



3900 Dr. Greaves Rd. • Kansas City, MO 64030 • (816) 761-7476 • FAX (816) 765-8955

EME420MD WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER
MIAMI-DADE APPROVED
MIAMI-DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE NUMBER: 17-1214.18 (EXPIRES 2/23/21)
FLORIDA PRODUCT APPROVAL #FL 21829.5

STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T6 extruded aluminum with .081" (2.1) nominal wall thickness. Downspouts provided in jamb frames.

BLADES

6063T6 extruded aluminum .063" (1.6) nominal wall thickness. Double drainable blades are sightproof.

SCREEN

5/8" x .040" (16 x 1) expanded flattened aluminum bird screen in removable frame.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

10 lbs. per sq. ft. (49 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE

Single section: 87 15/16"w X 144"h (2234 x 3658) or 130"w x 112"h (3302 x 2845) actual size.

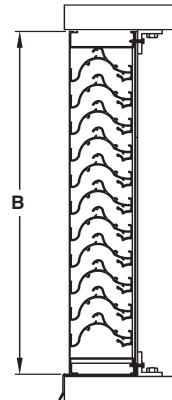
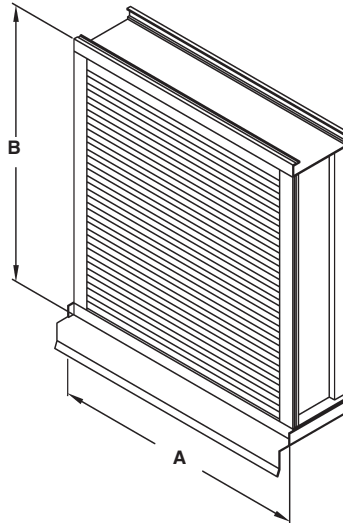
Field Assembly: Unlimited width x 144"h (3658).

Multiple section louvers will be shipped in single sections and must be joined together in the field by the installer. Section joint splice hardware is provided. **Sections may not be stacked in height.** Openings taller than the maximum louver height will need to be divided into multiple openings with suitable structural members. Structural members are not designed or provided by Ruskin.

INSTALLATION

The EME420MD must be installed per the appropriate Installation Detail. Reference the appropriate separate Installation Instruction Sheet.

Consult Ruskin for additional information.



FEATURE

- Various Frame construction for use in cast-in-place concrete, grout filled CMU, Wood and steel installations.
- Maximum windload ±130 PSF (6.7 kPa)
- * horizontal blades minimize the penetration of wind-driven rain, reducing damage and additional operating expenses.
- 40% Free Area.
- Published performance ratings based on testing in accordance with AMCA 500-L.
- Excellent pressure drop performance.
- Aluminum construction for low maintenance and high resistance to corrosion.
- Published performance ratings based on testing in accordance with AMCA Publication 511 & 512

LOUVER VARIATIONS

- Front or rear security bars.
- Filter racks.
- Universal Sleeve.
- Blank Off panels.
- Integral Flange.
- Drip Cap.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, 50% PVDF (modified fluoropolymer), epoxy, Pearledize 50 & 70, 70% PVDF, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Ruskin for other special requirements.

Please provide Rough Opening dimensions for A & B dimensions. Unless ordered as actual size, louver will be provided smaller than the "A" and "B" dimensions provided. Louvers will be undersized 1/4" (6) from the rough opening dimensions provided. Louvers ordered as Actual Size will not be undersized. Engineering drawings may show actual louver frame dimensions less sleeve thickness.



This label does not signify AMCA airflow performance certification.

Ruskin certifies that the EME420MD 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 Born Debris Impact Resistant and High Velocity Wind Driven Rain Resistant Louvers (with optional CD40, CD50 or SD60 damper in the closed position)



This label does not signify AMCA airflow performance certification.

- EME420MD meets the requirements for the following:
- AMCA 540 Listed for Basic Protection
 - Miami-Dade NOA Approval
 - AMCA 550 with AMCA 550 Approved Damper
 - Florida Product Approved FL
 - AMCA 500-L Tested
 - Texas Department of Insurance (TDI) Listed – LVR-10

Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

AMCA550 DAMPER OPTIONS

CONTROL DAMPER

CD40 (Thin Line Control Damper)

(The CD40 combines the lowest leakage attainable-6cfm/sq.ft. at 4"w.g. with thin line, 4" overall depth when the damper is completely open.)

