

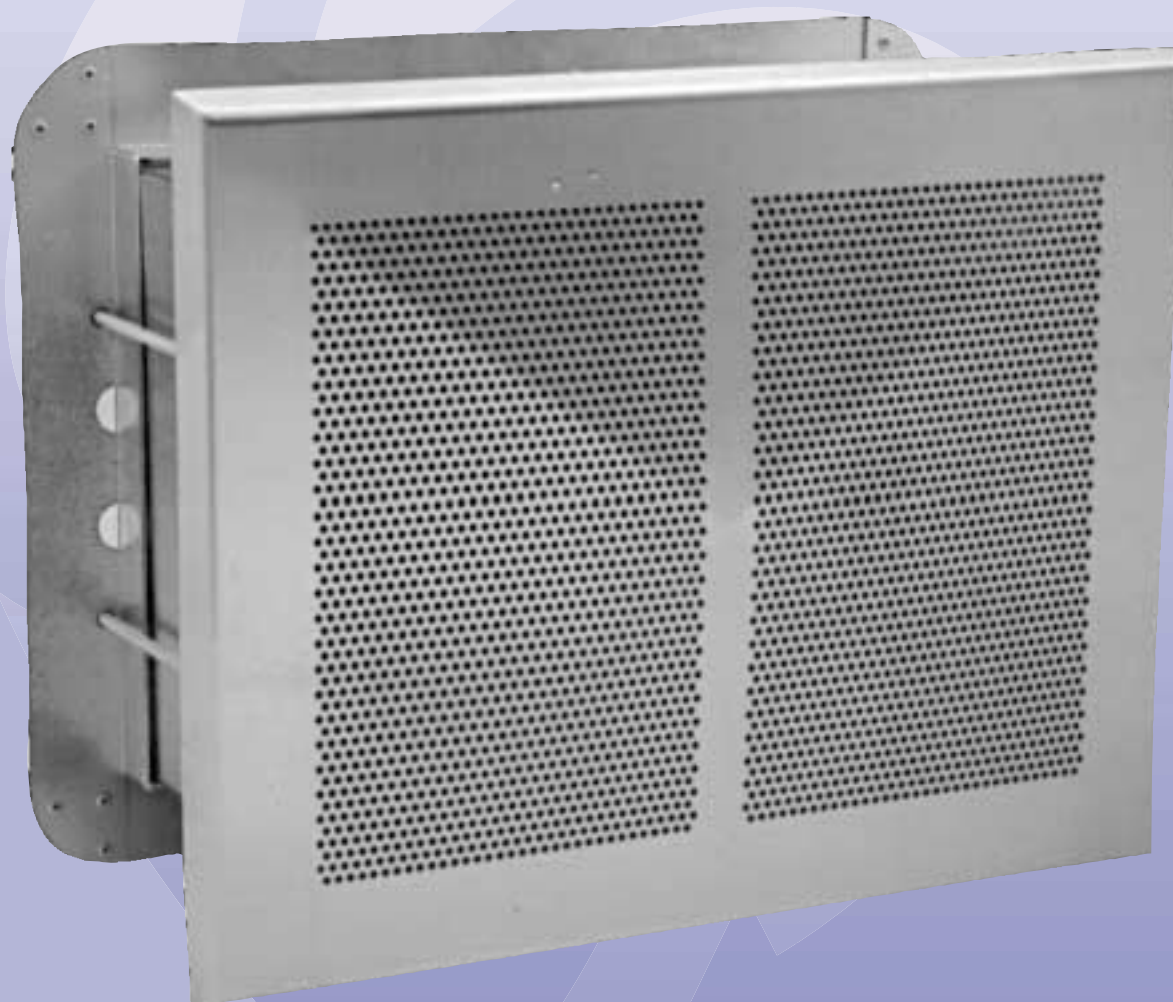
SERIES GP

Security Grilles

PUBLICATION

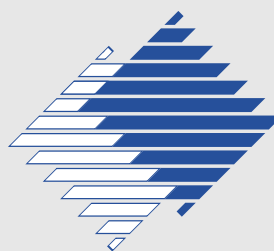
GRILLES 10

SEPT 2006

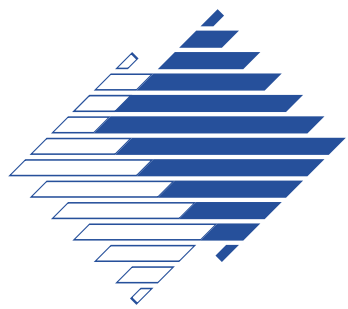


Features

- Robust 2mm Stainless Steel or 3mm Mild Steel Face.
- Available for Air Supply, Air Extract or Air Transfer Applications.
- High Security Rear Bolt Fixings.
- Key Operated Opposed Blade or Quadrant Operated Flap Damper.



