

Sand Trap Louvre

Types WSL and AWSL

For Building Facades



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Product Examples

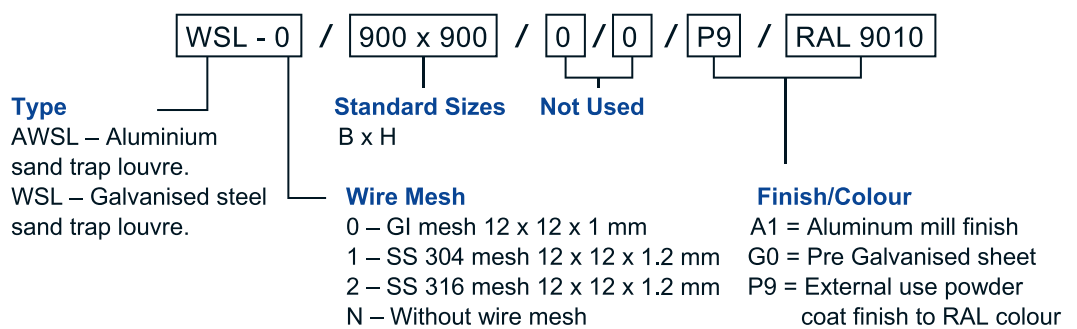


Description

The sand trap louvre is used as pre-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 concentration. 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 air filters. It is not intended as a substitute for conventional supply air filtration plant.

Order Code



Order Example

Make : TROX
Type : AWSL / 1800 x 1350 / 0 / 0 / P9 / RAL 9010

Dimensions

Standard Sizes . Single Section

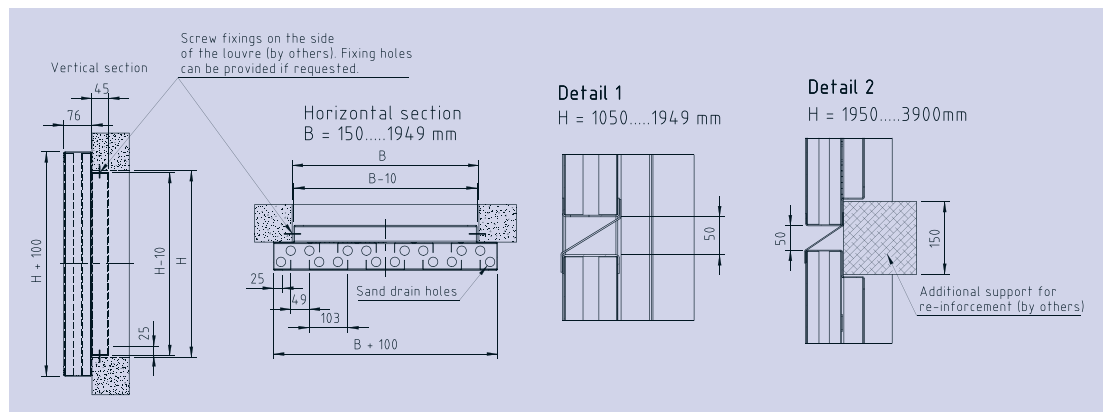
Width B in mm	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1949
Height H in mm	150	300	450	600	750	900	1050 ¹⁾	1200 ¹⁾	1350 ¹⁾	1500 ¹⁾	1650 ¹⁾	1800 ¹⁾	1949 ¹⁾

¹⁾With Split blades and sand chute (see Detail 1)

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 details 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.

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.

Materials

Basic construction either aluminum (AWSL) or galvanized steel (WSL). Standard finish AWSL mill, WSL galvanized or power coated RAL RAL9010, other RAL colours on request.

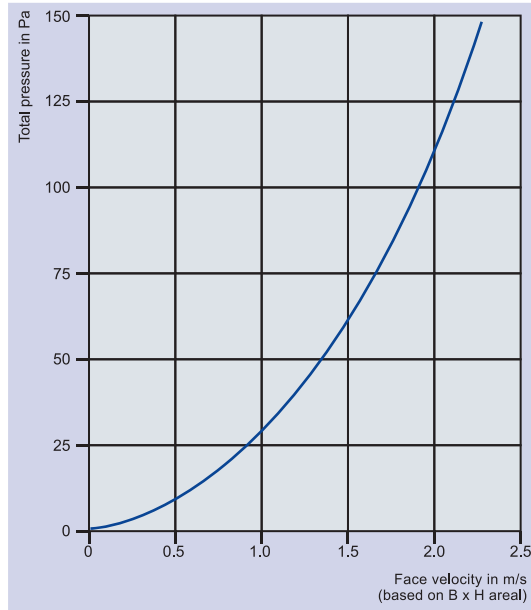
Fixing

Louvre rear section to be site drilled for fixings supplied by others.

Weight

Net weight without packing
 Aluminum approx. 18kg per m² of area (B x H)
 Steel approx. 27 kg per m² of area (B x H)

Pressure Drop



Filtration

The filtration performance is dependant on the dust type and the velocity of the air :

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

Example

For normal operation conditions the sand trap louvres should be rated for a face velocity of approx 1.0 m/s

Volume flow 2430 l/s (8750 m³/h)
 With a face velocity of 1.0 m/s
Area of louvre required approx. 2.4 m²

Dimensions selected
 -Assembly width 1800 mm
 -Assembly height 1350 mm

Total pressure drop approx. 30 Pa

Specification Text

This specification describes the general properties of the product.

Sand trap louvres for the protection of air intakes exposed to extreme levels of industrial / sand pollution.
 To separate large dust particles / sand at low air velocities, to be self-cleaning and maintenance free.
 To be used as initial filter to protect conventional air filters from excessive dust loading