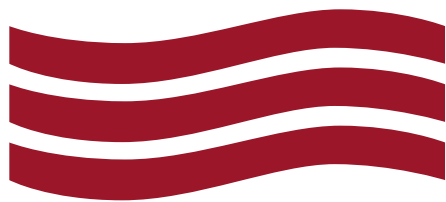


AIRFOIL



GRILLES
DUCT
FITTINGS

making it happen sooner...



CATALOGUE
EDITION 8.1



CORE VALUES AND VISION

BUSINESS CONCEPT

Our mission is to develop, manufacture, stock and market high-quality air diffusion and ventilation products. With our customers in focus, we aim to be the most dependable company for quality, availability and delivery.

CORE VALUES

Airfoil's core values of quality, availability and reliability of delivery focus on the customer.

QUALITY

To Airfoil, quality means offering reliable products. In addition, quality must permeate through to every part of the business, from product development and manufacture to logistics and customer support. Our aim is to be the first choice for our customers, and we have therefore developed a broad, well balanced product portfolio of standardised quality products. Our status as a quality assured company ensures all aspects of the operations adhere to best practices.

AVAILABILITY

To ensure availability, we have chosen to stock a substantial quantity of products at all times. Instead of starting production when we receive an order, we can deliver right away from our central warehouse. The strategy of holding stock translates into higher productivity on our custom-made products, allowing the business to have secure control over the entire flow of goods.

DELIVERY AVAILABILITY

Delivery reliability means the ability to deliver, without delay, the products and solutions that the customer needs. The standard range is delivered directly from stock and our custom-made products are manufactured internally with the best lead times in the industry. Air diffusion and ventilation systems are installed late in the construction process, and the installation contractor often needs the products at short notice. Against that background, we have built up an efficient production and logistics organisation to cater for the needs of the contractor. We also place great emphasis on punctual deliveries when producing directly to order.

GRILLES

80,000 grilles in stock



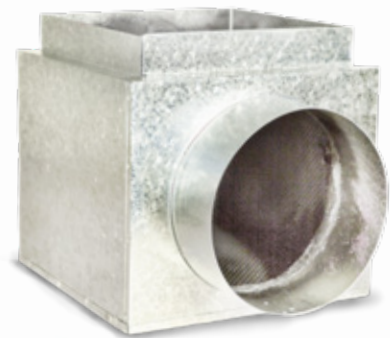
DUCT

20,000 lengths of insulated duct



FITTINGS

manufacture and stock a huge variety of sheet metal fittings



COMPANY PROFILE

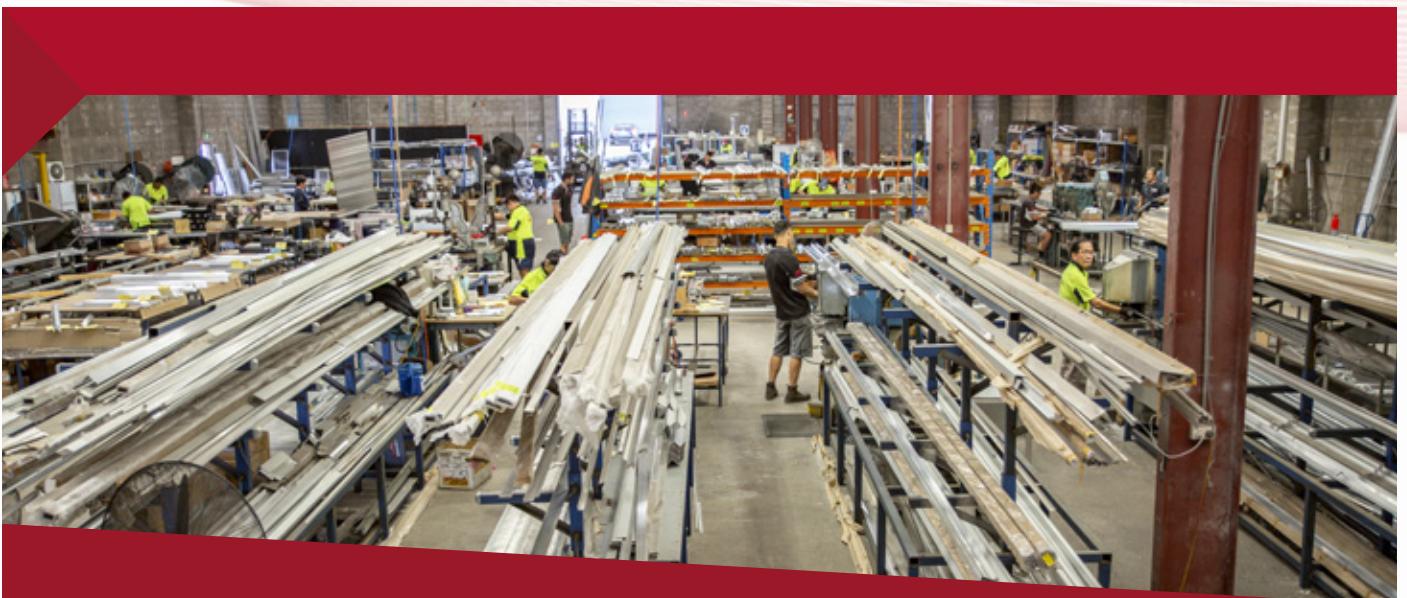
Airfoil is the longest running supplier of air conditioning components and accessories in Australia. Our success is based on our motto **“Making it happen sooner.”** Today we are a young energetic team servicing the whole country, but remain proudly Australian owned and family operated.

Airfoil stocks **over 80,000 grilles, 20,000 lengths of duct and a complete range of sheet metal fittings.** This means we can fill any size order quickly,

but also at the right price. If your job has specific requirements, we can customise any component in our factory complex with the fastest turnaround times in the industry.

We are the **only quality assured company** in the sector. As a market leader, we pride ourselves on never turning down a challenging job. We look for quality solutions that will fit into the timeframe and budget. There is no job too small or too big.

Airfoil is where **fast turnaround time meets excellent quality.** Come and experience the difference.



THE AIRFOIL DIFFERENCE



QUALITY ASSURED

We are the only NSW manufacturer in the sector to have **quality assured systems**. This provides us with the framework to deliver a consistent product across the board. Any mistakes are logged and corrected. An internal audit is performed monthly and an **official audit by SAI Global** every six months. You can have confidence that we are **continually improving our manufacturing processes** to provide you with better service.

What is quality management and ISO 9001?

ISO 9001 is the world's most widely recognised Quality Management System (QMS). It belongs to the ISO 9000 family of quality management system standards (along with ISO 9004), and helps organisations to meet the expectations and needs of their customers, amongst other benefits.

An ISO 9001 quality management system will help to continually monitor and manage quality across all operations, and outlines ways to achieve, as well as benchmark, consistent performance and service.

About SAI Global

SAI Global helps organisations manage risk, protect reputation, and perform better in an increasingly complex and interconnected ethical and regulatory environment. Through their trusted expertise, services and technology, SAI Global help manage the entire life-cycle of risk. Solutions include risk management software, standards and regulatory content, and ethics and compliance learning. Services include risk assessments, certification, testing and audits. In Australia, they are also a leading provider of settlement related services; company, personal and property information.

SAI Global Limited is listed on the Australian Securities Exchange and the head office is in Sydney, Australia. They have around 2,000 employees in 29 countries and 51 locations across Europe, North America and Asia.





LOCALLY MADE

All our custom products are made in Australia at our 7,800 square metre factory complex in Moorebank, Sydney. We don't expect our customers to buy our products just because we're an Australian manufacturer. Our customers buy our products because our grilles, duct, and fittings are manufactured to the highest standard, at competitive prices, and always on time. Making locally means we cut turnaround times and can control the quality of the product.

CUSTOM-MADE

Airfoil has never turned away a job for being too hard or because we haven't done it before. It doesn't matter whether it's a bar grille that's made like a triangle or a grille installed under a staircase, we'll make it. **No job is beyond our capability.** We have the staff with the talent and experience to make anything you can throw at us!

LATEST AND BEST

Airfoil consistently invests in cutting-edge technologies to make our work faster and more accurate. This investment can be a purchase of the latest steel plasma cutting machines, new software for the office, or applying the latest ideas to our

production processes. We are **continually innovating to make our products, timeframes, and your experience better.**

TECHNICAL SERVICES AND SUPPORT

Airfoil's staff are our major asset. We have the experience, knowledge and desire to make your job easier. We can assist in selection of products, technical specifications and workable solutions. If you need to know what size grille fits a particular sized room and air flow, we will help. If you need a site visit for measurements or after sales support, **we are there for you.**





REAL PARTNERSHIP

We offer a real partnership with our customers. We care about your job and your experience with Airfoil. We understand that we are a small part of the whole job and shouldn't be the cause of any worries. When a customer places an order we become part of their job and **work as a team**. Our young dynamic staff take on the responsibility and **communicate openly** to ensure you're always fully informed about the progress of your job.

FAST TURNAROUND

Airfoil's motto is "**Making it happen sooner**" and we mean it. We offer the fastest turnaround in the industry, **usually from 5 to 10 working days** in any State; immediate delivery for duct, 10 to 15 working days for custom-made sheet metal items and custom-made grilles. Other suppliers don't seem to put as much emphasis on the importance of getting a job delivered on time. At Airfoil, we do whatever it takes to live up to our motto "**Making it happen sooner.**"

ONE STOP SHOP

Airfoil is your one stop shop for all your air conditioning grilles, duct and sheet metal fittings. This not only makes our customers lives easier, but also **makes delivery more secure**. Using just one supplier **consolidates ordering** into one stress-free delivery pipeline that can be scheduled as you need. You deal with an experienced sales person who knows your job from start to finish.

ORDERING AIRFOIL PRODUCTS

For a catalogue or general enquiries about Airfoil products please contact your local state office via the details on the back of the catalogue. If you're in WA or NT contact the QLD office and SA or TAS contact the VIC office.





MEMBER OF AIRAH

Airfoil is a proud member of AIRAH. AIRAH is a specialist organisation which represents over 10,000 air conditioning, refrigeration, heating and ventilation professionals across Australia.

Member of



COMMITMENT TO YOU

Our commitment to customer service has seen us grow into a market leader. We will be with you every step of the way. We will always do everything in our power to make your job as smooth as possible. Small and large customers are all treated with the same friendly service that is the hallmark of Airfoil's **40 years of business**. You'll always be met with a smile at Airfoil.



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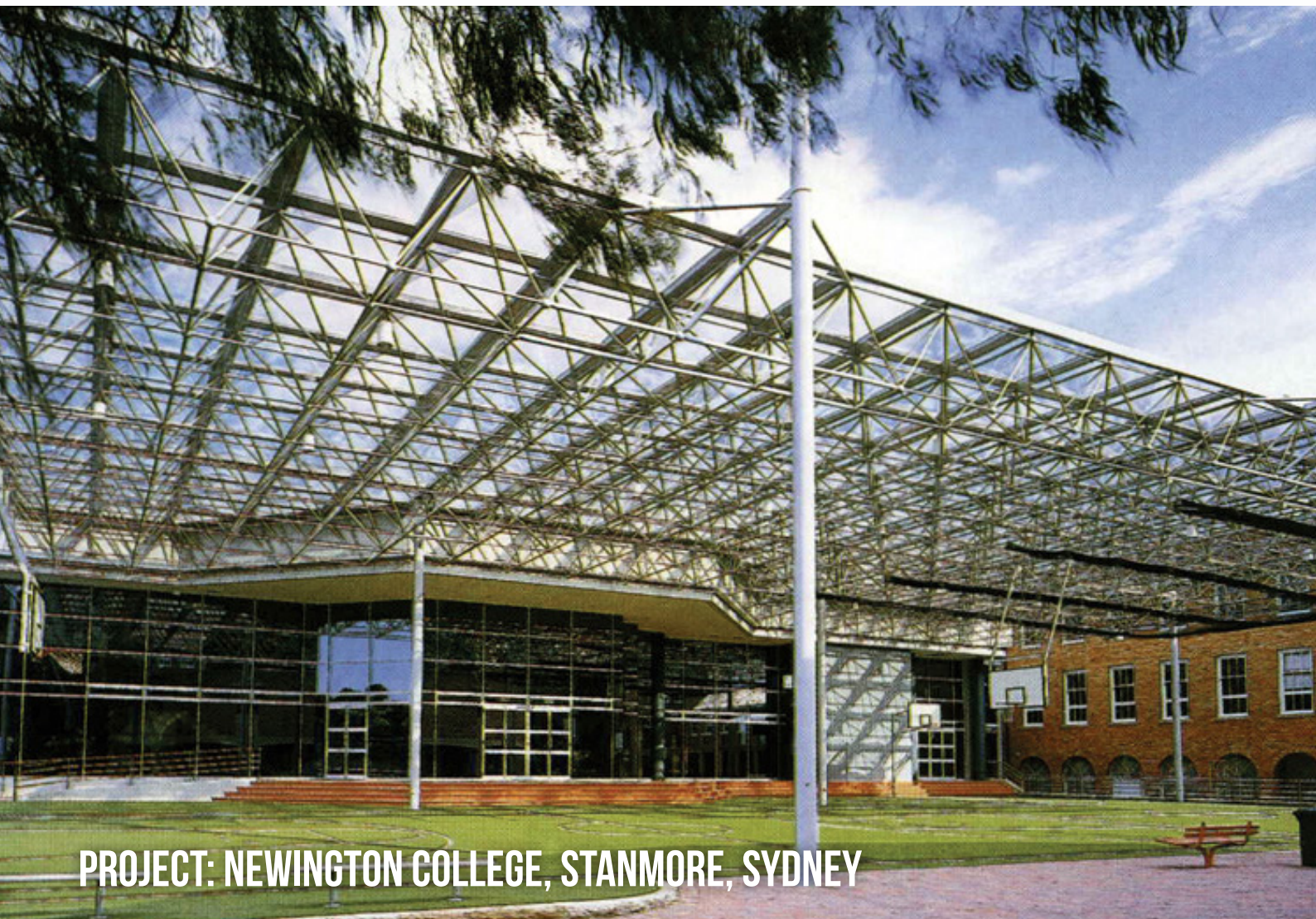
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33
IDGE RD

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133 NEWBRIDGE ROAD, MOOREBANK SYDNEY

1.0 TEST PROCEDURES



1.1 TEST PROCEDURE

DIFFUSERS



Selection of diffusers

The following metric performance data has been derived from exhaustive testing in elaborate laboratories of acoustic and vibrational engineers Louis A. Challis and associates Proprietary Limited, 246–248 Darling Street King's Cross Sydney 2000.

To select the diffuser appropriate to use and situation, two sets of data should be considered:

1. The specific room-use characteristics and the structure components of that room, and,
2. The performance characteristics of the actual ceiling diffuser.

Four important aspects involve from these two sets of data:

1. The air pattern requirements.
2. The throw requirements.
3. The air quality.
4. The desired noise levels

1. The air pattern requirement

The disbursement of the air in terms of direction relates to the shape of the space to be conditioned and the positioning of the outlet. For example, the situation of an outlet in the corner of the room may require either a 25, 26 or 27 core pattern or alternatively a 41 or 42 pattern blanked so as to provide for a two-way adjacent air discharge.

For example, a large area, such as a library, supermarket, school room, ballroom or integrated office, may be divided into a series of overlapping space models which may be square or rectangular to suit the 41 or 42 patterns.

Lighting fixtures, exposed beams, support columns and office partitions may all have a strong bearing on the frame style and core pattern that best suits any given situation.

2. Throw requirement

Considerations of throw are vital to ensure that the two extremes of air conditioning are not encountered i.e.

1. Inadequate conditioning which fails to adequately cover the total area, and;

2. Excessive air quantities relative to the capacity and positioning of the diffuser creating a draft.

The throw requirement is generally the distance from the outlet to the nearest enclosing wall or the distance from the diffuser to the intersection of its air stream with that being delivered from another diffuser.

For high ceiling applications throw is usually measured to the extent of the 1500 mm level in the room.

The throw should not exceed 1.5 times the ceiling mounting height.

3. The air quantity

Measured in litres per second, the air to be delivered into each space is determined by the overall system design.

The number of ceiling outlet supplying each space determines the litres per second being transmitted through each outlet.

The throw should not exceed 1.5 times the ceiling mounting height.

4. The noise level requirement

The maximum permissible NR levels from each outlet relate directly to the quantity of air transmitted through any given core style and neck size

The following table may be used as a guide to the generally acceptable NR levels for various common use situations.

NR LEVELS	TYPICAL APPLICATIONS
20-25	Radio, TV studios, Churches
25-30	Theatres, Opera Houses, Concert halls, Board Rooms.
30-35	Conference Rooms, Movie Theatres, Lecture Rooms, Private offices.
35-40	Libraries, general offices, toilets, restaurants.
40-45	Holes, cafeterias.
45-50	Storerooms, large department stores and supermarkets.
Over 50	Manufacturing areas.

Scope of Performance Data

Neck Velocities

The performance data is based on neck velocities of 1.5, 2.0, 2.5, 3.0 and 3.5 metres per second of all Airfoil core patterns and for all standard next sizes.

Pressure Drop

Total pressure drop counted through each core pattern at varying net velocities is set out in pascals. The total pressure drop being the sum of the static pressure drop of the air as it passes through the diffuser and velocity pressure of the air at the neck of the diffuser.

The static pressure drops across the diffuser were measured by using an inclined manometer from tapping point upstream of the plenum box.

Sound levels

The sound pressure to sound power conversion factors were obtained by measuring the sound pressure level of the sound power calibrator in the sound chamber with the ceiling outlet installed. The measured sound pressure levels were subtracted from the known sound powers of the sound power calibrator to provide a conversion factor in decibels for each octave band.

The Sound power figures for each test were used as a basis for determining a sound pressure level at a distance of 1.5 m from the diffuser in a room with constants as follows:

Octave Band Centre Frequency (Hz)	63	125	250	500	1K	2K	4K	8K
Room Constant (dB)	5	6	7	8	8	8	8	8

Throw air throw measurement

Maximum and minimum air throw were measured by using a Wallace Thermo-anemometer. The maximum throw was defined for a terminal velocity at the ceiling of 0.65 m/sec. and the minimum throw of terminal velocity of 1.5 m/sec. at the ceiling.

The Wallace Thermo-anemometer was reference checked before each series of measurements by comparison with a Kata thermometer and was regularly referenced relative to its zero level during measurements.



1.2 TEST PROCEDURE

RETURN, RELIEF AND OUTSIDE GRILLES

Measurement Procedures for Return, Relief and Outside Grilles

1. Sound pressure level measurements

Sound pressure levels in the chamber were measured using the following equipment:

Microphone – Bruel & Kjaer 4144
Preamplifier - Bruel & Kjaer 2619
Power supply - Bruel & Kjaer 2807
Rotating boom – (1m radius, 1 min. cycle)
Precision Laboratory sound level meter HP8052A
Precision Octave Filter Set– H P8055A
Integrating voltmeter– Nebula type 1
Sound Power calibrator– Challis/Torin type 1

The microphone was mounted on a rotating boom which was used to provide space average in the chamber while the integrating voltmeter provided a time average of the sound pressure level. Averaging times ranging between 10 seconds and 100 seconds were used. This system was referenced level checked before and after each series of measurements using a reference source, Bruel & Kjaer type 4230, and system drift did not exceed 0.1 dB.

Equipment was calibrated in the Challis laboratory which currently holds N.A.T.A. certificates for compliance with AS1259 and ASZ41.

The volume of the reverberation is such as to allow measurements to be made with a high accuracy down to the 63Hz octave band. The accuracy claimed for the measurements of sound pressure level is +/-2 dB at 60Hz, +/- 1.5dB at 125Hz and 8kHz; and +/-1.0dB in octave bands from 250Hz to 4kHz.

The background noise levels due to external noise and system noise were measured at each test air flow and where necessary, corrections for background noise have been applied to the measured sound pressure levels.

In some cases, at the lowest air flows, the measured levels of regenerated noise at 63Hz and in the higher frequency bands were indistinguishable from the system noise level, and in these cases the sound power levels have been quoted as being 10dB below the measured value.

The background and their system noise level in the chamber was typically as follows:-

Sound Pressure Levels in dB (re 2×10^{-5} Pascals)

Octave Band Centre Frequency (Hz)	63	125	250	500	1K	2K	4K	8K
Typical Air System Noise	45	36	27	20	16	14	8	9

The system allowed accurate measurements for the determination of NR figures down to NR 15.

2. Air flow measurements

Each unit was tested at three air flows, using either of two fan configurations:-

(a). Air flow is less than 1400 litres per second

These flows were provided by means of axial a series of axle fans or a large centrifugal fan. The desired airflows were measured by means of an ASTM triple nozzle system, installed in an acoustic plenum box incorporating an air straightening grid. The nozzle box was installed in the 600 mm x 600mm ductwork leading to the reverberation chamber, and provided air flows of an overall accuracy of better than +/- 5%.

(b). Air flows greater than 1400 litres per second

These flows were provided by means of the centrifugal fan, with air flows measured by means of a series of orifice plates installed in the 600 mm diameter inlet duct leading to the fan. This system is capable of measuring air flows over the range of 500 litres per second to 10,000 litres per second with an overall accuracy of +/- 5%.

3. Static pressure drop measurements

The static pressure drop across the test item was measured from a tapping point in the discharge duct of approximately 500 mm upstream of the unit, using an Inclined Manometer. This reads in steps of five Pascals (0.02"WG) and provides an overall accuracy of +/- 2.5 Pascals.

Selection of supply registers

The following metric performance data has been derived from an exhaustive testing in elaborate laboratories of acoustic and vibrational engineers Louis A. Challis and associates Proprietary Limited, 246–248 Darling Street King's Cross Sydney 2000.

To select the diffuser appropriate to use and situation, two sets of data should be considered:

1. The specific room-use characteristics and the structure components of that room, and,
2. The performance characteristics of the actual ceiling diffuser.

Four important aspects evolve from these two sets of data:

1. The air pattern requirements -drop.
2. The throw requirements.
3. The air quality.
4. The desired noise levels

1. The air pattern requirements - Drop

At any constant air quantity (litres per second), the vertical distance the air will drop increases as the neck area of the grill increases. This increased drop is due to the inverse relationship of air velocity at the face of the grille to the neck area of that grille.

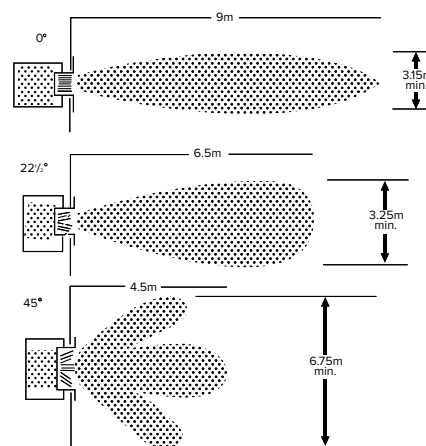
Assuming the spread angle of the aerofoil blades is maintained at a constant setting the length of throw will increase as the litres per second is increased. This increased length of throw will be accompanied by an increased air drop.

Adjusting the spread angles of the grille is the easiest source of altering the performance of the supply register.

Testing has shown that the general rules that have been applied to estimate spread are valid ;–

1. At a 45° setting the spread of air is approximately 1.5 times the throw
2. At a 22.5° setting the spread of air is approximately 0.5 times the throw and cook,
3. At a 0° setting the spread of air is approximately 0.35 times the throw

Example – An Air Quantity of 375 litres per second disbursed through a 600mm x 300mm double deflection register.



2. The throw requirement

Consideration of the throw metres of air from a supplier register under varying air quantities is vital to ensure that the two extremes of conditioning are not encountered ;–

1. inadequate conditioning which fails to adequately cover the total area, and
2. excessive air quantities relative to the neck area and spread of the angle register, thereby creating drafts.

Throw requirement is generally the distance from the outlet to the nearest enclosing wall or the distance from the register to the intersection of its air stream with that being delivered from another register.

The throw of air from the register selected should be limited to ensure the drop of the air stream does not fall below a reasonable working level within the room being conditioned i.e. around 1500 mm

3. The air quantity

Measured in litres per second, the air quantity to be delivered to each space is determined by the overall system design.

The number of registers supplying a given space determines the litres per second being transmitted through each outlet.

4. The noise level requirement

The maximum permissible noise levels (NR) from each supply register relate directly to the quantity of air being transmitted through the register to the neck size and louver blade spread angle of the register.

1.3 TEST PROCEDURE SUPPLY REGISTERS

Given a constant air quantity the noise level (NR) increases as the core area of the register decreases.

Similarly, given a constant air quantity, the noise level (NR) increases as the angle of the spread (blade adjustment) closes from 0° through to 90°.

The following table maybe used as a guide to generally acceptable noise levels for various, new situations.

NR LEVELS	TYPICAL APPLICATIONS
20-25	Radio, TV studios, Churches
25-30	Theatres, Opera Houses, Concert halls, Board Rooms.
30-35	Conference Rooms, Movie Theatres, Lecture Rooms, Private offices.
35-40	Libraries, general offices, toilets, restaurants.
40-45	Holes, cafeterias.
45-50	Storerooms, large department stores and supermarkets.
Over 50	Manufacturing areas.

Scope of performance data

The Airfoil supply register range was tested in the reverberation chambers of the laboratory of Louis A. Challis and associates Proprietary Limited, 246–248 Darling Street King's Cross Sydney 2000. The laboratory utilises two groups of fans capable of supplying air flows up to 10,000 litres per second with silenced discharge and extended duct system leading to the reverberation chamber.

1.(a) Sound pressure level measurements

Sound pressure level in the chamber were measured using the following equipment

Microphone – Bruel & Kjaer 4144
Preamplifier - Bruel & Kjaer 2619
Power supply - Bruel & Kjaer 2807
Rotating boom – (1m radius, 1 min. cycle)
Precision Laboratory sound level meter HP8052A
Precision Octave Filter Set– H P8055A
Integrating voltmeter– Nebula type 1
Sound Power calibrator– Challis/Torin type 1

The microphone was mounted on a rotating boom which was used to provide space average in the chamber while the integrating voltmeter provided a time average of the sound pressure level. Averaging time ranging between 10 seconds and 100 seconds were used. This system was referenced level checked before and after each series of measurements using a reference source, Bruel & Kjaer type 4230, and system drift did not exceed 0.3 dB.

Equipment was calibrated in the Challis laboratory which currently holds N.A.T.A. certificates for compliance with AS1259 and ASZ41.

The volume of the reverberation is such as to allow measurements to be made with a high accuracy down to the 63Hz octave band. The accuracy claimed for the measurements of sound pressure level is +/-2 dB at 63Hz, +/- 1.5dB at 125Hz; and +/- 1.0dB in octave bands from 250Hz to 8kHz.

The background noise levels due to external noise and system noise were measured at each test air flow and where necessary, corrections for background noise have been applied to the measured sound pressure levels.

