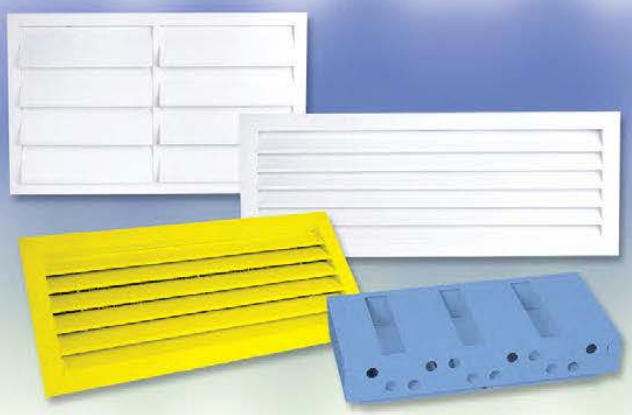
FLOW TECH
AIR DISTRIBUTION SPECIALIST

LOUVERS



GL	Wall Gravity Louvers
EAL	Exhaust Air Louvers
FAL	Fresh Air Louvers
FL	Filter Louvers
STL	Sand Trap Louvers

FAISAL JASSIM INDUSTRIES (L.L.C.)
P. O. Box: 1871 Dubai, U.A.E.
Tel: +971 4 2582640
Fax: +971 4 2582641
E-mail: flowtech@fjtco.com
Website: www.faisaljassim.ae
www.flowtechind.com

GRAVITY LOUVERS (GL)

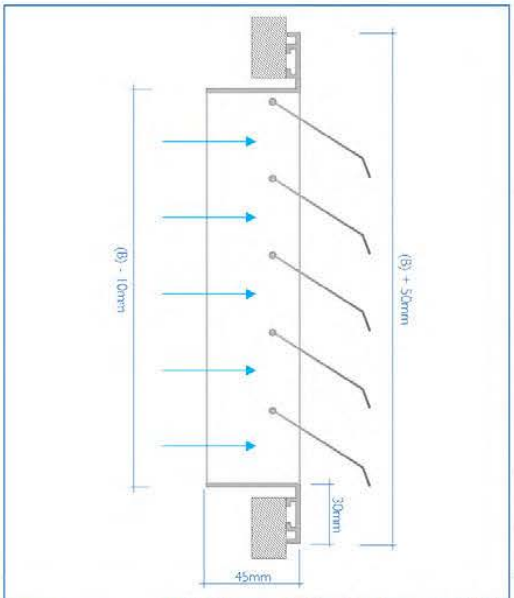
Gravity Louvers (GL)

The GL is a wall mounted device that is composed of a set of horizontally mounted blades that are normally closed and are free to rotate arround their horizontal axis.

This louver serves as a non-return damper and can be used at the exit terminal of exhaust ducts and fans.

Certain pressure is usually required before the damper opens to expel the exhaust air, which ensures the elimination of back flow.

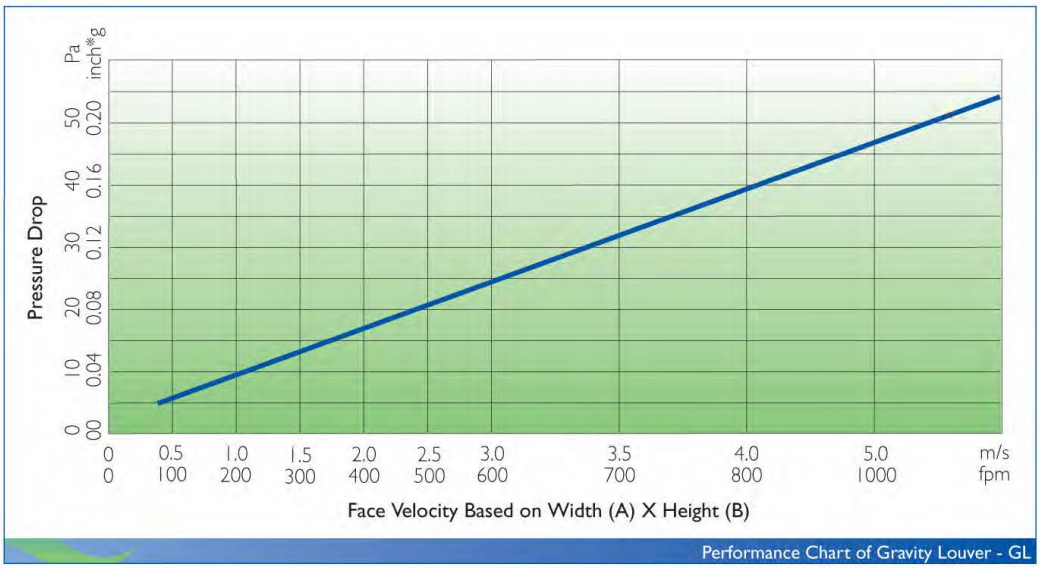
The blades are made from light weight aluminium sheets, while the frame is made from extruded aluminium.



