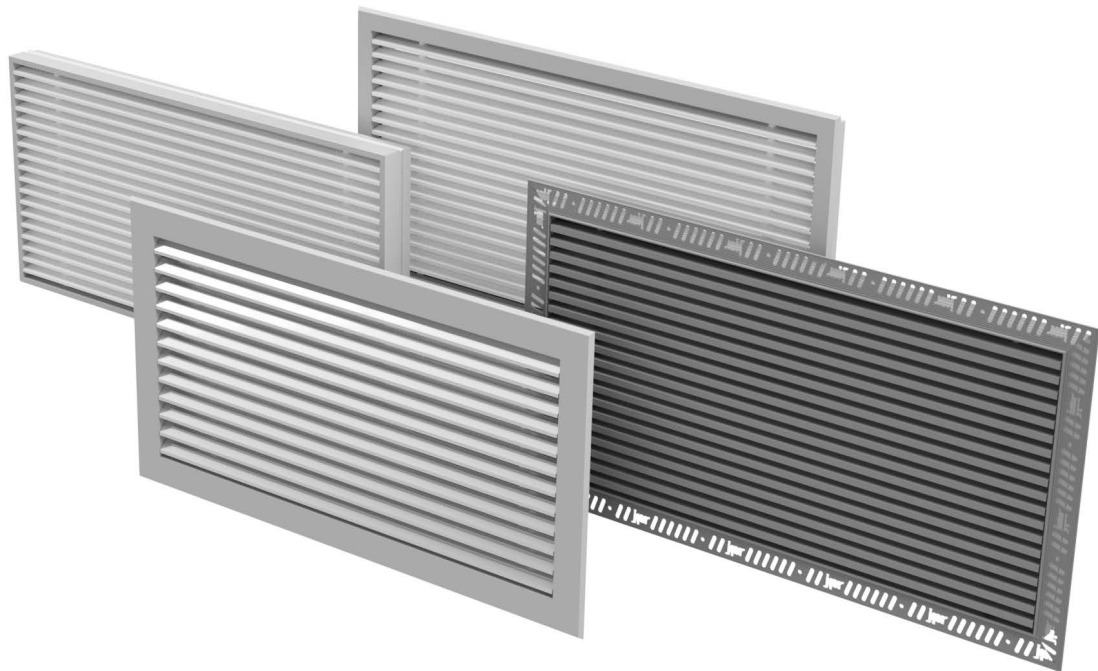


## NB / WB / FCD LINEAR BAR GRILLES



## **Linear Bar Grilles**

The NB, WB and FCD type linear grilles offer a range of different blade formats to meet both architectural and system requirements and are ideally suited to sidewall, bulkhead and cill applications.

All blade options are available with surface mounted, plaster-in or flangeless joinery options. Core only and other frame options are also available. Please enquire with the Sales Office with your individual requirements.

Linear bar grilles can be supplied in single units or, for continuous applications, in single sections up to 1800mm which are joined together on site using fishplates, to give a continuous appearance.

All core types are available as fixed or removable, or alternatively, can be supplied as core-only.

Hinged core sections can also be supplied to provide access to concealed control valves, thermostats or switches.

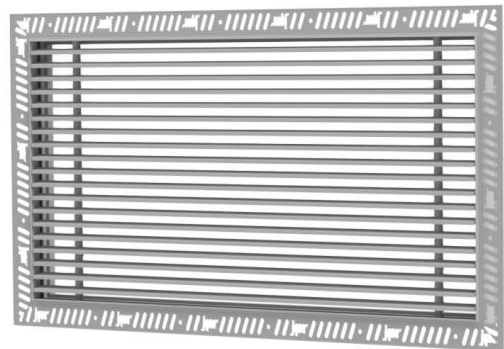
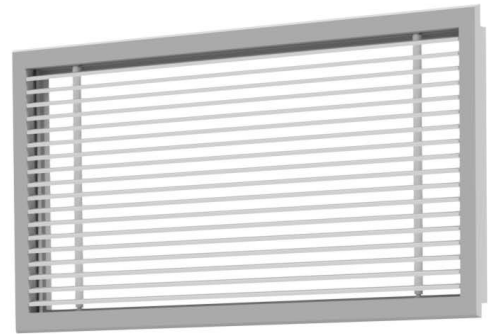
For continuous applications, make-up sections can be manufactured to suit internal or external corner details.

Grilles can also be curved to suit architectural features.

## **Standard Frame Options**

- Surface mounted frames are available in either 19 or 32mm options, face fixing holes are only available on the 32mm option.
- A plaster-in flange option is available with a specially designed plaster-bead, serrated and punched flange for optimum plaster adhesion and quality of finish.
- Flangeless joinery grilles with a 6mm border.

Other frame options are available including reverse angle frames, cut-down flanges and other special arrangements. Please contact our Sales Office to discuss your specific requirements.

