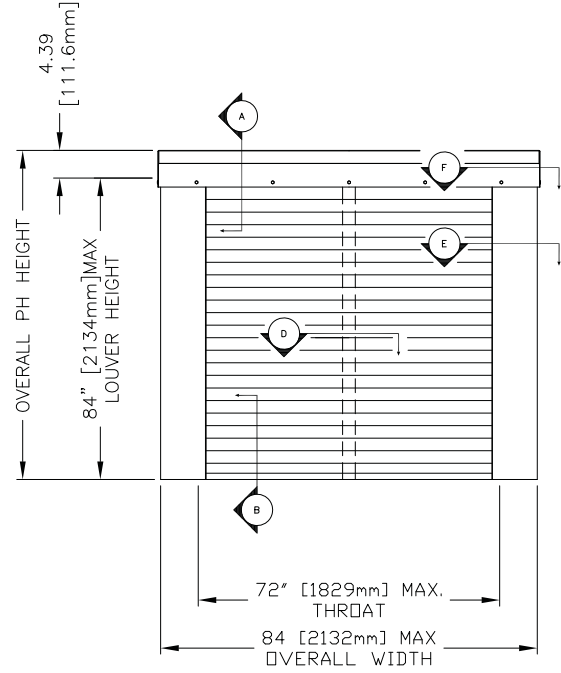
84 in. (213 cm)

