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**WINDCATCHER®**, **SUNPIPE®** and **COOL-PHASE®** brands are synonymous with quality and innovation (ISO9001 & 14001) and are supported by our market leading design service.

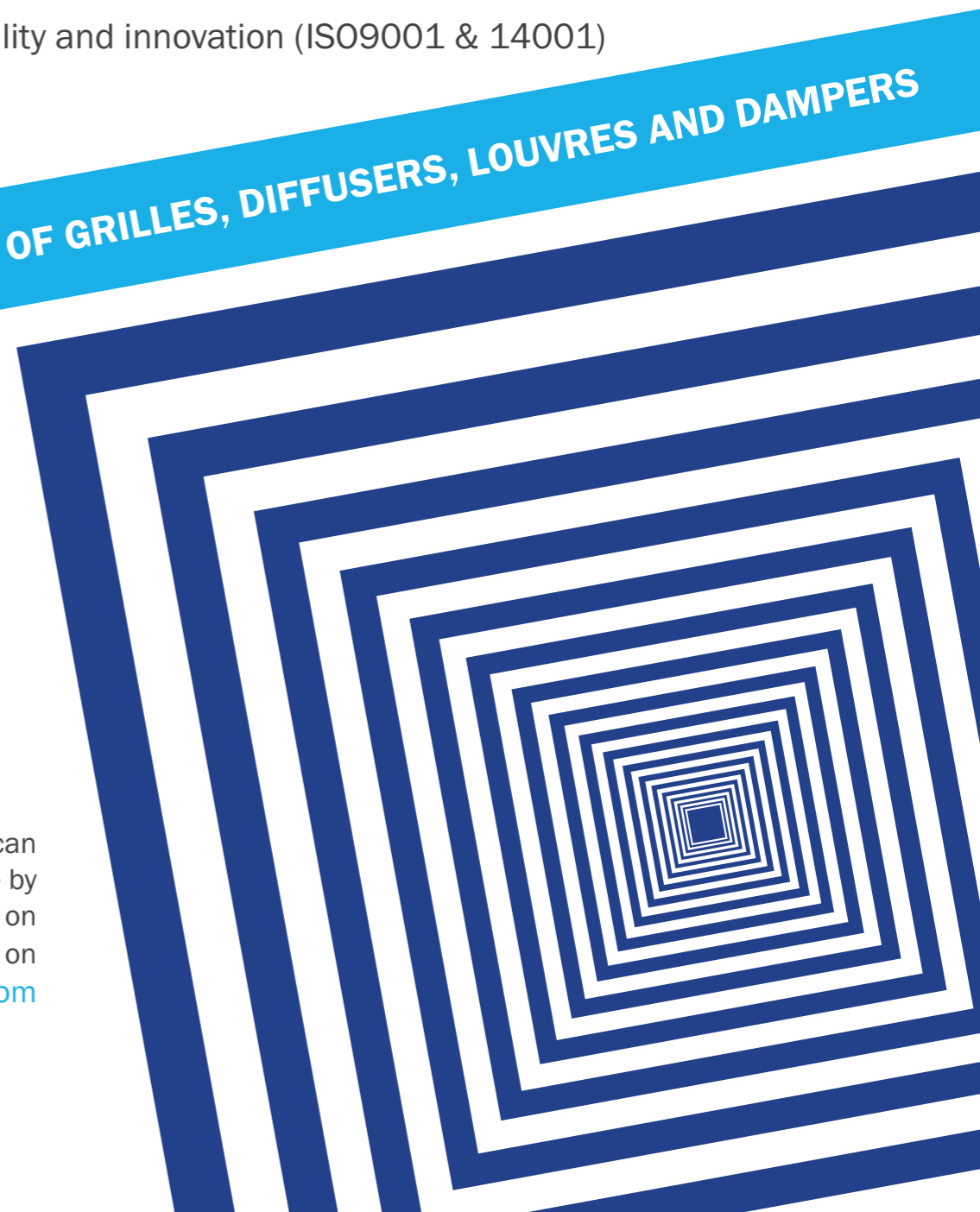
**Air-Precision** is an addition to Monodraught's portfolio including grilles, diffusers, external louvres and volume control dampers.

**PRODUCT RANGE OF GRILLES, DIFFUSERS, LOUVRES AND DAMPERS**

#### We are supporting this range with:

- £1 million of fast moving stock
- Bespoke manufacture with any standard RAL colour within 5 days
- 15 dedicated selection experts
- Designed with industry leading software
- Belimo actuators used throughout
- AA5 anodisation (ISO7599) utilised
- Market leading quality fully supported by a **10 year guarantee**

We are confident that we can beat any quotation you have by 10% so please contact us on **01494897700** or email us on [air-precision@monodraught.com](mailto:air-precision@monodraught.com)



# Linear Bar Grilles - LG



Series LG linear grilles are the most versatile series of grilles available.

