



## EXPRESS RANGE

## Series LG

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Series LG linear grilles are the most versatile series of grille available from JPR Services.

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 3mm thick, 0° blades, on a 20mm 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 12.5mm or 20mm blade pitches, giving you full control over throw direction, free area and appearance.

Linear bar grilles are also now available with a plaster-in frame design, please refer to pages 8 and 9 for more information.



## Design features

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<b>Material</b>	Extruded aluminium
<b>Frame</b>	Standard: 36B - 36mm bevelled Optional: 31F - 31mm flat TF - Tray frame SML - Surface mounted large PLG - Plaster-in
<b>Sizes</b>	Minimum: 100mm x 50mm Maximum: 2900mm x 2900mm
<b>Fixings</b>	Standard: None Optional: See page 11
<b>Finish</b>	Standard: Satin anodised (AA5) Optional: See page 14
<b>Mass/m<sup>2</sup> face area</b>	See technical specifications on next page
<b>Free area</b>	See technical specifications on next page

## Technical specifications

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Series	Free area (approx.)	Mass/m <sup>2</sup> face area (approx.)
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

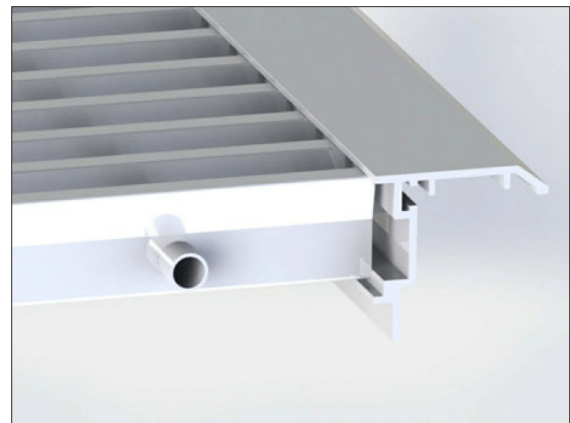
## Dedicated frame design

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As part of our continual drive to improve quality, linear grilles now use a dedicated frame design, rather than the standard frames used widely within the range of JPR Services 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.

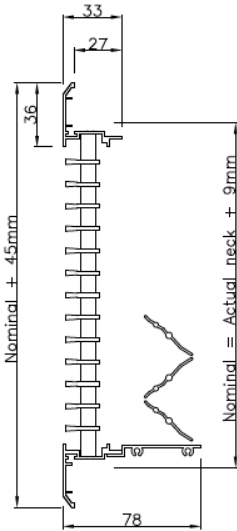
These frames, denoted the 36B (bevelled) and 31F (flat) are standard with all blade types (various options will require the use of other frames).