# LOUVER PENTHOUSE SCH601PD PRODUCT DETAILS

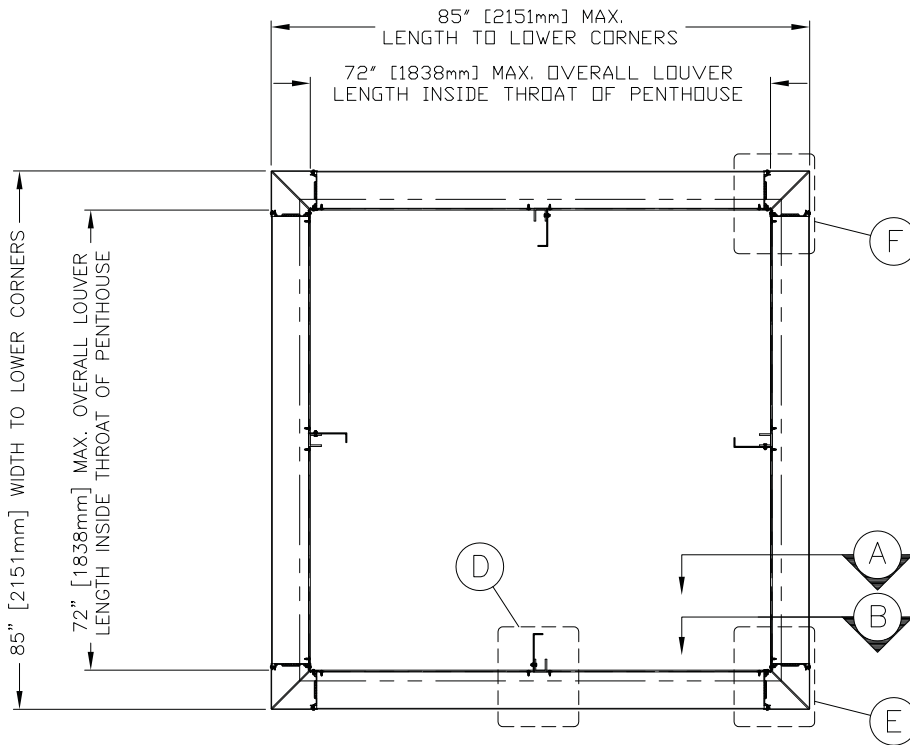
## SINGLE SECTION



SINGLE SECTION FRONT VIEW



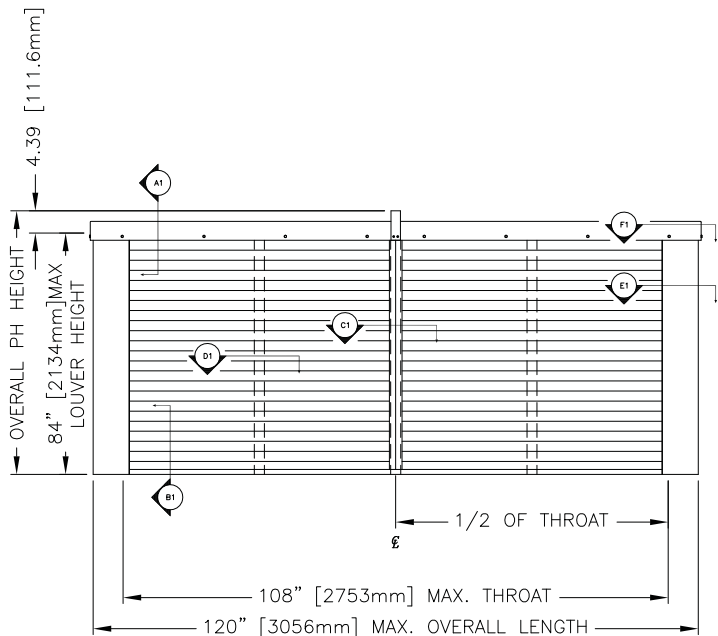
SINGLE SECTION SIDE VIEW



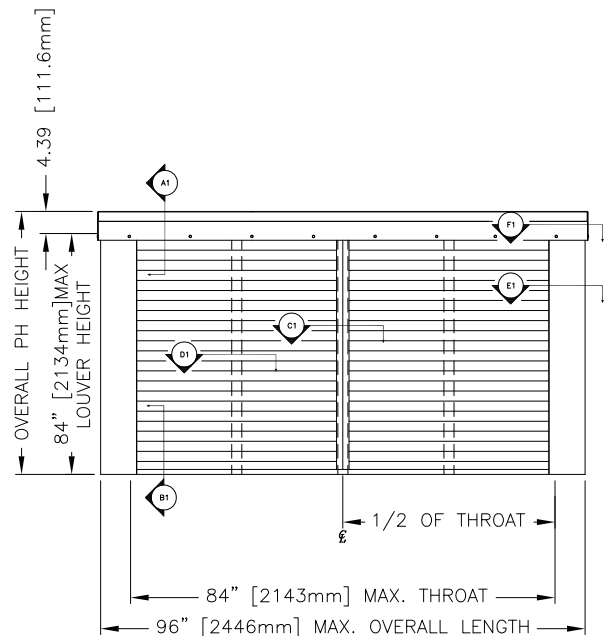
SINGLE SECTION PLAN VIEW W/O HOOD  
(UP TO 72" [1829mm] X 72" [1829mm] X 68" [1727mm] TALL)