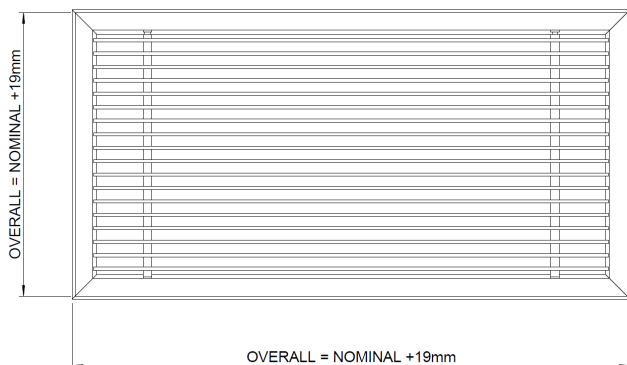


## Design Features

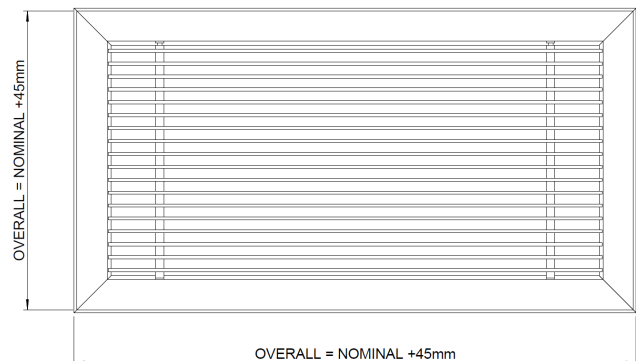
- **Material** : Extruded aluminium. Mitred and fully welded corners.
- **Maximum size** : 1800mm wide single section. Longer sections are supplied with fishplates for joining on site to give a continuous look. Max 1000mm high single section.
- **Fixings** : No fixing holes. Optional fixing holes on 32mm flange. Fixing straps and other methods available as special order.
- **Finishes** : Mill Finish. Linished (brushed) Aluminium. Polyester powder coat to stock RAL colours. Other colour ranges are available as special order.
- **Free areas** : 3mm Blade (NB) 65%  
6mm Blade (WB) 50%  
FCD 17mm Pitch 30%  
FCDRA19 19mm Pitch 35%

