

1. Grilles & Louvres

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1. Grilles & Louvres

1.1 Double Deflection Grille | AUR

Ordering procedure

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

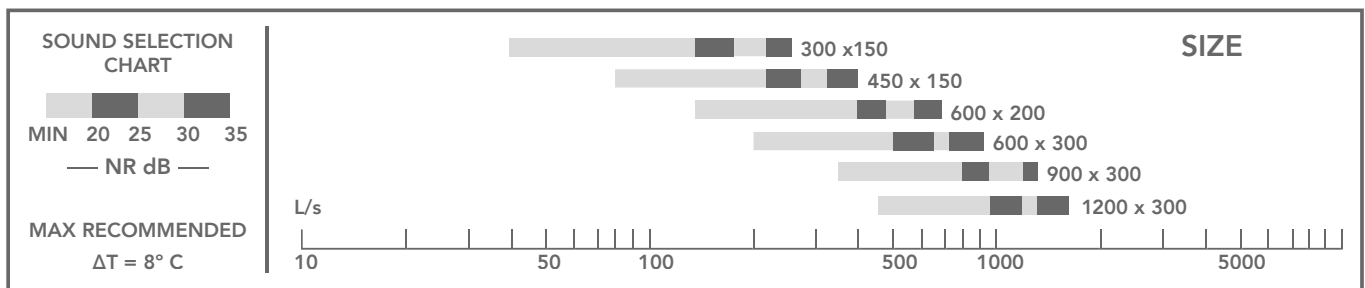
Type..X..Y (X & Y are the nominal neck sizes of the grille, see overleaf.)

Example: If your requirement is for a 12" x 12" (300mm x 300mm) grille with a removable core, the ordering code would be AURR1212 (When ordering it is not necessary to include the periods [..])

Specials: Curved face grilles (AURC) to suit round rigid ducting and other sizes are available upon request. Please contact your nearest branch.



Selection guide



Product size numbers

"Type"	"X" Size	"Y" SIZE										Colour
		04 (100)	06 (150)	08 (200)	10 (250)	12 (300)	14 (350)	16 (400)	18 (450)	20 (500)	24 (600)	
AUR (Fixed core)	10 (250)											Powdercoated white
AURR (Removeable core)	12 (300)											
	14 (350)											
	16 (400)											
	18 (450)											
	20 (500)											
	24 (600)											Special

1. Grilles & Louvres

1.1 Double Deflection Grille | AUR

Description

The 1.11 (AUR) grilles are designed for use in supply and return air applications.

Double deflection grilles have horizontal front blades and vertical rear blades.

The AURR type grille has a removable core for cleaning or installation.

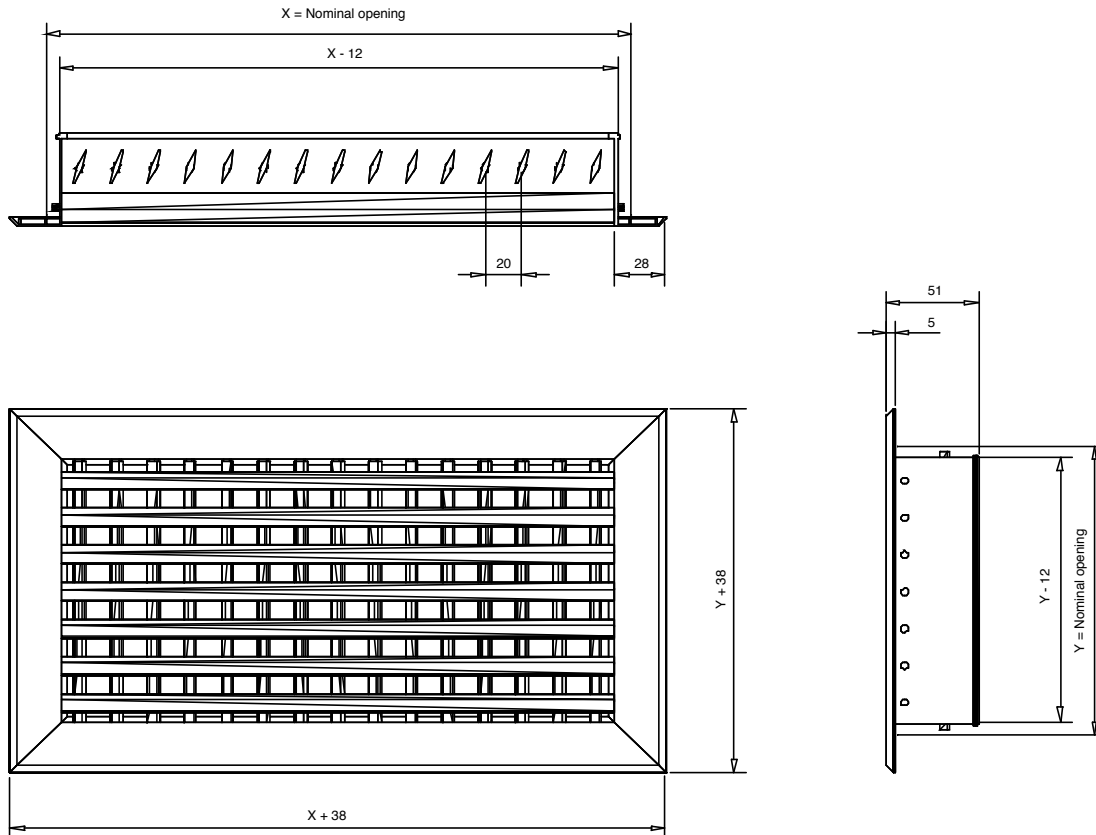
All grilles feature attractively designed extruded aluminium features. The blades are aerodynamically

designed to provide optimum air flow and low sound pressure level performance.

Standard finishes are natural anodised or powdercoat white. There are 15 other colours available at no additional cost. Please contact your nearest Bradflo branch for the selection range.

Other non-standard colours are available upon request.

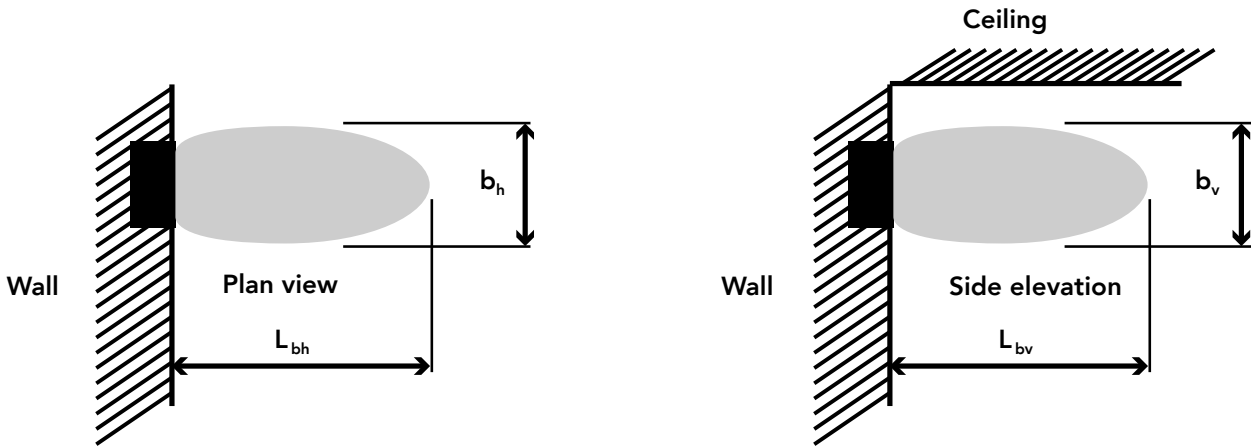
Design dimensions



1. Grilles & Louvres

1.1 Double Deflection Grille | AUR

Description



0° blowing

$$b_h = L0.3 \times 0.3$$

$$Lbh = L0.3 \times 0,5$$

45°blowing

$$b_h = L0.3 \times 1.5$$

$$L_{bh} = L0.3 \times 0,5$$

0° blowing

$$b_v = L0.3 \times 0.09$$

$$L_{bv} = L0.3 \times 0,5$$

0° blowing

$$b_v = L0.3 \times 0.06$$

$$L_{bv} = L0.3 \times 0,4$$

Free Area of AUR Grille (m2)

Y/X	300	400	450	500	600	750	900	1200
150	0.029	0.038	0.043	0.048	0.058	0.072	0.087	0.116
200	0.038	0.051	0.058	0.064	0.077	0.097	0.116	0.156
250	0.048	0.065	0.073	0.081	0.097	0.122	0.146	0.195
300	0.058	0.078	0.088	0.097	0.117	0.147	0.176	0.235
400	0.078	0.104	0.117	0.130	0.157	0.196	0.236	0.314

Free Area Factor

To calculate the free area, the grille's nominal area is multiplied by f_1 , where f_1 is a correction factor and is determined by the graph. For single deflection the nominal size is the grille's "Y" dimension. For double deflection it is the grille's "X" dimension.

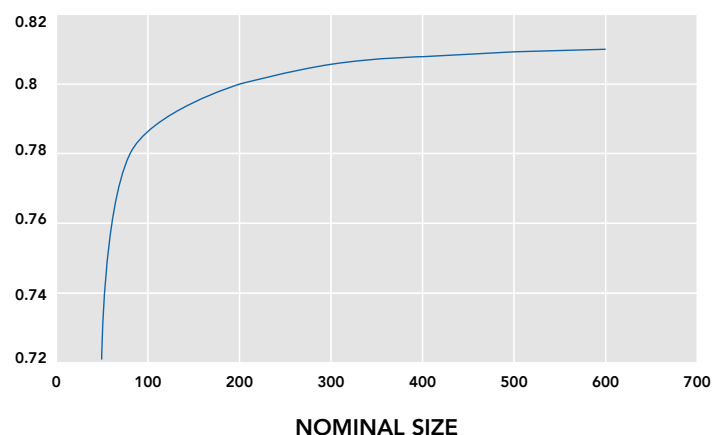
Free area for standard size double deflection grilles.

Example:

Size 300 x 150 single deflection.
From the graph, $f_1 = 0.79$ for the grille height of 150. The grille's free area is therefore: $300/1000 \times 150/1000 \times 0.79 = 0.0355\text{m}^2$.

For a double deflection include the factor f_1 for the grille length. The free area would therefore be: $300/1000 \times 150/1000 \times 0.79 \times 0.80 = 0.0284\text{m}^2$.