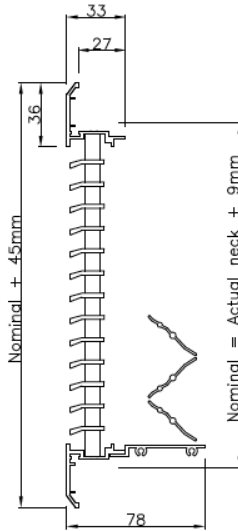
## Technical drawings - 36B frame

Grilles only

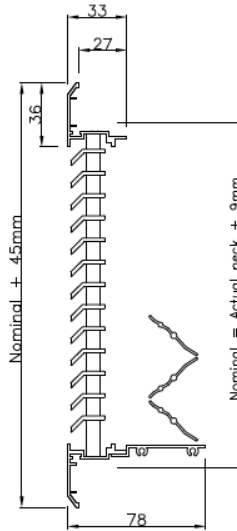
LG0 - 3 - 12.5 - 36B



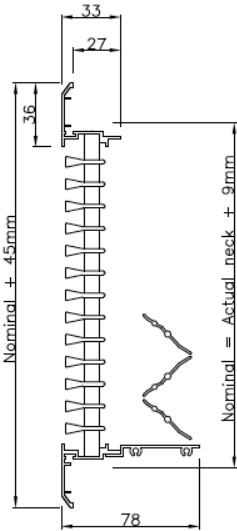
LG15 - 12.5 - 36B



LG45 - 12.5 - 36B

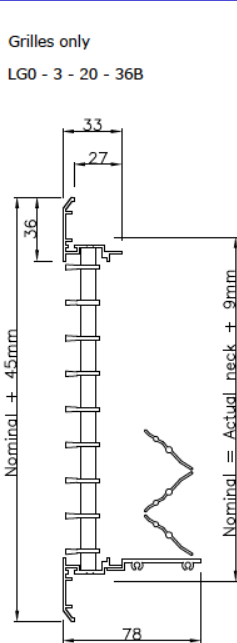


LG0 - 6 - 12.5 - 36B

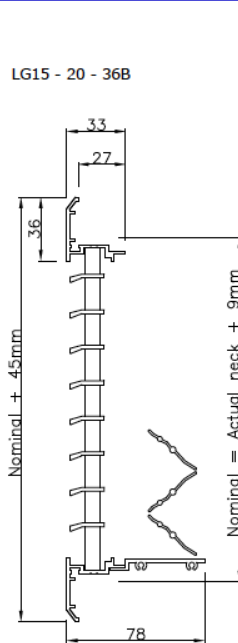


Grilles c/w opposed blade dampers

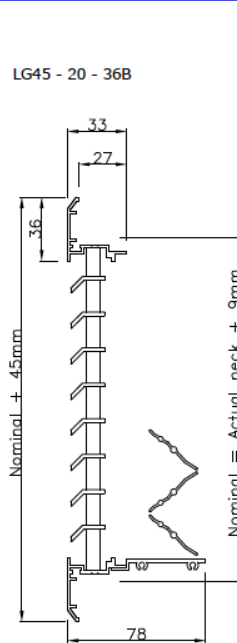
LG0 - 3 - 12.5 - D - 36B



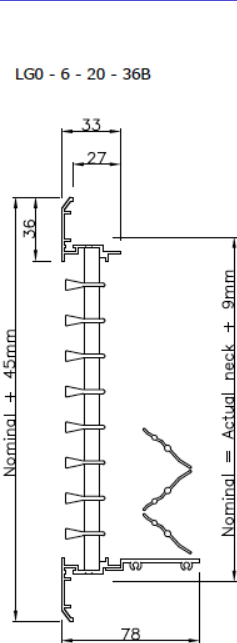
LG15 - 12.5 - D - 36B



LG45 - 12.5 - D - 36B

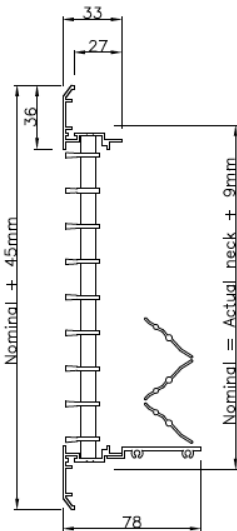


LG0 - 6 - 12.5 - D - 36B

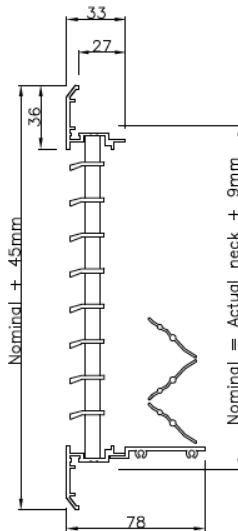


Grilles only

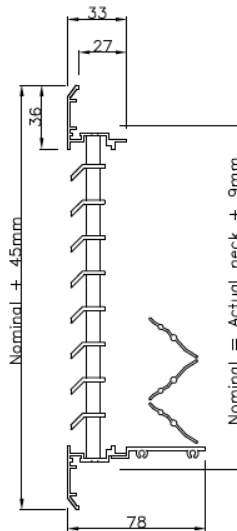
LG0 - 3 - 20 - 36B



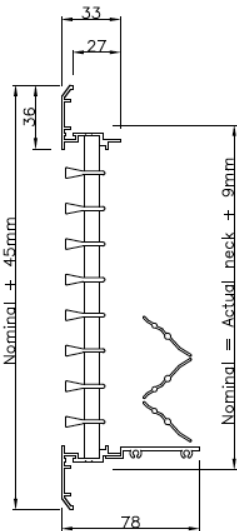
LG15 - 20 - 36B



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



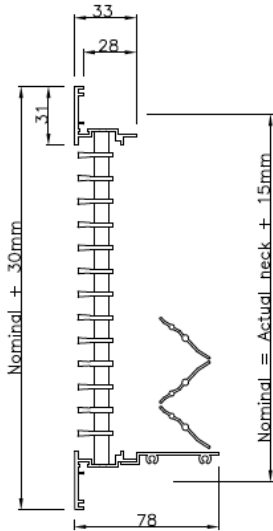
LG0 - 6 - 20 - D - 36B



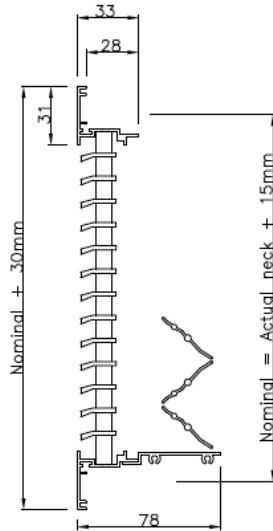
