

**DESCRIPTION:**

GMCAIR sand trap louvers are specially designed to separate the sand and dust from the air. It is effective and necessary to apply for ventilations and inlet ducts of air handling units. Sand trap louvers can be supplied with filters and dampers as optional.

Sand louvers are tested per ASHRAE Standard method 52.1 – 1992 (previously ASHRAE Standard 52-76) by a third party independent lab. STL protects air intake and exhaust openings in exterior walls from wind-driven sand. The design incorporates overlapping vertical sightproof blades that aid in collecting and channeling sand out of the airstream to the sloped louver sill.

**CONSTRUCTION:**

Standard Material Aluminum Optional: 304-316 Stainless Steel, Galvanized Sheet Steel.

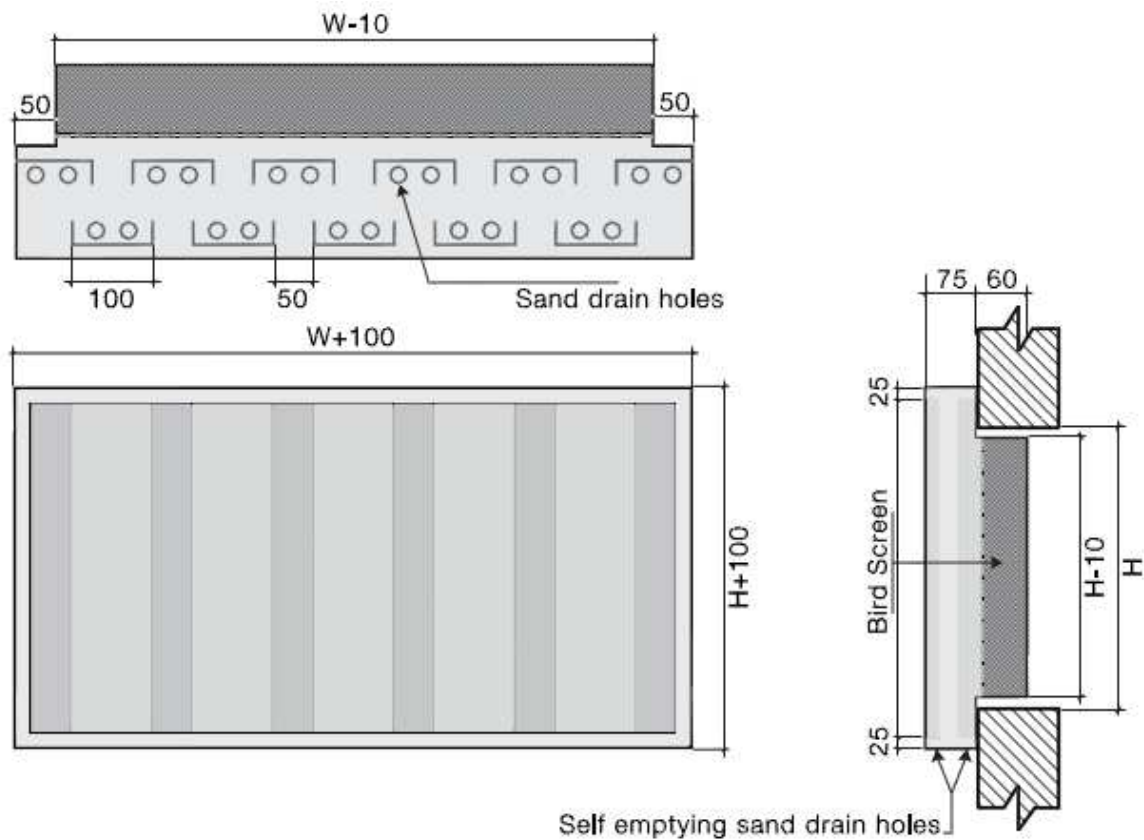
**APPLICATION:**

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.