Available with different blade profiles and spacings, a variety of hinged and removable core methods, and a comprehensive range of finishes.

If required for extract, specify your linear grille with 3 mm thick, 0° blades, on a 20 mm pitch. With a free area around 85%, this is a more robust alternative to Series ECG egg crate grilles, with very similar performance.

For supply applications, you can choose from 0°, 15° or 45° blade profiles, and 12.5 mm or 20 mm blade pitches, giving you full control over throw direction, free area and appearance.

## Materials:

- Extruded aluminium

## Construction:

- Frame held together using punched steel corners
- Blades secured at 12.5 mm or 20 mm spacing using expanded aluminium bar
- Aluminium expansion bar riveted into frame (fixed core units)

## Series Free Area - Mass/m<sup>2</sup> Face Area

Series	Free Area	Mass/m <sup>2</sup> face area
LG0 - 3 - 12.5	76%	10.0 kg
LG0 - 3 - 20	85%	7.2 kg
LG0 - 6 - 12.5	52%	14.1 kg
LG0 - 6 - 20	70%	9.6 kg
LG15 - 12.5	74%	10.1 kg
LG15 - 20	83%	7.3 kg
LG45 - 12.5	54%	10.5 kg
LG45 - 20	63%	7.4 kg

## Options

### Size:

- Minimum: 100 mm x 100 mm
- Maximum: 2900 mm x 2900 mm
- Stock Nominal Sizes Available:

H	WIDTH							
	300	600	900	1200	1500	1800	2100	2400
50								
62.5								
75								
87.5								
100								
112.5								
125								
150								
200								
250								
300								

### Series:

- LG0: Linear grille, 0° blades
- LG15: Linear grille, 15° blades
- LG45: Linear grille, 45° blades

### Blade Thickness:

- 3: 3 mm blade
- 6: 6 mm blade (only available with LG0)

### Blade Pitch:

- 12.5: 12.5 mm blade pitch
- 20: 20 mm blade pitch

### Damper (optional):

- D: Opposed blade damper fitted

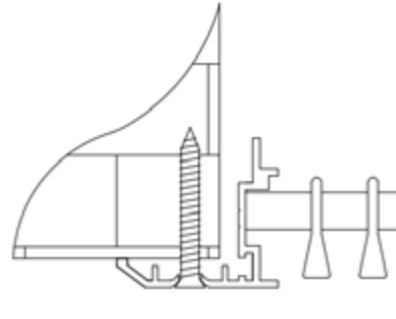
# Linear Bar Grilles - LG

## Fixings

### FH Countersunk Fixing Holes

For extremely simple fitting, countersunk fixing holes can be punched into the outer frame.

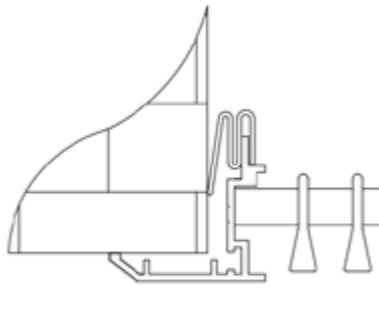
Self tapping screws in the same finish as the grilles are provided as standard.



### PC Push-in-clips:

These sprung clips are compressed when the grille is pushed into place. The outward force provided then holds the grille securely in place.

This fixing method is not suitable for use in ceilings.

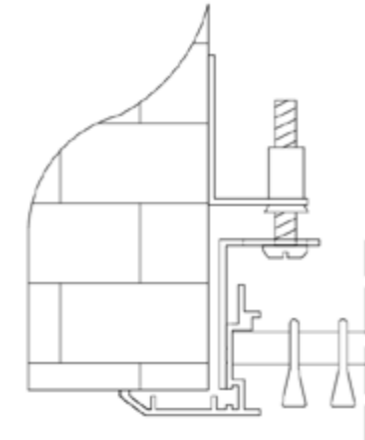


### CF Concealed fixings:

Comprise two small lengths of aluminium angle, one with a punched slot, the other with a factory fitted nutsert.

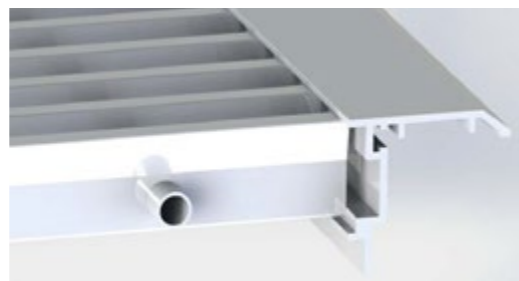
The punched bracket should be fitted to the grille neck and the bracket with the nutsert fixed to the inside of the plenum, duct or builderswork opening.

