

# Air Flow Company, Inc.

850 W. Fullerton Ave. • Addison, IL 60101  
Tel (630) 628-1138 Fax (630) 628-1149

## ST-12

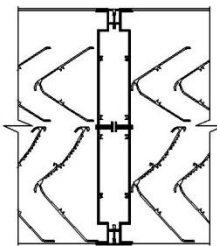
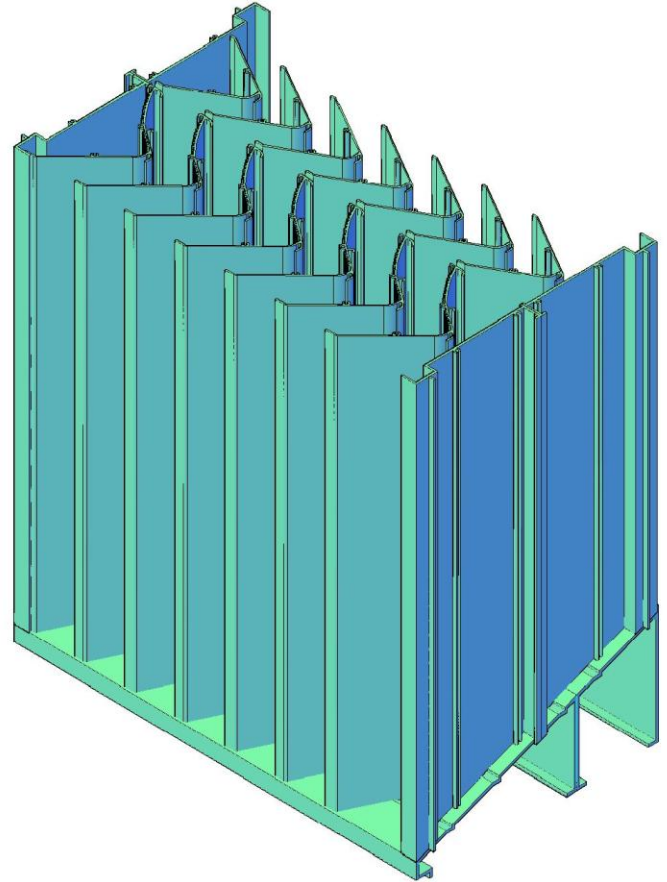
12" Wind Driven, Drainable  
Sight Proof Vertical  
Stationary Louver

### Standard Louver Construction

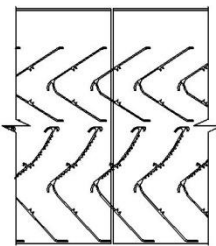
✓ Frame	Channel
✓ Frame Thickness	.125" & .081" extruded aluminum 6063-T5
✓ Blades Thickness	.081" & .063" extruded aluminum 6063-T5
✓ Blade Positioning	2-½" spacing center to center
✓ Fasteners	#8-14 x 1" Plated Steel
✓ Screen	.050" x ¾" expanded aluminum without frame
✓ Finish	Mill
✓ Undersized	¼" under opening sizes
✓ Mullions	Invisible
✓ Minimum Size	12" x 12"
✓ Maximum Single Section	120" x 84" or 84" x 120"

### Optional Construction

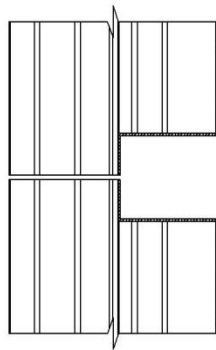
Fasteners	Welded Construction		
	Stainless Steel Fasteners		
Screen	.063" x ½" wire mesh Bird Screen		
	18 x 16 Insect screen		
Finish	Prime coat		
	Baked enamel		
	Powder coat		
	Kynar 500	2 Coat	3 Coat
	Anodized	Clear	Color
Mullions	Visible		
Frame Accessories	Flange		
	Pan		
	Extended sill		



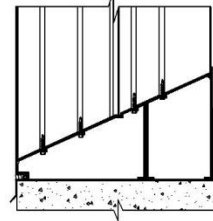
Exposed Mullion



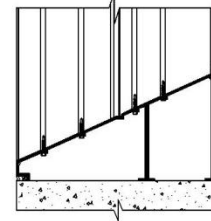
Invisible Mullion



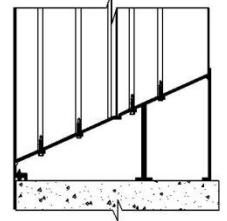
Hor. Invisible Mullion



Sill Extension



Channel Frame



Flanged (1-1/2")

