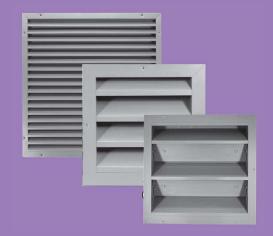


# EXTERNAL LOUVRES

External Fixed Blade Louvres

"No Sight" Louvres
Adjustable Louvres
Acoustic Louvres
Penthouse Louvres
Sand Louvres



### Why Waterloo



#### Reliability

To reliably give your client the service and support they expect, you need confidence that your suppliers will compliment and support your own professionalism. Waterloo's World Class attitudes and beliefs provide this confidence.

World-Class is not a reflection of size or number of employees, it is to do with values such as flexibility, innovation, customer service, integrity, strength of character and good humour. These are the values that separate the outstanding from the ordinary.

#### Innovation

Some projects are common place, but as the possibilities of building design are pushed to wider and wider boundaries you need to continually search for technically and cost effective solutions to give satisfaction to your client. Waterloo is committed to constant innovation to provide you with those solutions.

We at Waterloo challenge accepted knowledge and use our understanding and learning to sustain our reputation for technical excellence and continually develop one of the widest ranges of air terminal devices in the world. For over 100 years Waterloo have actively pioneered the use of innovative manufacturing techniques, an approach that is still integral to the way we work today.

#### **Quick Delivery**

When you are working on fast track projects (or just dealing with unexpected site requirements) you need confidence that your supplier understands and can respond with the required urgency. To give you complete support, Waterloo obsessively maintains high delivery and quality performance.

Waterloo has a well justified reputation throughout the construction industry for very quick service – when others might offer four or six weeks delivery periods, Waterloo prides itself in delivering most small and medium orders in five days.

#### Flexibility

In an ideal world all projects would commence with the entire design complete and documented. Until then, to give your client maximum confidence and satisfaction, Waterloo's renowned flexibility is at your service.

Unanticipated design issues or site conditions might require complex but timely solutions to exceptional problems. Waterloo's flexibility is founded on our wealth of experience, the fluency and knowledge of our highly-skilled staff and our willingness to explore new ways of working, and our desire to share with you the benefits of our expertise in construction, design, management, planning, procurement and programming.

#### Specials as Standard

Architectural design is continually developing and the tasks of interpreting the requirements and providing cost effective and practical solutions become more important. Waterloo's complimentary made-to-order programme and fluency with the design and manufacture of bespoke air terminal devices will allow you to realise your vision or solve unanticipated problems on site.

#### Symbols Used

v<sub>eff</sub> Effective Air Velocity [m/s]

L<sub>WA</sub> Uncorrected sound power level [dB]

q<sub>v</sub> Air Volume [l/s] or [m³/h]
 P<sub>s</sub> Static Pressure [Pa]
 W Nominal Width [mm]
 H Nominal Height [mm]













### **External Louvres**



# Small Format Fixed Blade External Louvres YG-EF / YG-RF

#### 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 louvre applications, sheltered situations and even internal screening requirements.

#### **Product Description**

YGA-EF External flanged louvre 38mm pitch
YGA-RF Recessed frame louvre 38mm pitch
YGB-EF External flanged louvre 45mm pitch
YGC-EF External flanged louvre 45mm pitch
YGC-RF Recessed frame louvre 50mm pitch
Note: The YGB/YGC are for sheltered locations only

#### **Features**

- Small format compact design
- Weather resistant design
- Lightweight aluminium extrusions
- Flanged and recessed frame options
- Provision for blade alignment on continuous installations

#### **Finishes**

PPG9010 (RAL 9010 Gloss - 80% Gloss White)
PPM9010 (RAL 9010 Matt - 20% Gloss White)
PPM9006 (RAL 9006 Matt - 30% Gloss Silver)
Other colours or anodised finish available on request
Sizes

Nom. W 125 - 1200 mm Nom. H 115 - 1985 mm

For larger sizes please contact head office

#### Fixing

SF Screw Fixing LF Rear Lug Fixing

STS Screw Through Stack fixing

NF No Fixing Screen Options

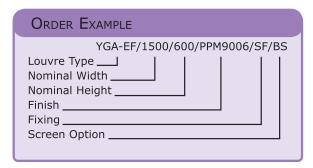
BS Galvanised steel bird screen
IS Aluminium insect screen
Other options available on request

#### Weights

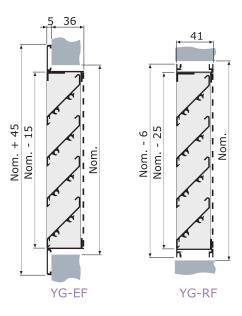
YG 10 kg/m² panel

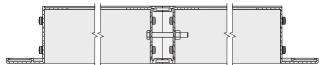
#### Advantages

- Lightweight, extruded aluminium frame and blade system
- Rear rain trap profile on each blade

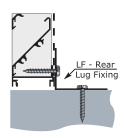








The above drawing shows a multiple YG-EF split along the width - Aluminium strips allow for expansion and contraction, due to changes in temperature.



Free Area				
YG				
19%- 47%				



Please scan the QR code to view the website page for:

WG-YG series Operation and Maintenance Instructions

www.waterloo.co.uk Tel: +44 (0)1622 717861

## **External Louvres**



# Small Format Fixed Blade External Louvres YG-EF / YG-RF

#### Selection Example

1500mm wide x 600mm high YG louvre handling 1200 l/s

Total air volume/width: 1200/1.5 = 800 l/s/m

From nomogram YGA (38mm pitch) YGB (45mm pitch)

 dBA
 45
 44

 Pa
 11
 9

 Mean Jet Velocity
 3.3 m/s
 3.0 m/s

Free Area x width  $0.21 \times 1.5 = 0.32 \text{m}^2 \quad 0.22 \times 1.5 = 0.33 \text{m}^2$ 

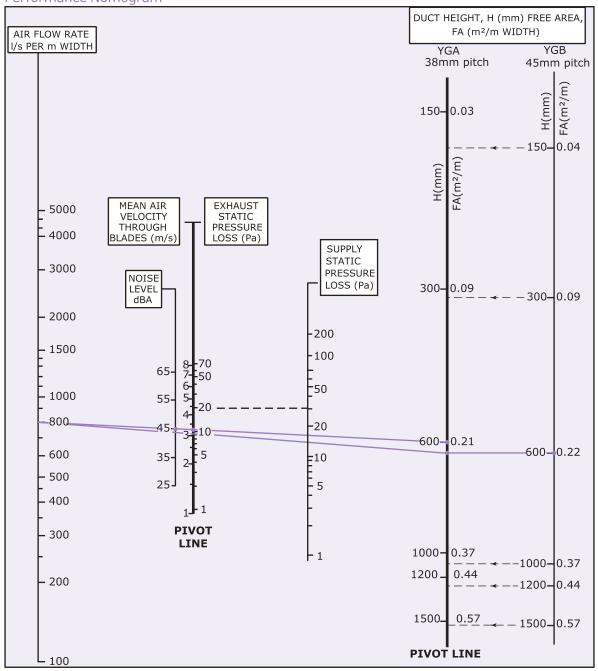
Frequency Spectrum Corrections (Hz)						
125	250	500	1k	2k	4k	
+6	+5	+2	0	-6	-12	

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. dBA 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 dBA level.

#### Performance Nomogram



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