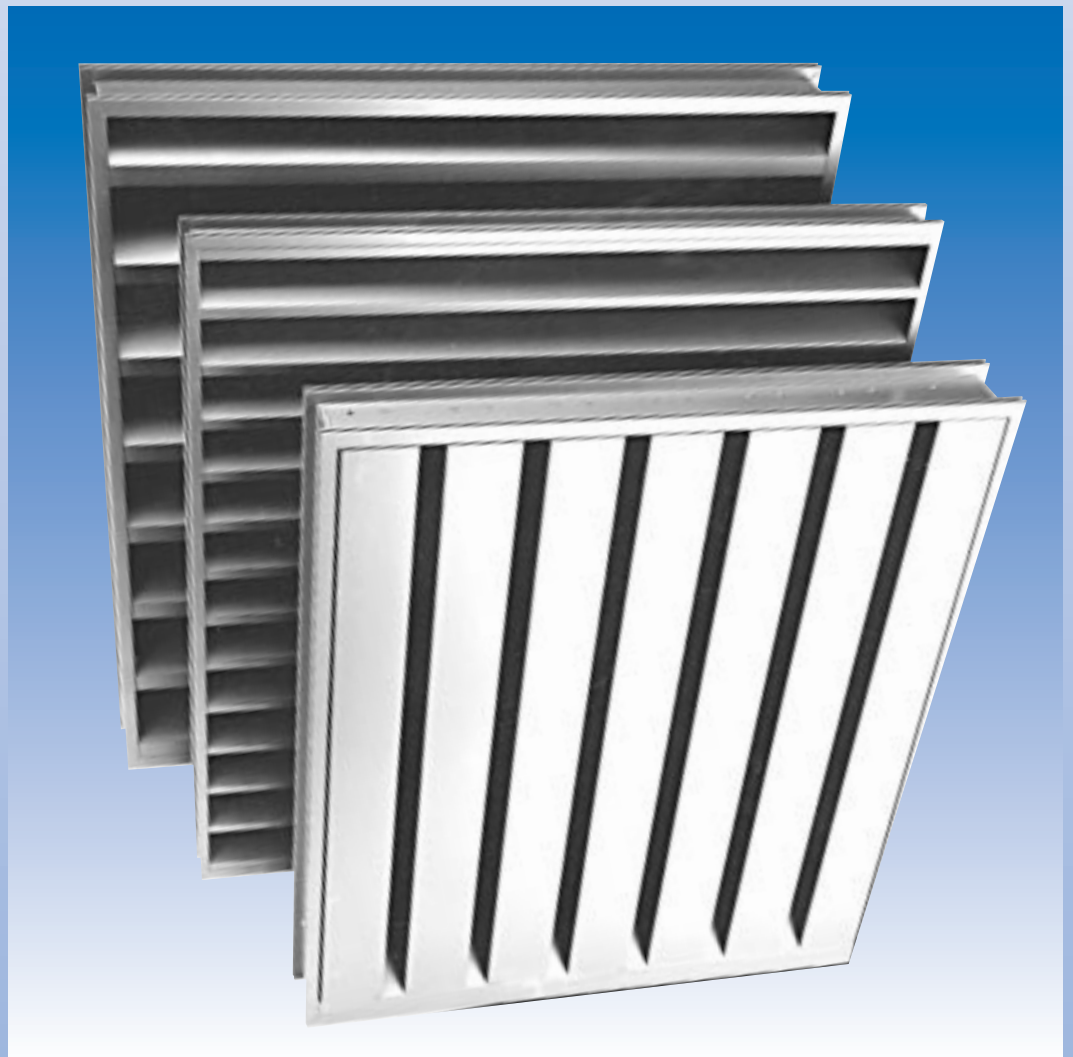




External louvres

WG
YG
SL



Introduction

Series WG large format high performance louvres are suitable for most external walling / screening applications and have been proven weatherproof even under the most adverse conditions. Available systems include horizontal and vertical continuous or mullion screens, doors, access panels, penthouse units, mansard roof panels and enclosures.

