

Linear Bar Grille

General Information:

All grilles, both with and without frames, can be manufactured with a hingeable access panel at one or both ends of the grille. The standard length of each panel piece is 150mm, although this length can be varied upon request.

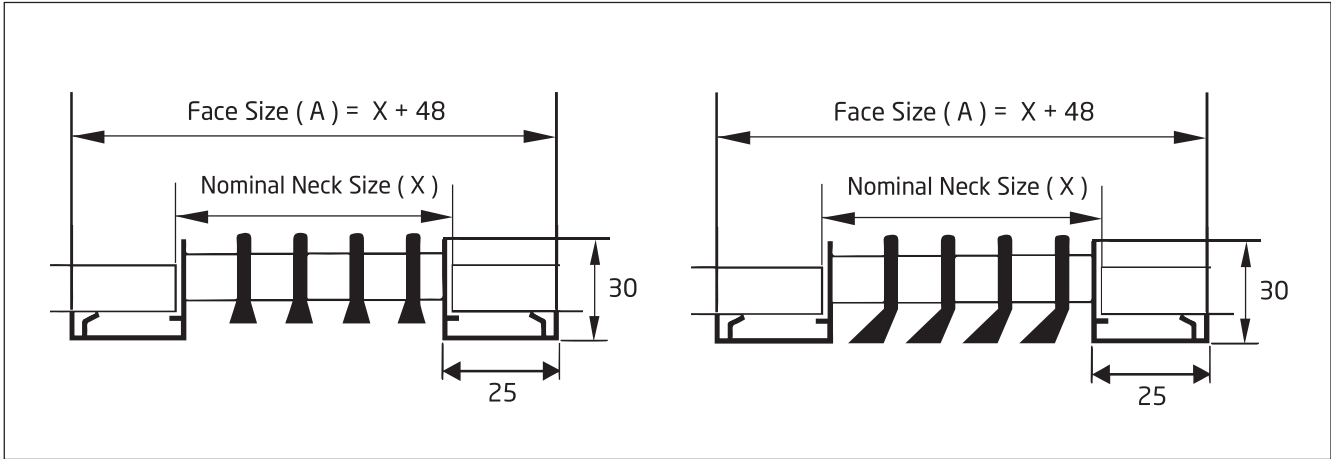
Due to the large amount of possibilities offered by this type of grille, it is recommended to consult in specific cases with special dimensions.

This range of grille has the necessary characteristics for its integration in contemporary architecture and interior design. They can be installed in ceilings, walls, consoles, fan-coils, induction units, both for supply and return air application and, properly reinforced, in floors.

The maximum recommended length is 2m in one piece, although 2 or more modules can be combined to give appearance of continuity.

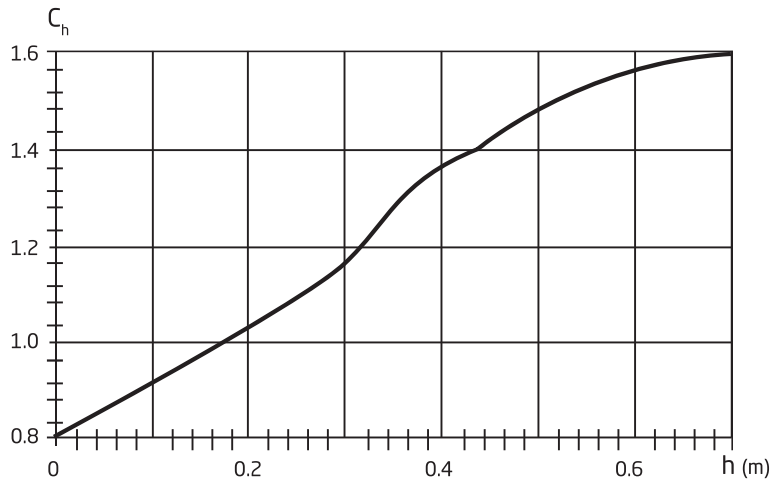
Features:

- Made of extruded aluminium
- Fixed blades at 0 degree, 15 degree, 30 degree
- Rigid, heavy gauge extruded frames with reinforced mitered and welded corners
- Standard finish white, other finishes are available
- Surface mounting or concealed mounting
- Size manufactured on request
- Construction is of a fixed core, while a hinged core option is available



General notes on the quick selection table:

Apart from the before-mentioned factor C_s (for grilles mounted in sill or floor), another correction factor exists for the distance of the grille to the ceiling, when mounted in a wall. For a free jet this factor C_h will be 1.6.



