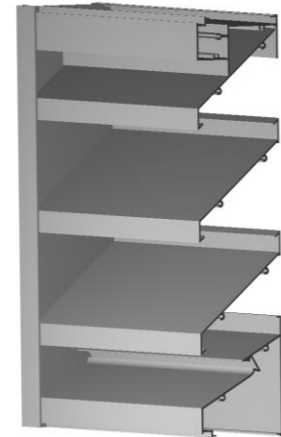


Construction Specialties Inc. certifies that the louver model A4105 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings.

**TEST DATA:**

For a 4 Foot by 4 Foot Unit. Tested with mill finish and no screen.

- Free area = 7.36 ft<sup>2</sup> (.684 m<sup>2</sup>)
- Percent free area = 46.0%
- Free area velocity at point of beginning water penetration (@ 0.01 oz./ft<sup>2</sup>) = 659 FPM (3.35 m/s)
- Maximum recommended air intake velocity = 459 FPM (2.33 m/s)  
Air volume @ 459 FPM free area velocity = 3378 CFM (1.59 m<sup>3</sup>/s)  
Pressure drop @ 459 FPM intake velocity = 0.04 in. H<sub>2</sub>O (9.9 Pa)
- Maximum recommended air exhaust velocity = 1673 FPM (8.50 m/s)  
Air volume @ 1673 FPM free area velocity = 12313 CFM (5.81 m<sup>3</sup>/s)  
Pressure drop @ 1673 FPM exhaust velocity = 0.50 in. H<sub>2</sub>O (124.2 Pa)



**SUGGESTED SPECIFICATIONS:**

**GENERAL:** Furnish and install where indicated on the drawings C/S 4" (101.6 mm) STANDARD FIXED EXTRUDED ARCH. LINE LOUVER **MODELS A4105** as manufactured by Construction Specialties, Inc. Lebanon, New Jersey. Complete details shall be submitted to the architect for approval prior to fabrication. The supplier must be a member of AMCA or BSRIA.

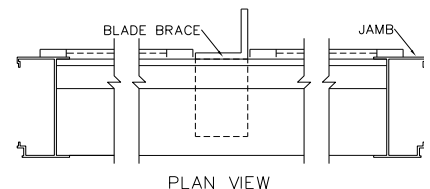
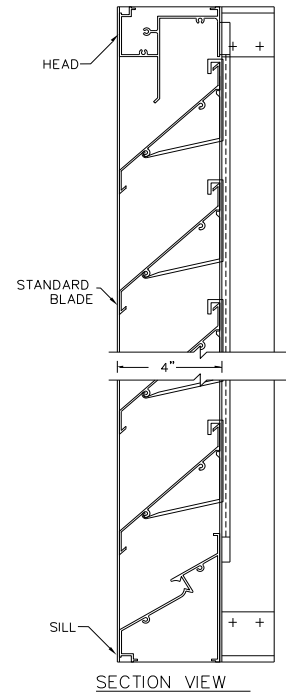
**MATERIAL:** Heads, sills and jambs to be one piece structural members of 6063-T6 alloy with integral caulking slot and retaining beads. Mullions shall be sliding interlock type. Blades to be one piece extrusions with reinforcing bosses. Fixed blades to be supported and lined up with heavy gauge extruded aluminum blade braces, positively interlocked to each blade and mechanically secured to structurals by aluminum and stainless steel fastenings. Where horizontal louvers extend around corners, the fixed blades, heads and sills shall be mitered and continuously heliarc welded. Extrusion thicknesses shall be as follows: Heads, Sills, and jambs: 0.081" (2.06 mm) Fixed Blades: 0.068" (1.73 mm). All fasteners to be aluminum or stainless steel. All louvers to be furnished with 5/8" (15.87 mm) flattened expanded mesh, aluminum bird screen with a 0.055" (1.4 mm) thick extruded aluminum frame. Screens and screen frames to be standard mill finish.

**STRUCTURAL DESIGN:** Structural supports shall be designed and furnished by the louver manufacturer to carry a wind load of not less than \_\_\_\_\_ psf (Pascals). (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 5' (1524 mm) wide by 8' (2438 mm) high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.)

**TEST DATA:** The louver manufacturer shall submit test data on a 4' x 4' (1.22 m x 1.22 m) unit showing that the louver conforms to the following: (Based on a 15 min test duration)

Free area:	7.36 ft. (0.684 m <sup>2</sup> )
Free area velocity At point of beginning water penetration (0.01 oz/ft <sup>2</sup> )	659 FPM (3.35 m/s)
Intake pressure drop at 0.01 oz.ft <sup>2</sup> free area velocity:	0.09 in. H <sub>2</sub> O (22.4 Pa)
Exhaust pressure drop at 1000 FPM free area velocity (305 m/min):	0.18 in. H <sub>2</sub> O (44.5 Pa)

**FINISH:** All louvers shall be finished with C/S Powder Coat, a coating to be 1.5 to 3 mil. thick full strength **100% resin Fluoropolymer coating. Finish to allow zero VOCs** to be emitted into facility of application. Finish to adhere to a 4H Hardness rating. All finishing procedures shall be one continuous operation in the plant of the manufacturer. **The coating shall meet or exceed all requirements of AAMA specification 2605** "Voluntary Specification for High Performance Organic Coatings on Architectural extrusions and Panels." The louver manufacturer shall supply an industry standard **20-year limited warranty against failure or excessive fading** of the Fluoropolymer Powder Coat finish. This limited warranty shall begin on the date of material shipment.