## Technical drawings - 31F frame

Grilles only

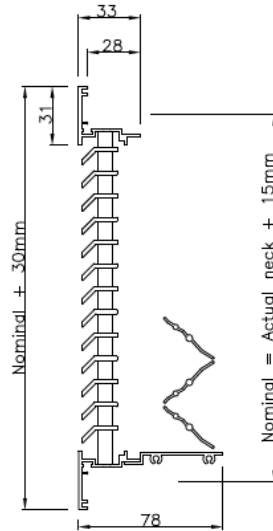
LG0 - 3 - 12.5 - 31F



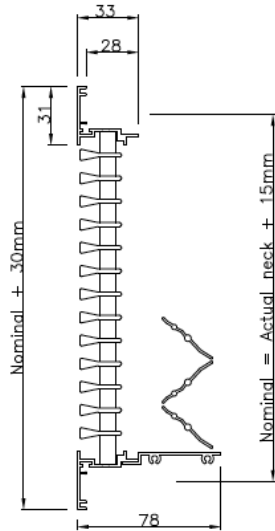
LG15 - 12.5 - 31F



LG45 - 12.5 - 31F

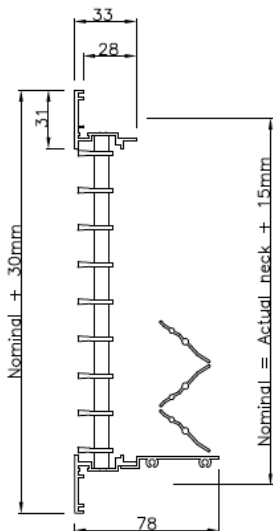


LG0 - 6 - 12.5 - 31F

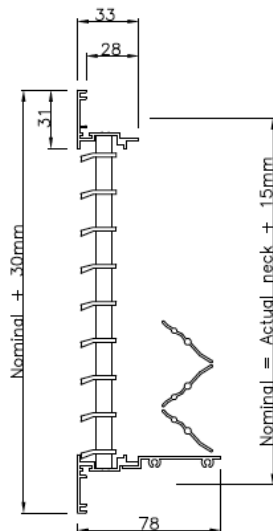


Grilles c/w opposed blade dampers

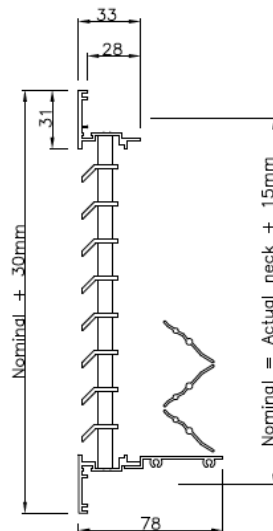
LG0 - 3 - 12.5 - D - 31F



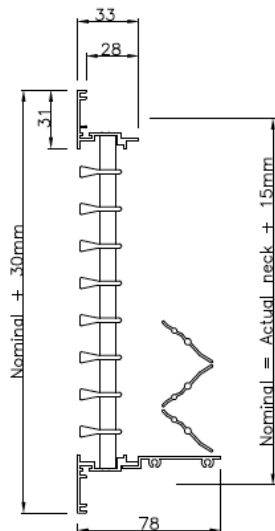
LG15 - 12.5 - D - 31F



LG45 - 12.5 - D - 31F

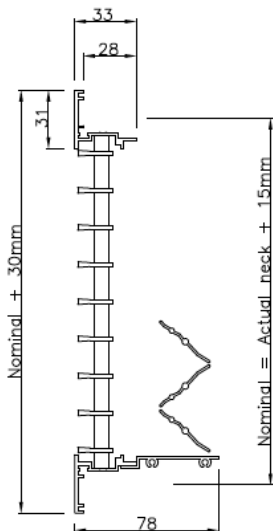


LG0 - 6 - 12.5 - D - 31F

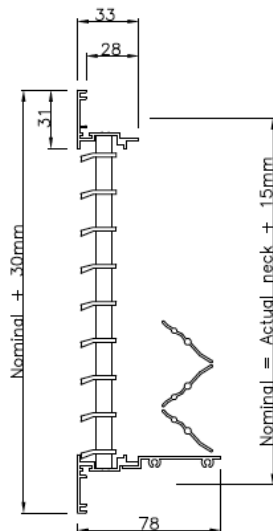


Grilles only

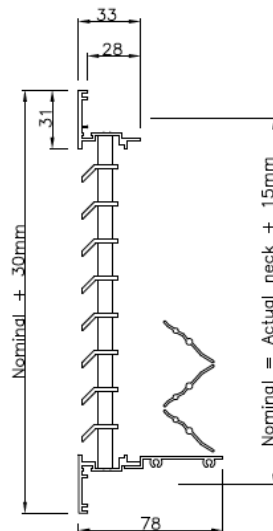
LG0 - 3 - 20 - 31F



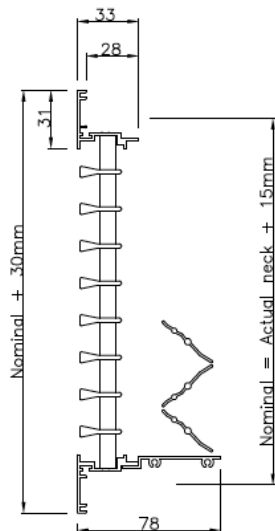
LG15 - 20 - 31F



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



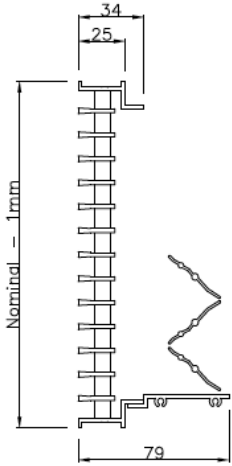
LG0 - 6 - 20 - D - 31F



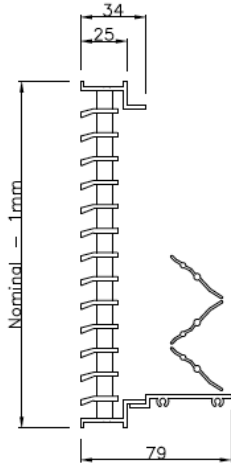
## Technical drawings - TF (tray frame)