CORRECTION FACTOR



1. Grilles & Louvres

1.1 Double Deflection Grille | AUR

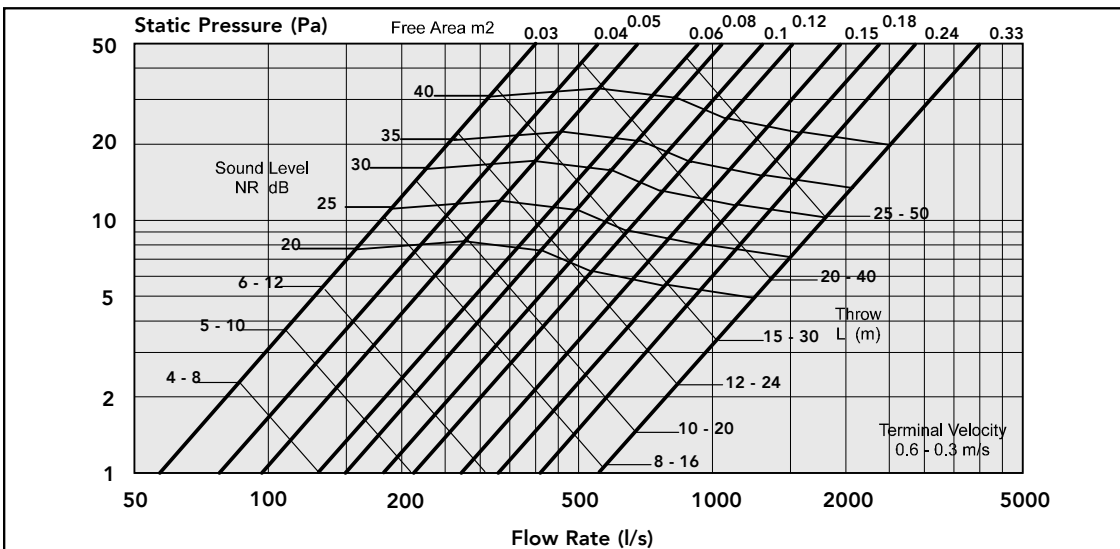
Engineering Graphs

Throws shown are to a terminal velocity of 0.60

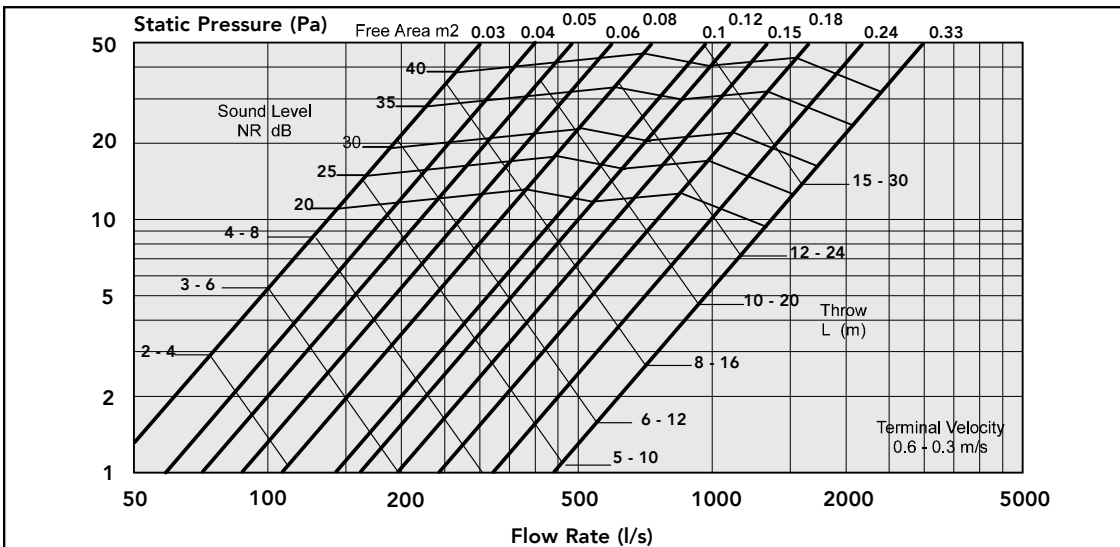
m/s and 0.30 m/s. Throw is given for equal slots in each direction.

Terminal velocity	Approximate air velocity in room
0.60 m/s	0.30 m/s
0.30 m/s	0.15 m/s

Performance data (0° deflection)



Performance data (22° deflection)



These graphs are for selection only and should not be used for commissioning

Bradflo reserves the right to make changes to product without prior notice

1. Grilles & Louvres

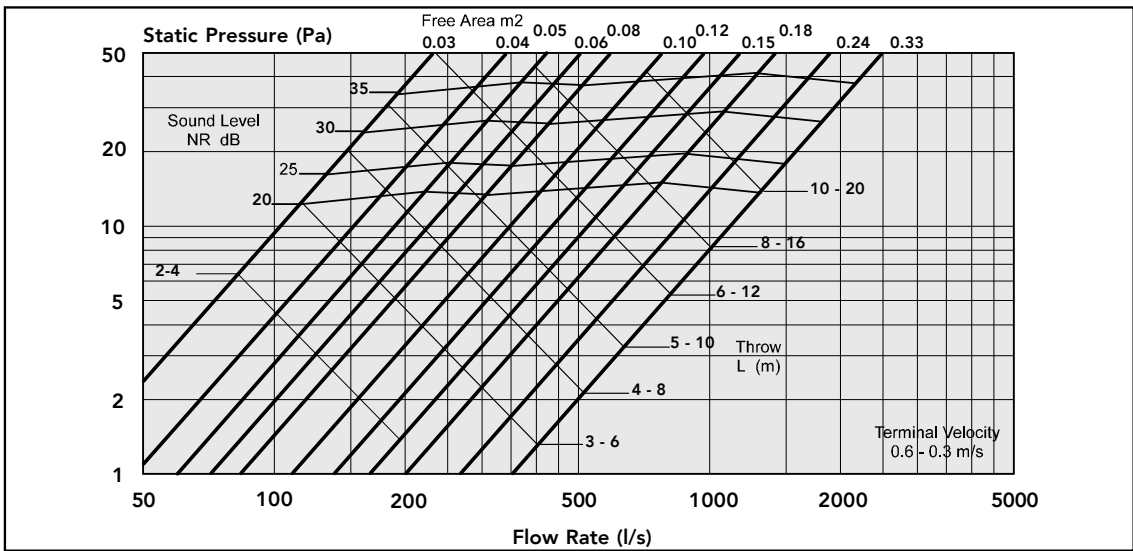
1.1 Double Deflection Grille | AUR

Engineering Graphs

Throws shown are to a terminal velocity of 0.60 m/s and 0.30 m/s. Throw is given for equal slots in each direction.

Terminal velocity	Approximate air velocity in room
0.60 m/s	0.30 m/s
0.30 m/s	0.15 m/s

Performance data (45° deflection)



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

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1. Grilles & Louvres

1.2 Slimline Wall Grille | ASG

Ordering procedure

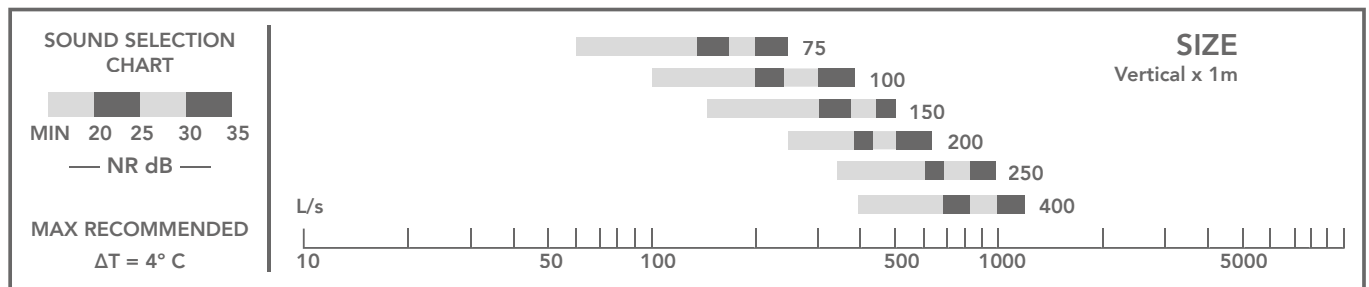
Using the chart below select your requirement and substitute the underscored text below.

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

Example: If your requirement is for a 12" x 8" (300mm x 200mm) standard 15° deflection grille, the ordering code would be **AAF1208**. (When ordering it is not necessary to include the periods [..])



Selection guide



Product size numbers

"Type"	"X" Size	"Y" SIZE										Colour
		04 (100)	06 (150)	08 (200)	10 (250)	12 (300)	14 (350)	16 (400)	18 (450)	20 (500)	24 (600)	
	10 (250)											Powdercoated white
	12 (300)											
AST (0° (extra slim blade)	14 (350)											
AAT (0° (15o extra slim blade)	16 (400)											
	18 (450)											
	20 (500)											
Special	24 (600)											Special

1. Grilles & Louvres

1.2 Slimline Wall Grille | ASG

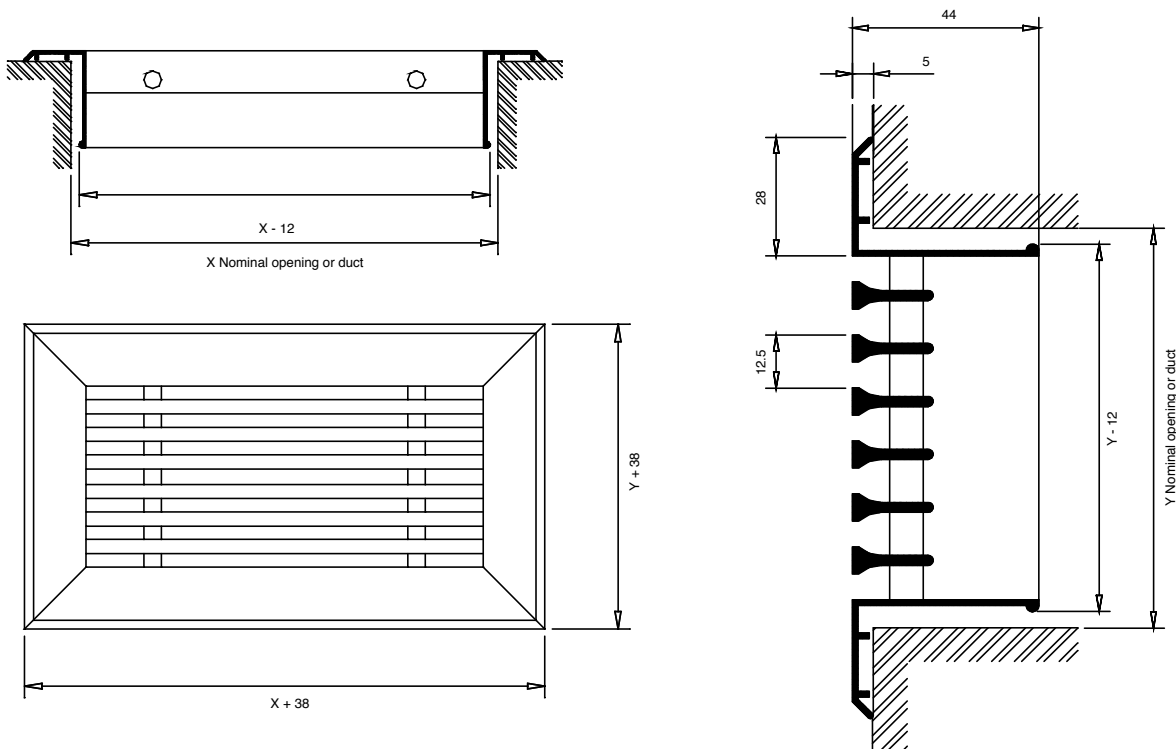
Description

Model 1.21 (ASG) grilles have been designed for use in supply, return or exhaust air applications. They are recommended for side wall, or sill mounting.

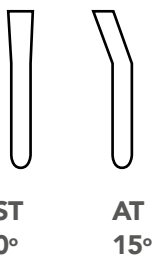
All grille core assemblies are mounted in a sturdy frame and can be either fixed core for security purposes or removable core for easy access. For Y sizes over 500mm and X sizes over 1200mm the core is fixed.

The grilles are manufactured from high quality aluminium extrusion with a choice of four blade styles with 0° or 15° air stream.

Standard finishes are natural anodised and white electrostatic powdercoat. There are also 15 other colours available at no additional cost. Contact your local Bradflo branch for any special requirement you may have.



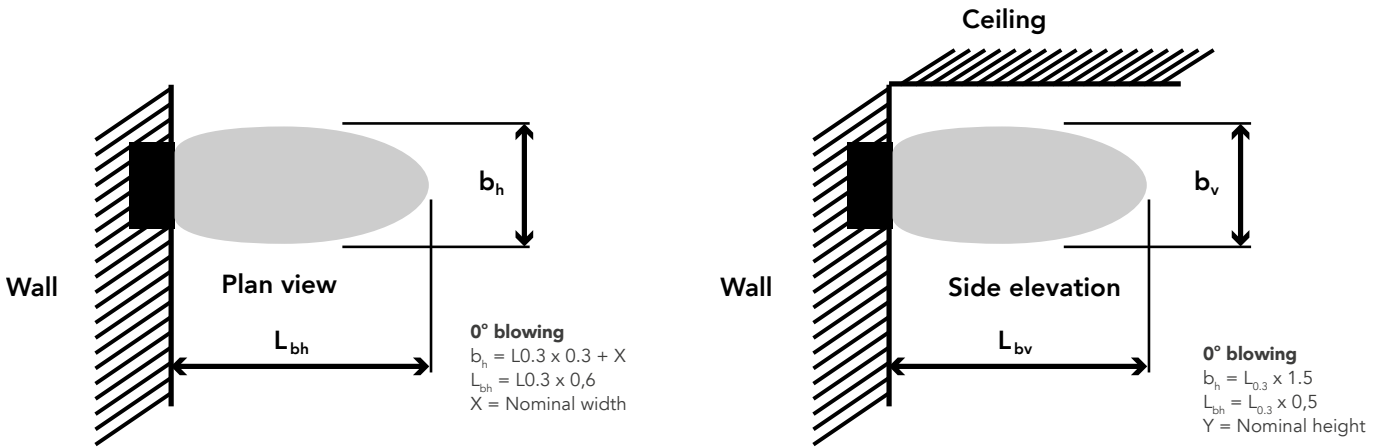
Blade profiles available



1. Grilles & Louvres

1.2 Slimline Wall Grille | ASG

Description



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) to the sound level NR dB according to the formula:

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

Correction table for grilles of length other than 1 metre.