In some cases, at the lowest airflows, the measured levels in the high-frequency bands were indistinguishable from the background noise level, and in these cases the sound power and sound pressure level at 1.5 m have been quoted as “Less than” the minimum measurable value.

The background and their system noise level in the chamber was typically as follows:-

Sound Pressure Levels in dB (re 2x10⁻⁵ Pascals)

Octave Band Centre Frequency (Hz)	63	125	250	500	1K	2K	4K	8K
Typical Air System Noise	50	36	26	17	11	8	8	8

The system allowed accurate measurements for the determination of NR figures down to NR 16.

1.(b) Sound Power Computations

The sound power figures for each test were used as a basis for determining the sound pressure level at a distance of approximately 1.5 m from the register in a room with room constants as follows:

Octave Band Centre Frequency (Hz)	63	125	250	500	1K	2K	4K	8K
Room Constant (dB)	5	6	7	8	8	8	8	8

2. Static pressure drop measurements

The static pressure drop across the test grille was measured using an inclined Manometer from a tapping point of approximately 450 mm upstream of the test unit.

3. Air throw measurements

Each test sample was typically tested at 3 air flows. The desired air volumes were measured by means of an ASTM triple nozzle system, installed in a lined box incorporating an air straightening grid. The nozzle box was installed in a 600 mm x 600 mm duct leading to the chamber. The system provided air flows to an accuracy of +/-5%.

4. Air velocity measurements

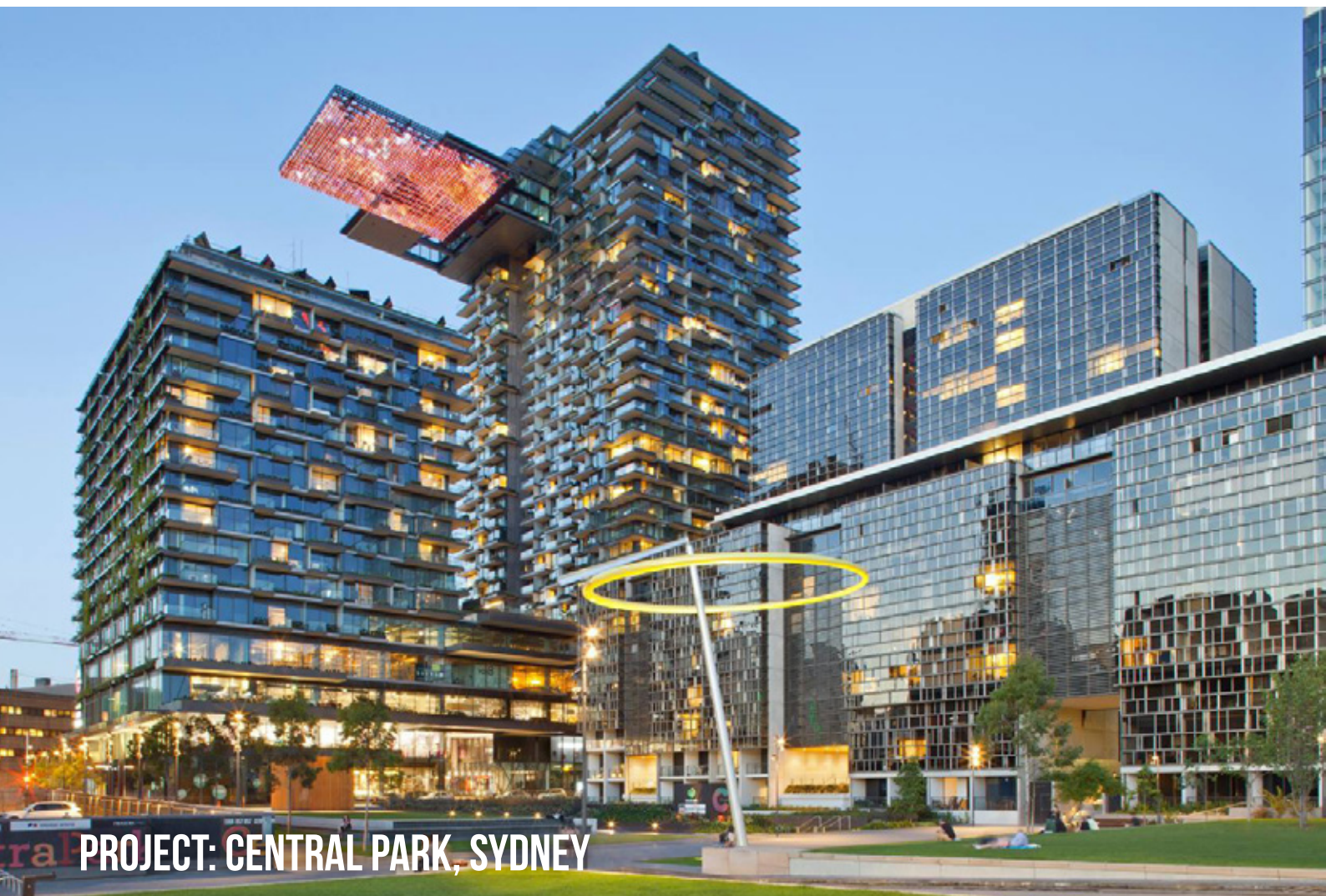
Measurements of face velocity were carried out using the Wallac Thermo-anemometer (as described above). The average of nine readings taken across the face of the test units provided air velocity measurements to precision of +/- 5%.



Laboratory tests were also carried out by Vipac Engineers & Scientists

Vipac Engineers & Scientists is a leading engineering consultancy and testing laboratory established 43 years ago, employing 150 trained specialists throughout eight Australian offices.

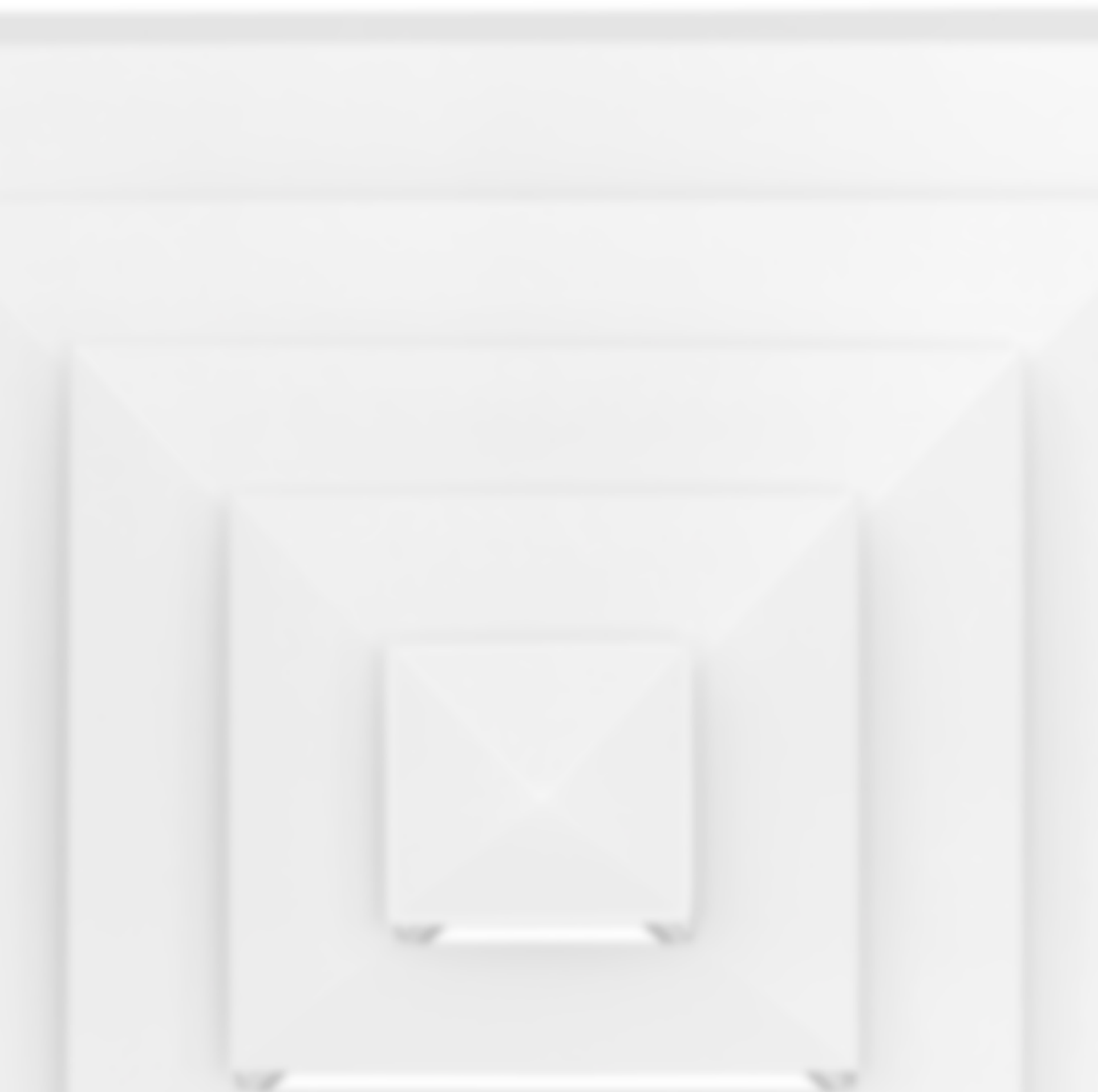
Vipac's in-house laboratories, wind tunnels, acoustic and climatic chambers, solar simulators and vibration rigs allow engineers to prototype, model and fabricate customised elements for projects. This enables the testing of unusual materials to prove their feasibility to clients and value-add to projects.





2.0

DIFFUSERS





Airfoil's Radial Swirl Diffuser range consists of four models CDS-DM 350, CDS-DM 500, CDS-DM 350R and CDS-DM 500R each having 22 blades. These diffusers have the capability of serving the lower to mid range airflow requirements, while maintaining a desired swirl supply air pattern.

The CDS-DM 350/R is a highly versatile swirl diffuser, making it ideal for a variety of applications such as office blocks, hospitals and shopping centres where a standard 1200 x 600mm ceiling grid has been provided but the airflow requirement, in individual tenancies or areas, is reduced. Similarly, the CDS-DM 500/R has a blade construction which promotes a swirl pattern at high induction rates, with a low pressure drop and low sound levels.



Louvre Face Diffuser Options

- > *Optional colours on request*
- > *Can be supplied without housing*
- > *Can be supplied mounted with multiple units*
- > *Jet mode or diffuser mode*

Product specification codes:

CDS-DM350-395F	Radial Swirl Diffuser 395mm x 395mm FACE
CDS-DM350-445F	Radial Swirl Diffuser 445mm x 445mm FACE
CDS-DM350-595F	Radial Swirl Diffuser 595mm x 595mm FACE
CDS-DM500-595F	Radial Swirl Diffuser 595mm x 595mm FACE
CDS-DM350R	Radial Swirl Diffuser Round 350mm diameter
CDS-DM500R	Radial Swirl Diffuser Round 500mm diameter

2.1 DIFFUSERS

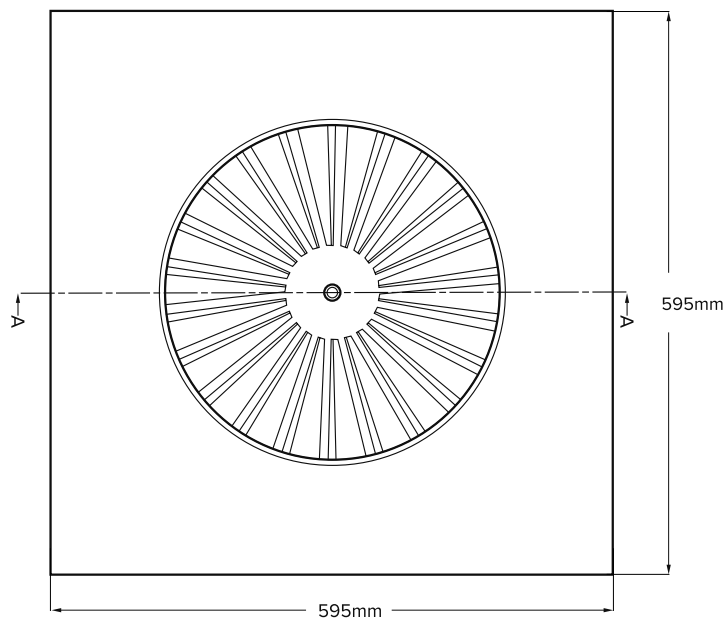
RADIAL SWIRL DIFFUSER (CDS-DM350/500)

11

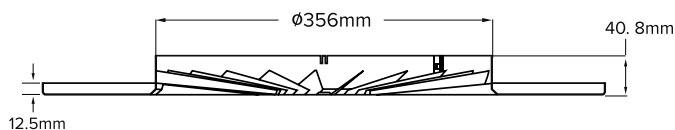


Sectional diagrams: Radial Swirl Diffuser (CDS-DM350)

Plan View Diagram

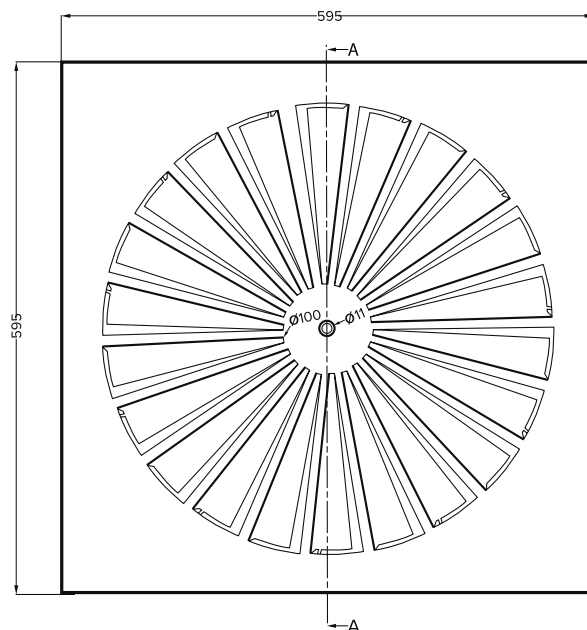


Cross Sectional Diagram

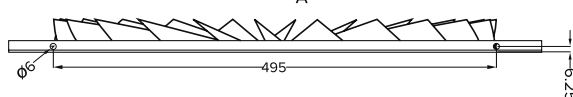


Sectional diagrams: Radial Swirl Diffuser (CDS-DM500)

Plan View Diagram



Cross Sectional Diagram



Due to going product development, data and dimensions are subject to change.

Performance Data

Radial Swirl Diffuser CDS-DM 500 - Airflow, Pressure and Throw Values						
	Grille Only		Grille (with 355 ring)		Grille (with 255mm ring)	
Qs (l/s)	Ps (Pa)	Th (m)	Ps (Pa)	Th (m)	Ps (Pa)	Th (m)
50	<1	1	2	1.6	7	2
75	1	1.5	3	1.9	9	2.7
100	2	2.0	5	2.5	15	3.5
125	2	2.5	7	3.2	24	4.4
150	3	3.0	10	3.8	34	5.5
175	5	3.5	14	4.5	46	>6
200	6	4.0	19	5.2	60	>6
225	7	4.5	24	5.9	77	>6
245	9	5.0	28	>6	92	>6
270	11	5.5	35	>6	112	>6
300	13	>6	43	>6	136	

LEGEND

Qa - Primary Air Flow Rate (L/s)

Ps - Supply Static Pressure (Pa)

< - Insufficient margin above background noise to allow accurate determination

> - Length of throw greater than that able to be measured

Th - Horizontal Throw in metres at terminal velocity of 0.25m/s

2.1 DIFFUSERS

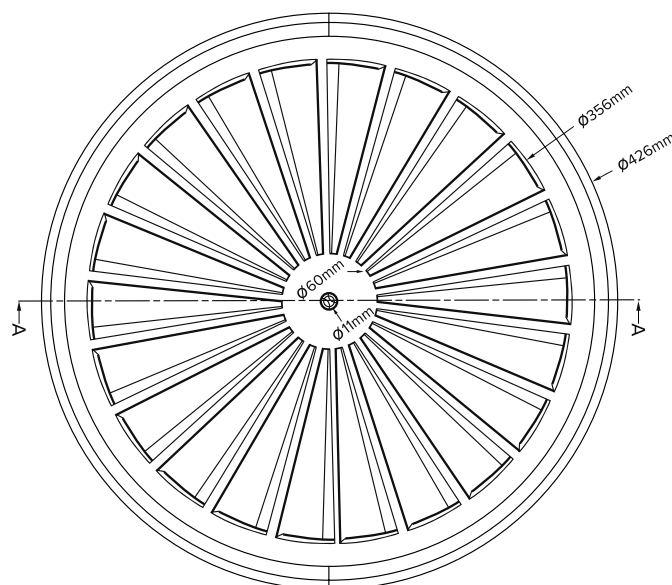
RADIAL SWIRL DIFFUSER (CDS-DM350R)

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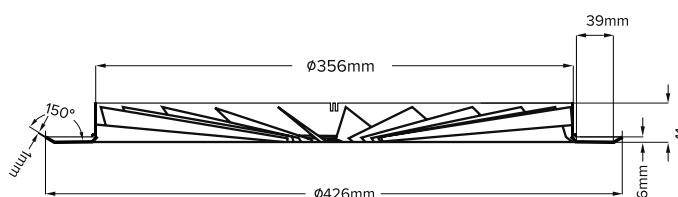


Sectional diagrams: Radial Swirl Diffuser (CDS-DM350R)

Plan View Diagram



Cross Sectional Diagram



Performance Data

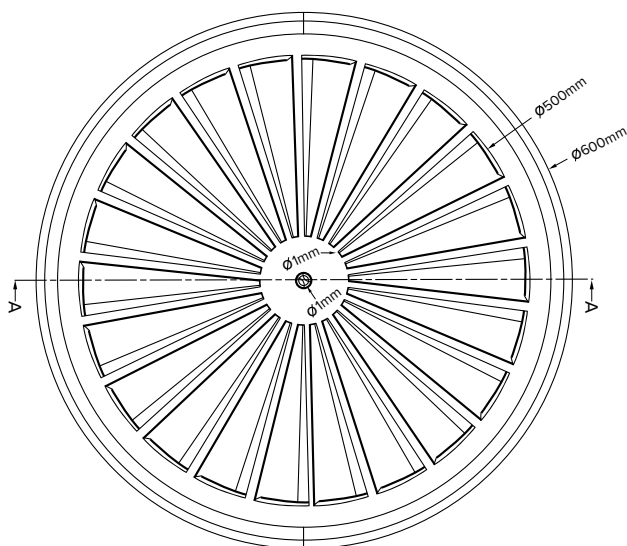
TEST CONDITIONS				SOUND POWER LEVEL, db re 1E-12 W OCTAVE BAND CENTRE FREQUENCY (Hz)						
Qs (l/s)	Ps (Pa)	Th (m)	NC	125	250	500	1000	2000	4000	8000
50	2	2	<11	<38.3	<30.8	<26.2	<22.8	<15.9	<14.5	<14.7
100	6	3.6	<12	40.2	32.1	<26.8	<23.3	<16.2	<14.8	<14.8
150	14	5.6	15	41.6	37.6	31.2	<25.3	<17.6	<14.5	<14.9
180	20	6.7	21	44.2	42.4	36.9	30.3	25.6	<16.6	<15.0
200	25	>7	24	47.7	44.3	39.6	34.0	27.2	19.9	<15.2

LEGEND

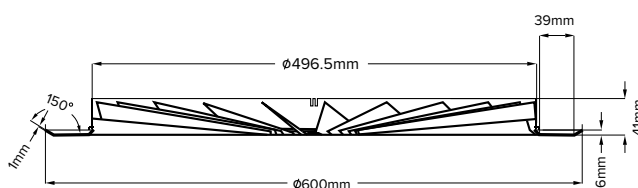
Qa - Primary Air Flow Rate (L/s) Ps - Supply Static Pressure (Pa) NC - Noise Criterion based upon room absorption of 10db
 > - Length of throw greater than that able to be measured Th - Horizontal Throw in metres at terminal velocity of 0.25m/s
 < - Insufficient margin above background noise to allow accurate determination

Sectional diagrams: Radial Swirl Diffuser (CDS-DM500R)

Plan View Diagram



Cross Sectional Diagram



Performance Data

TEST CONDITIONS				SOUND POWER LEVEL, db re 1E-12 W OCTAVE BAND CENTRE FREQUENCY (Hz)						
Qs (l/s)	Ps (Pa)	Th (m)	NC	125	250	500	1000	2000	4000	8000
165	7	4	17	42.5	37.6	31.4	29.7	25.4	16.4	<13.5
245	10	5	22	45.9	41.9	35.8	33.6	30.6	20.3	<13.5
288	13	6	27	49.9	46.4	40.5	38.4	36	26.5	16.3
351	19	7	32	53.5	50.6	45.8	42.8	39.8	31.8	22.1
432	29	>7	37	58.4	55.8	51.2	47.5	44.9	37.6	28.9

LEGEND

Qa - Primary Air Flow Rate (L/s) Ps - Supply Static Pressure (Pa) NC - Noise Criterion based upon room absorption of 10db
> - Length of throw greater than that able to be measured Th - Horizontal Throw in metres at terminal velocity of 0.25m/s
< - Insufficient margin above background noise to allow accurate determination

AIRFOIL



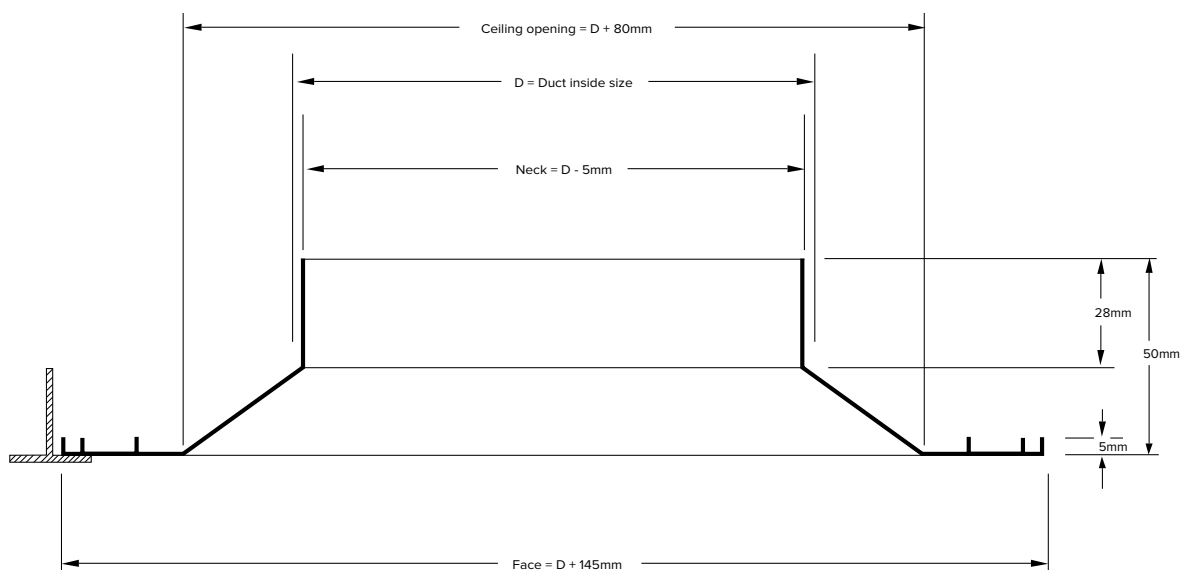
GRILLES
DUCT
FITTINGS

The Airfoil Louvre Face Diffuser is a frame style generally flush mounted to the ceiling line. This is ideal for lay-in applications where the diffuser is placed into a T-bar ceiling grid.

The Louvre Face Diffuser can be used in place of a modular ceiling tile without altering the T-bar construction. It comes in standard white.



Sectional diagram



Louvre Face Diffuser Options

> *Standard sizes: 150x150mm, 225x225mm, 300x300mm, 375x375mm, 395x395mm LAY IN FACE, 595x595mm LAY IN FACE. Special sizes manufactured on request*

> *Available in 5 different patterns*

> *Non-standard colours or finishes available on request*

Product specification codes:

LFD41	4 way blow diffuser	LFD41/F	4 way blow diffuser LAY IN FACE
LFD31	3 way blow diffuser	LFD31/F	3 way blow diffuser LAY IN FACE
LFD25	2 way corner blow diffuser	LFD25/F	2 way corner blow diffuser LAY IN FACE
LFD22	2 way opposite blow diffuser	LFD22/F	2 way opposite blow diffuser LAY IN FACE
LFD21	1 way blow diffuser	LFD21/F	1 way blow diffuser LAY IN FACE

Specification: Product code + size.

Example: **LFD41/F 395x395** 4 way blow diffuser 395mm x 395mm LAY IN FACE

LFD41 300x300 4 way blow diffuser 300mm x 300mm nominal neck

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

2.2 DIFFUSERS

LOUVRE FACE DIFFUSER (LFD41) 4 WAY BLOW

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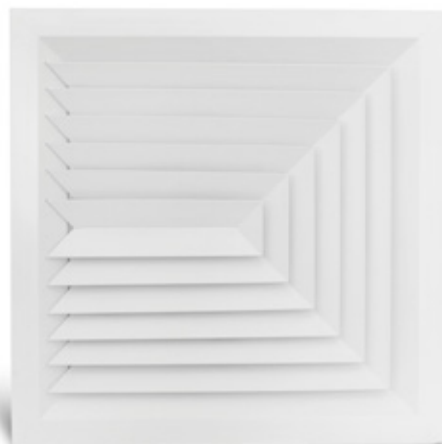


Performance Data Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	23	33	44
150x150	l/s	34	45	56	67	78
	NR - dB	—	—	—	—	20
	NC - dB	—	—	—	—	19
	Min - Max Throw (metres)	0.6-1.8	0.9-1.8	1.2-2.1	1.5-2.7	1.5-3.0
225x225	l/s	76	101	127	152	177
	NR - dB	—	—	—	22	27
	NC - dB	—	—	—	21	26
	Min - Max Throw (metres)	1.2-2.4	1.5-3.0	1.8-3.7	2.1-4.0	2.4-4.3
300x300	l/s	135	180	225	270	315
	NR - dB	—	—	22	28	32
	NC - dB	—	—	21	27	31
	Min - Max Throw (metres)	1.5-3.4	1.8-4.0	2.1-4.6	2.7-5.2	3.4-5.5
375x375	l/s	210	260	345	421	490
	NR - dB	—	21	27	31	38
	NC - dB	—	20	26	30	37
	Min - Max Throw (metres)	1.8-4.3	2.1-4.6	2.4-5.5	3.4-6.1	4.3-6.1
450x450	l/s	304	405	506	607	708
	NR - dB	—	25	30	34	40
	NC - dB	—	24	29	33	39
	Min - Max Throw (metres)	2.1-4.9	2.4-5.5	3.7-6.7	4.3-7.3	4.9-7.9

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.



