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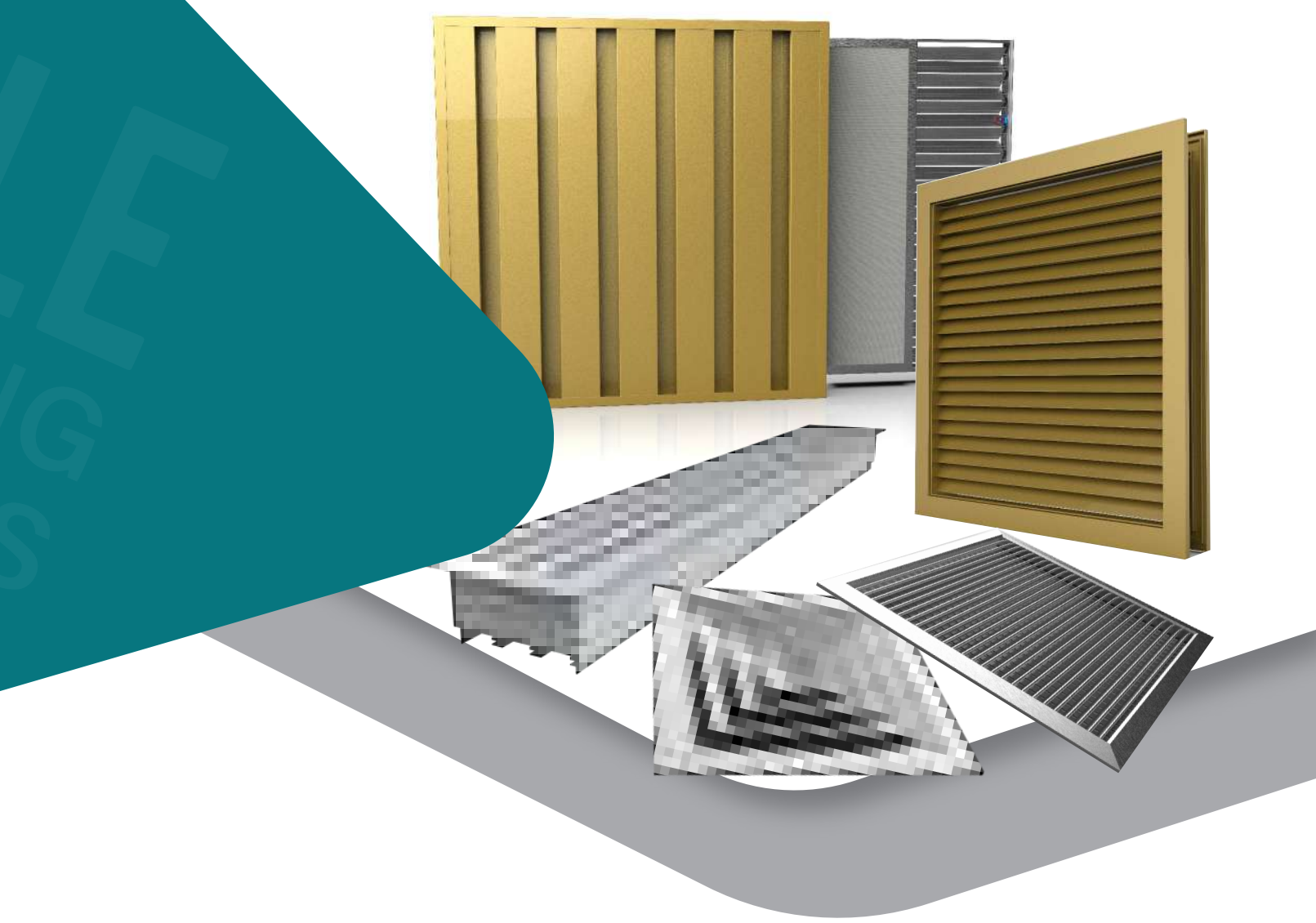

