

AIRFOIL



GRILLES
DUCT
FITTINGS

making it happen sooner...



FLOOR GRILLES (BGF)

The Floor Grille is used for supply and return air functions when mounted on the floor. Airfoil's Floor Grille is manufactured out of high-grade aluminium and is rated up to 120kg. The blades are held in position by a 20mmx12mmx3mm welded angle and are reinforced by intersecting security rods bolted to the frame. A filter can be added when used for a return air function to keep the air distribution system clean.

Available in a powder coat finish in any Dulux colour or natural anodised, the Airfoil Floor Grille gives an exceptional contemporary look in conjunction with exceptional strength.

Floor Grille Options

- > *Blade type 0 degree and 15 degree blow deflections*
- > *Optional filter attachment*
- > *Natural anodised or specific Dulux powdercoat colours and finishes available on request*
- > *Custom made to any size dimensions*

Product specification codes:

- BGF00** Floor grille with 0° kick blades.
- BGF15** Floor grille with 15° kick blades.
- BGF00/F** Floor grille with 0° kick blades with filter.
- BGF15/F** Floor grille with 15° kick blades with filter.

Specification: Product code + size.

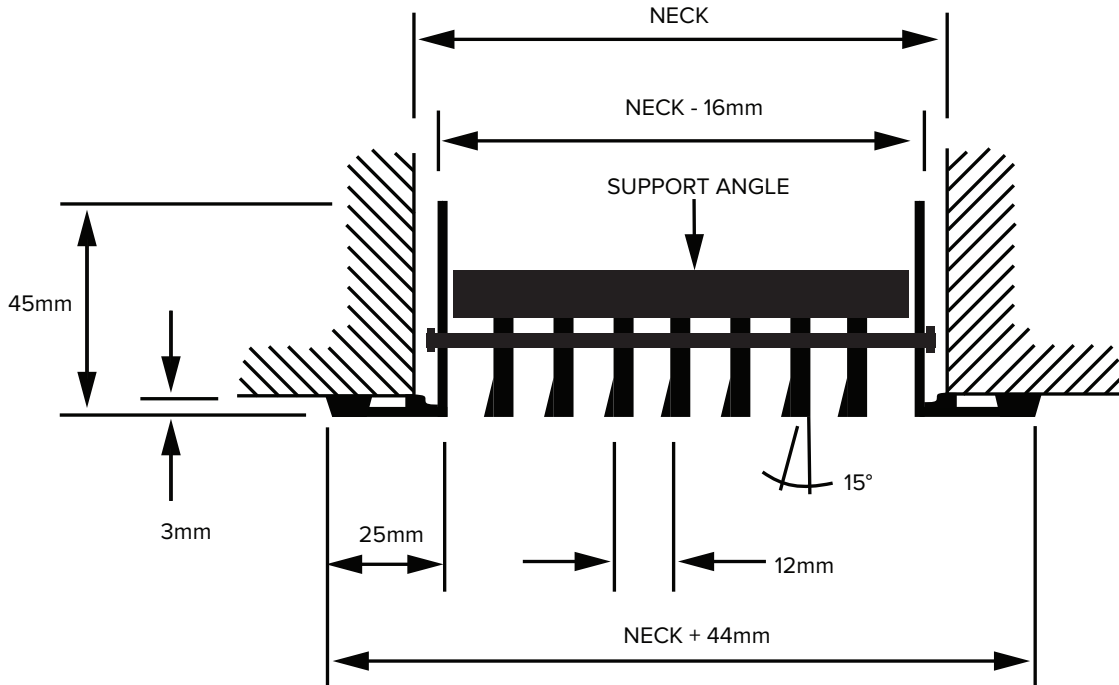
Example: **BGF15 400x200** Floor grille with 15° kick blades 400mm x 200mm

Important Note: Dimensions will be assumed nominal neck size unless otherwise specified.



FLOOR GRILLE 15°

Cross sectional diagram



Performance Data

Neck Size	Total Pressure (pa)	3	5	9	14	20	27	36	45
50mm	Lit/sec/metre	34	52	69	86	100	130	150	170
	Throw min/max (m)	1.2-2.4	2.1-4.3	3-5.8	3.9-7.2	4.8-8.4	5.4-9.1	6.3-9.8	6.6-10.8
	NR	-	14	22	28	33	38	42	46
75mm	Lit/sec/metre	57	86	110	140	170	200	230	250
	Throw min/max (m)	1.8-3.1	3.0-5.0	4.5-6.5	5.4-7.9	6.6-9.4	8.1-10.8	9.0-12	10.5-13.4
	NR	-	-	20	26	31	36	40	44
100mm	Lit/sec/metre	86	120	160	200	240	280	320	360
	Throw min/max (m)	2.7-3.8	3.9-5.8	5.7-7.7	6.6-8.6	8.4-10.6	9.9-12.0	10.5-13.4	11.7-14.4
	NR	-	13	21	27	32	37	41	45
150mm	Lit/sec/metre	130	200	260	330	400	460	520	600
	Throw min/max (m)	4.3-5.2	6.4-7.3	7.8-8.8	9.8-10.2	11.4-11.8	12.2-13.2	13.2-14.3	15.2-15.7
	NR	-	13	21	27	32	37	41	45

Sound values are based on a room absorption of 8 dB, re 10^{-12} watts for an active length of 3.0 metres.
 Throw distances indicated are terminal velocities of 0.75 and 0.25 metres per second for an active length of 3 metres. The following corrections for length should be made.