**ACCESSORIES:**

- Bird and insect screens
- Filters
- Dampers

### STANDARD DIMENSIONS:



## Metric System

[illegible]

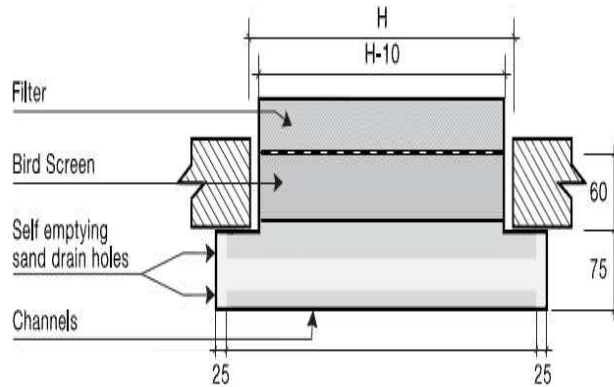
## Imperial System

[illegible]

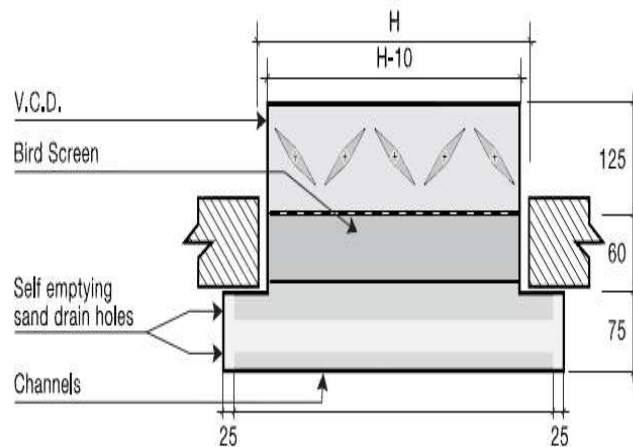


## FUNCTIONAL DESCRIPTION

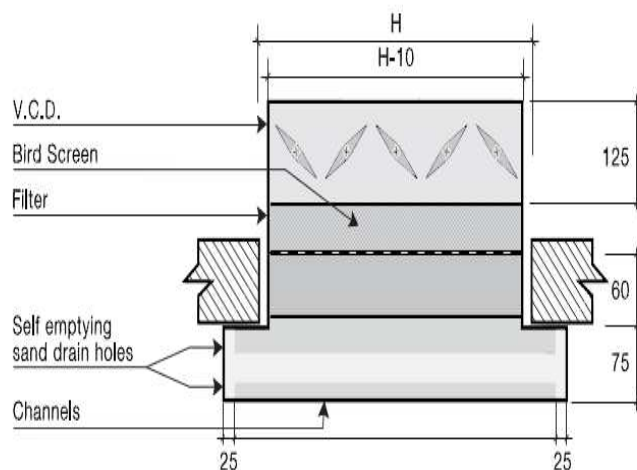
### Sand Trap louver with filter and bird screen



### Sand Trap louver with damper and bird screen



### Sand Trap louver with damper, filter and bird screen





### Performance Ratings

Particle Size	% of Efficiency
Up to 70 microns	50
71 to 200 microns	80
201 to 700 microns	90

Face velocity in m/sec	1.25	1.5	2.0	2.5	3.0	3.5	3.75	4.0	4.5
Exhaust in mm of water	0.248	0.331	0.564	0.814	1.151	1.595	1.825	2.143	3.290
Intake in mm of water	-0.350	-0.570	-0.830	-1.210	-1.690	-2.350	-2.690	-3.270	-3.850