# LOUVER PENTHOUSE SCH601PD PRODUCT DETAILS

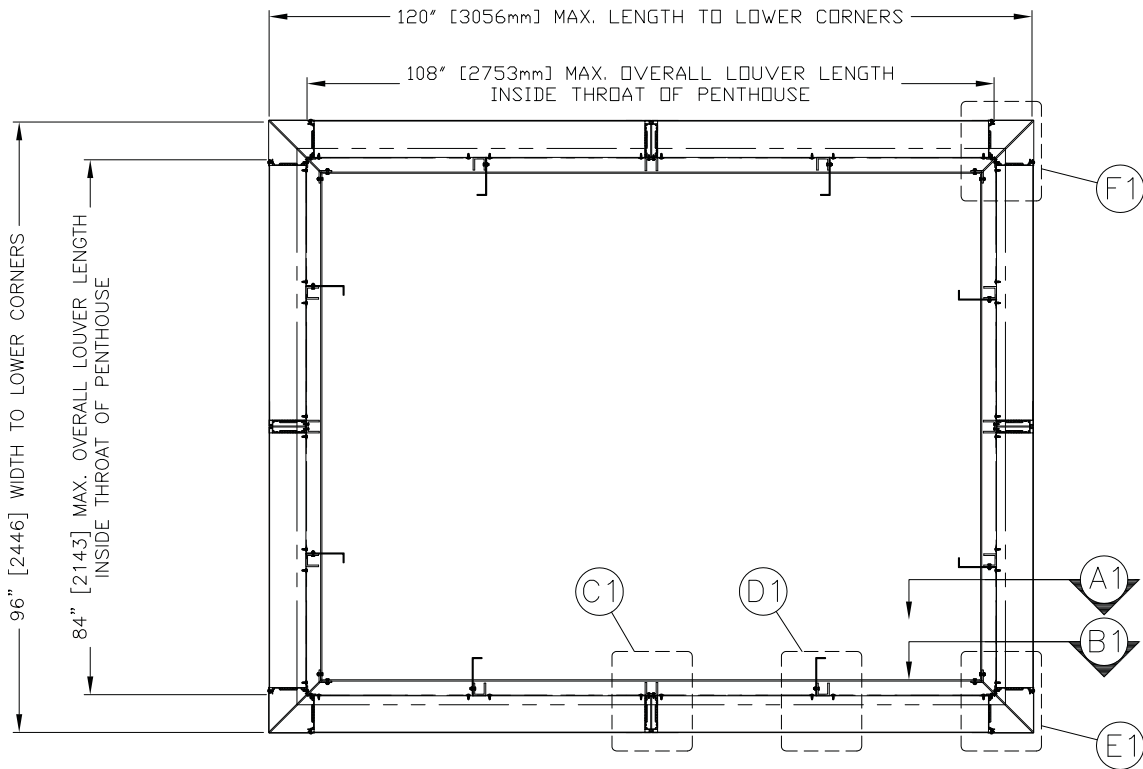
## TWO SECTION



TWO SECTION FRONT VIEW