- Damper Frame and Blade Depth 4"
- Max Single Section 60"x72"
- Opposed Blade
- Mill Finish
- Factory-Installed, pneumatic and electric actuators
- SP100 Switch Package
- Jack shafted or Extended Shaft option
- Concealed Linkage

CD50

(The CD50 is a low Leak, extruded aluminum damper designed with air foil blades for higher velocities and pressure HVAC systems. It meets the leakage requirements of the International energy Conservation Code by leaking less than 3cfm.sq.ft. at 1" of static pressure and is AMCA licensed as a Class 1A damper)

- Air Leakage AMCA Class 1A
- Damper Frame Depth is 5" and Blade width is 6"
- Max Single Section 60"x72"
- Opposed Blade
- Mill Finish
- Factory-Installed, pneumatic and electric actuators
- SP100 Switch Package
- Jack shafted or Extended Shaft option
- Concealed Linkage

SMOKE DAMPER

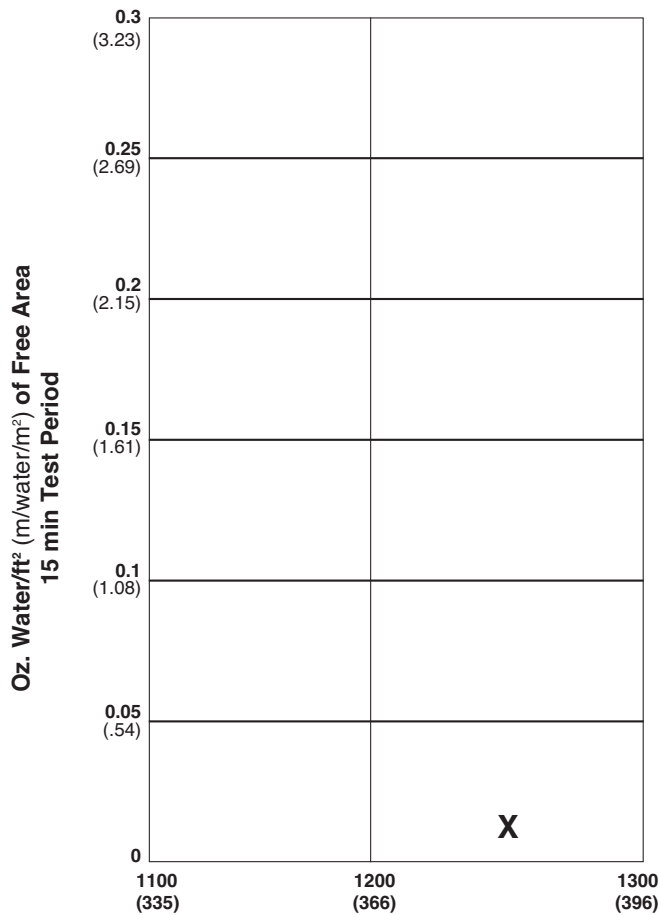
SD60 (UL555S Leakage Class 1 Damper)

(The SD60 is an ultra-low leakage rated smoke damper used in ducts that penetrate smoke rated barriers.)

- Air Leakage Class 1
- Damper Frame Depth is 5" and Blade width is 6"
- Max Single Section 48"x72"
- Opposed Blade
- Mill Finish
- Factory-Installed, pneumatic and electric actuators
- SP100 Switch Package
- Jack shafted or Extended Shaft option
- Concealed Linkage

WATER PENETRATION GRAPH

Test size 48" x 48" (1219 x 1219)
Beginning point of water penetration at .01 oz./sq. ft. is above 1250 fpm (381 m/min.)



Ruskin Company certifies that the louver 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 air performance ratings, water penetration ratings and wind driven rain ratings only.

WIND-DRIVEN RAIN PERFORMANCE

Test size is 1m x 1m (39" x 39") core area, 1.04m x 1.12m (41" x 44") nominal. Free Area of test louver is 5.45 ft² (.51m²).

