



Technical Data & Selection Procedure

Ravistar grilles

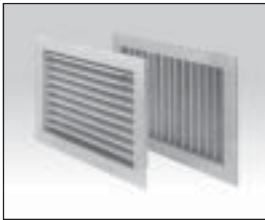


Adjustable Supply, Exhaust,
Linear Bar, Air Transfer,
Acoustic Transfer,
Linear Floor

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Range of Grilles and Selection Procedure



Adjustable Blade
Series 1 & 2

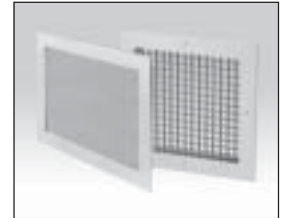
The required airflow in ltrs/sec is marked on the extreme left line, the throw/NC level whichever is critical is marked on appropriate line. These two marks are connected and the line is extended upto the pivot line. Any combination of grille width & height is selected by drawing a line passing through the point on pivot line.

Refer page no. 3

The required airflow in ltrs/sec is marked on the extreme left line, the throw/NC level whichever is critical is marked on appropriate line. These two marks are connected and the line is extended upto the pivot line. Any combination of grille width & height is selected by drawing a line passing through the point on pivot line.

Refer page no. 5

Exhaust
Series 3, GC5,
TEX, PER



Linear
Series AL

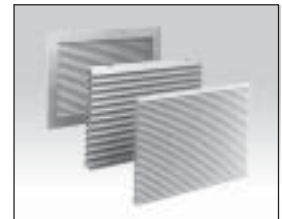
The required airflow in ltrs/sec per meter length of grille is marked on extreme left line. The throw/NC level which-ever is critical is marked on appropriate line. These two marks are connected and the line is extended upto the extreme right line to determine the nominal grille height.

Refer page no. 8 & 9

The required airflow in ltrs/sec is marked on the extreme left line, the throw/NC level whichever is critical is marked on appropriate line. These two marks are connected and the line is extended upto the pivot line. Any combination of grille width & height is selected by drawing a line passing through the point on pivot line.

Refer page no. 11

Non Vision Air Transfer
Model NS/DV



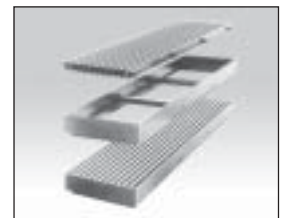
Acoustic
Model DSRX

Follow the example shown in the chart on page 13

The required airflow in ltrs/sec per meter length of grille is marked on extreme left line. The throw/NC level which-ever is critical is marked on appropriate line. These two marks are connected and the line is extended upto the extreme right line to determine the nominal grille height.

Refer page no. 15

Linear Floor Grilles
Model AFG



Adjustable Blade Grilles - Series 1 & 2

Introduction

Adjustable, single and double deflection blade grilles suitable for duct, ceiling and sidewall applications for most commercial projects, Grille vanes are individually adjustable to allow jet spread or deflection to be set within 45° of the duct axis.

Description

Manufacture

All grilles are constructed from high quality aluminium alloy extrusions with cleated and mitred frames. Vanes in single or double banks are individually adjustable. Blades are held in position with stainless steel spring wire for long life.

Types

Series 1 grilles have a single set of adjustable vanes which can be horizontal (1H) or vertical (1V).

Series 2 grilles have 2 sets of vanes, the front set being horizontal (2H) or vertical (2V).

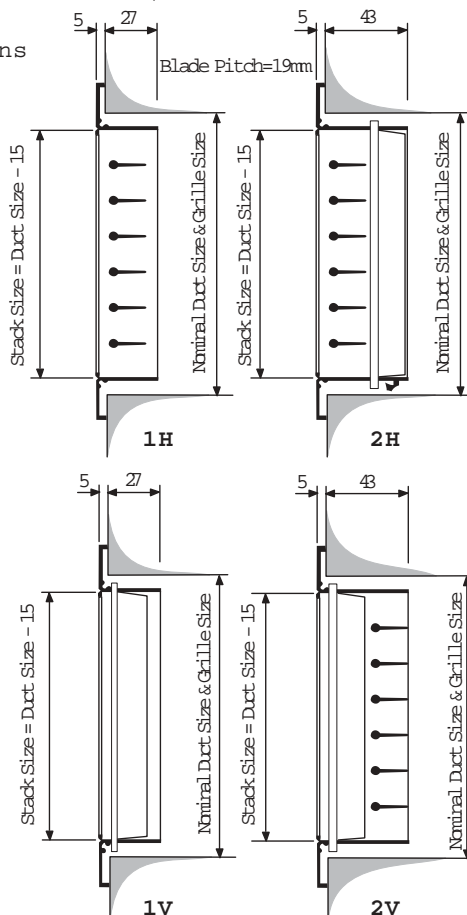
Sizes

Minimum size = 150 x 100

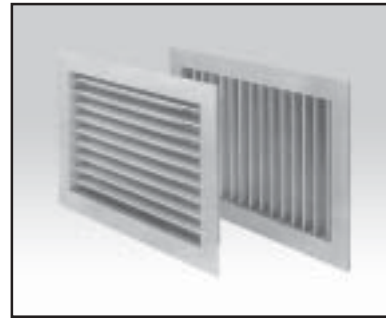
Maximum size = 1200 x 1200

Standard increments 50/100mm.

Dimensions



Note : Add 43mm to stack depth for fully open OBSS when fitted.



Features

- Single or double deflection for complete air pattern control.
- All aluminium construction.
- Teardrop blade for quiet operation but maximum induction.
- Screw or concealed fixing.
- Wide size range.

Finishes

Standard a) Epoxy Polyester Powder Coated off white/pure white.

b) Natural anodised.

Other powder coating finishes available on request.

Accessories

OBSS-opposed blade dampers.

ED-equalising deflectors.

Specification

Adjustable supply grilles shall be Ravistar type 1H, 1V, 2H or 2V and shall have mitred frames. Vanes shall be teardrop shaped and all vanes shall be individually adjustable.

Installation

Fixing options and border styles are detailed on page 16 & 17.

Ordering

Designation Standard					
Grille Type	Nominal Width (mm)	Nominal Height (mm)	Border Style	Fixing	Accessories
1H	500	200	25T	SF	OBSS
Specify number required, finish and special requirements separately.					

Legend

Grille Type : Grille Type Reference

Accessories : The accessories ordered shall be supplied loose to be fixed on the grille/duct collar at site.

Width : Nominal grille or duct width (mm).