Performance Data Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	23	33	44
150x150 0.0225	I/s	34	45	56	67	78
	NR - dB	—	—	—	24	31
	NC - dB	—	—	—	23	30
	Min-Max Throw (metres)	L 0.6-2.1 S 0.6-1.8	1.2-2.4 0.9-1.8	1.2-2.7 0.9-2.1	1.5-3.0 1.2-2.4	1.8-3.4 1.2-2.7
225x225 0.0506	I/s	76	101	127	152	177
	NR - dB	—	—	23	29	35
	NC - dB	—	—	22	28	34
	Min-Max Throw (metres)	L 1.2-3.0 S 1.2-2.7	1.5-3.7 1.2-3.0	1.8-4.0 1.5-3.7	2.4-4.6 1.8-3.7	2.7-4.9 2.1-4.0
300x300 0.0900	I/s	135	180	225	270	315
	NR - dB	—	21	26	32	38
	NC - dB	—	20	25	31	37
	Min-Max Throw (metres)	L 1.5-4.3 S 1.2-3.7	2.1-4.9 1.5-3.7	2.4-5.5 2.1-4.0	3.0-5.5 2.4-4.9	3.7-6.4 3.0-5.2
375x375 0.1406	I/s	210	260	345	421	490
	NR - dB	—	23	29	34	40
	NC - dB	—	22	28	33	39
	Min-Max Throw (metres)	L 1.8-5.2 S 1.5-4.3	2.4-6.1 2.1-4.9	3.0-6.7 2.4-5.5	3.7-7.0 3.4-6.1	4.9-7.6 4.3-6.4
450x450 0.2025	I/s	304	405	506	607	708
	NR - dB	—	24	30	35	42
	NC - dB	—	23	29	34	41
	Min-Max Throw (metres)	L 2.4-6.4 S 1.8-4.9	3.0-7.3 2.4-5.8	4.0-8.2 3.4-6.7	4.9-8.8 4.0-7.3	5.5-9.4 4.6-7.6

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

2.2 DIFFUSERS

LOUVRE FACE DIFFUSER (LFD25) 2 WAY CORNER BLOW

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AIRFOIL
GRILLES
DUCT
FITTINGS
making it happen sooner...



Performance Data Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	32	33	44
150x150	l/s	34	45	56	67	78
	NC - dB	—	—	—	24	30
	0.0225	—	—	—	23	29
	Min - Max Throw (metres)	0.9-2.4	1.5-3.0	1.5-3.0	2.1-3.7	2.4-4.0
225x225	l/s	76	101	127	152	177
	NR - dB	—	—	22	28	34
	0.0506	—	—	21	27	33
	Min - Max Throw (metres)	1.2-3.4	2.1-4.0	2.4-4.6	2.7-5.2	3.0-5.5
300x300	l/s	135	180	225	270	315
	NR - dB	—	21	26	31	37
	0.0900	—	20	25	30	36
	Min - Max Throw (metres)	1.8-4.6	2.4-5.5	3.0-6.1	4.0-6.4	4.3-7.0
375x375	l/s	210	260	345	421	490
	NR - dB	19	22	29	34	40
	0.1406	18	21	28	33	39
	Min - Max Throw (metres)	2.1-6.2	3.0-7.0	4.6-8.2	5.0-8.5	5.8-9.1
450x450	l/s	304	405	506	607	708
	NR - dB	—	23	30	35	41
	0.2025	—	22	29	34	40
	Min - Max Throw (metres)	2.7-7.0	3.7-8.2	4.6-9.1	5.5-10.0	6.7-10.9

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.



Performance Data Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	23	33	44
225x225 0.0506	I/s	76	101	127	152	177
	NC - dB	—	—	23	29	35
	NC - dB	—	—	22	28	34
	Min - Max Throw (metres)	1.2-3.4	1.5-3.7	1.8-4.3	2.4-4.9	3.0-5.2
300x300 0.0900	I/s	135	180	225	270	315
	NR - dB	—	21	26	32	38
	NC - dB	—	20	25	31	37
	Min - Max Throw (metres)	1.8-4.6	2.4-5.5	3.0-6.1	3.4-6.4	4.0-7.0
375x375 0.1406	I/s	210	260	345	421	490
	NR - dB	—	23	28	34	40
	NC - dB	—	22	27	33	39
	Min - Max Throw (metres)	2.1-5.8	3.0-6.7	3.7-7.6	4.3-8.2	5.2-8.8
450x450 0.2025	I/s	304	405	506	607	708
	NR - dB	—	24	30	35	42
	NC - dB	—	23	29	34	41
	Min - Max Throw (metres)	2.7-7.3	4.0-8.5	4.9-9.1	5.8-10.0	7.0-10.9

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

2.2 DIFFUSERS

LOUVRE FACE DIFFUSER (LFD 11) 1 WAY BLOW



Performance Data Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	23	33	44
150x150	l/s	34	45	56	67	78
	NR - dB	—	—	—	22	29
	NC - dB	—	—	—	21	28
	Min - Max Throw (metres)	1.2-3.4	1.5-3.7	2.1-4.0	2.7-4.6	3.0-5.2
225x225	l/s	76	101	127	152	177
	NR - dB	—	—	22	27	33
	NC - dB	—	—	21	26	32
	Min - Max Throw (metres)	1.8-5.2	2.4-5.5	3.4-6.4	4.0-7.0	4.6-7.9
300x300	l/s	135	180	225	270	315
	NR - dB	—	21	25	30	36
	NC - dB	—	20	24	29	35
	Min - Max Throw (metres)	2.4-6.7	3.4-7.9	4.3-8.5	5.5-9.1	6.1-10.0
375x375	l/s	210	260	345	421	490
	NR - dB	17	23	27	33	39
	NC - dB	16	22	26	32	38
	Min - Max Throw (metres)	3.0-7.0	3.7-10.0	5.5-10.7	6.1-11.0	8.0-13.0
450x450	l/s	304	405	506	607	708
	NR - dB	—	24	29	34	41
	NC - dB	—	23	28	33	40
	Min - Max Throw (metres)	3.4-7.0	4.0-10.3	5.8-11.0	6.4-11.3	8.2-13.4

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

Product ordering codes:

LFD41/F 595x595	4 way blow diffuser 595mm x 595mm LAY IN FACE STYLE
LFD31/F 595x595	3 way blow diffuser 595mm x 595mm LAY IN FACE STYLE
LFD25/F 595x595	2 way corner blow diffuser 595mm x 595mm LAY IN FACE STYLE
LFD21/F 595x595	2 way opposite blow diffuser 595mm x 595mm LAY IN FACE STYLE
LFD11/F 595x595	1 way blow diffuser 595mm x 595mm LAY IN FACE STYLE
LFD41/F 395x395	4 way blow diffuser 395mm x 395mm LAY IN FACE STYLE
LFD31/F 395x395	3 way blow diffuser 395mm x 395mm LAY IN FACE STYLE
LFD25/F 395x395	2 way corner blow diffuser 395mm x 395mm LAY IN FACE STYLE
LFD21/F 395x395	2 way opposite blow diffuser 395mm x 395mm LAY IN FACE STYLE
LFD11/F 395x395	1 way blow diffuser 395mm x 395mm LAY IN FACE STYLE
LFD41 375x375	4 way blow diffuser 375mm x 375mm
LFD31 375x375	3 way blow diffuser 375mm x 375mm
LFD25 375x375	2 way corner blow diffuser 375mm x 375mm
LFD21 375x375	2 way opposite blow diffuser 375mm x 375mm
LFD11 375x375	1 way blow diffuser 375mm x 375mm
LFD41 300x300	4 way blow diffuser 300mm x 300mm
LFD31 300x300	3 way blow diffuser 300mm x 300mm
LFD25 300x300	2 way corner blow diffuser 300mm x 300mm
LFD21 300x300	2 way opposite blow diffuser 300mm x 300mm
LFD11 300x300	1 way blow diffuser 300mm x 300mm
LFD41 225x225	4 way blow diffuser 225mm x 225mm
LFD31 225x225	3 way blow diffuser 225mm x 225mm
LFD25 225x225	2 way opposite blow diffuser 225mm x 225mm
LFD21 225x225	2 way opposite blow diffuser 150mm x 150mm
LFD11 225x225	1 way blow diffuser 225mm x 225mm
LFD41 150x150	4 way blow diffuser 150mm x 150mm
LFD31 150x150	3 way blow diffuser 150mm x 150mm
LFD25 150x150	2 way corner blow diffuser 150mm x 150mm
LFD21 150x150	2 way opposite blow diffuser 150mm x 150mm
LFD11 150x150	1 way blow diffuser 150mm x 150mm



PROJECT: GREENLAND HOTEL, SYDNEY

2.3 DIFFUSERS

BEVELLED FACE DIFFUSER (BD)

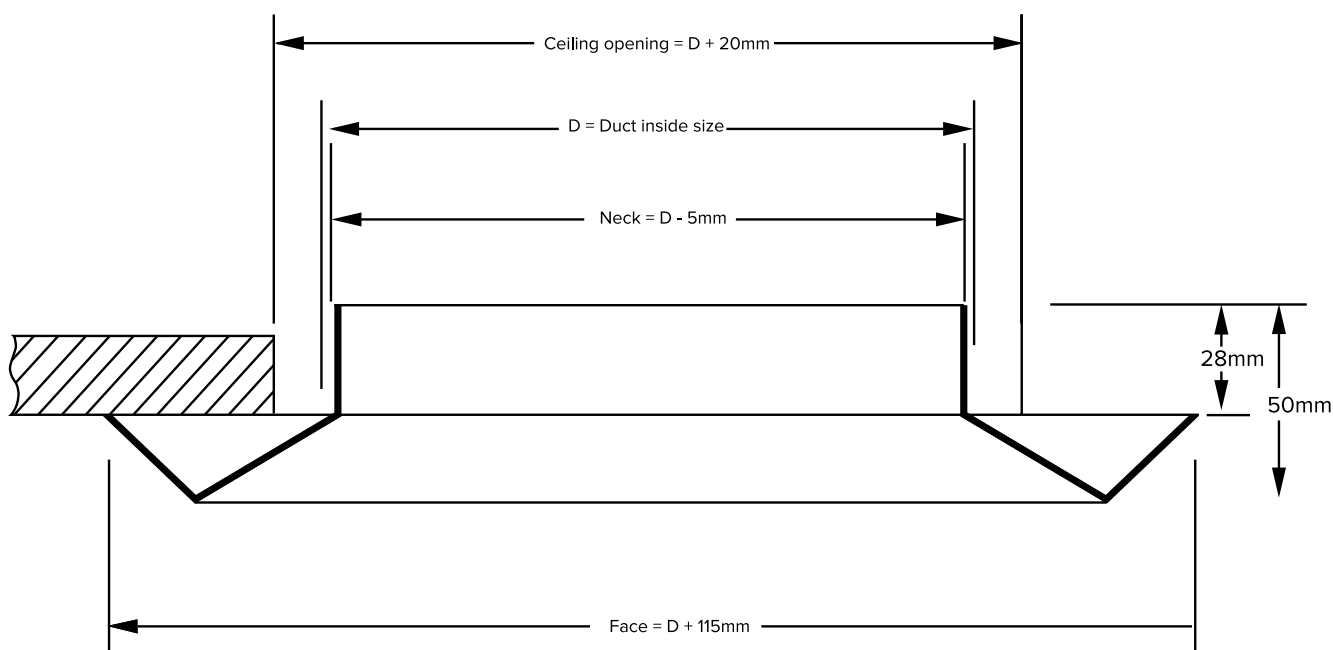
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The Airfoil Bevelled Face Diffuser is a surface mounting model. The attractive 45 degree bevelled frame comes in standard white. It offers the advantage of a built-in anti-smudge frame for increased ceiling protection.

All sizes are available with a fixing clip neck adaptor with a choice of spigot sizes to suit the flexible duct. Used in domestic and commercial capacities, the BD is extremely effective in providing an even spread of air across the target area.

Cross sectional diagram



Bevelled Face Diffuser Options

> *Standard sizes: 150x150mm, 225x225mm, 300x300mm, 375x375mm, 450x450mm, 600x600mm. Special sizes are manufactured on request*

> *Available in 5 different patterns*
> *Non-standard colours or finishes available on request*

Product specification codes:

BD41 4 way blow diffuser
BD31 3 way blow diffuser
BD25 2 way corner blow diffuser
BD21 2 way opposite blow diffuser
BD11 1 way blow diffuser

Specification: Product code + size.
Example: **BD41 450x450** 4 way blow diffuser 450mm x 450mm

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



Performance Data: Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	23	33	44
150x150 0.0225	l/s	34	45	56	67	78
	NR - dB	—	—	—	—	20
	NC - dB	—	—	—	—	19
	Min - Max Throw (metres)	0.6-1.8	0.9-1.8	1.2-2.1	1.5-2.7	1.5-3.0
225x225 0.0506	l/s	76	101	127	152	177
	NR - dB	—	—	—	22	27
	NC - dB	—	—	—	21	26
	Min - Max Throw (metres)	1.2-2.4	1.5-3.0	1.8-3.7	2.1-4.0	2.4-4.3
300x300 0.0900	l/s	135	180	225	270	315
	NR - dB	—	—	22	28	32
	NC - dB	—	—	21	27	31
	Min - Max Throw (metres)	1.5-3.4	1.8-4.0	2.1-4.6	2.7-5.2	3.4-5.5
375x375 0.1406	l/s	210	260	345	421	490
	NR - dB	—	21	27	31	38
	NC - dB	—	20	26	30	37
	Min - Max Throw (metres)	1.8-4.3	2.1-4.6	2.4-5.5	3.4-6.1	4.3-6.1
450x450 0.2025	l/s	304	405	506	607	708
	NR - dB	—	25	30	34	40
	NC - dB	—	24	29	33	39
	Min - Max Throw (metres)	2.1-4.9	2.4-5.5	3.7-6.7	4.3-7.3	4.9-7.9

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

2.3 DIFFUSERS

BEVELLED FACE DIFFUSER (BD3 1) 3 WAY BLOW

25



Performance Data: Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	23	33	44
150x150 0.0225	I/s	34	45	56	67	78
	NR - dB	—	—	—	24	31
	NC - dB	—	—	—	23	30
	Min-Max Throw (metres)	L 0.6-2.1	1.2-2.4	1.2-2.7	1.5-3.0	1.8-3.4
		S 0.6-1.8	0.9-1.8	0.9-2.1	1.2-2.4	1.2-2.7
225x225 0.0506	I/s	76	101	127	152	177
	NR - dB	—	—	23	29	35
	NC - dB	—	—	22	28	34
	Min-Max Throw (metres)	L 1.2-3.0	1.5-3.7	1.8-4.0	2.4-4.6	2.7-4.9
		S 1.2-2.7	1.2-3.0	1.5-3.7	1.8-3.7	2.1-4.0
300x300 0.0900	I/s	135	180	225	270	315
	NR - dB	—	21	26	32	38
	NC - dB	—	20	25	31	37
	Min-Max Throw (metres)	L 1.5-4.3	2.1-4.9	2.4-5.5	3.0-5.5	3.7-6.4
		S 1.2-3.7	1.5-3.7	2.1-4.0	2.4-4.9	3.0-5.2
375x375 0.1406	I/s	210	260	345	421	490
	NR - dB	—	23	29	34	40
	NC - dB	—	22	28	33	39
	Min-Max Throw (metres)	L 1.8-5.2	2.4-6.1	3.0-6.7	3.7-7.0	4.9-7.6
		S 1.5-4.3	2.1-4.9	2.4-5.5	3.4-6.1	4.3-6.4
450x450 0.2025	I/s	304	405	506	607	708
	NR - dB	—	24	30	35	42
	NC - dB	—	23	29	34	41
	Min-Max Throw (metres)	L 2.4-6.4	3.0-7.3	4.0-8.2	4.9-8.8	5.5-9.4
		S 1.8-4.9	2.4-5.8	3.4-6.7	4.0-7.3	4.6-7.6

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.



Performance Data: Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	32	33	44
150x150	l/s	34	45	56	67	78
	NC - dB	—	—	—	24	30
	0.0225	—	—	—	23	29
	Min - Max Throw (metres)	0.9-2.4	1.5-3.0	1.5-3.0	2.1-3.7	2.4-4.0
225x225	l/s	76	101	127	152	177
	NR - dB	—	—	22	28	34
	0.0506	—	—	21	27	33
	Min - Max Throw (metres)	1.2-3.4	2.1-4.0	2.4-4.6	2.7-5.2	3.0-5.5
300x300	l/s	135	180	225	270	315
	NR - dB	—	21	26	31	37
	0.0900	—	20	25	30	36
	Min - Max Throw (metres)	1.8-4.6	2.4-5.5	3.0-6.1	4.0-6.4	4.3-7.0
375x375	l/s	210	260	345	421	490
	NR - dB	19	22	29	34	40
	0.1406	18	21	28	33	39
	Min - Max Throw (metres)	2.1-6.2	3.0-7.0	4.6-8.2	5.0-8.5	5.8-9.1
450x450	l/s	304	405	506	607	708
	NR - dB	—	23	30	35	41
	0.2025	—	22	29	34	40
	Min - Max Throw (metres)	2.7-7.0	3.7-8.2	4.6-9.1	5.5-10.0	6.7-10.9

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

2.3 DIFFUSERS

BEVELLED FACE DIFFUSER 2 WAY OPPOSITE BLOW 2 WAY OPPOSITE BLOW



Performance Data: Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	23	33	44
225x225	l/s	76	101	127	152	177
	NC - dB	—	—	23	29	35
	0.0506	—	—	22	28	34
	Min - Max Throw (metres)	1.2-3.4	1.5-3.7	1.8-4.3	2.4-4.9	3.0-5.2
300x300	l/s	135	180	225	270	315
	NR - dB	—	21	26	32	38
	0.0900	—	20	25	31	37
	Min - Max Throw (metres)	1.8-4.6	2.4-5.5	3.0-6.1	3.4-6.4	4.0-7.0
375x375	l/s	210	260	345	421	490
	NR - dB	—	23	28	34	40
	0.1406	—	22	27	33	39
	Min - Max Throw (metres)	2.1-5.8	3.0-6.7	3.7-7.6	4.3-8.2	5.2-8.8
450x450	l/s	304	405	506	607	708
	NR - dB	—	24	30	35	42
	0.2025	—	23	29	34	41
	Min - Max Throw (metres)	2.7-7.3	4.0-8.5	4.9-9.1	5.8-10.0	7.0-10.9

Throw measurements are at 1.5mls min and .65mls max terminal velocity.



Performance Data: Neck Velocity (m/sec.)

Neck Area	Rating	1.5	2.0	2.5	3.0	3.5
(sq. metre)	Total Pressure Drop in Pascals	10	15	23	33	44
150x150	l/s	34	45	56	67	78
	NR - dB	—	—	—	22	29
	NC - dB	—	—	—	21	28
	Min - Max Throw (metres)	1.2-3.4	1.5-3.7	2.1-4.0	2.7-4.6	3.0-5.2
225x225	l/s	76	101	127	152	177
	NR - dB	—	—	22	27	33
	NC - dB	—	—	21	26	32
	Min - Max Throw (metres)	1.8-5.2	2.4-5.5	3.4-6.4	4.0-7.0	4.6-7.9
300x300	l/s	135	180	225	270	315
	NR - dB	—	21	25	30	36
	NC - dB	—	20	24	29	35
	Min - Max Throw (metres)	2.4-6.7	3.4-7.9	4.3-8.5	5.5-9.1	6.1-10.0
375x375	l/s	210	260	345	421	490
	NR - dB	17	23	27	33	39
	NC - dB	16	22	26	32	38
	Min - Max Throw (metres)	3.0-7.0	3.7-10.0	5.5-10.7	6.1-11.0	8.0-13.0
450x450	l/s	304	405	506	607	708
	NR - dB	—	24	29	34	41
	NC - dB	—	23	28	33	40
	Min - Max Throw (metres)	3.4-7.0	4.0-10.3	5.8-11.0	6.4-11.3	8.2-13.4

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

2.3 DIFFUSERS

BEVELLED FACE DIFFUSER (BD) STANDARD PRODUCT CODES

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Product ordering codes:

BD41 600x600	4 way blow diffuser 600mm x 600mm
BD41 450x450	4 way blow diffuser 450mm x 450mm
BD31 450x450	3 way blow diffuser 450mm x 450mm
BD25 450x450	2 way corner blow diffuser 450mm x 450mm
BD21 450x450	2 way opposite blow diffuser 450mm x 450mm
BD11 450x450	1 way blow diffuser 450mm x 450mm
BD41 375x375	4 way blow diffuser 375mm x 375mm
BD31 375x375	3 way blow diffuser 375mm x 375mm
BD25 375x375	2 way corner blow diffuser 375mm x 375mm
BD21 375x375	2 way opposite blow diffuser 375mm x 375mm
BD11 375x375	1 way blow diffuser 375mm x 375mm
BD41 300x300	4 way blow diffuser 300mm x 300mm
BD31 300x300	3 way blow diffuser 300mm x 300mm
BD25 300x300	2 way corner blow diffuser 300mm x 300mm
BD21 300x300	2 way opposite blow diffuser 300mm x 300mm
BD11 300x300	1 way blow diffuser 300mm x 300mm
BD41 225x225	4 way blow diffuser 225mm x 225mm
BD31 225x225	3 way blow diffuser 225mm x 225mm
BD25 225x225	2 way corner blow diffuser 225mm x 225mm
BD21 225x225	2 way opposite blow diffuser 225mm x 225mm
BD11 225x225	1 way blow diffuser 225mm x 225mm
BD41 150x150	4 way blow diffuser 150mm x 150mm
BD31 150x150	3 way blow diffuser 150mm x 150mm
BD25 150x150	2 way corner blow diffuser 150mm x 150mm
BD21 150x150	2 way opposite blow diffuser 150mm x 150mm
BD11 150x150	1 way blow diffuser 150mm x 150mm

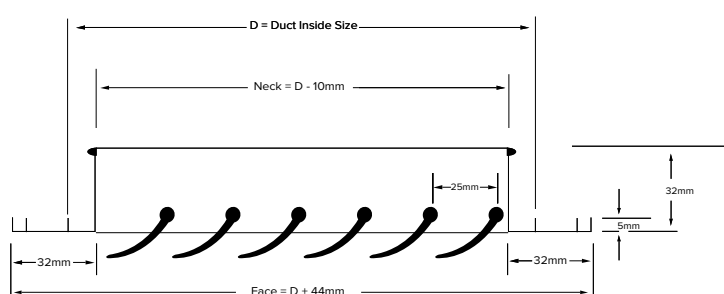


PROJECT: SYDNEY ADVENTIST HOSPITAL

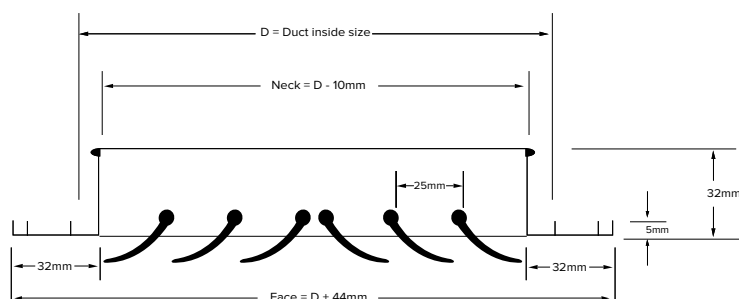
Airfoil's Curved Blade Registers frame style are generally flush mounted to the ceiling line and are manufactured from high quality aluminium. The curved blade register is adjustable and comes with a fixing clip neck adaptor or cushion box. It comes in standard in powder coated white.



Cross sectional diagram CR1



Cross sectional diagram CR2



Curved Blade Register Options

- > *Non-standard colours or finishes available on request*
- > *Available in fixed or removable core*
- > *Available in 4 different patterns*
- > *Special sizes are manufactured on request*
- > *Optional MDO style on request*

Product specification codes:

CR4	4 way curved blade blow diffuser with fixed core	RCCR4	4 way curved blade blow diffuser with removable core
CR3	3 way curved blade blow diffuser with fixed core	RCCR3	3 way curved blade blow diffuser with removable core
CR2	2 way curved blade blow diffuser with fixed core	RCCR2	2 way curved blade blow diffuser with removable core
CR1	1 way curved blade blow diffuser with fixed core	RCCR1	1 way curved blade blow diffuser with removable core

Specification: Product code + size.

Example: **CR3 450x450** 3 way curved blade blow diffuser with fixed core 450mm x 450mm

2.4 DIFFUSERS

CURVED BLADE REGISTER (CR4)

4 WAY BLOW



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Performance Data

Face Velocity	1 m/s			1.5 m/s			2 m/s			2.5 m/s		
Neck Size	I/s	Throw m	Stat Pres (Pa)	I/s	Throw m	Stat Pres (Pa)	I/s	Throw m	Stat Pres (Pa)	I/s	Throw m	Stat Pres (Pa)
300x300	56	.6	1.5	80	.9	2.75	108	1.3	4.5	124	1.8	6
400x400	100	.6	1.5	140	1.2	2.75	192	1.5	4.5	232	2.1	6
450x300	85	.6	1.5	129	.9	2.75	154	1.5	4.5	197	2	6
450x450	133	.9	1.5	185	1.2	2.75	234	1.8	4.5	294	2.3	6
600x300	114	.6	1.5	168	1.2	2.75	215	1.8	4.5	275	2	6
600x450	177	.9	1.5	266	1.5	2.75	343	2.3	4.5	242	2.6	6
600x600	240	1.2	1.5	366	2	2.75	481	2.7	4.5	575	3.4	6

Face Velocity	3 m/s			3.5 m/s			4 m/s		
Neck Size	I/s	Throw m	Stat Pres (Pa)	I/s	Throw m	Stat Pres (Pa)	I/s	Throw m	Stat Pres (Pa)
300x300	146	2.1	8	166	2.2	9.25	195	2.4	12.5
400x400	276	2.7	8	314	3.1	9.25	360	3.6	12.5
450x300	235	2.4	8	270	3	9.25	314	3.3	12.5
450x450	368	3	8	414	3.6	9.25	470	4.2	12.5
600x300	316	2.7	8	326	3.5	9.25	400	3.9	12.5
600x450	520	3.6	8	595	4.3	9.25	662	4.9	12.5
600x600	700	4.3	8	790	5.2	9.25	910	5.8	12.5

Due to going product development, data and dimensions are subject to change.