GILBERTS



SERIES GP

Introduction

Gilberts GP series presents a range of perforated face grilles designed for air supply, extract and transfer applications in high security areas such as Prisons, Cell Blocks and Remand Centres.

Manufactured to meet Home Office specifications they comprise of either a 2mm stainless steel or, if required, a 3mm mild steel fascia perforated with 3mm dia holes on a staggered 5mm pitch.

With the outer edges angled at 45° this creates a tough, yet attractive unit with maximum tamper resistance.

Units are fixed either with a maximum security rear bolt fixing providing NO access from the face or, for medium and lower security areas with non removable 'clutch' screws through the flange.

TYPE GP1 - Air supply or extract unit complete with plenum and maximum security rear bolt fixing.

TYPE GP2 - Air supply or extract grille fascia only complete with security clutch screw fixing through the face flange.

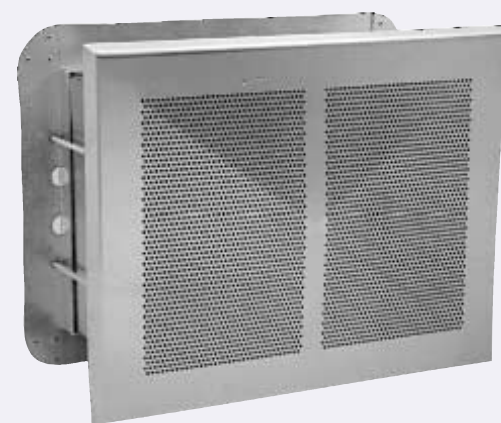
TYPE GP3 - Air transfer grille arrangement comprising of a high security bolt fixing unit on one side and a lower security clutch screw unit on the other

For volume control both the Type GP1 and GP2 models can be fitted with an opposed blade damper mounted behind the grille fascia and operated through one of the standard fascia holes (marked by a removable cap) for installation and balancing. Alternatively Type GP1 units can have a quadrant type damper fitted to the plenum inlet and operated from the rear.

All units are available in sizes ranging from 150 x 150 up to 600 x 600 in 50mm increments. Stainless steel units are supplied natural brushed finish with mild steel units polyester powder White although other colours and finishes are available on request

Features

- Robust 2mm stainless steel or 3mm mild steel face construction.
- Available for air supply, air extract or air transfer applications.
- High security rear bolt fixings.
- Key operated opposed blade or quadrant operated flap damper



Performance Data

The performance data nomogram that follows is related to isothermal conditions. It can be applied for either supply or extract selection purposes and is intended to be an aid to the design engineer.

References used:

PRESSURE: All pressures are in Pa (N/m²).

SOUND: measured in average dba level.

THROWS: All horizontal throws are for a distance measured in metres and correspond to a terminal velocity of 0.25m/s.

Selection Procedure

Having established the position where the supply terminal can be situated measure the acceptable throw distance. It is better to position the supply Grille at high level in a side wall with the discharge of air over the ceiling and extract at a lower level. Knowing the volume and throw for each Grille then use the nomogram to check:

- A) Size as selected to give required throw of air.
- B) Noise level from performance data to ensure it meets with required specifications.
- C) Determine the static pressure drop from performance data.

Example:

Volume required 0.06m³/S.

Throw 5/6 metres.

Max Sound Level 35 dba.