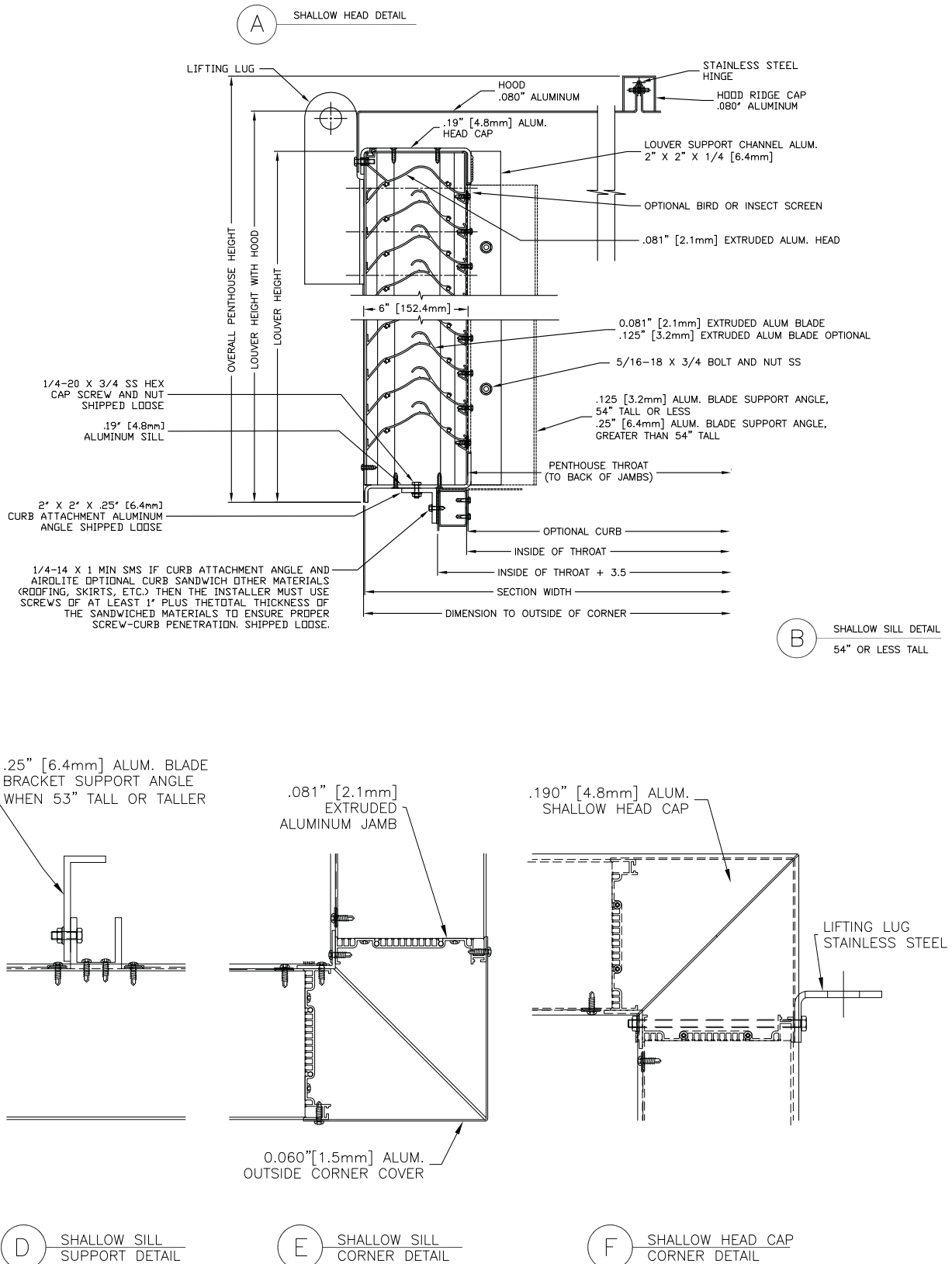
TWO SECTION SIDE VIEW



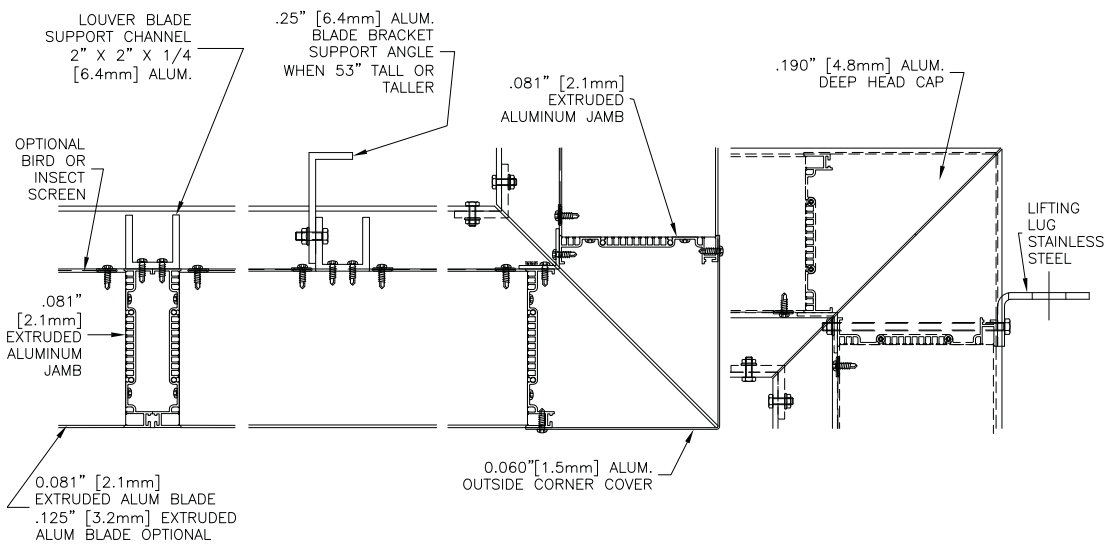
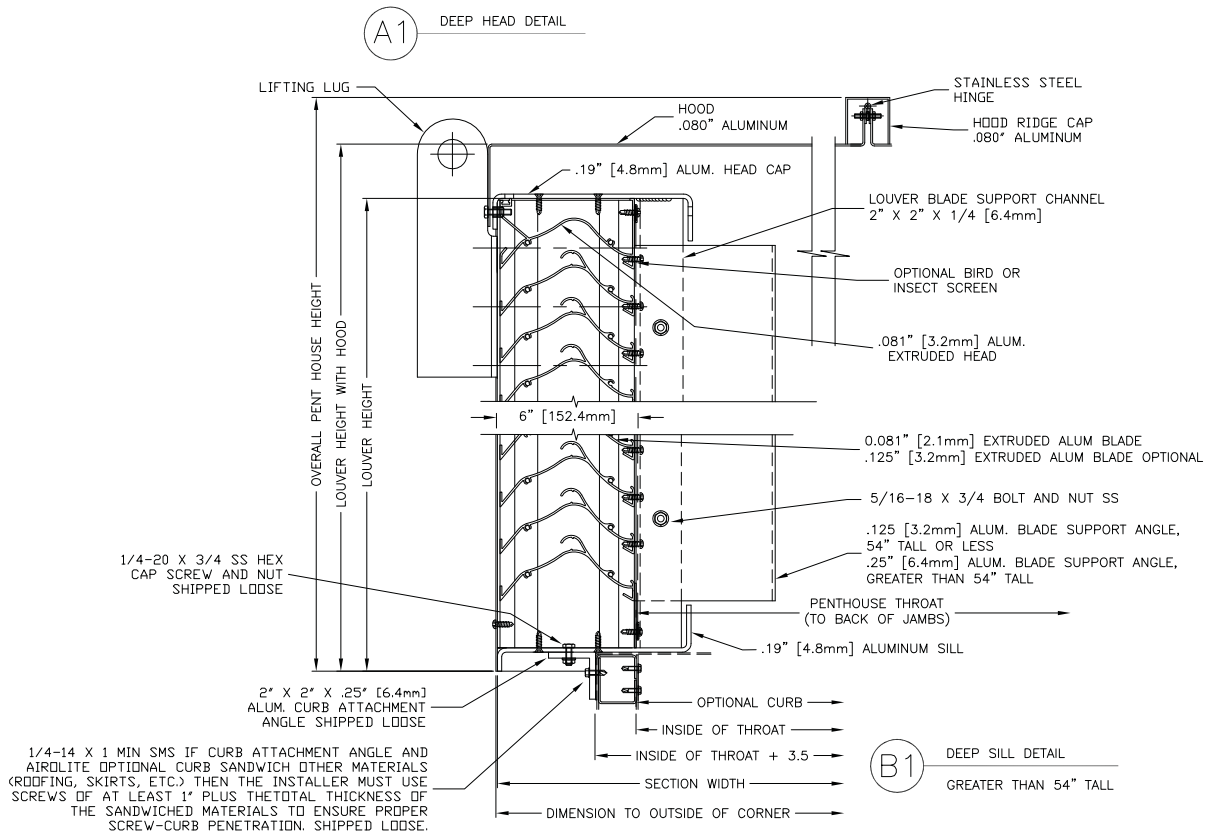
TWO SECTION PLAN VIEW W/O HOOD

(LARGER THAN 72" [1829mm] X 72" [1829mm] X 68" [1727mm] TALL,  
 MAXIMUM SIZE 84" [2134mm] X 108" [2743mm] X 84" [2134mm] TALL)

