

# CATALOGUE SAND TRAP LOUVER

AL **MABANI**  
AL UMUMIYAH



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**GENERAL:**

Al Mabani sand trap louver is used as pre-filter to prevent the conditioned area from sand and high dust particle in areas prone to sandstorm and extreme industrial pollution. The vertically placed inverted U blades and the self-drain holes effectively separate the sand particles. The self-cleaning and maintenance free sand trap louver provides the maximum performance at low face velocities. Ideally suited for installation into structural opening that are constructed into wall cladding either single skin or double wall composite panels, concrete or block wall.

**MATERILAS & CONSTRUCTION:**

Available in both Aluminum and Galvanized sheet. The aluminum variant is constructed of extruded aluminum. As an option bird screen and aluminum washable filter can be attached in the interior face of the louver. All combinations for W and H dimensions can be supplied. Sand trap louver with height above 42 inches are fitted with integral sand drain chute.

**SAS-STL-5****APPLICATION:**

Manufacturing plant air inlet system  
 Generator and plant room as inlet air devices  
 Power Station's intake manifolds  
 Air inlet for HVAC ducted systems

**DIMENSION Standard size**

<b>Width (inches)</b>	12	18	24	30	36	42	48	54	60
<b>Height (inches)</b>	12	18	24	30	36	42	48	54	60

**CONFIGURATION:**

Supplied In Modular Assembly Form For Rapid Site and Installation and suitable for different weather condition.

**MATERIALS:**

AL-Aluminum Extruded-Exposed Type  
GI:- Galvanized steel type-flush type

**SCREEN:**

B-Bird Mesh  
I-Insect screen

**FINISH:**

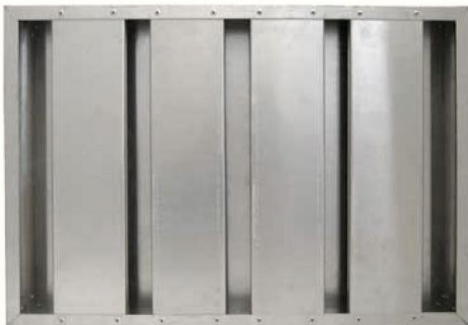
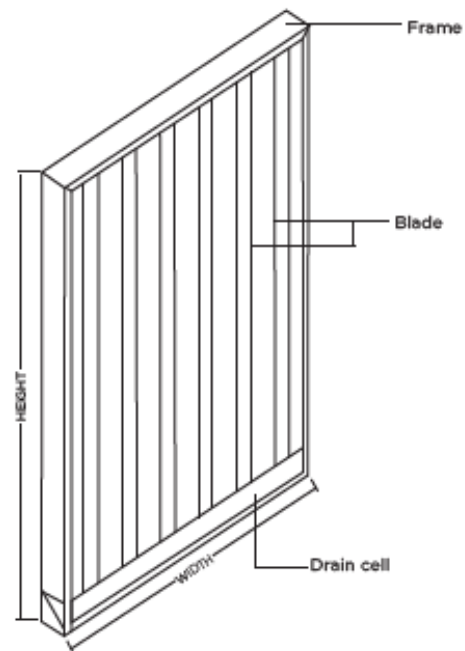
P-Powder Coated  
A-Anodizes  
E-Epoxy Painted  
M-Mill Finish

**OPTIONAL:**

WF-Aluminum washable filter.

**SELECTION:**

SAS-STL – W X H – MATERIAL-FINISH-OPTIONAL  
SAS-STL- 18 inches X 12 inches-AL(Aluminum)-  
P(Powder coat)-B(Bird Screen)