Discharge Coefficient  
Intake Cd = 0.30 (Class 3)  
AMCA certifies the coefficient class only

**PERFORMANCE DATA MODEL A4105**

**Water Penetration Statement**

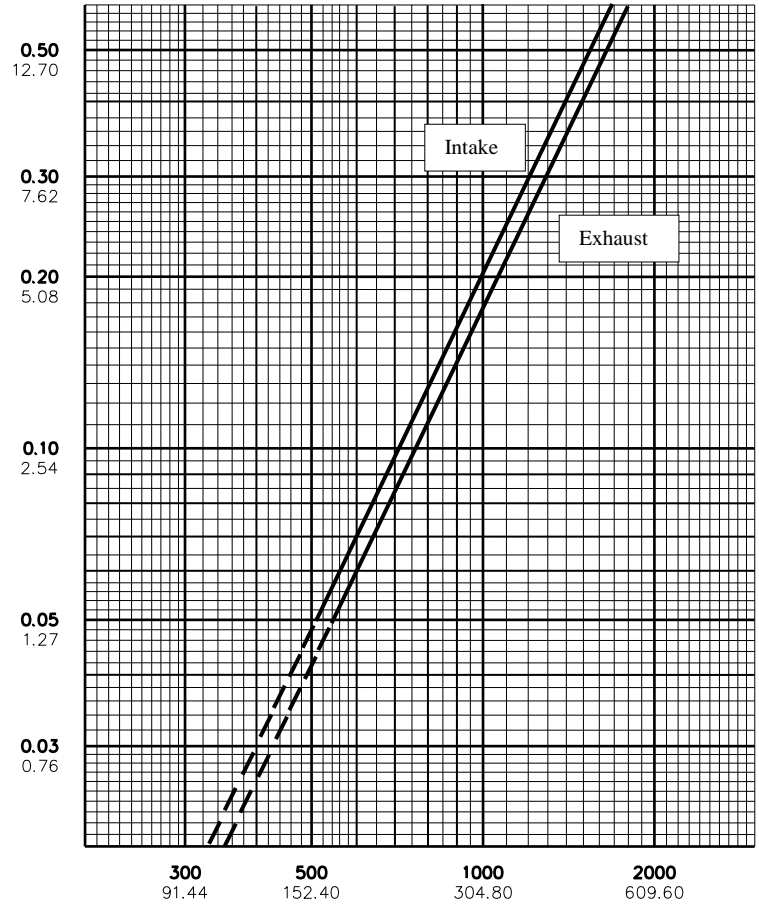
AMCA defines the point of beginning water penetration as the free area velocity at which the AMCA water test has yielded 0.01 or less ounces of water per square foot of louver free area during a 15-minute test period.