Product Description

- WG/EF external flanged louvre
- WG/RF recessed frame louvre
- SF Screw fixing
- LF Rear Lug fixing
- STS Screw through stack fixing
- BS Birdscreen
- IS Insect Screen
- DC Drip Cill

Features

- Continuous effect or mullion style joints
- 65, 75 & 100mm pitches for mansard, standard and sheltered installations
- Vertical blade option with pitches at 75, 100 & 150mm
- Suitable for screening with doors etc
- Optional penthouse louvres

Panel Sizes

From 300mm x 300mm up to 2000mm wide x 1500mm high or 1500mm wide x 2000mm high.

Maximum height for multiple panel assembly is 4000mm but may be greater if suitable.

Structural support work is available.

Finishes

- Polyester Powder RAL 9006 Matt (Silver Grey)
- Polyester Powder RAL 9010 Matt or Gloss
- Others at extra cost

Advantages

- Lightweight, extruded aluminium frame and blade system
- Rigid fully welded frame with screwed blade construction
- Rear rain trap profile on each blade
- Provision for blade alignment on continuous installations

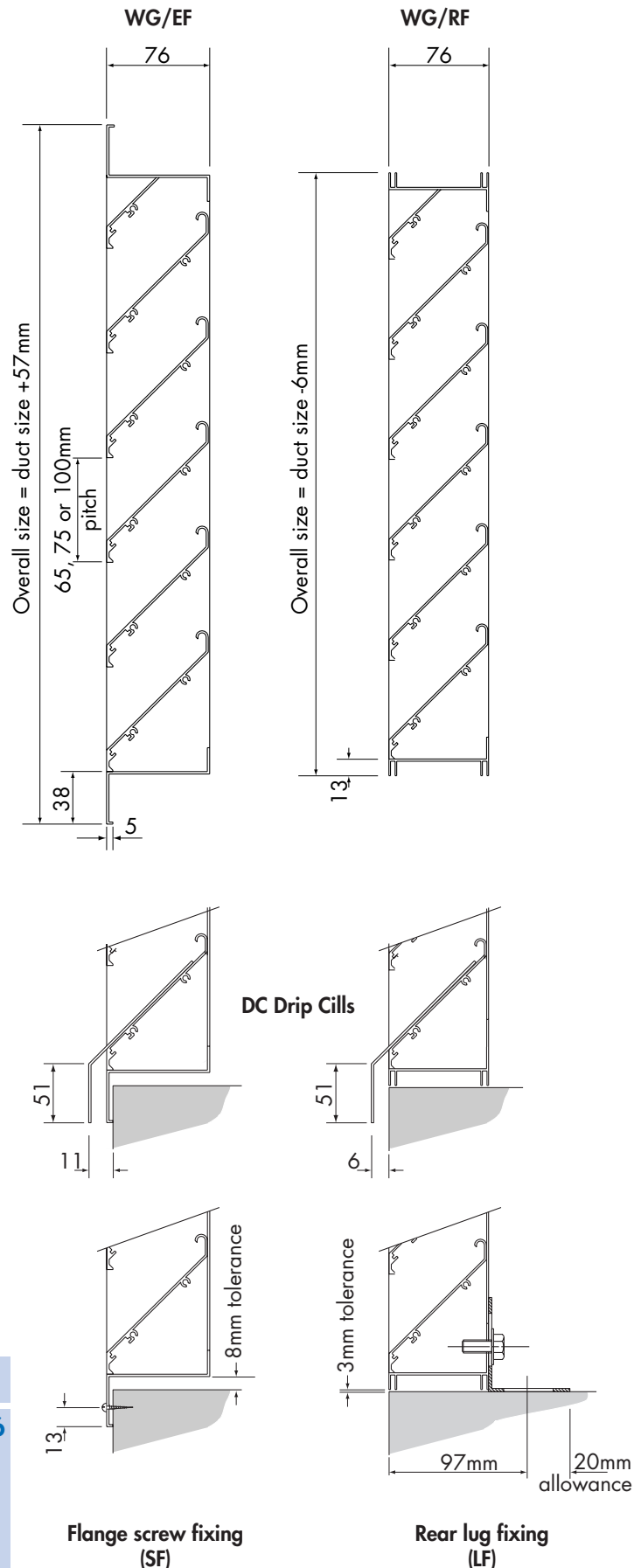
Weights

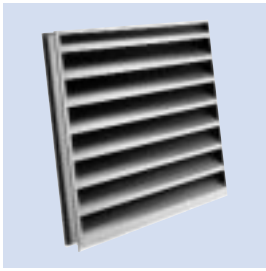
13.0 kg/m² panel

Order Example

WG/EF/1200/600/SF/BS/PPM9006

Frame _____
 Nominal Width _____
 Nominal Height _____
 Fixing _____
 Extras _____
 Finish _____