# LOUVER PENTHOUSE SCH601PD PRODUCT DETAILS



# LOUVER PENTHOUSE SCH601PD PRODUCT DETAILS



**C1** MULLION DETAIL

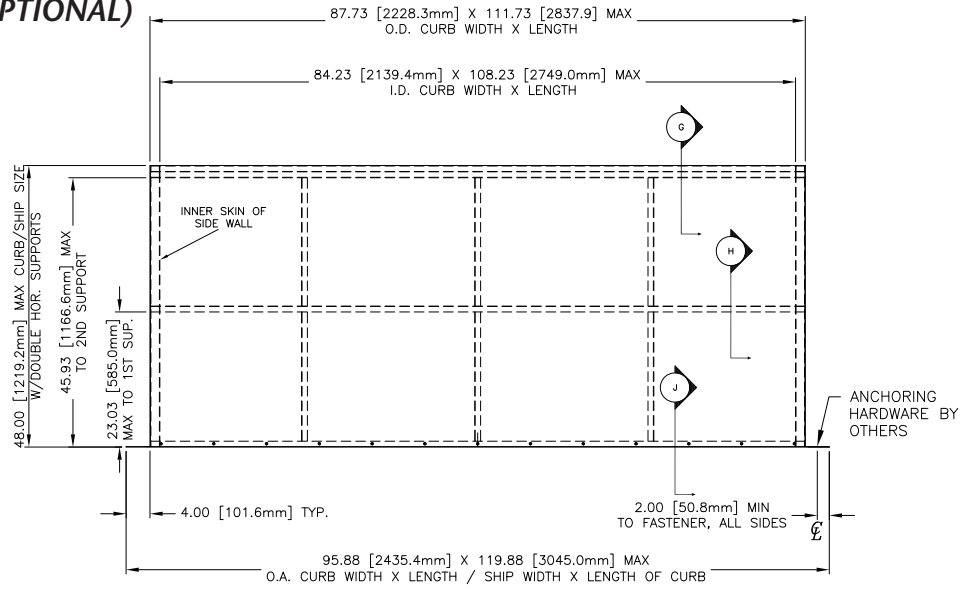
**D1** DEEP SILL SUPPORT DETAIL

**E1** DEEP SILL CORNER DETAIL

**F1** DEEP HEAD CAP CORNER DETAIL

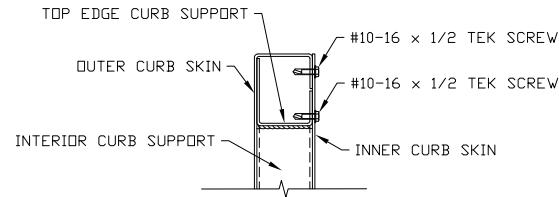
# LOUVER PENTHOUSE SCH601PD PRODUCT DETAILS