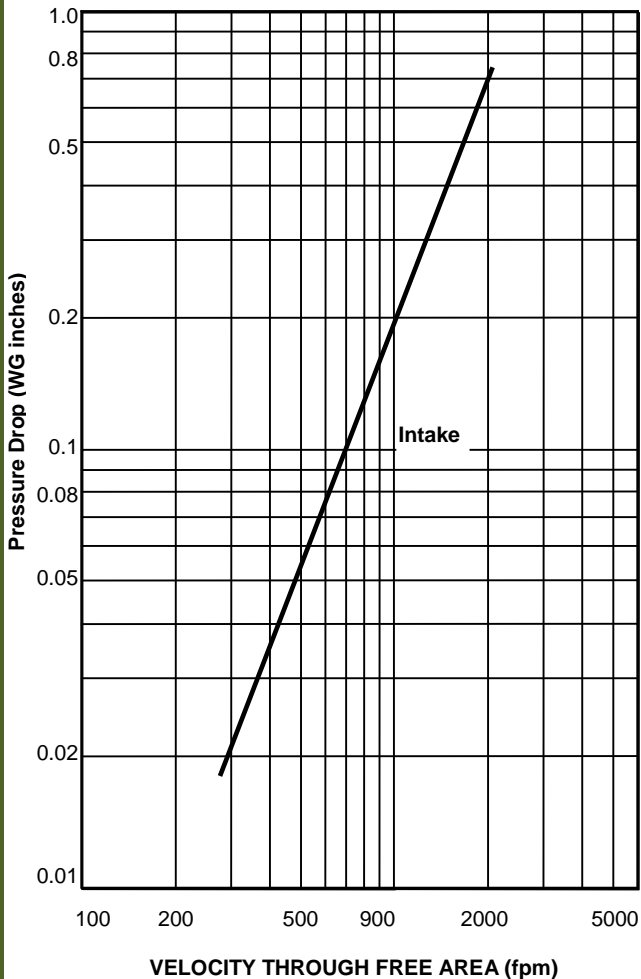
### Louver Schedule

Item	Qty	Opening Size (W x H)	Notes	Project:
				Location:
				Arch/Eng:
				Customer:

### Free Area Calculations (sq. ft.)

		W I D T H (inches)														
		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
H E I G H T (inches)	12	0.07	0.14	0.24	0.31	0.41	0.48	0.55	0.65	0.72	0.82	0.89	0.96	1.06	1.13	1.23
	18	0.16	0.32	0.55	0.71	0.95	1.10	1.26	1.49	1.65	1.89	2.04	2.20	2.44	2.59	2.83
	24	0.25	0.50	0.86	1.11	1.48	1.72	1.97	2.34	2.58	2.95	3.19	3.44	3.81	4.05	4.42
	30	0.34	0.67	1.17	1.51	2.01	2.34	2.68	3.18	3.51	4.01	4.35	4.68	5.18	5.52	6.02
	36	0.43	0.85	1.48	1.91	2.54	2.96	3.39	4.02	4.44	5.08	5.50	5.92	6.55	6.98	7.61
	42	0.52	1.03	1.79	2.31	3.07	3.58	4.09	4.86	5.37	6.14	6.65	7.16	7.93	8.44	9.21
	48	0.60	1.20	2.10	2.70	3.60	4.20	4.80	5.70	6.30	7.20	7.80	8.40	9.30	9.90	10.80
	54	0.69	1.38	2.41	3.10	4.13	4.82	5.51	6.54	7.23	8.26	8.95	9.64	10.67	11.36	12.39
	60	0.78	1.56	2.72	3.50	4.67	5.44	6.22	7.39	8.16	9.33	10.10	10.88	12.05	12.82	13.99
	66	0.87	1.74	3.03	3.90	5.20	6.06	6.93	8.23	9.09	10.39	11.26	12.12	13.42	14.29	15.58
	72	0.96	1.91	3.34	4.30	5.73	6.68	7.64	9.07	10.02	11.45	12.41	13.36	14.79	15.75	17.18
	78	1.05	2.09	3.65	4.70	6.26	7.30	8.35	9.91	10.95	12.52	13.56	14.60	16.17	17.21	18.77
	84	1.14	2.27	3.96	5.10	6.79	7.92	9.05	10.75	11.88	13.58	14.71	15.84	17.54	18.67	20.37
	90	1.22	2.44	4.27	5.49	7.32	8.54	9.76	11.59	12.81	14.64	15.86	17.08	18.91	20.13	21.96
	96	1.31	2.62	4.58	5.89	7.86	9.16	10.47	12.43	13.74	15.71	17.01	18.32	20.28	21.59	23.56
	102	1.40	2.80	4.89	6.29	8.39	9.78	11.18	13.28	14.67	16.77	18.17	19.56	21.66	23.05	25.15
108	1.49	2.98	5.20	6.69	8.92	10.40	11.89	14.12	15.60	17.83	19.32	20.80	23.03	24.52	26.74	
114	1.58	3.15	5.51	7.09	9.45	11.02	12.60	14.96	16.53	18.89	20.47	22.04	24.40	25.98	28.34	
120	1.67	3.33	5.82	7.49	9.98	11.64	13.31	15.80	17.46	19.96	21.62	23.28	25.78	27.44	29.93	

### Air Performance



Sand Removal Efficiency		
Free Area Velocity	0.53 m/s (104 fpm)	1.34 m/s (264 fpm)
Sand Partical Size	Removal Efficiency	Removal Efficiency
150-300 microns	98%	95%
300-355 microns	99%	96%
355-425 microns	99%	98%



Sand Louvers shall be tested with sand removal efficiency in accordance with ASHRAE standard 52.1 – 2007.

Test ratings shall be based on test and procedures in accordance with AMCA 500-L for Air Performance and Water Penetration.

Test result does not include the effect of the bird screen.

Sand Louvers shall be designed to withstand (+/-) 40 psf of wind pressure @ L/180 deflection.

### Water Penetration

Beginning of water penetration = 1250 FPM  
(15 minutes duration)