Grilles only

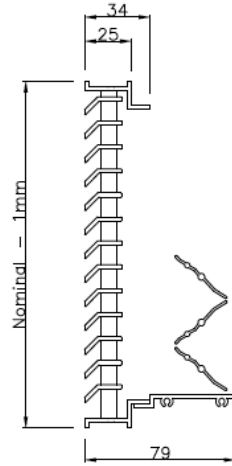
LG0 - 3 - 12.5 - TF



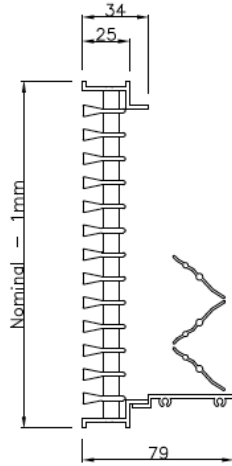
LG15 - 12.5 - TF



LG45 - 12.5 - TF



LG0 - 6 - 12.5 - TF



Grilles c/w opposed blade dampers

LG0 - 3 - 12.5 - D - TF

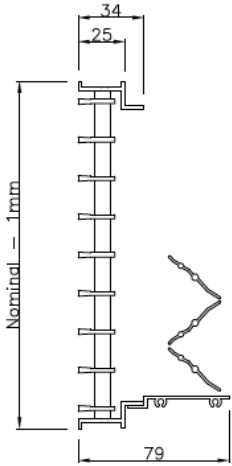
LG15 - 12.5 - D - TF

LG45 - 12.5 - D - TF

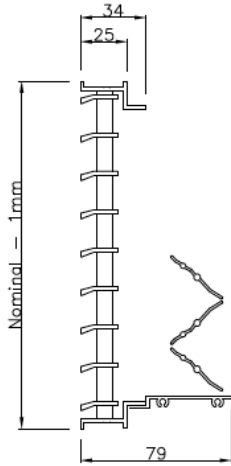
LG0 - 6 - 12.5 - D - TF

Grilles only

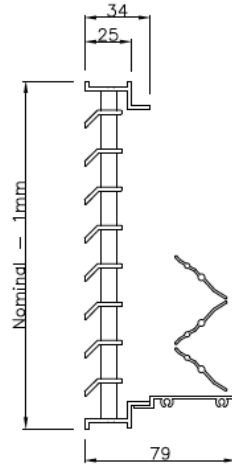
LG0 - 3 - 20 - TF



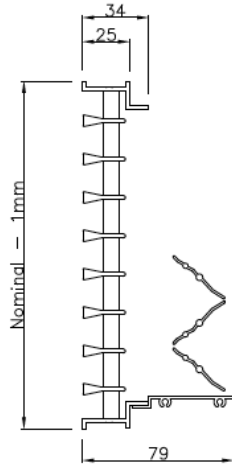
LG15 - 20 - TF



LG45 - 20 - TF



LG0 - 6 - 20 - TF



Grilles c/w opposed blade dampers

LG0 - 3 - 20 - D - TF

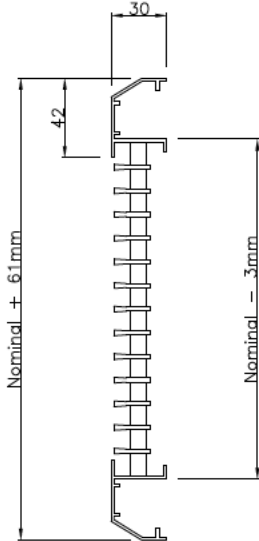
LG15 - 20 - D - TF

LG45 - 20 - D - TF

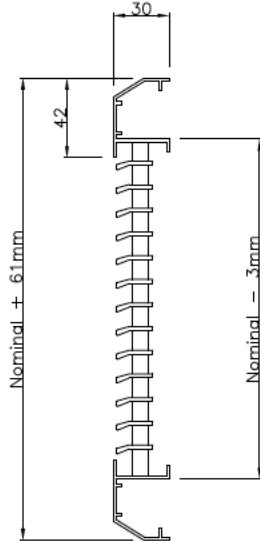
LG0 - 6 - 20 - D - TF