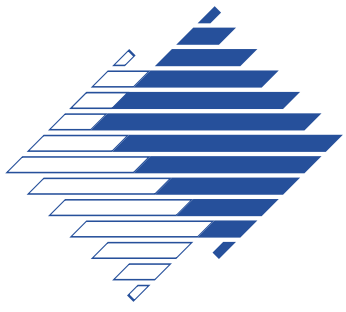
From Chart selection of 300 x 300 Grille gives the following data:-

Throw - 6 metres

Sound Level - 24 dba

Pressure Drop - 8 pa

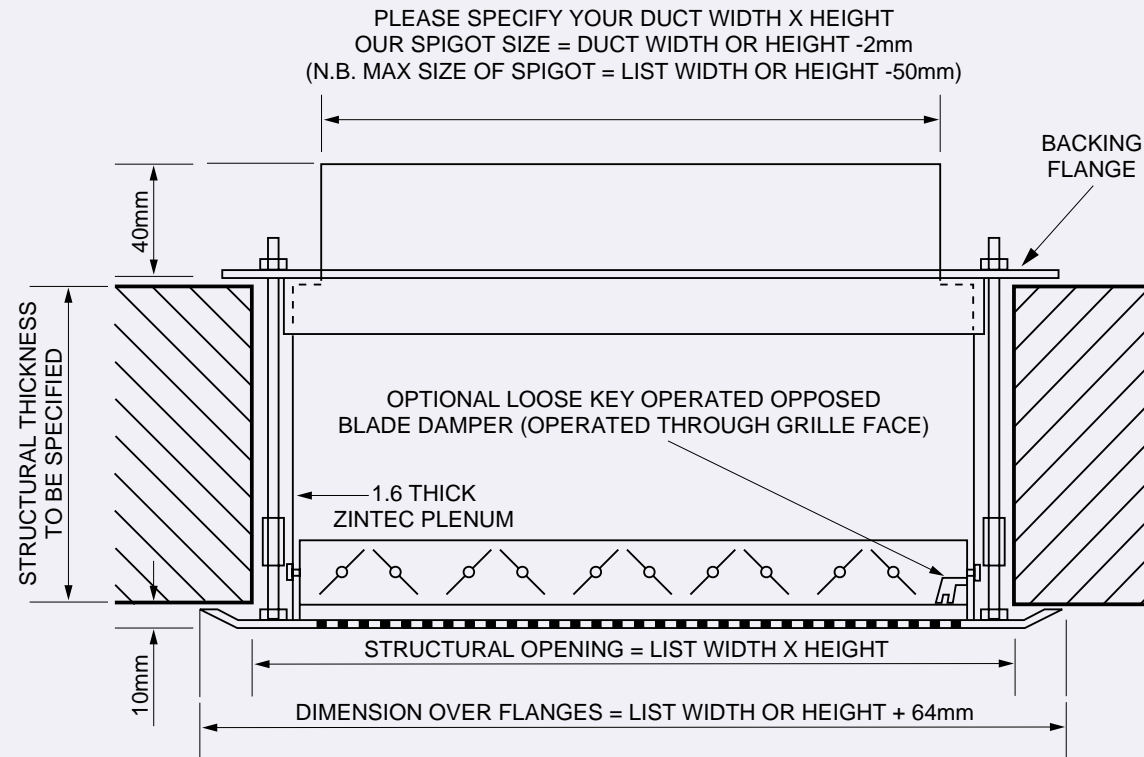
Selection of extract Grilles are generally based upon acceptable pressure drops and noise levels



