

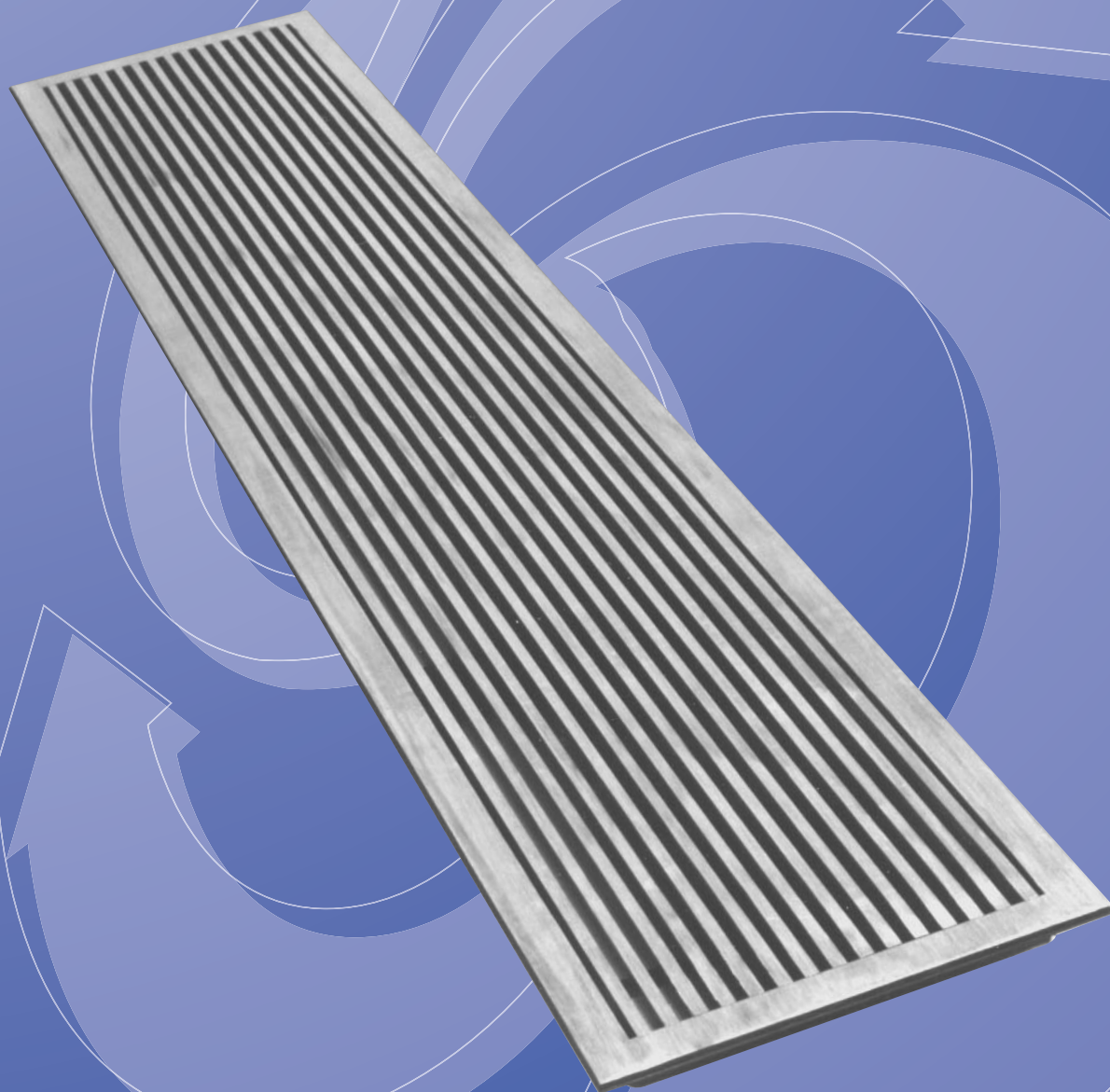
SERIES F

Heavy Duty Linear
Floor Grilles

PUBLICATION

GRILLES 14

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Features

- Attractive, Balanced Styling.
- 0° or 15° Blade Angle.
- Robust Heavy Duty Construction.
- Single Unit or Continuous Run.
- All Extruded Aluminium Construction.