29 mph (13 m/s) wind & 3" (76) per hour rain conditions

50 mph (22 m/s) wind & 8" (203) per hour rain conditions

Core Velocity ₁ fpm (m/s)	Airflow cfm (m³/min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class ₃
0 (0)	0 (0)	0 (0)	99.9%	A
0 (0)	0 (0)	0 (0)	99.9%	A
0 (0)	0 (0)	0 (0)	99.9%	A
283 (1.4)	3052 (86.4)	726 (221.3)	99.9%	A
376 (1.9)	4049 (114.7)	964 (293.8)	99.9%	A
464 (2.4)	4992 (141.4)	1190 (362.7)	99.1%	A
578 (2.9)	6224 (176.3)	1482 (451.9)	96.5%	B
681 (3.5)	7334 (207.7)	1746 (532.2)	93.2%	C

Core Velocity ₁ fpm (m/s)	Airflow cfm (m³/min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class ₃
0 (0)	0 (0)	0 (0)	99.9%	A
101 (.5)	1084 (30.7)	259 (78.9)	99.8%	A
175 (.9)	1889 (53.5)	349 (136.9)	99.7%	A
296 (1.5)	3189 (90.3)	759 (231.3)	99.3%	A
390 (2.0)	4199 (118.9)	1000 (304.8)	98.3%	B
491 (2.5)	5289 (149.8)	1259 (383.7)	97.2%	B
567 (2.9)	6104 (172.9)	1454 (443.2)	96.0%	B
687 (3.5)	7392 (209.3)	1762 (537.1)	91.6%	C

NOTES

- Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver (1m x 1m).
- Free Area of test size is calculated per AMCA standard 500-L.

- Wind Driven Rain Penetration Classes:

Class Effectiveness

- | | | | |
|---|---------------|---|---------------|
| A | 1 to .99 | C | 0.949 to 0.80 |
| B | 0.989 to 0.95 | D | Below 0.8 |

- The EME420MD provides Class A performance at all velocities up to and including 3.5 m/s core velocity.

