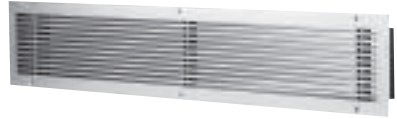


Heavy Duty Linear Bar Grilles

Description

For supply or extract air, having single set of fixed blades available in economy or heavy duty bars. Its robust construction makes it ideal for commercial or industrial use in areas of possible impact such as schools or gyms. Suitable for wall or ceiling mounting.



Construction

From extruded aluminium sections, frame 1.6mm thick, blades 6mm thick for the S79, and 6mm thick tapering to 2.5mm for the S78, all at 12.5mm centres. Hairline mitres mechanically held. Optional OBD is of extruded aluminium.

Size and Weight

Height from 100mm to 600mm (see office for greater than 600mm) in 25mm increments. Widths or lengths from 300mm to 3000mm in a single unit. Longer lengths can be supplied as multiple units.

Grille only 27.5kg/m², Grille and OBD 35.0kg/m². Free area approximately 55%.

How to Specify

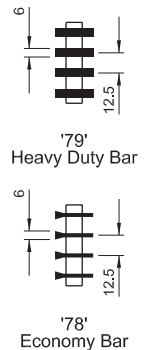
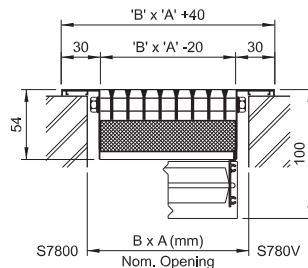
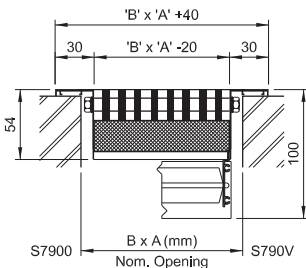
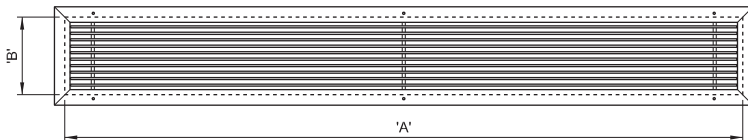
STATE QUANTITY, THE PRODUCT CODING AND THE SIZE WIDTH X HEIGHT

e.g. 10 Qty. S7900+8C 800 x 400.

Frame Style	Core	Options	Accessories
S 30mm Flange	79 0° Bars Heavy Duty	0 Fixed Core	0 None
	78 0° Bars Economy		V Damper

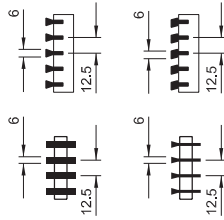
+

Fixings	Finish
1 Flange Holes	A Satin Anodised
2 Neck Fixings	C PPC BS /RAL Colour
8 Concealed Rear Bracket	D Mill Finish

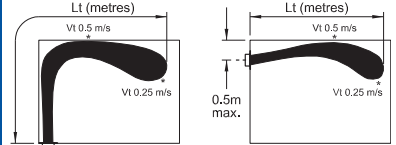


Technical Data Heavy Duty Linear Bar & Floor Grilles

S7200 **V7900**
S7300 **V7800**
S7C00 **F7900**
S7D00 **F7800**
S7800
S7900



qm (l/s) (1000mm)	Nominal Duct H.	Psn (Pa) (Pascals)	Vf (m/s)	Lt (metres)	NC
40	50	3	1.25	1.1 - 2.1	-
50	50	4	1.50	1.7 - 3.1	15
60	50	8	2.00	2.3 - 4.3	15
75	50 75	12 4	2.50 1.40	2.9 - 5.2 2.5 - 4.0	23 -
90	50 75 100	15 5 2	3.00 1.65 1.15	3.3 - 6.0 2.7 - 4.6 2.1 - 3.7	25 18 14
110	50 75 100	20 8 4	3.50 2.00 1.35	4.0 - 6.9 3.2 - 5.6 2.6 - 4.6	27 19 15
125	50 75 100	20 8 4	3.50 2.00 1.35	4.0 - 6.9 3.2 - 5.6 2.6 - 4.6	27 19 15
140	75 100 125	12 6 4	2.50 1.75 1.30	3.6 - 7.1 3.1 - 5.8 2.7 - 4.8	25 20 16
160	75 100 125	14 6 4	2.80 1.90 1.50	4.7 - 8.0 3.6 - 6.6 3.1 - 5.6	28 22 19
190	75 100 125 150	20 10 6 4	3.50 2.40 1.80 1.50	5.5 - 8.6 4.5 - 7.5 3.6 - 6.5 3.4 - 5.7	31 24 21 15
230	75 100 125 150	28 15 9 6	4.20 3.00 2.20 1.80	6.7 - 11.0 5.9 - 9.2 5.4 - 7.8 4.8 - 7.0	35 26 23 17
270	100 125 150 200	20 12 8 4	3.35 2.50 2.00 1.50	6.8 - 10.0 6.3 - 8.8 5.6 - 8.1 4.8 - 7.2	28 25 20 14
310	100 125 150 200	22 15 10 5	3.80 3.00 2.35 1.70	8.2 - 13.0 6.8 - 12.0 6.1 - 10.2 5.3 - 9.1	32 28 24 18
350	125 150 200 250	19 13 6 4	3.30 2.65 1.90 1.50	7.3 - 11.2 6.4 - 10.3 5.7 - 9.1 4.2 - 7.8	32 27 21 18
390	125 150 200 250	22 15 8 5	3.65 2.95 2.10 1.65	7.9 - 11.5 7.5 - 10.8 6.5 - 10.2 5.9 - 9.0	37 29 25 21
430	150 200 250 300	19 10 6 4	3.25 2.35 1.85 1.50	8.0 - 11.2 7.3 - 11.0 6.2 - 9.8 5.7 - 8.6	33 28 25 19
470	150 200 250 300	20 12 8 5	3.50 2.50 2.00 1.65	9.2 - 12.0 8.0 - 11.2 7.1 - 10.3 6.3 - 9.1	38 33 28 21
540	200 250 300	15 10 6	3.00 2.30 1.90	9.5 - 14.5 8.7 - 12.5 7.3 - 11.2	38 32 24



Grille Length (metres)	Multiply throw by the following factor	Adjust NC
0.9 - 1.5	1.00	0
1.6 - 2.5	1.10	+2
2.6 +	1.15	+5

Throw (Lt) and terminal velocity (Vt)

The throw distance given in the tables is based on a floor to ceiling height of 2.7 metres.

Selection Example

1) Size a F79CV+8A (heavy duty blades with recessed frame and damper) mounted in a raised floor adjacent to glazing to supply 0.855 M³/s giving a throw of 8.5 metres and a noise level less than NC 30. Room width is 6 metres.

2) Linear supply products should finish 10 - 20 % short of the room width to avoid excessive turbulence where the floor meets the wall, therefore in this case, an effective length would be 4.5 metres. The data in the tables is per linear metre:

0.855 M³/s / 4.5m (grille length) = 0.19 M³/s per metre.

3) Enter tables at nearest volume i.e. 0.19 and you will find that at 100mm width the corresponding throw is 7.5 metres long. As the grille length is more than 2.6 metres, multiply throw by correction factor 1.15 and add 5Nc (see table above).

7.5M x 1.15 = 8.6 29Nc.