Grille length (m)	0.5	1	1.5	2	3+
Add to NR value	-3	0	+2	+3	+5
Multiply throw by	0.8	1	1.2	1.35	1.5

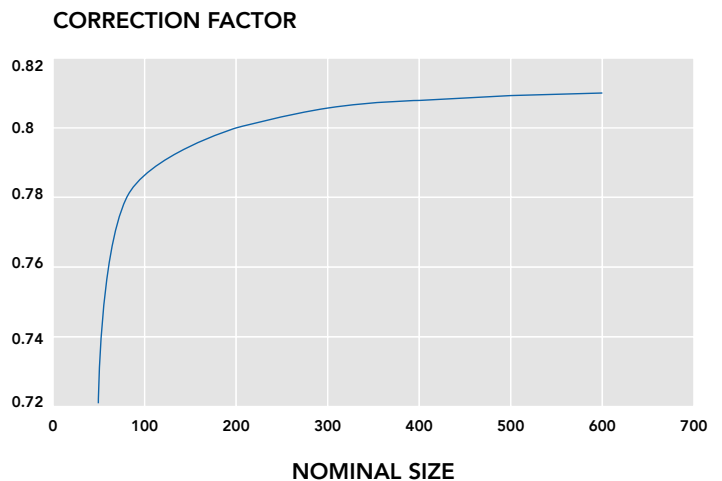
Correction table for grilles of length other than 1 metre.

Size	Frequency (cycles per second)						
	125	250	500	1000	2000	4000	8000
All	+6	+5	+3	-2	-8	-13	-15
Tol+/-	2	2	2	2	2	2	2

Correction factor k_{ok}

Free Area Factor

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



1. Grilles & Louvres

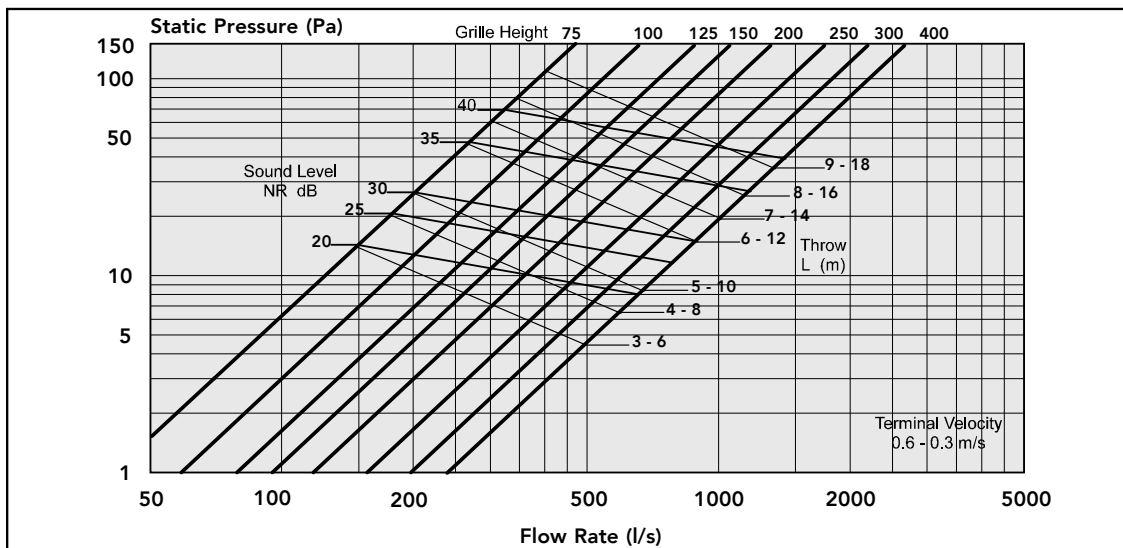
1.2 Slimline Wall Grille | ASG

Engineering Graphs

Throws shown are to a terminal velocity of 0.60 m/s and 0.30 m/s.
Throw is given for equal slots in each direction.

Terminal velocity	Approximate air velocity in room
0.60 m/s	0.30 m/s
0.30 m/s	0.15 m/s

ASF grille x 1000 mm long ("X" dim)



For return or exhaust air, the pressure drop and noise level may be calculated as follows.

Pressure drop

$$Pd_{ra} = P_d \times 1.2$$

Noise level

$$NR_{ra} = NR + 8$$

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

Bradflo reserves the right to make changes to product without prior notice

1. Grilles & Louvres

1.3 Slimline Floor Grille | ASGF

Ordering procedure

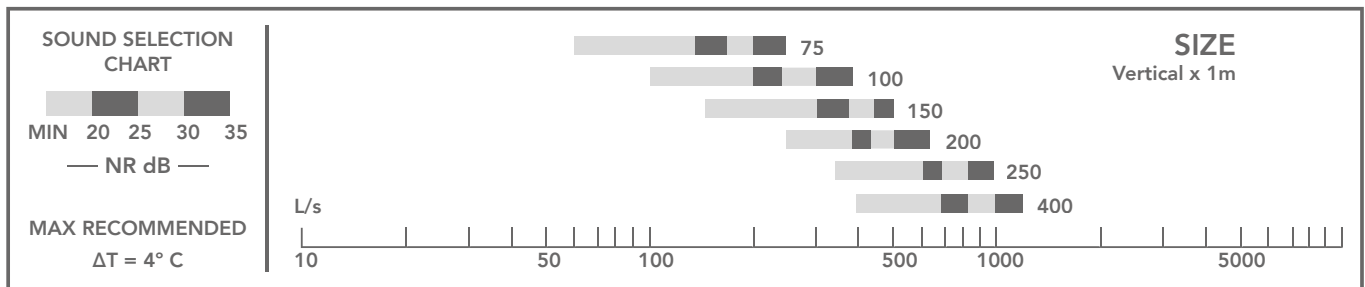
Using the chart below select your requirement and substitute the underscored text below.

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

Example: If your requirement is for a 12" x 8" (300mm x 200mm) standard 15° deflection grille, the ordering code would be **AAF1208**. (When ordering it is not necessary to include the periods [..])



Selection guide



Product size numbers

"Type"	"X" Size	"Y" SIZE										Colour
		04 (100)	06 (150)	08 (200)	10 (250)	12 (300)	14 (350)	16 (400)	18 (450)	20 (500)	24 (600)	
ASFF (0° deflection)	10 (250)											Powdercoated white
AAFF (15o deflection)	12 (300)											
ASTF (0o slim blade)	14 (350)											
AATF (15o slim blade)	16 (400)											
ASIF (0o deflection)	18 (450)											
AAIF (15o deflection)	20 (500)											
ASIF (0o slim blade)	24 (600)											Special
AAIF (15o slim blade)												

Special

1. Grilles & Louvres

1.3 Slimline Floor Grille | ASGF

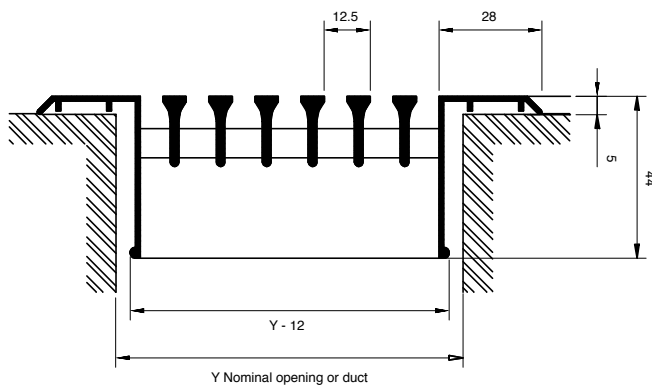
Description

Model 1.22 (ASGF) grilles have been designed for use in supply, return or exhaust air applications. They are recommended for floor mounting. (for wall mounting refer section 1.21 (ASG)).

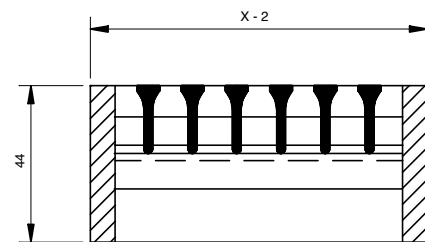
All grille core assemblies are mounted in a sturdy frame and can be either fixed core for security purposes or removable core for easy access.

For Y sizes over 500mm and X sizes over 1200mm the core is fixed. The grilles are manufactured from high quality aluminium extrusion with a choice of four blade styles with 0° or 15° air stream.

Standard finishes are natural anodised and white electrostatic powdercoat. There are also 15 other colours available at no additional cost. Contact your local Bradflo branch for any special requirement you may have.



Flanged frame



"I" frame

Blade profiles available



ST
0°



AT
15°

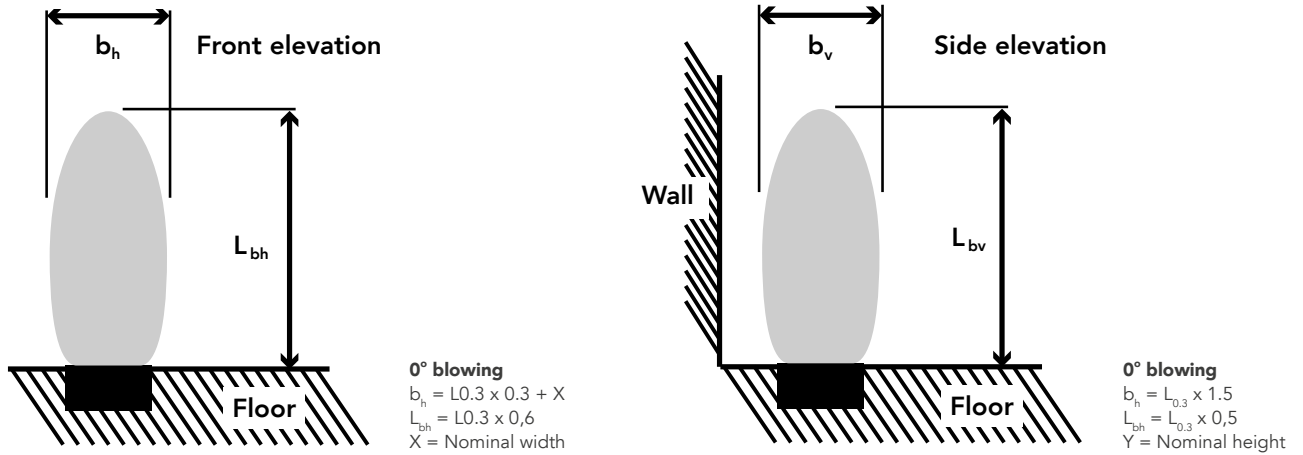
IMPORTANT!

The ASGF floor grille (1.22) has been designed to withstand an evenly distributed load of 70 kg with a built in safety factor of two (2). If the load on the grille is likely to exceed 70 kg then that load should be specified at the time of ordering for specific design and pricing.

1. Grilles & Louvres

1.3 Slimline Floor Grille | ASGF

Description



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) to the sound level NR dB according to the formula:

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

Correction table for grilles of length other than 1 metre.

