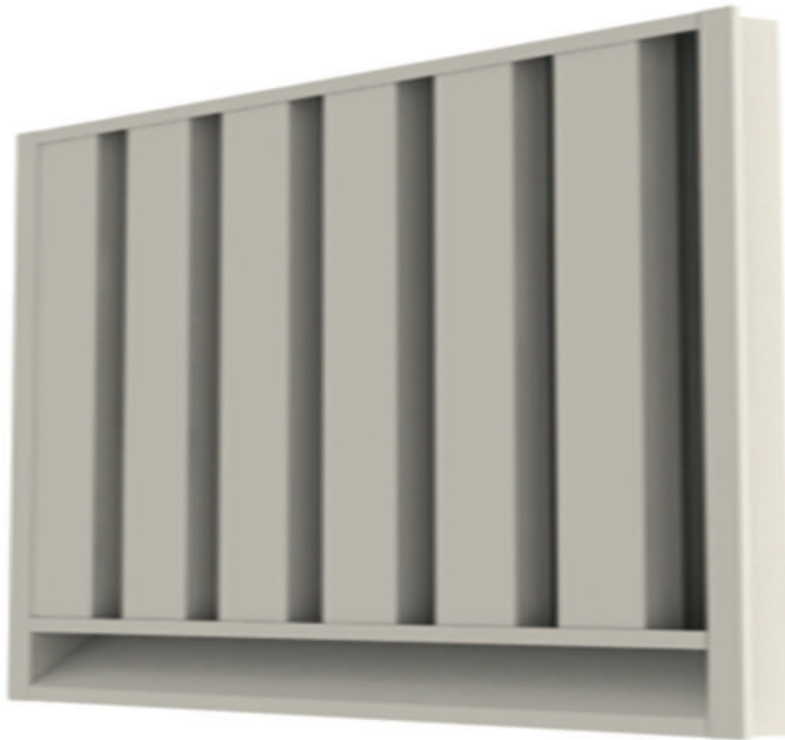




SAND TRAP

Out standing technique for highest demands Unique in comfort, acousrics and design

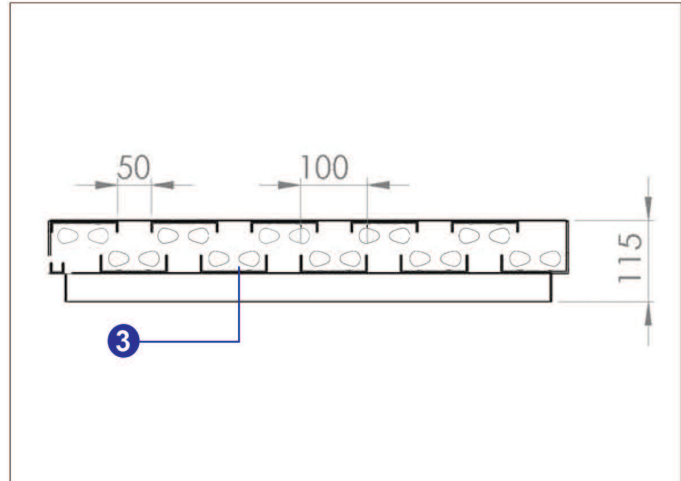
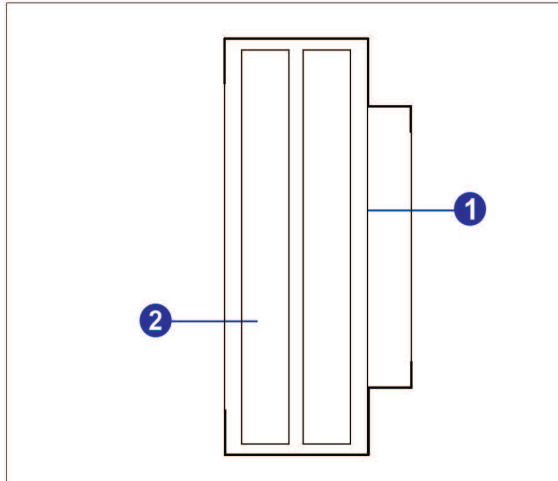
Product Overview



Sand Trap Louver is normally used as prefilter for fresh air intake of Air Handling Units (AHU), Package Air Conditioning Units (PACU), Roof Top Fresh Air Units (RTFAU) for Air Conditioning Systems and for Fresh Air Intake in manufacturing plants. It has a high degree of separation of sand and large dust particles even in case of high dust concentrations. The vertically arranged blade sections and holes for sand drainage ensure that the sand trap louver is self cleaning and maintenance free. It is designed to separate large particles of sand and dust from airstream at low velocities, thus avoiding excessive dust loading of conventional filters. It is not intended as a substitute for conventional filters.