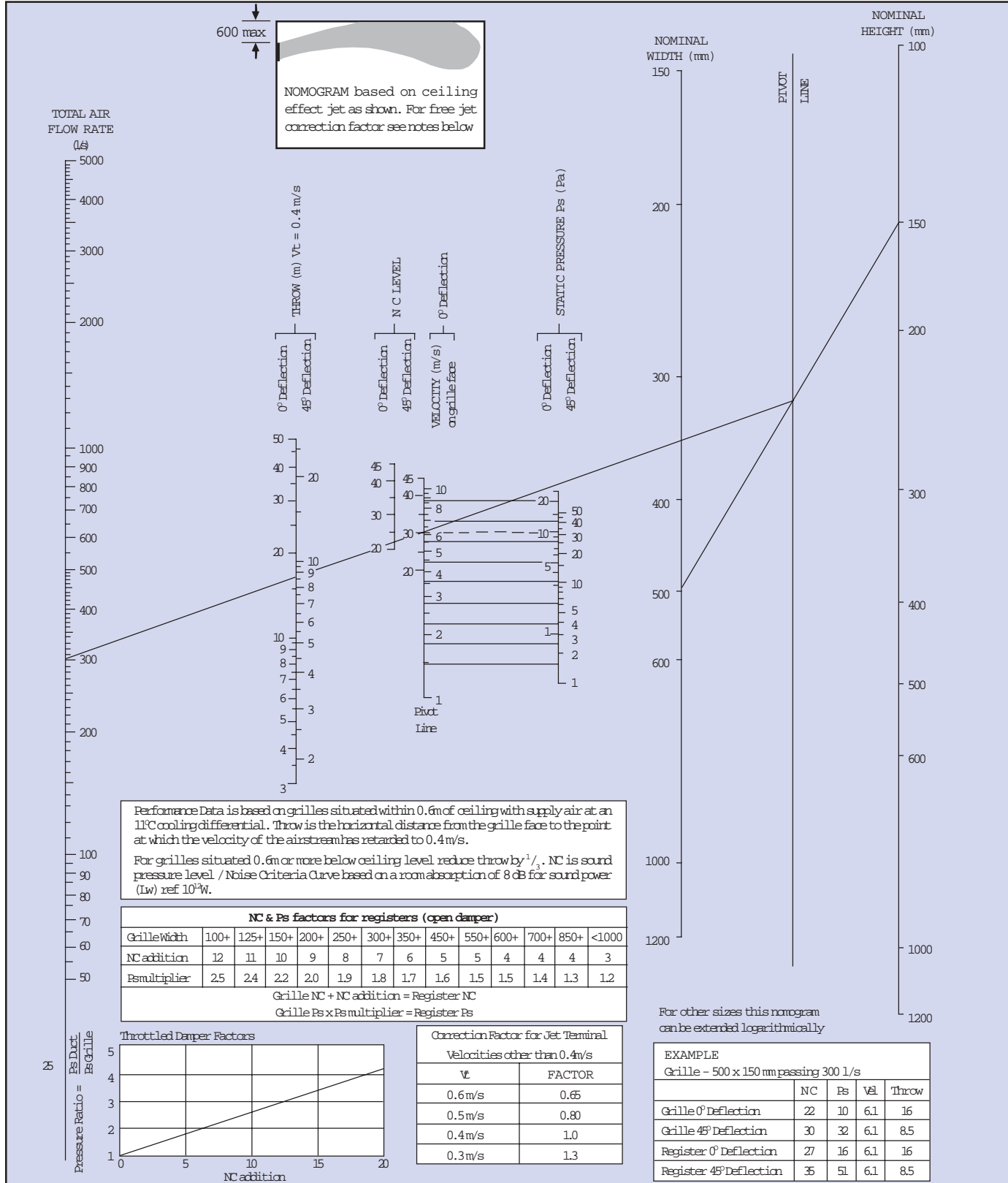
Height : Nominal grille or duct height (mm).

Fixing : Types SF, CRB (see page 17).

Border Style : Type 25T (see page 16).

Performance

Adjustable Blade Grilles Series 1 & 2 Types 1H, 2H, 1V & 2V



Exhaust Grilles - Series 3, GC5, TEX & PER

Introduction

Series 3 vaned grilles and GC5, TEX, PER mesh grilles have been designed to satisfy all exhaust applications in HVAC systems. The various cores may be selected to satisfy both engineering and architectural requirements.

Description

Manufacture :

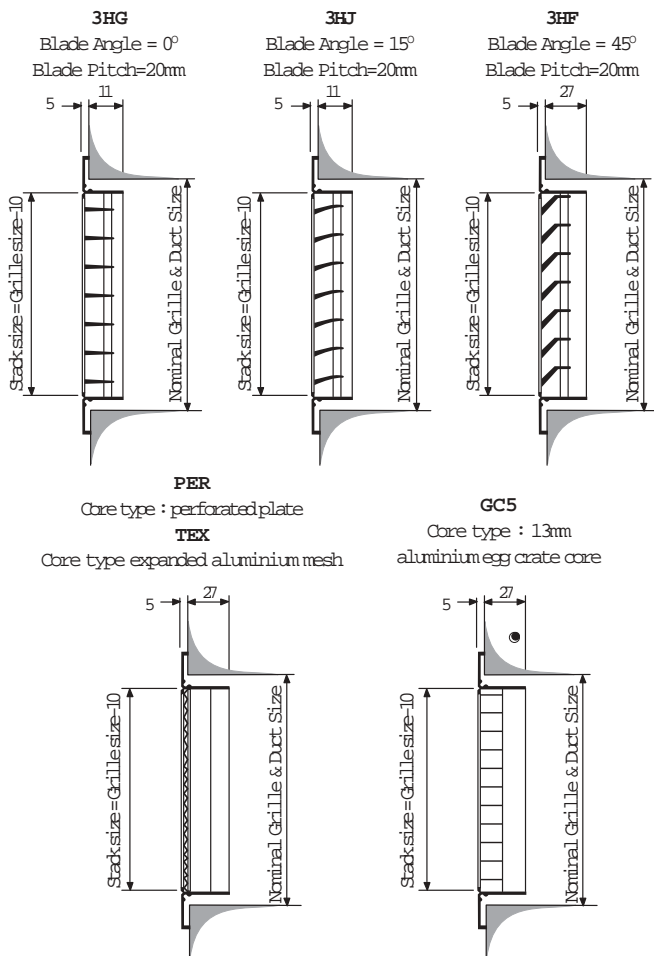
Frames are constructed from high quality aluminium alloy extrusions which are mitred and cleated. Cores are constructed from aluminium extrusions supported on integral aluminium tubes; Mesh cores are either fabricated or expanded aluminium.

Types

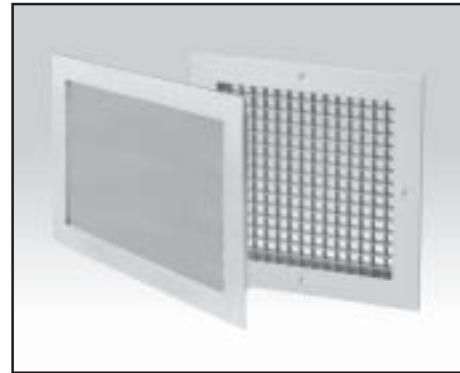
Grille types are shown in the diagrams below.

Sizes

Standard - Minimum size = 100 x 100
Maximum size = 1200 x 1200



Note : Add 43mm to stack depth when OBSS/ED is fitted.



Finishes

- Standard
- a) Epoxy Polyester Powder Coated off white/pure white.
 - b) Natural anodised.
- Other powder coating finishes available on request.

Accessories

- OBSS-opposed blade dampers
- ED-equalising deflectors

Installation

Fixing options and border styles are shown on pages 16 & 17.

Features

- Wide core range to suit architectural and engineering specifications.
- Two border styles available.

Specification

Exhaust grilles shall be Ravistar type having mitred frames. Vaned grilles shall have fixed bars secured firmly on tube supports.