Selection Example for a 2000m wide x 1500mm high louvre with 75 and 100mm blade pitches handling 4000 l/s

Total air volume/width : $4000/2 = 2000$ l/s/m

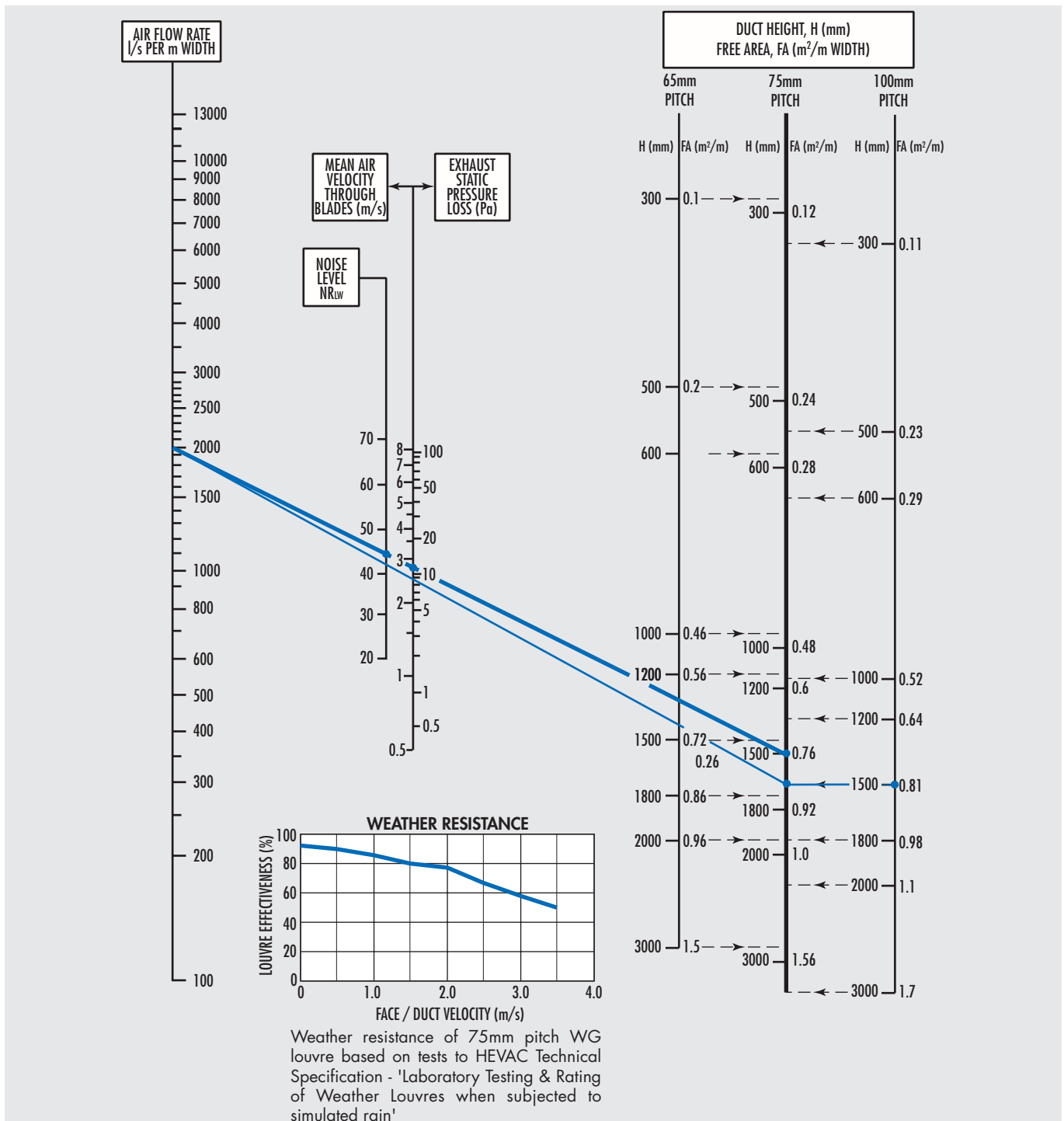
From nomogram	75mm pitch	100mm pitch
NR _{LW}	45	42
Pa	12	9
Mean Jet Velocity	2.8 m/s	2.6 m/s
Free Area x width	$0.76 \times 2 = 1.52\text{m}^2$	$0.81 \times 2 = 1.62\text{m}^2$