SAND TRAP (S T)

Construction



1 - Frame

Made from high quality extruded aluminum profiles with 115 mm depth 1.2 mm.

2 - Blade

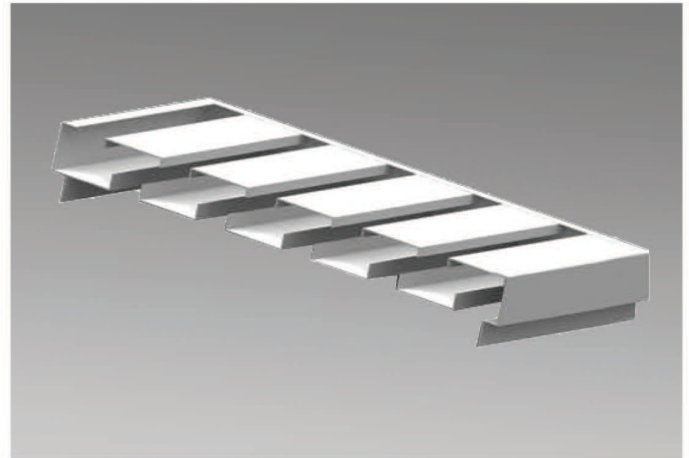
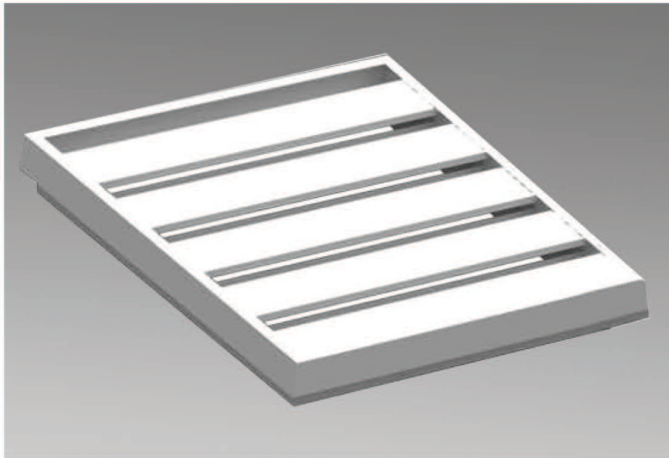
Made from high quality extruded aluminum profiles with 100 mm depth 1.2 mm.

3 - Drain

20 mm Dia self - drain holes at the bottom of the louver.