**Width in Inches and Meters**

	12	18	24	30	36	42	48	54	60
0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.67
18	0.41	0.70	0.98	1.27	1.56	1.85	2.13	2.42	2.71
0.46	0.04	0.06	0.09	0.12	0.14	0.17	0.20	0.22	0.25
24	0.61	1.04	1.47	1.90	2.33	2.76	3.18	3.61	4.04
0.61	0.06	0.10	0.14	0.18	0.22	0.26	0.30	0.34	0.38
30	0.82	1.40	1.97	2.55	3.13	3.70	4.28	4.85	5.43
0.76	0.08	0.13	0.18	0.24	0.29	0.34	0.40	0.45	0.50
36	0.99	1.68	2.38	3.08	3.77	4.47	5.16	5.86	6.56
0.91	0.09	0.16	0.22	0.29	0.35	0.42	0.48	0.54	0.61
42	1.26	2.14	3.03	3.91	4.80	5.68	6.56	7.45	8.33
1.07	0.12	0.20	0.28	0.36	0.45	0.53	0.61	0.69	0.77
48	1.46	2.48	3.51	4.54	5.56	6.59	7.36	8.64	9.67
1.22	0.14	0.23	0.33	0.42	0.52	0.61	0.71	0.80	0.90
54	1.67	2.84	4.01	5.19	6.36	7.54	8.71	9.88	11.06
1.37	0.15	0.26	0.37	0.48	0.59	0.70	0.81	0.92	1.03
60	1.84	3.13	4.42	5.72	7.01	8.30	9.60	10.89	12.18
1.52	0.17	0.29	0.41	0.53	0.65	0.77	0.89	1.01	1.13
66	2.10	3.59	5.07	6.55	8.03	9.51	11.00	12.48	13.96
1.68	0.20	0.33	0.47	0.61	0.75	0.88	1.02	1.16	1.30
72	2.31	3.93	5.55	7.18	8.80	10.42	12.05	13.67	15.29
1.83	0.21	0.37	0.52	0.67	0.82	0.97	1.12	1.27	1.42
78	2.51	4.29	6.06	7.83	9.60	11.37	13.14	14.91	16.68
1.98	0.23	0.40	0.56	0.73	0.89	1.06	1.22	1.39	1.55
84	2.68	4.57	6.47	8.36	10.25	12.14	14.03	15.92	17.81
2.13	0.25	0.43	0.60	0.78	0.95	1.13	1.30	1.48	1.65
90	2.95	5.03	7.11	9.19	11.27	13.35	15.43	17.51	19.58
2.29	0.27	0.47	0.66	0.85	1.05	1.24	1.43	1.63	1.82
96	3.15	5.37	7.60	9.82	12.04	14.26	16.48	18.70	20.92
2.44	0.29	0.50	0.71	0.91	1.12	1.32	1.53	1.74	1.94
102	3.36	5.73	8.10	10.47	12.84	15.20	17.57	19.94	22.31
2.59	0.31	0.53	0.75	0.97	1.19	1.41	1.63	1.85	2.07
108	3.53	6.02	8.51	11.00	13.48	15.97	18.46	20.95	23.43
2.74	0.33	0.56	0.79	1.02	1.25	1.48	1.71	1.95	2.18
114	3.80	6.47	9.14	11.81	14.49	17.16	19.83	22.51	25.18
2.90	0.35	0.60	0.85	1.10	1.35	1.59	1.84	2.09	2.34
120	4.00	6.82	9.64	12.46	15.27	18.09	20.91	23.73	26.55
3.05	0.37	0.63	0.90	1.16	1.42	1.68	1.94	2.20	2.47
126	4.21	7.18	10.14	13.11	16.07	19.04	22.00	24.97	27.93
3.20	0.39	0.67	0.94	1.22	1.49	1.77	2.04	2.32	2.60
132	4.38	7.47	10.55	13.63	16.72	19.80	22.89	25.97	29.06
3.35	0.41	0.69	0.98	1.27	1.55	1.84	2.13	2.41	2.70
138	4.64	7.91	11.18	14.45	17.72	20.99	24.26	27.53	30.80
3.51	0.43	0.74	1.04	1.34	1.65	1.95	2.25	2.56	2.86
144	4.85	8.26	11.68	15.09	18.51	21.93	25.34	28.76	32.17
3.66	0.45	0.77	1.09	1.40	1.72	2.04	2.35	2.67	2.99
150	5.06	8.62	12.18	15.75	19.31	22.87	26.43	30.00	33.56
3.81	0.47	0.80	1.13	1.46	1.79	2.12	2.46	2.79	3.12
156	5.23	8.91	12.59	16.27	19.96	23.64	27.32	31.00	34.68
3.96	0.49	0.83	1.17	1.51	1.85	2.20	2.54	2.88	3.22
162	5.49	9.36	13.23	17.09	20.96	24.83	28.70	32.56	36.43
4.11	0.51	0.87	1.23	1.59	1.95	2.31	2.67	3.03	3.38
168	5.70	9.71	13.72	17.73	21.75	25.76	29.77	33.78	37.80
4.27	0.53	0.90	1.27	1.65	2.02	2.39	2.77	3.14	3.51
174	5.91	10.07	14.23	18.39	22.55	26.71	30.87	35.02	39.18
4.42	0.55	0.94	1.32	1.71	2.09	2.48	2.87	3.25	3.64
180	6.08	10.36	14.63	18.91	23.19	27.47	31.75	36.03	40.31
4.57	0.56	0.96	1.36	1.76	2.15	2.55	2.95	3.35	3.74
186	6.34	10.80	15.27	19.73	24.20	28.66	33.13	37.59	42.06
4.72	0.59	1.00	1.42	1.83	2.25	2.66	3.08	3.49	3.91
192	6.53	11.12	15.72	20.32	24.91	29.51	34.11	38.70	43.30
4.88	0.61	1.03	1.46	1.89	2.31	2.74	3.17	3.60	4.02
198	6.75	11.51	16.27	21.03	25.78	30.54	35.30	40.05	44.81
5.03	0.63	1.07	1.51	1.95	2.40	2.84	3.28	3.72	4.16

**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  
**For a 48" X 48" sized louver tested to figure 5.5.**  
**Data corrected to standard air density.**

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For assistance with overseas requirements,  
 call C/S International (908) 236-0800

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**A4105-7**

**Upper Numerals English Units/Lower Numerals Metric Units**