## Technical drawings - SML (surface mounted frame)

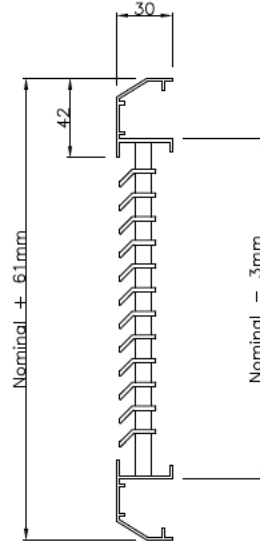
LG0 - 3 - 12.5 - SML



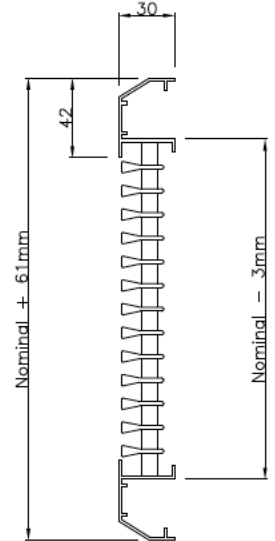
LG15 - 12.5 - SML



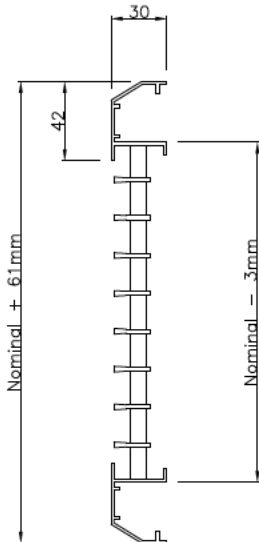
LG45 - 12.5 - SML



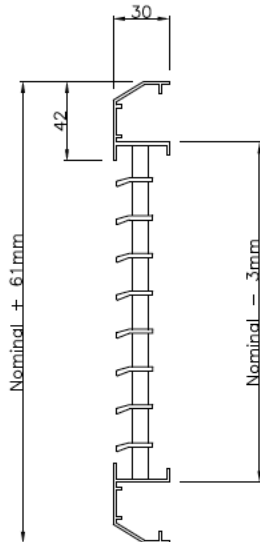
LG0 - 6 - 12.5 - SML



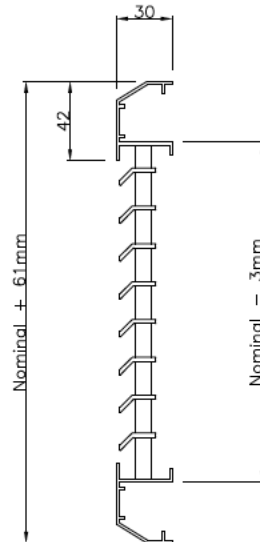
LG0 - 3 - 20 - SML



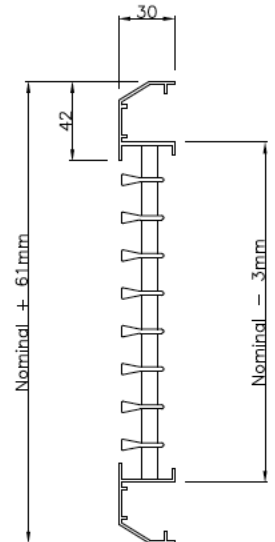
LG15 - 20 - SML



LG45 - 20 - SML



LG0 - 6 - 20 - SML



## Removable core - Twin frame

Fitted with spring loaded quarter turn fasteners, the outer frame has angle brackets fixed to the inside of the neck.

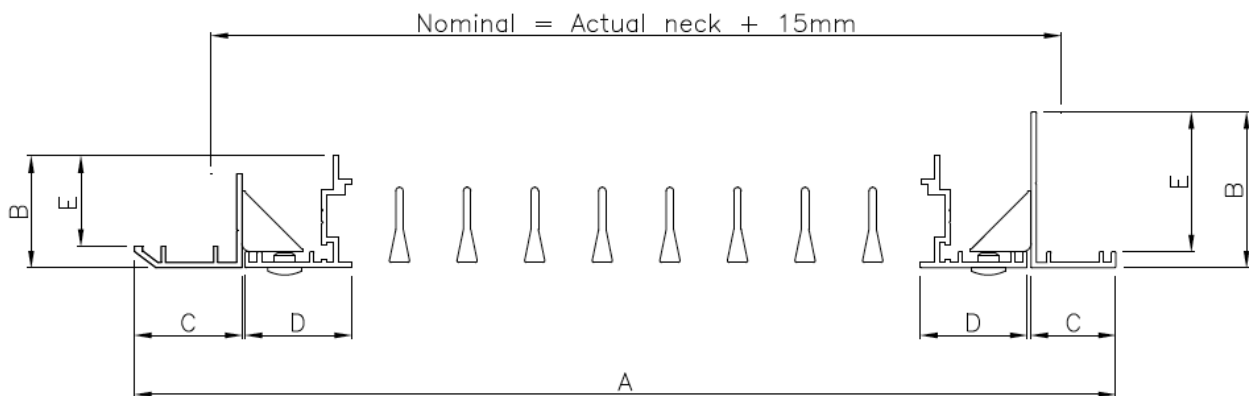
The inner removable frame holds the chrome plated slotted head studs, which are easily removed with a flathead screwdriver.