## Frame Options

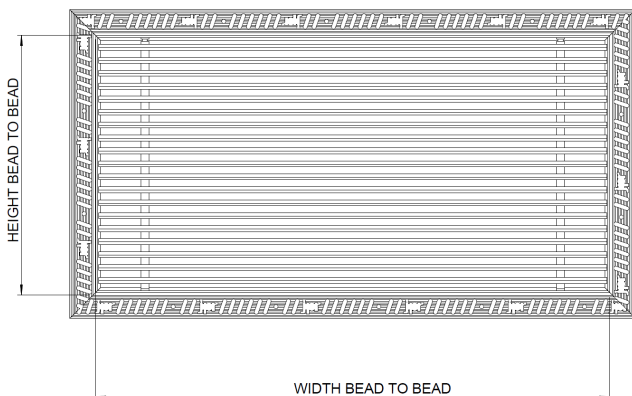
19W-19mm Surface Mounted Flange



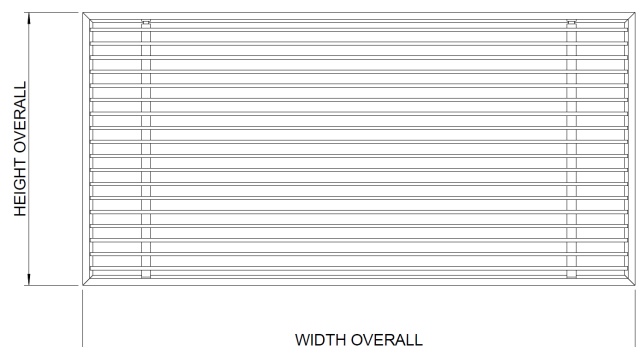
32W-32mm Surface Mounted Flange



25P-25mm Plaster-in Flange

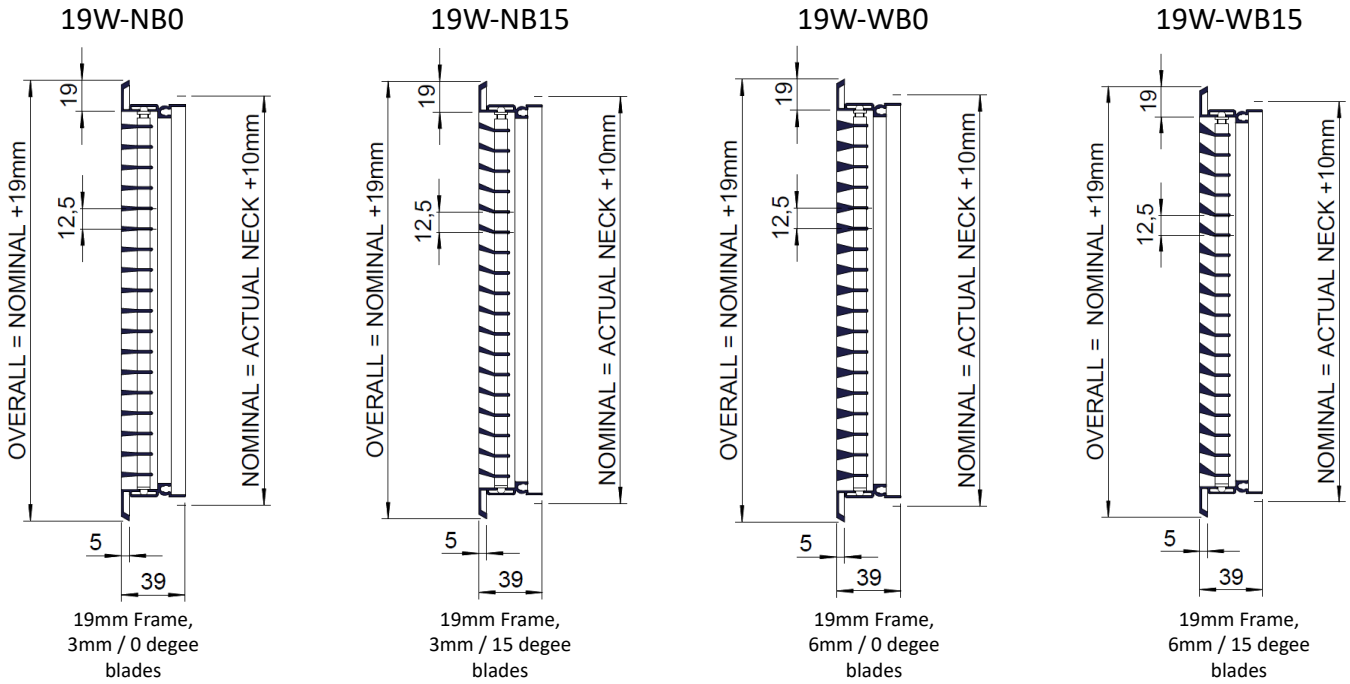


J6-6mm Joinery Frame

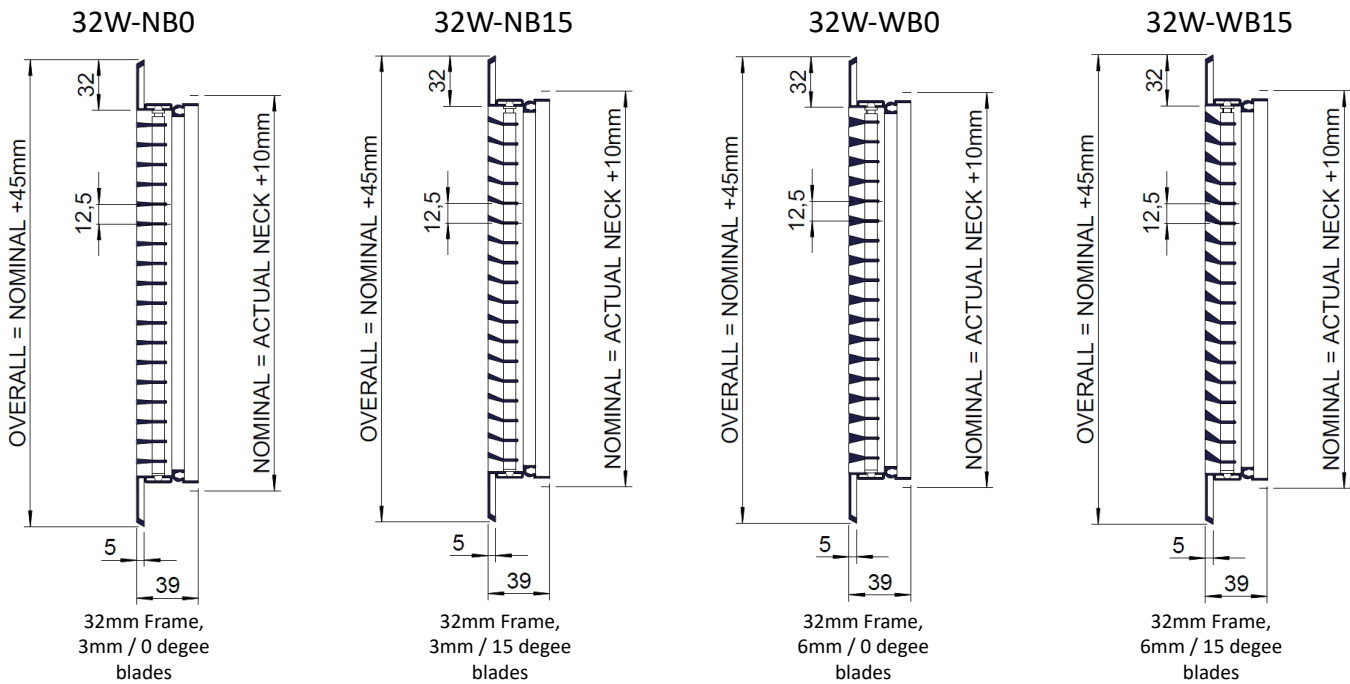


## Frame & Blade Options- Narrow & Wide Blade

### 19W 19mm Surface Mounted



### 32W 32mm Surface Mounted

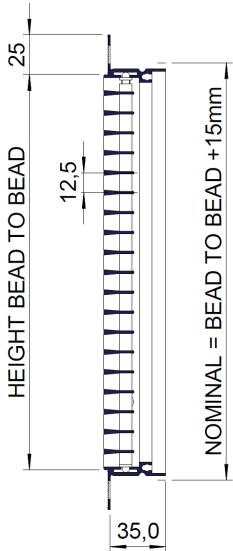


Angled blade grilles can be installed with blades facing either upwards or downwards