Grille length (m)	0.5	1	1.5	2	3+
Add to NR value	-3	0	+2	+3	+5
Multiply throw by	0.8	1	1.2	1.35	1.5

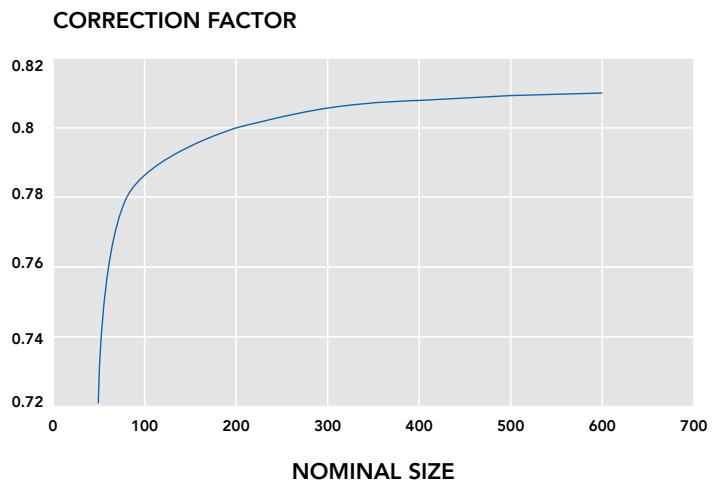
Correction table for grilles of length other than 1 metre.

Size	Frequency (cycles per second)						
	125	250	500	1000	2000	4000	8000
All	+6	+5	+3	-2	-8	-13	-15
Tol+/-	2	2	2	2	2	2	2

Correction factor k_{ok}

Free Area Factor

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



1. Grilles & Louvres

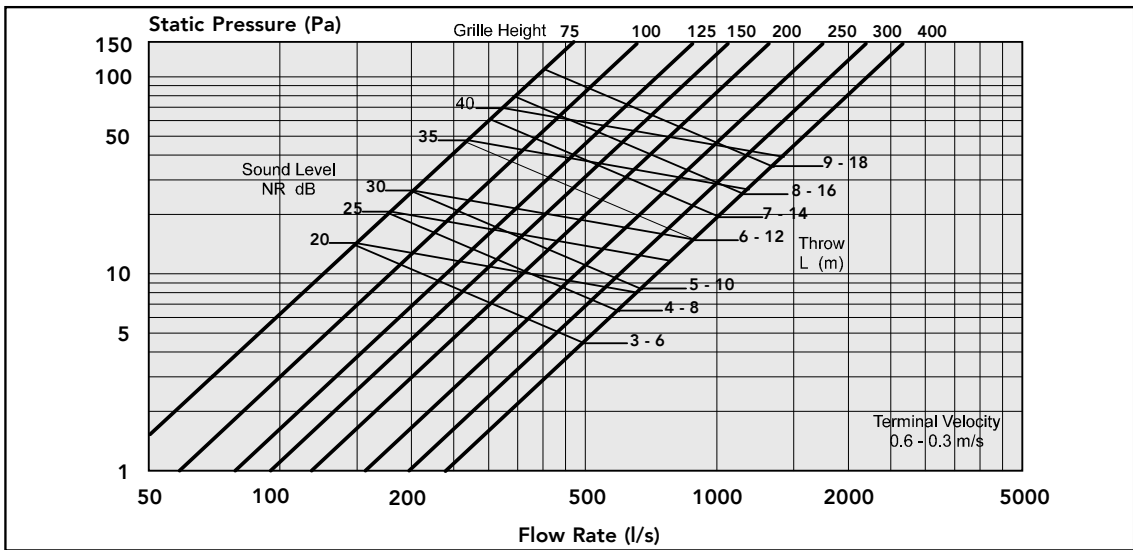
1.3 Slimline Floor Grille | ASGF

Engineering Graphs

Throws shown are to a terminal velocity of 0.60 m/s and 0.30 m/s.
Throw is given for equal slots in each direction.

Terminal velocity	Approximate air velocity in room
0.60 m/s	0.30 m/s
0.30 m/s	0.15 m/s

ASGF grille x 1000 mm long ("X" dim)



For return or exhaust air, the pressure drop and noise level may be calculated as follows.

Pressure drop

$$P_{dra} = P_d \times 1.2$$

Noise level

$$NR_{ra} = NR + 8$$

These graphs are for selection only and should not be used for commissioning

Bradflo reserves the right to make changes to product without prior notice

1. Grilles & Louvres

1.4 Return Air Grille | ARG

Ordering procedure

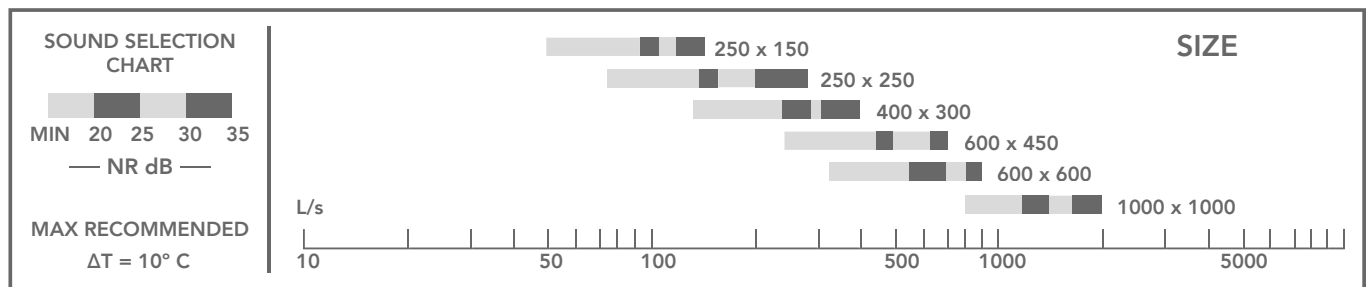
Using the chart below select your requirement and substitute the underscored text below.

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

Example: If your requirement is for a 12" x 8" (300mm x 200mm) standard 15° deflection grille, the ordering code would be **ARG1824**. (When ordering it is not necessary to include the periods [..])



Selection guide



Product size numbers

"Type"	"X" Size	"Y" SIZE								Colour
		14 (350)	16 (400)	18 (450)	20 (500)	24 (600)	30 (750)	36 (900)		
ARG	14 (350)									Powdercoated white
ARGF (with filter)	16 (400)									
	18 (450)									
	20 (500)									
	24 (600)									

Special sizes

Special colours

1. Return Air Grille

1.4 Return Air Grille | ARG

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 nonwoven 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

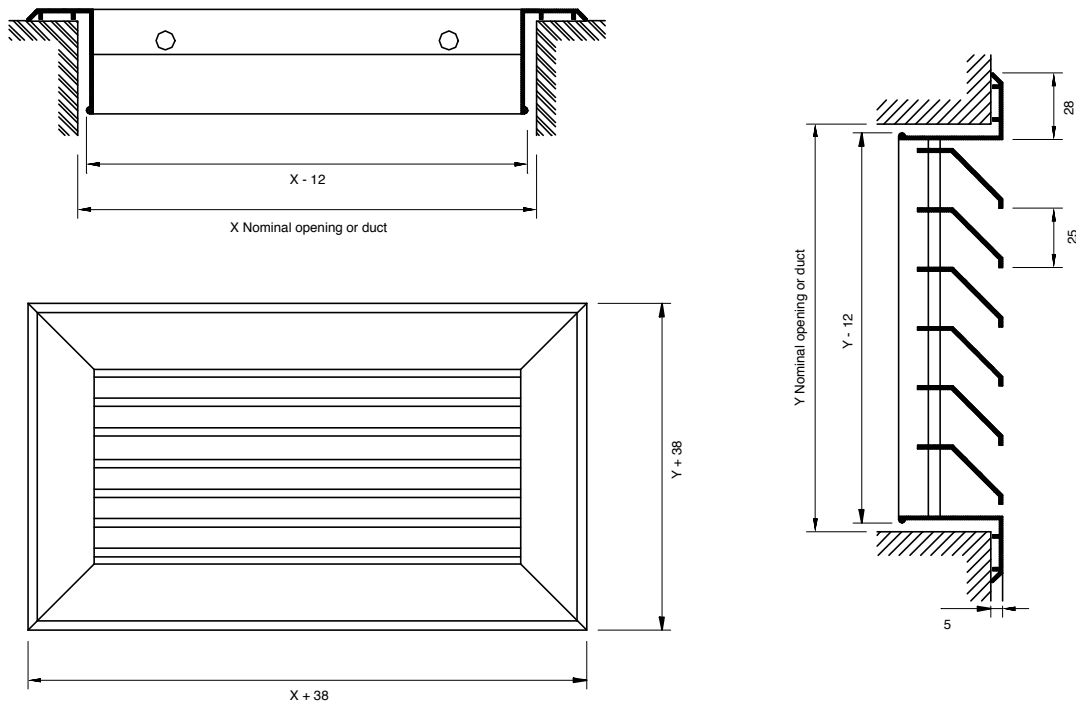
Temperature resistance: 120o C constant.

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.

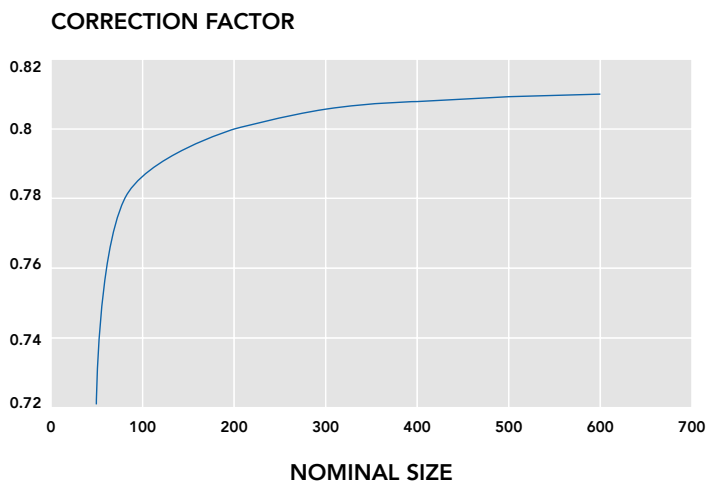


1. Return Air Grille

1.4 Return Air Grille | ARG

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 by the graph.



FREE AREA OF ARG GRILLE (M ²)								
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
200	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

1. Grilles & Louvres

1.4 Return Air Grille | ARG

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) to the sound level NR dB according to the formula:

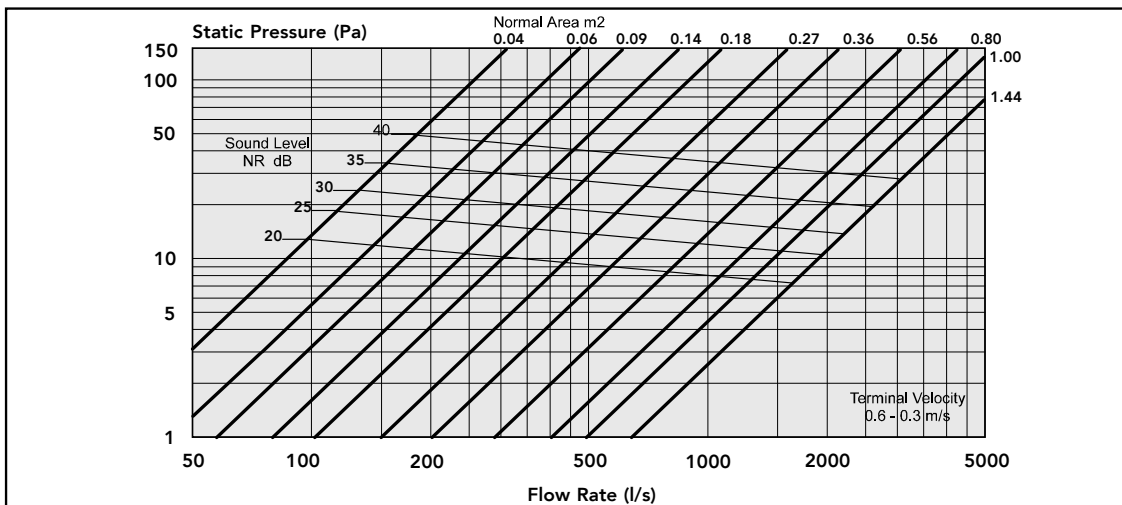
$$L_w = NR + K_{ok}$$

Correction table for grilles of length other than 1 metre.