Other stud types are available for use with allen keys, or with a larger head for removal by hand.

Outer frame will be either 32BS 32mm bevelled frame or 25F 25mm flat, inner frame will be 31F 31mm flat.



Ordering code for type shown here: RC-QT



32BS: 32mm bevelled (standard)	
A	Nominal + 45mm
B	33mm
C	32mm
D	31mm
E	27mm

25F: 25mm flat (optional)	
A	Nominal + 30mm
B	46mm
C	25mm
D	31mm
E	41mm



## Removable core - Tube clips

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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.

32BD 32mm bevelled frame or 25F 25mm flat frames only.

**For wall mounting use only.  
Not recommended for use in ceilings.**

**Ordering code for type shown here:** RC-TC



## Removable core - Quick release

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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.

32BD 32mm bevelled frame or 25F 25mm flat frames only.

Safety cord fitted as standard.

Not available on grilles of nominal height less than 100mm.

**Ordering code for type shown here:** RC-QR



## Hinged core

Enabling the core to hinge outwards may be preferable to it being fully removable.

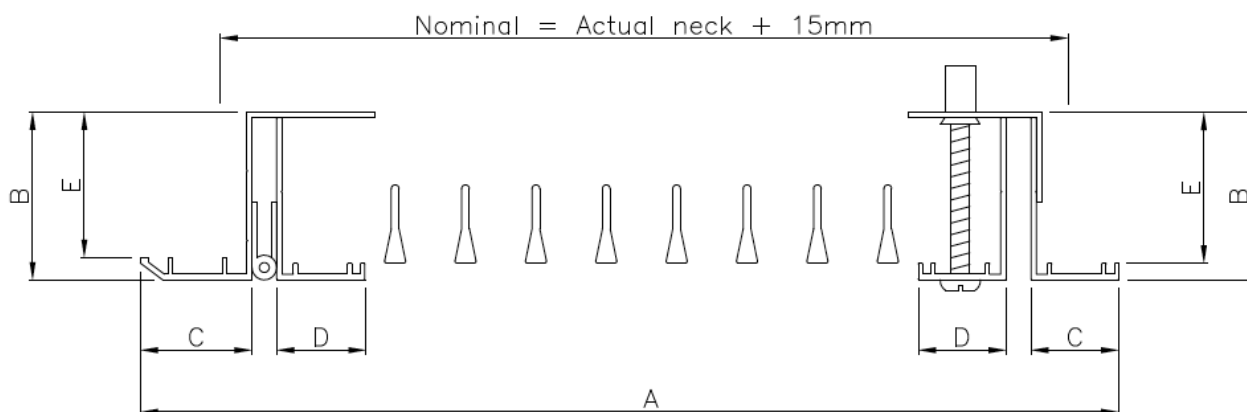
The full length piano hinge at one side is discreet, and gives minimal loss of core area.

The inner core is held in place by one or more M6 panhead bolts mating with nutserts mounted to a concealed rear frame extension.

Chrome plated cam fasteners are optional instead of bolts.



Ordering code for type shown here: HC-BLT



<b>32BZ: 32mm bevelled Z (standard)</b>	
A	Nominal + 45mm
B	48mm
C	32mm
D	30mm
E	41mm

<b>25F: 25mm flat (optional)</b>	
A	Nominal + 30mm
B	48mm
C	25mm
D	30mm
E	43mm

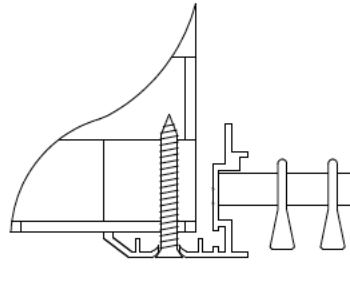
## Fixings

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### Countersunk fixing holes: Code suffix FH

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

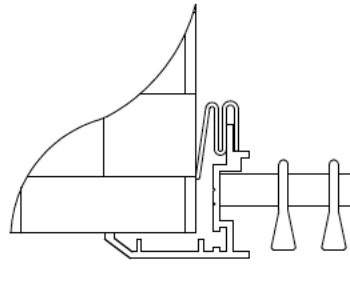
Self tapping screws in the same finish as the grille are provided as standard.