Performance Data

Face Velocity	1 m/s			1.5 m/s			2 m/s			2.5 m/s		
Neck Size	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)
300x300	57	.6	1	82	.9	2.5	110	1.3	3.75	127	1.8	5.5
400x400	103	.6	1.25	143	1.2	2.5	196	1.5	3.75	236	2.1	5.5
450x300	87	.6	1.25	131	.9	2.5	158	1.5	3.75	201	2	5.5
450x450	135	.9	1.25	190	1.2	2.5	242	1.8	3.75	302	2.3	5.5
600x300	116	.6	1.25	170	1.2	2.5	220	1.8	3.75	280	2	5.5
600x450	180	.9	1.25	269	1.5	2.5	349	2.4	3.75	432	2.7	5.5
600x600	245	1.2	1.25	371	2.1	2.5	490	2.7	3.75	585	3.4	5.5

Face Velocity	3 m/s			3.5 m/s			4 m/s		
Neck Size	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)
300x300	150	2.1	7	170	2.2	7.75	200	2.4	10.5
400x400	284	2.7	7	322	3.2	7.75	370	3.7	10.5
450x300	240	2.4	7	275	3.1	7.75	322	3.4	10.5
450x450	376	3	7	422	3.7	7.75	485	4.3	10.5
600x300	324	2.7	7	334	3.6	7.75	415	4	10.5
600x450	530	3.7	7	610	4.4	7.75	680	4.9	10.5
600x600	720	4.3	7	810	5.2	7.75	930	5.8	10.5

2.4 DIFFUSERS

CURVED BLADE REGISTER (CR2)

2 WAY BLOW

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Performance Data

Face Velocity	1 m/s			1.5 m/s			2 m/s			2.5 m/s		
Neck Size	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)
300x300	59	.9	1.25	83	1.9	2	112	1.5	3.5	130	2.1	4.25
400x400	105	.6	1.25	146	1.5	2.25	200	2.7	3.5	240	3.6	4.25
450x300	88	.9	1.25	133	1.2	2.25	162	1.8	3.5	205	3.4	4.25
450x450	137	1.2	1.25	195	1.8	2.25	251	2.4	3.5	310	3.7	4.25
600x300	118	.9	1.25	172	1.8	2.25	225	2.4	3.5	285	3.0	4.25
600x450	182	1.2	1.25	272	2.1	2.25	355	3.0	3.5	440	3.9	4.25
600x600	247	1.5	1.25	375	2.4	2.25	500	3.7	3.5	595	4.7	4.25

Face Velocity	3 m/s			3.5 m/s			4 m/s		
Neck Size	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)
300x300	155	2.4	6.5	175	3	7	210	3.4	10
400x400	290	4.7	6.5	330	5.2	7	380	5.9	10
450x300	245	3.7	6.5	280	4	7	330	4.3	10
450x450	380	4	6.5	430	4.7	7	500	5.4	10
600x300	330	3.7	6.5	342	4.4	7	430	5.2	10
600x450	540	4.6	6.5	625	5.5	7	700	6.1	10
600x600	735	5.5	6.5	830	6.4	7	960	7.3	10

Due to going product development, data and dimensions are subject to change.



Performance Data

Face Velocity	1 m/s			1.5 m/s			2 m/s			2.5 m/s		
Neck Size	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)
300x300	60	.9	.75	85	1.5	1.5	115	2.1	2.5	135	3	3.75
400x400	105	1.5	1	150	2.1	1.75	205	3.0	2.5	245	4	3.75
450x300	90	1.2	1	135	1.8	1.75	165	2.7	2.5	210	3.7	3.75
450x450	140	1.5	1	200	2.7	1.75	260	3.7	2.5	320	4.6	3.75
600x300	120	1.5	1	175	2.1	1.75	230	3.4	2.5	290	4.3	3.75
600x450	185	2.1	1	275	3.0	1.75	360	4.3	2.5	450	4	3.75
600x600	250	2.4	1	380	3.7	1.75	510	5.2	2.5	610	6.7	3.75

Face Velocity	3 m/s			3.5 m/s			4 m/s		
Neck Size	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)
300x300	160	3.4	5	180	4	6.25	215	4.6	7.5
400x400	300	4.9	5	340	5.8	6.25	400	6.7	7.5
450x300	250	4.3	5	290	5.5	6.25	340	6.1	10
450x450	390	5.5	5	440	6.7	6.25	520	7.6	10
600x300	340	5.2	5	350	6.1	6.25	450	7	10
600x450	550	6.7	5	640	7.9	6.25	730	8.5	10
600x600	750	7.6	5	850	9.1	6.25	1000	10.3	10

2.5 DIFFUSERS

LINEAR SLOT DIFFUSER (LS)

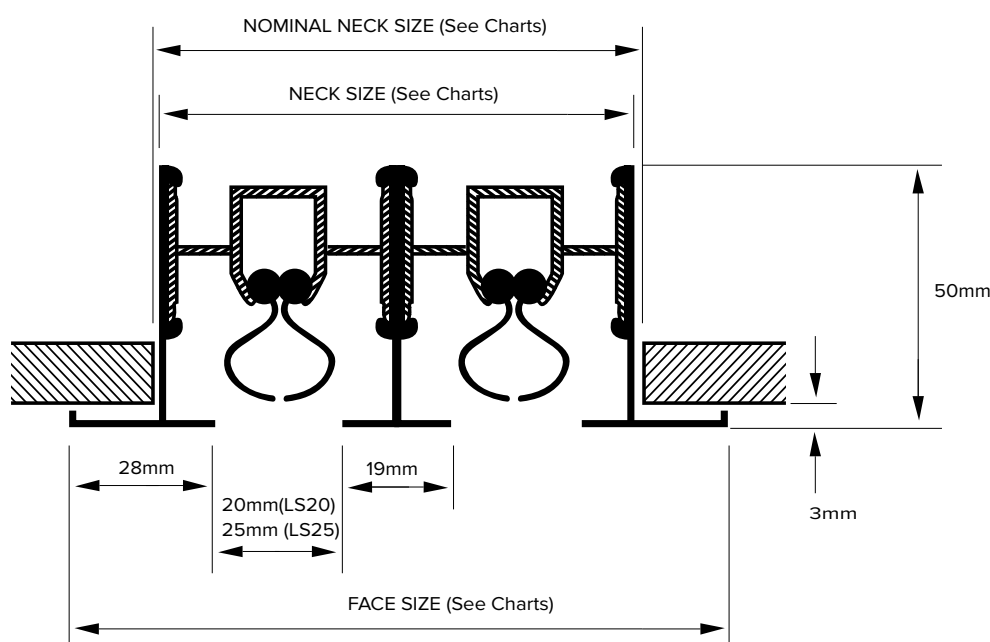
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Airfoil's Linear Slot Diffuser is generally ceiling mounted and can be used for both supply and return air functions. The slots can be adjusted to provide a variable air throw pattern from vertical to horizontal.

Airfoil's superior design delivers greater air volume per slot and less noise for a more effective room air circulation.

Cross sectional diagram



Linear Slot Diffuser Options

- > Slot widths of either 20mm or 25mm
- > Recommended single length 4.5m, maximum 6m
- > Specific colours and finishes available on request
- > Up to 10 slots with fixed core

Product specification codes:

LS125	One slot linear diffuser with 25mm spacing	LS120	One slot linear diffuser with 20mm spacing
LS225	Two slot linear diffuser with 25mm spacing	LS220	Two slot linear diffuser with 20mm spacing
LS325	Three slot linear diffuser with 25mm spacing	LS320	Three slot linear diffuser with 20mm spacing
LS425	Four slot linear diffuser with 25mm spacing	LS420	Four slot linear diffuser with 20mm spacing
LS525	Five slot linear diffuser with 25mm spacing	LS520	Five slot linear diffuser with 20mm spacing
LS625	Six slot linear diffuser with 25mm spacing	LS620	Six slot linear diffuser with 20mm spacing
LS725	Seven slot linear diffuser with 25mm spacing	LS720	Seven slot linear diffuser with 20mm spacing
LS825	Eight slot linear diffuser with 25mm spacing	LS820	Eight slot linear diffuser with 20mm spacing
LS925	Nine slot linear diffuser with 25mm spacing	LS920	Nine slot linear diffuser with 20mm spacing
LS1025	Ten slot linear diffuser with 25mm spacing	LS1020	Ten slot linear diffuser with 20mm spacing

Specification: Product code + size.

Example: **LS825 1200 NNS** Eight slot linear diffuser with 25mm spacing and nominal neck size of 1200mm

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

PRODUCT CODE	SLOT	SLOT WIDTH	EXACT NECK SIZE	FACE SIZE
LS125	1	25	45	80
LS225	2	25	90	125
LS325	3	25	135	170
LS425	4	25	180	215
LS525	5	25	225	260
LS625	6	25	270	305

Performance Data - LS 25MM Slot width supply application

No. Slots	Total Press.		Horiz.		1		4		9		16		24		35		49		62	
	Pascals.		Vert.		1		2		6		10		15		21		29		37	
1	Lit / sec / metre				12		25		37		50		65		75		90		100	
	NR				-		-		16		25		32		37		42		46	
	Throw	Hor.	0.1	1	0.4	3.4	1	4	1.8	4.6	2.8	5.2	3.4	5.8	4.8	6.2	3.8	6.8		
	in metres	Vert	0.6		2.4		3.8		4.4		4.6		5.2		5.6		5.8			
2	Lit / sec / metre				25		50		75		100		125		150		175		200	
	NR				-		-		21		30		37		42		47		51	
	Throw	Hor.	0.4	1.8	1	4.6	1.8	5.8	3.4	6.8	4.4	7.4	4.6	8.2	5	8.2	5.6	9.6		
	in metres	Vert	1.6		3.4		5		5.8		6.8		7.6		8		8.6			
3	Lit / sec / metre				37		75		115		150		185		225		260		300	
	NR				-		16		24		33		40		45		50		54	
	Throw	Hor.	0.4	3.2	1.2	5.8	3.2	7	4	8.2	5	9.2	5.8	9.8	6.2	10.8	6.8	11.4		
	in metres	Vert	2.2		4		6.2		7.4		8.2		8.8		9.8		10.4			
4	Lit / sec / metre				50		100		150		200		250		300		350		400	
	NR				-		13		26		35		42		47		52		56	
	Throw	Hor.	0.6	3.4	1.8	6.8	3.8	8.2	4.6	9.6	6.2	10.4	6.8	11.4	7.4	12.2	7.6	13.2		
	in metres	Vert	-		13		26		35		42		47		52		56			
5	Lit / sec / metre				65		125		185		250		310		375		435		495	
	NR				-		14		27		36		43		48		53		57	
	Throw	Hor.	0.6	4	2.4	7.4	4	9.2	5.6	10.4	6.8	11.6	7.4	12.8	8	13.8	8.6	14.6		
	in metres	Vert	2.8		5.2		7.6		9.6		10.4		11.6		12.6		13.2			
6	Lit / sec / metre				75		150		225		300		375		445		520		595	
	NR				-		15		28		37		44		49		54		58	
	Throw	Hor.	1	4.4	2.8	8.2	4.6	9.8	5.8	11.4	7.4	12.8	8.2	13.8	8.8	15	9.2	16		
	in metres	Vert	2.8		5.8		8.6		10.4		11.6		12.6		13.8		14.6			
7	Lit / sec / metre				90		175		260		350		435		520		610		695	
	NR				-		16		29		38		45		50		55		59	
	Throw	Hor.	1	4.6	3.2	8.6	4.6	10.8	6.4	12.2	8	13.8	8.8	15	9.6	16.2	10.2	17.2		
	in metres	Vert	3.2		6.2		9.2		11		12.6		13.8		14.6		16			
8	Lit / sec / metre				100		200		300		400		495		595		695		795	
	NR				-		17		30		39		46		51		56		60	
	Throw	Hor.	1.2	5	3.4	9.6	5	11.4	6.8	13.2	8.6	14.6	9.2	16	10.2	17.2	10.8	18.4		
	in metres	Vert	3.4		6.8		9.8		12		13.2		14.6		16		16.8			

Performance Data - LS 25MM Slot width return application

No. Slot	Negative Static Pressure in Pascals	5	10	18	27	40	54	70	112
1	Lit / sec / metre	31	47	65	80	95	110	125	155
	NR	-	14	22	28	33	37	41	47
2	Lit / sec / metre	65	95	125	155	185	220	250	310
	NR	-	17	25	31	36	40	44	50
3	Lit / sec / metre	95	140	185	235	280	325	375	465
	NR	-	19	27	33	38	42	46	52
4	Lit / sec / metre	125	185	250	310	375	435	495	620
	NR	-	20	28	34	39	43	47	53
5	Lit / sec / metre	155	235	310	390	465	545	620	775
	NR	-	21	29	35	40	44	48	54
6	Lit / sec / metre	185	280	375	465	560	650	745	930
	NR	-	22	30	36	41	45	49	55
7	Lit / sec / metre	220	325	435	545	650	760	870	1085
	NR	-	23	31	37	42	46	50	56
8	Lit / sec / metre	250	375	495	620	745	870	995	1240
	NR	-	23	31	37	42	46	50	56

2.5 DIFFUSERS

LINEAR SLOT DIFFUSER (LS20)

20MM SLOT SPACING



PRODUCT CODE	SLOT	SLOT WIDTH	EXACT NECK SIZE	FACE SIZE
LS120	1	20	36	75
LS220	2	20	75	115
LS320	3	20	113	155
LS420	4	20	152	195
LS520	5	20	190	235
LS620	6	20	228	275

Performance Data - LS 20MM Slot width supply application

No. Slots	Total Press. Pascals.	Horiz. Vert.	1.5 1	4 3	8 6	14 11	23 17	31 24	44 31	58 42
1	Lit / sec / metre		9	19	28	37	47	55	65	75
	NR		-	-	-	21	27	33	38	42
	Throw	Hor.	0.4 1	0.4 2.8	1 3.4	1.6 4	2.4 4.6	2.8 5	3.2 5.2	3.4 8
	in metres	Vert.	0.6	1.8	3.2	3.8	4.4	4.6	5	5.2
2	Lit / sec / metre		19	37	55	75	95	115	130	150
	NR		-	-	16	26	32	38	43	47
	Throw	Hor.	0.4 1.6	0.6 4	1.6 5	2.8 8	3.4 6.4	4 7	4.4 6	4.6 8.2
	in metres	Vert.	1.2	2.8	4.4	5.2	5.8	6.4	7	7.4
3	Lit / sec / metre		28	55	85	115	140	170	195	225
	NR		-	-	19	29	35	41	46	50
	Throw	Hor.	0.4 2.4	1.2 5	2.2 6.2	3.4 7	4.4 8	5 8.6	5.6 9.2	5.8 9.8
	in metres	Vert.	1.8	3.4	5.2	6.4	7	8	8.6	9.2
4	Lit / sec / metre		37	75	115	150	185	225	260	300
	NR		-	-	21	31	37	43	48	52
	Throw	Hor.	0.4 3.2	1.6 5.8	3.2 7	4 8.2	5 9.2	5.8 9.8	6.4 10.8	6.8 11.4
	in metres	Vert.	1.8	4	5.8	7.4	8.2	9.2	9.8	10.4
5	Lit / sec / metre		47	95	140	185	235	280	325	375
	NR		-	-	22	32	38	44	49	53
	Throw	Hor.	0.6 3.4	1.8 6.4	3.4 8	4.6 9.2	5.6 10.2	6.4 11	7 12	7.6 12.8
	in metres	Vert.	2.2	4.4	6.4	8.2	9.2	10.2	11	11.6
6	Lit / sec / metre		55	115	170	225	280	335	390	445
	NR		-	-	23	33	39	45	50	54
	Throw	Hor.	0.6 3.8	2.4 7	3.8 8.6	5 9.8	6.2 11	7 12.2	7.6 12.2	8 13.8
	in metres	Vert.	2.4	4.6	7.4	9.2	10.2	11	12	12.8
7	Lit / sec / metre		65	130	195	260	325	390	455	520
	NR		-	13	24	34	40	46	51	55
	Throw	Hor.	1 3.8	2.8 7.6	4 9.2	5.6 10.8	6.8 12	7.6 13.2	8.2 14	8.8 15
	in metres	Vert.	2.4	5	7.4	9.8	11	12	12.8	13.8
8	Lit / sec / metre		75	150	225	300	375	445	520	595
	NR		-	14	25	35	41	47	52	56
	Throw	Hor.	1.2 4.4	2.8 8.2	4.4 9.8	5.8 11.4	7.4 12.8	8 13.8	8.8 15	9.2 16
	in metres	Vert.	2.4	5	7.4	10.2	11.6	12.8	13.8	14.6

Performance Data - LS 20MM Slot width return application

No. Slot	Negative Static Pressure in Pascals	2	7	16	27	42	62	86	112
1	Lit / sec / metre	15	31	47	65	80	95	110	125
	NR	-	-	21	29	35	40	44	48
2	Lit / sec / metre	31	65	95	125	155	185	220	250
	NR	-	13	24	32	38	43	47	51
3	Lit / sec / metre	47	95	140	185	235	280	325	375
	NR	-	15	26	34	40	45	49	53
4	Lit / sec / metre	65	125	185	250	310	375	435	495
	NR	-	16	27	35	41	46	50	54
5	Lit / sec / metre	80	155	235	310	390	465	545	620
	NR	-	17	28	36	42	47	51	55
6	Lit / sec / metre	95	185	280	375	465	560	650	745
	NR	-	18	29	37	43	48	52	56
7	Lit / sec / metre	110	220	325	435	545	650	760	870
	NR	-	19	30	38	44	49	53	57
8	Lit / sec / metre	125	250	375	495	620	745	870	995
	NR	-	19	30	38	44	49	53	57

Due to going product development, data and dimensions are subject to change.

Airfoil's Removable Core Linear Slot Diffuser is generally ceiling mounted and can be used for both supply and return air functions. The slots can be adjusted to provide a variable air throw pattern from vertical to horizontal. The removable core provides easy installation and cleaning. The product comes complete with safety chain.



Airfoil's superior design delivers greater air volume per slot and less noise for a more effective room air circulation.

Removable Core Linear Slot Diffuser Options

- > Slot width; standard 20mm or custom made 25mm
- > Recommended single length 4.5m, maximum 6m
- > Up to 4 slots

Product specification codes:

RCLS125	One slot linear diffuser with 25mm spacing	RCLS120	One slot linear diffuser with 20mm spacing
RCLS225	Two slot linear diffuser with 25mm spacing	RCLS220	Two slot linear diffuser with 20mm spacing
RCLS325	Three slot linear diffuser with 25mm spacing	RCLS320	Three slot linear diffuser with 20mm spacing
RCLS425	Four slot linear diffuser with 25mm spacing	RCLS420	Four slot linear diffuser with 20mm spacing

Specification: Product code + size.

Example: **RCLS425** Four slot linear diffuser with 25mm spacing and nominal neck size of 1200mm

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

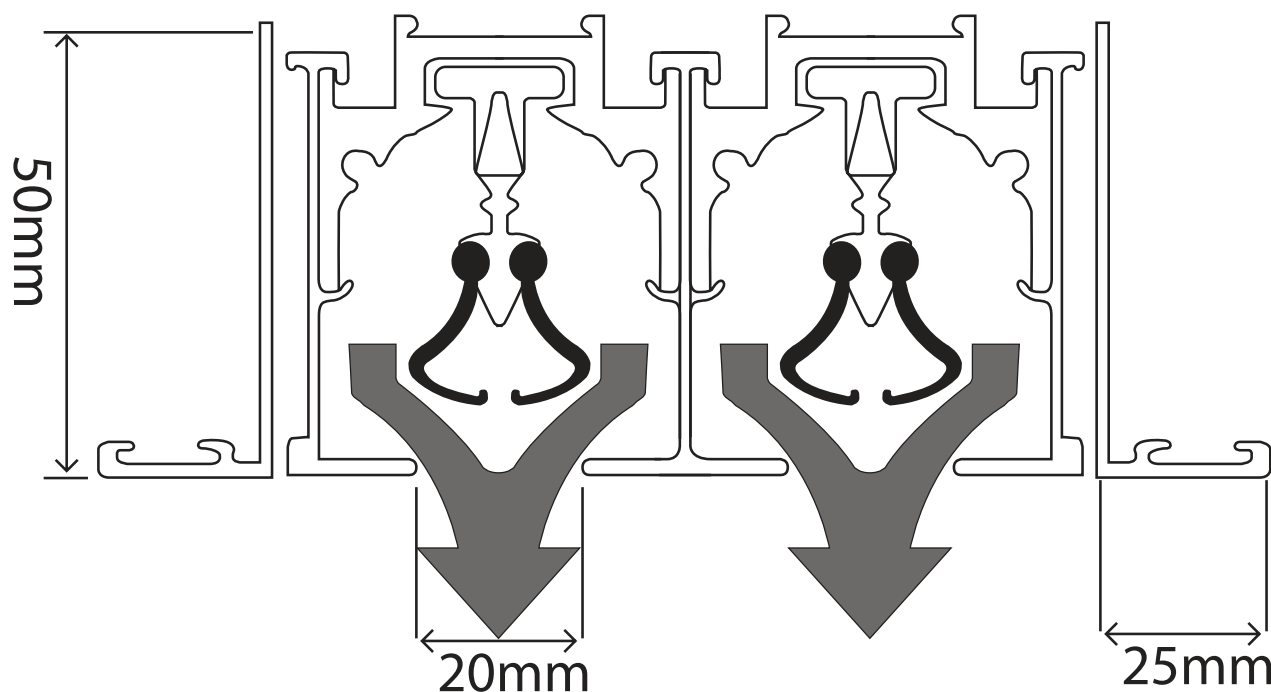


2.6 DIFFUSERS

REMOVABLE CORE LINEAR SLOT DIFFUSER (RCLC) STOCKED STANDARD



AIRFOIL
GRILLES
DUCT
FITTINGS
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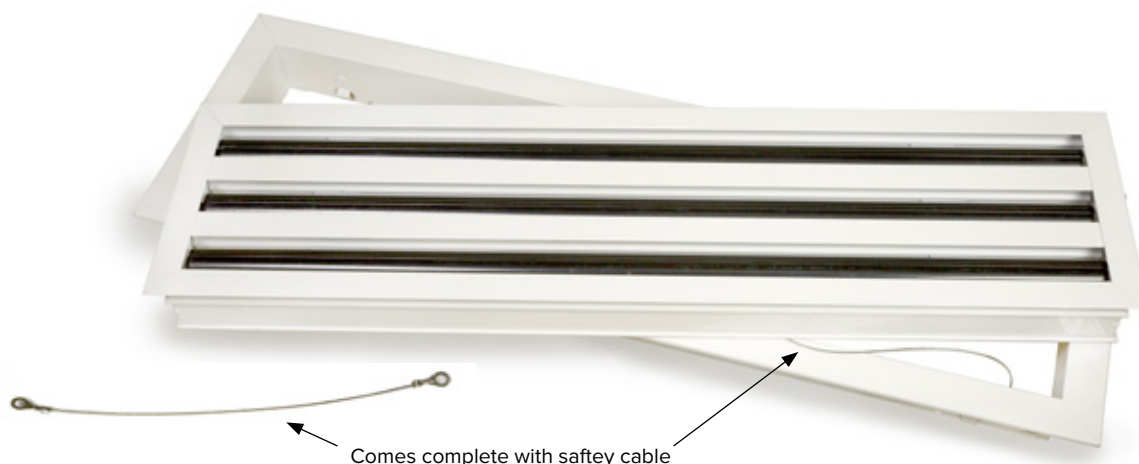


Product Code		Supply Air Volume m/s							
		45	60	75	100	125	150	175	200
RCLS595F	Throw H	2.3-6.9	2.7-8.2	3.7-9.7	4.8-10.9	5.8-12.4			
	Throw V	3.4	4.2	5.0	6.9	8.0			
	PA	15	26	41	72	113			
	NC	24	27	30	40	48			
RCLS600	Throw H	2.2-6.7	2.5-8.0	3.6-9.5	4.7-10.6	5.6-12.1			
	Throw V	3.3	4.1	4.9	6.7	7.8			
	PA	14	24	38	67	104			
	NC	23	26	29	38	46			
RCLS900	Throw H	1.8-5.9	2.4-7.1	2.8-8.4	3.8-9.9	4.9-11.1	5.9-12.6		
	Throw V	2.7	3.5	4.2	5.2	6.8	7.7		
	PA	9	16	25	44	69	100		
	NC	20	24	26	32	39	45		
RCLS1000	Throw H	1.7-5.4	2.2-6.5	2.5-7.6	3.5-9.0	4.5-10.1	5.4-11.5		
	Throw V	2.5	3.2	3.8	4.7	6.2	7.1		
	PA	8	14	22	40	62	90		
	NC	19	23	25	30	36	42		
RCLS1195F	Throw H	1.5-4.9	2.0-5.8	2.3-6.8	3.1-8.1	4.1-9.0	4.9-10.3	5.6-11.4	
	Throw V	2.3	2.9	3.4	4.2	5.6	6.4	7.3	
	PA	7	12	19	34	54	77	105	
	NC	18	22	24	28	34	40	44	
RCLS1200	Throw H	1.4-4.8	1.9-5.7	2.2-6.7	3.0-8.0	4.1-8.9	4.8-10.2	5.5-11.3	
	Throw V	2.2	2.8	3.3	4.1	5.5	6.3	7.2	
	PA	7	12	19	33	52	75	101	
	NC	18	22	24	28	33	39	43	

Due to going product development, data and dimensions are subject to change.

Airfoil's Custom Manufactured Removable Core Linear Slot Diffuser is generally ceiling mounted and can be used for both supply and return air functions. The slots can be adjusted to provide a variable air throw pattern from vertical to horizontal. The removable core provides easy installation and cleaning. The product comes complete with safety chain.

Airfoil's superior design delivers greater air volume per slot and less noise for more effective room air circulation.



Custom Manufactured Removable Core Linear Slot Diffuser Options

- > Slot widths of either 20mm or 25mm
- > Up to 4 slots
- > Recommended single length 4.5m, maximum 6m
- > Specific colours and finishes available on request

Product specification codes:

RCLS125	One slot linear diffuser with 25mm spacing	RCLS120	One slot linear diffuser with 20mm spacing
RCLS225	Two slot linear diffuser with 25mm spacing	RCLS220	Two slot linear diffuser with 20mm spacing
RCLS325	Three slot linear diffuser with 25mm spacing	RCLS320	Three slot linear diffuser with 20mm spacing
RCLS425	Four slot linear diffuser with 25mm spacing	RCLS420	Four slot linear diffuser with 20mm spacing

Specification: Product code + size.