Ordering

Designation Standard					
Grille Type	Nominal Width (mm)	Nominal Height (mm)	Border Style	Fixing	Accessories
3HJ	500	200	25T	SF	OBSS

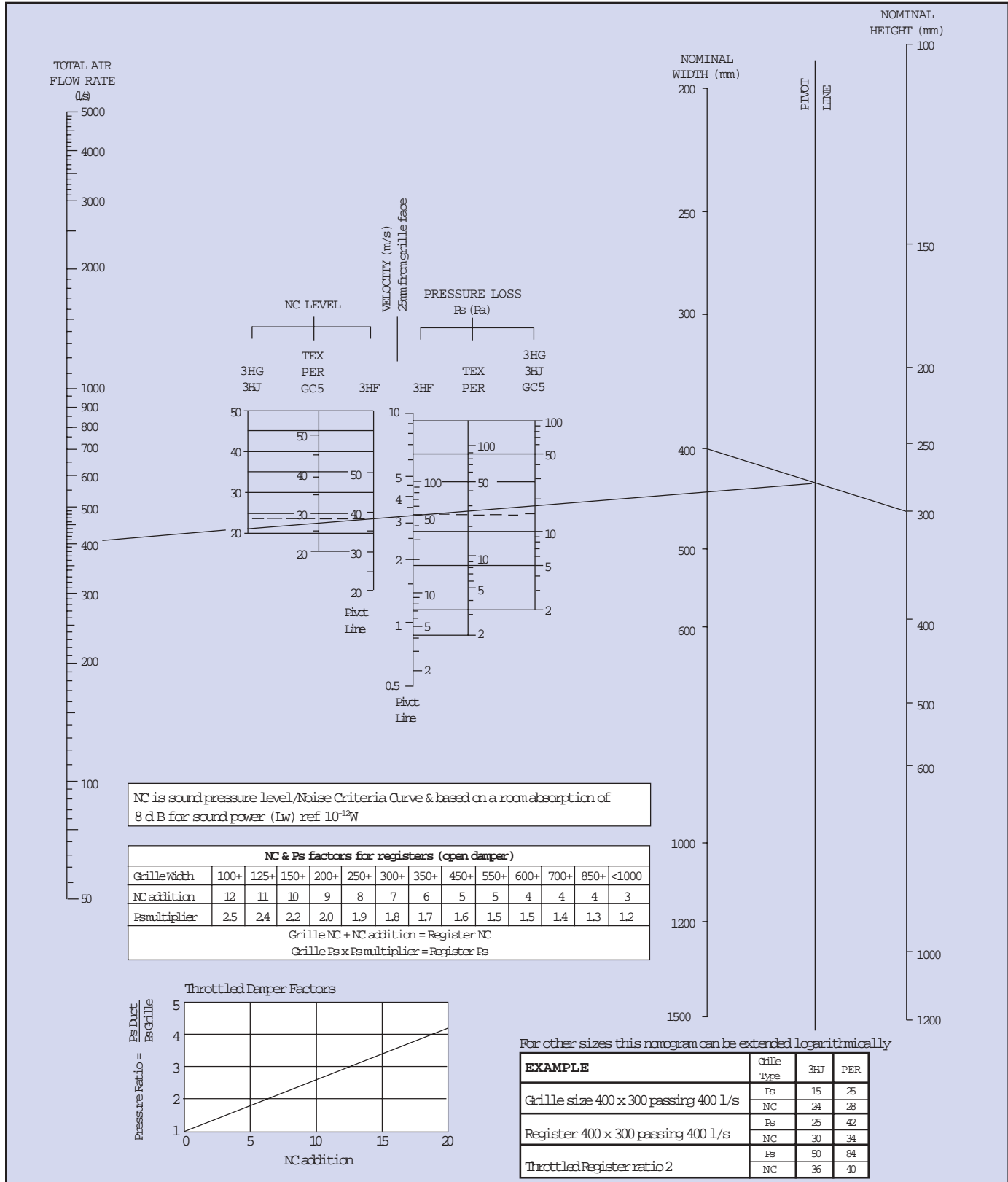
Specify number required, finish and special requirements separately.

Legend

- Grille Type : Grille Type Reference
- Accessories : The accessories ordered shall be supplied loose to be fixed on the grille/duct collar at site.
- Width : Nominal grille or duct width (mm).
- Height : Nominal grille or duct height (mm).
- Fixing : Types SF, CRB (see page 17).
- Border Style : Types 16T, 25T (see page 16).
For 16T - Flange width 16mm, Flange Depth 16mm.
For 25T - Flange width 25mm, Flange Depth 32mm.
Only 25T for Flange Screw Fixing.

Performance

Exhaust Grilles Series 3HF, 3HG, 3HJ, GC5, TEX & PER



Linear Bar Grilles - Series AL

Introduction

Linear bar grilles have been designed to satisfy air diffusion and engineering requirements as well as architectural specifications. Linear grilles may be used in modular or continuous situations for ceiling, side wall, cill or bulkhead applications. The range is available with a wide variety of special options and fabrications to suit most project requirements.

Grilles can also be supplied with non standard frames / borders as per the special requirements.

Description

Manufacture

All linear grilles are constructed from extruded aluminium sections fabricated into modular assemblies using expanded tube production techniques. Frames are mitred and cleated.

Types

The various types available are shown on page 7.

Sizes

Standard (individual framed grilles)

Minimum size = 150 x 50mm

Maximum size = 1800 x 600mm

Standard (continuous grilles)

Supplied in sections for butt joining on site.

Maximum section

length 1800mm.

Finishes

Standard a) Epoxy Polyester Powder Coated off white/pure white.

b) Natural anodised.

Other powder coating finishes available on request.

Accessories

OBSS - opposed blade dampers.

ED - equalising deflectors.

Removable core grilles (RGC/RGS).

Performance

Supply grilles (see page 8).

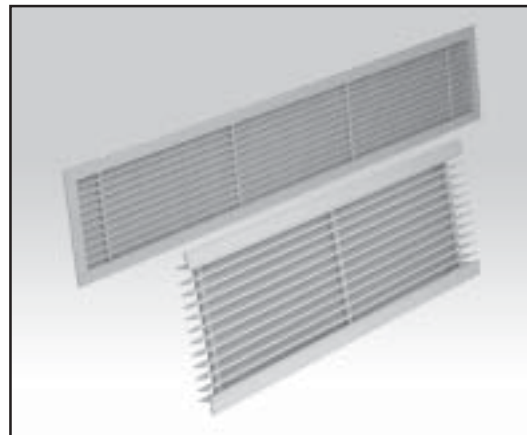
Exhaust grilles (see page 9).

Installation

Fixing options and border styles are shown on pages 16 & 17.

Features

- All aluminium construction.
- Wide core range to satisfy engineering and architectural specifications.
- Tubed construction to provide attractive recessed vertical support.
- Wide range of special options.
- Cores only (grilles without frames and grilles with frames / borders) as per special requirements.



Specification

Linear supply and return/exhaust grilles shall be Ravistar type AL constructed with tubed cores and cleated frames.

Ordering

Designation Standard					
Grille Type	Nominal Width (mm)	Nominal Height (mm)	Border Style	Fixing	Accessories
ALJ (RS2)	1800	100	16T	CRB	OBSS

For continuous grilles indicate 2 side flange only. For grilles with end flanges indicate 3 side flange LHS/RHS.

Specify number required, finish and special requirements separately.

Legend

Grille Type : Grille Type Reference

Accessories : The accessories ordered shall be supplied loose to be fixed on the grille/duct collar at site.

Width : Nominal grille or duct width (mm).

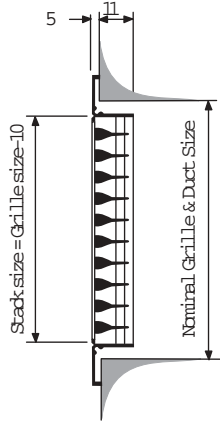
Height : Nominal grille or duct height (mm).

Fixing : Types SF, CRB (see page 17).

Border Style : Types 16T, 25T (see page 16).
 For 16T - Flange width 16mm, Flange Depth 16mm.
 For 25T - Flange width 25mm, Flange Depth 32mm.
 Only 25T for Flange Screw Fixing.