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}

Performance data



These graphs are for selection only and should not be used for commissioning

1. Grilles & Louvres

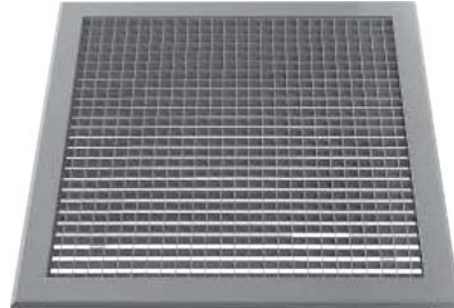
1.5 Egg Crate Grille | AEC

Ordering procedure

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

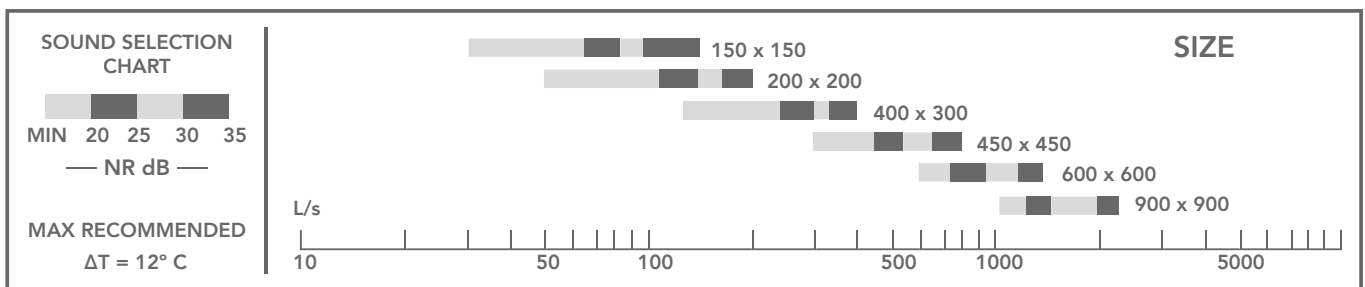
Type.X..Y (X & Y are the nominal neck sizes of the grille, see overleaf.)

Example: If your requirement is for a 18" x 24" (450 x 600) egg crate grille, hinged with a filter, the ordering code would be **AEHF1824**. {When ordering it is not necessary to include the periods [..]}
Special sizes are available upon request.



Contact your nearest Bradflo office.

Selection guide



Product size numbers

"Type"	"X" Size	14 (350)	16 (400)	18 (450)	20 (500)	24 (600)	30 (750)	36 (900)				Colour
AEC (with filter)	6" (150)											Powdercoated white
AECS (Ceiling Clip)	8" (200)											
AECRC (Removeable core)	10" (250)											
AEHF (Hinged with filter)	12" (300)											
AEH (Hinged with no filter)	14" (350)											
AECRI (Removeable inner)	16" (400)											
AECR (Removeable grille)	18" (450)											
	20" (500)											
Special sizes	24" (600)											Special colours

1. Grilles & Louvres

1.5 Egg Crate Grille | AEC

Description

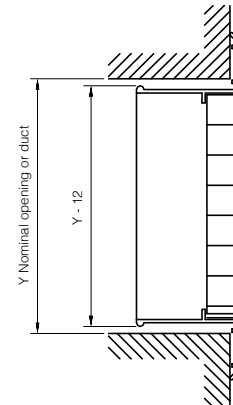
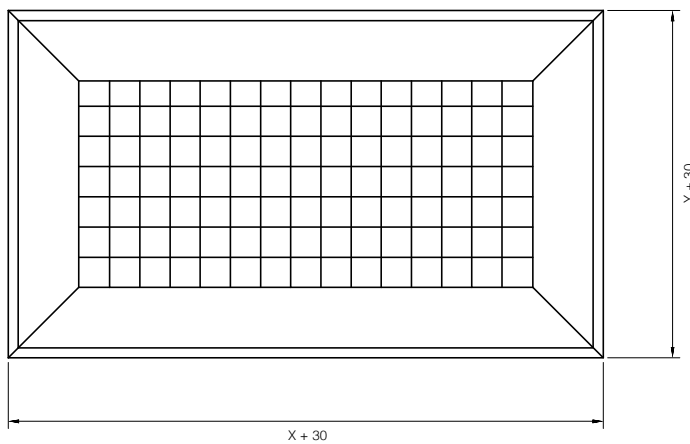
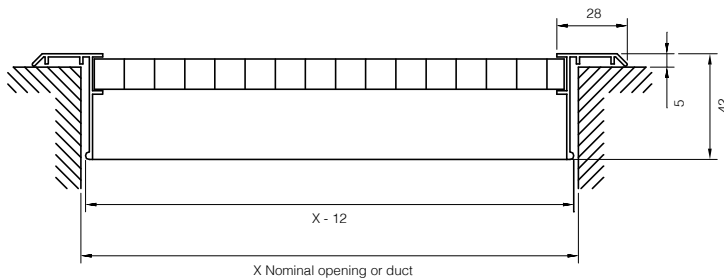
The 1.32 (AEC) grilles are designed for use in exhaust or return air situations and may be mounted in walls or ceilings. They are not to be used for floor mounting.

The grilles have extruded aluminium frames with a 13mm x 13mm x 13mm aluminium egg crate core. Hinged models are available as standard and provide easy access to filters or other equipment. Grilles up to 600mm x 600mm are available with spring retaining clip for fast and efficient mounting in ceilings.

The free area of the grille is >90% of the nominal area, providing maximum air flow and very low noise levels.

Finish

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.



1. Grilles & Louvres

1.5 Egg Crate Grille | AEC

Air Filtration

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

General Description

The filter media is manufactured in a synthetic nonwoven 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

Performance

When tested to AS1132-1973 methods 2 and 4 (Report No. 1558/95), the following results were obtained. Initial resistance at 1.8 m/s was 35 Pa. When loaded to a final resistance of 250 Pa the average resistance was found to be 85.3% and the dust holding capacity 411 g/m².

Note! AS1132 method 4 uses test dust #4.

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) to the sound level NR dB according to the formula:

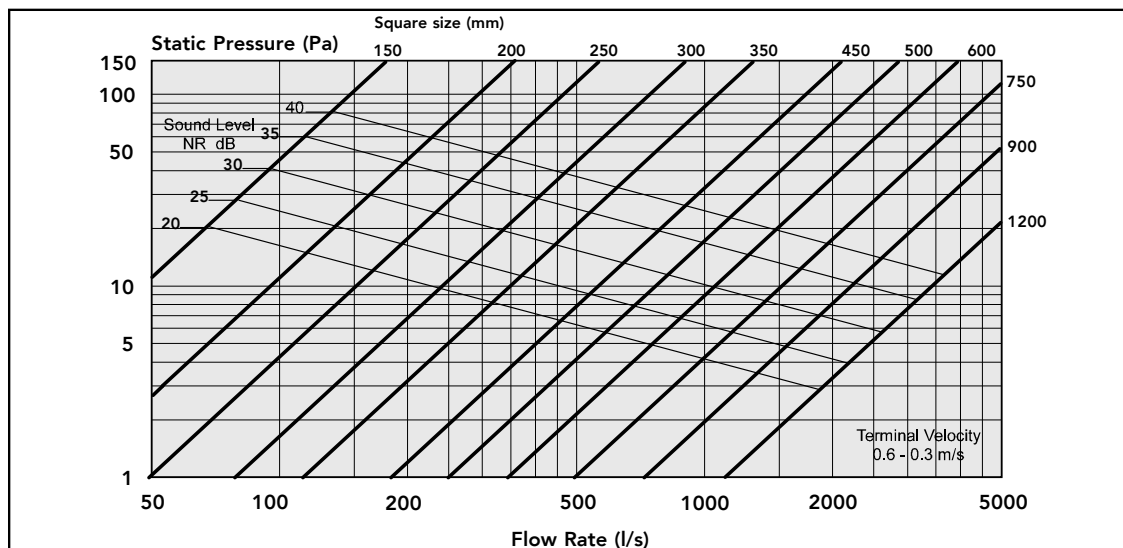
$$L_w = NR + K_{ok}$$

Correction table for grilles of length other than 1 metre.

Size	Frequency (cycles per second)						
	125	250	500	1000	2000	4000	8000
All	+14	+14	+6	-8	-5	-4	-8
Tol+/-	2	2	2	2	2	2	2

Correction factor k_{ok}

Performance data



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

1. Grilles & Louvres

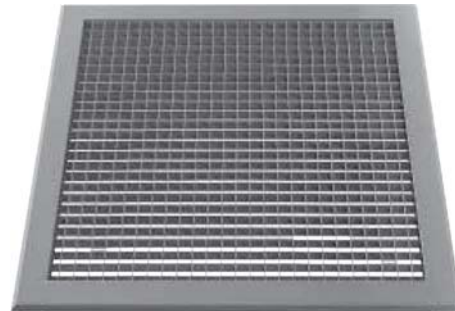
1.6 Egg Crate Grille | AECL

Ordering procedure

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

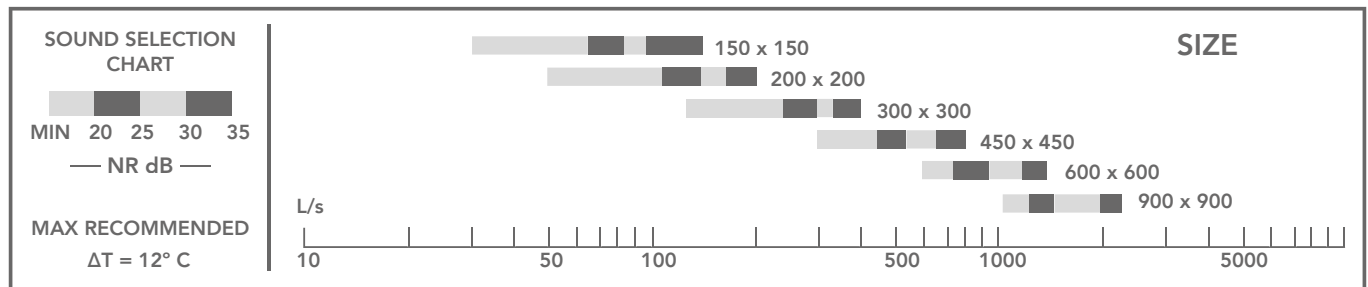
Type.X.Y (X & Y are the nominal neck sizes of the grille, see overleaf.)

Example: If your requirement is for a 18" x 24" (450 x 600) egg crate grille, hinged with a filter, the ordering code would be **AELHF1824**. {When ordering it is not necessary to include the periods [..]}Special sizes are available upon request.



Contact your nearest Bradflo office.