SAS-STL-GI-100



SAS-STL-AL-100

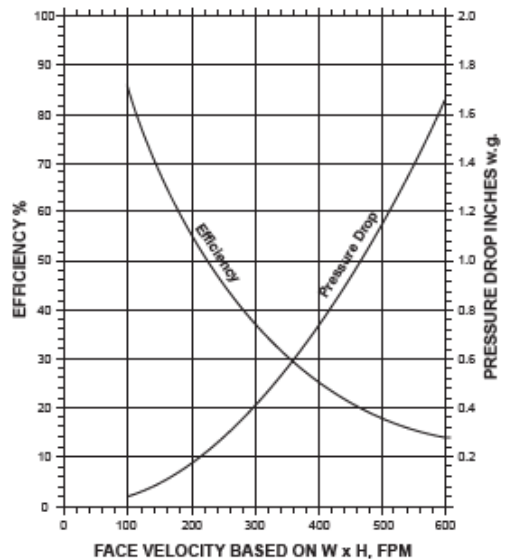


**PERFORMANCE DETAILS**

Free Area (ft<sup>2</sup>)

Height (inches)	Width (inches)													
	12	18	24	30	36	42	48	54	60	66	72	78	84	90
12	0.31	0.47	0.64	0.79	0.96	1.12	1.28	1.44	1.60	1.77	1.93	2.09	2.25	2.41
18	0.47	0.72	0.96	1.21	1.45	1.70	1.94	2.19	2.43	2.68	2.92	3.17	3.41	3.66
24	0.64	0.96	1.29	1.62	1.95	2.28	2.60	2.93	3.26	3.59	3.92	4.24	4.57	4.90
30	0.79	1.21	1.62	2.03	2.44	2.85	3.27	3.68	4.09	4.50	4.91	5.32	5.73	6.15
36	0.96	1.45	1.95	2.44	2.94	3.43	3.93	4.42	4.92	5.41	5.91	6.40	6.89	7.39
42	1.40	1.57	2.11	2.65	3.19	3.72	4.26	4.79	5.33	5.87	6.40	6.94	7.47	8.01
48	1.20	1.82	2.44	3.06	3.68	4.30	4.92	5.54	6.16	6.78	7.40	8.02	8.64	9.26
54	1.36	2.06	2.77	3.47	4.17	4.87	5.58	6.28	6.98	7.69	8.39	9.10	9.80	10.50
60	1.52	2.31	3.09	3.88	4.67	5.45	6.24	7.03	7.81	8.60	9.39	10.17	10.86	11.75
66	1.69	2.55	3.42	4.29	5.16	6.03	6.90	7.77	8.64	9.51	10.38	11.25	12.12	13.00
72	1.85	2.80	3.75	4.71	5.66	6.61	7.57	8.52	9.47	10.42	11.38	12.33	13.28	14.23
78	2.01	3.04	4.08	5.12	6.15	7.19	8.23	9.26	10.30	11.33	12.37	13.41	14.44	15.48
84	2.17	3.29	4.41	5.53	6.65	7.77	8.89	10.01	11.13	12.25	13.37	14.49	15.61	16.72
90	2.33	3.53	4.74	5.89	7.14	8.35	9.55	10.75	11.96	13.16	14.36	15.56	16.77	17.97

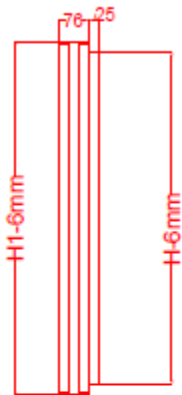
Test result conducted on similar equipment indicate a typical filtration efficiency of 80% on AC coarse (20-200 microns) and 50% on AC fine test dust (1 to 70 microns). For normal operation in ordinary conditions, sand trap louvers used for natural ventilation purpose are rated at a recommended face velocity of 1.0 m/s.