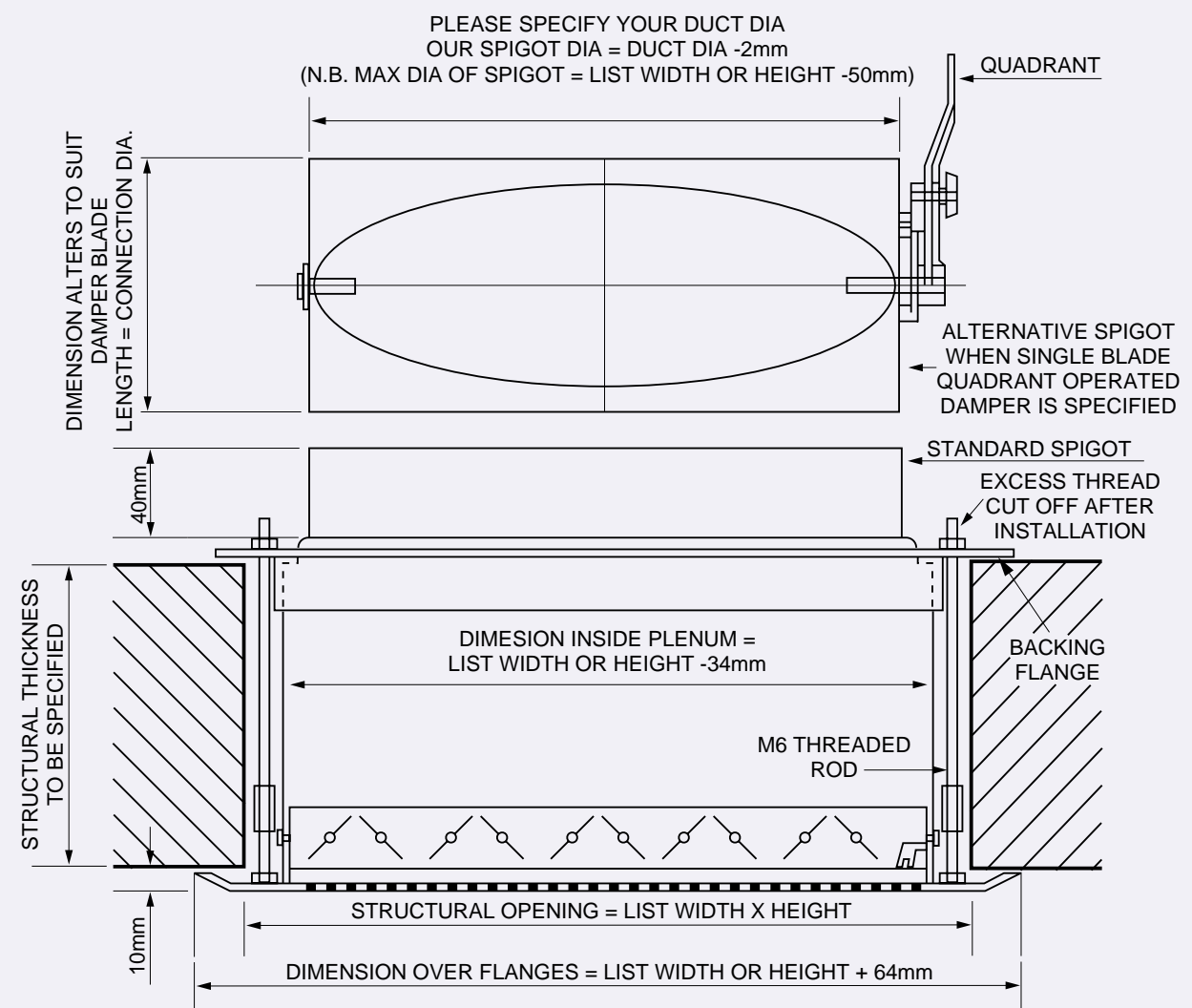
SERIES GP

Series GP1
Supply or
Extract
Grille

TYPE GP1 SQUARE/RECTANGULAR SPIGOT CONNECTION



TYPE GP1 CIRCULAR SPIGOT CONNECTION



ORDERING SPECIFICATION: BACK COVER