Wall Mounted Gravity Louvers (GL)

Free area ratio = 0.81 for 100% open blades.
To calculate the air flow rate:

Air flow= 0.81 X Neck area X Face Velocity



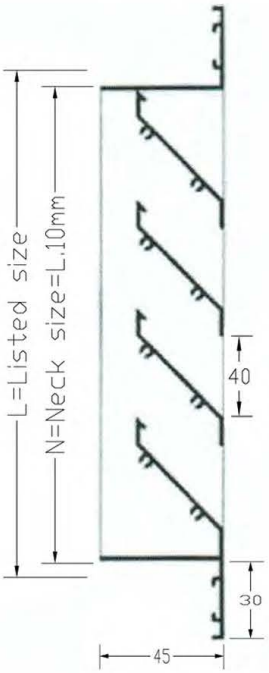
Performance Chart of Gravity Louver - GL

EXHAUST AIR LOUVERS (EL)

Exhaust Air Louver (EL)

The **EAL** is a weather proof external cover for air inlets and discharge openings, suitable for most external walls and screening applications.

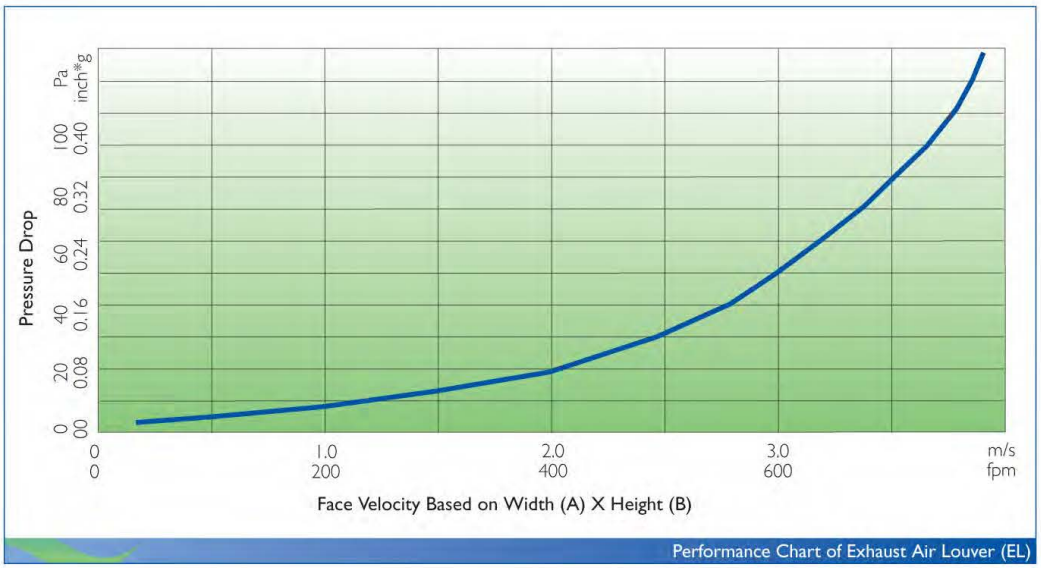
The EAL is composed of frame and horizontal blade assembly, manufactured from high quality extruded aluminium profiles. Blades are fixed rigidly to the main frame by rivets and sets at angle of 45deg to the horizontal with 40 mm spacing to inclined downward to protect against rain water.



