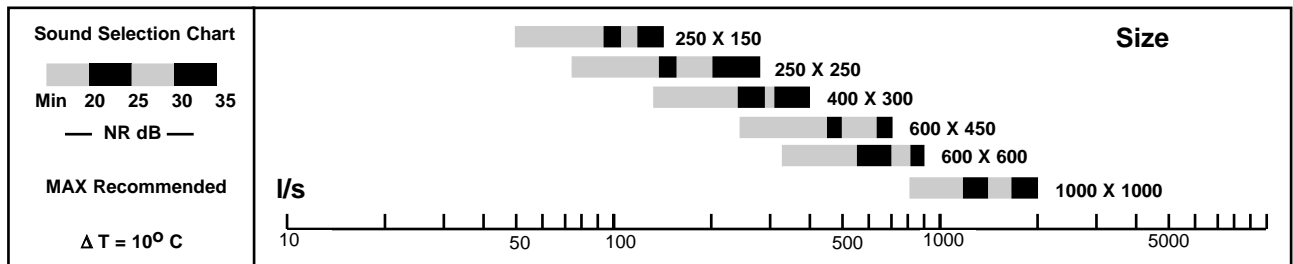




Selection Guide



Ordering procedure

Using the chart below select your requirement and substitute the underscored text below.

Type..X..Y (X & Y are the nominal neck sizes of the grille, see overleaf.)

Example: If your requirement is for a 18" x 24" (450 x 600) return air grille, the ordering code would be **ARG1824**. {When ordering it is not necessary to include the periods [..]} Special sizes are available upon request. Please contact your nearest Bradflo office.

Product Size Numbers											
		"Y" Size									
"Type"	"X" Size	14 (350)	16 (400)	18 (450)	20 (500)	24 (600)	30 (750)	36 (900)			Colour
ARG	14 (350)										Powdercoate white
ARGF (with filter)	16 (400)										
	18 (450)										
	20 (500)										
	24 (600)										
Special sizes											Special colours

1.31

ARG

RETURN AIR GRILLE



Description

The 1.31 (ARG) grilles are designed for use in exhaust or return air situations, and may be mounted in a wall or ceiling.

This grille is an attractive, robust unit manufactured from aluminium extrusion and powder coated to provide a long lasting finish.

The core is removable as standard for "Y" sizes up to and including 1000mm.

Standard finish is white electrostatic powdercoat. There are also 15 other colours to choose from at no additional cost.

Contact your local Bradflo branch for any special requirement you may have.

Air Filtration

A filter is offered as a standard option in removable core grilles. This filter is easily removed for cleaning, easy access or replacement.

General Description

The filter media is manufactured in a synthetic non-woven material. It offers low air resistance, long life and satisfactory dust extraction efficiency with particular emphasis on the collection of fluff, linters and pollens.

Physical Properties of filter material

Temperature resistance: 120⁰ C constant.

Fire resistance: Manufactured in fire retardent resin system.

Performance

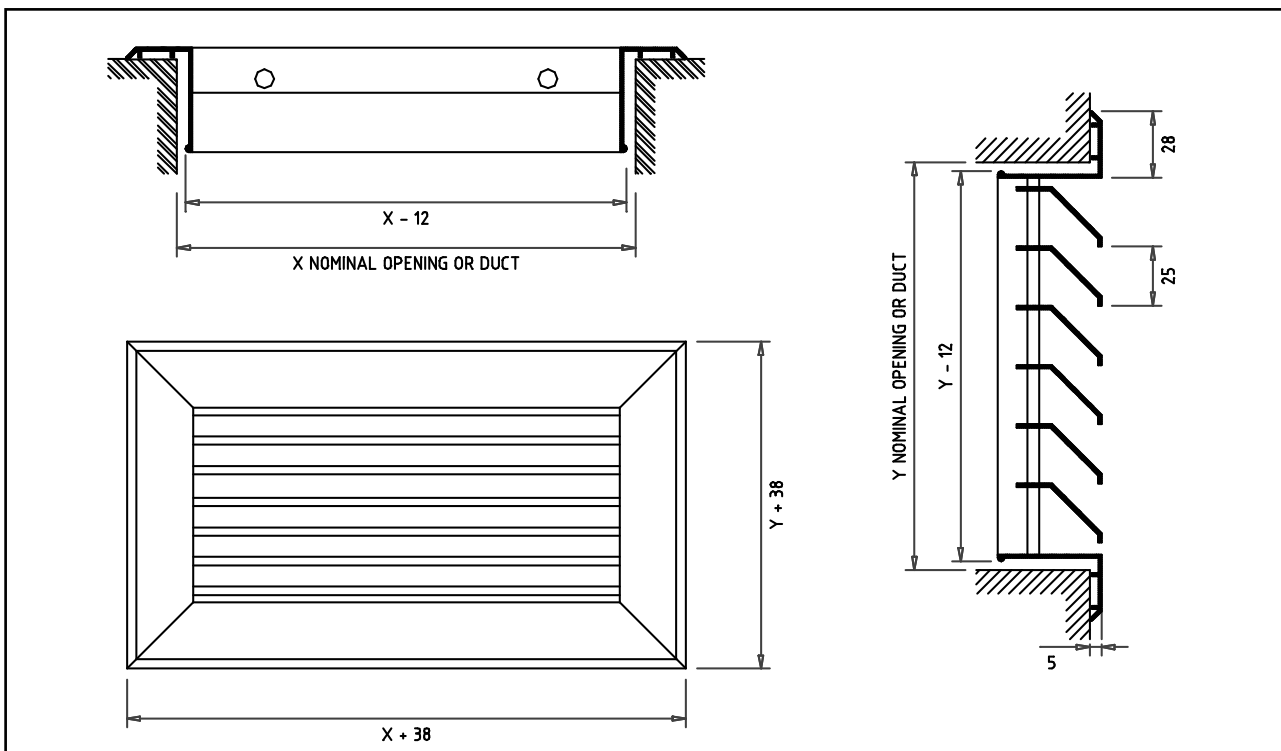
When tested to AS1132-1973 methods 2 and 4 the following results were obtained.