Example: **RCLS425** Four slot linear diffuser with 25mm spacing and nominal neck size of 1200mm

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

2.7 DIFFUSERS

REMOVABLE CORE LINEAR SLOT DIFFUSER (RCLS) CUSTOM MANUFACTURED

Quality System
Quality
Endorsed
Company
ISO 9001
SAI GLOBAL

AIRFOIL

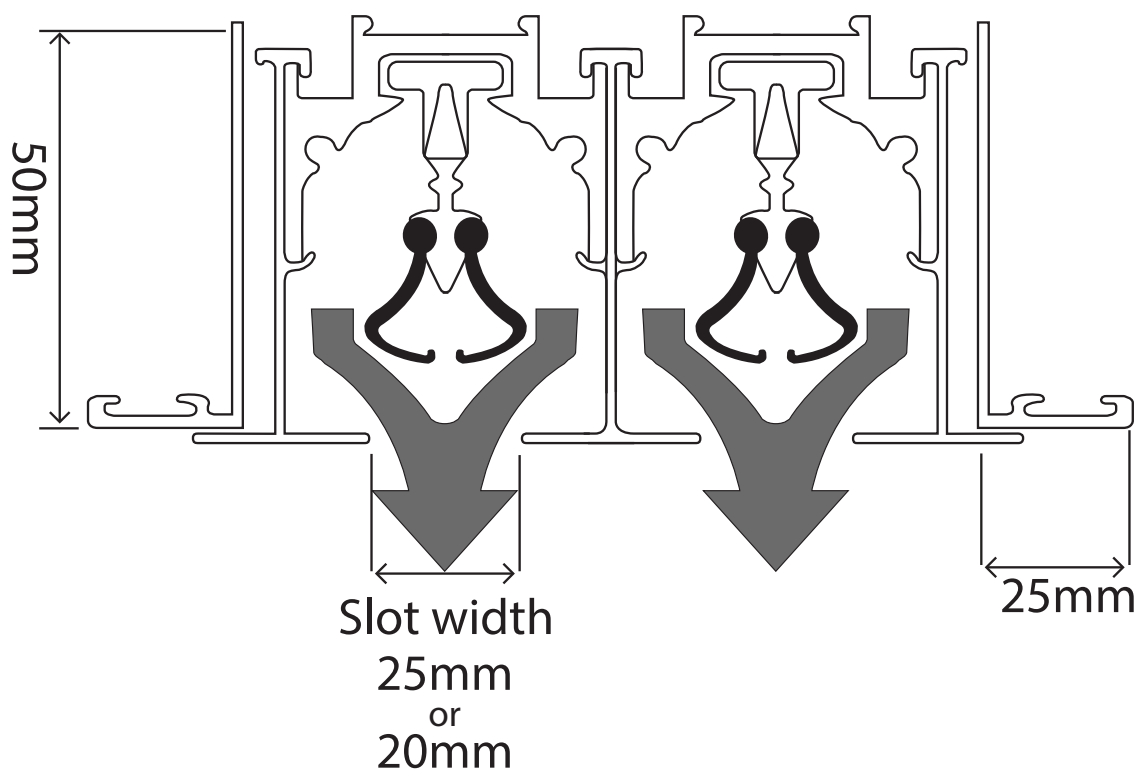


GRILLES
DUCT
FITTINGS

making it happen sooner...

41

Cross sectional diagram



PROJECT: KEMPSEY DISTRICT HOSPITAL, NSW

2.7 DIFFUSERS

REMOVABLE CORE LINEAR SLOT DIFFUSER (RCLS)

CUSTOM MANUFACTURED 25MM SLOT SPACING

PRODUCT CODE	SLOT	SLOT WIDTH	EXACT NECK SIZE	FACE SIZE
RCLS125	1	25	60	105
RCLS225	2	25	105	150
RCLS325	3	25	150	195
RCLS425	4	25	195	240
RCLS525	5	25	240	285
RCLS625	6	25	285	330

Performance Data - CRCLSD 25MM Slot width supply application

No. Slots	Total Press. Pascals.	Horiz. Vert.	1 1	4 2	9 6	16 10	24 15	35 21	49 29	62 37
1	Lit / sec / metre		12	25	37	50	65	75	90	100
	NR		-	-	16	25	32	37	42	46
	Throw	Hor.	0.1	1	0.4	3.4	1	4	1.8	4.6
	in metres	Vert	0.6	2.4	3.8	4.4	4.6	5.2	5.6	5.8
2	Lit / sec / metre		25	50	75	100	125	150	175	200
	NR		-	-	21	30	37	42	47	51
	Throw	Hor.	0.4	1.8	1	4.6	1.8	5.8	3.4	6.8
	in metres	Vert	1.6	3.4	5	5.8	6.8	7.6	8	8.6
3	Lit / sec / metre		37	75	115	150	185	225	260	300
	NR		-	16	24	33	40	45	50	54
	Throw	Hor.	0.4	3.2	1.2	5.8	3.2	7	4	8.2
	in metres	Vert	2.2	4	6.2	7.4	8.2	8.8	9.8	10.4
4	Lit / sec / metre		50	100	150	200	250	300	350	400
	NR		-	13	26	35	42	47	52	56
	Throw	Hor.	0.6	3.4	1.8	6.8	3.8	8.2	4.6	9.6
	in metres	Vert	-	13	26	35	42	47	52	56
5	Lit / sec / metre		65	125	185	250	310	375	435	495
	NR		-	14	27	36	43	48	53	57
	Throw	Hor.	0.6	4	2.4	7.4	4	9.2	5.6	10.4
	in metres	Vert	2.8	5.2	7.6	9.6	10.4	11.6	12.6	13.2
6	Lit / sec / metre		75	150	225	300	375	445	520	595
	NR		-	15	28	37	44	49	54	58
	Throw	Hor.	1	4.4	2.8	8.2	4.6	9.8	5.8	11.4
	in metres	Vert	2.8	5.8	8.6	10.4	11.6	12.6	13.8	14.6
7	Lit / sec / metre		90	175	260	350	435	520	610	695
	NR		-	16	29	38	45	50	55	59
	Throw	Hor.	1	4.6	3.2	8.6	4.6	10.8	6.4	12.2
	in metres	Vert	3.2	6.2	9.2	11	12.6	13.8	14.6	16
8	Lit / sec / metre		100	200	300	400	495	595	695	795
	NR		-	17	30	39	46	51	56	60
	Throw	Hor.	1.2	5	3.4	9.6	5	11.4	6.8	13.2
	in metres	Vert	3.4	6.8	9.8	12	13.2	14.6	16	16.8

Performance Data - CRCLSD 25MM Slot width return application

No. Slot	Negative Static Pressure in Pascals	5	10	18	27	40	54	70	112
1	Lit / sec / metre	31	47	65	80	95	110	125	155
	NR	-	14	22	28	33	37	41	47
2	Lit / sec / metre	65	95	125	155	185	220	250	310
	NR	-	17	25	31	36	40	44	50
3	Lit / sec / metre	95	140	185	235	280	325	375	465
	NR	-	19	27	33	38	42	46	52
4	Lit / sec / metre	125	185	250	310	375	435	495	620
	NR	-	20	28	34	39	43	47	53
5	Lit / sec / metre	155	235	310	390	465	545	620	775
	NR	-	21	29	35	40	44	48	54
6	Lit / sec / metre	185	280	375	465	560	650	745	930
	NR	-	22	30	36	41	45	49	55
7	Lit / sec / metre	220	325	435	545	650	760	870	1085
	NR	-	23	31	37	42	46	50	56
8	Lit / sec / metre	250	375	495	620	745	870	995	1240
	NR	-	23	31	37	42	46	50	56

2.7 DIFFUSERS

REMOVABLE CORE LINEAR SLOT DIFFUSER (RCLS) CUSTOM MANUFACTURED 20MM SLOT SPACING



PRODUCT CODE	SLOT	SLOT WIDTH	EXACT NECK SIZE	FACE SIZE
RCLS120	1	20	55	100
RCLS220	2	20	95	140
RCLSD320	3	20	135	180
RCLS420	4	20	175	220
RCLS520	5	20	215	260
RCLS620	6	20	255	300

Performance Data - RCLS 20MM Slot width supply application

No. Slots	Total Press. Pascals.	Horiz.	1.5		4		8		14		23		31		44		58	
		Vert.	1		3		6		11		17		24		31		42	
1	Lit / sec / metre		9		19		28		37		47		55		65		75	
	NR		-		-		-		21		27		33		38		42	
	Throw	Hor.	0.4	1	0.4	2.8	1	3.4	1.6	4	2.4	4.6	2.8	5	3.2	5.2	3.4	8
	in metres	Vert	0.6		1.8		3.2		3.8		4.4		4.6		5		5.2	
2	Lit / sec / metre		19		37		55		75		95		115		130		150	
	NR		-		-		16		26		32		38		43		47	
	Throw	Hor.	0.4	1.6	0.6	4	1.6	5	2.8	8	3.4	6.4	4	7	4.4	6	4.6	82
	in metres	Vert	1.2		2.8		4.4		5.2		5.8		6.4		7		7.4	
3	Lit / sec / metre		28		55		85		115		140		170		195		225	
	NR		-		-		19		29		35		41		46		50	
	Throw	Hor.	0.4	2.4	1.2	5	2.2	6.2	3.4	7	4.4	8	5	8.6	5.6	9.2	5.8	9.8
	in metres	Vert	1.8		3.4		5.2		6.4		7		8		8.6		9.2	
4	Lit / sec / metre		37		75		115		150		185		225		260		300	
	NR		-		-		21		31		37		43		48		52	
	Throw	Hor.	0.4	3.2	1.6	5.8	3.2	7	4	8.2	5	9.2	5.8	9.8	6.4	10.8	6.8	11.4
	in metres	Vert	1.8		4		5.8		7.4		8.2		9.2		9.8		10.4	
5	Lit / sec / metre		47		95		140		185		235		280		325		375	
	NR		-		-		22		32		38		44		49		53	
	Throw	Hor.	0.6	3.4	1.8	6.4	3.4	8	4.6	9.2	5.6	10.2	6.4	11	7	12	7.6	12.8
	in metres	Vert	2.2		4.4		6.4		8.2		9.2		10.2		11		11.6	
6	Lit / sec / metre		55		115		170		225		280		335		390		445	
	NR		-		-		23		33		39		45		50		54	
	Throw	Hor.	0.6	3.8	2.4	7	3.8	8.6	5	9.8	6.2	11	7	12.2	7.6	12.2	8	13.8
	in metres	Vert	2.4		4.6		7.4		9.2		10.2		11		12		12.8	
7	Lit / sec / metre		65		130		195		260		325		390		455		520	
	NR		-		13		24		34		40		46		51		55	
	Throw	Hor.	1	3.8	2.8	7.6	4	9.2	5.6	10.8	6.8	12	7.6	13.2	8.2	14	8.8	15
	in metres	Vert	2.4		5		7.4		9.8		11		12		12.8		13.8	
8	Lit / sec / metre		75		150		225		300		375		445		520		595	
	NR		-		14		25		35		41		47		52		56	
	Throw	Hor.	1.2	4.4	2.8	8.2	4.4	9.8	5.8	11.4	7.4	12.8	8	13.8	8.8	15	9.2	16
	in metres	Vert	2.4		5		7.4		10.2		11.6		12.8		13.8		14.6	

Performance Data - RCLS 20MM Slot width return application

No. Slot	Negative Static Pressure in Pascals	2	7	16	27	42	62	86	112
1	Lit / sec / metre	15	31	47	65	80	95	110	125
	NR	-	-	21	29	35	40	44	48
2	Lit / sec / metre	31	65	95	125	155	185	220	250
	NR	-	13	24	32	38	43	47	51
3	Lit / sec / metre	47	95	140	185	235	280	325	375
	NR	-	15	26	34	40	45	49	53
4	Lit / sec / metre	65	125	185	250	310	375	435	495
	NR	-	16	27	35	41	46	50	54
5	Lit / sec / metre	80	155	235	310	390	465	545	620
	NR	-	17	28	36	42	47	51	55
6	Lit / sec / metre	95	185	280	375	465	560	650	745
	NR	-	18	29	37	43	48	52	56
7	Lit / sec / metre	110	220	325	435	545	650	760	870
	NR	-	19	30	38	44	49	53	57
8	Lit / sec / metre	125	250	375	495	620	745	870	995
	NR	-	19	30	38	44	49	53	57

Due to going product development, data and dimensions are subject to change.

Airfoil's Circular Diffuser is manufactured from high-grade aluminium. Its sleek and sophisticated appearance makes it ideal for ceiling mounted supply applications.

The core of the diffuser can be adjusted to suit specific requirements, for example, the Circular Diffuser allows for variable horizontal airflow patterns. The attractive white powder coat finish is standard.



Circular Diffuser Options

> *Specific colours and finishes available on request*

Product specification codes:

CD20	Circular Diffuser with 200 mm neck	CD35	Circular Diffuser with 350 mm neck
CD25	Circular Diffuser with 250 mm neck	CD40	Circular Diffuser with 400 mm neck
CD30	Circular Diffuser with 300 mm neck		

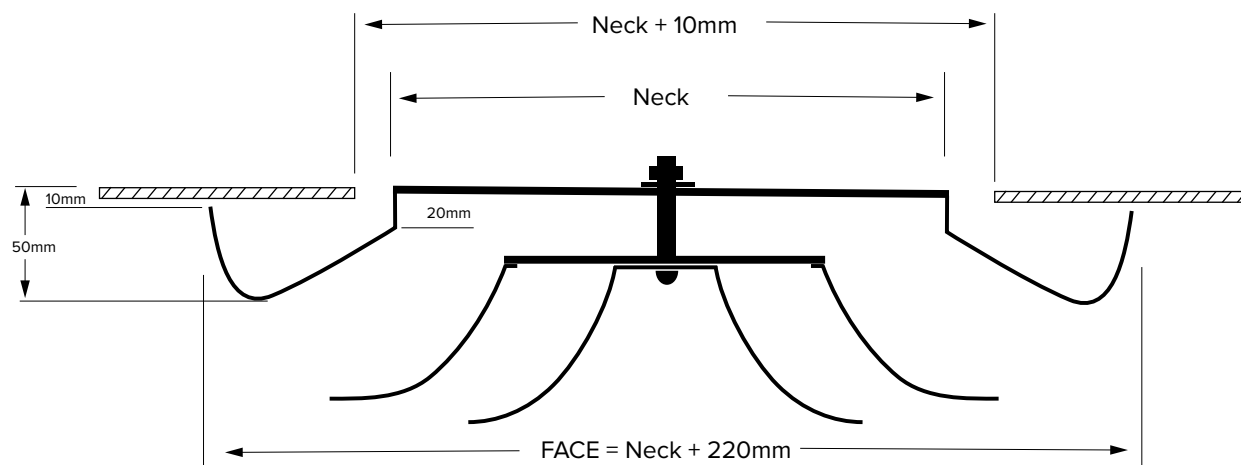
2.8 DIFFUSERS

CIRCULAR DIFFUSER (CD)

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Cross sectional diagram



Performance Data

Nike dia	Neck Vel. m/s	2	2.5	3	3.5	4	4.5	5	6
200 mm	Lit/sec	66	83	99	110	130	150	160	190
	NR	-	-	16	24	29	34	37	40
	Tot. Press (Pa)								
	Rad. Of diffusion/m	0.6 - 1.8	0.8 - 2	1.2 - 2.6	1.2 - 3	1.4 - 3.4	1.4 - 4	1.8 - 4.2	2 - 5.2
250 mm	Lit/sec	100	120	150	170	200	230	250	300
	NR	-	14	20	24	29	33	36	41
	Tot. Press (Pa)	7	11	16	21	27	35	43	60
	Rad. Of diffusion/m	0.8 - 2	0.8 - 2.4	1.2 - 3	1.4 - 3.4	1.4 - 4	1.8 - 4.6	2 - 5	2.4 - 6
300 mm	Lit/sec	140	180	220	260	290	330	370	440
	NR	-	14	20	25	29	33	36	42
	Tot. Press (Pa)	7	11	15	21	27	34	42	58
	Rad. Of diffusion/m	0.8 - 2.4	1.2 - 3	1.4 - 3.6	1.8 - 4	1.8 - 4.6	2 - 5.2	2.4 - 5.8	3 - 7
350 mm	Lit/sec	200	250	300	350	400	450	500	600
	NR	14	21	26	31	35	39	43	49
	Tot. Press (Pa)	10	16	22	30	38	48	59	85
	Rad. Of diffusion/m	1.2 - 3	1.4 - 3.6	1.8 - 4.6	2 - 5.2	2.4 - 6	2.6 - 6.6	3 - 7.2	3.6 - 8.8
400 mm	Lit/sec	260	330	400	460	520	580	640	720
	NR	10	21	26	31	35	39	43	49
	Tot. Press (Pa)	10	17	24	33	41	52	63	89
	Rad. Of diffusion/m	1.4 - 3.2	1.7 - 4.2	2.1 - 5.1	2.4 - 5.9	2.7 - 6.8	3.2 - 7.5	3.6 - 8.2	3.9 - 9.8

Sound values are based on a room absorption of 8dB

Radii of diffusion indicated are at a terminal velocity of 0.75 and 0.25 metres per sec set against flat ceilings

For exposed duct installations multiply radii of diffusion shown in table by 0.7

Due to going product development, data and dimensions are subject to change.

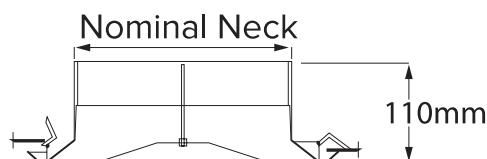
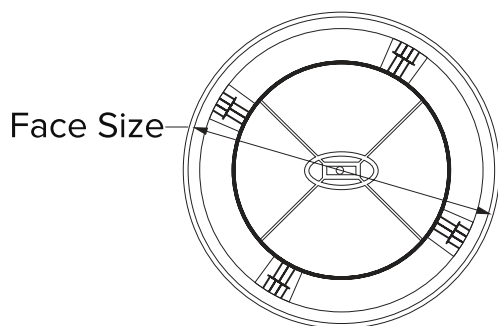
Airfoil's Plastic Round is an attractive and high quality ceiling mounted diffuser used predominantly for domestic supply and exhaust applications.

Airfoil's Plastic Round is manufactured from high quality ABS polymers, which will ensure long term strength and rigidity. This will ensure that the surface will not discolour over time. The centre of the diffuser can be adjusted which will enable the user to conveniently and accurately balance the airflow.

The finish is standard ceiling white with an etched surface, which will act to minimise light reflections.



Cross sectional diagram



PRODUCT CODE	FACE SIZE	NECK SIZE	CUT SIZE
RND150	260 mm	150 mm	230 mm
RND200	320 mm	200 mm	290 mm
RND250	395 mm	250 mm	360 mm
RND300	440 mm	300 mm	400 mm

Performance Data

			Flowrate (l/s)													
			25	50	75	100	125	150	175	200	225	250	275	300	350	
RND150	Throw (m)	0.50m/s	1.1	1.5	2.2	2.5	2.7									
	NC		-	15	16	27	35									
	Pstatic (Pa)		7	23	50	84	133									
RND200	Throw (m)	0.50m/s	-	1.4	1.8	2.1	2.4	2.8	3.0							
	NC		-	-	15	24	30	40	42							
	Pstatic (Pa)		-	9	20	36	54	76	103							
RND250	Throw (m)	0.50m/s	-	1.1	1.7	1.6	2.1	2.6	2.8	3.1	3.3	3.5	3.7			
	NC		-	-	-	-	-	15	17	26	29	32	33			
	Pstatic (Pa)			8	17	25	35	44	56	70	85	102	123			
RND300	Throw (m)	0.50m/s	-	.9	1.3	1.5	1.9	2.2	2.5	2.7	2.9	3.1	3.2	3.5	3.9	
	NC		-								15	17	22	26	33	
	Pstatic (Pa)			3	5	9	11	18	25	32	39	46	59	72	103	

Product specification codes:

RND150 Plastic Round with 150 mm neck
RND200 Plastic Round with 200 mm neck

RND250 Plastic Round with 250 mm neck
RND300 Plastic Round with 300 mm neck

2.10 DIFFUSERS

JET DIFFUSER (JD)

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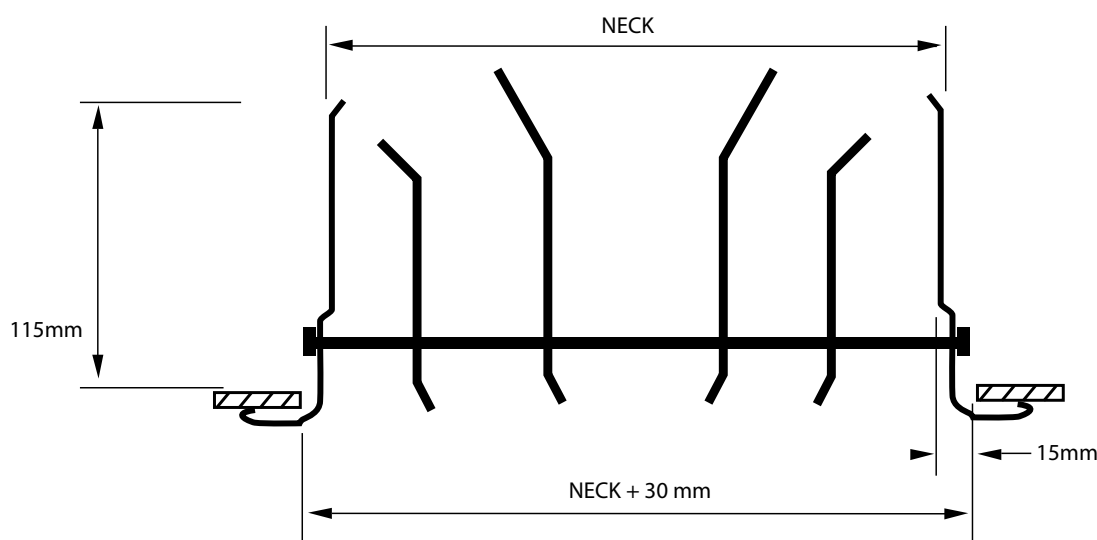
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Airfoil's Jet Diffuser is manufactured from high-grade spun aluminium, and can supply air in either a "jet" or "diffused" air pattern by rotating the cone assembly on its own axis.

Airfoil's Jet Diffuser is perfect for long throw, short throw, or diffused air control. It's ideal for high volume applications such as high ceiling auditoriums and shopping centres. Comes standard in white.

Cross Sectional Diagram: Jet Mode



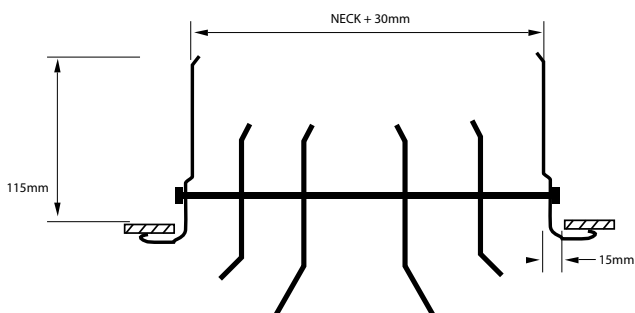
Jet Diffuser Options

- > Specific colours and finishes available on request
- > Can be supplied without housing
- > Can be supplied mounted with multiple units
- > Jet mode or diffuser mode

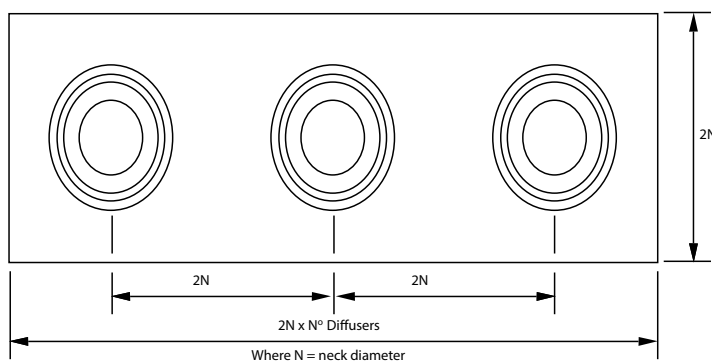
Product specification codes:

JD150	Jet Diffuser with 150 diameter	JD300	Jet Diffuser with 300 diameter
JD200	Jet Diffuser with 200 diameter	JD350	Jet Diffuser with 350 diameter
JD250	Jet Diffuser with 250 diameter	JD400	Jet Diffuser with 400 diameter

Cross Sectional Diagram: Diffusing mode



Mounted Jet Diffusers on plate



Custom Size Plate Available

Performance Data

NECK DIA	Lit / sec	50	75	100	125	150
	NR	28	34	38	45	>50
150 mm	Static Pressure Pascals	15	28	38	55	70
	Throw JET	3	4.2	6	7.3	8.6
	metres DIFFUSION	1.5	2.1	3	3.7	4.3
200 mm	Lit / sec	100	125	150	175	200
	NR	26	30	34	39	43
	Static Pressure Pascals	15	23	33	45	60
250 mm	Throw JET	4.5	5.5	6.5	8	9
	metres DIFFUSION	2.3	2.8	3.3	4	4.5
	Lit / sec	150	200	250	300	400
300 mm	NR	20	27	33	37	46
	Static Pressure Pascals	8	15	23	33	60
	Throw JET	5	7	8.3	10.2	12.7
350 mm	metres DIFFUSION	2.5	3.5	4.2	5.1	4.6
	Lit / sec	250	300	400	500	600
	NR	27	28	34	39	45
400 mm	Static Pressure Pascals	10	15	25	40	58
	Throw JET	6.3	7	10.2	13.3	16
	metres DIFFUSION	3.2	3.8	5.1	6.7	8
400 mm	Lit / sec	300	400	600	800	1000
	NR	-	25	35	43	> 50
	Static Pressure Pascals	5	12	32	60	103
400 mm	Throw JET	6.5	8.8	13.8	18	23
	metres DIFFUSION	3.3	4.4	6.9	9	11.5
	Lit / sec	400	600	800	1000	1200
	NR	-	28	35	43	> 50
	Static Pressure Pascals	5	15	33	60	145
	Throw JET	7.8	12	16	20	24
	metres DIFFUSION	3.9	6	8	10	12

Sound values are based on a room absorption of 8 dB , re 10⁻¹² watts.

Radii of diffusion indicated are at a terminal velocity of 0.5 metres per sec.