Factory supplied bolts can then be used to pull the grille securely into place.



## Frame Type:

Linear grilles now use a dedicated frame design, rather than the standard frames used widely within the range of Air-Precision grilles. Offering the significant advantage of supporting the blade ends, this gives a much stronger design, which is less prone to bowing. The blade and tube ends are also concealed giving a seamless design. These frames denoted the 36B (bevelled) and 31F (flat) are standard with all blade types and removable cores.

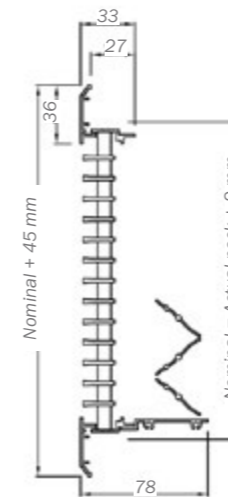


## Technical Drawings

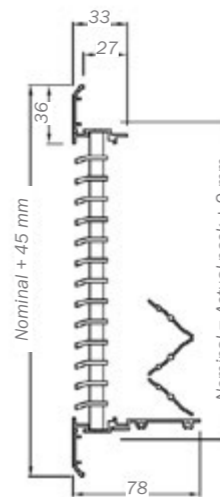
### 36B - 36 mm Bevelled Frame (standard):