Static pressure scale is for exhaust applications with or without birdscreen. A factor of 1.5 should be applied for intake louvres and a factor of 1.1 should be applied for Insect Screen.

NR_{LW} is the noise rating of the louvre based on sound power level. To determine octave band sound power levels, apply the correction factors shown to the NR_{LW} level.

Spectrum Corrections Frequency (Hz)

125	250	500	1k	2k	4k
+6	+5	+2	0	-6	-12



Introduction

Series YG small format louvres are suitable for intake or exhaust systems where space or cost is at a premium. The design incorporates features of the WG system but at half the scale and this makes the YG ideal for small louver applications, sheltered situations and even internal screening requirements.

Product Description

YGA/EF external flanged louver 38mm pitch
 YGA/RF recessed frame louver 38mm pitch
 YGB/EF external flanged louver 45mm pitch
 YGB/RF recessed frame louver 45mm pitch
 SF Screw fixing
 LF Rear Lug fixing
 STS Screw through stack fixing
 BS Birdscreen
 IS Insect Screen
 DC Drip Cill

Features

- Small format compact design
- YGB is suitable for sheltered locations only
- Lightweight aluminium extrusions
- Flanged and recessed frame options

Panel Sizes

From 150mm x 150mm up to 1500mm wide x 1500mm high.

Finishes

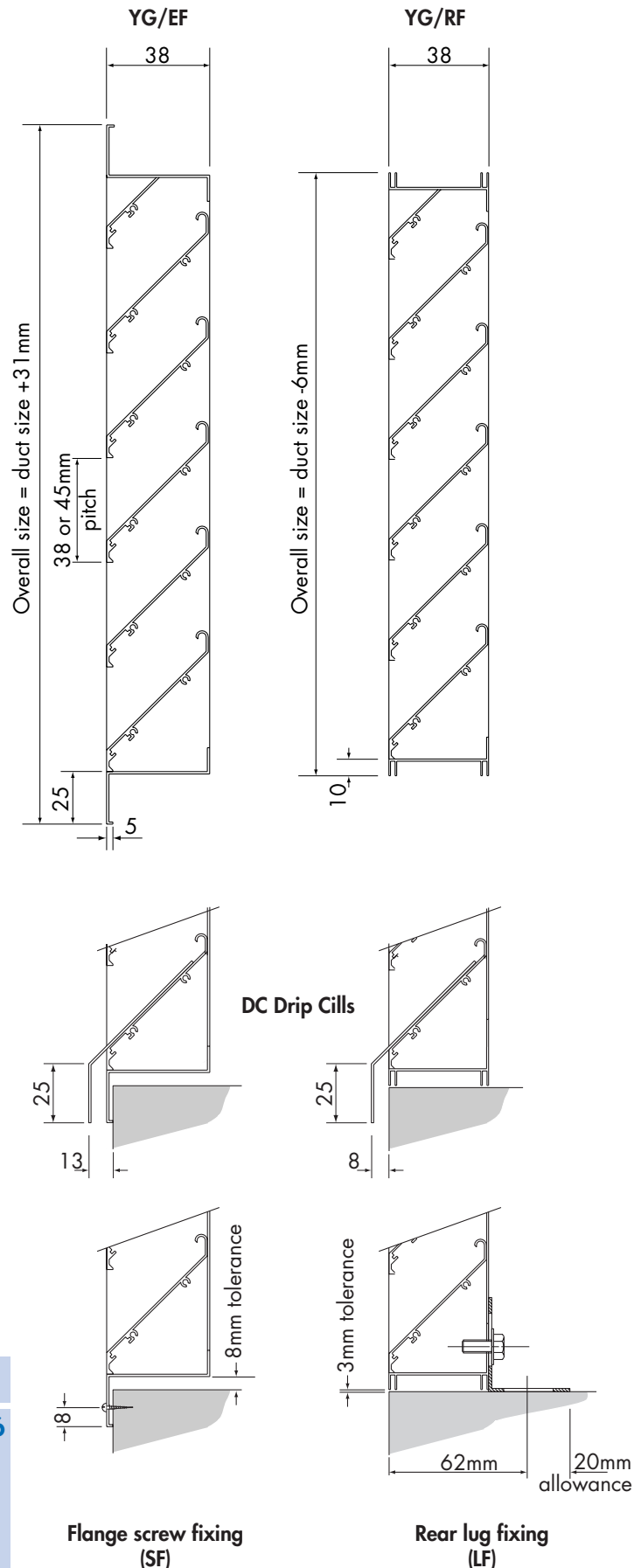
Polyester Powder RAL 9006 Matt (Silver Grey)
 Polyester Powder RAL 9010 Matt or Gloss
 Others at extra cost