AIR OUTLETS

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Sand trap Louver
Chapter 10

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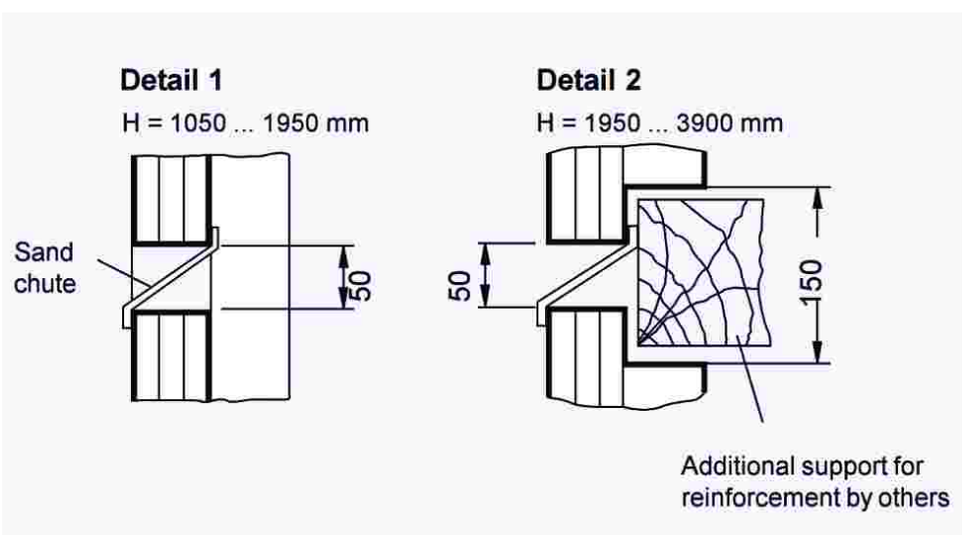
Description

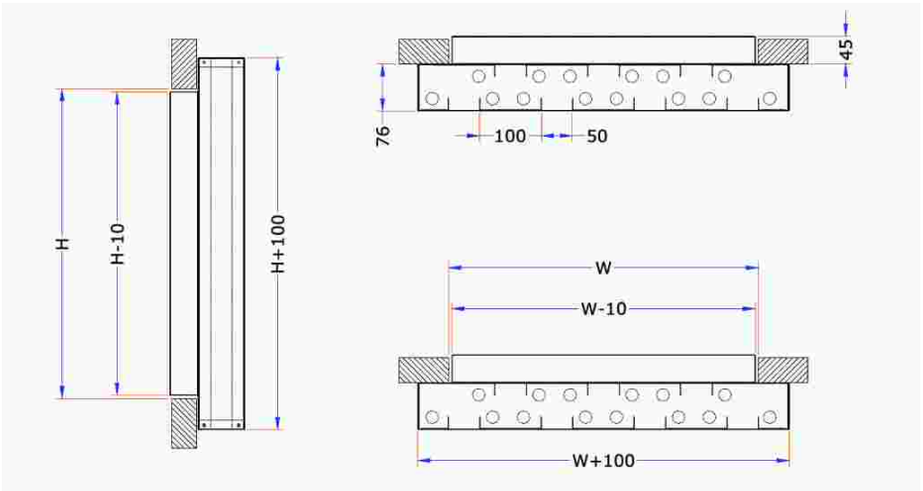
The sand trap louvre is used as pro-filter for the protection of air conditioning plants in areas exposed to extreme levels of industrial pollution. It has a degree of separation of sand and large dust particles, even in cases of high dust concentrations. The vertically arranged sections and holes for sand drainage ensure the sand trap louvre is self-cleaning and maintenance-free. The sand trap louvre is designed to separate large particles at low air velocities, thus avoiding excessive dust loading on conventional plant filters. It is not intended as a substitute for conventional supply air filtration plant.

Construction

Two rows of vertically arranged channels sections to form a labyrinth for the air path. Base frame has drainage holes for the sand ensuring the louvre is self-cleaning and maintenance free. All combinations for B and H dimensions can be supplied. For sizes larger than indicated in the table several sections can be combined to provide any combination of overall width or height. Sand trap louvres with H between 1050 and 1949 integral sand chutes are fitted (see detail 1), H between 1950 and 3900 they are split on height and supplied with additional sand chute (see detail 2), loose for fitting on site by others. The additional support for reinforcement and assembly of the sand trap louvre combination is to be supplied on site by others. Sand trap louvres with B = 1950 to 3900 are also split into end section left, end section right and middle if required. The vertical joint between two end sections of sand trap louvre is capped on site by others with a loose channel section supplied.



