

C/S 6" (152.4mm) MODULAR LOUVER MODEL LS-105 LOCATION SMART[®]



Construction Specialties, Inc. certifies that louver model LS-105 Location Smart 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 wind driven rain performance ratings.



DESIGN DATA:

To Maintain an **CLASS A (99%) effectiveness** rating with a wind speed of 50 mph and rainfall rate of 8 in/hr

- Maximum intake core velocity 3.5 m/s (689 FPM)
- Maximum intake free area velocity 5.5 m/s (1078 FPM)
- Intake pressure drop 2.871 mm (0.11 in.) H₂O
- Intake capacity 3.5 m³/s (7416.0 CFM)

* Louver tested with 1m² core area, mill finish and no screen

SUGGESTED SPECIFICATIONS:

1. GENERAL: Furnish and install where indicated on the drawings Modular Louver Model LS-105 Location Smart[®] as manufactured by Construction Specialties Inc., Cranford, NJ; and Mississauga, Ontario. Complete details shall be submitted to the architect for approval prior to fabrication and no substitutes shall be acceptable except by prior written approval.

2. MATERIAL: Frames and blades to be fabricated from 6063-T5 aluminum alloy. Louver to be mechanically fastened using stainless steel or aluminum fasteners. Louvers to be supplied with 4" (101.6 mm) high by full depth sill flashing formed from minimum 0.050" (1.27mm) thick aluminum. Sill flashing to have welded side panels. Louvers and sill flashing to be installed in accordance with the manufacturer's recommended procedures to ensure complete water integrity performance of louver system. Individual LS modules shall be removable and be supplied with integral bird or insect screens. Where required, the louvers are to be supplied with removable blank blank off panels, framed with 0.050" (1.27 mm) aluminum extrusions and fabricated with 0.032" (0.8 mm) skins and 2" (50 mm) thick foam cores.

3. STRUCTURAL DESIGN: Structural supports shall be designed and furnished by the louver manufacturer to carry a wind load of not less than ___ psf. (kPa) (Note: If this paragraph is omitted or if the design wind load is not specified, the louvers will be manufactured in self-supporting units up to a maximum of 4' 0" (1219 mm) wide by 8' 0" (2438 mm) high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.

4. FINISH: Louvers shall be finished in Kynar 500[®]/Hylar 5000[®], a minimum 1 mil (0.025mm) thick full strength 70% resin fluoropolymer coating. The coating shall meet or exceed all requirements of AAMA spec 2605 "Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels." The Louver manufacturer shall supply an industry standard 5 year limited warranty against failure of the Kynar 500/Hylar 5000 finish. This limited warranty shall begin on the date of material shipment (Note: Kynar 500/Hylar 5000 finish with an extended 20 year limited warranty is available as an option at extra cost). The finish will be applied to the exterior elements only.

WIND DRIVEN RAIN PERFORMANCE:

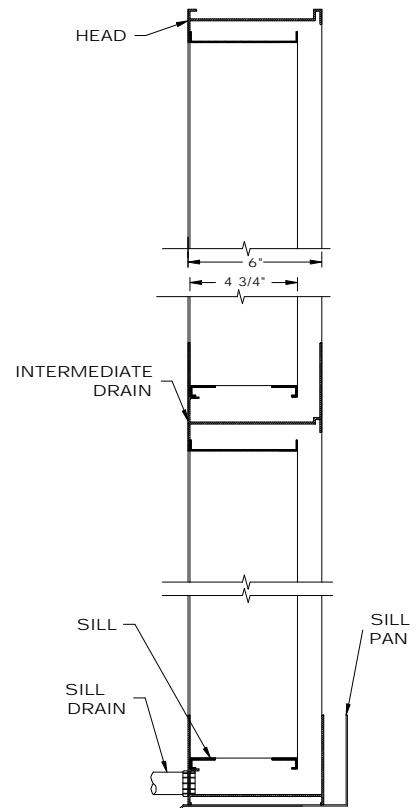
The louver test was based on a 39.370"(1.00m) x 39.370" (1.00 m) core area unit (6.88ft² free area), tested at a rainfall rate of 8.0 inches per hour (203.2mm/hr) and with a wind directed to the face of the louver at a velocity of 50.0 mph (22.4 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

Core Ventilation Rate (m/s):	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5
Core Ventilation Rate (ft/min):	0	98	197	295	394	492	591	689
Free Area Ventilation Rate (ft/min):	0	153	308	462	616	770	925	1078
Rating effectiveness:	A	A	A	A	A	A	A	A
Effectiveness Rating:	A = 1 to 0.99		B = 0.989 to 0.95		C = 0.949 to 0.80		D = 0.80 to 0	

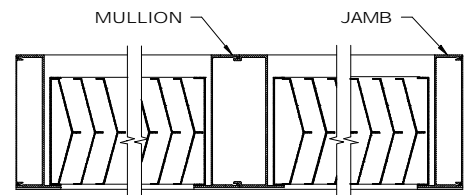
Discharge Loss Coefficient

Intake Cd = 0.502 (Class 1)

Note: AMCA certifies class only



SECTION VIEW



PLAN VIEW

SCALE: 1-1/2" = 1'