## Frame & Blade Options- Narrow & Wide Blade

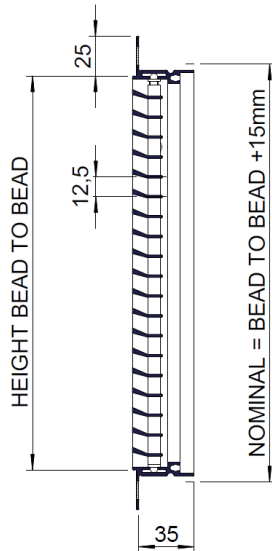
### 25P Plaster-in Frame

25P-NB0



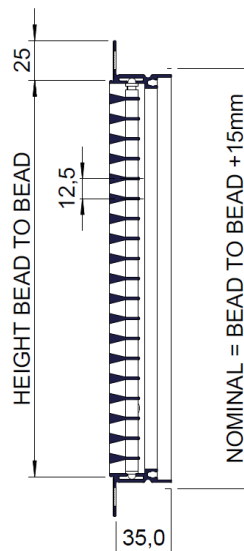
25P Frame, 3mm / 0 degree blades

25P-NB15



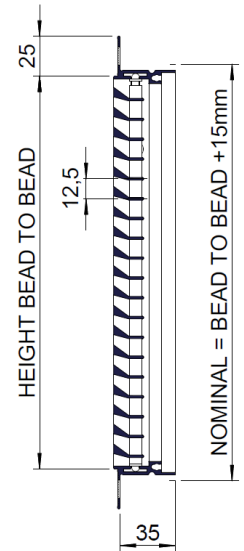
25P Frame, 3mm / 15 degree blades

25P-WB0



25P Frame, 6mm / 0 degree blades

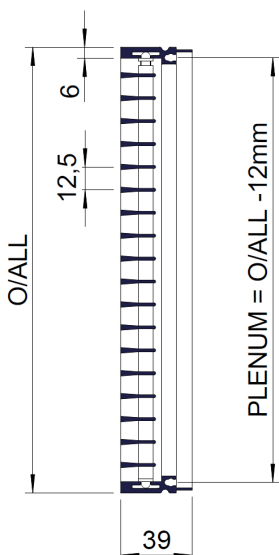
25P-WB15



25P Frame, 6mm / 15 degree blades

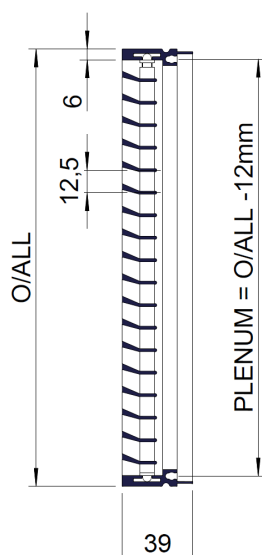
### J6 Joinery Frame

J6-NB0



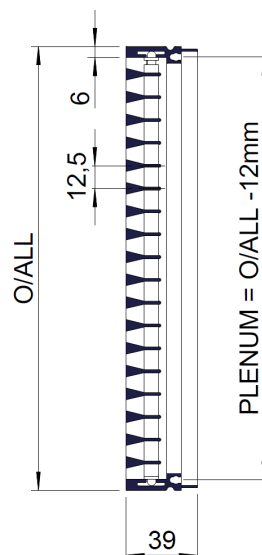
J6 Frame, 3mm / 0 degree blades

J6-NB15



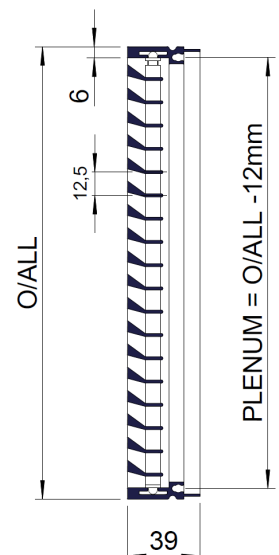
J6 Frame, 3mm / 15 degree blades

J6-WB0



J6 Frame, 6mm / 0 degree blades

J6-WB15

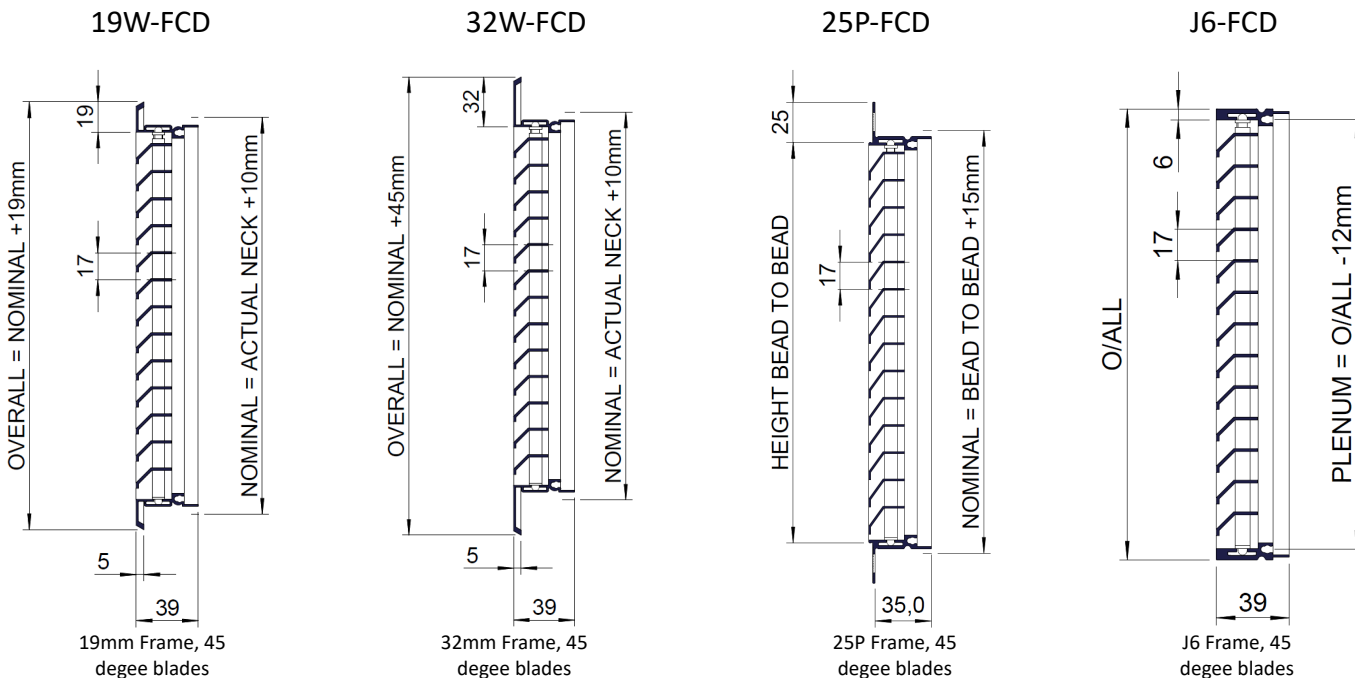


J6 Frame, 6mm / 15 degree blades

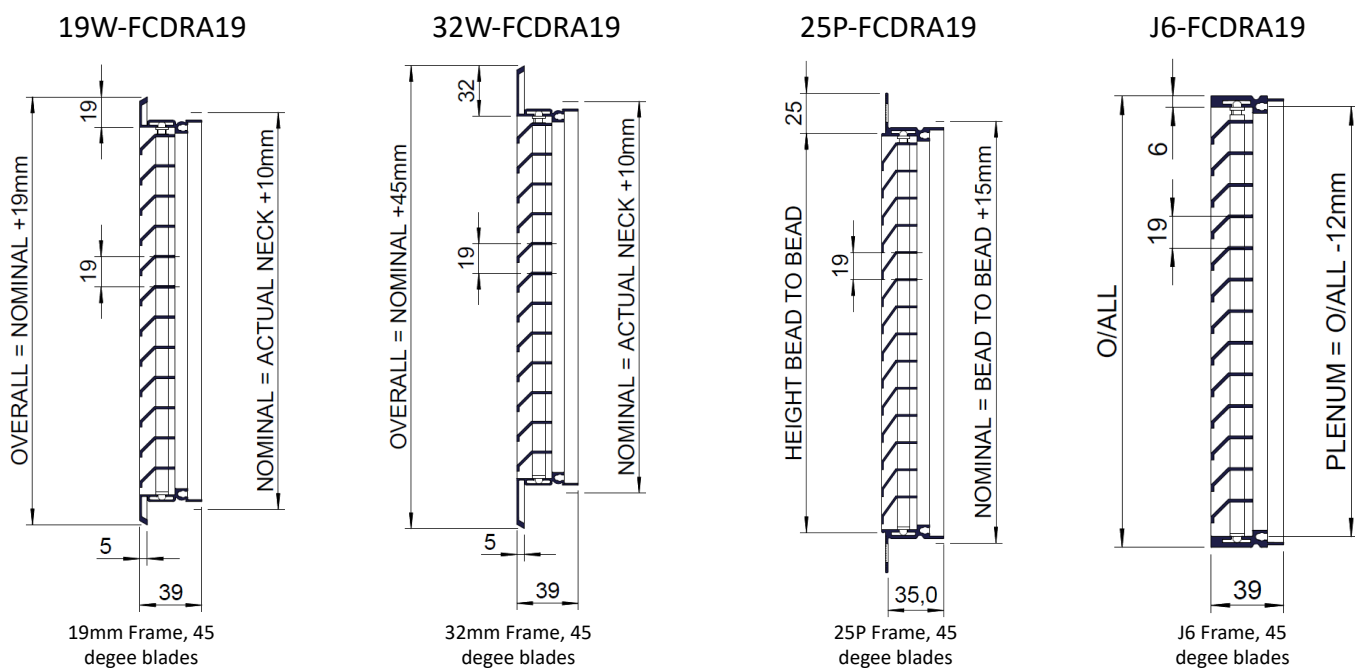