Exhaust Air Louver(EAL)

Free area ratio = **0.41**
To calculate the air flow rate:

Air flow= 0.41 X Neck area X Face Velocity



Performance Chart of Exhaust Air Louver (EL)

FRESH AIR LOUVERS (FAL) & FILTER LOUVERS (FL)

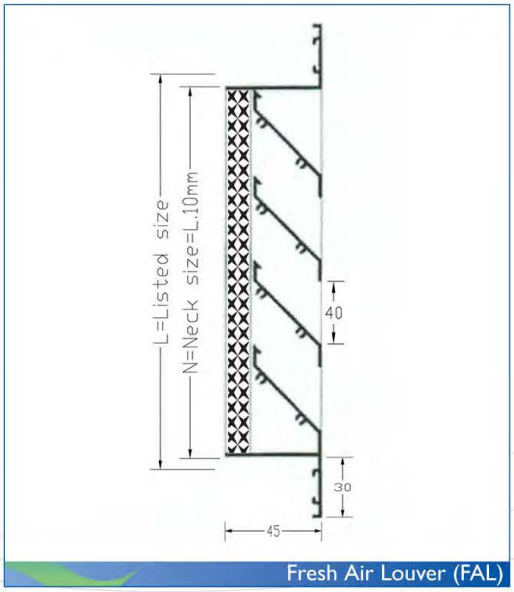
Fresh Air Louver (FAL)

The FAL is a simple form of filter louvers. It is composed of an exhaust louver with an aluminium filter fixed at the back.

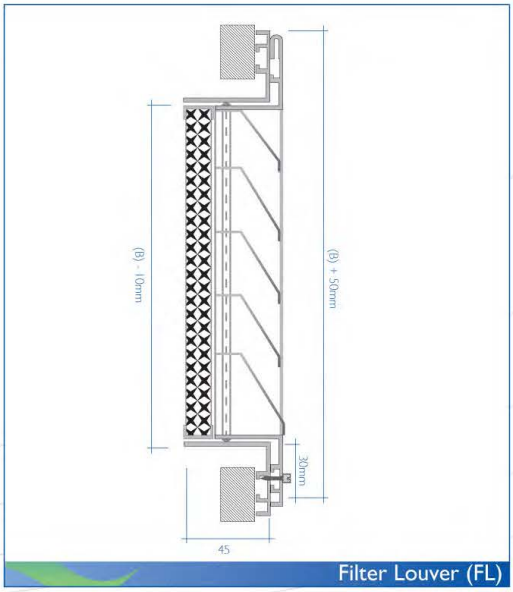
The fresh air louver is suitable for use in air inlets of fresh air ducts and air handling units. It is also suitable for use at dirty air exhaust discharge.

The filter is made of washable aluminium media and is fixed on the back of grille. Filter is 25mm thick.

Also available as Filter Louver (FL) which is composed of an exhaust air louver fixed to a frame that contains a filter by means of stainless steel hinges.



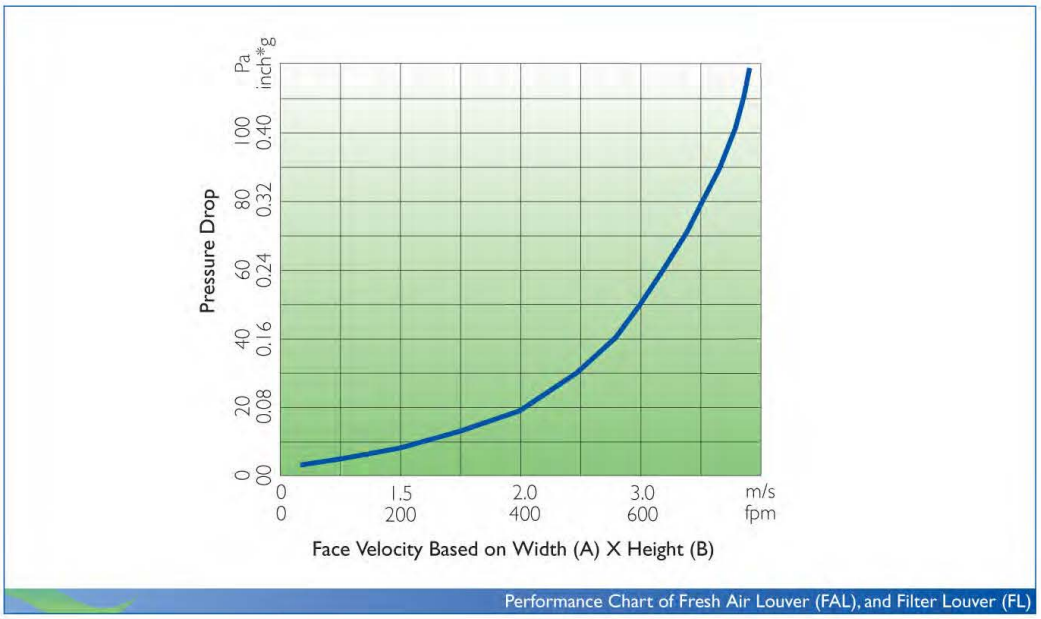
Fresh Air Louver (FAL)