Advantages

- Lightweight, extruded aluminium frame and blade system
- Rigid fully welded frame with riveted blade construction
- Rear rain trap profile on each blade
- Provision for blade alignment on continuous installations

Weights

9.0 kg/m² panel

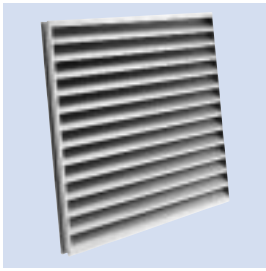


Order Example

YGA/EF/1500/600/SF/BS/PPM9006

Frame _____
 Nominal Width _____
 Nominal Height _____
 Fixing _____
 Extras _____
 Finish _____

YGA YGB



Selection Example for a 1500m wide x 600mm high YGA and YGB louvres handling 1200 l/s

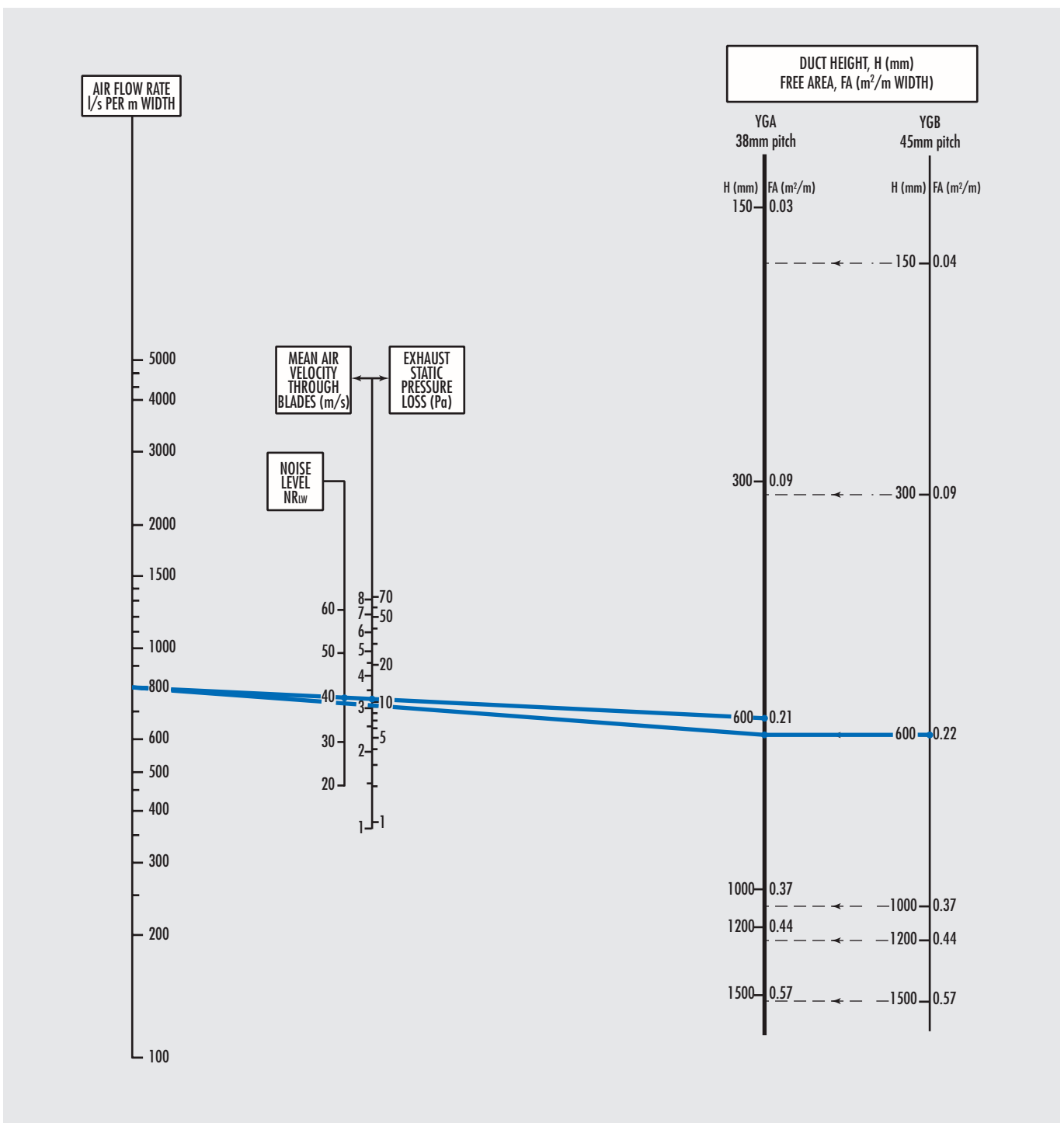
Total air volume/width : $1200/1.5 = 800 \text{ l/s/m}$