2.11 DIFFUSERS

JET NOZZLE DIFFUSER (EBJD)

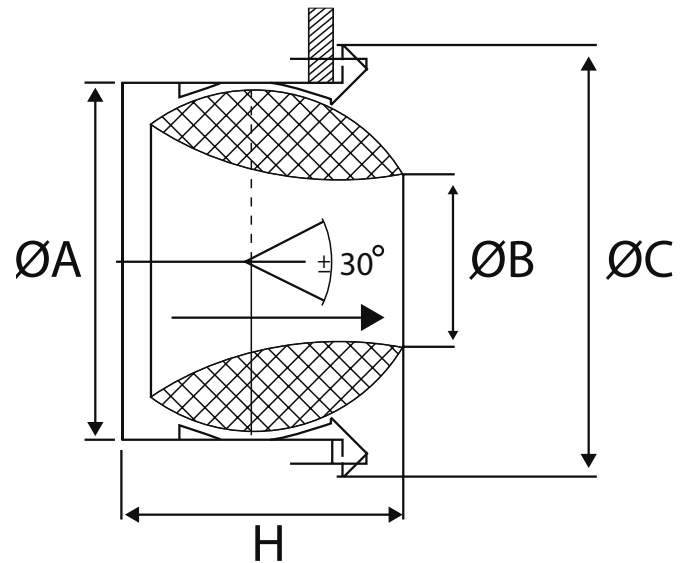
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Airfoil's Jet Nozzle Diffuser is manufactured from lightweight sturdy aluminium and is ideal for use in long throw applications. The 360° rotating eyeball allows for precise directional airflow. The front frame fascia is removable for ease of installation and cleaning.



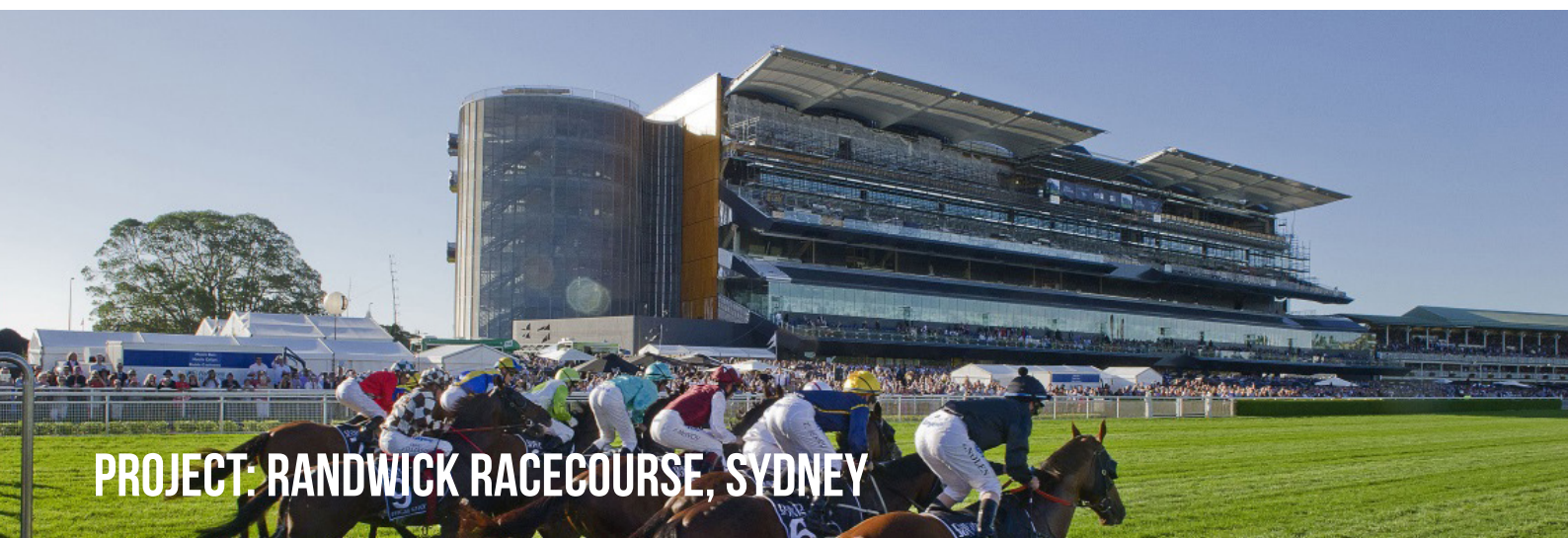
Jet Nozzle Diffuser Options

- > *Standard diameter sizes: 150mm, 200mm, 250mm, 315mm, 350mm, 400mm.*
- > *Specific colours and finishes available on request*
- > *Optional mounting plate on request*

Product specification codes:

EBJD150	Jet Nozzle Diffuser 150mm in diameter	EBJD315	Jet Nozzle Diffuser 315mm in diameter
EBJD200	Jet Nozzle Diffuser 200mm in diameter	EBJD350	Jet Nozzle Diffuser 350mm in diameter
EBJD250	Jet Nozzle Diffuser 250mm in diameter	EBJD400	Jet Nozzle Diffuser 400mm in diameter

PROJECT: RANDWICK RACECOURSE, SYDNEY



Product Code	Exact Neck Metric ØA	Face Opening ØB	Face Size Metric ØC	Height Metric H
EBJD150	147	75	200	113
EBJD200	197	105	266	133
EBJD250	247	128	315	185
EBJD315	312	165	395	230
EBJD350	347	185	433	251
EBJD400	397	210	495	285

Performance Data

Size (mm)	Air Volume (l/s)	Pressure lost (Pa)	Noise db (A)	Length of air stream Ln (m)	End air velocity (m/s)
160mm	35	26	<20	6.5	0.5
	44	45	22	8.5	
	56	55	26	11	
	70	110	35	13.5	
	89	144	48	16.5	
200mm	56	21	<20	8	0.5
	70	35	21	10	
	89	70	30	12.5	
	111	85	34	16	
	139	142	49	18.5	
250mm	89	23	<20	8.5	0.5
	111	45	24	12.5	
	139	55	28	15.5	
	175	90	37	18.5	
	222	142	50	21.5	
315mm	139	35	23	10	0.5
	175	46	34	12.5	
	222	80	36	15	
	278	94	40	18.5	
	347	148	50	21.5	
400mm	222	17	<20	11	0.5
	278	31	23	14	
	347	45	28	17	
	444	75	35	19.5	
	556	102	49	23	

2.12 DIFFUSERS

DOWN JET DIFFUSER (DJD)

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Airfoil's Down Jet Diffuser is suitable for ceiling mounted heating, cooling or ventilation applications. Available in 3 sizes, all models are constructed from A.B.S polymers providing long term strength and rigidity. The diffusers consist of a series of concentric rings that deliver the air downwards at a slight angle to the vertical. A centre knob is adjusted to control the airflow including a total shut-off.

The airflow pattern is ideal for ceiling mounted heating applications where warm air is directed downwards from the down jet. The directional nature of the airflow improves the mixing of cooler air at lower levels. The down jet is regularly used in ducted heating applications where under floor ductwork is not available, such as solid concrete floors.

Standard finish is off-white and the surface has an etched face. This lowers light reflections and ensures an unobtrusive finish.

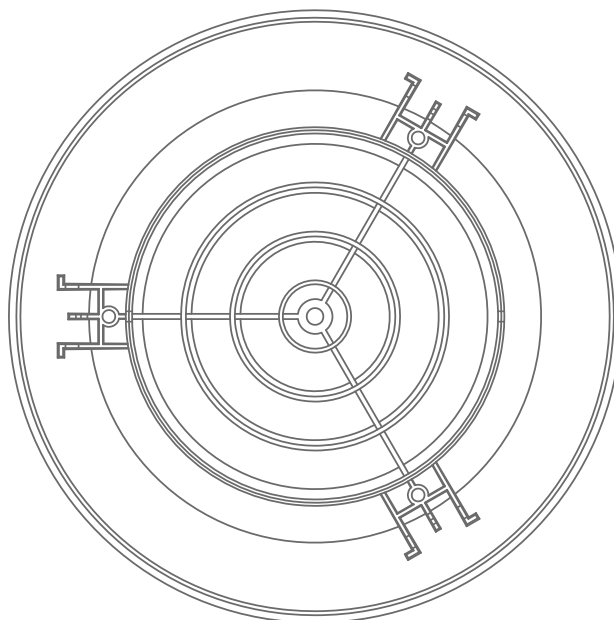
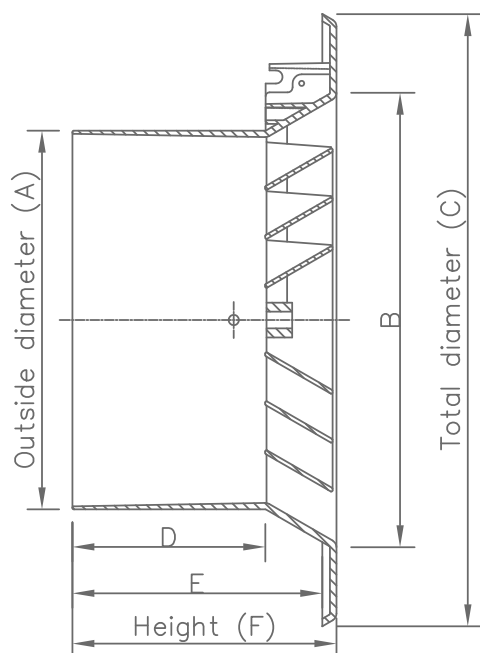
Product specification codes:

DJD150	Down Jet Diffuser 150mm diameter
DJD200	Down Jet Diffuser 200mm diameter
DJD250	Down Jet Diffuser 250mm diameter

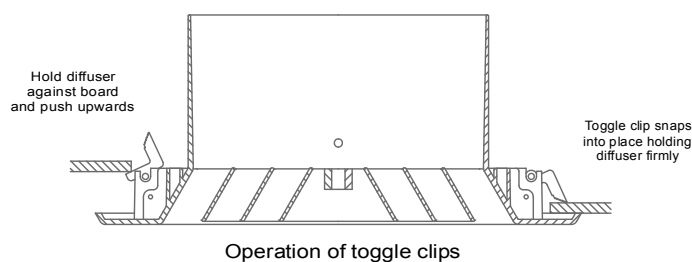
PROJECT: LIFESTYLE MANOR BONDI, SYDNEY



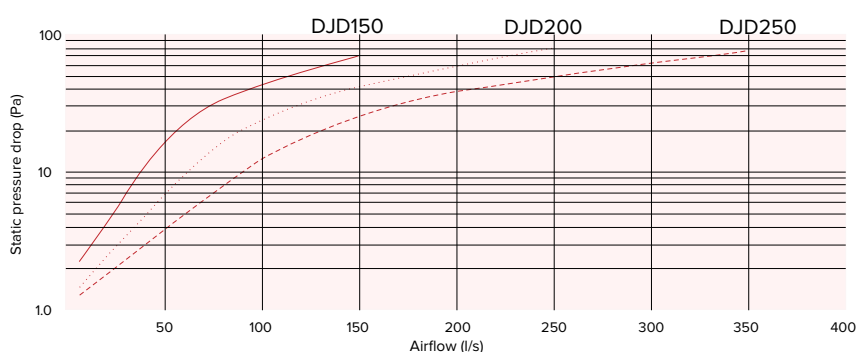
Cross Sectional Diagram



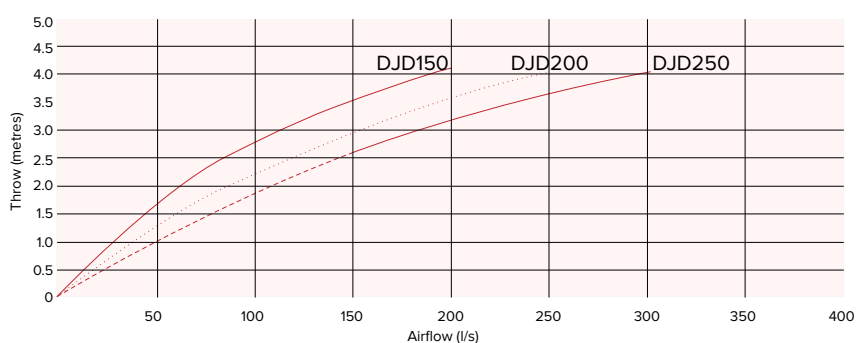
Model	A	B	C	D	E	F
DJD150	147	173	237	74	96	101
DJD200	196	224	288	92	115	120
DJD250	248	274	338	118	138	143



Static pressure drop vs Airflow



Throw vs Airflow



2.13 DIFFUSERS

MULTI DIRECTIONAL OUTLET (MDO)

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Airfoil's Multi Directional Outlet is a plastic diffuser that comes complete with reducing neck and clips to attach to a gyprock ceiling. The diffuser is easy to install and cost effective. Commonly used in domestic applications the diffuser allows for the four biscuits which lay in its core to be interchanged. This allows the diffuser to direct air flows in a multitude of patterns depending on the room requirements.

The Multi Directional Outlet has a flushed faced appearance, which gives a contemporary look and feel.



Product specification codes:

MDO200	Multi Directional Outlet 300mmx300mm with 200mm diameter neck
MDO250	Multi Directional Outlet 300mmx300mm with 250mm diameter neck
MDO300	Multi Directional Outlet 300mmx300mm with 300mm diameter neck

PROJECT: PARKROYAL HOTEL PARRAMATTA, SYDNEY

3.0 REGISTERS



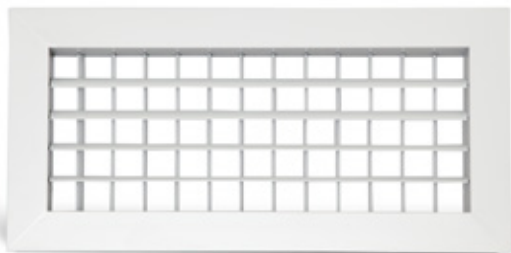
3.1 REGISTERS

DOUBLE DEFLECTION REGISTER (2AR) WITH FIXED CORE

55



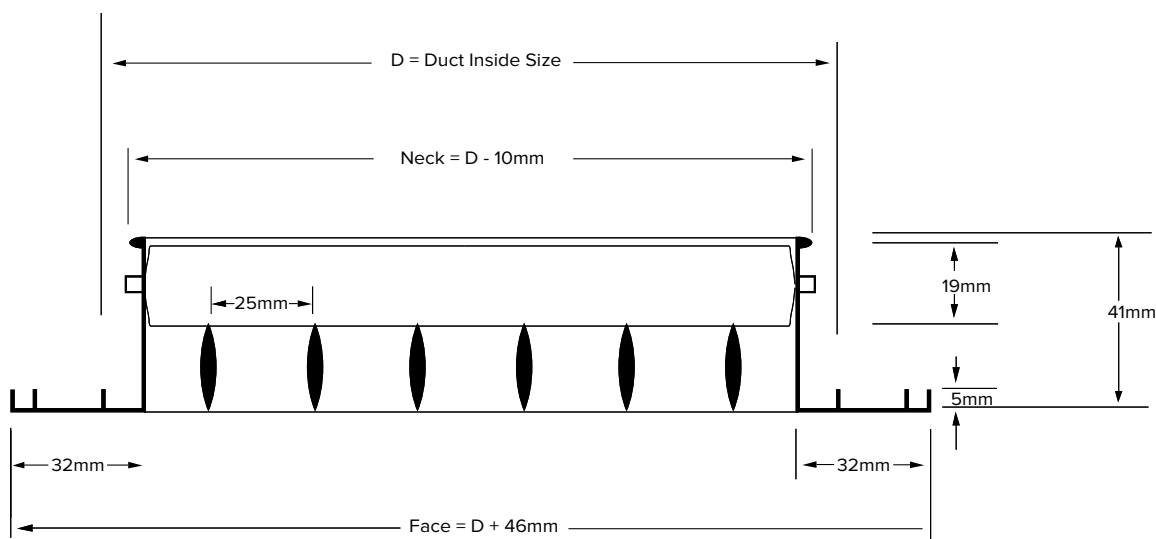
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Airfoil's Double Deflection Register with Fixed Core is used for supply air functions. The double set of fully adjustable blades gives a high level of control of the air pattern across four directions. Incorporating two sets of individually adjustable blades, the front blades may be adjusted up or down and the rear blades are adjusted side to side.

Made from high-grade extruded aluminium sections to ensure functional strength and performance, Airfoil's Double Deflection Register provides a contemporary attractive feel and modern look. It comes in standard powder coated white with optional colours and finishes available on request.

Cross Sectional Diagram: Model 2ARH



Double Deflection with Fixed Core Options

- > Flange size: 32mm standard with optional 25mm or 38mm
- > Blade spacing: 19mm or 25mm
- > Custom-made to any size dimensions
- > Horizontal blades or vertical blades at the front
- > Specific colours and finishes available on request

Product specification codes:

2ARH Fixed core double deflection register with front horizontal blades
2ARV Fixed core double deflection register with front vertical blades

Specification: Product code + size.

Example:

2ARH200x150 Fixed core double deflection register with front horizontal blades; width 200mm x height 150mm

2ARV150x200 Fixed core double deflection register with front vertical blades; height 150mm x width 200mm

Performance Data 25mm Centres

AREA FACTOR		0.17			0.33			0.5			0.66			1.0			1.25		
NECK AREA — M ²		0.023			0.045			0.068			0.090			0.135			0.169		
TYPICAL SIZES		150 X 150 225 X 100			225 X 200 300 X 150 450 X 100			300 X 225 450 X 150 675 X 100			300 X 300 400 X 225 600 X 150			450 X 300 600 X 225 900 X 150			450 X 375 675 X 250 750 X 225		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
1/5	Throw Metres — min	3.2	2.2	2.0	2.2	1.7	1.4												
	Throw Metres — max	5.1	3.4	2.2	3.4	2.5	2.0												
	Static Pressure — (Pa)	2.5	5.0	7.5	—	—	—												
47	Throw Metres — min	6.2	4.8	3.7	4.3	3.2	2.5	3.4	2.5	2.0	3.2	2.2	1.4						
	Throw Metres — max	9.3	7.1	5.4	6.8	4.8	3.7	5.4	4.0	2.8	4.8	3.4	2.8						
	Static Pressure — (Pa)	10	22.5	32.5	2.5	5	10	—	—	2.5	—	—	—						
94	Throw Metres — min				6.5	4.5	3.7	5.4	3.7	2.8	4.5	3.4	2.2	4.0	2.5	2.0			
	Throw Metres — max				10.3	7.3	5.7	8.2	5.9	4.5	7.3	5.1	4.0	5.7	4.3	3.2			
	Static Pressure — (Pa)				7.5	12.5	20	2.5	5	7.5	—	2.5	5	—	—	—			
141	Throw Metres — min				8.4	6.2	5.1	7.1	5.1	3.7	6.2	4.8	3.4	5.1	3.7	2.5	4.5	3.4	2.4
	Throw Metres — max				13.5	9.8	7.3	10.2	7.9	5.9	9.8	7.1	5.1	7.6	5.7	4.0	7.3	5.3	3.9
	Static Pressure — (Pa)				10	22.5	32.5	5	7.5	12.5	2.5	5	10	—	—	2.5	—	—	—
189	Throw Metres — min							8.1	6.2	5.2	7.6	5.7	4.3	6.2	4.5	3.4	5.7	4.3	3.3
	Throw Metres — max							13.5	9.8	7.3	12.4	9.0	6.5	9.6	7.1	5.4	8.7	6.8	5.1
	Static Pressure — (Pa)							7.5	12.5	20	5	10	12.5	—	2.5	5	—	—	3.5
236	Throw Metres — min							10.4	7.6	5.7	9.3	6.8	4.8	7.6	5.4	4.0	7.1	4.9	3.9
	Throw Metres — max							16.3	11.9	8.7	14.7	10.1	7.9	11.5	7.9	6.2	10.9	7.5	6.0
	Static Pressure — (Pa)							10	17.5	25	7.5	12.5	20	2.5	5	7.5	1.5	4	6
283	Throw Metres — min										11.3	7.9	5.9	8.4	6.2	4.8	8.2	5.9	4.5
	Throw Metres — max										16.9	12.4	9.3	14.1	9.8	7.2	12.7	9.0	6.8
	Static Pressure — (Pa)										10	17.5	25	5	7.5	10	3.5	60	9
330	Throw Metres — min										12.4	9.3	6.8	9.6	7.1	5.1	9.3	6.8	4.8
	Throw Metres — max										19.7	14.1	10.3	15.2	10.4	8.2	14.4	10.1	7.7
	Static Pressure — (Pa)										12.5	22.5	32.5	5	7.5	12.5	3.5	6	11
375	Throw Metres — min										14.1	10.1	7.6	10.4	7.6	5.9	10.1	7.3	5.7
	Throw Metres — max										22.3	15.2	11.9	16.9	12.4	9.3	15.8	11.3	8.7
	Static Pressure — (Pa)										15	27.5	40	5	10	15	5	8.5	12.5
425	Throw Metres — min													12.4	8.7	6.5	11.3	8.2	6.2
	Throw Metres — max													18.5	14.1	10.4	17.6	13.1	9.8
	Static Pressure — (Pa)													7.5	12.5	20	6.5	11	15
472	Throw Metres — min													15.8	10.4	7.9	13.9	9.8	7.5
	Throw Metres — max													22.6	16.9	12.2	20.8	15.8	11.9
	Static Pressure — (Pa)													10	17.5	25	8.5	14	22.5
566	Throw Metres — min													16.9	12.2	9.3	16.6	11.6	8.7
	Throw Metres — max													27.3	19.7	14.1	25.2	18.2	13.6
	Static Pressure — (Pa)													12.5	25	35	11	20	30
660	Throw Metres — min																17.8	13.4	10.1
	Throw Metres — max																29.8	21.8	15.9
	Static Pressure — (Pa)																14	25	37.5
755	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
850	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
944	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1180	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1416	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1888	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

3.1 REGISTERS

DOUBLE DEFLECTION REGISTER (2AR) WITH FIXED CORE

Performance Data 25mm Centres

AREA FACTOR		1.33	1.5	1.66	2.0	2.5	2.66
NECK AREA — M ²		0.180	0.203	0.225	0.270	0.338	0.360
TYPICAL SIZES		600 x 300 900 x 200 1200 x 150	450 x 450 675 x 300 900 x 225	600 x 375 750 x 300 1500 x 150	600 x 450 900 x 300 1200 x 225	750 x 450 900 x 375 1125 x 300	600 x 600 800 x 450 1200 x 300
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
141	Throw Metres — max Static Pressure — (Pa)						
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	4.3 3.2 2.2 6.8 5.0 3.8 — — —					
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	5.4 4.0 3.2 8.7 6.2 5.2 — — 2.5	4.3 3.2 2.5 6.8 4.8 3.7 — — —				
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.5 4.5 3.7 10.4 7.3 4.8 — 2.5 5	5.9 4.3 3.2 9.3 7.1 4.8 — — 2.5	5.3 3.8 3.0 8.4 5.8 4.5 — — —	4.8 3.7 2.8 7.9 5.4 4.3 — — —		
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.6 5.7 4.3 11.9 8.7 6.5 2.5 5 7.5	6.8 4.8 3.7 10.4 7.6 5.9 — 2.5 5	6.2 4.5 3.4 9.8 6.5 5.1 — — 2.5	5.9 4.3 3.2 9.3 7.1 4.8 — — 2.5		
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.0 6.5 4.5 13.5 9.8 7.4 2.5 5 10	8.2 5.7 4.3 12.9 9.0 6.8 1.5 4 6	7.3 5.4 4.0 11.2 7.9 6.4 — 2.5 5	6.8 4.8 3.7 10.4 6.6 5.7 — — 2.5	6.2 4.3 3.3 9.4 6.6 5.1 — — —	5.9 4.0 3.2 8.7 6.2 4.8 — — —
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8 7.1 5.4 15.2 10.8 8.4 5 7.5 10	9.0 6.2 4.8 14.1 9.8 7.3 2.5 5 7.5	8.2 5.7 4.3 12.9 9.0 6.8 1.5 4 6	7.6 5.7 4.0 11.9 8.7 6.5 — 2.5 5	6.9 4.9 3.6 10.8 7.7 5.8 — — 3	6.5 4.5 3.4 10.4 7.1 5.4 — — 2.5
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	10.8 7.9 5.9 17.1 12.4 9.3 5 10 12.5	9.8 7.1 5.4 15.2 11.3 8.4 1.5 5 10	9.0 6.5 4.9 14.4 10.4 7.9 2.5 5 7	8.4 6.2 4.5 13.5 9.6 7.1 — 2.5 5	8.0 6.2 4.5 13.5 9.6 7.1 — 2.5 5	7.6 5.1 3.7 11.9 8.2 6.5 — — 2.5
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0 9.6 7.3 20.2 15.2 11.3 7.5 12.5 20	11.9 8.7 6.5 18.5 13.5 9.9 5 7.5 12.5	10.9 8.2 6.2 17.2 12.1 9.1 2.5 5 10	10.1 7.6 5.7 15.8 11.3 8.4 2.5 5 7.5	9.7 7.1 5.3 14.7 10.6 8.1 1.5 4 6	9.6 6.8 5.1 14.1 10.1 7.8 — 2.5 5
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	16.3 11.3 8.4 23.7 17.4 13.0 10 17.5 25	14.1 9.8 7.3 21.3 15.2 11.9 5 10 15	13.8 9.6 7.1 20.8 15.0 11.6 5 7.5 12.5	13.5 9.6 6.9 20.2 14.8 11.3 5 7.5 10	11.7 8.4 6.6 18.0 13.2 10.1 3.5 6 9	10.6 7.9 6.2 16.9 12.1 9.3 2.5 5 7.5
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4 13.0 9.6 28.4 19.7 15.2 12.5 22.5 32.5	15.2 11.9 8.2 24.9 18.0 13.5 7.5 12.5 20	14.1 10.1 7.7 22.2 16.3 12.1 5 10 15	13.5 9.6 7.3 20.8 15.2 11.3 5 7.5 12.5	12.8 9.4 6.9 20.2 14.6 10.6 3.5 6 11	12.4 8.9 6.8 19.7 14.1 10.1 2.5 5 7.5
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	19.7 14.7 10.6 30.4 22.6 16.9 15 27.5 40	17.4 13.0 9.6 28.9 19.7 14.7 10 17.5 25	16.0 12.1 8.7 25.5 17.7 13.8 7.5 12.5 20	15.2 10.8 8.2 23.7 16.9 13.0 7.5 10 15	14.7 10.4 7.7 23.1 16.1 12.4 5 8.5 12.5	14.1 10.1 7.4 22.6 15.6 11.7 5 7.5 10
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)		19.7 14.1 10.8 31.3 22.6 16.7 12.5 22.5 32.5	18.0 13.0 9.9 27.9 20.4 15.2 10 17.5 25	16.9 11.9 9.0 26.1 18.5 14.1 17.5 12.5 20	15.9 11.3 8.7 25.1 16.8 13.6 6.5 11 15	15.4 11.0 8.4 24.5 16.9 13.3 5 7.5 12.5
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)			21.4 15.8 11.9 32.6 25.2 19.5 12.5 22.5 32.5	20.8 15.2 11.3 31.5 23.7 18.1 10 20 30	20.1 14.6 11.0 30.5 22.9 16.9 8.5 14 22.5	18.4 13.9 10.7 29.8 22.6 16.3 7.5 12.5 20
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				24.7 18.4 13.4 38.2 28.2 20.8 15 27.5 40	23.4 17.2 13.1 35.2 26.8 19.5 12.5 22.5 32.5	22.6 16.6 12.5 33.7 26.1 18.7 10 17.5 25
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)						29.9 17.8 13.4 42.9 31.7 25.4 15 27.5 40
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)						