Selection guide



Product size numbers

"Type"	"X" Size	6" (150)	8" (200)	10" (250)	12" (300)	14" (350)	16" (400)	18" (450)	20" (500)	24" (600)	28" (700)	36" (900)	40" (1000)	Colour
AECL (Fixed core)	6" (150)													Powdercoated white
AECLS (Ceiling Clip)	8" (200)													
AECLRC (Removable core)	10" (250)													
AELHF (Hinged with filter)	12" (300)													
AELH (Hinged with no filter)	14" (350)													
AECLRI (Removable inner)	16" (400)													
AECLR (Removable grille)	18" (450)													
	20" (500)													
Special sizes	24" (600)													Special colours

1. Grilles & Louvres

1.6 Egg Crate Grille | AECL

Description

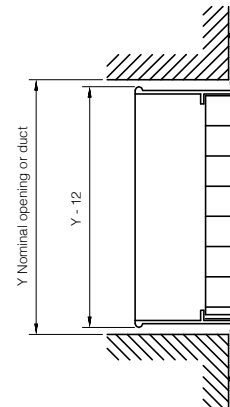
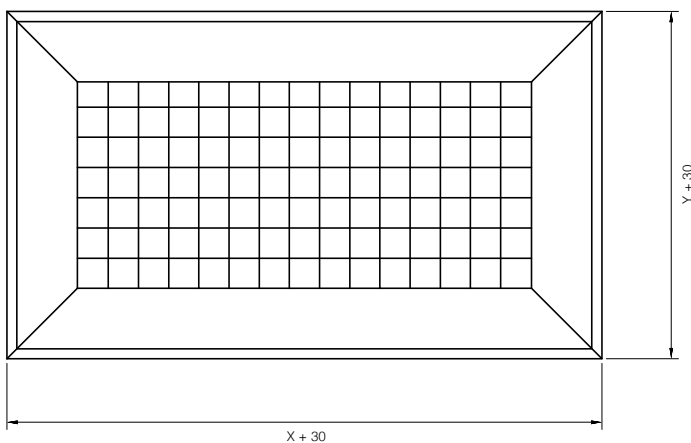
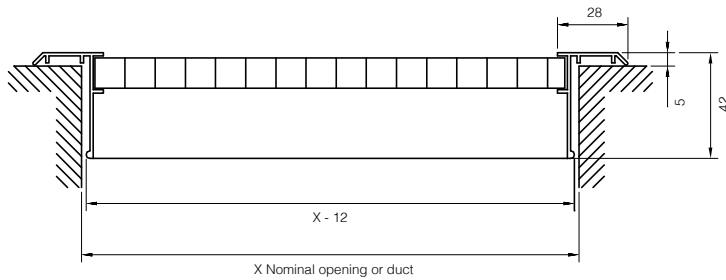
The 1.33 (AECL) grilles are designed for use in exhaust or return air situations and may be mounted in walls or ceilings. They are not to be used for floor mounting. The grilles have extruded aluminium frames with a 15mm x 15mm x 13mm aluminium egg crate core. Hinged models are available as standard and provide easy access to filters or other equipment. Grilles up to 600mm x 600mm are available with spring retaining clip for fast and efficient mounting in ceilings.

The free area of the grille is >90% of the nominal area, providing maximum air flow and very low noise levels.

Finish

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.

Performance data



1. Grilles & Louvres

1.6 Egg Crate Grille | AECL

Air Filtration

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

General Description

The filter media is manufactured in a synthetic nonwoven 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

Performance

When tested to AS1132-1973 methods 2 and 4 the following results were obtained. Initial resistance at 1.8 m/s was 35 Pa. When loaded to a final resistance of 250 Pa the average resistance was found to be 85.3% and the dust holding capacity 411 g/m².

Note! AS1132 method 4 uses test dust #4.

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) to the sound level NR dB according to the formula:

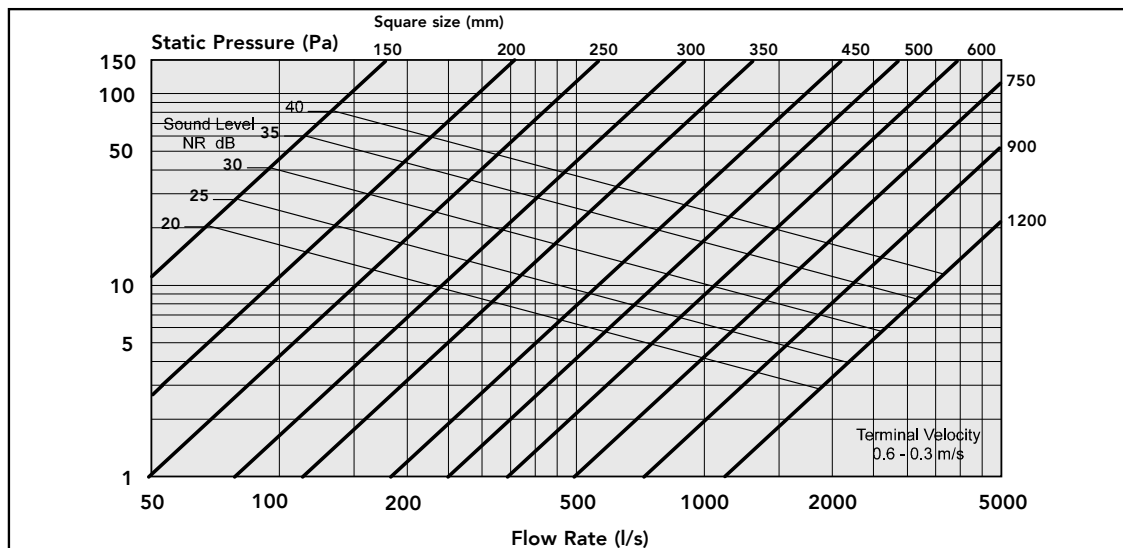
$$L_w = NR + K_{ok}$$

Correction table for grilles of length other than 1 metre.

Size	Frequency (cycles per second)						
	125	250	500	1000	2000	4000	8000
All	+14	+14	+6	-8	-5	-4	-8
Tol+/-	2	2	2	2	2	2	2

Correction factor k_{ok}

Performance data



These graphs are for selection only and should not be used for commissioning

Bradflo reserves the right to make changes to product without prior notice

1. Grilles & Louvres

1.7 Curved Blade Register | ACB

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.)

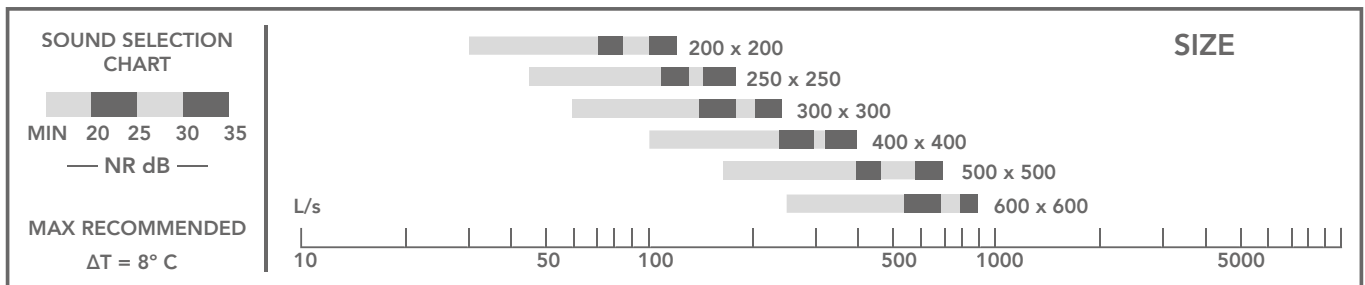
Example: If your requirement is for a 12" x 12" (300mm x 300mm) curved blade (2 way blow) grille, the ordering code would be ACB2B1212. {When ordering it is not necessary to include the periods [..]}

Specials:

Special sizes are available upon request. Please contact your nearest Bradflo office.



Selection guide



Product size numbers

"Type"	"X" Size	6" (150)	8" (200)	10" (250)	12" (300)	14" (350)	16" (400)	18" (450)	20" (500)	24" (600)	Colour
ACB2B (2 way blow)	06 (150)										
ACBMB (Multi blow)	08 (200)										
	10 (250)										
	12 (300)										
	14 (350)										Powdercoated white Special colours
	16 (400)										
	18 (450)										
	20 (500)										
Special sizes	24 (600)										

1. Grilles & Louvres

1.7 Curved Blade Register | ACB

Description

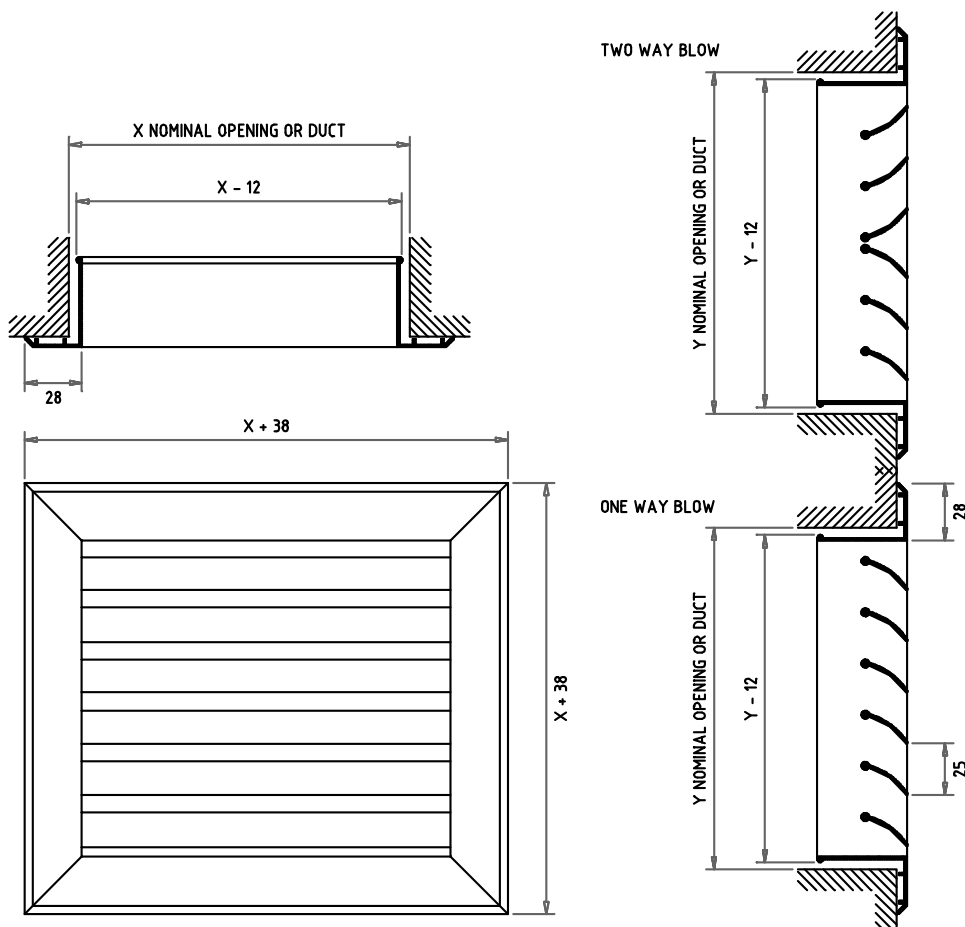
Model 1.41 (ACB) grilles have been designed for supply air situations and are especially suited for evaporative cooling systems. These grilles are available in 1, 2, 3 or 4 way air flow patterns. The ACB2B may be configured to a 1 or 2 way blow and the ACBMB may be configured to all directions above. Note that when using a neck reducer (ANAG) the configuration of the ACBMB must be carried out prior to fitting the neck reducer. The blade profiles have been designed to provide the most efficient operation at the lowest possible sound level.

The main components of the grille are manufactured from extruded aluminium.