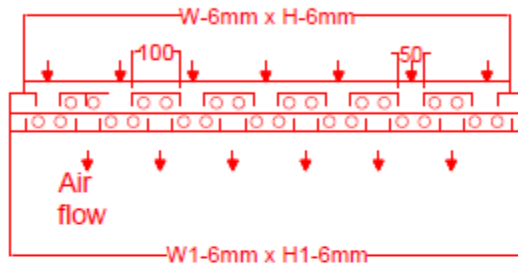
SAND TRAP LOUVER

SECTION DETAILS

VERTICAL SECTION



HORIZONTAL SECTION

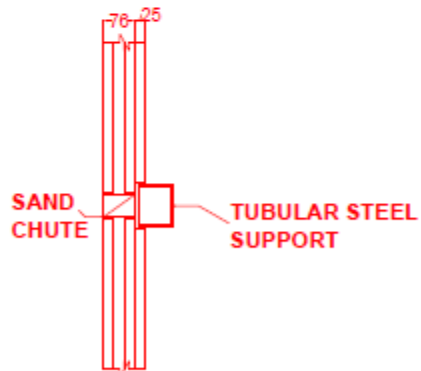


VERTICAL SECTION  
WITH SAND CHUTE



SINGLE MODULE WITH 2 SECTIONS VERTICAL  
BLADES WITH SAND CHUTE FROM HEIGHT  
( H ) OF 1000 MM UP TO 2500 MM

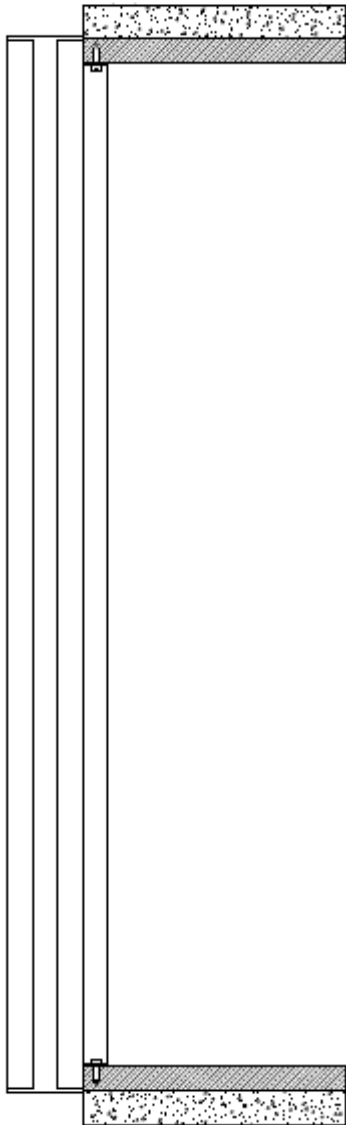
MULTIPLE MODULE WITH  
SAND CHUTE



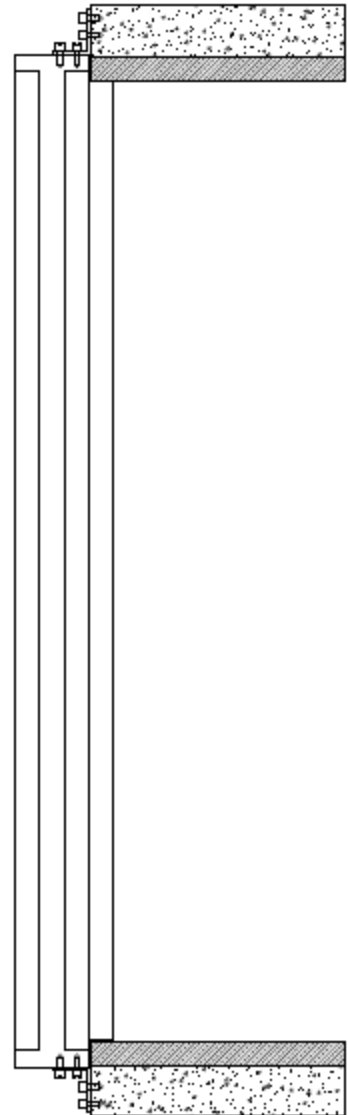
SINGLE MODULE WITH 2 SECTIONS VERTICAL  
BLADES WITH SAND CHUTE FROM HEIGHT  
( H ) OF 1000 MM TO 2500 MM



**INSTALLATION DETAILS**



**CONCEALED MOUNTING**



**EXTERNAL MOUNTING**



AL **MABANI**  
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