Angled blade grilles can be installed with blades facing either upwards or downwards

## Frame & Blade Options- 45 Degree Blade

### Frame & Blade Options- 45 Degree FCD Blade, 17mm Pitch (Supply)



### Frame & Blade Options- 45 Degree FCD-RA19 Blade, 19mm Pitch



## Ordering Codes

Frame	Blade Profile	Core	Accessories	Fixing	Finish
<b>19W</b> - 19mm Flanged <b>32W</b> - 32mm Flanged <b>25P</b> - Plaster-in <b>J6</b> - Flangeless Joinery	<b>NB0</b> - 3mm, 0° <b>NB15</b> - 3mm, 15° <b>WB0</b> - 6mm, 0° <b>WB15</b> - 6mm, 15° <b>FCD</b> - 45° <b>FCDRA19</b> - 45°	<b>FC</b> - Fixed Core <b>RC</b> - Removable Core	/ - None <b>OBD</b> - Opposed Blade Damper <b>SVMB</b> - Straightening Vanes <b>BP</b> - Blanking Plate <b>NVP</b> - Non Vision Plate <b>S</b> - Special	<b>F0</b> (None) <b>F1</b> (Fixing Holes, <b>32W ONLY</b> )	<b>RAL</b> - PPC to a RAL Colour <b>MILL</b> - Mill Finish Aluminium) <b>LINISH</b> - Linished Aluminium) <b>SPECIAL</b> (Please Specify)

**Example :** 19W-NB15-RC-/-F0-RAL9010    19mm Flanges, 3mm/15 Degree Blades, Removable Core, No accessories, No fixing holes RAL9010

## Sizing information

- Surface mounted linear bar grilles are normally ordered as a 'Nominal' size. This is the size of the plenum or wall opening.

The actual neck size of the grille will be made 5mm smaller to allow for a fitting tolerance. If grilles are required to be an exact neck size or an exact overall size, please specify this.
- Plaster-in grilles are ordered as 'Bead-to-Bead' size. This is the visible size of the grille when installed and plastered.

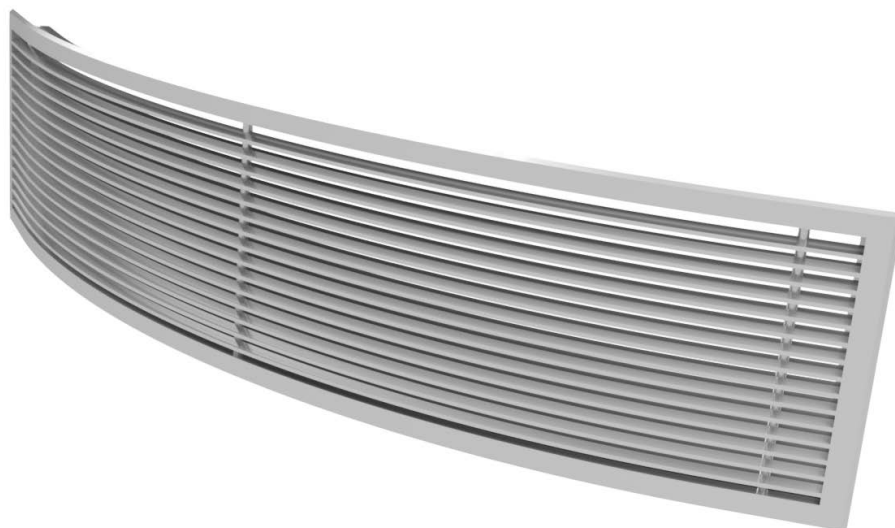
The required opening size is the bead-to-bead size +15.