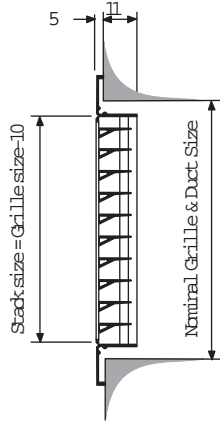
Grilles with normal blades

Blade Angle = 0°
Blade Pitch=12.5
Blade Thickness = 5



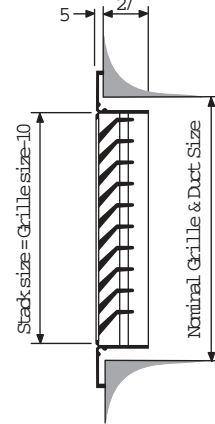
AL1
(RS2)

Blade Angle = 15°
Blade Pitch=12.5
Blade Thickness = 5



AL15
(RS2)

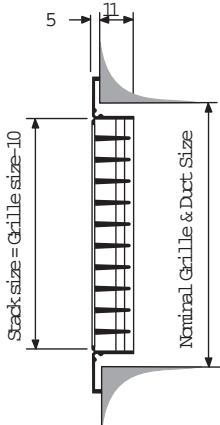
Blade Angle = 45°
Blade Pitch=12.5
Blade Thickness = 3



ALF

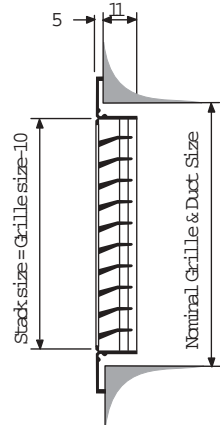
Grilles with slimline blades

Blade Angle = 0°
Blade Pitch=12.5
Blade Thickness = 3



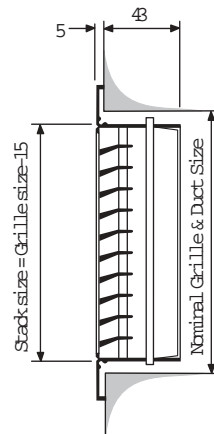
ALG
(RS2)

Blade Angle = 15°
Blade Pitch=12.5
Blade Thickness = 3



ALJ
(RS2)

Grilles with front horizontal fixed bar and rear verticle adjustable blades



Grilles with front horizontal fixed bar and rear verticle adjustable blades are available as below:

AL2 (RS2) Front fixed bar 5mm thk. & 0 deg.

AL25 (RS2) Front fixed bar 5mm thk. & 15 deg.

ALG2 (RS2) Front fixed bar 3mm thk. & 0 deg.

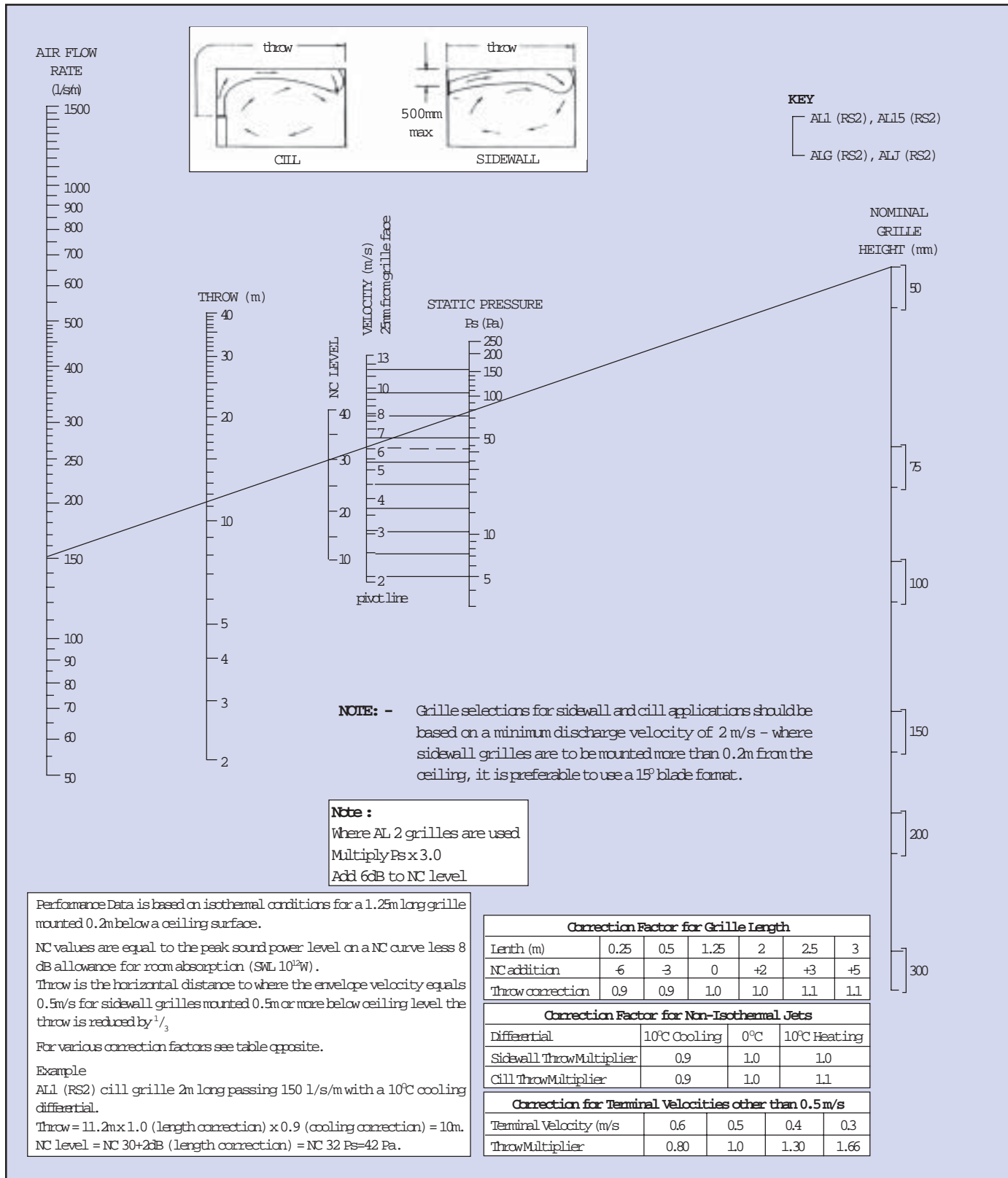
ALJ2 (RS2) Front fixed bar 3mm thk. & 15 deg.

Note 1 : Add 43mm to all stack depths when grilles are fitted with OBSS/ED controls.

Note 2 : See page 16 for alternative removable core grille frames Model RGC/RGS.