Initial resistance at 1.8 m/s was 27 Pa

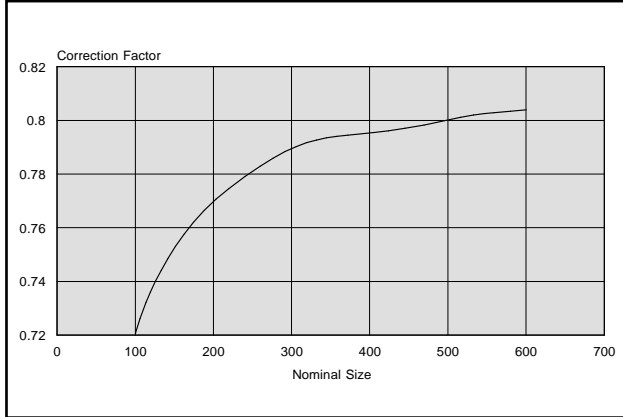
When loaded to a final resistance of 125 Pa the average resistance was found to be 53.7% and the dust holding capacity 290 g/m².

Note! AS1132 method 4 uses test dust #4.

Design dimensions



Free area correction factor



Free Area Factor

To calculate the free area, the grilles' nominal area is multiplied by f_1 , where f_1 is a correction factor and is determined from the graph.

Free Area of ARG Grille (m²)

Y/X	250	300	400	600	750	900	1000	1200
150	0.026	0.031	0.041	0.046	0.062	0.092	0.013	0.123
250	0.047	0.056	0.075	0.084	0.113	0.169	0.188	0.225
300	0.057	0.069	0.092	0.103	0.138	0.207	0.230	0.276
450	0.089	0.107	0.143	0.160	0.214	0.321	0.356	0.428
600	0.121	0.145	0.193	0.217	0.289	0.434	0.482	0.579
900	0.184	0.220	0.294	0.331	0.444	0.661	0.735	0.882
1000	0.205	0.246	0.327	0.368	0.491	0.737	0.819	0.982
1200	0.247	0.296	0.395	0.444	0.592	0.888	0.987	1.184

The graphs are for selection only and should not be used for commissioning.

Sound data

NR levels for the grille may be determined from the engineering graph.

Sound power level L_w

The generated sound power level L_w dB is calculated by adding the correction factor K_{Ok} (see table below) to the sound level NR dB according to the formula:

$$L_w = NR + K_{Ok}$$

Size	Frequency (cycles per second)						
	125	250	500	1000	2000	4000	8000
All	+5	+7	+4	-3	-8	-12	-15
Tol +/-	2	2	2	2	2	2	2

Correction factor K_{Ok}

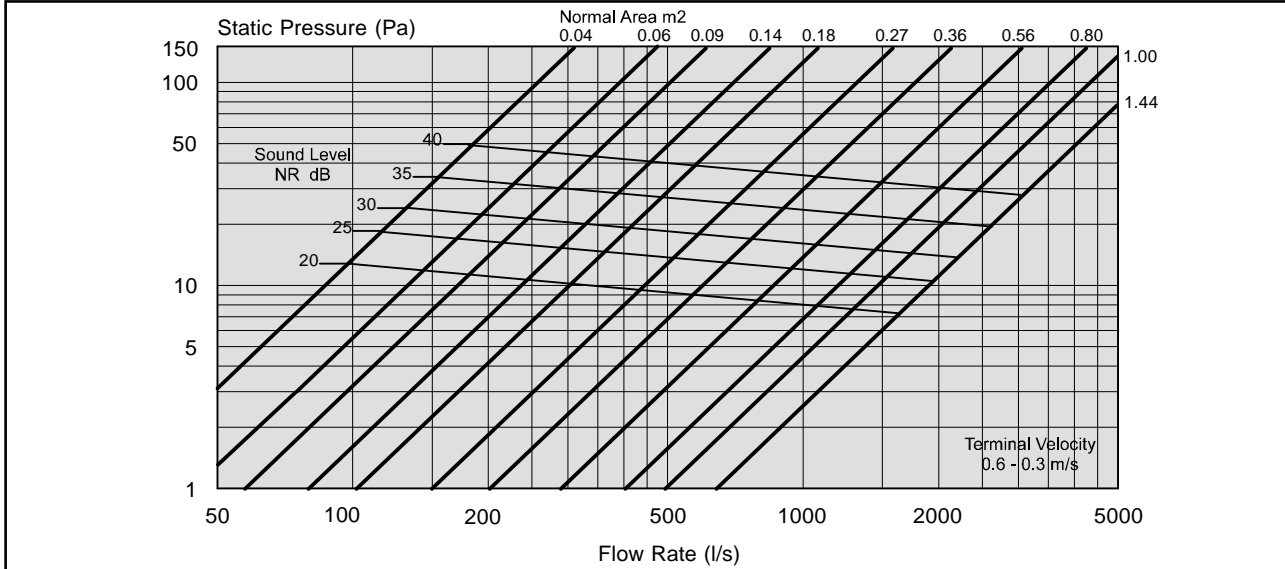
1.31

ARG

RETURN AIR GRILLE



Performance data



The graphs are for selection only and should not be used for commissioning.