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

Performance Data 25mm Centres

AREA FACTOR		3.0	4.0	5.0	6.0	8.15
NECK AREA — M ²		0.405	0.540	0.675	0.810	1.10
TYPICAL SIZES		675 x 600 900 x 450	900 x 600 1200 x 450 1800 x 300	900 x 750 1500 x 450	900 x 900 1350 x 600 1800 x 450	1050 x 1050
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
189	Throw Metres — max Static Pressure — (Pa)					
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.2 4.3 3.4 9.8 6.8 5.1 — — —				
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.1 4.8 3.4 10.6 7.6 5.9 — — —				
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	8.2 6.2 4.5 13.0 9.3 7.1 — — 2.5	6.8 4.8 3.7 10.4 7.6 5.7 — — —			
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8 7.1 5.1 15.2 11.3 8.4 — 2.5 5	7.6 5.7 4.3 12.4 8.7 6.5 — — 2.5			
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	11.3 8.2 6.2 17.4 13.0 9.6 — 2.5 5	8.7 6.5 4.8 14.1 9.8 7.6 — — 2.5			
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0 9.0 6.8 19.7 14.1 10.4 2.5 5 7.5	10.1 7.3 5.7 15.2 11.3 8.5 — 2.5 5	8.9 6.8 5.1 14.1 10.4 8.2 — — 2.5	8.4 6.2 4.0 13.5 9.8 7.6 — — —	
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	14.1 10.1 7.3 21.1 15.8 11.9 2.5 5 10	11.9 7.9 5.9 16.9 12.4 9.3 — 2.5 5	10.6 7.5 5.7 15.7 11.5 8.9 — — 2.5	9.8 7.1 5.4 15.2 10.9 8.4 — — —	
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4 12.6 9.6 27.1 19.7 14.7 5 10 12.5	14.1 9.8 7.6 21.7 15.2 11.9 2.5 5 7.5	13.1 9.6 7.3 20.1 14.3 10.9 — 2.5 5	12.4 9.2 7.1 18.4 13.4 10.4 — — 2.5	10.1 7.1 5.4 15.2 10.1 8.1 — — —
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	20.2 15.5 13.3 31.5 23.7 17.4 7.5 12.5 20	16.9 11.9 9.0 24.3 19.3 14.1 5 10 12.5	15.9 11.2 8.4 23.5 17.7 13.5 2.5 5 7.5	14.7 10.6 8.2 22.6 16.9 13.0 — 2.5 5	11.9 8.4 6.5 18.5 13.5 9.8 — — 2.5
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	28.2 17.4 12.7 40.8 30.4 23.7 12.5 22.5 32.5	23.0 15.8 11.9 34.1 24.8 18.5 9.5 12.5 20	20.2 14.9 11.0 32.2 22.9 17.7 5 7.5 12.5	18.5 14.1 10.6 30.4 21.1 16.9 2.5 5 7.5	15.6 11.3 8.4 24.5 18.0 14.5 — 2.5 5
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)		28.2 17.8 15.2 42.6 30.6 23.2 12.5 22.5 32.5	27.0 17.4 14.6 38.8 28.7 21.4 7.5 12.5 20	26.1 16.8 14.1 34.8 28.2 20.2 5 10 12.5	19.7 14.1 10.6 30.4 22.6 16.9 2.5 5 7.5

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

3.1 REGISTERS

DOUBLE DEFLECTION REGISTER (2AR) WITH FIXED CORE



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Neck areas for supply registers

Nominal Height mm	150	225	300	375	450	525	600	675	750	825	900	975	1050
Nominal Length mm													
150	.023												
225	.038	.051											
300	.045	.068	.090										
375	.056	.084	.113	.141									
450	.068	.101	.136	.169	.203								
525	.079	.118	.158	.197	.236	.276							
600	.090	.135	.180	.225	.270	.315	.360						
675	.101	.152	.203	.253	.304	.354	.405	.456					
750	.113	.169	.225	.281	.338	.393	.450	.506	.563				
825	.124	.186	.248	.309	.371	.433	.495	.557	.618	.681			
900	.135	.203	.270	.338	.405	.473	.540	.607	.675	.743	.810		
975	.146	.219	.293	.366	.439	.512	.585	.658	.731	.804	.878	.951	
1050	.158	.236	.315	.394	.473	.551	.630	.709	.788	.866	.945	1.024	1.100

Core areas for supply registers

Nominal Height mm	150	225	300	375	450	525	600	675	750	825	900	975	1050
Nominal Length mm													
150	.017												
225	.027	.042											
300	.037	.058	.079										
375	.047	.073	.100	.127									
450	.056	.089	.121	.153	.186								
525	.066	.104	.142	.180	.218	.256							
600	.076	.120	.163	.207	.250	.294	.338						
675	.086	.135	.184	.233	.283	.332	.381	.456					
750	.096	.150	.205	.260	.315	.370	.425	.506	.534				
825	.106	.166	.226	.290	.347	.408	.468	.557	.589	.650			
900	.115	.181	.248	.314	.380	.446	.512	.607	.644	.710	.776		
975	.125	.197	.269	.340	.412	.484	.555	.658	.699	.771	.842	.913	
1050	.135	.212	.290	.367	.444	.522	.609	.709	.754	.831	.908	.986	1.063

Due to ongoing product development, data and dimensions are subject to change.

3.1 REGISTERS

DOUBLE DEFLECTION REGISTER (2AR)

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Core areas for supply registers

Neck Area	.02	.03	.038	.045	.053	.068	.075	.09	.10	.113	.12	.135	.15	.18	.225	.27	.36	.405	.45	.54	.675	.81
L/S																						
50	A	A																				
100	A	A																				
150	B	B	A																			
200	C	B	B	A	A																	
250	D	C	C	B	B	A	A															
300	E	D	D	C	B	B	B	A														
350		E	D	D	C	C	B	B	A													
400			E	E	D	C	C	B	B	A												
450				E	D	D	C	B	B	A												
500					E	E	C	C	B	B	A											
600						E	D	C	C	B	B	A										
700							E	D	C	C	C	B	A									
800								E	D	C	C	C	B	A								
900									E	D	D	D	C	B	A							
1000									E	D	D	E	D	B	B	A						
1250													E	D	D	B	A					
1500															E	E	C	B	A	A		
1750																	D	C	C	B	A	A

NRdb Ratings at 22 1/2° A = 20 - 25 B = 25 - 30 C = 30 - 35 D = 35 - 40 E = 40 - 45

3.2 REGISTERS

DOUBLE DEFLECTION REGISTER (RC2AR) WITH REMOVABLE CORE

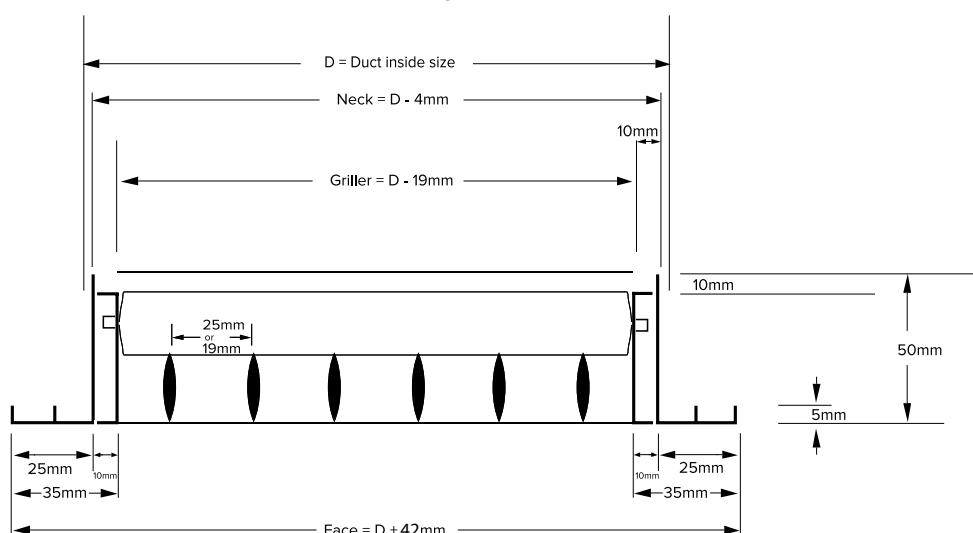
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Airfoil's Double Deflection Register with Removable Core is used for supply air functions. The double set of fully adjustable blades gives a high level of control of the air pattern across four directions. Incorporating two sets of individually adjustable blades, the front blades may be adjusted up or down and the rear blades are adjusted side to side.

Made from high-grade extruded aluminium sections to ensure functional strength and performance, Airfoil's Double Deflection Register provides a contemporary attractive feel and modern look. It comes in standard powder coated white with optional colours and finishes available on request.

Cross Sectional Diagram: Model RC2ARH



Double Deflection Register with Removable Core Options

- > Flange size: 32mm standard with optional 25mm or 38mm
- > Blade spacing: 19mm or 25mm
- > Custom-made to any size dimensions
- > Horizontal blades or vertical blades at the front
- > Specific colours and finishes available on request

Product specification codes:

RC2ARH Removable core double deflection register with front horizontal blades

RC2ARV Removable core double deflection register with front vertical blades

Specification: Product code + size.

Example:

RC2ARH200x150 Removable Core Double Deflection Register with front horizontal blades width 200mm x height 150mm

RC2ARV150x200 Removable Core Double Deflection Register with front vertical blades height 150mm x width 200mm

Due to going product development, data and dimensions are subject to change.

3.2 REGISTERS

DOUBLE DEFLECTION REGISTER (RC2AR)

WITH REMOVABLE CORE

Performance Data 25mm Centres

AREA FACTOR		0.17			0.33			0.5			0.66			1.0			1.25		
NECK AREA — M ²		0.023			0.045			0.068			0.090			0.135			0.169		
TYPICAL SIZES		150 X 150 225 X 100			225 X 200 300 X 150 450 X 100			300 X 225 450 X 150 675 X 100			300 X 300 400 X 225 600 X 150			450 X 300 600 X 225 900 X 150			450 X 375 675 X 250 750 X 225		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
47	Throw Metres — min	3.2	2.2	2.0	2.2	1.7	1.4												
	Throw Metres — max	5.1	3.4	2.2	3.4	2.5	2.0												
	Static Pressure — (Pa)	2.5	5.0	7.5	—	—	—												
94	Throw Metres — min	6.2	4.8	3.7	4.3	3.2	2.5	3.4	2.5	2.0	3.2	2.2	1.4						
	Throw Metres — max	9.3	7.1	5.4	6.8	4.8	3.7	5.4	4.0	2.8	4.8	3.4	2.8						
	Static Pressure — (Pa)	10	22.5	32.5	2.5	5	10	—	—	2.5	—	—	—						
141	Throw Metres — min				6.5	4.5	3.7	5.4	3.7	2.8	4.5	3.4	2.2	4.0	2.5	2.0			
	Throw Metres — max				10.3	7.3	5.7	8.2	5.9	4.5	7.3	5.1	4.0	5.7	4.3	3.2			
	Static Pressure — (Pa)				7.5	12.5	20	2.5	5	7.5	—	2.5	5	—	—	—			
189	Throw Metres — min				8.4	6.2	5.1	7.1	5.1	3.7	6.2	4.8	3.4	5.1	3.7	2.5	4.5	3.4	2.4
	Throw Metres — max				13.5	9.8	7.3	10.2	7.9	5.9	9.8	7.1	5.1	7.6	5.7	4.0	7.3	5.3	3.9
	Static Pressure — (Pa)				10	22.5	32.5	5	7.5	12.5	2.5	5	10	—	—	2.5	—	—	—
236	Throw Metres — min							8.1	6.2	5.2	7.6	5.7	4.3	6.2	4.5	3.4	5.7	4.3	3.3
	Throw Metres — max							13.5	9.8	7.3	12.4	9.0	6.5	9.6	7.1	5.4	8.7	6.8	5.1
	Static Pressure — (Pa)							7.5	12.5	20	5	10	12.5	—	2.5	5	—	—	3.5
283	Throw Metres — min							10.4	7.6	5.7	9.3	6.8	4.8	7.6	5.4	4.0	7.1	4.9	3.9
	Throw Metres — max							16.3	11.9	8.7	14.7	10.1	7.9	11.5	7.9	6.2	10.9	7.5	6.0
	Static Pressure — (Pa)							10	17.5	25	7.5	12.5	20	2.5	5	7.5	1.5	4	6
330	Throw Metres — min										11.3	7.9	5.9	8.4	6.2	4.8	8.2	5.9	4.5
	Throw Metres — max										16.9	12.4	9.3	14.1	9.8	7.2	12.7	9.0	6.8
	Static Pressure — (Pa)										10	17.5	25	5	7.5	10	3.5	60	9
375	Throw Metres — min										12.4	9.3	6.8	9.6	7.1	5.1	9.3	6.8	4.8
	Throw Metres — max										19.7	14.1	10.3	15.2	10.4	8.2	14.4	10.1	7.7
	Static Pressure — (Pa)										12.5	22.5	32.5	5	7.5	12.5	3.5	6	11
425	Throw Metres — min										14.1	10.1	7.6	10.4	7.6	5.9	10.1	7.3	5.7
	Throw Metres — max										22.3	15.2	11.9	16.9	12.4	9.3	15.8	11.3	8.7
	Static Pressure — (Pa)										15	27.5	40	5	10	15	5	8.5	12.5
472	Throw Metres — min													12.4	8.7	6.5	11.3	8.2	6.2
	Throw Metres — max													18.5	14.1	10.4	17.6	13.1	9.8
	Static Pressure — (Pa)													7.5	12.5	20	6.5	11	15
566	Throw Metres — min													15.8	10.4	7.9	13.9	9.8	7.5
	Throw Metres — max													22.6	16.9	12.2	20.8	15.8	11.9
	Static Pressure — (Pa)													10	17.5	25	8.5	14	22.5
660	Throw Metres — min													16.9	12.2	9.3	16.6	11.6	8.7
	Throw Metres — max													27.3	19.7	14.1	25.2	18.2	13.6
	Static Pressure — (Pa)													12.5	25	35	11	20	30
755	Throw Metres — min																17.8	13.4	10.1
	Throw Metres — max																29.8	21.8	15.9
	Static Pressure — (Pa)																14	25	37.5
850	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
944	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1180	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1416	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

3.2 REGISTERS

DOUBLE DEFLECTION REGISTER (RC2AR) WITH REMOVABLE CORE

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Performance Data 25mm Centres

AREA FACTOR		1.33			1.5			1.66			2.0			2.5			2.66		
NECK AREA — M²		0.180			0.203			0.225			0.270			0.338			0.360		
TYPICAL SIZES		600 x 300			450 x 450			600 x 375			600 x 450			750 x 450			600 x 600		
		900 x 200			675 x 300			750 x 300			900 x 300			900 x 375			800 x 450		
		1200 x 150			900 x 225			1500 x 150			1200 x 225			1125 x 300			1200 x 300		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
94	Throw Metres — max Static Pressure — (Pa)																		
141	Throw Metres — min Throw Metres — max Static Pressure — (Pa)																		
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	4.3 6.8 —	3.2 5.0 —	2.2 3.8 —															
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	5.4 8.7 —	4.0 6.2 —	3.2 5.2 2.5	4.3 6.8 —	3.2 4.8 —	2.5 3.7 —												
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.5 10.4 —	4.5 7.3 2.5	3.7 4.8 5	5.9 9.3 —	4.3 7.1 —	3.2 4.8 2.5	5.3 8.4 —	3.8 5.8 —	3.0 4.5 —	4.8 7.9 —	3.7 5.4 —	2.8 4.3 —						
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.6 11.9 2.5	5.7 8.7 5	4.3 6.5 7.5	6.8 10.4 —	4.8 7.6 2.5	3.7 5.9 5	6.2 9.8 —	4.5 6.5 —	3.4 5.1 2.5	5.9 9.3 —	4.3 7.1 —	3.2 4.8 2.5						
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.0 13.5 2.5	6.5 9.8 5	4.5 7.4 10	8.2 12.9 1.5	5.7 9.0 4	4.3 6.8 6	7.3 11.2 —	5.4 7.9 2.5	4.0 6.4 5	6.8 10.4 —	4.8 6.6 —	3.7 5.7 2.5	6.2 9.4 —	4.3 6.6 —	3.3 5.1 —	5.9 8.7 —	4.0 6.2 —	3.2 4.8 —
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8 15.2 5	7.1 10.8 7.5	5.4 8.4 10	9.0 14.1 2.5	6.2 9.8 5	4.8 7.3 7.5	8.2 12.9 1.5	5.7 9.0 4	4.3 6.8 6	7.6 11.9 —	5.7 8.7 2.5	4.0 6.5 5	6.9 10.8 —	4.9 7.7 —	3.6 5.8 3	6.5 10.4 —	4.5 7.1 —	3.4 5.4 2.5
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	10.8 17.1 5	7.9 12.4 10	5.9 9.3 12.5	9.8 15.2 1.5	7.1 11.3 5	5.4 8.4 10	9.0 14.4 2.5	6.5 10.4 5	4.9 7.9 7	8.4 13.5 —	6.2 9.6 2.5	4.5 7.1 5	8.0 13.5 —	6.2 9.6 2.5	4.5 7.1 5	7.6 11.9 —	5.1 8.2 —	3.7 6.5 2.5
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0 20.2 7.5	9.6 15.2 12.5	7.3 11.3 20	11.9 18.5 5	8.7 13.5 7.5	6.5 9.9 12.5	10.9 17.2 2.5	8.2 12.1 5	6.2 9.1 10	10.1 15.8 2.5	7.6 11.3 5	5.7 8.4 7.5	9.7 14.7 1.5	7.1 10.6 4	5.3 8.1 6	9.6 14.1 —	6.8 10.1 2.5	5.1 7.8 5
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	16.3 23.7 10	11.3 17.4 17.5	8.4 13.0 25	14.1 21.3 5	9.8 15.2 10	7.3 11.9 15	13.8 20.8 5	9.6 15.0 7.5	7.1 11.6 12.5	13.5 20.2 5	9.6 14.8 7.5	6.9 11.3 10	11.7 18.0 3.5	8.4 13.2 6	6.6 10.1 9	10.6 16.9 2.5	7.9 12.1 5	6.2 9.3 7.5
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4 28.4 12.5	13.0 19.7 22.5	9.6 15.2 32.5	15.2 24.9 7.5	11.9 18.0 12.5	8.2 13.5 20	14.1 22.2 5	10.1 16.3 10	7.7 12.1 15	7.7 12.5 18.5	9.6 15.2 7.5	12.5 20.8 10	13.5 20.2 5	9.6 14.6 3.5	7.3 10.6 6	7.3 10.6 11	12.4 19.7 2.5	6.8 10.1 5
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	19.7 30.4 15	14.7 22.6 27.5	10.6 16.9 40	17.4 28.9 10	13.0 19.7 17.5	9.6 14.7 25	16.0 25.5 7.5	12.1 17.7 12.5	8.7 13.8 20	15.2 23.7 7.5	10.8 16.9 10	8.2 13.0 15	14.7 23.1 5	10.4 16.1 8.5	7.7 12.4 12.5	7.7 12.4 12.5	10.1 15.6 5	7.4 11.7 10
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				19.7 31.3 12.5	14.1 22.6 22.5	10.8 16.7 32.5	18.0 27.9 10	13.0 20.4 17.5	9.9 15.2 25	16.9 26.1 17.5	11.9 18.5 12.5	9.0 14.1 20	15.9 25.1 6.5	11.3 16.8 11	8.7 13.6 15	15.4 24.5 5	11.0 16.9 7.5	8.4 13.3 12.5
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)							21.4 32.6 12.5	15.8 25.2 22.5	11.9 19.5 32.5	20.8 31.5 10	15.2 23.7 20	11.3 18.1 30	20.1 30.5 8.5	14.6 22.9 14	11.0 16.9 22.5	18.4 29.8 7.5	13.9 22.6 12.5	10.7 16.3 20
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)										24.7 38.2 15	18.4 28.2 27.5	13.4 20.8 40	23.4 35.2 12.5	17.2 26.8 22.5	13.1 19.5 32.5	22.6 33.7 10	16.6 26.1 17.5	12.5 18.7 25
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)																29.9 42.9 15	17.8 31.7 27.5	13.4 25.4 40
	Throw Metres — min Throw Metres — max Static Pressure — (Pa)																		
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)																		

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

Performance Data 25mm Centres

AREA FACTOR		3.0	4.0	5.0	6.0	8.15
NECK AREA — M ²		0.405	0.540	0.675	0.810	1.10
TYPICAL SIZES		675 x 600 900 x 450	900 x 600 1200 x 450 1800 x 300	900 x 750 1500 x 450	900 x 900 1350 x 600 1800 x 450	1050 x 1050
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
141	Throw Metres — max Static Pressure — (Pa)					
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.2 4.3 3.4 9.8 6.8 5.1 — — —				
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.1 4.8 3.4 10.6 7.6 5.9 — — —				
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	8.2 6.2 4.5 13.0 9.3 7.1 — — 2.5	6.8 4.8 3.7 10.4 7.6 5.7 — — —			
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8 7.1 5.1 15.2 11.3 8.4 — 2.5 5	7.6 5.7 4.3 12.4 8.7 6.5 — — 2.5			
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	11.3 8.2 6.2 17.4 13.0 9.6 — 2.5 5	8.7 6.5 4.8 14.1 9.8 7.6 — — 2.5			
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0 9.0 6.8 19.7 14.1 10.4 2.5 5 7.5	10.1 7.3 5.7 15.2 11.3 8.5 — 2.5 5	8.9 6.8 5.1 14.1 10.4 8.2 — — 2.5	8.4 6.2 4.0 13.5 9.8 7.6 — — —	
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	14.1 10.1 7.3 21.1 15.8 11.9 2.5 5 10	11.9 7.9 5.9 16.9 12.4 9.3 — 2.5 5	10.6 7.5 5.7 15.7 11.5 8.9 — — 2.5	9.8 7.1 5.4 15.2 10.9 8.4 — — —	
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4 12.6 9.6 27.1 19.7 14.7 5 10 12.5	14.1 9.8 7.6 21.7 15.2 11.9 2.5 5 7.5	13.1 9.6 7.3 20.1 14.3 10.9 — 2.5 5	12.4 9.2 7.1 18.4 13.4 10.4 — — 2.5	10.1 7.1 5.4 15.2 10.1 8.1 — — —
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	20.2 15.5 13.3 31.5 23.7 17.4 7.5 12.5 20	16.9 11.9 9.0 24.3 19.3 14.1 5 10 12.5	15.9 11.2 8.4 23.5 17.7 13.5 2.5 5 7.5	14.7 10.6 8.2 22.6 16.9 13.0 — 2.5 5	11.9 8.4 6.5 18.5 13.5 9.8 — — 2.5
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	28.2 17.4 12.7 40.8 30.4 23.7 12.5 22.5 32.5	23.0 15.8 11.9 34.1 24.8 18.5 9.5 12.5 20	20.2 14.9 11.0 32.2 22.9 17.7 5 7.5 12.5	18.5 14.1 10.6 30.4 21.1 16.9 2.5 5 7.5	15.6 11.3 8.4 24.5 18.0 14.5 — 2.5 5
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)		28.2 17.8 15.2 42.6 30.6 23.2 12.5 22.5 32.5	27.0 17.4 14.6 38.8 28.7 21.4 7.5 12.5 20	26.1 16.8 14.1 34.8 28.2 20.2 5 10 12.5	19.7 14.1 10.6 30.4 22.6 16.9 2.5 5 7.5

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

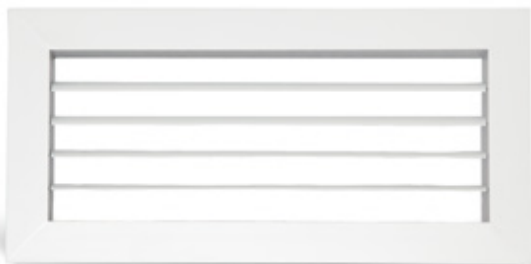
3.3 REGISTERS

SINGLE DEFLECTION REGISTER (1AR) WITH FIXED CORE

65



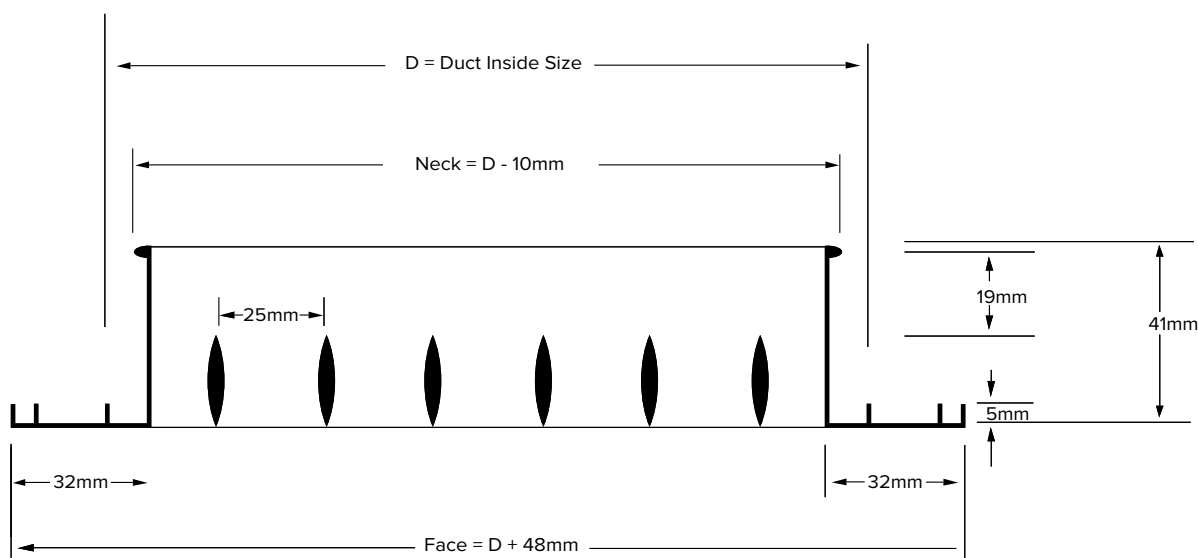
AIRFOIL
GRILLES
DUCT
FITTINGS
making it happen sooner...



Airfoil's Single Deflection Register with Fixed Core is manufactured with a single set of fully adjustable blades to give a high level of control of the air pattern across two directions. The blades may be ordered in either horizontal or vertical as required.