Dimensions

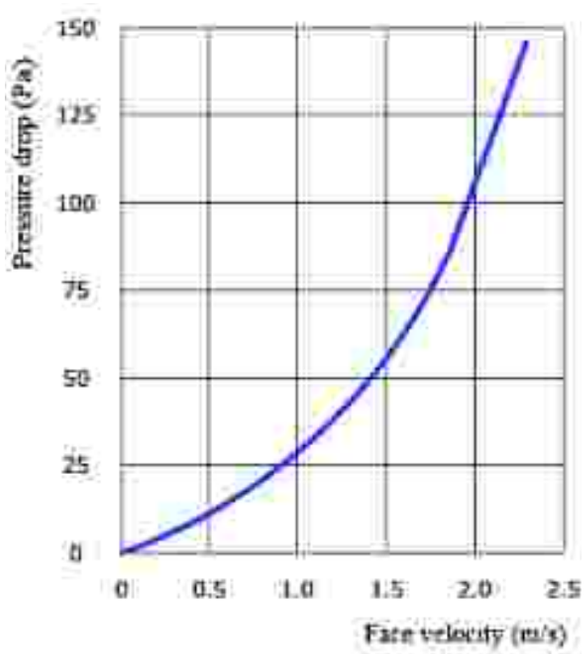


Standard Sizes

W	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950
H	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950

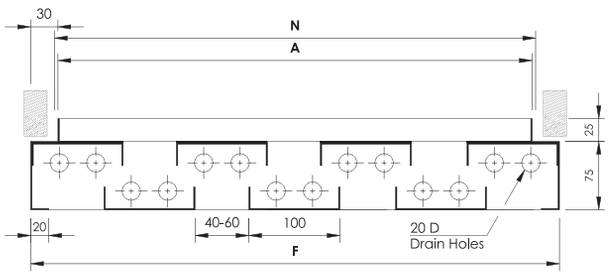
Louver Selection

When choosing a Sand trap louver, the speed in the throat is assumed
to be about 1.0 m/s.
Example:
What is the sand retainer louvre size and pressure loss value for 10,000 m3/hr. airflow?
Q = A x V
Q = 10000 m3/hr.
=2.78m3/s
V assumed to be 1 m/s
W = 1800 mm
H = 1500 mm
The Pressure Loss is approximately 30 Pa for 1.0 m/s from the graphic.

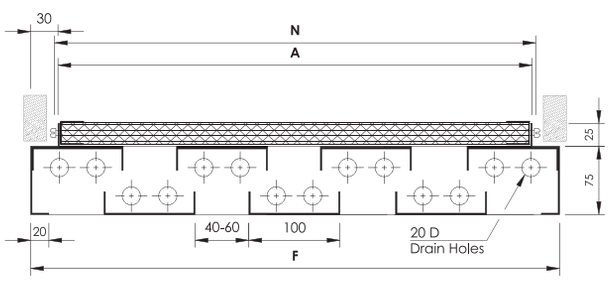


Models

1) Sand Trap Louver (STL)

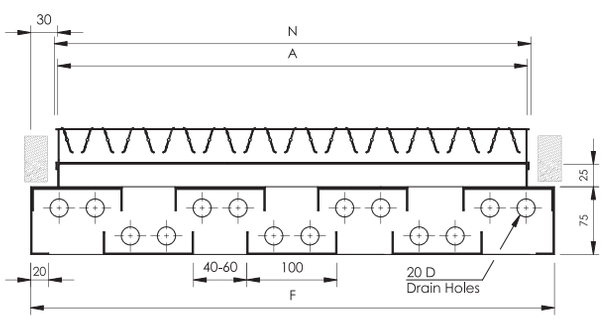


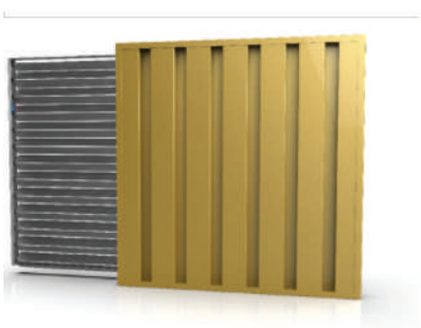
2) Sand Trap Louver with Filter (STL.WF)



•Bird Screen Standard.
•Filter Aluminium Washable Filter Media of ½" standard Thickness (1" and 2" also available on request)
•N: Nominal listed size= length * height
•A: Actual Size =(L-5) *(H-5)
•F: Face size =(L+55) *(H+55)
•All Dimensions Are In mm And Subject to ±1mm tolerance