GILBERTS

SERIES F

Heavy Duty Linear Floor Grilles

Introduction

Gilberts F Series complement the existing CF and GF Series of square and rectangular floor grilles by providing a linear style of floor grille designed for all manner and type of floor mounting application. Suitable for both supply and extract application the F Series is attractively designed and styled from robust heavy duty aluminium sectioning for optimum load performance. The core itself comprises of 6mm 'Broadline' bars, set on a 13mm pitch, and features a tapered, rather than straight, bar profile to improve both airflow and aesthetics. The core is argon welded into a compact 22mm Z section flange border frame which

incorporates a discreet, low profile bevelled edge to improve the floor grille line and prevent tripping.

On the F Series both 0° straight and 15° angle blades can be selected as standard with available widths ranging from 50mm right up to 600mm and lengths up to 2 metres in a single unit. Over 2 metres, for continuous runs, units are supplied in sections and can be designed to incorporate additional features such as active/dummy sections and mitred corners.

Type F/ 0/ 6: Heavy Duty Linear Floor Grille comprising 6mm bars set straight on a 13mm pitch in 22mm flange border frame.

Type F/ 15/ 6: Heavy Duty Linear Floor Grille comprising 6mm bars set at 15° on a 13mm pitch in 22mm flange border frame.

Manufactured throughout from extruded aluminium the F Series is available with standard screwdriver operated opposed blade volume control. Standard fixing is drop in with no additional fixing required. Fixing holes or concealed bracket fixings can however be provided on request.

Standard finish is mill brush finished, however units can be nylon coated to a limited RAL colour range, or shadowline finished (brushed face with matt black internals) where preferred.

Performance Data

The Performance Nomogram that follows is related basically to airjet velocities and pressure drop characteristics through various types and sizes of units.

Having determined the most suitable position of the linear grille to give the best effective distribution:

1. Determine the volume in m³/sec per metre length.
2. Establish the throw required to prevent overblow. This should be 75% of the distance to the wall opposite or if outlets are opposed to one another this should be one third of the distance between them.
3. Check the acceptable sound level from the chart opposite. Please note that data is only available down to NC20. For selections at lower levels please consult with our technical dept.
4. From the Selection Nomogram determine a suitable grille width to suit the above criteria.

References used:

Pressure: All pressures are in Pascals (N/m²)

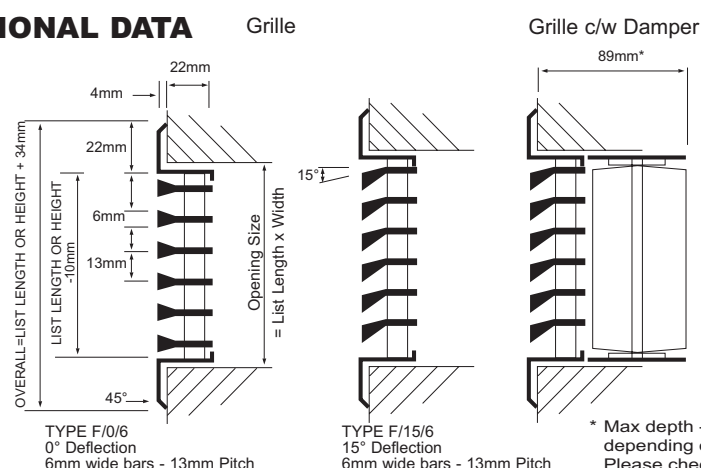
Velocities: All jet velocities are in m/s

Volumes: All air volumes are in m³/s

Area to be served	Recommended Maximum NC Levels
Sound Broadcasting Recording Studios, TV (Audience Studios)	15 - 20 20 - 25
Lecture Theatres, Cinemas, Concert Halls, Boardroom/Ex Offices Lounge, Conference Room, Court Room, Churches, Private Bedrooms	25 - 30
Operating Theatres, Hospital Wards, Staff Room, Class Rooms, Ballroom, Banquet Room, Library, Bank, Museum, Offices	30 - 40
Restaurants, Department Stores, Computer Suite, Washroom Toilet	35 - 40
Laundries, Kitchens, Swimming Pools, Sports Arena	40 - 45
Garage, Light Engineering Workshop	45 - 50
Heavy Engineering Workshop	50 - 65