From nomogram	YGA (38mm pitch)	YGB (45mm pitch)
NR _{lw}	40	39
P _a	11	9
Velocity	3.3 m/s	3.0 m/s
Free Area x width	$0.21 \times 1.5 = 0.32\text{m}^2$	$0.22 \times 1.5 = 0.33\text{m}^2$

Static pressure scale is for exhaust applications with or without birdscreen. A factor of 1.5 should be applied for intake louvres and a factor of 1.1 should be applied for Insect Screen.

NR_{lw} is the noise rating of the louvre based on sound power level. To determine octave band sound power levels, apply the correction factors shown to the NR_{lw} level.

Spectrum Corrections		Frequency (Hz)			
125	250	500	1k	2k	4k
-7	+4	+3	0	-5	-10



Introduction

Series SL sand louvres have been designed as first stage separators of airborne sand and dust, thereby reducing the dust loading on ventilation filtration equipment.

The attractive, compact and yet simple design uses 'inertia separation' techniques in a two stage baffle arrangement to separate particles and return them to the face via a lower blade chute.

Product Description

SL/EF external flanged sand louvre

SL/RF recessed frame sand louvre

SF Screw fixing

LF Rear Lug fixing

BS Birdscreen

IS Insect Screen

Features

- Compact design
- Heavy duty extruded aluminium frame and blades
- Attractive vertical blade arrangement
- Integral collection chute
- Flanged or recessed frame options

Panel Sizes

From 320mm x 300mm up to 1533mm wide x 1500mm high.

Refer to table below for full details.

Finishes

Polyester Powder RAL 9006 Matt (Silver Grey)