## CURB DETAILS (OPTIONAL)

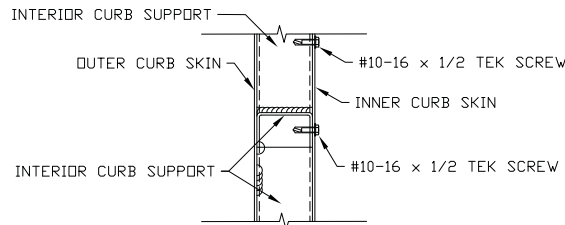


CURB DETAIL

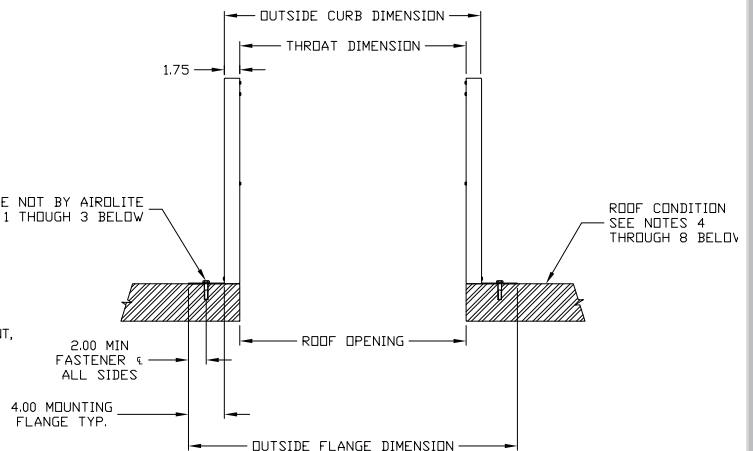
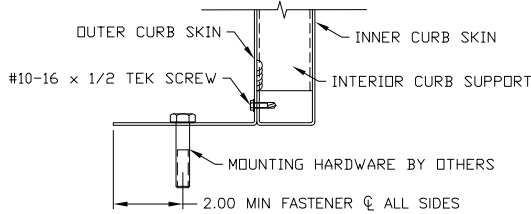
G CURB DETAILS TOP



