

**Storm Resistant Louver in 7" thick design Model SLS-07**

**Design Features** – High performance patented horizontal intermediate dual blade design with multiple functions such as: weather protection, vision proof and wind-driven rain resistant design . Test modeled after HEVAC and BSRIA.

**STANDARD CONSTRUCTION**

ALL MATERIAL – EXTRUDED ALUMINUM 6063-T5 (KB-45)

**FRAME**

SLS-07 – 7" deep (178), .081" (2.1) wall thickness extruded aluminum in style #3.

**BLADES**

SLS-07 – 7" deep (178), .070" (1.8) wall thickness extruded aluminum @ 45°

**MAXIMUM SIZE**

Unlimited, with mullions, structural bracing supplied by others

**MAXIMUM FACTORY ASSEMBLY SIZE**

120" w x 84 h" or 84" w x 120"h (3048 x 2134) or (2134 x 3048) (Type of finish may limit maximum single section)

**MULLION**

Invisible

**MINIMUM SIZE**

12" x 12" (305 x 305)

**UNDERSIZED**

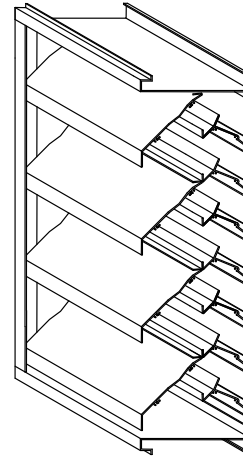
1/4" (6) under ordered size unless specified Exact or Actual

**SCREEN**

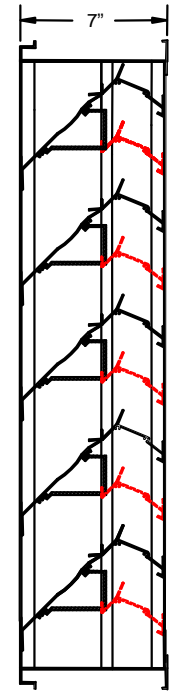
3/4" x .051" (19 x 1.3) flattened expanded aluminum bird screen in extruded aluminum frame.

**FINISH**

Mill



ISOMETRIC VIEW



VERTICAL SECTION

**OPTIONAL CONSTRUCTION**

**SCREEN** - Many styles available please consult screen listing

**FINISH** – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, or Powder coat.

**MULLION** – Visible for architectural preference

**SPECIAL PURPOSE CONSTRUCTION**

Special shapes: Triangle, Round, Trapezoid, etc.

Fully welded construction

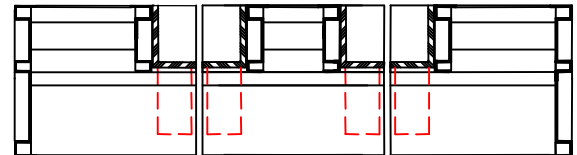
Security bars

Hinged as walk through door or swing out access

Filter racks

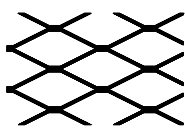
Sleeved for ductwork connection

\*\* Consult SAFE-AIR/DOWCO for additional technical information.

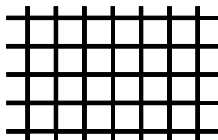


HORIZONTAL SECTION

**TYPICAL SCREEN STYLES**



Expanded Aluminum Standard



Wire Mesh

AIR PERFORMANCE	
<b>Free Area:</b> 50% - 48 x 48 unit (1219 x 1219)	
<b>Pressure Drop:</b> 0.25" w.g. @ 1000 fpm (6.35mm wg. @ 5.08 mps)	

WIND DRIVEN RAIN TEST (AMCA 500 L-99)	
Rainfall inch/hour: 3" (76 mm)	
Wind Velocity: 30 mph (48.27 kph)	
Core Velocity: 690 fpm (210.3 m/min)	
Water Flow: 112 gph (424 lph)	
Water Penetration: .56 gph (.212 lph)	
Efficiency: 99.50%	

DATE	ARCHITECT			CUSTOMER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION



DEPENDABLE PRODUCTS SINCE 1955

**SAFE-AIR OF ILLINOIS INC.**

Engineering and General Offices

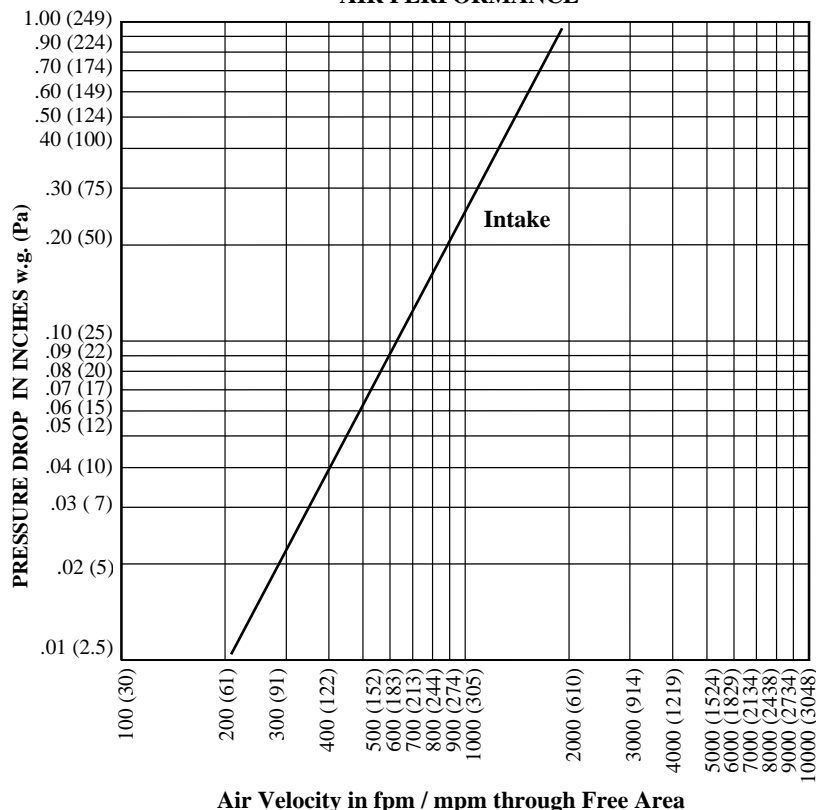
1855 South 54<sup>th</sup> Avenue, Cicero, Illinois 60804