Filter Louver (FL)

Free area ratio = **0.38**
To calculate the air flow rate:

Air flow= 0.38 X Neck area X Face Velocity



Performance Chart of Fresh Air Louver (FAL), and Filter Louver (FL)

SAND TRAP LOUVERS (STL)

Sand Trap Louvers (STL)

The STL is used to lower the dust loading of conventional filteration as it is designed to separate large size sand particles at low to medium speeds, it is also fitted with a bird screen mesh made of galvanized steel to protect against undesired objects. Insect screen of stainless steel can be installed as optional.

The STL is a self emptying system, it has a set of holes at the bottom face of the casing to discharge separated sand particles.

The STL is made of aluminium sections. It is composed of two sets of inverted U channels, mounted vertically on two opposite rows.

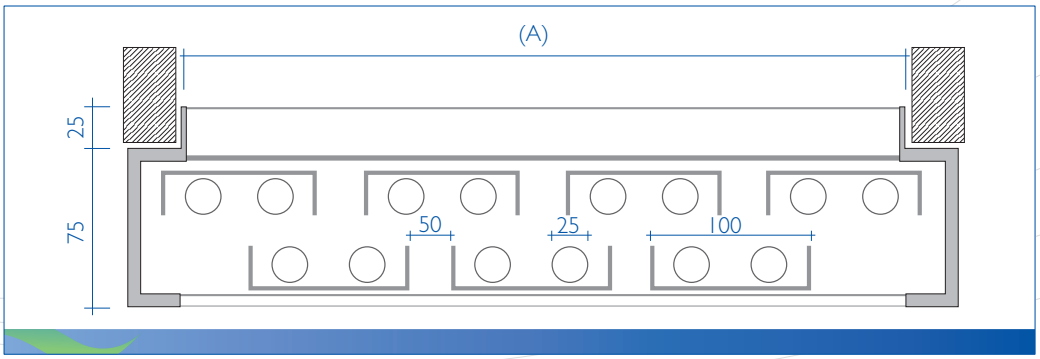
Aluminium washable filter (optional) can be installed on the neck of the louver. Filter is 25mm thick.

Standard Dimensions

Any combination of A x B.

A	B
450	450
600	500
750	600
900	800
1050	1000
1200	1200
1350	
1500	
1650	
1800	
1950	

Other size B, available on request by step of 50 mm.



Test conducted on similar equipment indicated a typical efficiency of 80% on AC coarse (20 - 200 micron) and 50% on AC fine test duct (1 to 70 microns).

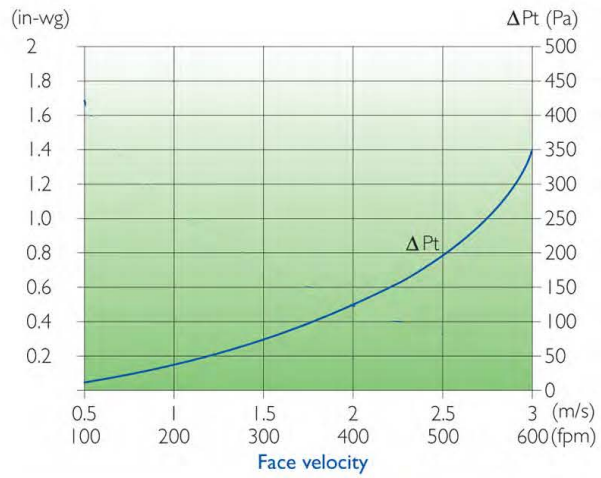
Standard Free area ratio = **0.33**
(Standard dimensions are given above)