Grilles Only

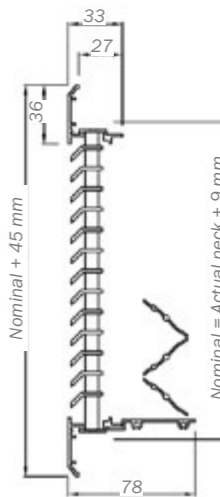
LG0 - 3 - 12.5 - 36B



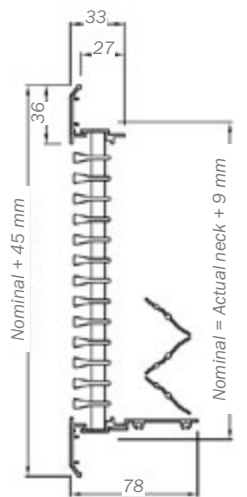
LG15 - 12.5 - 36B



LG45 - 12.5 - 36B



LG0 - 6 - 12.5 - 36B



Grilles c/w opposed blade dampers

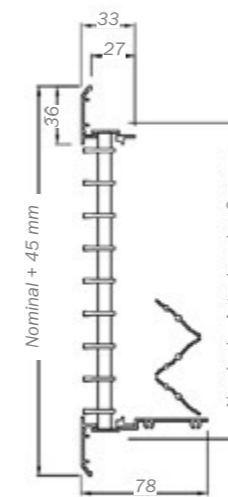
LG0 - 3 - 12.5 - D - 36B

LG15 - 12.5 - D - 36B

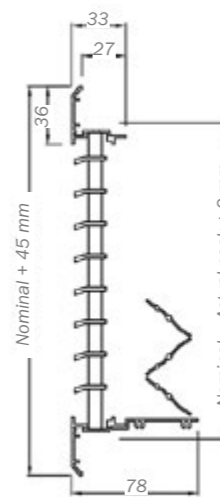
LG45 - 12.5 - D - 36B

LG0 - 6 - 12.5 - D - 36B

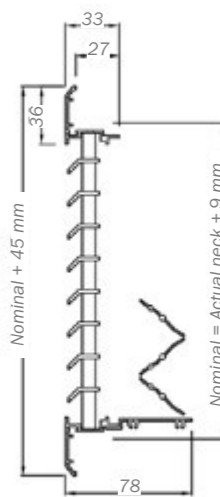
LG0 - 3 - 20 - 36B



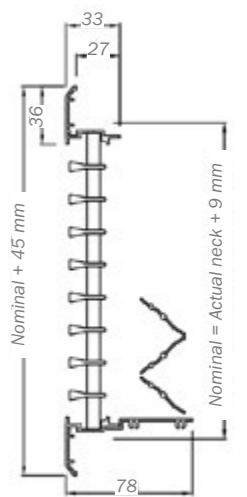
LG15 - 20 - 36B



LG45 - 20 - 36B



LG0 - 6 - 20 - 36B



Grilles c/w opposed blade dampers

LG0 - 3 - 20 - D - 36B

LG15 - 20 - D - 36B

LG45 - 20 - D - 36B

LG0 - 6 - 20 - D - 36B

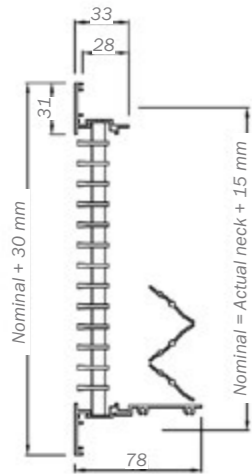
# Linear Bar Grilles - LG

## Technical Drawings

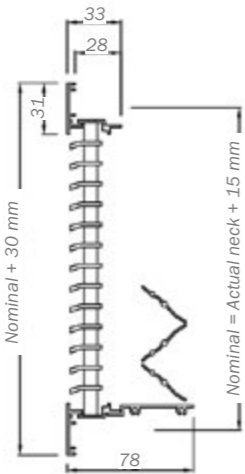
### 31F - 31 mm Flat Frame:

Grilles Only

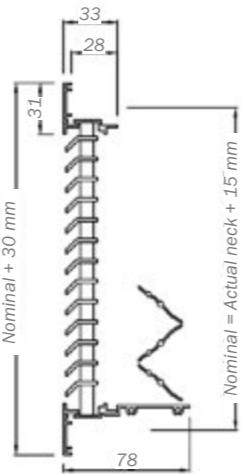
LG0 - 3 - 12.5 - 31F



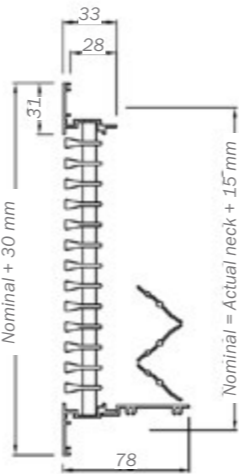
LG15 - 12.5 - 31F



LG45 - 12.5 - 31F



LG0 - 6 - 12.5 - 31F



Grilles c/w opposed blade dampers

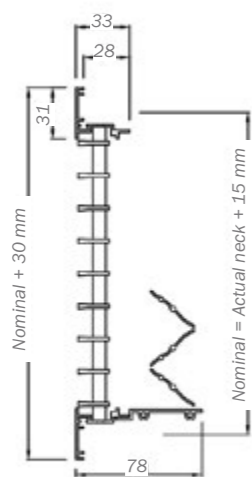
LG0 - 3 - 12.5 - D - 31F

LG15 - 12.5 - D - 31F

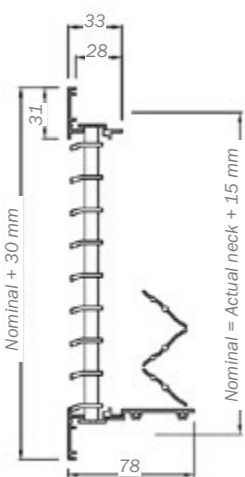
LG45 - 12.5 - D - 31F

LG0 - 6 - 12.5 - D - 31F

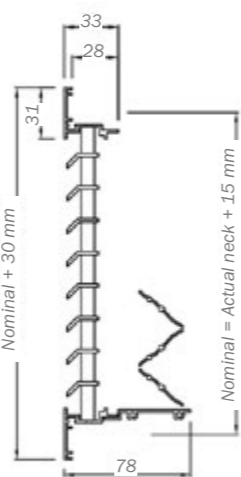
LG0 - 3 - 20 - 31F



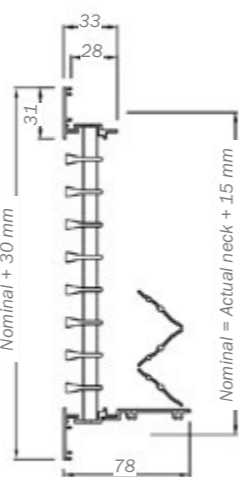
LG15 - 20 - 31F



LG45 - 20 - 31F



LG0 - 6 - 20 - 31F



Grilles c/w opposed blade dampers

LG0 - 3 - 20 - D - 31F

LG15 - 20 - D - 31F

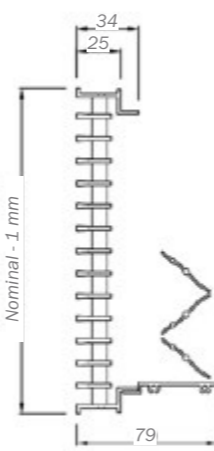
LG45 - 20 - D - 31F

LG0 - 6 - 20 - D - 31F

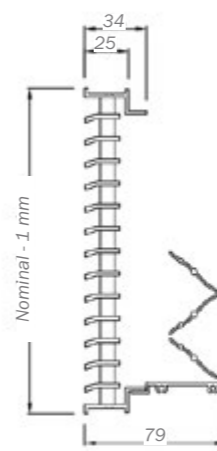
### TF Tray Frame:

Grilles Only

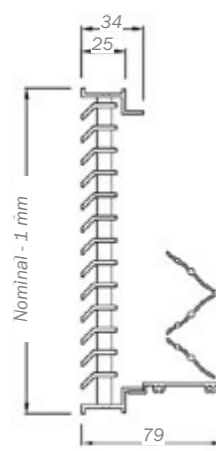
LG0 - 3 - 12.5 - TF



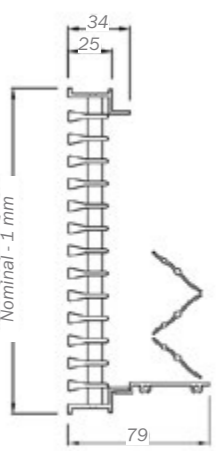
LG15 - 12.5 - TF



LG45 - 12.5 - TF



LG0 - 6 - 12.5 - TF



Grilles c/w opposed blade dampers

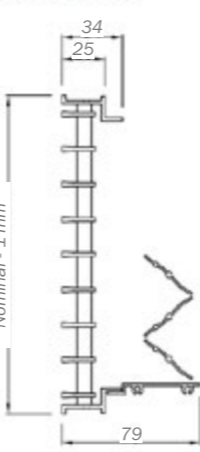
LG0 - 3 - 12.5 - D - TF

LG15 - 12.5 - D - TF

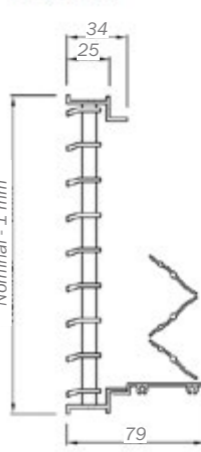
LG45 - 12.5 - D - TF

LG0 - 6 - 12.5 - D - TF

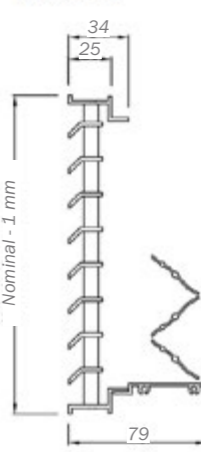
LG0 - 3 - 20 - TF



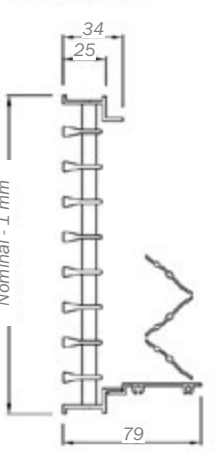
LG15 - 20 - TF



LG45 - 20 - TF



LG0 - 6 - 20 - TF



Grilles c/w opposed blade dampers

LG0 - 3 - 20 - D - TF

LG15 - 20 - D - TF

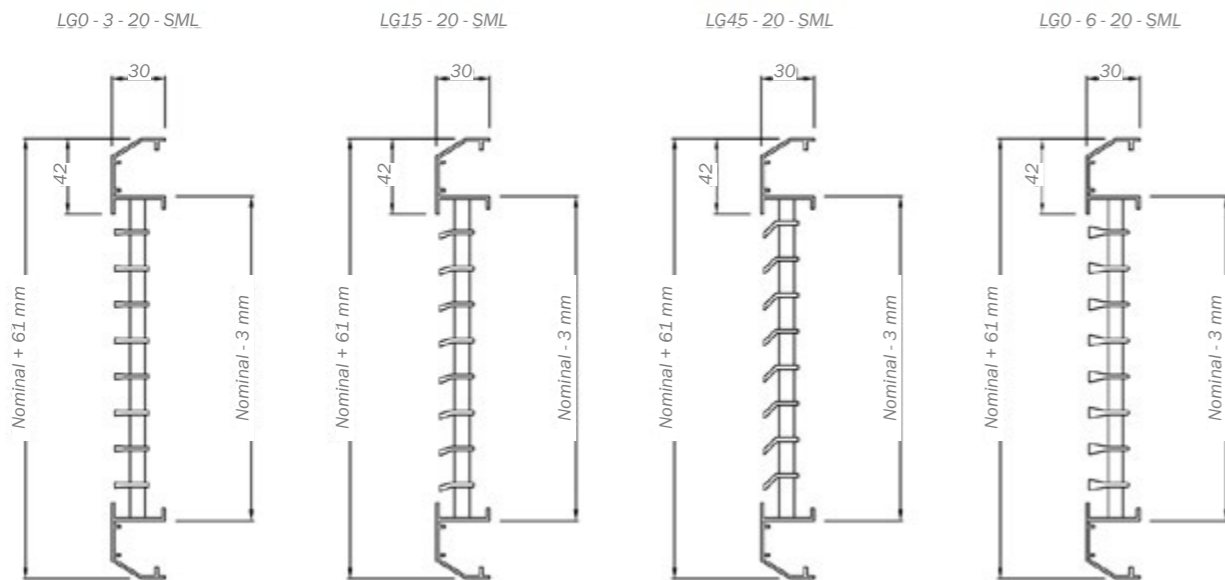
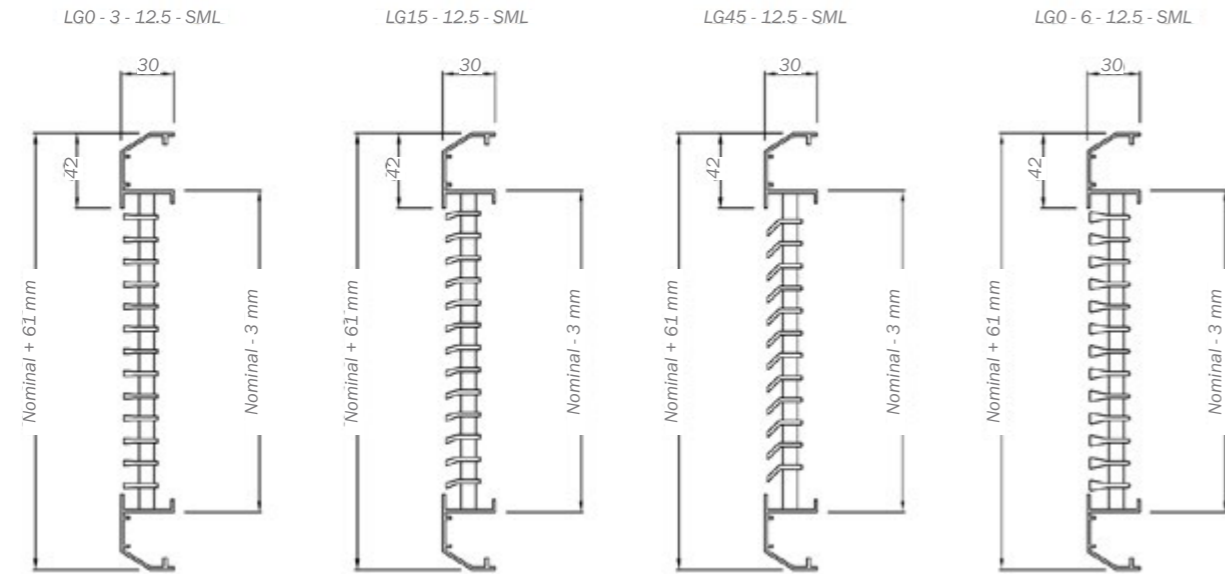
