

Tag: \_\_\_\_\_ Engineer: \_\_\_\_\_  
 Project: \_\_\_\_\_ Contractor: \_\_\_\_\_  
 Location: \_\_\_\_\_ Architect: \_\_\_\_\_  
 Date: \_\_\_\_\_ Submitted By: \_\_\_\_\_



## MODEL WDR-6 Extruded Aluminum Louver

Wind-Driven Rain, AMCA Licensed

### Standard Construction

**FRAME:** 6" (152) x .081 (2.1) extruded aluminum, 6063-T6

**BLADES:** .081 (2.1) extruded aluminum, 6063-T6

Fixed, Sightproof blades

Spaced approximately 2" (51)

**SCREEN:** Bird screen - 3/4" (19) x .050" (1.3) expanded, flattened aluminum with a removable frame on the interior of the louver. Screen adds approximately 1/2" (12.7) to depth of louver.

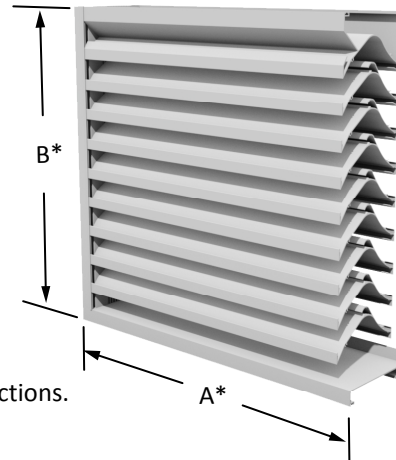
**FINISH:** Mill

**MINIMUM SIZE:** 6"w (152) x 12"h (305)

#### MAXIMUM

**ASSEMBLY SIZE:** Single Sections will not exceed 120"w (3048) x 72"h (1829) or 72"w (1829) x 120"h (3048).  
Larger sizes will require field assembly of smaller sections.

**DESIGN LOAD:** 20 psf (97.6 kg/m<sup>2</sup>) Consult for higher pressures.



All dimensions shown in inches, parenthesis ( ) indicate millimeters.

### LEED Material Information

**VOC Content (g/L) - 0**

**Manufacturing Location (MR 5.1)**

- Marion, NC 28752

**Recycled Content (MR 4.1 & 4.2)**

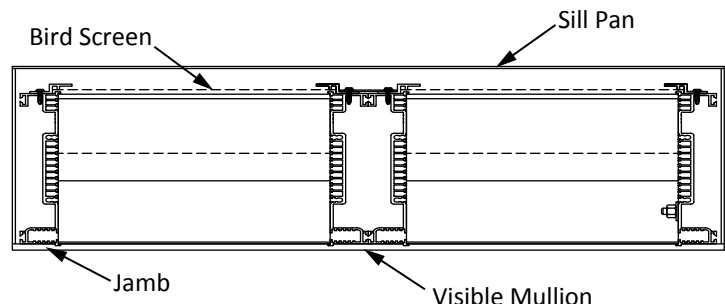
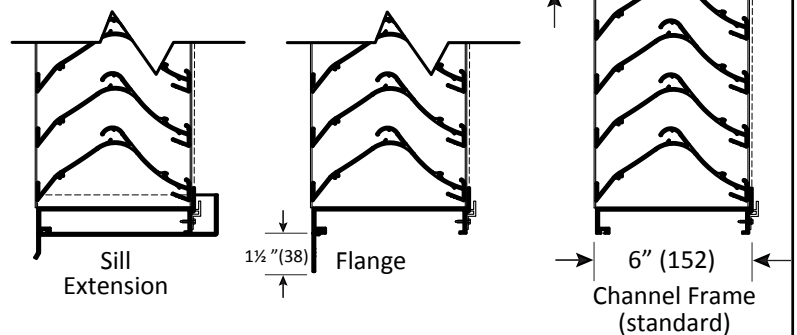
- 10% Post-Consumer
- 80% Pre-Consumer

### Optional Construction

- ☐ Sill Extension
- ☐ Flange Frame [1½" (38)]
- ☐ Optional Bird and Insect Screens
- ☐ Optional Finishes: Consult Finishes Chart
- ☐ Blank Off Panel:
  - ☐ Aluminum, Non-Insulated
  - ☐ Aluminum, Insulated

Consult NCA for Other Special Requirements

### Frame Options



**Note:** Concealed (Architectural) mullions are not recommended with drainable blade products.

All Stated Specifications Are Subject to Change Without notice or Obligation.