Finish

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

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



1. Grilles & Louvres

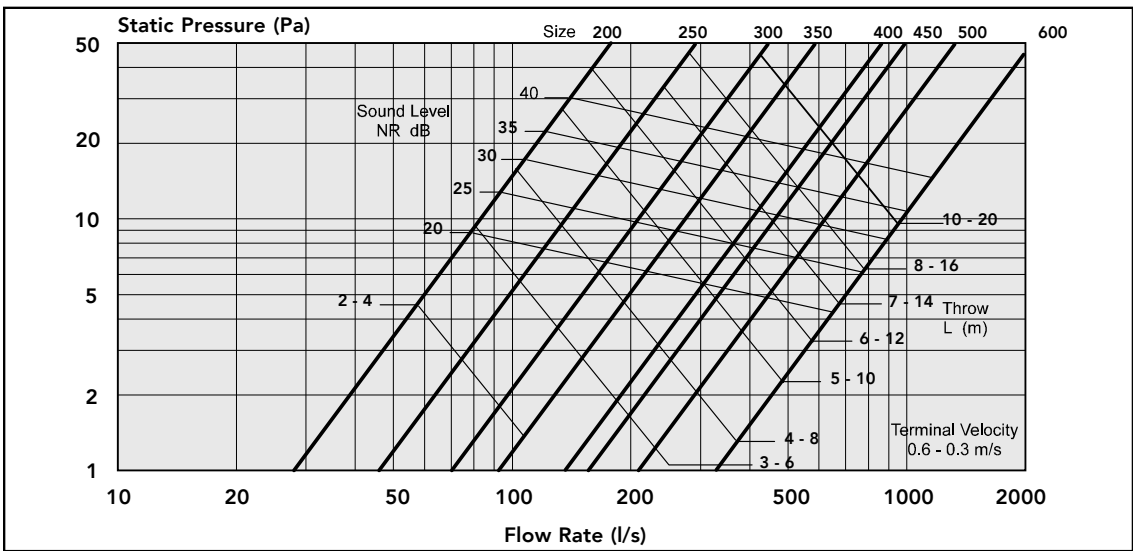
1.7 Curved Blade Register | ACB

Engineering Graphs

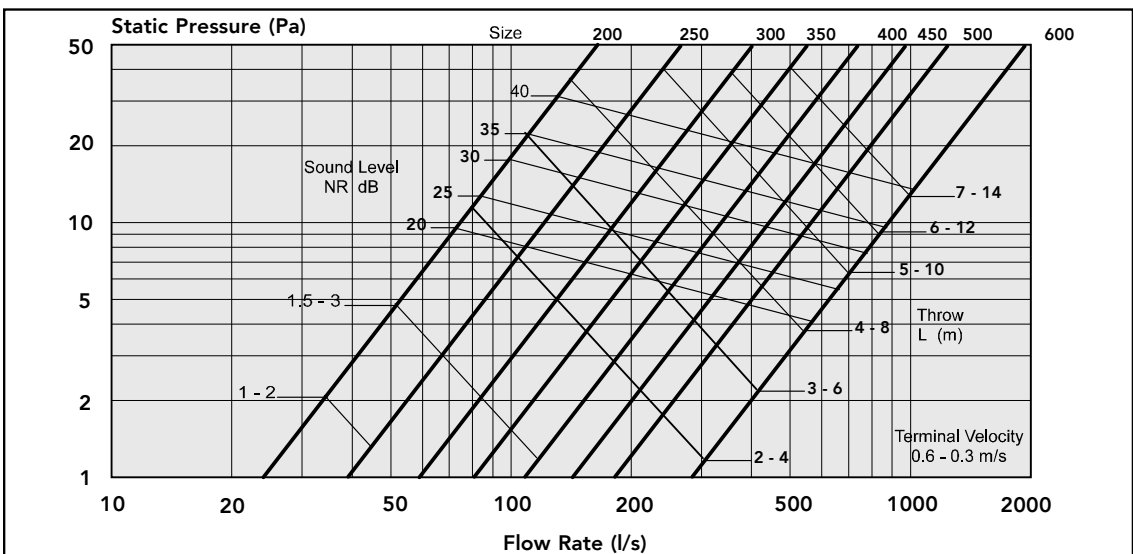
Throws shown are to a terminal velocity of 0.60 m/s and 0.30 m/s. Throw is given for equal slots in each direction.

Terminal velocity	Approximate air velocity in room
0.60 m/s	0.30 m/s
0.30 m/s	0.15 m/s

Performance data (1-way blow)



Performance data (2-way blow)



These graphs are for selection only and should not be used for commissioning

Bradflo reserves the right to make changes to product without prior notice

1. Grilles & Louvres

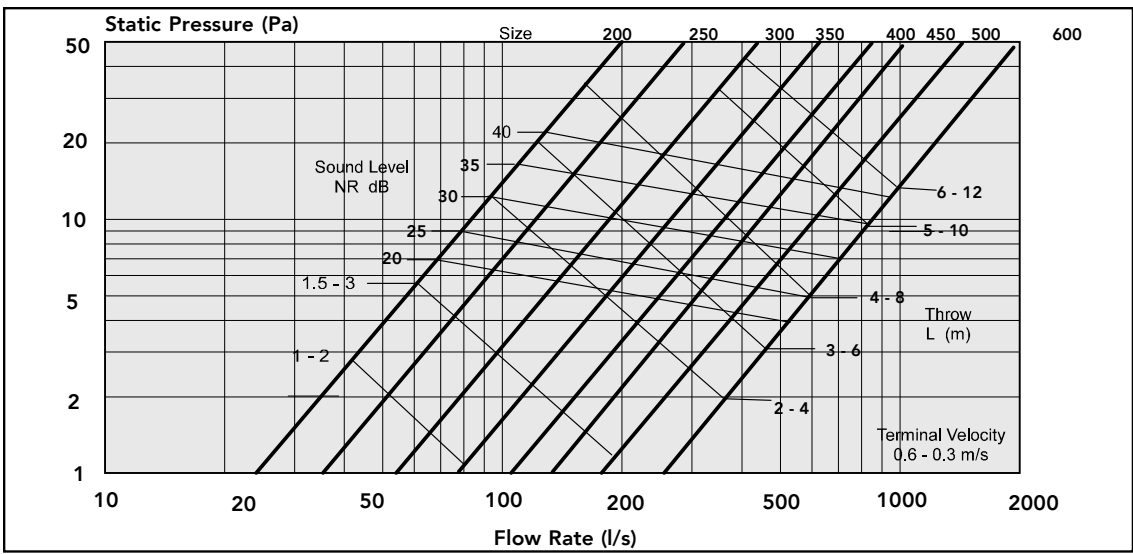
1.7 Curved Blade Register | ACB

Engineering Graphs

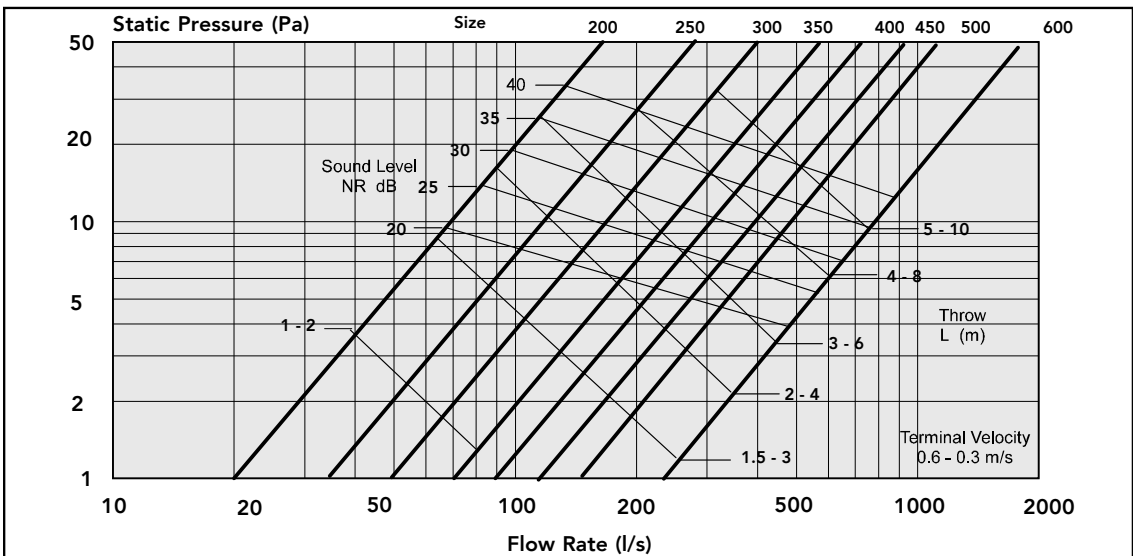
Throws shown are to a terminal velocity of 0.60 m/s and 0.30 m/s. Throw is given for equal slots in each direction.

Terminal velocity	Approximate air velocity in room
0.60 m/s	0.30 m/s
0.30 m/s	0.15 m/s

Performance data (3-way blow)



Performance data (4-way blow)

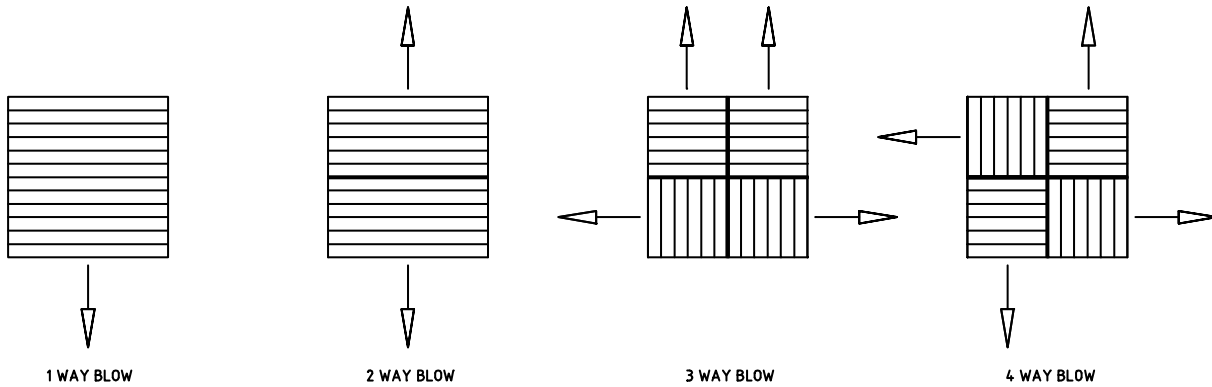


These graphs are for selection only and should not be used for commissioning

1. Grilles & Louvres

1.7 Curved Blade Register | ACB

Air pattern configuration



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) to the sound level NR dB according to the formula:

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

Correction table for grilles of length other than 1 metre.

	Frequency (cycles per second)						
Size	125	250	500	1000	2000	4000	8000
All	+16	+14	+12	+6	-1	-6	-8
Tol+/-	2	2	2	2	2	2	2

Correction factor k_{ok}

Air pattern

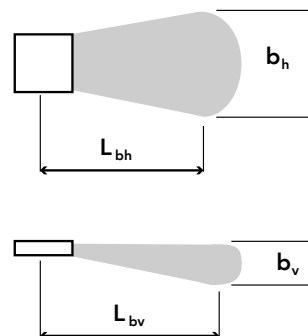
(with isothermal air supply)

$$b_h = L_{0.3} \times 0.03$$

$$L_{bh} = L_{0.3} \times 0.5$$

$$b_v = L_{0.3} \times 0.05$$

$$L_{bv} = L_{0.3} \times 0.4$$



1. Grilles & Louvres

1.7 Aluminium Door Register | AADR

Ordering procedure

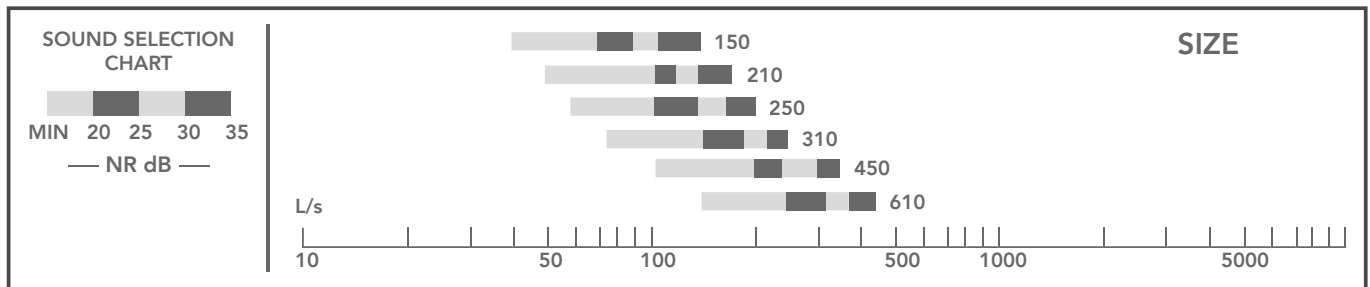
Using the chart below select your requirement and substitute the underscored text below.

Type..X..Y (X & Y are the nominal neck sizes of the register, see over leaf)

Example: If your requirement is for a 24" x 12" (600 x 300) aluminium door register, the ordering code would be **AADR2412**. {When ordering it is not necessary to include the periods [..]}



Selection guide



Product size numbers

"Type"	"X" Size	6" (150)	8" (200)	10" (250)	12" (300)	16" (400)	18" (450)	20" (500)	22" (550)	24" (600)	Colour
AADR	12" (300)										Natural Anodised
	18" (450)										
	24" (600)										

Special sizes

1. Grilles & Louvres

1.8 Aluminium Door Register | AADR

Engineering Graphs

The 1.52 (AADR) door registers have horizontally mounted blades firmly fixed into a frame. To ensure a pleasing appearance an adjustable rear frame covers the opening on the opposite side of the door. A unique spring clip method eliminates the need for screws of any sort when fixing the register to the door.