SERIES GP

Series GP2
Supply or
Extract
Grille

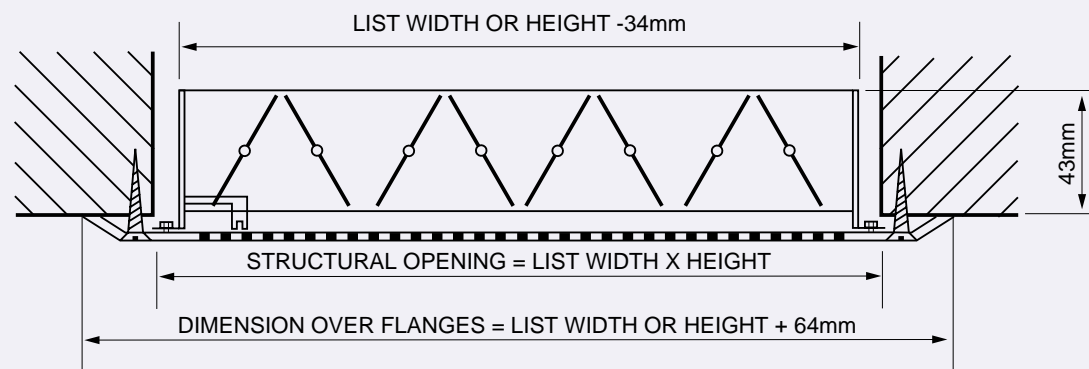
TYPE GP2

Grille Only



TYPE GP2-DO

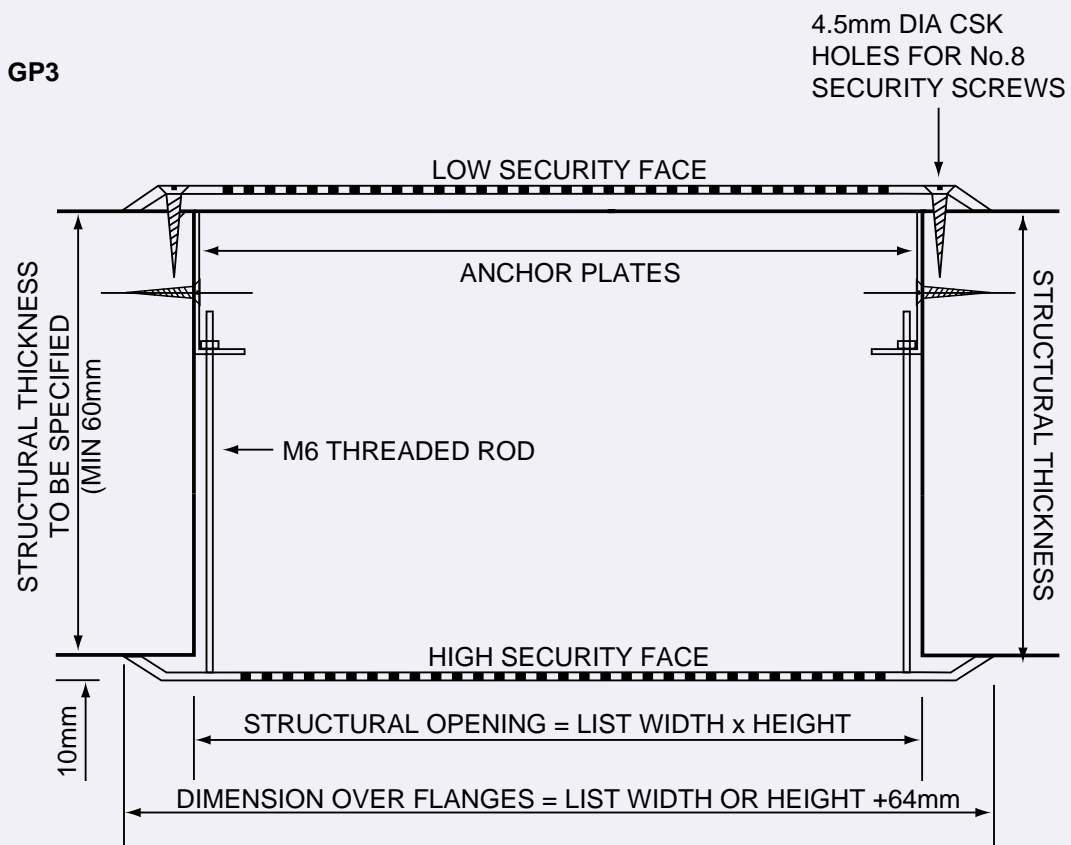
Grille c/w
Damper



ORDERING SPECIFICATION: BACK COVER