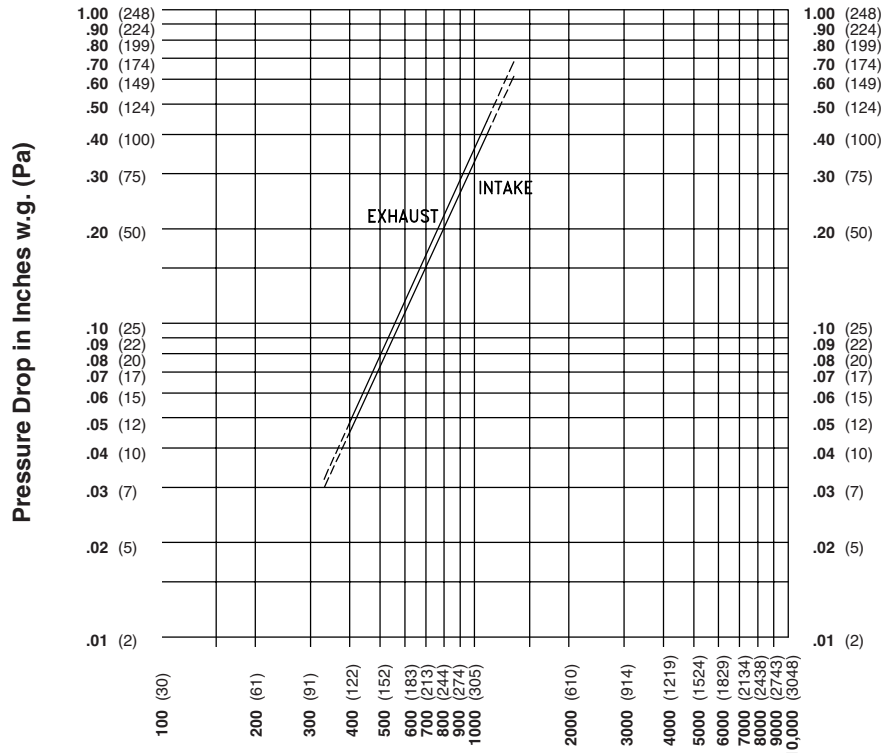
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of EME420MD.
Width – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	130
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05	3.20	3.30
12	0.22	0.41	0.61	0.80	0.99	1.19	1.38	1.57	1.77	1.96	2.16	2.35	2.54	2.74	2.93	3.13	3.32	3.51	3.71	3.73	3.86
0.30	0.02	0.04	0.06	0.07	0.09	0.11	0.13	0.15	0.16	0.18	0.20	0.22	0.24	0.25	0.27	0.29	0.31	0.33	0.34	0.35	0.36
18	0.34	0.64	0.95	1.25	1.55	1.86	2.16	2.46	2.77	3.07	3.37	3.68	3.98	4.28	4.59	4.89	5.19	5.50	5.80	5.84	6.04
0.46	0.03	0.06	0.09	0.12	0.14	0.17	0.20	0.23	0.26	0.29	0.31	0.34	0.37	0.40	0.43	0.45	0.48	0.51	0.54	0.54	0.56
24	0.46	0.88	1.29	1.70	2.12	2.53	2.94	3.35	3.77	4.18	4.59	5.01	5.42	5.83	6.24	6.66	7.07	7.48	7.90	7.95	8.22
0.61	0.04	0.08	0.12	0.16	0.20	0.24	0.27	0.31	0.35	0.39	0.43	0.47	0.50	0.54	0.58	0.62	0.66	0.70	0.73	0.74	0.76
30	0.63	1.19	1.75	2.31	2.87	3.43	3.99	4.55	5.11	5.68	6.24	6.80	7.36	7.92	8.48	9.04	9.60	10.16	10.72	10.79	11.16
0.76	0.06	0.11	0.16	0.22	0.27	0.32	0.37	0.42	0.48	0.53	0.58	0.63	0.68	0.74	0.79	0.84	0.89	0.94	1.00	1.00	1.04
36	0.75	1.42	2.09	2.76	3.43	4.10	4.77	5.44	6.11	6.78	7.45	8.12	8.79	9.46	10.13	10.80	11.47	12.14	12.81	12.90	13.34
0.91	0.07	0.13	0.19	0.26	0.32	0.38	0.44	0.51	0.57	0.63	0.69	0.76	0.82	0.88	0.94	1.00	1.07	1.13	1.19	1.20	1.24
42	0.88	1.66	2.44	3.22	4.00	4.77	5.55	6.33	7.11	7.89	8.67	9.45	10.23	11.01	11.79	12.57	13.35	14.13	14.91	15.01	15.53
1.07	0.08	0.15	0.23	0.30	0.37	0.44	0.52	0.59	0.66	0.73	0.81	0.88	0.95	1.02	1.10	1.17	1.24	1.31	1.39	1.40	1.44
48	1.00	1.89	2.78	3.67	4.56	5.45	6.33	7.22	8.11	9.00	9.89	10.78	11.67	12.56	13.45	14.34	15.23	16.11	17.00	17.11	17.71
1.22	0.09	0.18	0.26	0.34	0.42	0.51	0.59	0.67	0.75	0.84	0.92	1.00	1.09	1.17	1.25	1.33	1.42	1.50	1.58	1.59	1.65
54	1.17	2.20	3.24	4.28	5.31	6.35	7.39	8.42	9.46	10.50	11.53	12.57	13.61	14.64	15.68	16.72	17.75	18.79	19.83	19.96	20.65
1.37	0.11	0.20	0.30	0.40	0.49	0.59	0.69	0.78	0.88	0.98	1.07	1.17	1.27	1.36	1.46	1.55	1.65	1.75	1.84	1.86	1.92
60	1.29	2.44	3.58	4.73	5.87	7.02	8.17	9.31	10.46	11.61	12.75	13.90	15.04	16.19	17.34	18.48	19.63	20.78	21.92	22.06	22.83
1.52	0.12	0.23	0.33	0.44	0.55	0.65	0.76	0.87	0.97	1.08	1.19	1.29	1.40	1.51	1.61	1.72	1.83	1.93	2.02	2.05	2.12
66	1.41	2.67	3.92	5.18	6.44	7.69	8.95	10.20	11.46	12.71	13.97	15.23	16.48	17.74	18.99	20.25	21.50	22.76	24.02	24.17	25.01
1.68	0.13	0.25	0.36	0.48	0.60	0.72	0.83	0.95	1.07	1.18	1.30	1.42	1.53	1.65	1.77	1.88	2.00	2.12	2.23	2.25	2.33
72	1.58	2.98	4.39	5.79	7.19	8.60	10.00	11.40	12.81	14.21	15.61	17.02	18.42	19.82	21.23	22.63	24.03	25.44	26.84	27.02	27.95
1.83	0.15	0.28	0.41	0.54	0.67	0.80	0.93	1.06	1.19	1.32	1.45	1.58	1.71	1.84	1.97	2.10	2.24	2.37	2.50	2.51	2.60