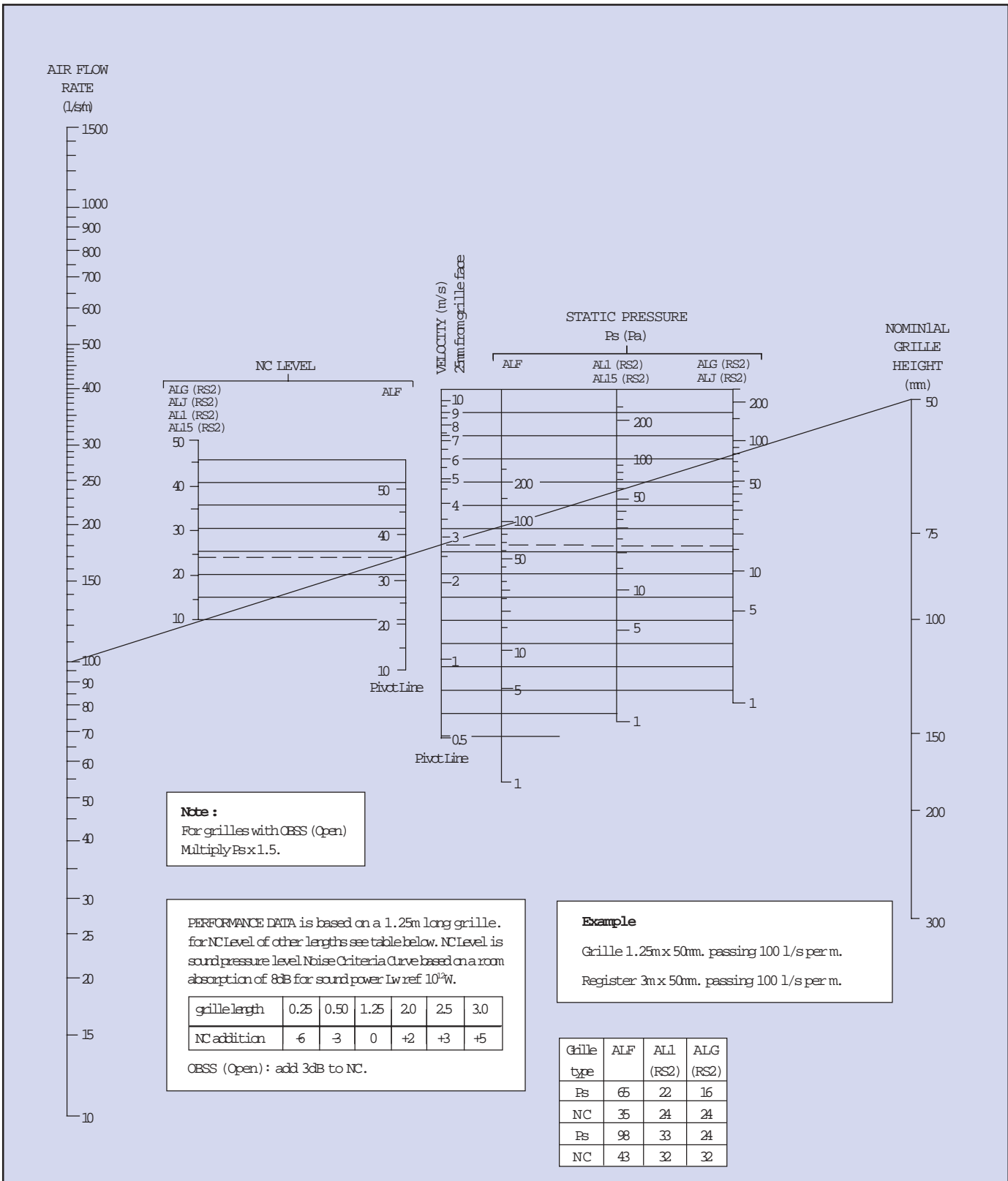
Performance

Linear Bar Supply Grilles Model AL1 (RS2), AL15 (RS2), ALG (RS2) & ALJ (RS2)



Performance

Linear Bar Exhaust Grilles Model AL1 (RS2), AL15 (RS2), ALF, ALG (RS2) & ALJ (RS2)



Air Transfer Grilles - Model NS & DV

Introduction

Transfer grilles are suitable for mounting in doors, partitions and walls to allow ventilation air to pass between adjacent rooms. Series NS are small format grilles with a "no-sight" feature and series DV are large format grilles for door ventilator applications. The grilles are available with or without frames.

Description

Manufacture

All grilles are constructed from aluminium extrusions with tubed cores and mitred, cleated frames.

Types

Detailed in diagrams below.

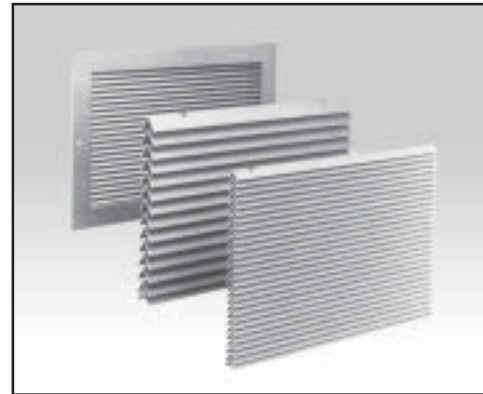
Sizes

Minimum size = 200 x 100 mm
Maximum size = 1200 x 600 mm
in standard 50/100mm increments.

Finishes

Standard a) Epoxy Polyester Powder Coated off white/pure white.
b) Natural anodised.

Other powder coating finishes available on request.

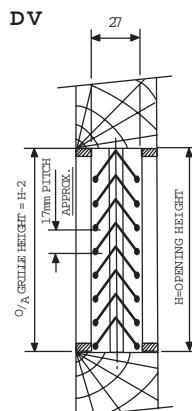
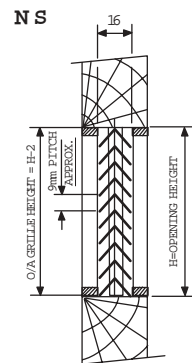


Installation

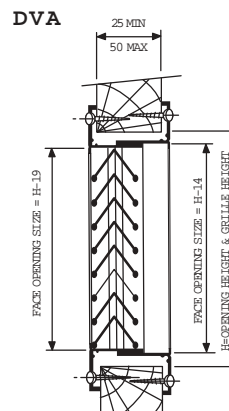
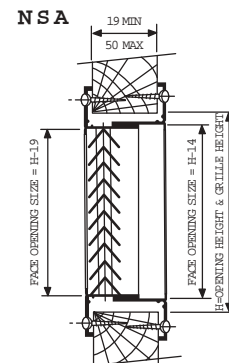
Recommended installation for framed grilles is screw through flanges. For border style details refer to page 16.

Features

- Small or large format options to suit design requirements.
- No sight (NS) option for room to room privacy.
- Two fixing options to suit door, wall and partitions.
- Narrow core only for modern door systems (NS).
- Flange screw fixing provided.



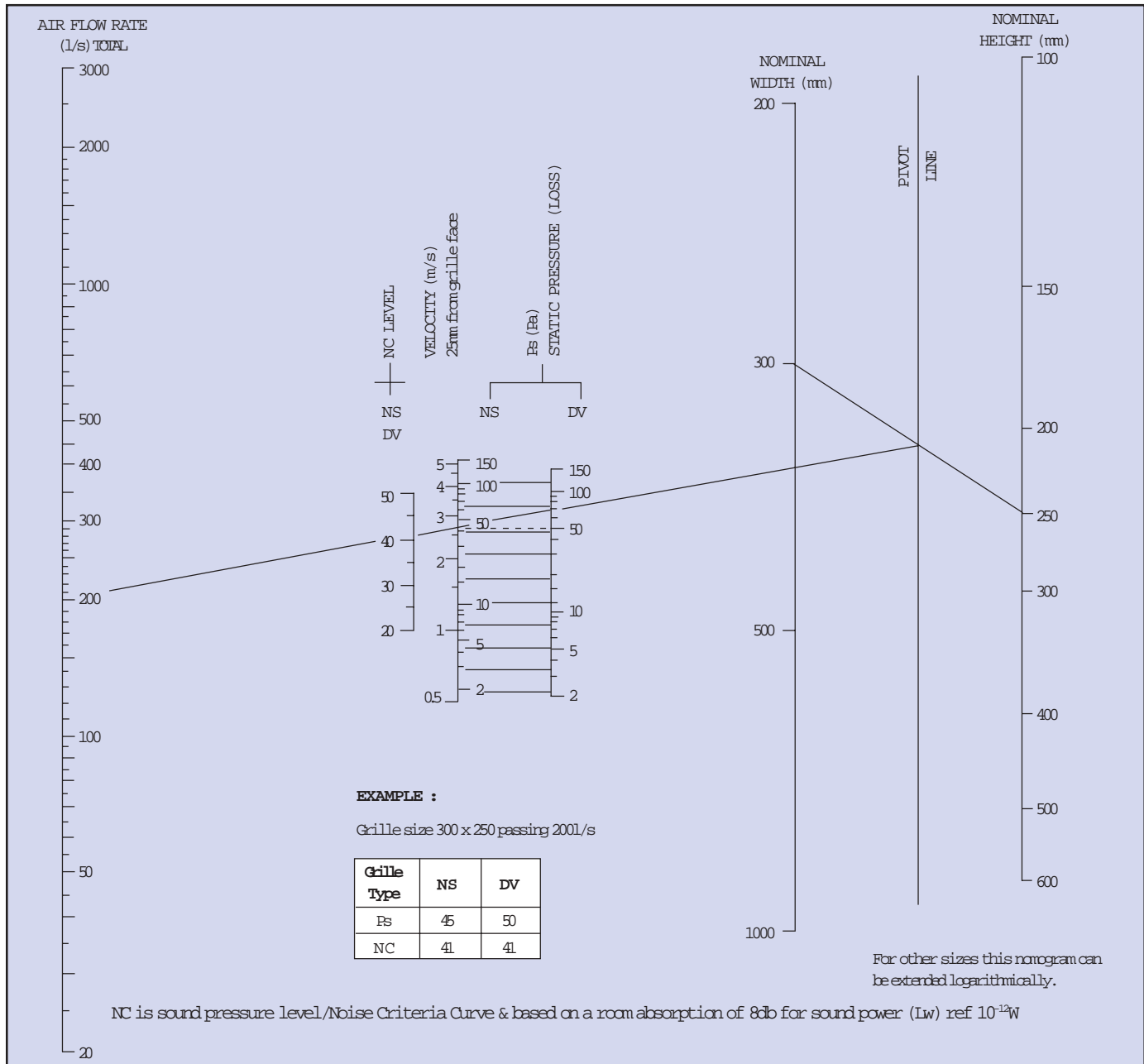
Core only for door or partition mounting
with beaded fixing (by others)