To calculate the air flow rate:

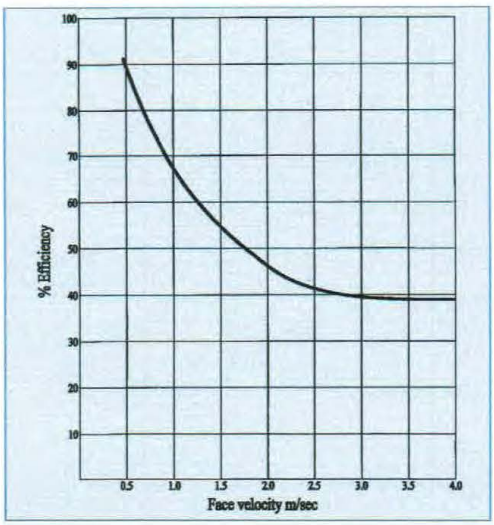
For normal operation ordinary conditions, sand trap louvers used for natural ventilation purpose are rated at a recommended Face velocity of 1.0 m/s.

Different sand trap louver arrangements may be provided to give other Free Area ratio as per customer requirement.

Air flow= 0.33 X Neck area X Face Velocity

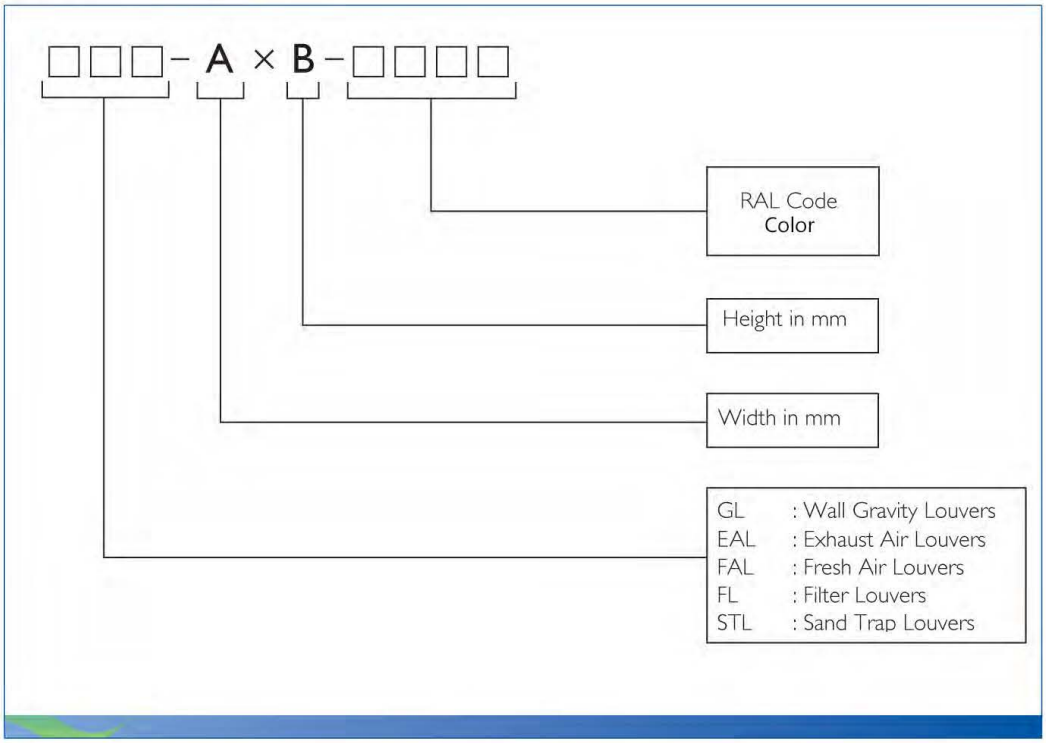


Selection table: Degree of filtration and resistance as a function of air speed.



Efficiency Vs Face velocity in m/sec

ORDERING SYSTEM



ORDERING EXAMPLE

STL - 1200 x 600 - 9010

Stands for Sand Louver, 1200mm Width x 600mm Height, powder coated to RAL 9010.