Series GP3
Transfer
Grille

TYPE GP3



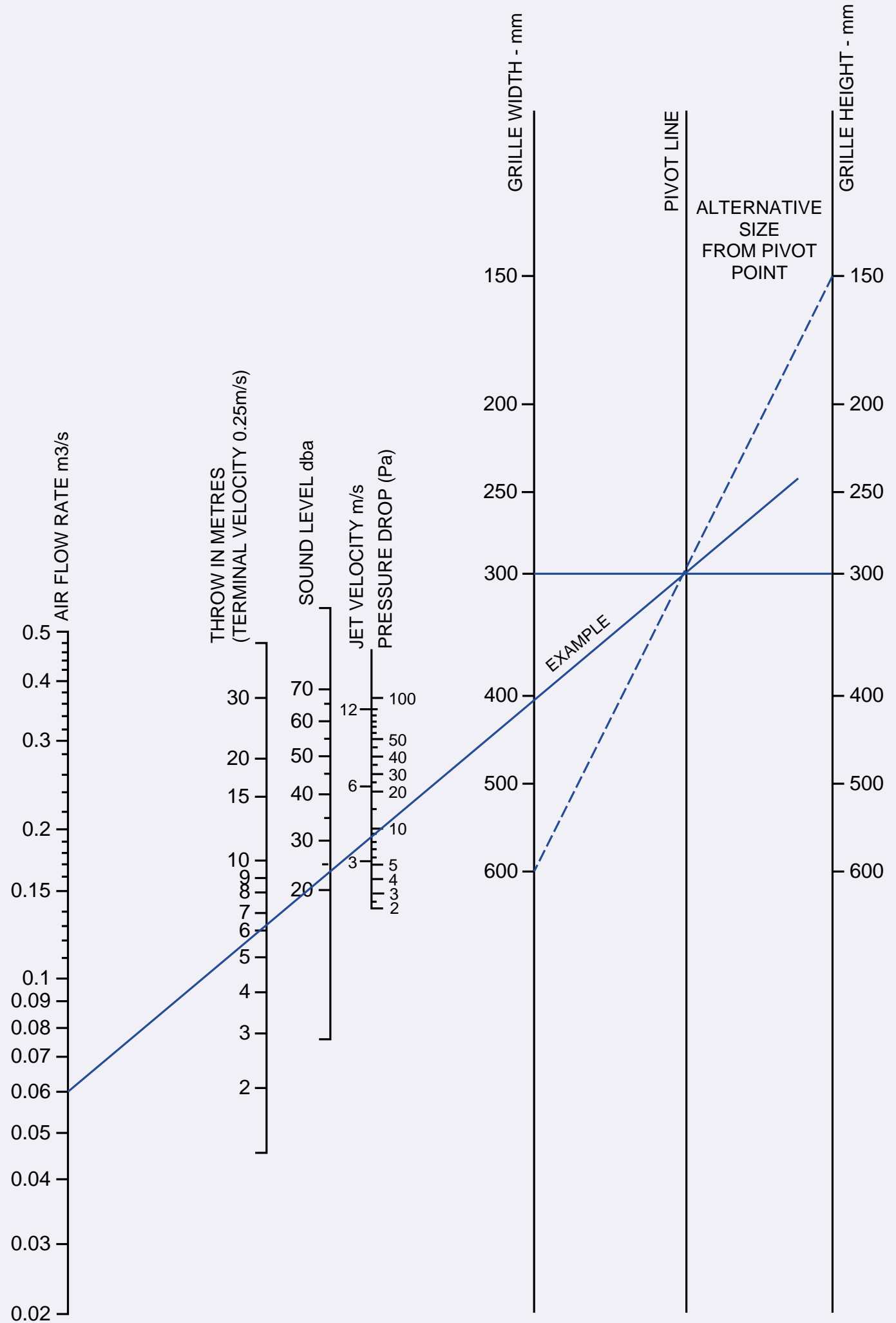
ORDERING SPECIFICATION: BACK COVER

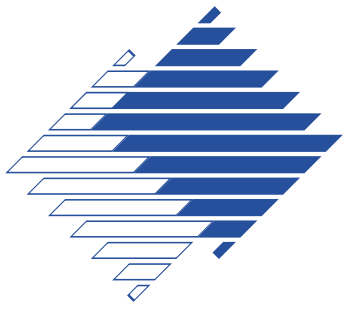
MANUFACTURING TOLERANCES = +0/-2mm.