WDR-6- 0913 / Replaces WDR-6 - 08-06

## FREE AREA GUIDE FOR WDR-6 (Free area in ft<sup>2</sup> and m<sup>2</sup>)

		Width in Inches (Meters)																	
		6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108
Height in Inches (Meters)	12	0.10	0.26	0.43	0.59	0.75	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
	0.30	0.01	0.02	0.04	0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.18	0.19	0.21	0.22	0.24	0.25	0.27
	18	0.20	0.51	0.82	1.12	1.43	1.74	2.05	2.36	2.67	2.98	3.29	3.60	3.91	4.22	4.53	4.84	5.15	5.45
	0.46	0.02	0.05	0.08	0.10	0.13	0.16	0.19	0.22	0.25	0.28	0.31	0.33	0.36	0.39	0.42	0.45	0.48	0.51
	24	0.29	0.75	1.20	1.66	2.12	2.57	3.03	3.49	3.95	4.40	4.86	5.32	5.77	6.23	6.69	7.14	7.60	8.06
	0.61	0.03	0.07	0.11	0.15	0.20	0.24	0.28	0.32	0.37	0.41	0.45	0.49	0.54	0.58	0.62	0.66	0.71	0.75
	30	0.39	0.99	1.60	2.20	2.81	3.41	4.02	4.62	5.23	5.83	6.44	7.04	7.65	8.25	8.86	9.46	10.07	10.67
	0.76	0.04	0.09	0.15	0.20	0.26	0.32	0.37	0.43	0.49	0.54	0.60	0.65	0.71	0.77	0.82	0.88	0.94	0.99
	36	0.48	1.23	1.98	2.74	3.49	4.24	4.99	5.75	6.50	7.25	8.01	8.76	9.51	10.26	11.02	11.77	12.52	13.27
	0.91	0.04	0.11	0.18	0.25	0.32	0.39	0.46	0.53	0.60	0.67	0.74	0.81	0.88	0.95	1.02	1.09	1.16	1.23
	42	0.57	1.47	2.37	3.27	4.17	5.07	5.97	6.87	7.77	8.67	9.57	10.47	11.37	12.27	13.17	14.07	14.97	15.88
	1.07	0.05	0.14	0.22	0.30	0.39	0.47	0.56	0.64	0.72	0.81	0.89	0.97	1.06	1.14	1.23	1.31	1.39	1.48
	48	0.67	1.71	2.76	3.81	4.86	5.91	6.95	8.00	9.05	10.10	11.14	12.19	13.24	14.29	15.33	16.38	17.43	18.48
	1.22	0.06	0.16	0.26	0.35	0.45	0.55	0.65	0.74	0.84	0.94	1.04	1.13	1.23	1.33	1.43	1.52	1.62	1.72
	54	0.76	1.96	3.15	4.35	5.54	6.74	7.93	9.13	10.32	11.52	12.71	13.91	15.10	16.30	17.49	18.69	19.88	21.08
	1.37	0.07	0.18	0.29	0.40	0.52	0.63	0.74	0.85	0.96	1.07	1.18	1.29	1.40	1.52	1.63	1.74	1.85	1.96
	60	0.85	2.20	3.54	4.88	6.23	7.57	8.91	10.25	11.60	12.94	14.28	15.62	16.97	18.31	19.65	20.99	22.34	23.68
	1.52	0.08	0.20	0.33	0.45	0.58	0.70	0.83	0.95	1.08	1.20	1.33	1.45	1.58	1.70	1.83	1.95	2.08	2.20
	66	0.95	2.44	3.93	5.42	6.91	8.40	9.89	11.39	12.88	14.37	15.86	17.35	18.84	20.33	21.82	23.31	24.80	26.30
	1.68	0.09	0.23	0.37	0.50	0.64	0.78	0.92	1.06	1.20	1.34	1.47	1.61	1.75	1.89	2.03	2.17	2.31	2.45
	72	1.04	2.68	4.32	5.96	7.60	9.24	10.87	12.51	14.15	15.79	17.43	19.07	20.70	22.34	23.98	25.62	27.26	28.90
	1.83	0.10	0.25	0.40	0.55	0.71	0.86	1.01	1.16	1.32	1.47	1.62	1.77	1.93	2.08	2.23	2.38	2.54	2.69
	78	1.14	2.92	4.71	6.49	8.28	10.07	11.85	13.64	15.42	17.21	19.00	20.78	22.57	24.35	26.14	27.93	29.71	31.50
	1.98	0.11	0.27	0.44	0.60	0.77	0.94	1.10	1.27	1.43	1.60	1.77	1.93	2.10	2.26	2.43	2.60	2.76	2.93
	84	1.23	3.16	5.10	7.03	8.96	10.90	12.83	14.77	16.70	18.63	20.57	22.50	24.43	26.37	28.30	30.23	32.17	34.10
	2.13	0.11	0.29	0.47	0.65	0.83	1.01	1.19	1.37	1.55	1.73	1.91	2.09	2.27	2.45	2.63	2.81	2.99	3.17
	90	1.32	3.41	5.49	7.57	9.65	11.73	13.81	15.89	17.97	20.05	22.13	24.22	26.30	28.38	30.46	32.54	34.62	36.70
	2.29	0.12	0.32	0.51	0.70	0.90	1.09	1.28	1.48	1.67	1.86	2.06	2.25	2.45	2.64	2.83	3.03	3.22	3.41