78	1.70	3.21	4.73	6.24	7.75	9.27	10.78	12.29	13.81	15.32	16.83	18.34	19.86	21.37	22.88	24.40	25.91	27.42	28.93	29.12	30.13
1.98	0.16	0.30	0.44	0.58	0.72	0.86	1.00	1.14	1.28	1.42	1.57	1.71	1.85	1.99	2.13	2.27	2.41	2.55	2.69	2.71	2.80
84	1.83	3.45	5.07	6.69	8.31	9.94	11.56	13.18	14.80	16.43	18.05	19.67	21.29	22.92	24.54	26.16	27.78	29.41	31.03	31.23	32.31
2.13	0.17	0.32	0.47	0.62	0.77	0.92	1.08	1.23	1.38	1.53	1.68	1.83	1.98	2.13	2.28	2.43	2.58	2.73	2.89	2.90	3.01
90	1.99	3.76	5.53	7.30	9.07	10.84	12.61	14.38	16.15	17.92	19.69	21.46	23.23	25.00	26.77	28.54	30.31	32.08	33.85	34.07	35.25
2.29	0.19	0.35	0.51	0.68	0.84	1.01	1.17	1.34	1.50	1.67	1.83	2.00	2.16	2.33	2.49	2.65	2.82	2.98	3.15	3.17	3.28
96	2.11	3.99	5.87	7.75	9.63	11.51	13.39	15.27	17.15	19.03	20.91	22.79	24.67	26.55	28.43	30.31	32.19	34.07	35.95	36.18	37.43
2.44	0.20	0.37	0.55	0.72	0.90	1.07	1.25	1.42	1.60	1.77	1.94	2.12	2.29	2.47	2.64	2.82	2.99	3.17	3.34	3.36	3.48
102	2.24	4.23	6.22	8.20	10.19	12.18	14.17	16.15	18.15	20.14	22.13	24.12	26.11	28.10	30.08	32.07	34.06	36.05	38.04	38.29	39.62
2.59	0.21	0.39	0.58	0.76	0.95	1.13	1.32	1.50	1.69	1.87	2.06	2.24	2.43	2.61	2.80	2.98	3.17	3.35	3.54	3.56	3.68
108	2.40	4.54	6.68	8.81	10.95	13.09	15.22	17.36	19.50	21.63	23.77	25.91	28.04	30.18	32.32	34.45	36.59	38.73	40.86	41.13	42.56
2.74	0.22	0.42	0.62	0.82	1.02	1.22	1.42	1.61	1.81	2.01	2.21	2.41	2.61	2.81	3.01	3.20	3.40	3.60	3.80	3.83	3.96
114	2.53	4.77	7.02	9.27	11.51	13.76	16.00	18.25	20.50	22.74	24.99	27.24	29.48	31.73	33.97	36.22	38.47	40.71	42.96	43.24	44.74
2.90	0.24	0.44	0.65	0.86	1.07	1.28	1.49	1.70	1.91	2.12	2.32	2.53	2.74	2.95	3.16	3.37	3.58	3.79	4.00	4.02	4.16
120	2.65	5.01	7.36	9.72	12.07	14.43	16.78	19.14	21.50	23.85	26.21	28.56	30.92	33.28	35.63	37.99	40.34	42.70	45.05	45.35	46.92
3.05	0.25	0.47	0.68	0.90	1.12	1.34	1.56	1.78	2.00	2.22	2.44	2.66	2.88	3.09	3.31	3.53	3.75	3.97	4.19	4.22	4.36
126	2.70	5.10	7.51	9.91	12.31	14.71	17.11	19.52	21.92	24.32	26.72	29.12	31.53	33.93	36.33	38.73	41.13	43.54	45.94	46.24	47.84
3.20	0.25	0.47	0.70	0.92	1.14	1.37	1.59	1.81	2.04	2.26	2.49	2.71	2.93	3.16	3.38	3.60	3.83	4.05	4.27	4.30	4.45
132	2.83	5.34	7.85	10.36	12.87	15.38	17.89	20.41	22.92	25.43	27.94	30.45	32.96	35.47	37.99	40.50	43.01	45.52	48.03	48.35	50.02
3.35	0.26	0.50	0.73	0.96	1.20	1.43	1.66	1.90	2.13	2.36	2.60	2.83	3.07	3.30	3.53	3.77	4.00	4.23	4.47	4.50	4.65
138	3.03	5.73	8.43	11.13	13.82	16.52	19.22	21.92	24.61	27.31	30.01	32.70	35.40	38.10	40.80	43.49	46.19	48.89	51.58	51.92	53.72
3.51	0.28	0.53	0.78	1.03	1.29	1.54	1.79	2.04	2.29	2.54	2.79	3.04	3.29	3.54	3.79	4.04	4.30	4.55	4.80	4.83	5.00
144	3.16	5.96	8.77	11.58	14.38	17.19	20.00	22.80	25.61	28.42	31.23	34.03	36.84	39.65	42.45	45.26	48.07	50.87	53.68	54.03	55.90
3.66	0.29	0.55	0.82	1.08	1.34	1.60	1.86	2.12	2.38	2.64	2.90	3.16	3.43	3.69	3.95	4.21	4.47	4.73	4.99	5.02	5.20