SERIES GP

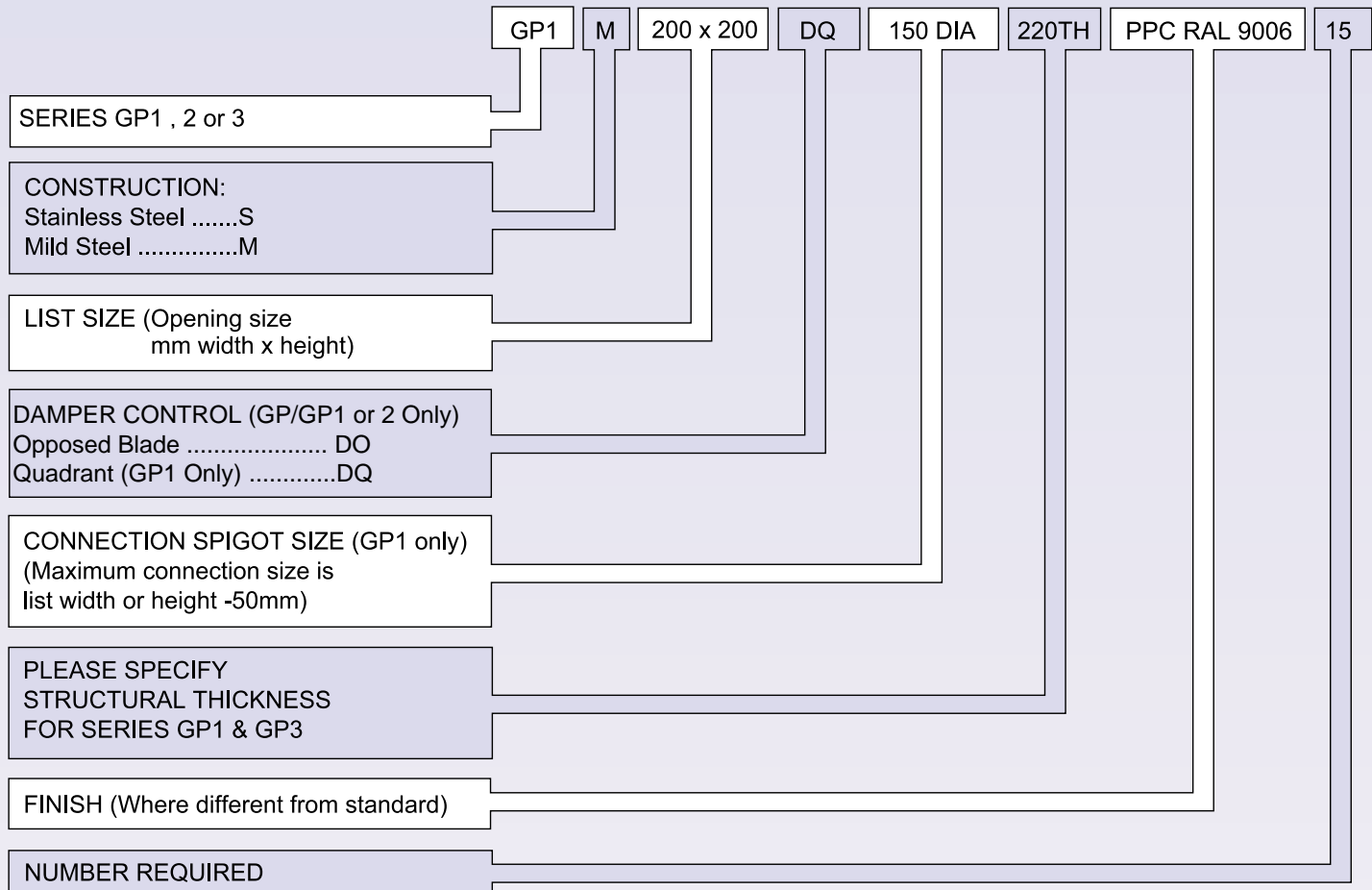
Sizing Nomogram





SERIES GP

Ordering Specification



FINISH

STANDARD FINISH:

Stainless steel units are supplied in natural brushed finish and mild steel Units Polyester Powder White RAL 9010 20% Gloss.

SPECIAL FINISHES:

Polyester Powder finish to stock BS or RAL colour.
Stove Enamel finish to any BS or RAL colour.

RECENT PROJECTS INCLUDE:

Harrow Crown Courts
Walton Prison (Segregation Centre)
Woking Magistrates Courts
Strangeways Prison

FIXING

Standard fixings include either high security rear bolt fixing or low security clutch screw fixing as detailed in technical data.

HM Prison Greenock
Lewes Crown and Magistrates Courts
Coventry Crown Courts
Risley Remand Centre

Contact

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