Door or partition grille with
matching front and rear borders

Performance

Transfer Grilles Model NS, NSA, DV & DVA



Specification

Air transfer grilles shall be Ravistar type NS or DV with tube construction cores and mitred frames. Type NS grilles shall not allow direct line of sight through the core.

Ordering

Designation Standard	Grille Type	Nominal Width (mm)	Nominal Height (mm)	Border Style	Fixing (SF Only)
Typical designation	NSA	500	200	25T	SF
Specify number required, finish and special requirements separately.					

Legend

Grille Type :Grille Type Reference

Width :Nominal grille or duct width (mm.)

Height :Nominal grille or duct height (mm.)

Fixing : Types SF (see page 17).

Border Style : Types 25T (see page 16).

Acoustic Transfer Grilles - Model DSRX

Introduction

Ravistar Acoustic Transfer Grilles have been developed for use in partitions and doors where a reduction in noise transfer or "cross-talk" from one space to another is required, as well as ventilation air transfer.

Description

Manufacture

Model DSRX grilles are manufactured from high quality aluminium extrusions with channel section cores forming a labyrinth airway lined internally with acoustic damping media. The cores are retained within a flanged frame which is fitted with a sealing gasket. Units are supplied with fixed border and matching adjustable rear border frame.

Application

DSRX units will only provide acoustic isolation improvements over that of a clear aperture. DSRX units may be used in series to increase transmission loss.

Installation

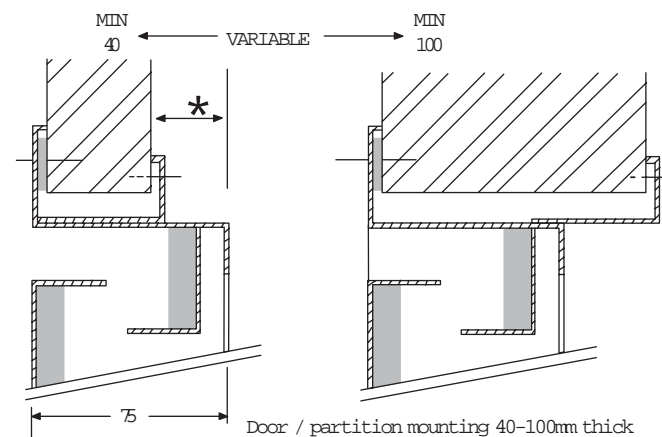
The only installation method is screw fixing through the flange.

- method -
- place grille into aperture
- mark flange screw fixings and remove grille
- drill and if necessary plug holes
- refit grille and screw into position

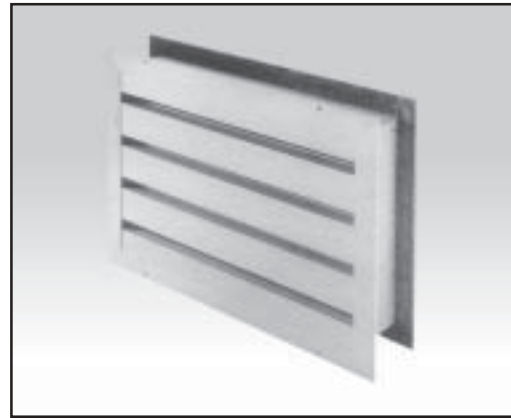
Ordering

Designation	Type	Width (mm)	Height (mm)
	DSRX	425	125

Specify number required separately



Note: 30mm protrusion with minimum depth of door.



Specification

Door and Acoustic Transfer Grilles shall be Ravistar Model DSRX constructed from extruded aluminium sections with internal acoustic damping media. Matching frames are to be used for door and partition arrangements.

Features

- Suitable for partition, wall, or door mounting.
- Easy to install.
- Fit most standard doors and partitions.
- Easy to clean.
- Modular sizes.