LG45 - 20 - D - TF

LG0 - 6 - 20 - D - TF

# Linear Bar Grilles - LG

## Technical Drawings

### SML Surface Mounted Frame:



## Customisations

### Multiple Way Blows:

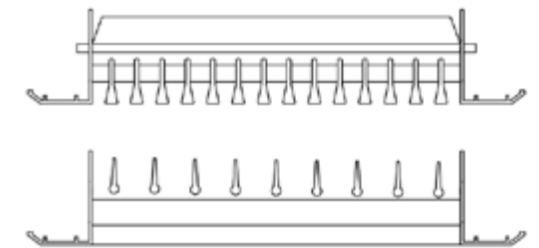
To increase functionality, all three 3 mm blade types can be used in a single grille. For example: When used just inside an entrance, 50% of the grille can be used with 0° blade to provide an air curtain and the rest can use either 15° or 45° blade to direct air into the room.



### SD Single Deflection Blades:

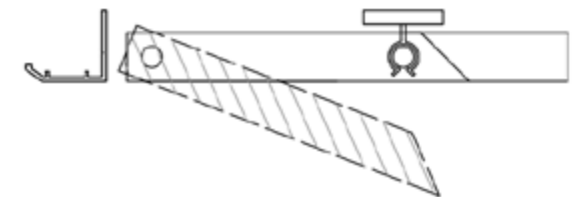
A bank of SD type blades can be mounted behind the LG grille blades. Enabling throw adjustment in one plane.