Phone 708-652-9100 FAX 708-652-9158

## FREE AREA CALCULATIONS IN SQUARE FEET / SQUARE METERS

		Width - Inches / Meters																		
		12 0.31	18 0.46	24 0.61	30 0.77	36 0.92	42 1.07	48 1.22	54 1.38	60 1.53	66 1.68	72 1.83	78 1.99	84 2.14	90 2.29	96 2.44	102 2.6	108 2.75	114 2.9	120 3.05
Height - Inches / Meters	12 0.31	0.25 0.02	0.41 0.04	0.56 0.05	0.71 0.07	0.86 0.08	1.01 0.09	1.17 0.11	1.32 0.12	1.47 0.14	1.62 0.15	1.77 0.16	1.93 0.18	2.08 0.19	2.23 0.21	2.38 0.22	2.53 0.24	2.69 0.25	2.84 0.26	2.99 0.28
	18 0.46	0.54 0.05	0.86 0.08	1.18 0.11	1.51 0.14	1.83 0.17	2.15 0.2	2.48 0.23	2.8 0.26	3.12 0.29	3.44 0.32	3.77 0.35	4.09 0.38	4.41 0.41	4.74 0.44	5.06 0.47	5.38 0.5	5.7 0.53	6.03 0.56	6.35 0.59
	24 0.61	0.73 0.07	1.17 0.11	1.6 0.15	2.04 0.19	2.48 0.23	2.92 0.27	3.35 0.31	3.79 0.35	4.23 0.39	4.67 0.43	5.1 0.47	5.54 0.51	5.98 0.56	6.42 0.6	6.85 0.64	7.29 0.68	7.73 0.72	8.17 0.76	8.6 0.8
	30 0.77	0.95 0.09	1.53 0.14	2.1 0.2	2.67 0.25	3.25 0.3	3.82 0.35	4.39 0.41	4.97 0.46	5.54 0.51	6.11 0.57	6.68 0.62	7.26 0.67	7.83 0.73	8.4 0.78	8.98 0.83	9.55 0.89	10.12 0.94	10.69 0.99	11.27 1.05
	36 0.92	1.22 0.11	1.94 0.18	2.67 0.25	3.4 0.32	4.13 0.38	4.86 0.45	5.59 0.52	6.32 0.59	7.05 0.65	7.78 0.72	8.51 0.79	9.24 0.86	9.97 0.93	10.69 0.99	11.42 1.06	12.15 1.13	12.88 1.2	13.61 1.26	14.34 1.33
	42 1.07	1.48 0.14	2.36 0.22	3.25 0.3	4.13 0.38	5.02 0.47	5.9 0.55	6.79 0.63	7.67 0.71	8.56 0.8	9.44 0.88	10.33 0.96	11.22 1.04	12.1 1.12	12.99 1.21	13.87 1.29	14.76 1.37	15.64 1.45	16.53 1.54	17.41 1.62
	48 1.22	1.74 0.16	2.78 0.26	3.82 0.35	4.86 0.45	5.9 0.55	6.94 0.64	7.99 0.74	9.03 0.84	10.07 0.94	11.11 1.03	12.15 1.13	13.19 1.23	14.24 1.32	15.28 1.42	16.32 1.52	17.36 1.61	18.4 1.71	19.44 1.81	20.49 1.9
	54 1.38	1.97 0.18	3.15 0.29	4.34 0.4	5.52 0.51	6.7 0.62	7.88 0.73	9.06 0.84	10.25 0.95	11.43 1.06	12.61 1.18	13.79 1.31	14.98 1.43	16.16 1.55	17.34 1.67	18.52 1.8	19.7 1.92	20.89 2.04	22.07 2.16	23.25 2.29
	60 1.53	2.2 0.2	3.51 0.33	4.83 0.45	6.15 0.57	7.47 0.69	8.78 0.82	10.1 0.94	11.42 1.06	12.74 1.18	14.06 1.31	15.37 1.45	16.69 1.59	18.01 1.72	19.33 1.86	20.64 1.99	21.96 2.13	23.28 2.27	24.6 2.4	25.91 2.54
	66 1.68	2.44 0.23	3.9 0.36	5.37 0.5	6.83 0.63	8.29 0.77	9.76 0.91	11.22 1.04	12.68 1.18	14.15 1.31	15.61 1.45	17.07 1.59	18.54 1.72	20 1.86	21.47 1.99	22.93 2.13	24.39 2.27	25.86 2.4	27.32 2.54	28.78 2.67
	72 1.83	2.7 0.25	4.32 0.4	5.94 0.55	7.56 0.7	9.18 0.85	10.8 1	12.42 1.15	14.04 1.3	15.66 1.45	17.28 1.61	18.9 1.76	20.52 1.91	22.14 2.06	23.76 2.21	25.38 2.36	27 2.51	28.62 2.66	30.24 2.81	31.86 2.96
	78 1.99	2.96 0.27	4.74 0.44	6.51 0.6	8.29 0.77	10.06 0.93	11.84 1.1	13.62 1.27	15.39 1.43	17.17 1.59	18.94 1.76	20.72 1.92	22.5 2.09	24.27 2.25	26.05 2.42	27.82 2.58	29.6 2.75	31.38 2.92	33.15 3.08	34.93 3.24
	84 2.14	3.21 0.3	5.14 0.48	7.07 0.66	8.99 0.84	10.92 1.01	12.85 1.19	14.77 1.37	16.7 1.55	18.63 1.73	20.56 1.91	22.48 2.09	24.41 2.27	26.34 2.45	28.26 2.63	30.19 2.8	32.12 2.98	34.05 3.16	35.97 3.34	37.9 3.52
	90 2.29	3.44 0.32	5.5 0.51	7.56 0.7	9.63 0.89	11.69 1.09	13.75 1.28	15.81 1.47	17.88 1.66	19.94 1.85	22 2.04	24.06 2.24	26.13 2.43	28.19 2.62	30.25 2.81	32.31 3	34.38 3.19	36.44 3.39	38.5 3.58	40.56 3.77
	96 2.44	3.66 0.34	5.86 0.54	8.06 0.75	10.26 0.95	12.45 1.16	14.65 1.36	16.85 1.57	19.05 1.77	21.25 1.97	23.44 2.18	25.64 2.38	27.84 2.59	30.04 2.79	32.24 2.99	34.43 3.21	36.63 3.43	38.83 3.65	41.03 3.86	43.23 4.08
	102 2.6	3.92 0.36	6.28 0.58	8.63 0.8	10.99 1.02	13.34 1.24	15.69 1.46	18.05 1.68	20.4 1.9	22.76 2.11	25.11 2.33	27.47 2.55	29.82 2.77	32.17 2.99	34.53 3.21	36.88 3.43	39.24 3.65	41.59 3.86	43.94 4.08	46.3 4.3
	108 2.75	4.18 0.39	6.69 0.62	9.2 0.85	11.72 1.09	14.23 1.32	16.74 1.56	19.25 1.79	21.76 2.02	24.27 2.25	26.78 2.49	29.29 2.72	31.8 2.95	34.31 3.19	36.82 3.42	39.33 3.65	41.84 3.89	44.35 4.12	46.86 4.35	49.37 4.59
	114 2.9	4.44 0.41	7.11 0.66	9.78 0.91	12.44 1.16	15.11 1.4	17.78 1.65	20.44 1.9	23.11 2.15	25.78 2.39	28.44 2.64	31.11 2.89	33.78 3.14	36.44 3.39	39.11 3.63	41.78 3.88	44.44 4.13	47.11 4.38	49.78 4.62	52.44 4.87
	120 3.05	4.68 0.43	7.49 0.7	10.29 0.96	13.1 1.22	15.91 1.48	18.72 1.74	21.52 2	24.33 2.26	27.14 2.52	29.94 2.78	32.75 3.04	35.56 3.3	38.37 3.56	41.17 3.82	43.98 4.09	46.79 4.35	49.6 4.61	52.4 4.87	55.21 5.13

### AIR PERFORMANCE



The Pressure Drop test performed in accordance with AMCA Standard 500 per figure 5.5. All free area calculations are based on AMCA standards.

#### Calculation Pressure Loss

Based upon a give flow rate in (CFM), the flowing pressure loss may be determined from the "air performance" graph, knowing the sq. ft. or sq. meters of free area of the louver. Alternately, the free area may be determined based upon a volumetric flow rate and a maximum pressure loss. Utilizing the "air performance" graph.