C/S MODULAR LOUVER MODEL LS-105 Location Smart®

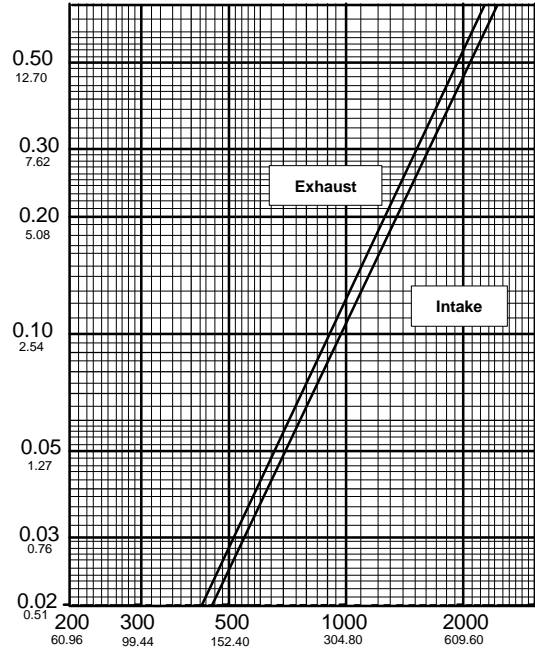
FREE AREAS IN SQ. FEET AND SQ. METERS

WIDTH IN INCHES AND METERS

	24	36	48	60	72	84	96	108
	2.2296	3.3444	4.4592	5.574	6.6888	7.8036	8.9184	10.033
24	1.57	2.56	3.55	4.54	5.17	6.18	7.20	8.08
2.23	0.15	0.24	0.33	0.42	0.48	0.57	0.67	0.75
36	2.58	4.22	5.87	7.53	8.43	10.09	11.75	13.41
3.344	0.24	0.39	0.55	0.70	0.78	0.94	1.09	1.25
48	3.60	5.85	8.15	10.45	11.69	13.99	16.30	18.60
4.459	0.33	0.54	0.76	0.97	1.09	1.30	1.51	1.73
60	4.62	7.48	10.42	13.36	14.96	17.90	20.84	23.79
5.574	0.43	0.69	0.97	1.24	1.39	1.66	1.94	2.21
72	5.17	8.43	11.75	15.06	16.86	20.18	23.50	26.81
6.689	0.48	0.78	1.09	1.40	1.57	1.87	2.18	2.49
84	6.18	10.06	14.02	17.98	20.12	24.08	28.04	32.00
7.804	0.57	0.93	1.30	1.67	1.87	2.24	2.61	2.97
96	7.20	11.69	16.30	20.90	23.39	27.99	32.59	37.19
8.918	0.67	1.09	1.51	1.94	2.17	2.60	3.03	3.46
108	8.22	13.33	18.57	23.81	26.65	31.89	37.14	42.38
10.03	0.76	1.24	1.73	2.21	2.48	2.96	3.45	3.94
120	9.23	14.96	20.84	26.73	29.92	35.80	41.69	47.57
11.15	0.86	1.39	1.94	2.48	2.78	3.33	3.87	4.42
132	9.78	15.91	22.17	28.43	31.82	38.08	44.34	50.60
12.26	0.91	1.48	2.06	2.64	2.96	3.54	4.12	4.70
144	10.80	17.54	24.44	31.34	35.08	41.98	48.89	55.79
13.38	1.00	1.63	2.27	2.91	3.26	3.90	4.54	5.18
156	11.82	19.17	26.72	34.26	38.35	45.89	53.43	60.98
14.49	1.10	1.78	2.48	3.18	3.56	4.26	4.96	5.66
168	12.83	20.80	28.99	37.18	41.61	49.80	57.98	66.17
15.61	1.19	1.93	2.69	3.45	3.87	4.63	5.39	6.15
180	13.85	22.44	31.26	40.09	44.87	53.70	62.53	71.36
16.72	1.29	2.08	2.90	3.72	4.17	4.99	5.81	6.63
192	14.40	23.39	32.59	41.79	46.78	55.98	65.18	74.38
17.84	1.34	2.17	3.03	3.88	4.35	5.20	6.06	6.91
204	15.42	25.02	34.86	44.71	50.04	59.88	69.73	79.57
18.95	1.43	2.32	3.24	4.15	4.65	5.56	6.48	7.39
216	16.43	26.65	37.14	47.62	53.30	63.79	74.28	84.76
20.07	1.53	2.48	3.45	4.42	4.95	5.93	6.90	7.87
228	17.45	28.28	39.41	50.54	56.57	67.70	78.82	89.95
21.18	1.62	2.63	3.66	4.70	5.26	6.29	7.32	8.36
240	18.47	29.92	41.69	53.46	59.83	71.60	83.37	95.14
22.3	1.72	2.78	3.87	4.97	5.56	6.65	7.75	8.84

HEIGHT IN INCHES AND METERS

STATIC PRESSURE DROP IN INCHES AND MILLIMETERS OF WATER



AIR VELOCITY IN FEET AND METERS PER MINUTE THROUGH FREE AREA

Air performance is not licensed to bear the AMCA Seal

UPPER NUMERALS ENGLISH UNITS / LOWER NUMERALS METRIC UNITS

C/S can provide Location Smart Louver designs that are 100% effective for design wind speeds up to 50 miles per hour. Contact C/S for additional Louver and Grilles designs in the Location Smart system and for exact performance information

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LS-105 Location Smart®

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