*Please Note: Selection of this option will mean standard 36B or 31F frames cannot be used. 25 mm Flat (25F) or 32 mm Bevelled (32BD) will be substituted. Surface mounted grilles cannot use this option.*



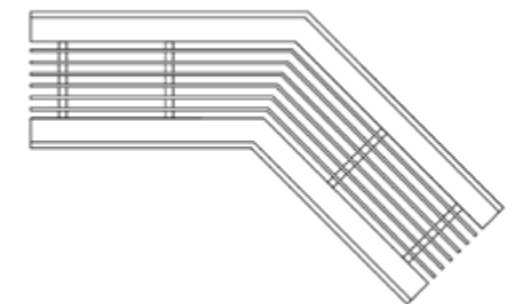
### AB/ AP Hinged access blades / panels:

To allow access through the grille face, without having to opt for a fully removable core or removing the whole grille, blades or a panel can be hinged enabling access through the core. The section swings out to 90° and integrated tube clips prevent the panel swinging out unexpectedly if mounted in a wall or ceiling.



### Mitred sections:

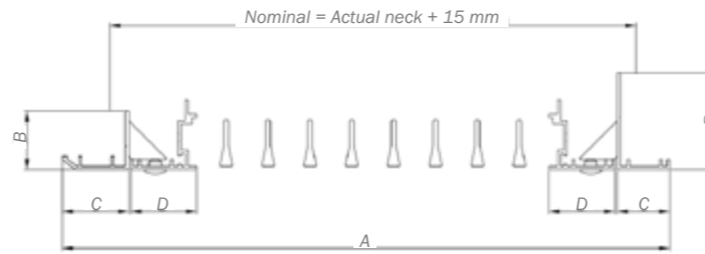
For true bespoke installations, mitred sections can be made to suit corners. Whether these are a standard 90° corner for ceiling fitting, or an internal or external corner for sidewall fitting at an angle other than 90° we can manufacture them.



# Linear Bar Grilles - LG

## Core Type:

- **Fixed**
- **RC Removable Core Twin frame (standard type):**  
Fitted with spring loaded quarter turn fasteners, the outer frame has angle brackets fixed to the inside of the neck. The inner removable frame holds the chrome plated slotted head studs, which are easily removed with a flathead screwdriver. Other stud types are available for use with allen keys, or with a larger head for removal by hand. Outer frame must be either standard 32 mm bevelled or 25 mm flat, inner frame will be 31F flat linear grille frame.



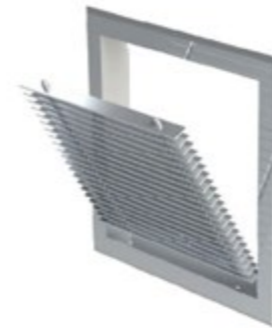
32BS: 32 mm bevelled	
A	Nominal + 45 mm
B	28 mm
C	32 mm
D	31 mm

25F: 25 mm flat	
A	Nominal + 30 mm
B	46 mm
C	25 mm
D	31 mm

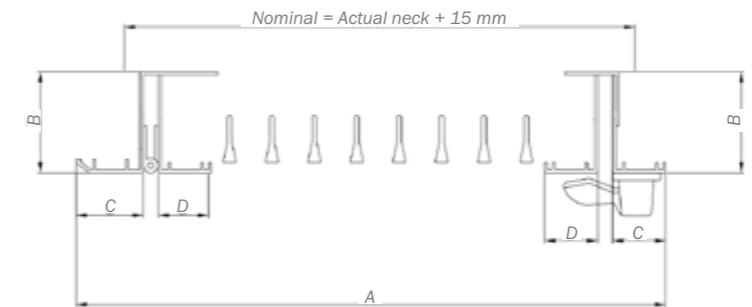
- **TC Removable core - Tube clips:**  
Sprung tube clips are mounted on mullions running behind the blade pack. To install the core, align the blade tubes with the clips and push the core into place. Not recommended for use in ceilings. Standard 32 mm bevelled frame or 25 mm flat frame only.



- **QR Removable core - Quick release:**  
Quick release removable core grilles have spring loaded pins in one end of the core tubes, with a locator pin at the other end. While fitted the springs force the pins into locating holes in the frame, holding the core in place. To remove the core, compress the springs, pulling the locator pins out of the holes, and pull the core away. Standard 32 mm bevelled frame or 25 mm flat frame only.



- **HC Hinged Core:**  
Enabling the core to hinge outwards may be preferable to it being fully removable. The full length piano hinge at one side is discreet and gives minimal loss of core area. The inner core is held in place by a chrome plated cam fastener as standard, bolts are optional. Outer frame must be either standard 32 mm bevelled Z section or 25 mm flat, inner frame will be reversed 25 mm flat.