PRESSURE DROP

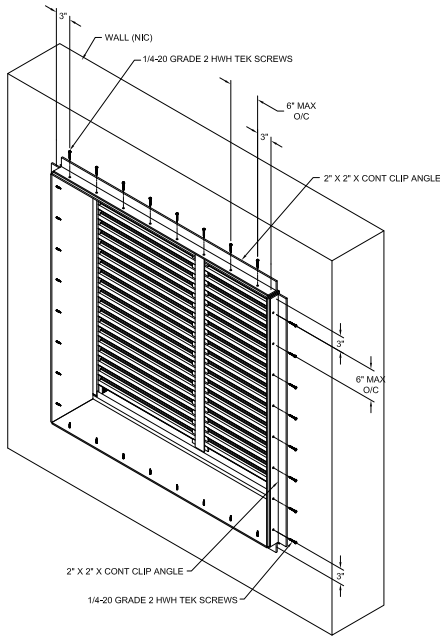
Test size 48" wide x 48" high (1219 x 1219).



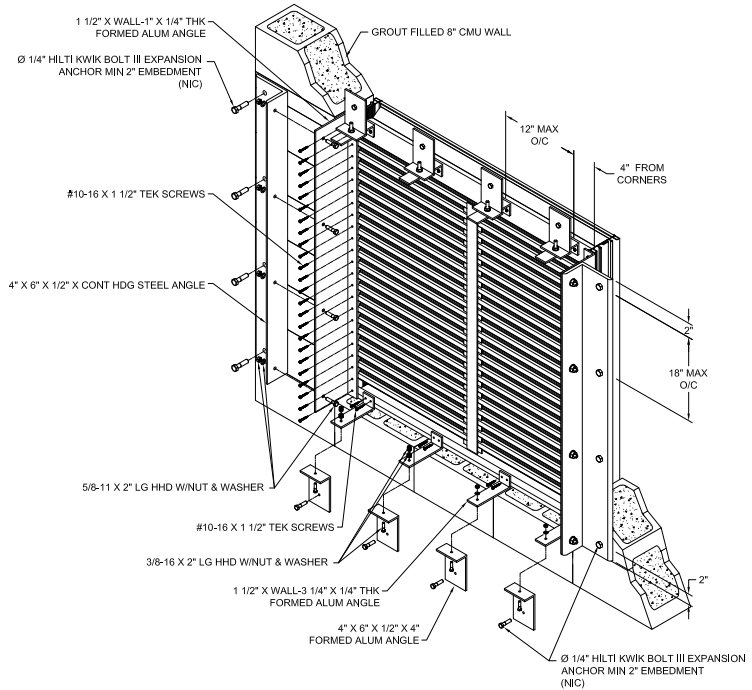
Ratings do not include the effect of a bird screen.