### Push-in clip method: Code suffix PC

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.**



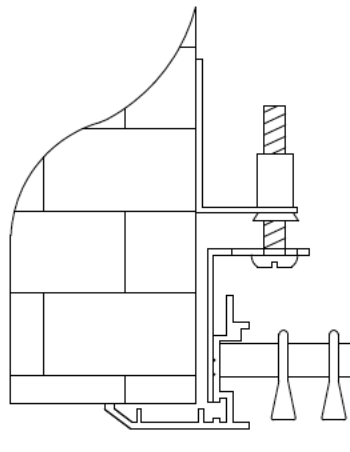
### Concealed fixings: Code suffix CF

Recently redesigned, 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 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.

**Please note:** A removable core should be specified if concealed fixings are required with an LG45-12.5 (45 degree blades on 12.5mm pitch)



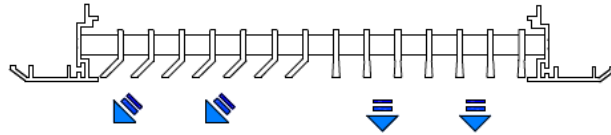
## Customisations

### Multiple way blows

To increase functionality, all three 3mm 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.

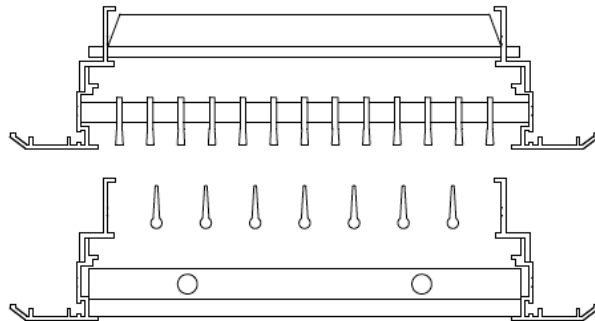
Please discuss any requirements for this option with HVC.



### Single deflection blades: Code suffix RSD

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

**Please note:** Surface mounted grilles cannot use this option.

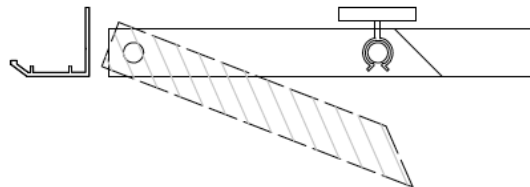


### Hinged access blades / panels

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.

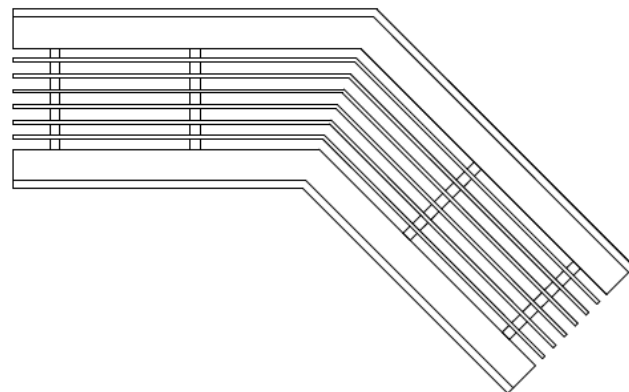
Please discuss any requirements for this option with HVC.



### Mitred sections

For truly 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.

Please discuss any requirements for this option with HVC.



