

Sand Trap Louvre

for Building Facades

Types WSL and AWSL



TROX[®] TECHNIK

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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 high 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 of conventional filters. It is not intended as a substitute for conventional supply air filtration plant.

Single Section Sizes

Width B in mm:
150 300 450 600 750 900 1050 1200 1350 1500 1650 1800 1950

Height H in mm:
150 300 450 600 750 900 1050¹⁾ 1200¹⁾ 1350¹⁾ 1500¹⁾ 1650¹⁾ 1800¹⁾ 1950¹⁾

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 = 1950 to 3900 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 and supplied with a loose channel section to cap the vertical joint, channel to be fitted on site by others.

Selection 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) m ³ /h
With a face velocity of 1.0 m/s area of louvre required	approx. 2.4 m ²
Dimensions selected	
- Assembly width	1800 mm
- Assembly height	1350 mm
Pressure drop	approx. 30 Pa

Order Code

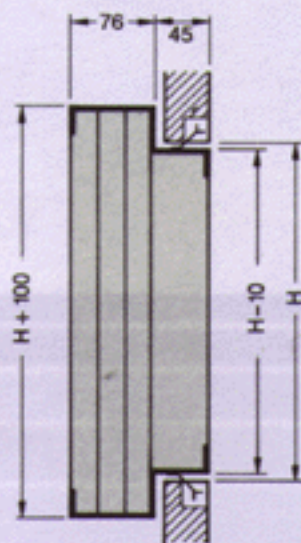
1 off sand trap louvre in mill finish aluminium	F 290 type AWSL
Construction with bird screen ²⁾ :	F 290 type AWSL-WS
Assembly dimensions B = 1800 mm and H = 1350 mm	

¹⁾ With transom and sand chute

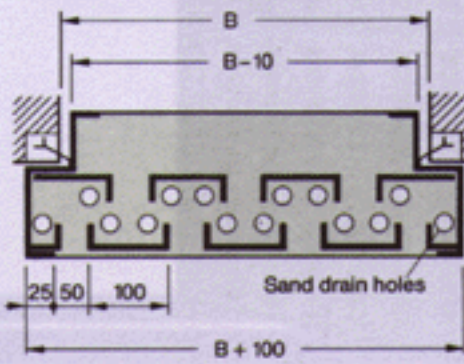
²⁾ Galvanised wire bird screen, 12 x 12 x 1 mm

Construction

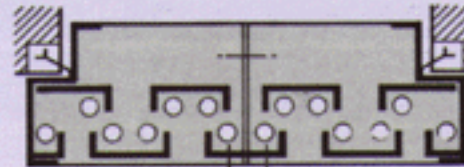
Vertical section



Horizontal section B = 150 ... 1950 mm



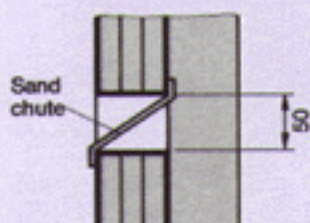
Horizontal section B = 1950 ... 3900 mm



Supplied as separate sections - assembly by others on site

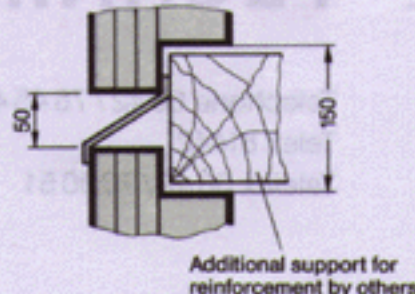
Detail 1

H = 1050 ... 1950 mm



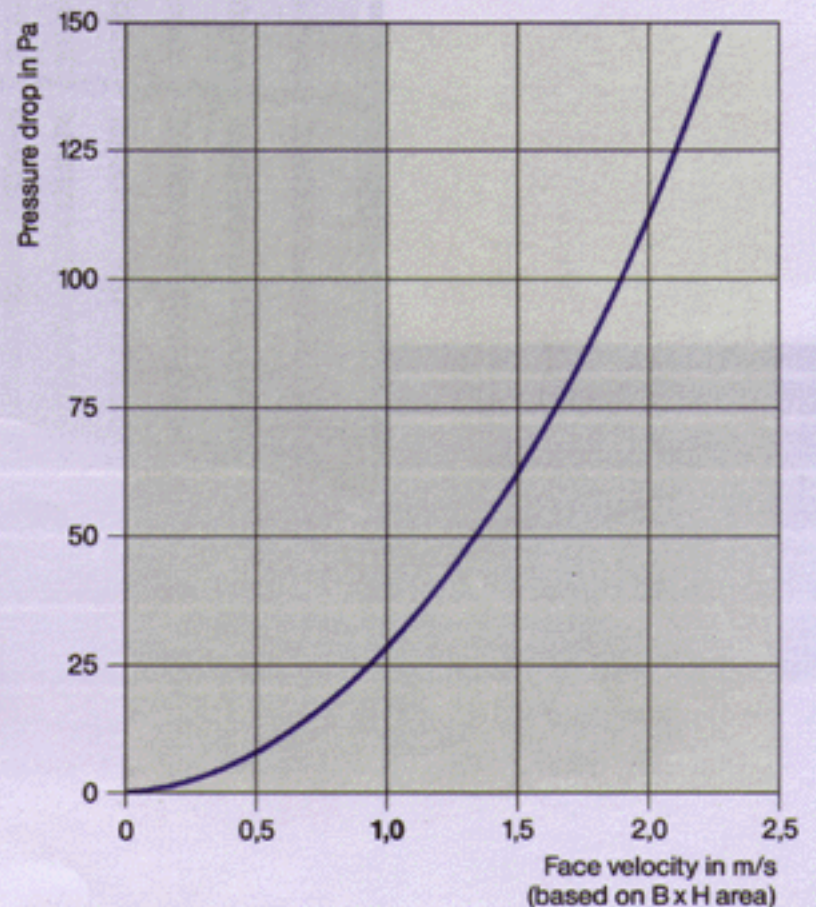
Detail 2

H = 1950 ... 3900 mm



Pressure Drop

Data for inlet application with rear duct or plenum connection



Performance Data

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

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

Weight

Nett weight without packing
approx. 18 kg per m² of area (B x H)