The exact neck size is the bead-to-bead size +8mm.
- Joinery grilles are ordered as an 'Overall' size.

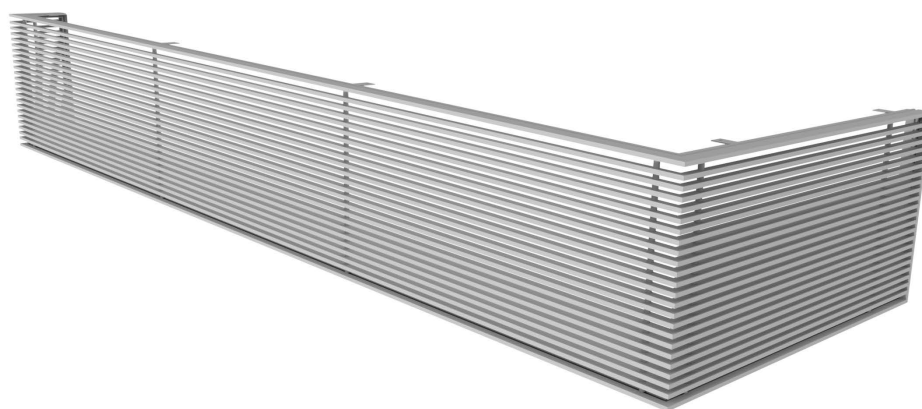
## *Special Arrangements*

Other frame options are available including reverse angle frames, cut-down flanges and other special arrangements. Please contact our Sales Office to discuss your specific requirements.

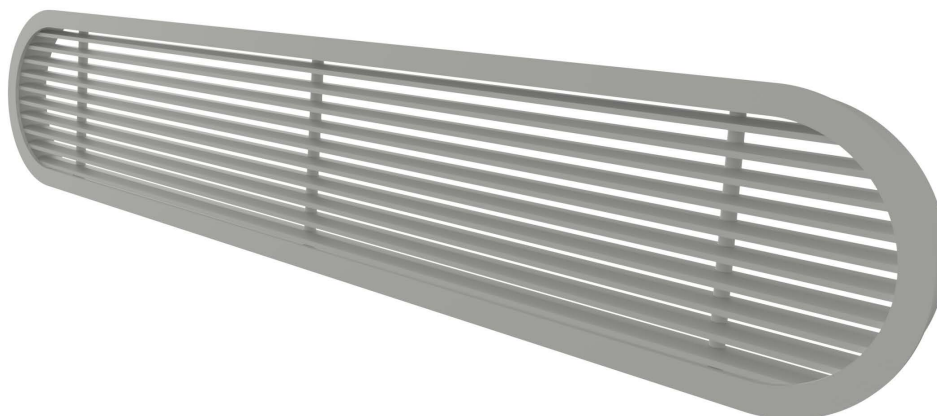
### *Curved Grilles*



### *Mitred Grilles*



### *Oval Grilles*



## Selection Tables For 3mm NB Blade Common Sizes

Throw (m)	100mm High			130mm High			150mm High		
	<i>l/s/m</i>	<i>Pa</i>	<i>Noise</i>	<i>l/s/m</i>	<i>Pa</i>	<i>Noise</i>	<i>l/s/m</i>	<i>Pa</i>	<i>Noise</i>
1.6	40	3	<25	45	3	<25	48	3	<25
2.0	50	3	<25	54	3	<25	60	3	<25
2.5	63	4	<25	70	3	<25	80	4	<25
3.0	80	5	<25	88	4	<25	98	4	<25
3.5	100	9	<25	110	6	<25	125	5	<25
4.0	120	10	30	135	9	<25	150	8	<25
4.5	138	15	30	150	10	30	165	10	30