All registers are manufactured from natural anodised aluminium extrusion and will fit doors from 30mm to

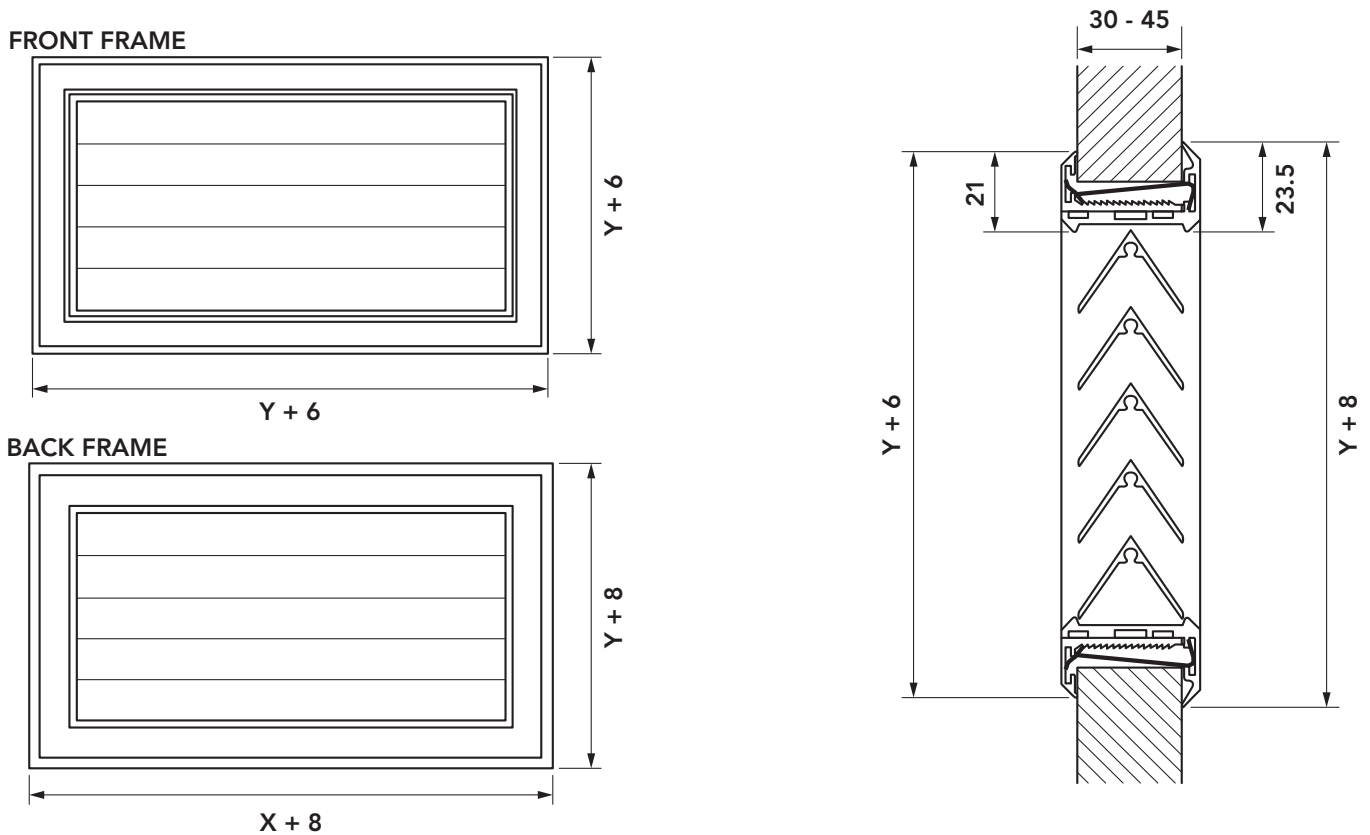
45mm thick. The blade profiles ensure maximum air flows at minimum sound levels.

Finish

Standard finish is natural anodised. 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.

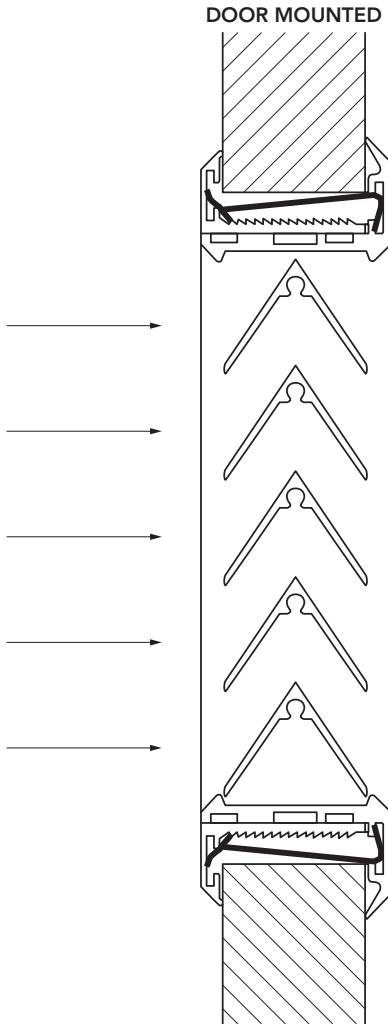
Design dimensions



1. Grilles & Louvres

1.8 Aluminium Door Register | AADR

Installation



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) to the sound level NR dB according to the formula:

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

Opening Size	Free Area
600 x 150	0.062
600 x 210	0.093
600 x 250	0.114
600 x 310	0.145
600 x 450	0.216
600 x 610	0.300

Correction table for grilles of length other than 1 metre.

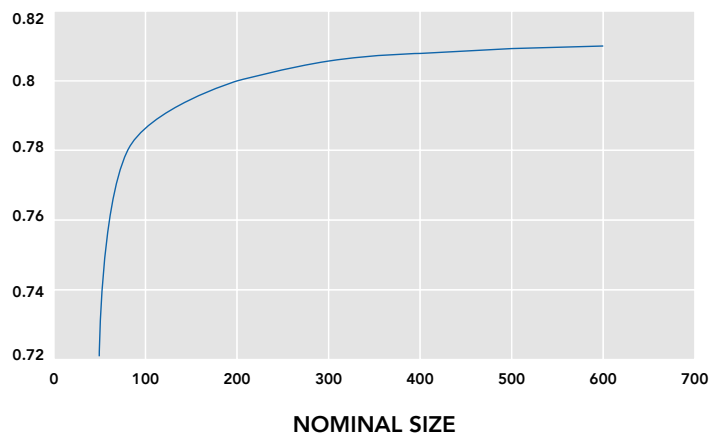
Size	Frequency (cycles per second)						
	125	250	500	1000	2000	4000	8000
All	+15	+14	+12	+7	+1	-4	-6
Tol+/-	2	2	2	2	2	2	2

Correction factor k_{ok}

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 by the graph.

CORRECTION FACTOR



1. Grilles & Louvres

1.9 Slimline Weather Louvre | AWLS

Ordering procedure

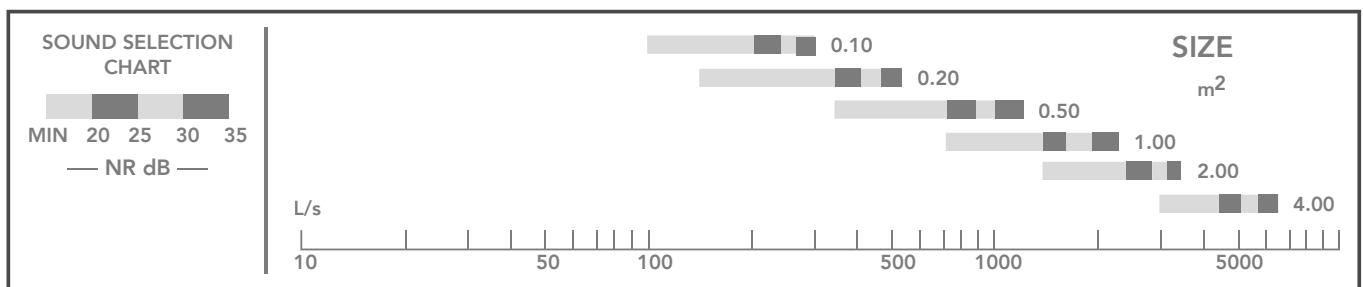
Using the chart below select your requirement and substitute the underscored text below.

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

Example: If your requirement is for a 24" x 12" (600 x 300) slimline flange mounted weather louvre, the ordering code would be **AWLSF2412**. {When ordering it is not necessary to include the periods [..]}



Selection guide



Product size numbers

"Type"	"X" Size	06 (150)	08 (200)	10 (250)	12 (300)	16 (400)	18 (450)	20 (500)	24 (600)	Colour
AWLSF	06 (150)									Powdercoated white Special colours
	08 (200)									
	10 (250)									
	12 (300)									
	16 (400)									
	18 (450)									
	20 (500)									
24 (600)										

Special sizes

1. Grilles & Louvres

1.9 Slimline Weather Louvre | AWLS

Description

The 1.64 slimline weather louvre has been designed to ensure a low ingress of water whilst maintaining maximum air flow at low noise levels. The weather louvre may be used for supply or exhaust applications.

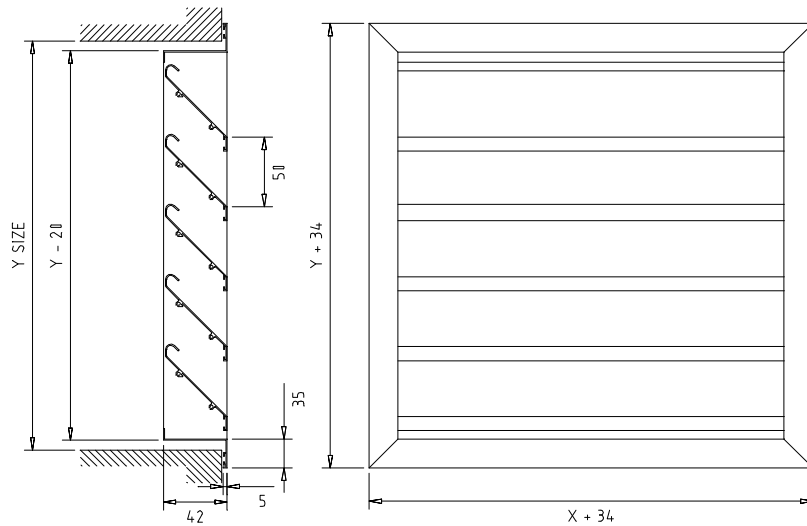
Standard weather louvre's are manufactured with either flanged frame for surface mounting or channel frame for recess mounting. Blades and frames are manufactured from extruded aluminium.

Finish

Standard finish is natural anodised. There are also 15 other colours to choose from. Contact your local Bradflo branch for any special requirement you may have.

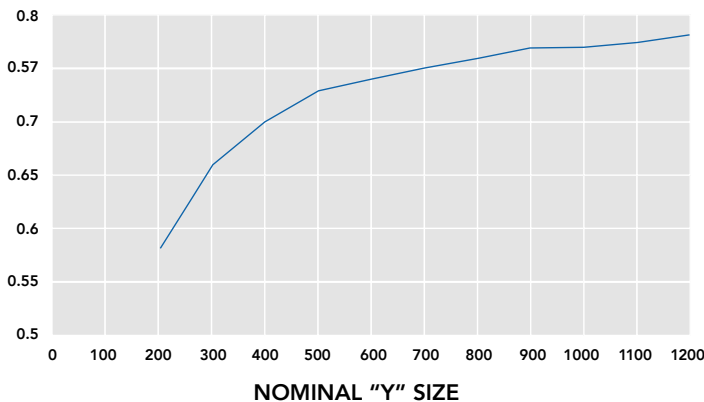
Design and mm dimensions

Most sizes can be manufactured, however, contact your nearest Bradflo branch with your special sizes. Bird wire is fitted to the rear of the weather louvre as standard.



These graphs are for selection only and should not be used for commissioning

CORRECTION FACTOR



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