- Notes:**
- Pressure Drop Data applies to test unit size 48" w x 48" h (1219 x 1219) only.
  - Performance data does not include the effects of bird screen.
  - All Performance shown is at standard air density of 0.075 lb/ft<sup>3</sup> (1.2 kg/m<sup>3</sup>).

Beginning Point of Water Penetration at  
.01oz/ft<sup>2</sup> is **1250+ FPM** (381+ m/min)  
Free Area Velocity

### Wind Driven Rain Performance

29 mph Wind Driven Tests are per AMCA 500L, Figure 5.11 Setup  
Performance Based Test Louver 39 3/8"x39 3/8", 1mx1m Core Size

Velocity Through Cal. Plate	Core velocity Through Louver	Specified Flow	Nominal Supply Flow	Corrected Penetrated Water Flow	Water Penetration Effectiveness	Water Penetration Classification
(fpm)	(fpm)	(gal/hr)	(gal/hr)	(gal/hr)	(%)	
587	595	20.135	37.797	0.0020	100.0	A

50 mph Wind Driven Tests are per AMCA 500L, Figure 5.11 Setup  
Performance Based Test Louver 39 3/8"x39 3/8", 1mx1m Core Size

Velocity Through Cal. Plate	Core velocity Through Louver	Specified Flow	Nominal Supply Flow	Corrected Penetrated Water Flow	Water Penetration Effectiveness	Water Penetration Classification
(fpm)	(fpm)	(gal/hr)	(gal/hr)	(gal/hr)	(%)	
0	0	53.693	133.175	0.2979	99.4	A
96	94	53.693	123.784	0.5111	99	A

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

The Discharge Loss Coefficient is Class 1. The Discharge Loss Coefficient is calculated per AMCA 511, Appendix C5 using Actual Flow divided by the Theoretical Flow.



NCA certifies that the Model **WDR-6** louver shown herein is certified 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 and wind driven rain ratings only.