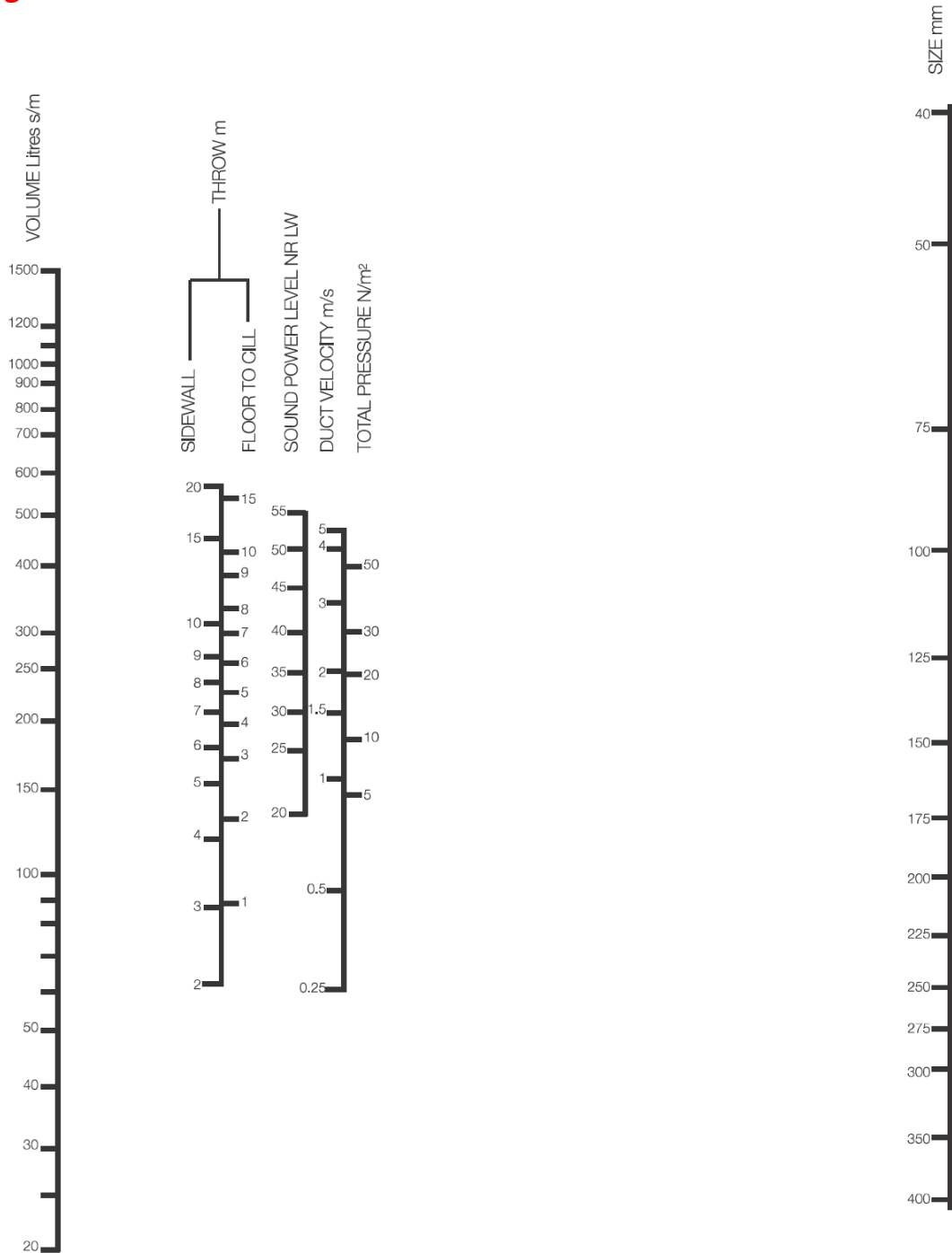
Throw (m)	175mm High			200mm High		
	<i>l/s/m</i>	<i>Pa</i>	<i>Noise</i>	<i>l/s/m</i>	<i>Pa</i>	<i>Noise</i>
1.6	50	3	<25	55	3	<25
2.0	65	3	<25	70	3	<25
2.5	80	3	<25	90	3	<25
3.0	100	4	<25	110	3	<25
3.5	135	5	<25	145	4	<25
4.0	155	6	<25	160	5	<25
4.5	180	9	<25	190	7	<25

## Selection Tables For 6mm WB Blade Common Sizes

Throw (m)	100mm High			130mm High			150mm High		
	V/s/m	Pa	Noise	V/s/m	Pa	Noise	V/s/m	Pa	Noise
2.0	40	3	<25	45	3	<25	50	3	<25
2.5	50	3	<25	58	3	<25	60	3	<25
3.0	63	3	<25	70	3	<25	72	3	<25
3.5	75	4	<25	88	3	<25	90	3	<25
4.0	90	5	<25	100	4	<25	110	4	<25
4.5	105	8	<25	125	6	<25	135	5	<25
5.0	125	10	25	145	7	<25	150	7	<25

Throw (m)	175mm High			200mm High		
	V/s/m	Pa	Noise	V/s/m	Pa	Noise
2.0	51	3	<25	58	3	<25
2.5	68	3	<25	70	3	<25
3.0	80	3	<25	83	3	<25
3.5	98	3	<25	105	3	<25
4.0	120	4	<25	130	3	<25
4.5	145	5	<25	150	3	<25
5.0	160	6	25	170	5	<25

## Selection Nomogram



Values shown are for Model WB. For NB apply correction factors as shown below.

NB Correction Factors		
Throw	Sound Power	Total Pressure
x 0.8	- 2db	x 0.8

All values include for fitted opposed blade dampers.  
 Throw based on 10° cooling to terminal velocity of 0.25m/s.  
 Side wall throw assumes flat ceiling not more than 0.5m above grille centre line.

Issue date : 12/5/26