Corrected throw = Throw

C_h , with h in the graph the distance between grille and ceiling.

$$X_c = X * C_h$$

Quick Selection Table

Symbols:

A_k - Effective area

V_k - Effective velocity in m/s

X - Throw in metres correspond to a terminal velocity in occupied zone of 0.25m/s

Pressure (P_t) - All pressures are in Pa (N/m^2)

NR - Noise level index in dB based on a room absorption and one diffuser

Flow rate		L	1000	1000	1000	1000	1000	1000	1000	1000
		H	50	75	100	125	150	200	250	300
(m³/h)	(l/s)	A _k	0.024	0.0370	0.0500	0.0630	0.0820	0.1080	0.1400	0.1720
100	27.8	V _i	1.2	0.8	0.6					
		X	2.3	1.9	1.6					
		P _i	0.8	0.3	0.2					
		NR	-	-	-					
120	33.3	V _i	1.4	0.9	0.7					
		X	2.8	2.2	1.9					
		P _i	1.1	0.5	0.3					
		NR	-	-	-					
140	38.9	V _i	1.6	1.1	0.8					
		X	3.2	2.6	2.2					
		P _i	1.5	0.6	0.4					
		NR	-	-	-					
160	44.4	V _i	1.9	1.2	0.9					
		X	3.7	3.0	2.6					
		P _i	2.0	0.8	0.5					
		NR	-	-	-					
180	50.0	V _i	2.1	1.4	1.0	0.8				
		X	4.1	3.3	2.9	2.6				
		P _i	2.5	1.1	0.6	0.4				
		NR	8	-	-	-				
200	55.6	V _i	2.3	1.5	1.1	0.9				
		X	4.6	3.7	3.2	2.8				
		P _i	3.1	1.3	0.7	0.5				
		NR	10	-	-	-				
250	69.4	V _i	2.9	1.9	1.4	1.1	0.8			
		X	5.8	4.6	4.0	3.6	3.1			
		P _i	4.9	2.0	1.1	0.7	0.4			
		NR	16	7	-	-	-			
300	83.3	V _i	3.5	2.3	1.7	1.3	1.0	0.8	0.6	
		X	6.9	5.6	4.8	4.3	3.7	3.3	2.9	
		P _i	7.0	2.9	1.6	1.0	0.6	0.3	0.2	
		NR	21	11	-	-	-	-	-	-
350	97.2	V _i	4.1	2.6	1.9	1.5	1.2	0.9	0.7	0.6
		X	8.1	6.5	5.6	5.0	4.4	3.8	3.3	3.0
		P _i	9.5	4.0	2.2	1.4	0.8	0.5	0.3	0.2
		NR	25	15	9	-	-	-	-	-
400	111.1	V _i	4.6	3.0	2.2	1.8	1.4	1.0	0.8	0.6
		X	9.2	7.4	6.4	5.7	5.0	4.3	3.8	3.4
		P _i	12.4	5.2	2.9	1.8	1.1	0.6	0.4	0.2
		NR	28	19	12	8	-	-	-	-
450	125.0	V _i	5.2	3.4	2.5	2.0	1.5	1.2	0.9	0.7
		X	10.4	8.3	7.2	6.4	5.6	4.9	4.3	3.9
		P _i	15.7	6.6	3.6	2.3	1.3	0.8	0.5	0.3
		NR	31	22	15	11	5	-	-	-
500	138.9	V _i	5.8	3.8	2.8	2.2	1.7	1.3	1.0	0.8
		X	11.5	9.3	8.0	7.1	6.2	5.4	4.8	4.3
		P _i	19.4	8.2	4.5	2.8	1.7	1.0	0.6	0.4
		NR	34	25	18	13	8	-	-	-
600	166.7	V _i	6.9	4.5	3.3	2.6	2.0	1.5	1.2	1.0
		X	13.8	11.1	9.6	8.5	7.5	6.5	5.7	5.2
		P _i	28.0	11.8	6.4	4.1	2.4	1.4	0.8	0.5
		NR	38	29	23	18	12	6	-	-
700	194.4	V _i	8.1	5.3	3.9	3.1	2.4	1.8	1.4	1.1
		X	16.1	13.0	11.2	9.9	8.7	7.6	6.7	6.0
		P _i	38.1	16.0	8.8	5.5	3.3	1.9	1.1	0.7
		NR	42	33	27	22	16	10	5	-
800	222.2	V _i	9.3	6.0	4.4	3.5	2.7	2.1	1.6	1.3
		X	18.4	14.8	12.8	11.4	10.0	8.7	7.6	6.9
		P _i	49.7	20.9	11.5	7.2	4.3	2.5	1.5	1.0
		NR	46	37	30	25	20	14	8	-
900	250.0	V _i		6.8	5.0	4.0	3.0	2.3	1.8	1.5
		X		16.7	14.4	12.8	11.2	9.8	8.6	7.7
		P _i		26.5	14.5	9.1	5.4	3.1	1.8	1.2
		NR		40	33	28	23	17	11	7
1000	277.8	V _i		7.5	5.6	4.4	3.4	2.6	2.0	1.6
		X		18.5	15.9	14.2	12.5	10.9	9.5	8.6
		P _i		32.7	17.9	11.3	6.7	3.8	2.3	1.5
		NR		42	36	31	25	20	14	10
1200	333.3	V _i			6.7	5.3	4.1	3.1	2.4	1.9
		X			19.1	17.1	14.9	13.0	11.4	10.3
		P _i			25.8	16.2	9.6	5.5	3.3	2.2
		NR			41	36	30	24	19	14
1400	388.9	V _i				6.2	4.7	3.6	2.8	2.3
		X				19.9	17.4	15.2	13.3	12.0
		P _i				22.1	13.0	7.5	4.5	3.0
		NR				40	34	28	23	18