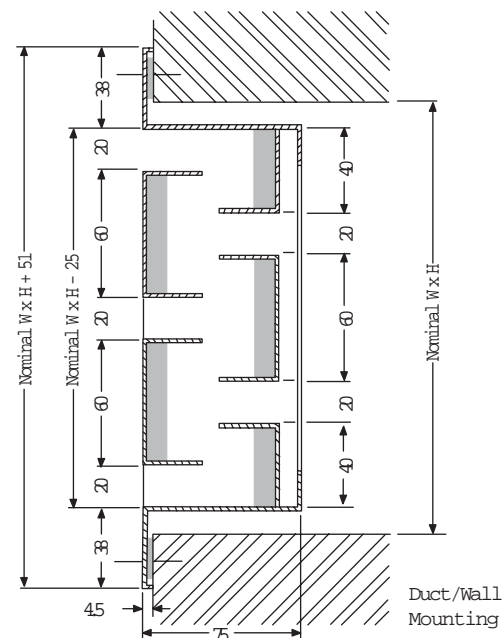
Sizes

Minimum Size (mm)	Maximum Size (mm)
325 x 125	1225 x 445

Finishes

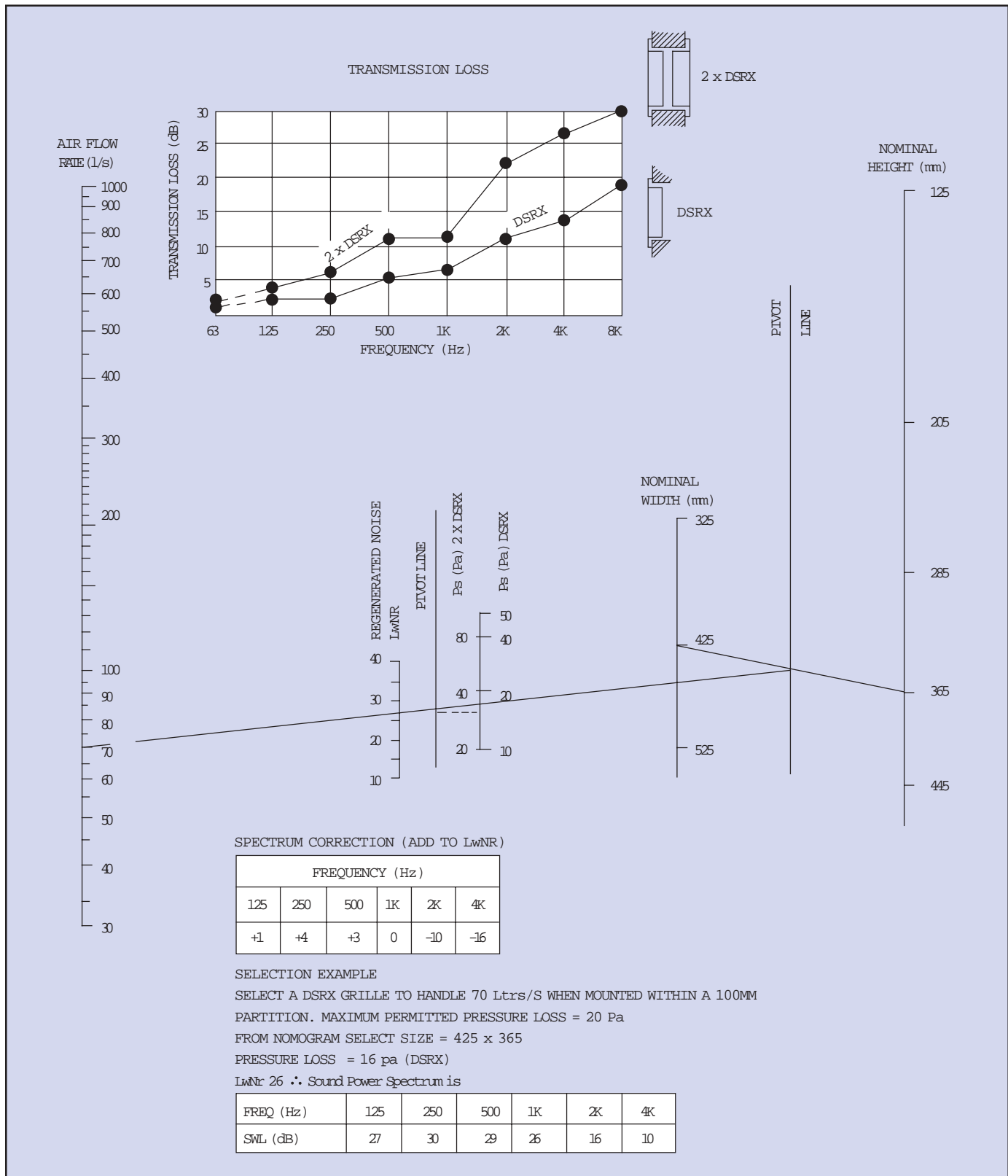
Standard a) Epoxy Polyester Powder Coated off white/pure white.
b) Natural anodised.

Other powder coating finishes available on request.



Performance

Selection Nomogram Model DSRX



Linear Floor Grilles - Model AFG

Introduction

The airline floor grille Model AFG has been specifically designed for cill and floor applications where light foot traffic will be experienced.

In addition the AFG is available with any of the airline cores which then makes the product ideal for sidewall applications where reinforced recessed frames are necessary.

Description

Manufacture

All grilles are constructed from aluminium alloy extrusions with tube type cores and fully welded frames. The core is supported by rear reinforcing bars.

Sizes

Minimum size = 150 x 50

Maximum size = 1800 x 600

Finishes

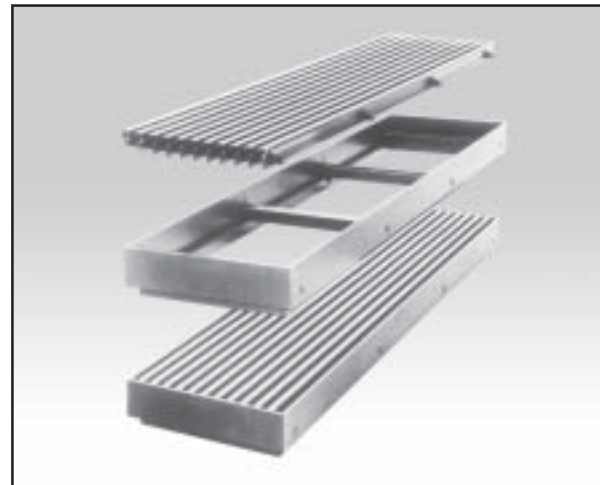
- Standard
- Epoxy Polyester Powder Coated off white/pure white.
 - Natural anodised.

Other powder coating finishes available on request.

Accessories

OBSS - opposed blade dampers.

ED - equalising deflectors.

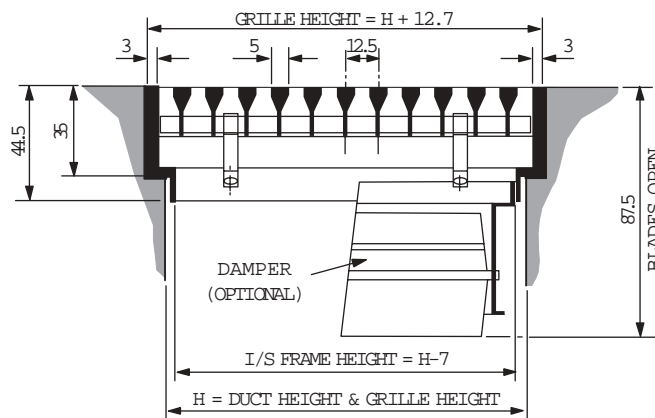
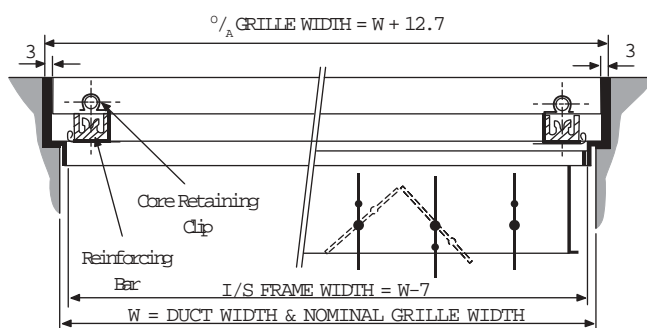
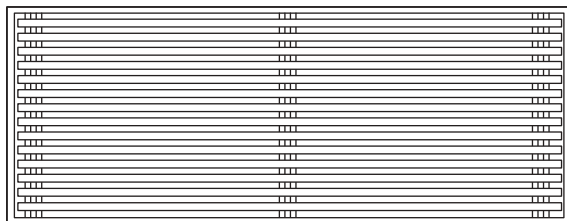


Specification

Linear Floor Grilles shall be Ravistar Model AFG with reinforced, removable tubed cores fitted within a recessed frame.

Features

- Removable cores for easy access and cleaning.
- Core retaining clips for security/safety.
- Various core styles.
- Recessed frame detail
- Robust enough for light foot traffic on floors or cills.
- Suitable for low level sidewall applications.
- Solid extruded blades.



Ordering

Designation (Typical)			
Type	Duct Width (mm)	Duct Height (mm)	Control
AFG	1200	200	OBSS