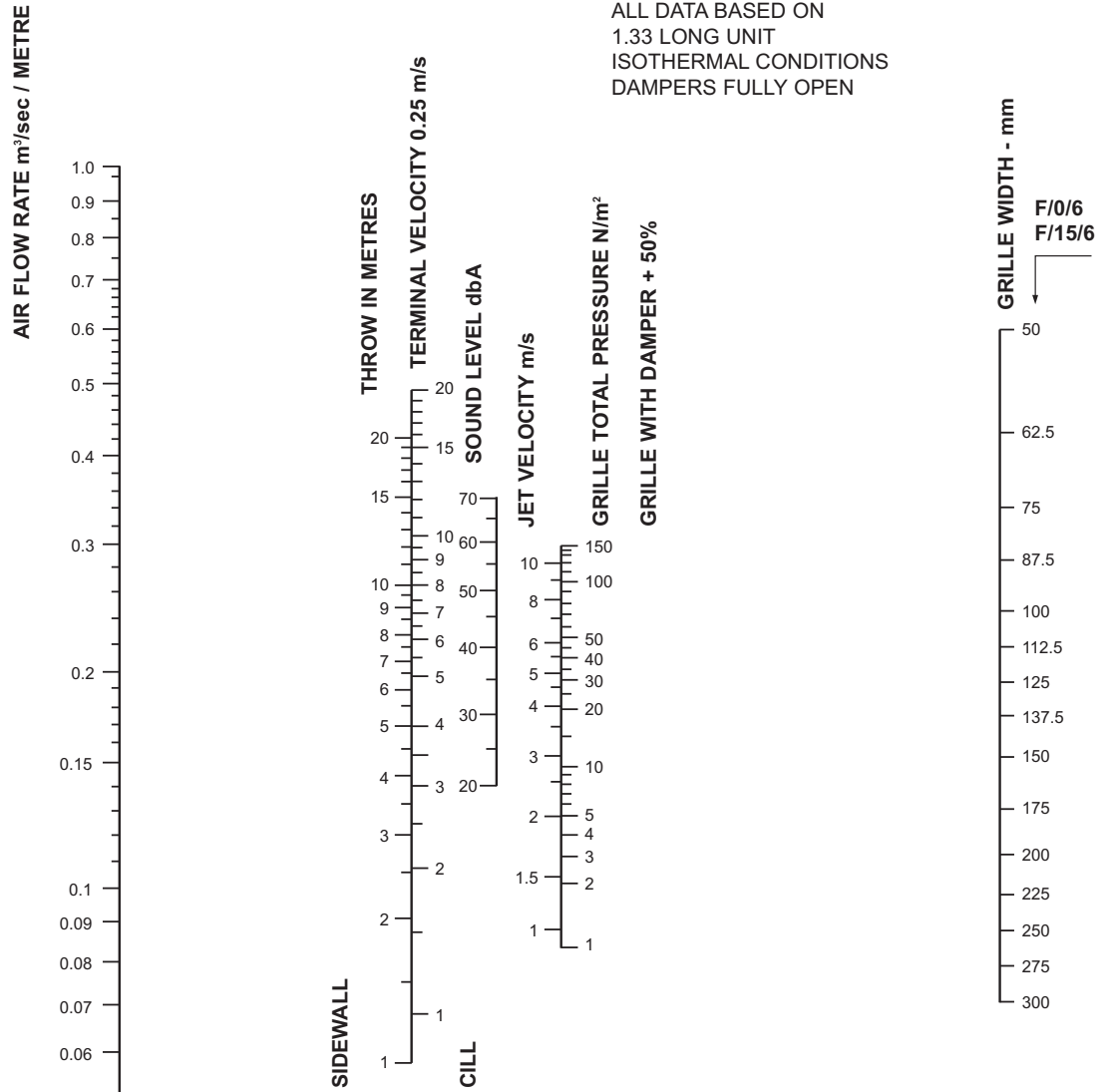
Dimensional Data

DIMENSIONAL DATA





Sizing Nomogram



ALL DATA BASED ON
1.33 LONG UNIT
ISOTHERMAL CONDITIONS
DAMPERS FULLY OPEN

PRESSURE CORRECTION FACTORS

GRILLE TYPE	TOTAL PRESSURE
F/0/6	AS SCALE
F/15/6	x 1.25

SOUND CORRECTION FACTORS

DIFFUSER LENGTH IN METRES	DECIBEL CORRECTION
0.33 - 1.0	- 1
1.66 - 2.0	+1
2.33 - 3.0	+2
OVER 3 METRES	+3

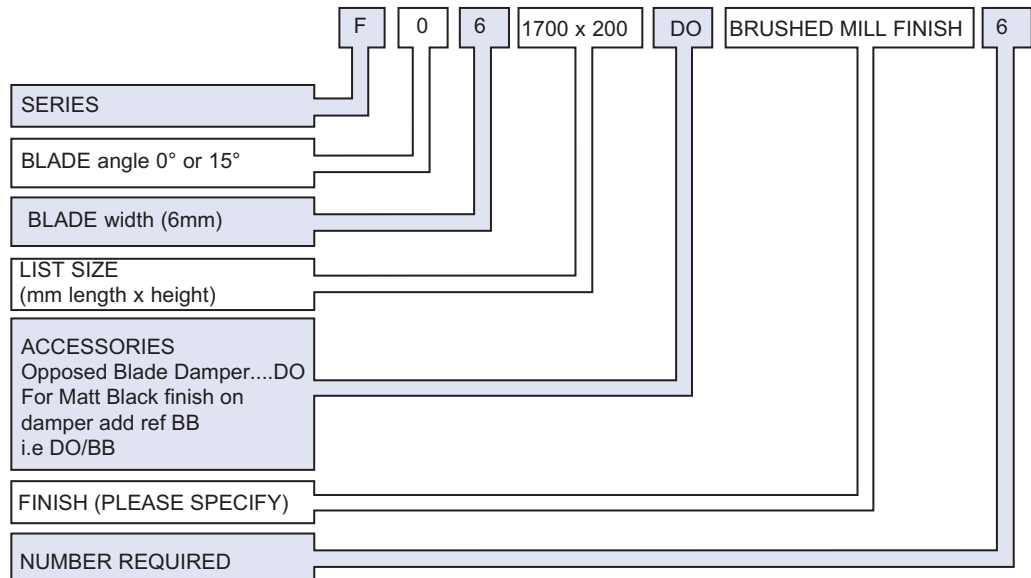
THROW CORRECTION FACTORS

DIFFUSER LENGTH IN METRES	THROW CORRECTION
---0.33	x .5
1.66 - 1.0	x .95
2.33 - 2.0	x 1.05
OVER 2 METRES	x 1.15

SERIES F

Heavy Duty Linear Floor Grilles

Ordering Specification



Fixing

No fixing provided as standard.
All units are "drop in type".

Size Range

Available heights range from 50mm rising in 1mm increments up to 600mm with lengths available up to 2 metres in a single unit.

Note: Above lengths of 600mm, 25mm deep T bar supports are fitted at the rear of the grille increasing depth at these locations.

Finish

STANDARD FINISH:
Natural 'Mill' brush finished.

SPECIAL FINISHES:
"Shadowline" with inner faces matt black and face brush finished.
Nylon coated in limited RAL colour range.

Note: Dampers are Mill finish Aluminium or Galvanised Steel

GILBERTS

Head Office and Works
GILBERTS (BLACKPOOL) LTD
Gilair Works, Clifton Road,
Blackpool.
Lancashire FY4 4QT.
Telephone: (01253) 766911
Fax: (01253) 767941
e-mail: sales@gilbertsblackpool.com
Web: www.gilbertsblackpool.com