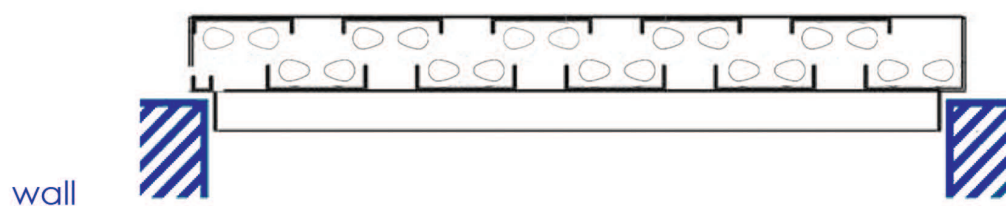
Description



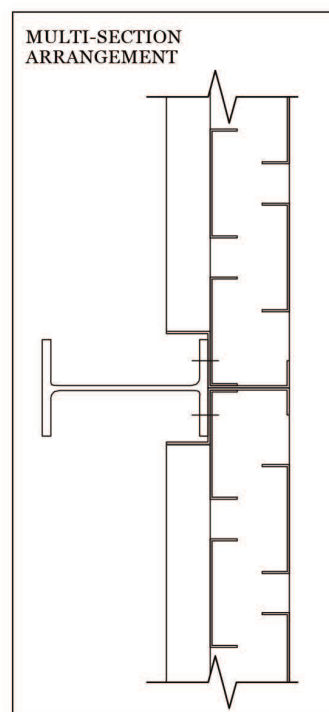
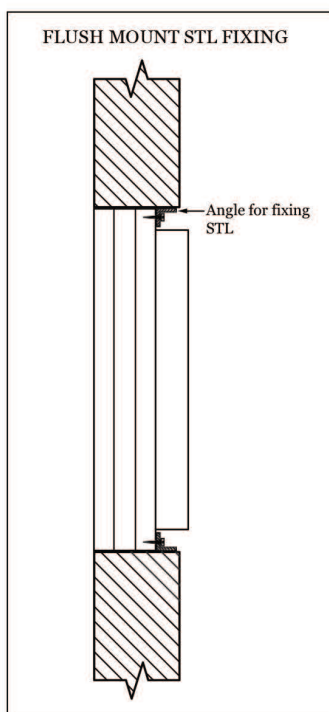
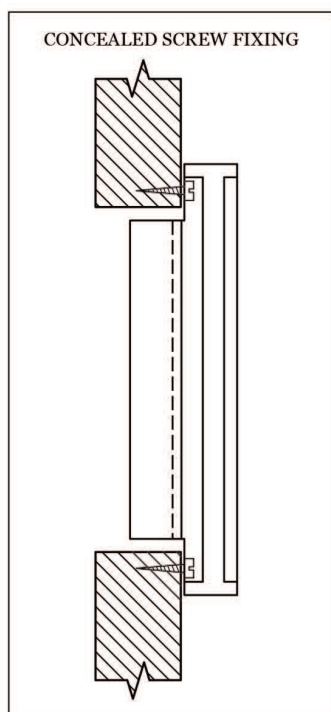
- The frame and blades are of high quality extruded aluminum profiles with 1.2 mm and 1.5 mm thickness
- Can be manufacture from galvanized steel as option
- Composed of two sets of inverted u - channels mounted vertically on two opposite rows
- Drain holes of diameter 20 mm are provided in two rows at the bottom of the Louver for emptying filtered sand and dust
- Sand trap can be supplied with galvanized iron wire mesh 1.5 mm Thickness as standard with flexibility of supplying
- Sand trap can be supplied with a removable volume control damper which ensures positive control over the fresh air stream
- Sand trap can be supplied with easily removable filter with 20 mm Thickness as standard and non standard thicknesses are available as option
- Designed To separate sand and dust from the air
- Aluminum anodized finish or powder coated color finish per RAL color codes and flexibility of finish

SAND TRAP (S T)

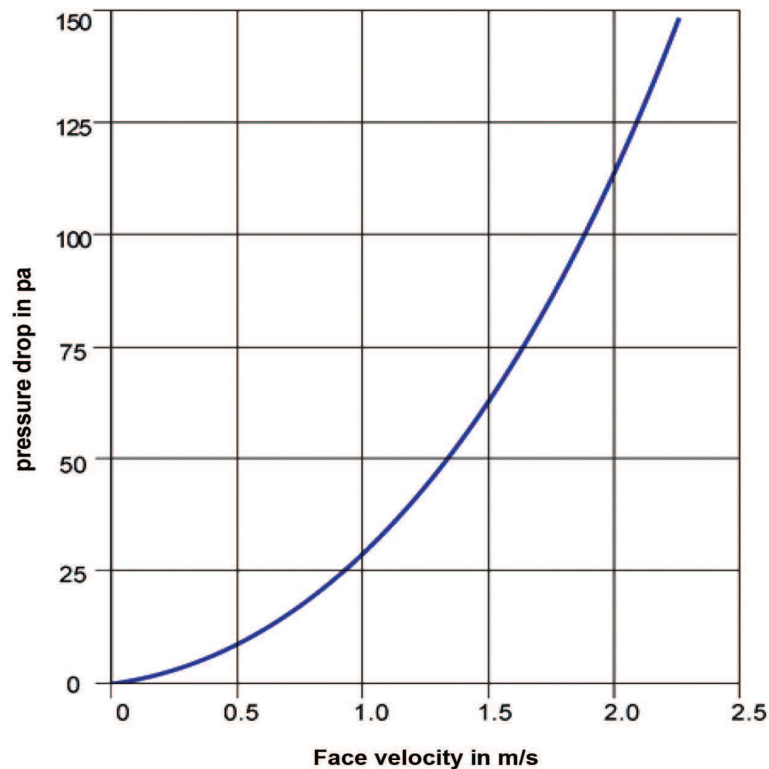
Installation



Fixing details ;



Air Performance



OUTER FRAME SIZE (W1 inches)