32BZ: 32 mm bevelled Z	
A	Nominal + 45 mm
B	48 mm
C	32 mm
D	30 mm

25F: 25 mm flat	
A	Nominal + 30 mm
B	48 mm
C	25 mm
D	30 mm

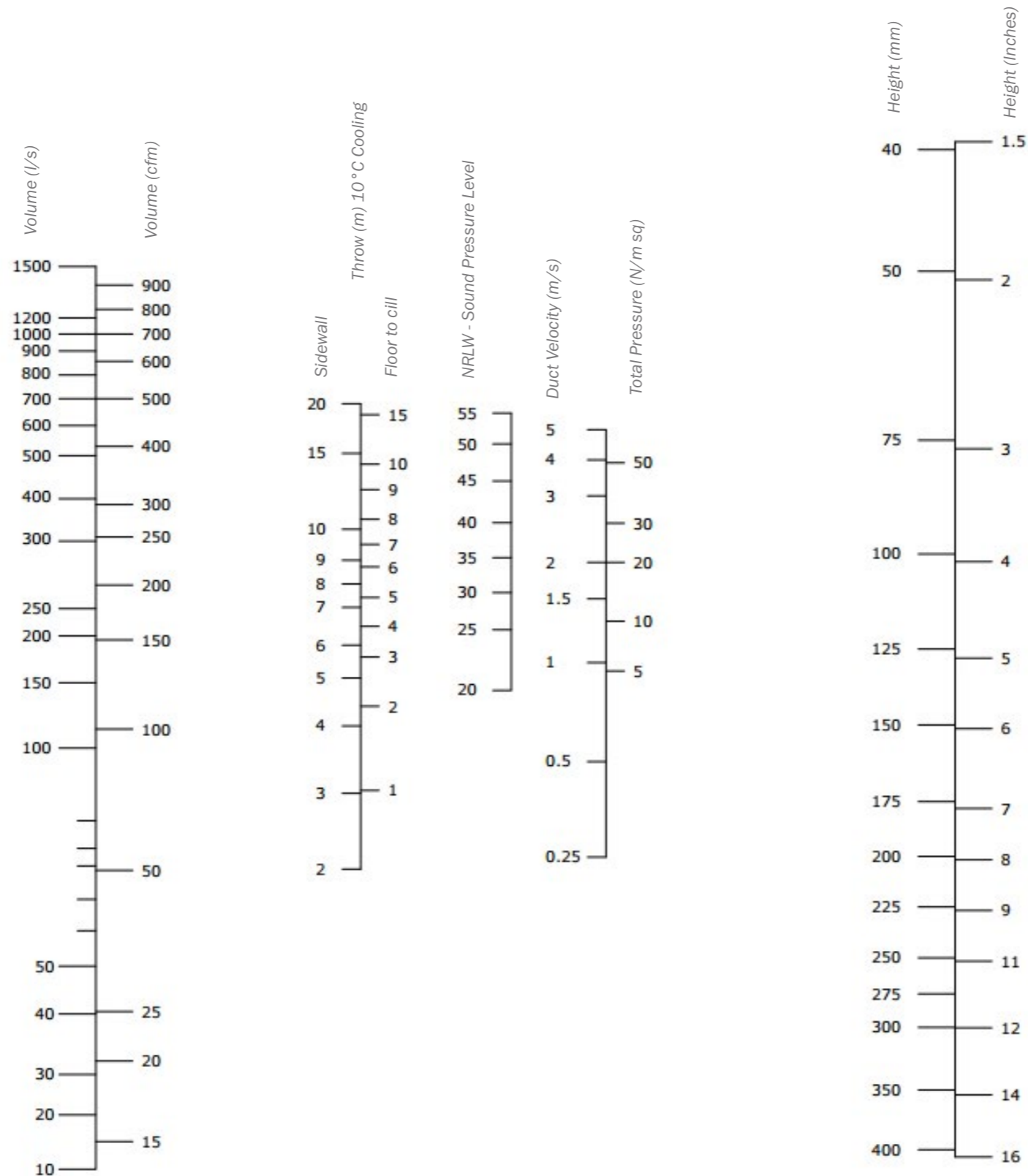
## Finish:

- SAA: Satin anodised (standard, not available with tray frame)
- Mill Aluminium (standard on tray frame)
- Brushed Aluminium (only frame and blade tops)
- RAL: Polyester powder coated to RAL
- BS: Polyester powder coated to BS





# Linear Bar Grilles - LG


## Selection data




Figures based on 1 m wide LG0 - 3 - 12.5 fitted with OBD.  
 10 °C Cooling application with grille not more than 0.5 mm below ceiling.  
 For 6 mm blade multiply throw and pressure by 1.2 and increase sound by 2 dB.  
 For 20 mm pitch multiply throw and pressure by 0.8 and reduce sound by 2 dB.  
 For grilles without OBD multiply throw and pressure by 0.9 and reduce sound power level by 2.

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