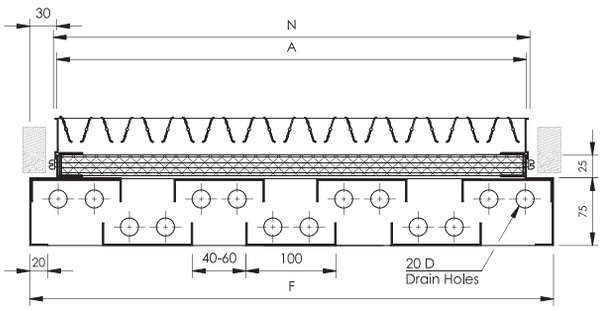
3) Sand Trap Louver with Damper (STL.WD)

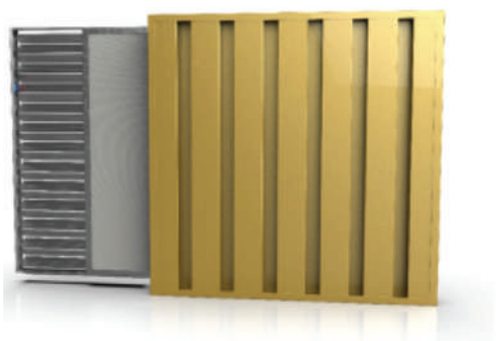




•Bird Screen Standard.
•N: Nominal listed size= length * height
•A: Actual Size =(L-5) *(H-5)
•F: Face size =(L+55) *(H+55)
•For large Sizes it's not recommended to use this type of opposite blade damper Due to it's Weakness, for more rigidity we can replace it with volume control damper.
•All Dimensions Are In mm And Subject to ±1mm tolerance

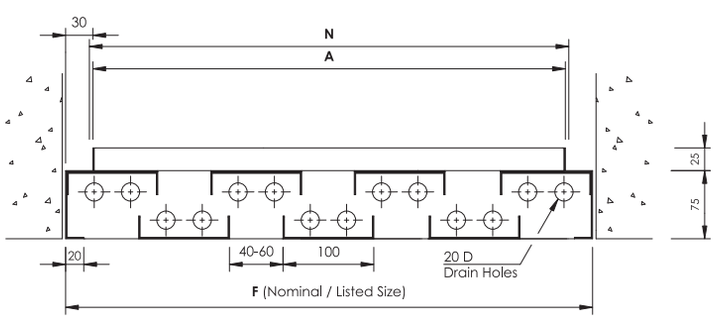
4) Sand Trap Louver with Filter And Damper (STL.WFD)





•Bird Screen Standard.
•Filter Aluminium Washable Filter Media of ½" standard Thickness (1" and 2" also available on request).
•N: Nominal listed size= length * height
•A: Actual Size =(L-5) *(H-5)
•F: Face size =(L+55) *(H+55)
•For large Sizes it's not recommended to use this type of opposite blade damper Due to it's Weakness, for more rigidity we can replace it with volume control damper.
•All Dimensions Are In mm And Subject to ±1mm tolerance

5) Sand Trap Louver with Chute (STL.WC)



•Bird Screen Standard.
•It's Provided With especially designed sand chute tray as shown to insure the discharge of the capture sand or dust to outside the building
•Also, it available with filter and damper
•N: Nominal listed size= length * height
•A: Actual Size =(L-5) *(H-5)
•F: Face size =(L+55) *(H+55)
•All Dimensions Are In mm And Subject to ±1mm tolerance.

Installation

Mounting of STL - Sand trap louvers done by fixing the wings behind the front surface with screws.

Weight

Approximate net weight is found by multiplying the measures W (m) x H (m). The result is multiplied by 18 kg / m2.

Materials and painting

STL - Sand Trap louver is made of aluminium. As an option the body and the wings of the louver can be formed from galvanized sheet. It is painted RAL9010 color with “Electrostatic Powder Painting” as standard with high corrosion resistance, any colour of RAL stander is available upon request.

In the direction of customer preferences it can also be produced as stainless steel.

Ordering Data

•Model code.
•Sand Trap Louver Dimensions.
•Surface Finishes for Sand Trap Louver.
-Natural/Matt Silver Anodized.
-Powder Coating (standard 9010/9016) Other Colours Are Optional.
-Aluminium In Mill Finish.
-Other Special Finish Is on Request If Available.

CASTLE
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Contact Us

Address: 28km, Alex-Cairo Desert Road,
Abu Rawash Industrial Zone, Giza, Egypt.

Email: sales@castle-ei.com

Tel: +202 353 94394
Mob: +20 1288012995
Mob: +20 1281217517
Mob: +20 1273637171

Contact

Location