Polyester Powder RAL 9010 Matt or Gloss

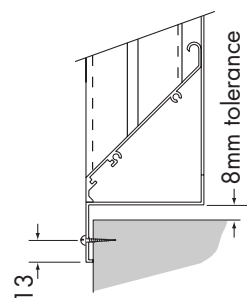
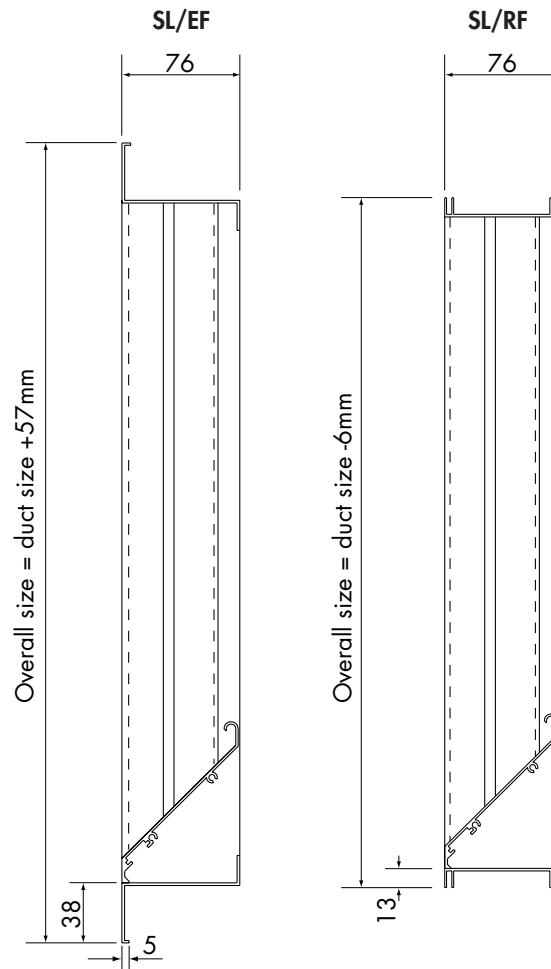
Others at extra cost

Advantages

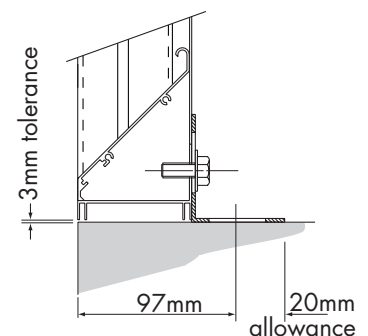
- Lightweight, extruded aluminium frame and blade system
- Rigid fully welded frame with screwed blade construction

Weights

12.5 kg/m² panel



Flange screw fixing (SF)



Rear lug fixing (LF)

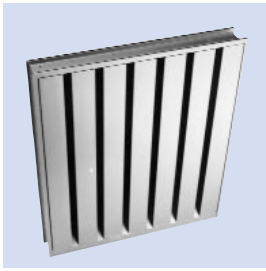
Order Example

SL/EF/1520/1500/SF/BS/PPM9006

Frame _____
 Nominal Width _____
 Nominal Height _____
 Fixing _____
 Extras _____
 Finish _____

Permissible sizes

	Min & Max Nominal Opening Width						Min & Max Opening Height
	Single Panel		2 Panel		3 Panel		
	EF Frame	RF Frame	EF Frame	RF Frame	EF Frame	RF Frame	
Min	320	333	1605	1618	3130	3143	Min 300
Max	1520	1533	3045	3058	4570	4583	Max 1500



Selection Example for a flanged louvre 1520mm wide x 1500mm high louvre handling 2280 l/s

Total air volume/area : $2280 / (1520 \times 1500) = 2280 / 2280 = 1 \text{ m/s}$