Air Velocity in feet and (meters) per minute through Free Area
(Data corrected to standard air density and AMCA figure or figures tested to 5.5)

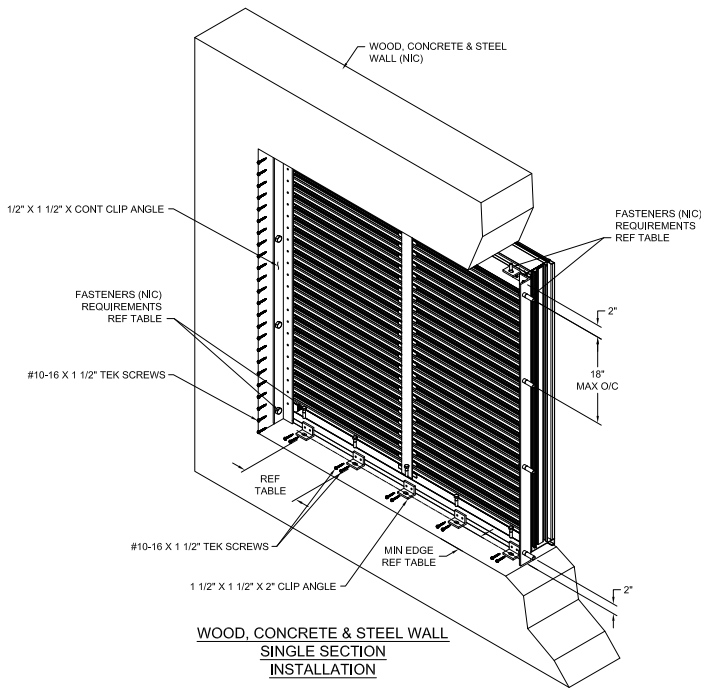
SHIP SECTION DETAILS



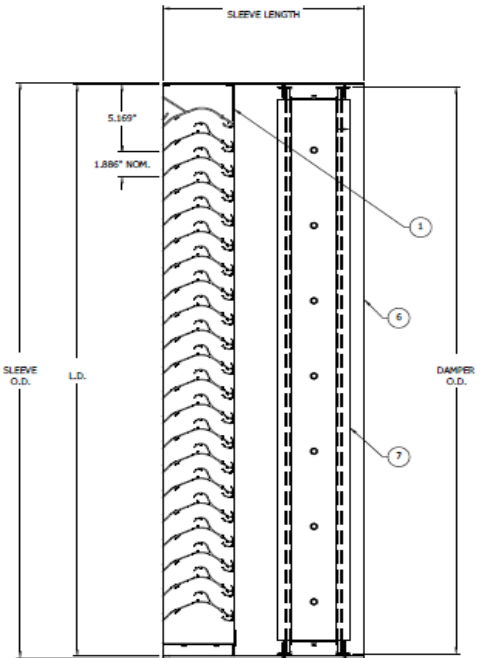
**UNIVERSAL SLEEVE
SINGLE SECTION
INSTALLATION**



GROUT FILLED 8\"/>



**WOOD, CONCRETE & STEEL WALL
SINGLE SECTION
INSTALLATION**



GENERAL NOTES:

1. Reference separate Installation Instruction Sheet for the proper installation method. Miami-Dade and Florida product approvals are contingent upon proper installation. It is the installing contractor's responsibility to ensure that the louvers are installed properly.
2. Some orders may require special submittal and/or shop drawings provided by Ruskin. Reference these drawings for additional installation information.
3. Continuous angles and fasteners can be supplied and are shipped loose.
4. Louvers are provided with steel channel supports to be installed behind the visible mullions.
5. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly.



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www.ruskin.com