H CURB DETAILS MIDDLE



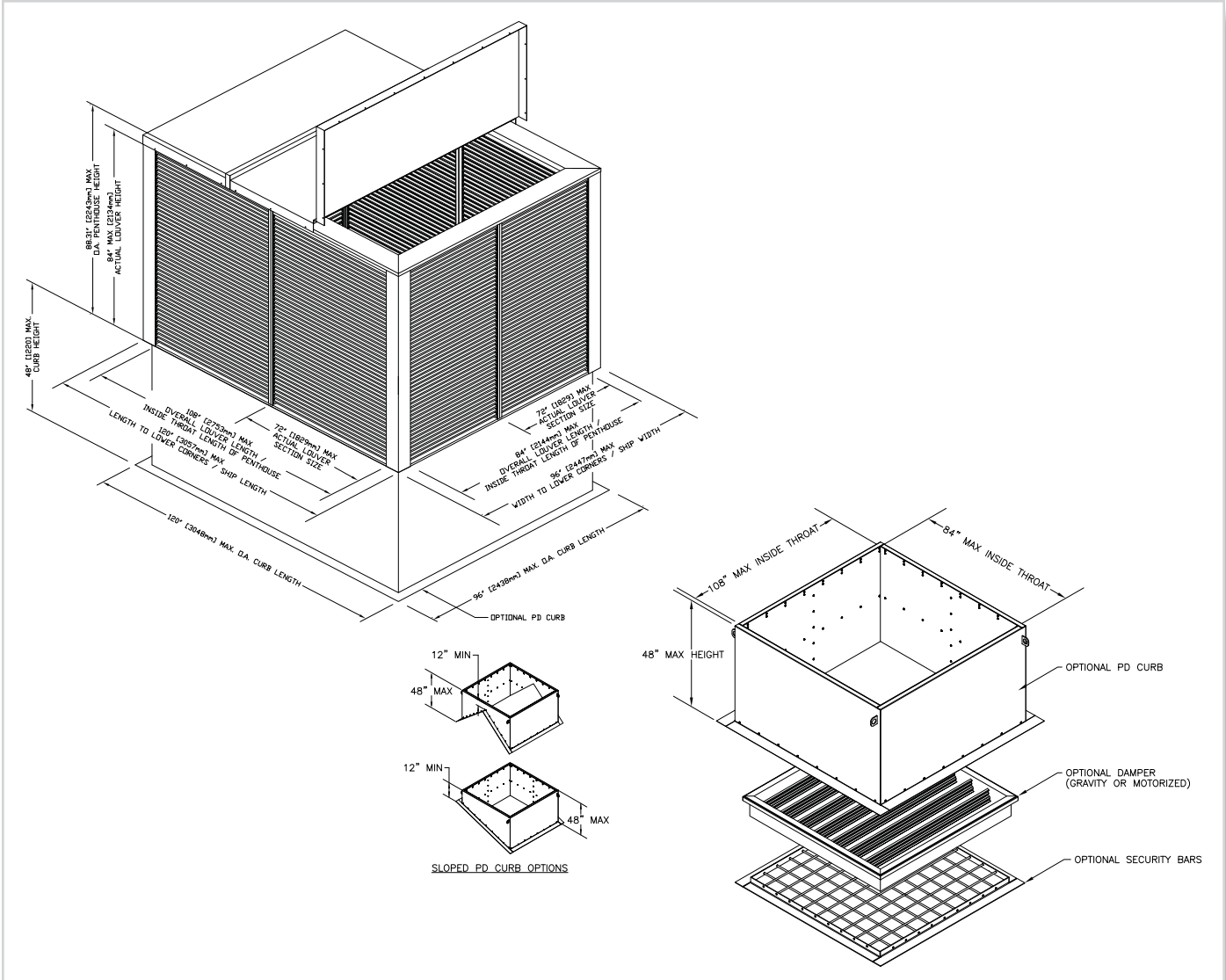
J CURB DETAILS BOTTOM



NOTES:

- 3/8-16 X 3 MIN PLATED STEEL EXPANDABLE ANCHOR 12" MAX CENTERS, 2.5" MIN CONCRETE ENGAGEMENT, 3.25" MIN TO CONCRETE EDGE.
- #12-14 X 1 MIN SMS, PLATED STEEL 4.5" MAX CENTERS W/ 3/ CORNER, 1/4" MIN VERTICAL THREAD ENGAGEMENT INTO STEEL, 2" MIN TO STEEL EDGE.
- 1/2 X 3 MIN PLATED STEEL LAG BOLT 8" MAX CENTERS, 2.93" MIN WOOD ENGAGEMENT, 2" MIN TO WOOD EDGE.
- ALL WOOD SUBSTRATE SHALL BE G = 0.55 DENSITY OR BETTER.
- ALL METAL STUD SUBSTRATE SHALL BE MIN. 16 GA. F<sub>y</sub> = 50 KSI.
- ALL STRUCTURAL STEEL SUBSTRATE SHALL BE MIN. 1/4" THICK F<sub>y</sub> = 36 KSI.
- ALL CONCRETE SUBSTRATE SHALL BE MIN. 3000 PSI.
- CONCRETE MASONRY SHALL BE ASTM C90, TYPE II, MIN 2000 PSI GROUT-FILLED.

# LOUVER PENTHOUSE SCH601PD ACCESSORY OPTIONS



**FINISHES** (Select one of the following)

**ACRYLIC ENAMEL:** Louvers shall be cleaned, pretreated and Finished with an oven-cured thermosetting acrylic enamel finish that meets or exceeds the performance requirements of AAMA 2603, "Voluntary Specification Performance Requirements and Test Procedures for Pigmented Organic Coatings."

**2-COAT FLUOROPOLYMER:** Louvers shall be cleaned, pretreated and Finished with an inhibitive primer and oven-cured Kynar 500® / Hylar 5000® resin coating with minimum 1.2 mils dry-film coating thickness that meets or exceeds the performance requirements of AAMA 2605, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels."

**3-COAT FLUOROPOLYMER:** Louvers shall be cleaned, pretreated and Finished with an inhibitive primer and oven-cured Kynar 500® / Hylar 5000® resin coating with minimum 2.0 mils dry-film coating thickness that meets or exceeds the performance requirements of AAMA 2605, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels."

**CLEAR ANODIZE:** Louvers shall be Finished with a Class I clear anodized coating (AA-M10C22A41) that complies with the performance requirements of AAMA Specification 611-98, "Voluntary Specification for Anodized Architectural Aluminum."

**COLOR ANODIZE:** Louvers shall be Finished with a Class I electrolytically color anodized coating (AA-M10C22A42/44) that complies with the performance requirements of AAMA Specification 611-98, "Voluntary Specification for Anodized Architectural Aluminum." Color shall be (select one): Champagne, Light Bronze, Medium Bronze, Dark Bronze, Extra Dark Bronze or Black Anodize.