From charts

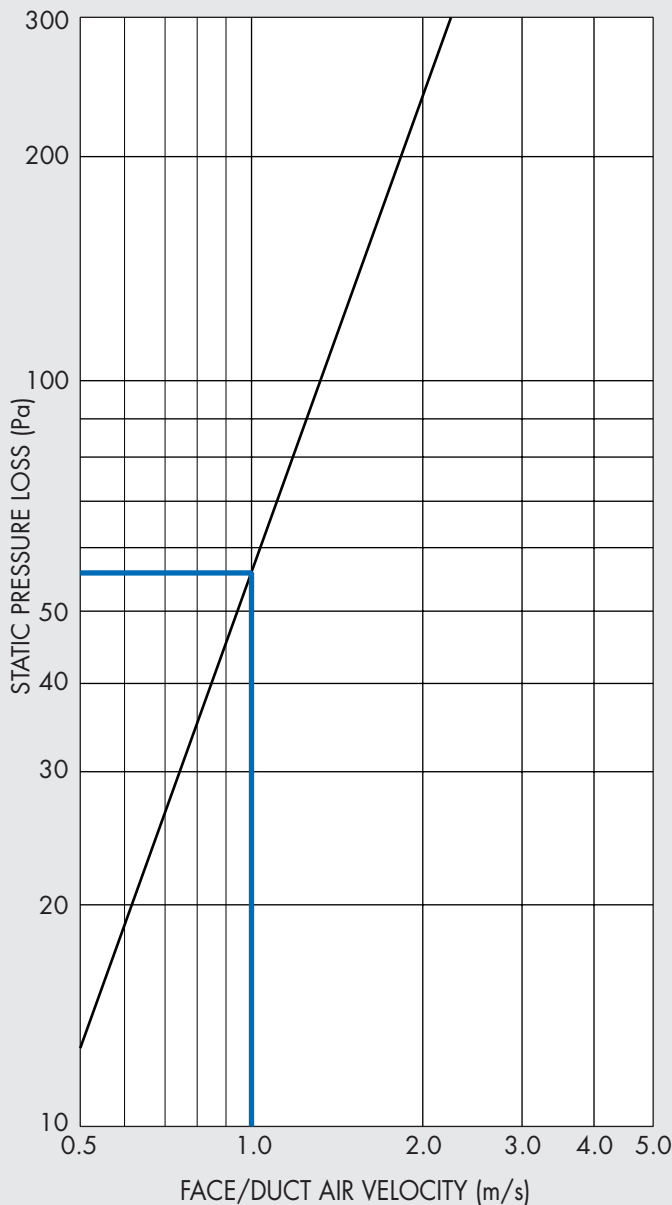
NR_{LW} = 41
 P_a = 58
 Efficiency = 67%

Spectrum Corrections Frequency (Hz)

125	250	500	1k	2k	4k
+1	+4	+3	0	-10	-16

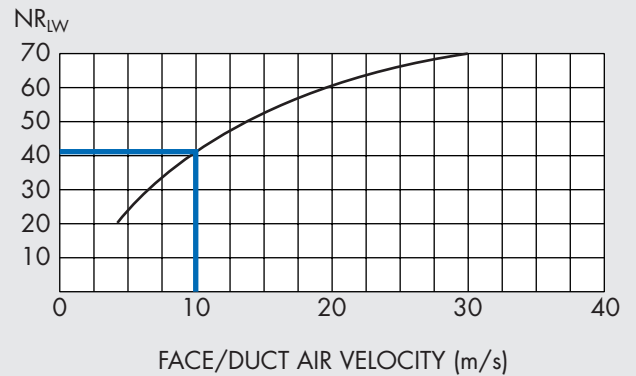
PRESSURE LOSS

The graph below gives static pressure loss across the louvre for intake or exhaust applications.



NOISE GENERATION

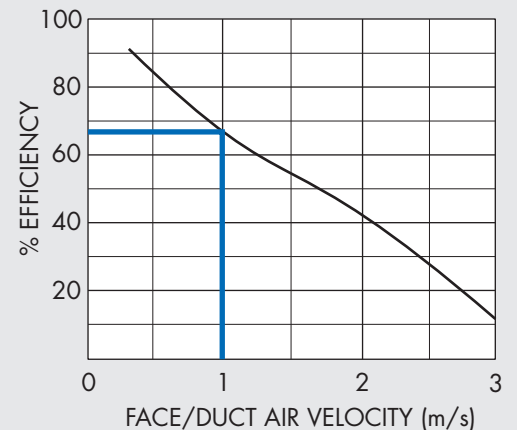
The graph below gives NR_{LW} levels based on peak sound power level plotted on noise rating (NR) curves. To obtain octave band sound power levels apply the spectrum corrections shown to the NR_{LW} level.



EFFICIENCY

Sand rejection efficiency using a standard sand having grains sized between 100 and 1000 microns with 90% between 150 and 425 microns. Sand collected by the double channel construction drops to the base of the louvre and a chute directs the sand back to the face.

$$\text{Efficiency} = \frac{\text{weight of sand rejected}}{\text{weight of sand injected}} \times 100$$



Waterloo



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