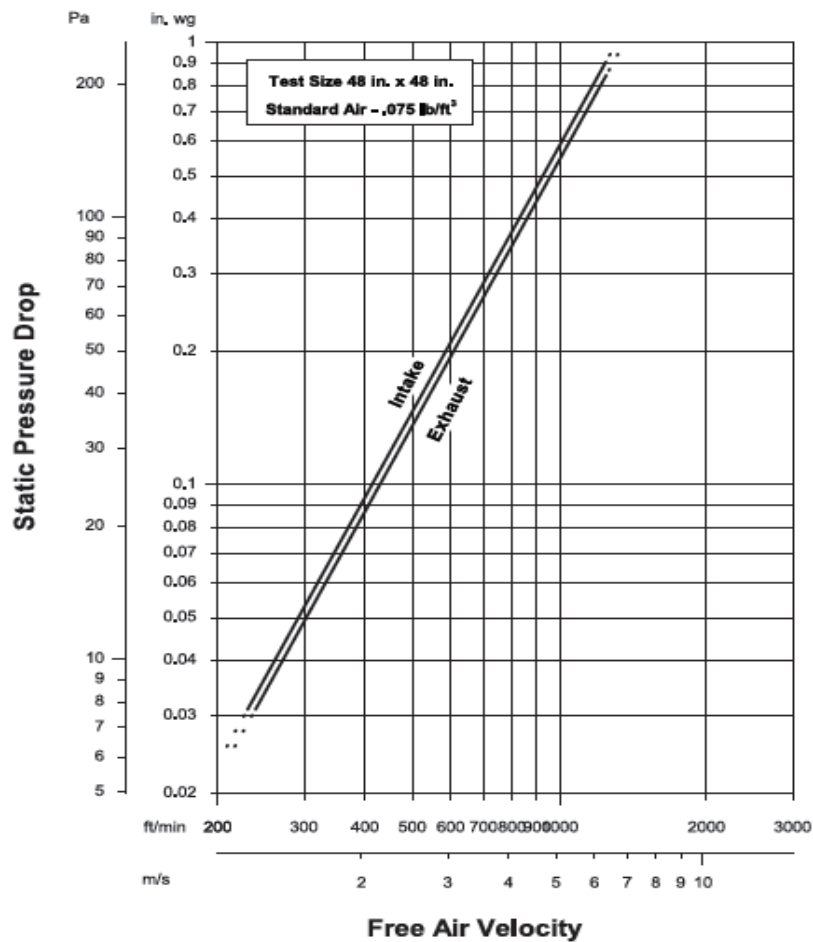
### Effective Pressure Areas in m2

Height in mm	Width in mm													
	300	350	400	450	500	550	600	650	700	750	800	850	900	1000
300	0.038	0.049	0.055	0.063	0.069	0.077	0.084	0.091	0.098	0.105	0.111	0.119	0.125	0.139
350	0.049	0.057	0.065	0.073	0.082	0.089	0.097	0.106	0.1114	0.122	0.13	0.138	0.147	0.163
400	0.055	0.065	0.074	0.084	0.093	0.102	0.111	0.121	0.13	0.14	0.148	0.158	0.167	0.186
450	0.063	0.073	0.084	0.094	0.105	0.115	0.125	0.136	0.146	0.156	0.167	0.178	0.188	0.209
500	0.069	0.082	0.093	0.105	0.116	0.128	0.139	0.152	0.163	0.175	0.186	0.198	0.209	0.23
550	0.077	0.089	0.102	0.115	0.128	0.14	0.153	0.166	0.179	0.191	0.204	0.218	0.23	0.256
600	0.084	0.097	0.111	0.125	0.139	0.153	0.167	0.181	0.195	0.209	0.223	0.237	0.251	0.279
650	0.091	0.106	0.121	0.136	0.152	0.166	0.181	0.196	0.212	0.227	0.242	0.257	0.272	0.302
700	0.098	0.114	0.13	0.146	0.163	0.179	0.195	0.212	0.228	0.244	0.26	0.277	0.293	0.325
750	0.105	0.122	0.14	0.156	0.175	0.191	0.209	0.227	0.244	0.261	0.279	0.296	0.314	0.349
800	0.11	0.13	0.148	0.167	0.186	0.204	0.223	0.242	0.26	0.279	0.297	0.316	0.335	0.372
850	0.119	0.138	0.158	0.178	0.197	0.217	0.237	0.257	0.277	0.296	0.316	0.335	0.356	0.395
900	0.125	0.147	0.167	0.188	0.209	0.23	0.251	0.272	0.293	0.314	0.335	0.356	0.376	0.418
1000	0.139	0.163	0.186	0.21	0.23	0.256	0.279	0.302	0.325	0.349	0.372	0.395	0.418	0.464

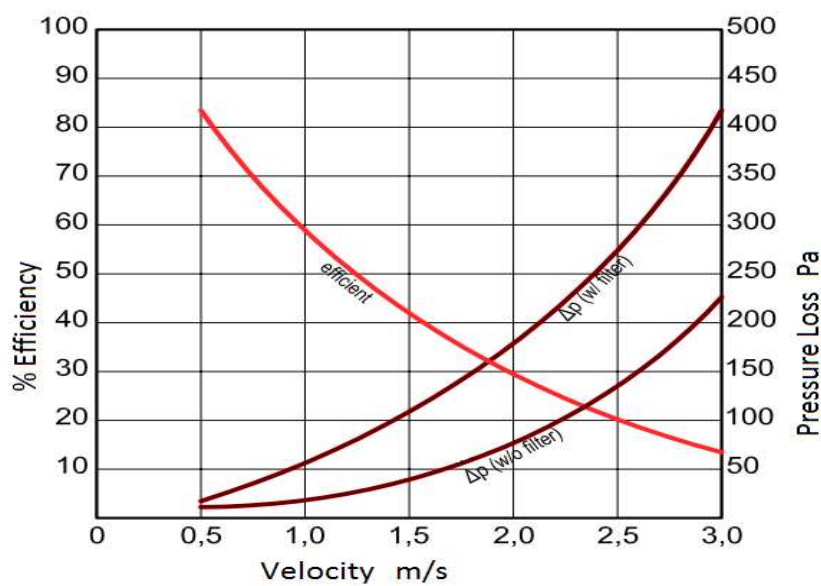
Note: Effective pressure areas for non standard size can be interpolated from the above data