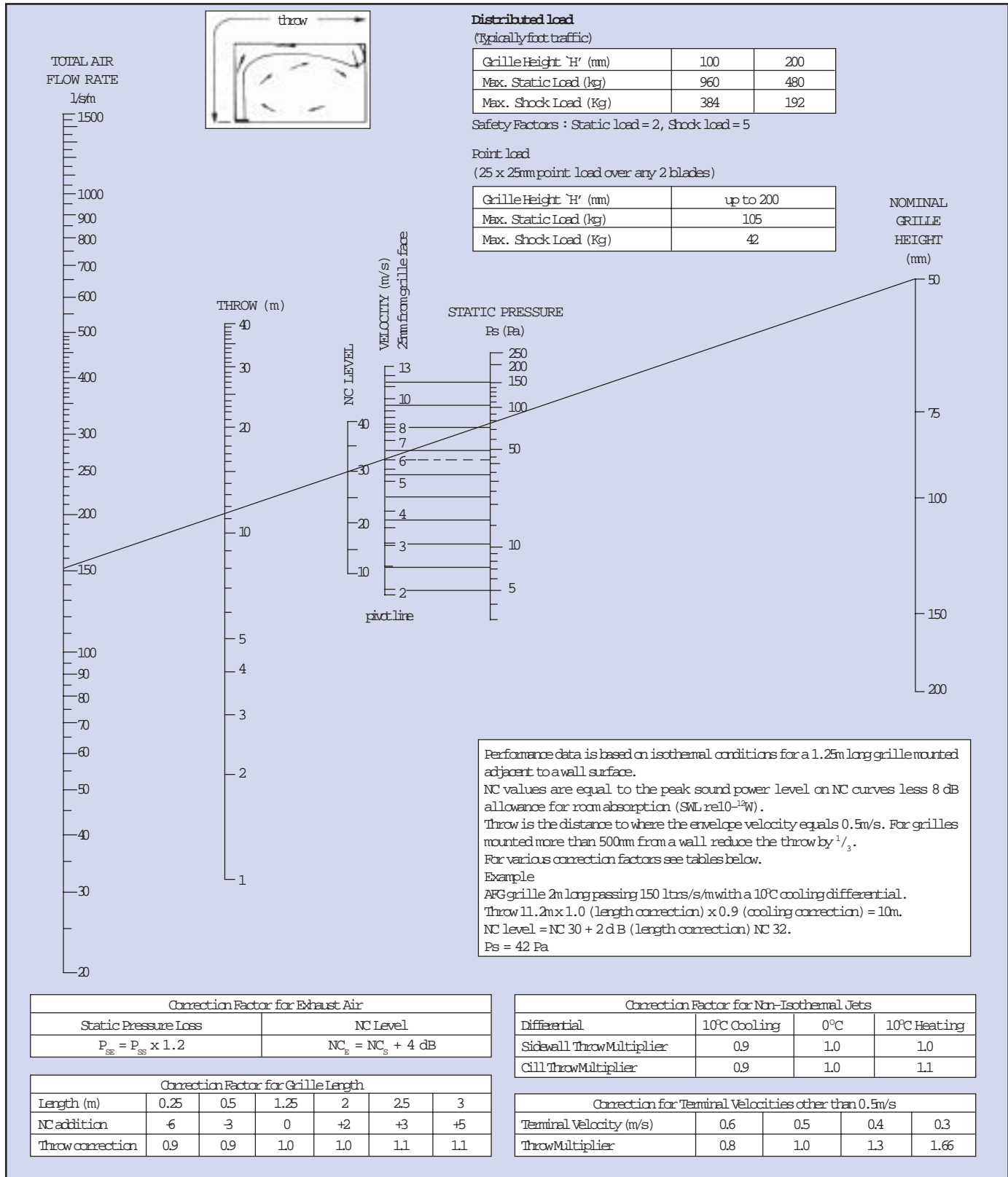
Specify number and finish separately

Installation

The recessed frame should be supported at the rear as shown above. For security the frame can be screw fixed to the surround. The core is retained into the frame with spring clips which fit around the reinforcing bars.

Performance

Linear Floor Grilles Model AFG



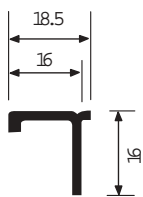
Installation and Fixing Options

Installation

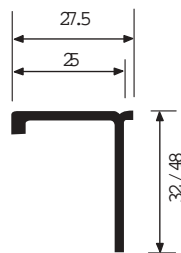
Fixing Options for Grilles with Subframes and Borders

MODEL	SF SCREW THROUGH FLANGE	CF CLIP FIXING	CRB CONCEALED REAR BRACKET	RGC REMOVABLE CORE	RGS REMOVABLE CORE
1H, 1V, 2H, 2V	●	●	●		
GC5	●	●	●		
3HG, 3HJ	●	●	●	●	●
3HF	●	●		●	●
ALF	●	●		●	●
AL1 (RS2), ALG (RS2), AL15 (RS2), ALJ (RS2)	●	●	●	●	●
NS, DV	●				
NSA, DVA	●				
AFG				●	●
AL2 (RS2), AL25 (RS2), ALG2 (RS2) & ALJ2 (RS2)	●	●	●		
BORDER STYLES AVAILABLE & NOTES	25T	16T/25T	16T/25T	RGC	RGS

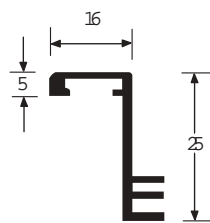
Border Styles and Subframes



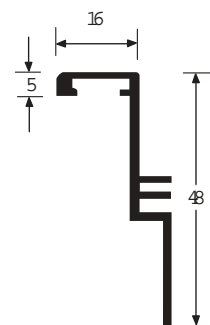
16T



25T

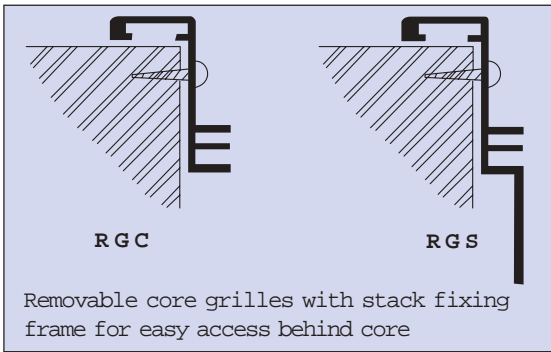


RGC

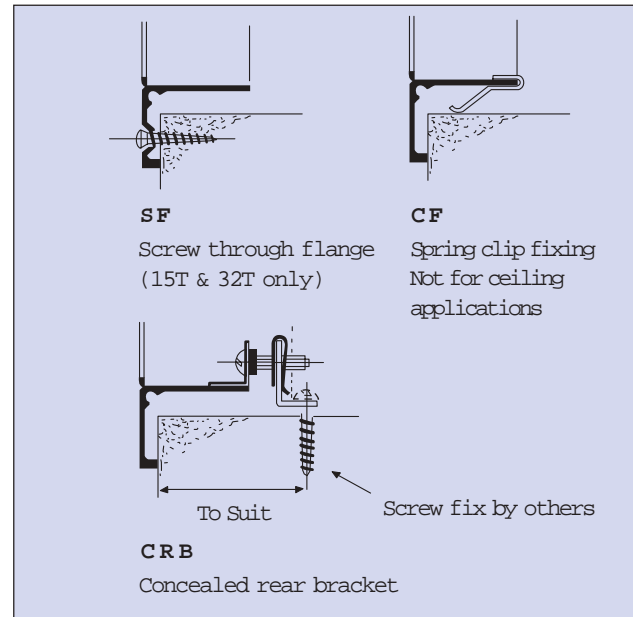


RGS

Removable Core Grilles

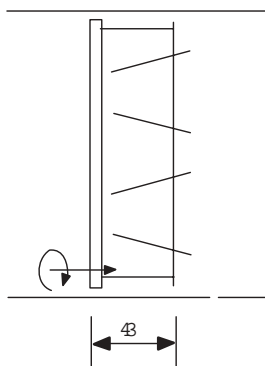


Grille Fixing Options



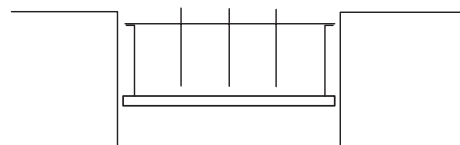
Controls for Grilles

Opposed blade terminal balancing dampers



OBSS - standard opposed blade damper for diffuser, grille or duct mounting. Adjustable by socket or screwdriver inside the duct or through the face of the air terminal device.

Equalising deflectors and dampers



ED - Equalising deflectors for grille, diffuser or duct mounting. Deflector blades are individually adjustable to control air direction and may be used for localised blanking.

- Specifications and data are subject to change without prior notice due to continuous product development.
- Normal tolerances shall be applicable.



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