OUTER FRAME SIZE (H1 inches)		16	24	28	36	40	48	52	60	64	68	76	84	88	92	100	104
	16	0.31	0.47	0.62	0.78	0.94	1.09	1.25	1.40	1.56	1.72	1.87	2.03	2.19	2.34	2.50	2.65
	24	0.53	0.79	1.05	1.32	1.58	1.85	2.11	2.37	2.64	2.90	3.16	3.43	3.69	3.96	4.22	4.48
	28	0.64	0.95	1.27	1.59	1.91	2.22	2.54	2.86	3.18	3.49	3.81	4.13	4.45	4.76	5.08	5.40
	36	0.85	1.28	1.70	2.13	2.55	2.98	3.40	3.83	4.25	4.68	5.10	5.53	5.95	6.38	6.80	7.23
	40	0.96	1.44	1.92	2.39	2.87	3.35	3.83	4.31	4.79	5.27	5.75	6.23	6.71	7.18	7.66	8.14
	48	1.17	1.76	2.35	2.93	3.52	4.43	4.69	5.28	5.87	6.45	7.04	7.63	8.21	8.80	9.39	9.97
	52	1.28	1.92	2.56	3.20	3.84	4.48	5.12	5.76	6.40	7.05	7.69	8.33	8.97	9.61	10.25	10.89
	60	1.39	2.08	2.78	3.47	4.17	4.86	5.55	6.25	6.94	7.64	8.33	9.03	9.72	10.41	11.11	11.80
	64	1.50	2.24	2.99	3.74	4.49	5.24	5.98	6.73	7.48	8.23	8.98	9.73	10.47	11.22	11.97	12.72
	68	1.60	2.41	3.21	4.01	4.81	5.61	6.42	7.22	8.02	8.82	9.62	10.42	11.23	12.03	12.83	13.63
	76	1.82	2.73	3.64	4.55	5.46	6.37	7.28	8.19	9.10	10.01	10.91	11.82	12.73	13.64	14.55	15.46
	84	2.03	3.05	4.07	5.09	6.10	7.12	8.14	9.15	10.17	11.19	12.21	13.22	14.24	15.26	16.28	17.29
	88	2.14	3.21	4.28	5.36	6.43	7.50	8.57	9.64	10.71	11.78	12.85	13.92	14.99	16.07	17.14	18.21
	92	2.25	3.37	4.50	5.62	6.75	7.87	9.00	10.12	11.25	12.37	13.50	14.62	15.75	16.87	18.00	19.12
	100	2.46	3.70	4.93	6.16	7.39	8.63	9.86	11.09	12.32	13.56	14.79	16.02	17.25	18.49	19.72	20.95
	104	2.57	3.86	5.15	6.43	7.72	9.00	10.29	11.58	12.86	14.15	15.44	16.72	18.01	19.29	20.58	21.87

Performance Data

Performance Data

The filtration performance is dependent on the dust particle size and air velocity.

Particle Size (µm)	Filtration Efficiency in %	
Range	at 1.0 m/s	at 2.0 m/s
350 - 700	90	70
75 - 350	60	approx. 30

Table 1

Outer Frame Size (in.)	Neck Size (mm)
W1 X H1	W X H
16 X 16	400 X 400
20 X 20	500 X 500
24 X 24	600 X 600
28 X 28	700 X 700
32 X 32	800 X 800
36 X 36	900 X 900
40 X 40	1000 X 1000
44 X 44	1100 X 1100
48 X 48	1200 X 1200
52 X 52	1300 X 1300
56 X 56	1400 X 1400
60 X 60	1500 X 1500
64 X 64	1600 X 1600
68 X 68	1700 X 1700
72 X 72	1800 X 1800
76 X 76	1900 X 1900
80 X 80	2000 X 2000
84 X 84	2100 X 2100
88 X 88	2200 X 2200
92 X 92	2300 X 2300
96 X 96	2400 X 2400
100 X 100	2500 X 2500
104 X 104	2600 X 2600

Selection Example

For normal operation condition the sand trap louvers should be selected for a maximum free area velocity of 600 feet per minute (FPM).

Example:

Given:

Airflow: 2658 CFM

Assumed free area velocity: 600 FPM

Calculate for free area, neck size and pressure drop.

1. Free Area = 2658 CFM / 600 FPM = 4.43 ft².
2. From **Free Area Chart** the outer frame size is 48in X 48in (W1 X H1).
3. From **Table 1** neck size is 1200mm X 1200mm (W X H).
4. Pressure drop = 0.151 in. W.G. (38Pa).

How To Order