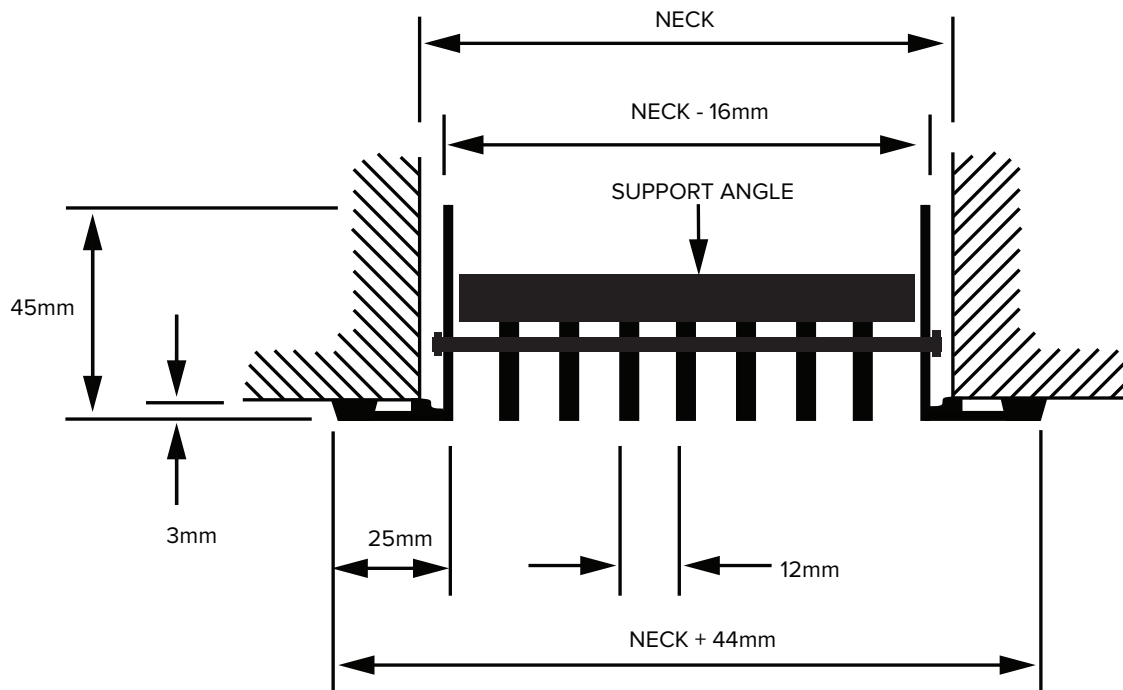
Active length in metres	0.3	0.6	1.2	2	3	4	6
NR	subtract 9	subtract 7	subtract 4	subtract 1	table value	add 1	add 3
Throw at term vel. .075	multiply throw by 0.3		multiply throw by 0.7		table values		
Throw at term vel. .025	multiply throw by 0.6		multiply throw by 0.8		table values		

When used as a RETURN GRILLE the following corrections should be made.

- NR value increases by 4.
- Negative Static Pressure = Total Pressure (shown in the table) x 0.8

FLOOR GRILLE 0°

Cross sectional diagram



Performance Data

Neck Size	Total Pressure (pa)	3	5	9	14	20	27	36	45
50mm	Lit/sec/metre	34	51	68	85	100	110	130	150
	Throw min/max (m)	1.2-2.4	2.1-4.3	3-5.8	3.9-7.2	4.8-8.4	5.7-9.4	6.3-10.1	6.6-10.8
	NR	-	14	15	21	26	30	34	37
75mm	Lit/sec/metre	58	89	110	140	170	200	230	270
	Throw min/max (m)	2.1-3.6	3.0-5.0	4.5-6.7	5.4-8.4	6.6-9.4	8.1-10.8	9.0-12.2	10.5-13.7
	NR	-	-	14	20	25	29	33	36
100mm	Lit/sec/metre	86	120	170	210	250	300	340	380
	Throw min/max (m)	2.7-3.8	4.5-6.0	5.7-7.7	7.2-9.1	9.0-10.8	9.9-12.2	10.8-13.4	12.6-15.4
	NR	-	-	15	21	26	30	34	37
150mm	Lit/sec/metre	130	210	270	340	410	480	550	620
	Throw min/max (m)	4.3-5.5	6.4-7.3	7.8-8.8	9.8-10.6	11.7-12.5	13.6-14.3	14.7-15	16.6-16.8
	NR	-	-	21	22	27	31	35	38

Sound values are based on a room absorption of 8 dB, re 10^{-12} watts for an active length of 3.0 metres. Throw distances indicated are terminal velocities of 0.75 and 0.25 metres per second for an active length of 3 metres. The following corrections for length should be made.

Active length in metres	0.3	0.6	1.2	2	3	4	6
NR	subtract 9	subtract 7	subtract 4	subtract 1	table value	add 1	add 3
Throw at term vel. .075	multiply throw by 0.3		multiply throw by 0.7		table values		
Throw at term vel. .025	multiply throw by 0.6		multiply throw by 0.8		table values		

When used as a RETURN GRILLE the following corrections should be made.

1. NR value increases by 4.
2. Negative Static Pressure = Total Pressure (shown in the table) x 0.8