

AIRFOIL



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REVERSE FLANGE BAR GRILLES (FLANGELESS) (RFBG)

With its elegant design and robust construction, Airfoil's flangeless Bar Grille will look beautiful and perform brilliantly when mounted in a side wall for both supply and return air functions. Made from solid 3mm extruded aluminium, the reverse flange (flangeless) bar grille sits flush with the wall. Perfect for high-end domestic or commercial applications such as apartments, hotel lobbies or shopping centres.

Reverse Flange Bar Grille Options

- *Blade type 0 degree and 15 degree blow deflections*
- *Optional depth: 20mm deep*
- *Other size angles and spacings are available on request.*
- *Comes complete with end caps or straight cut, leaving a raw edge*
- *Optional: End angles are available on request*
- *Natural anodised or specific Dulux powdercoat colours and finishes available on request*

Product specification codes:

- RFG25/00** Flangeless bar grille 25mm deep with 0° kick blades.
- RFG25/15** Flangeless bar grille 25mm deep with 15° kick blades.
- RFG20/00** Flangeless bar grille 20mm deep with 0° kick blades.
- RFG20/15** Flangeless bar grille 20mm deep with 15° kick blades.

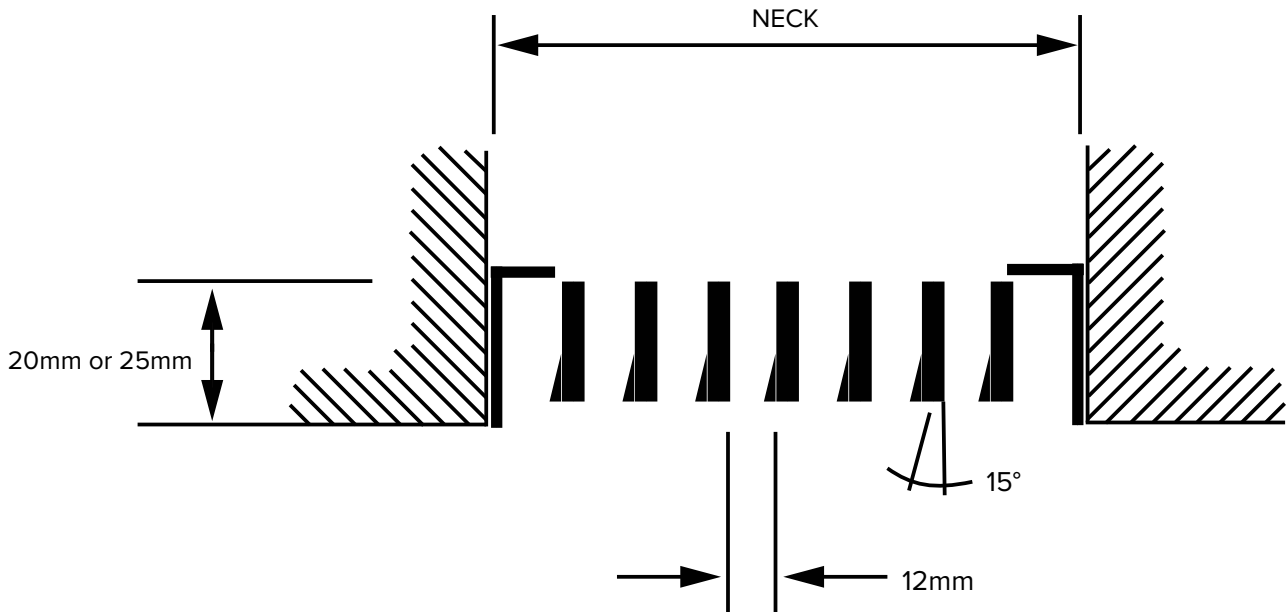
Specification: Product code + size.

Example: **RFG25/15 400x200** Reverse flange bar grille 25mm deep with 15° kick blades 400mm x 200mm



REVERSE FLANGE BAR 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.

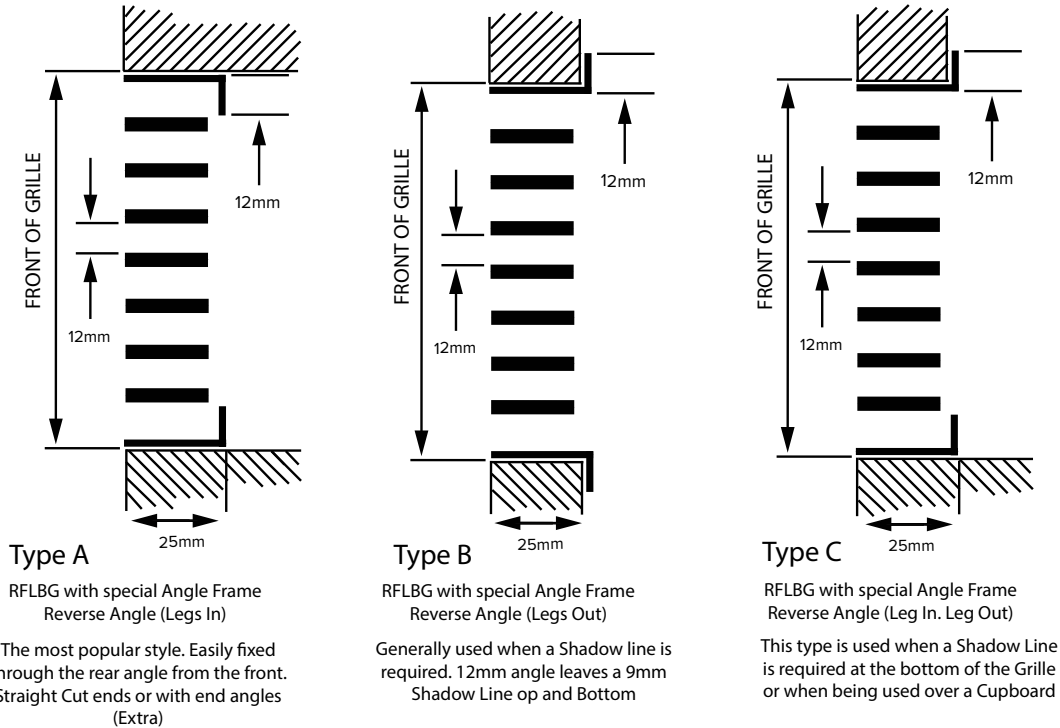
Active length in metres NR	0.3 subtract 9	0.6 subtract 7	1.2 subtract 4	2 subtract 1	3 table value	4 add 1	6 add 3
Throw at term vel. .075	multiply throw by 0.3		multiply throw by 0.7		table values		
Throw at term vel. .025	multiply throw by 0.6		multiply throw by 0.8		table values		

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

REVERSE FLANGE BAR 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