## DATA DIAGRAMS



Diagrams - 1

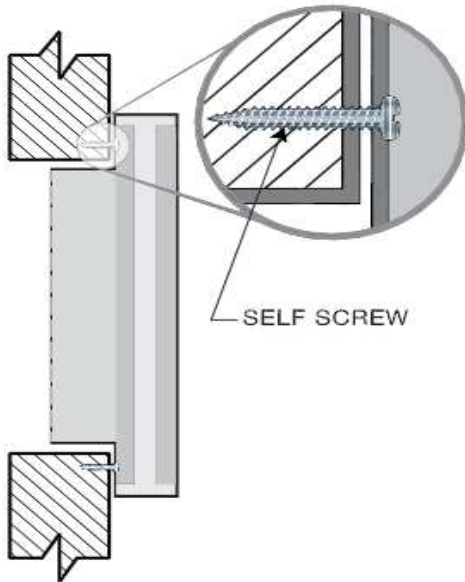


Diagrams - 2

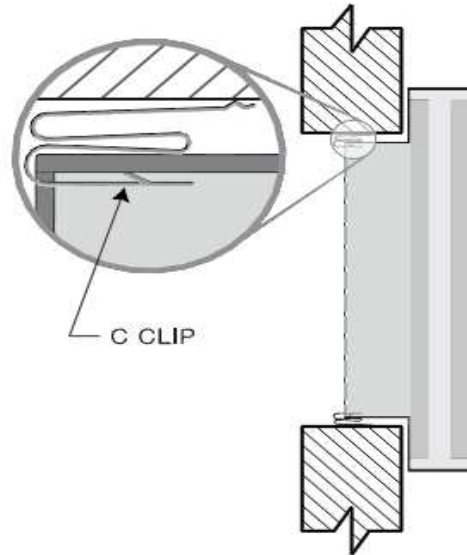


## INSTALLATION DETAILS

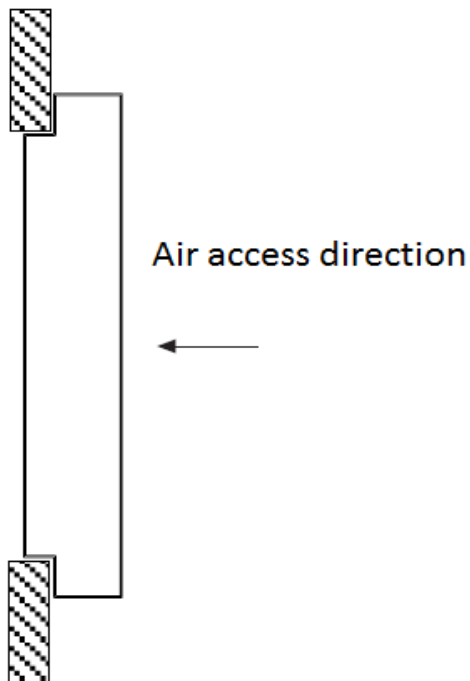
Screw installation



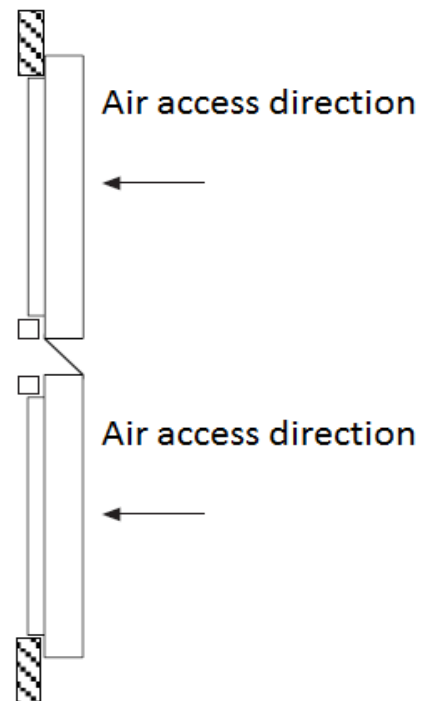
Concealed Clip installation



Details-1



SINGLE MOUNTING



MULTI-MOUNTING

Details-2



## ORDER CODE

STL	A	F25	00	RAL9016	SM	N 300X300