## Selection data

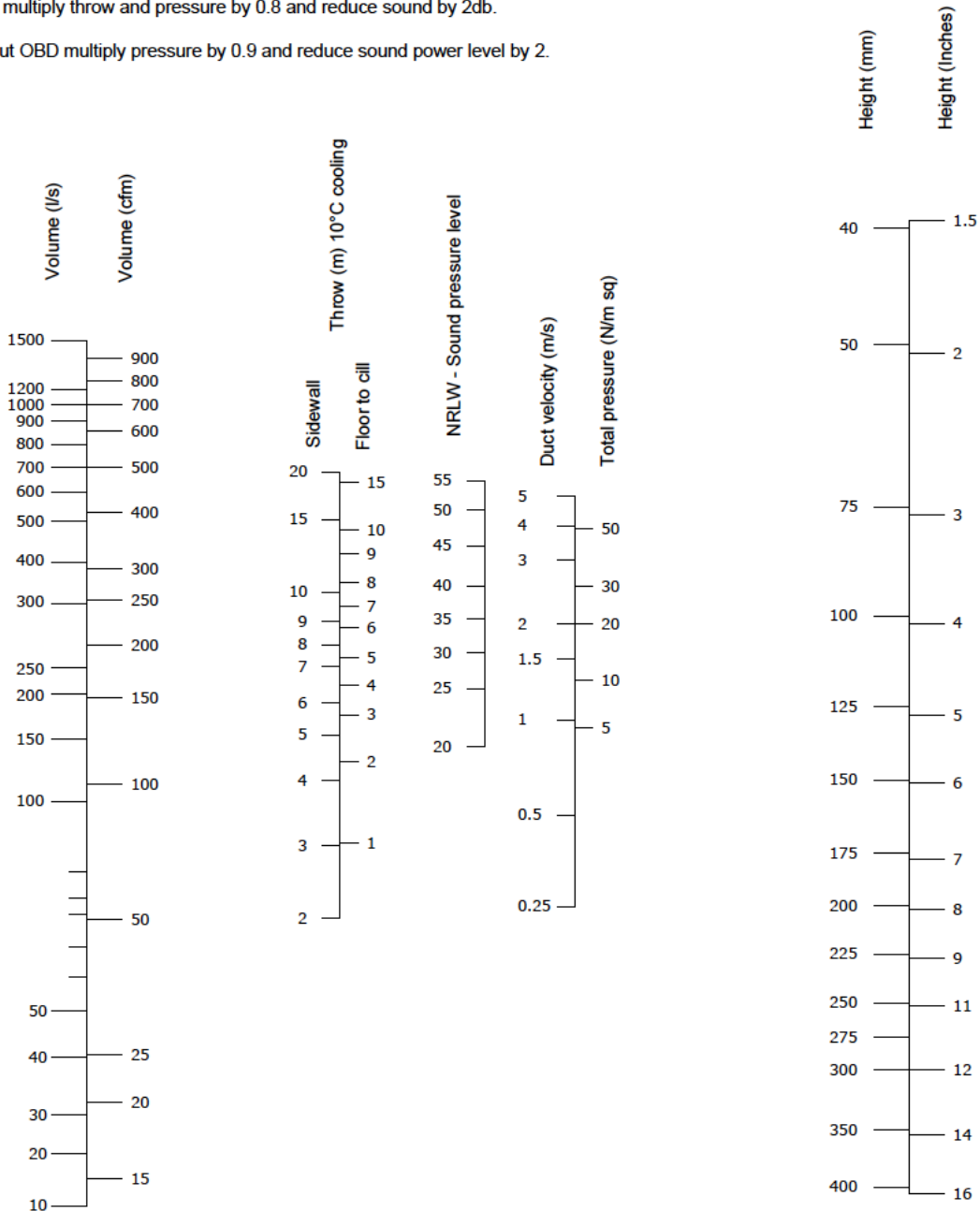
Figures based on 1m wide LG0-3-12.5 fitted with OBD.

10°C cooling application with grille not more than 0.5m below ceiling.

For 6mm blade multiply throw and pressure by 1.2 and increase sound by 2db.

For 20mm pitch multiply throw and pressure by 0.8 and reduce sound by 2db.

For grilles without OBD multiply pressure by 0.9 and reduce sound power level by 2.



## Finishes

Mill aluminium

Linished (brushed) aluminium (frame face and blade tops only)

Satin anodised aluminium

Polyester powder coating to any RAL or BS colour



## Ordering codes

### Example

1 - 400 x 400 - LG0 - 6 - 20 - D - 36B - FH - RAL9010 - 1S

1)	<b>Quantity</b>		
2)	<b>Size (mm)</b>	(Width x height)	
3)	<b>Series</b>	LG0 LG15 LG45	Linear grille, 0° blades Linear grille, 15° blades Linear grille, 45° blades
4)	<b>Blade thickness</b>	3 6	3mm blade 6mm blade (only available with LG0)
5)	<b>Blade pitch</b>	12.5 20	12.5mm blade pitch 20mm blade pitch
6)	<b>Damper</b>	D	Opposed blade damper fitted
7)	<b>Frame</b>	36B 31F TF SML PLG	36mm bevelled frame (standard) 31mm flat frame Tray frame Surface mounted Plaster-in
8)	<b>Fixings</b>	FH CF PC	Countersunk fixing holes (screws supplied in same finish) Concealed fixings Push-in clips (not for use in ceilings)
9)	<b>Core type</b>	RC-QT RC-QR RC-TC HC-BLT HC-CAM	Removable core - Twin frame type (standard method, not available with 'TF' or 'PLG') Removable core - Quick release type (optional, not available if nominal height < 100mm, not with 'SML') Removable core - Tube clip type (optional, not recommended for use in ceilings, not with 'SML') Hinged core - Bolt type (standard method, not available with 'TF', 'SML' or 'PLG') Hinged core - Cam fastener (optional, not available with 'TF', 'SML' or 'PLG')
10)	<b>Deflection blades</b>	RSD	Rear mounted single deflection blades
11)	<b>Finish</b>	SAA Mill Linished RAL... BS...	Satin anodised (standard, not available if frame type is 'TF' or 'PLG') Mill aluminium (standard on ) Linished (brushed) aluminium (only frame and blade tops) Polyester powder coated to RAL... Polyester powder coated to BS...
12)	<b>Sections</b>	_S	Number of sections required. If left blank this will be confirmed on order acknowledgment.

**Important:** Size will be taken to be nominal (hole internal) unless stated otherwise.

Leave code section blank if no option is required.