Made from high-grade extruded aluminium sections to ensure functional strength and performance, Airfoil's Single Deflection Register provides a contemporary attractive feel and modern look. It comes in standard powder coated white with optional colours and finishes available on request.

Cross Sectional Diagram



Single Deflection Register Options

- > Flange size: 32mm standard with optional 25mm or 38mm
- > Blade spacing: 19mm or 25mm
- > Custom-made to any size dimensions
- > Specific colours and finishes available on request
- > Horizontal blades at front or vertical blades at front

Product specification codes:

1ARH Fixed core single deflection register with horizontal blades at front.

1ARV Fixed core single deflection register with vertical blades at front.

Specification: Product code + size.

Example:

1ARH200x150 Fixed Core Single Deflection Register with front horizontal blades width 200mm x height 150mm

Performance Data 25mm Centres

AREA FACTOR		0.17			0.33			0.5			0.66			1.0			1.25		
NECK AREA — M ²		0.023			0.045			0.068			0.090			0.135			0.169		
TYPICAL SIZES		150 X 150			225 X 200			300 X 225			300 X 300			450 X 300			450 X 375		
		225 X 100			300 X 150			450 X 150			400 X 225			600 X 225			675 X 250		
					450 X 100			675 X 100			600 X 150			900 X 150			750 X 225		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
47	Throw Metres — min	3.2	2.2	2.0	2.2	1.7	1.4												
	Throw Metres — max	5.1	3.4	2.2	3.4	2.5	2.0												
	Static Pressure — (Pa)	2.5	5.0	7.5	—	—	—												
94	Throw Metres — min	6.2	4.8	3.7	4.3	3.2	2.5	3.4	2.5	2.0	3.2	2.2	1.4						
	Throw Metres — max	9.3	7.1	5.4	6.8	4.8	3.7	5.4	4.0	2.8	4.8	3.4	2.8						
	Static Pressure — (Pa)	10	22.5	32.5	2.5	5	10	—	—	2.5	—	—	—						
141	Throw Metres — min				6.5	4.5	3.7	5.4	3.7	2.8	4.5	3.4	2.2	4.0	2.5	2.0			
	Throw Metres — max				10.3	7.3	5.7	8.2	5.9	4.5	7.3	5.1	4.0	5.7	4.3	3.2			
	Static Pressure — (Pa)				7.5	12.5	20	2.5	5	7.5	—	2.5	5	—	—	—			
189	Throw Metres — min				8.4	6.2	5.1	7.1	5.1	3.7	6.2	4.8	3.4	5.1	3.7	2.5	4.5	3.4	2.4
	Throw Metres — max				13.5	9.8	7.3	10.2	7.9	5.9	9.8	7.1	5.1	7.6	5.7	4.0	7.3	5.3	3.9
	Static Pressure — (Pa)				10	22.5	32.5	5	7.5	12.5	2.5	5	10	—	—	2.5	—	—	—
236	Throw Metres — min							8.1	6.2	5.2	7.6	5.7	4.3	6.2	4.5	3.4	5.7	4.3	3.3
	Throw Metres — max							13.5	9.8	7.3	12.4	9.0	6.5	9.6	7.1	5.4	8.7	6.8	5.1
	Static Pressure — (Pa)							7.5	12.5	20	5	10	12.5	—	2.5	5	—	—	3.5
283	Throw Metres — min							10.4	7.6	5.7	9.3	6.8	4.8	7.6	5.4	4.0	7.1	4.9	3.9
	Throw Metres — max							16.3	11.9	8.7	14.7	10.1	7.9	11.5	7.9	6.2	10.9	7.5	6.0
	Static Pressure — (Pa)							10	17.5	25	7.5	12.5	20	2.5	5	7.5	1.5	4	6
330	Throw Metres — min										11.3	7.9	5.9	8.4	6.2	4.8	8.2	5.9	4.5
	Throw Metres — max										16.9	12.4	9.3	14.1	9.8	7.2	12.7	9.0	6.8
	Static Pressure — (Pa)										10	17.5	25	5	7.5	10	3.5	60	9
375	Throw Metres — min										12.4	9.3	6.8	9.6	7.1	5.1	9.3	6.8	4.8
	Throw Metres — max										19.7	14.1	10.3	15.2	10.4	8.2	14.4	10.1	7.7
	Static Pressure — (Pa)										12.5	22.5	32.5	5	7.5	12.5	3.5	6	11
425	Throw Metres — min										14.1	10.1	7.6	10.4	7.6	5.9	10.1	7.3	5.7
	Throw Metres — max										22.3	15.2	11.9	16.9	12.4	9.3	15.8	11.3	8.7
	Static Pressure — (Pa)										15	27.5	40	5	10	15	5	8.5	12.5
472	Throw Metres — min													12.4	8.7	6.5	11.3	8.2	6.2
	Throw Metres — max													18.5	14.1	10.4	17.6	13.1	9.8
	Static Pressure — (Pa)													7.5	12.5	20	6.5	11	15
566	Throw Metres — min													15.8	10.4	7.9	13.9	9.8	7.5
	Throw Metres — max													22.6	16.9	12.2	20.8	15.8	11.9
	Static Pressure — (Pa)													10	17.5	25	8.5	14	22.5
660	Throw Metres — min													16.9	12.2	9.3	16.6	11.6	8.7
	Throw Metres — max													27.3	19.7	14.1	25.2	18.2	13.6
	Static Pressure — (Pa)													12.5	25	35	11	20	30
755	Throw Metres — min																17.8	13.4	10.1
	Throw Metres — max																29.8	21.8	15.9
	Static Pressure — (Pa)																14	25	37.5
850	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
944	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1180	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1416	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

3.3 REGISTERS

SINGLE DEFLECTION REGISTER (1AR) WITH FIXED CORE

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Performance Data 25mm Centres

AREA FACTOR		1.33			1.5			1.66			2.0			2.5			2.66		
NECK AREA — M ²		0.180			0.203			0.225			0.270			0.338			0.360		
TYPICAL SIZES		600 x 300			450 x 450			600 x 375			600 x 450			750 x 450			600 x 600		
		900 x 200			675 x 300			750 x 300			900 x 300			900 x 375			800 x 450		
		1200 x 150			900 x 225			1500 x 150			1200 x 225			1125 x 300			1200 x 300		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
141	Throw Metres — max Static Pressure — (Pa)																		
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	4.3	3.2	2.2															
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	5.4	4.0	3.2	4.3	3.2	2.5												
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.5	4.5	3.7	5.9	4.3	3.2	5.3	3.8	3.0	4.8	3.7	2.8						
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.6	5.7	4.3	6.8	4.8	3.7	6.2	4.5	3.4	5.9	4.3	3.2						
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.0	6.5	4.5	8.2	5.7	4.3	7.3	5.4	4.0	6.8	4.8	3.7	6.2	4.3	3.3	5.9	4.0	3.2
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8	7.1	5.4	9.0	6.2	4.8	8.2	5.7	4.3	7.6	5.7	4.0	6.9	4.9	3.6	6.5	4.5	3.4
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	10.8	7.9	5.9	9.8	7.1	5.4	9.0	6.5	4.9	8.4	6.2	4.5	8.0	6.2	4.5	7.6	5.1	3.7
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0	9.6	7.3	11.9	8.7	6.5	10.9	8.2	6.2	10.1	7.6	5.7	9.7	7.1	5.3	9.6	6.8	5.1
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	16.3	11.3	8.4	14.1	9.8	7.3	13.8	9.6	7.1	13.5	9.6	6.9	11.7	8.4	6.6	10.6	7.9	6.2
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4	13.0	9.6	15.2	11.9	8.2	14.1	10.1	7.7	13.5	9.6	7.3	12.8	9.4	6.9	12.4	8.9	6.8
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	19.7	14.7	10.6	17.4	13.0	9.6	16.0	12.1	8.7	15.2	10.8	8.2	14.7	10.4	7.7	14.1	10.1	7.4
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				19.7	14.1	10.8	18.0	13.0	9.9	16.9	11.9	9.0	15.9	11.3	8.7	15.4	11.0	8.4
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				31.3	22.6	16.7	27.9	20.4	15.2	26.1	18.5	14.1	25.1	16.8	13.6	24.5	16.9	13.3
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				12.5	22.5	32.5	10	17.5	25	17.5	12.5	20	6.5	11	15	5	7.5	12.5
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)							21.4	15.8	11.9	20.8	15.2	11.3	20.1	14.6	11.0	18.4	13.9	10.7
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)							32.6	25.2	19.5	31.5	23.7	18.1	30.5	22.9	16.9	29.8	22.6	16.3
								12.5	22.5	32.5	10	20	30	8.5	14	22.5	7.5	12.5	20
											24.7	18.4	13.4	23.4	17.2	13.1	22.6	16.6	12.5
											38.2	28.2	20.8	35.2	26.8	19.5	33.7	26.1	18.7
											15	27.5	40	12.5	22.5	32.5	10	17.5	25
																	29.9	17.8	13.4
																	42.9	31.7	25.4
																	15	27.5	40

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

Performance Data 25mm Centres

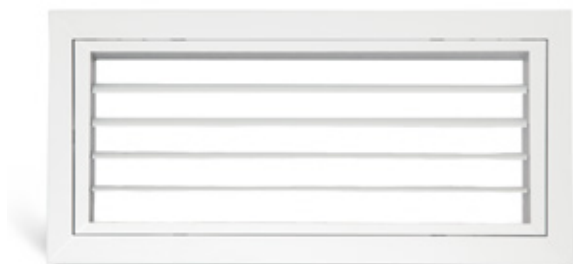
AREA FACTOR		3.0	4.0	5.0	6.0	8.15
NECK AREA — M ²		0.405	0.540	0.675	0.810	1.10
TYPICAL SIZES		675 x 600	900 x 600	900 x 750	900 x 900	1050 x 1050
		900 x 450	1200 x 450	1500 x 450	1350 x 600	
			1800 x 300		1800 x 450	
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
141	Throw Metres — max Static Pressure — (Pa)					
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.2 4.3 3.4 9.8 6.8 5.1 — — —				
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.1 4.8 3.4 10.6 7.6 5.9 — — —				
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	8.2 6.2 4.5 13.0 9.3 7.1 — — 2.5	6.8 4.8 3.7 10.4 7.6 5.7 — — —			
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8 7.1 5.1 15.2 11.3 8.4 — 2.5 5	7.6 5.7 4.3 12.4 8.7 6.5 — — 2.5			
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	11.3 8.2 6.2 17.4 13.0 9.6 — 2.5 5	8.7 6.5 4.8 14.1 9.8 7.6 — — 2.5			
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0 9.0 6.8 19.7 14.1 10.4 2.5 5 7.5	10.1 7.3 5.7 15.2 11.3 8.5 — 2.5 5	8.9 6.8 5.1 14.1 10.4 8.2 — — 2.5	8.4 6.2 4.0 13.5 9.8 7.6 — — —	
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	14.1 10.1 7.3 21.1 15.8 11.9 2.5 5 10	11.9 7.9 5.9 16.9 12.4 9.3 — 2.5 5	10.6 7.5 5.7 15.7 11.5 8.9 — — 2.5	9.8 7.1 5.4 15.2 10.9 8.4 — — —	
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4 12.6 9.6 27.1 19.7 14.7 5 10 12.5	14.1 9.8 7.6 21.7 15.2 11.9 2.5 5 7.5	13.1 9.6 7.3 20.1 14.3 10.9 — 2.5 5	12.4 9.2 7.1 18.4 13.4 10.4 — — 2.5	10.1 7.1 5.4 15.2 10.1 8.1 — — —
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	20.2 15.5 13.3 31.5 23.7 17.4 7.5 12.5 20	16.9 11.9 9.0 24.3 19.3 14.1 5 10 12.5	15.9 11.2 8.4 23.5 17.7 13.5 2.5 5 7.5	14.7 10.6 8.2 22.6 16.9 13.0 — 2.5 5	11.9 8.4 6.5 18.5 13.5 9.8 — — 2.5
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	28.2 17.4 12.7 40.8 30.4 23.7 12.5 22.5 32.5	23.0 15.8 11.9 34.1 24.8 18.5 9.5 12.5 20	20.2 14.9 11.0 32.2 22.9 17.7 5 7.5 12.5	18.5 14.1 10.6 30.4 21.1 16.9 2.5 5 7.5	15.6 11.3 8.4 24.5 18.0 14.5 — 2.5 5
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)		28.2 17.8 15.2 42.6 30.6 23.2 12.5 22.5 32.5	27.0 17.4 14.6 38.8 28.7 21.4 7.5 12.5 20	26.1 16.8 14.1 34.8 28.2 20.2 5 10 12.5	19.7 14.1 10.6 30.4 22.6 16.9 2.5 5 7.5

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

3.4 REGISTERS

SINGLE DEFLECTION REGISTER (RC1AR) WITH REMOVABLE CORE

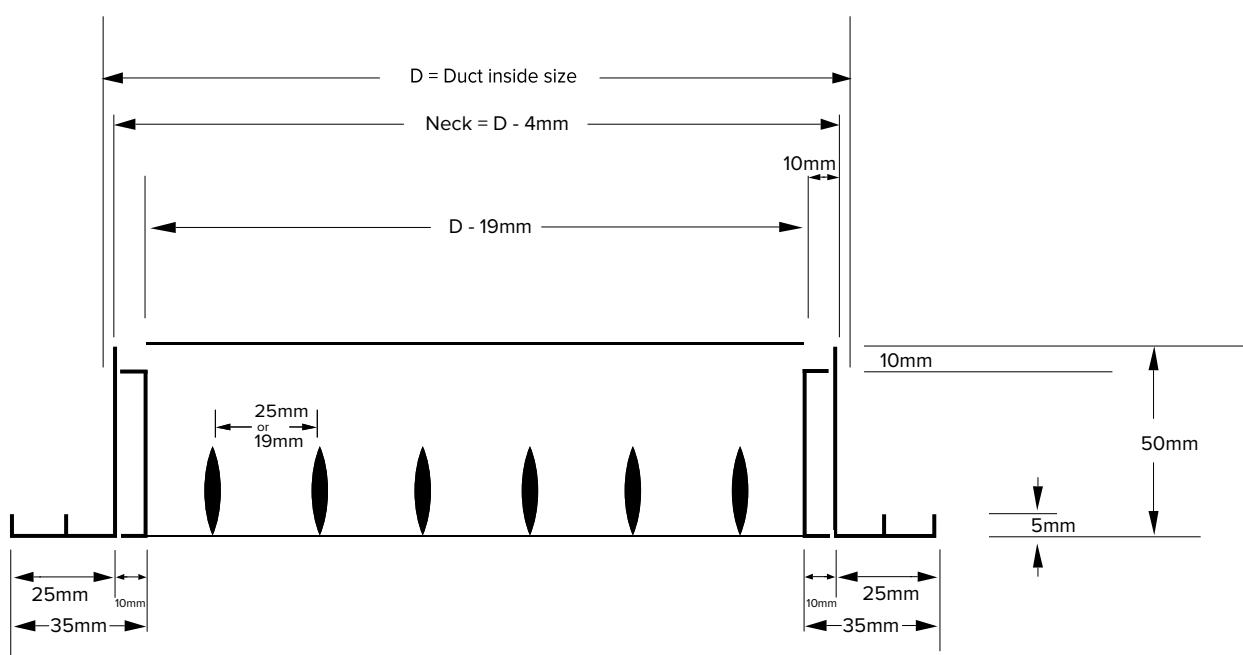
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Airfoil's Single Deflection Register with Removable Core is manufactured with a single set of fully adjustable blades to give a high level of control of the air pattern across two directions. The blades may be ordered in either horizontal or vertical as required.

Made from high-grade extruded aluminium sections to ensure functional strength and performance, Airfoil's Single Deflection Register provides a contemporary attractive feel and modern look. It comes in standard powder coated white with optional colours and finishes available on request.

Cross Sectional Diagram



Single Deflection Register with Removable Core Options

- > Flange size: 32mm standard with optional 25mm or 38mm
- > Blade spacing: 19mm or 25mm
- > Custom-made to any size dimensions
- > Specific colours and finishes available on request

Product specification codes:

RC1ARH Removable core single deflection register with horizontal blades.

RC1ARV Removable core single deflection register with vertical blades.

Specification: Product code + size.

Example:

RC1ARH200x150 Removable Core Single Deflection Register with horizontal blades width 200mm x height 150mm

Performance Data 25mm Centres

AREA FACTOR		0.17			0.33			0.5			0.66			1.0			1.25		
NECK AREA — M ²		0.023			0.045			0.068			0.090			0.135			0.169		
TYPICAL SIZES		150 X 150			225 X 200			300 X 225			300 X 300			450 X 300			450 X 375		
		225 X 100			300 X 150			450 X 150			400 X 225			600 X 225			675 X 250		
					450 X 100			675 X 100			600 X 150			900 X 150			750 X 225		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
47	Throw Metres — min	3.2	2.2	2.0	2.2	1.7	1.4												
	Throw Metres — max	5.1	3.4	2.2	3.4	2.5	2.0												
	Static Pressure — (Pa)	2.5	5.0	7.5	—	—	—												
94	Throw Metres — min	6.2	4.8	3.7	4.3	3.2	2.5	3.4	2.5	2.0	3.2	2.2	1.4						
	Throw Metres — max	9.3	7.1	5.4	6.8	4.8	3.7	5.4	4.0	2.8	4.8	3.4	2.8						
	Static Pressure — (Pa)	10	22.5	32.5	2.5	5	10	—	—	2.5	—	—	—						
141	Throw Metres — min				6.5	4.5	3.7	5.4	3.7	2.8	4.5	3.4	2.2	4.0	2.5	2.0			
	Throw Metres — max				10.3	7.3	5.7	8.2	5.9	4.5	7.3	5.1	4.0	5.7	4.3	3.2			
	Static Pressure — (Pa)				7.5	12.5	20	2.5	5	7.5	—	2.5	5	—	—	—			
189	Throw Metres — min				8.4	6.2	5.1	7.1	5.1	3.7	6.2	4.8	3.4	5.1	3.7	2.5	4.5	3.4	2.4
	Throw Metres — max				13.5	9.8	7.3	10.2	7.9	5.9	9.8	7.1	5.1	7.6	5.7	4.0	7.3	5.3	3.9
	Static Pressure — (Pa)				10	22.5	32.5	5	7.5	12.5	2.5	5	10	—	—	2.5	—	—	—
236	Throw Metres — min							8.1	6.2	5.2	7.6	5.7	4.3	6.2	4.5	3.4	5.7	4.3	3.3
	Throw Metres — max							13.5	9.8	7.3	12.4	9.0	6.5	9.6	7.1	5.4	8.7	6.8	5.1
	Static Pressure — (Pa)							7.5	12.5	20	5	10	12.5	—	2.5	5	—	—	3.5
283	Throw Metres — min							10.4	7.6	5.7	9.3	6.8	4.8	7.6	5.4	4.0	7.1	4.9	3.9
	Throw Metres — max							16.3	11.9	8.7	14.7	10.1	7.9	11.5	7.9	6.2	10.9	7.5	6.0
	Static Pressure — (Pa)							10	17.5	25	7.5	12.5	20	2.5	5	7.5	1.5	4	6
330	Throw Metres — min										11.3	7.9	5.9	8.4	6.2	4.8	8.2	5.9	4.5
	Throw Metres — max										16.9	12.4	9.3	14.1	9.8	7.2	12.7	9.0	6.8
	Static Pressure — (Pa)										10	17.5	25	5	7.5	10	3.5	60	9
375	Throw Metres — min										12.4	9.3	6.8	9.6	7.1	5.1	9.3	6.8	4.8
	Throw Metres — max										19.7	14.1	10.3	15.2	10.4	8.2	14.4	10.1	7.7
	Static Pressure — (Pa)										12.5	22.5	32.5	5	7.5	12.5	3.5	6	11
425	Throw Metres — min										14.1	10.1	7.6	10.4	7.6	5.9	10.1	7.3	5.7
	Throw Metres — max										22.3	15.2	11.9	16.9	12.4	9.3	15.8	11.3	8.7
	Static Pressure — (Pa)										15	27.5	40	5	10	15	5	8.5	12.5
472	Throw Metres — min													12.4	8.7	6.5	11.3	8.2	6.2
	Throw Metres — max													18.5	14.1	10.4	17.6	13.1	9.8
	Static Pressure — (Pa)													7.5	12.5	20	6.5	11	15
566	Throw Metres — min													15.8	10.4	7.9	13.9	9.8	7.5
	Throw Metres — max													22.6	16.9	12.2	20.8	15.8	11.9
	Static Pressure — (Pa)													10	17.5	25	8.5	14	22.5
660	Throw Metres — min													16.9	12.2	9.3	16.6	11.6	8.7
	Throw Metres — max													27.3	19.7	14.1	25.2	18.2	13.6
	Static Pressure — (Pa)													12.5	25	35	11	20	30
755	Throw Metres — min																17.8	13.4	10.1
	Throw Metres — max																29.8	21.8	15.9
	Static Pressure — (Pa)																14	25	37.5
850	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
944	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1180	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1416	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

3.4 REGISTERS

SINGLE DEFLECTION REGISTER (RC1AR) WITH REMOVABLE CORE

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Performance Data 25mm Centres

AREA FACTOR		1.33	1.5	1.66	2.0	2.5	2.66
NECK AREA — M ²		0.180	0.203	0.225	0.270	0.338	0.360
TYPICAL SIZES		600 x 300	450 x 450	600 x 375	600 x 450	750 x 450	600 x 600
		900 x 200	675 x 300	750 x 300	900 x 300	900 x 375	800 x 450
		1200 x 150	900 x 225	1500 x 150	1200 x 225	1125 x 300	1200 x 300
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
141	Throw Metres — max Static Pressure — (Pa)						
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	4.3 3.2 2.2 6.8 5.0 3.8 — — —					
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	5.4 4.0 3.2 8.7 6.2 5.2 — — 2.5	4.3 3.2 2.5 6.8 4.8 3.7 — — —				
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.5 4.5 3.7 10.4 7.3 4.8 — 2.5 5	5.9 4.3 3.2 9.3 7.1 4.8 — — 2.5	5.3 3.8 3.0 8.4 5.8 4.5 — — —	4.8 3.7 2.8 7.9 5.4 4.3 — — —		
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.6 5.7 4.3 11.9 8.7 6.5 2.5 5 7.5	6.8 4.8 3.7 10.4 7.6 5.9 — 2.5 5	6.2 4.5 3.4 9.8 6.5 5.1 — — 2.5	5.9 4.3 3.2 9.3 7.1 4.8 — — 2.5		
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.0 6.5 4.5 13.5 9.8 7.4 2.5 5 10	8.2 5.7 4.3 12.9 9.0 6.8 1.5 4 6	7.3 5.4 4.0 11.2 7.9 6.4 — 2.5 5	6.8 4.8 3.7 10.4 6.6 5.7 — — 2.5	6.2 4.3 3.3 9.4 6.6 5.1 — — —	5.9 4.0 3.2 8.7 6.2 4.8 — — —
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8 7.1 5.4 15.2 10.8 8.4 5 7.5 10	9.0 6.2 4.8 14.1 9.8 7.3 2.5 5 7.5	8.2 5.7 4.3 12.9 9.0 6.8 1.5 4 6	7.6 5.7 4.0 11.9 8.7 6.5 — 2.5 5	6.9 4.9 3.6 10.8 7.7 5.8 — — 3	6.5 4.5 3.4 10.4 7.1 5.4 — — 2.5
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	10.8 7.9 5.9 17.1 12.4 9.3 5 10 12.5	9.8 7.1 5.4 15.2 11.3 8.4 1.5 5 10	9.0 6.5 4.9 14.4 10.4 7.9 2.5 5 7	8.4 6.2 4.5 13.5 9.6 7.1 — 2.5 5	8.0 6.2 4.5 13.5 9.6 7.1 — 2.5 5	7.6 5.1 3.7 11.9 8.2 6.5 — — 2.5
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0 9.6 7.3 20.2 15.2 11.3 7.5 12.5 20	11.9 8.7 6.5 18.5 13.5 9.9 5 7.5 12.5	10.9 8.2 6.2 17.2 12.1 9.1 2.5 5 10	10.1 7.6 5.7 15.8 11.3 8.4 2.5 5 7.5	9.7 7.1 5.3 14.7 10.6 8.1 1.5 4 6	9.6 6.8 5.1 14.1 10.1 7.8 — 2.5 5
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	16.3 11.3 8.4 23.7 17.4 13.0 10 17.5 25	14.1 9.8 7.3 21.3 15.2 11.9 5 10 15	13.8 9.6 7.1 20.8 15.0 11.6 5 7.5 12.5	13.5 9.6 6.9 20.2 14.8 11.3 5 7.5 10	11.7 8.4 6.6 18.0 13.2 10.1 3.5 6 9	10.6 7.9 6.2 16.9 12.1 9.3 2.5 5 7.5
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4 13.0 9.6 28.4 19.7 15.2 12.5 22.5 32.5	15.2 11.9 8.2 24.9 18.0 13.5 7.5 12.5 20	14.1 10.1 7.7 22.2 16.3 12.1 5 10 15	13.5 9.6 7.3 20.8 15.2 11.3 5 7.5 12.5	12.8 9.4 6.9 20.2 14.6 10.6 3.5 6 11	12.4 8.9 6.8 19.7 14.1 10.1 2.5 5 7.5
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	19.7 14.7 10.6 30.4 22.6 16.9 15 27.5 40	17.4 13.0 9.6 28.9 19.7 14.7 10 17.5 25	16.0 12.1 8.7 25.5 17.7 13.8 7.5 12.5 20	15.2 10.8 8.2 23.7 16.9 13.0 7.5 10 15	14.7 10.4 7.7 23.1 16.1 12.4 5 8.5 12.5	14.1 10.1 7.4 22.6 15.6 11.7 5 7.5 10
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)		19.7 14.1 10.8 31.3 22.6 16.7 12.5 22.5 32.5	18.0 13.0 9.9 27.9 20.4 15.2 10 17.5 25	16.9 11.9 9.0 26.1 18.5 14.1 17.5 12.5 20	15.9 11.3 8.7 25.1 16.8 13.6 6.5 11 15	15.4 11.0 8.4 24.5 16.9 13.3 5 7.5 12.5
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)			21.4 15.8 11.9 32.6 25.2 19.5 12.5 22.5 32.5	20.8 15.2 11.3 31.5 23.7 18.1 10 20 30	20.1 14.6 11.0 30.5 22.9 16.9 8.5 14 22.5	18.4 13.9 10.7 29.8 22.6 16.3 7.5 12.5 20
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				24.7 18.4 13.4 38.2 28.2 20.8 15 27.5 40	23.4 17.2 13.1 35.2 26.8 19.5 12.5 22.5 32.5	22.6 16.6 12.5 33.7 26.1 18.7 10 17.5 25
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)						29.9 17.8 13.4 42.9 31.7 25.4 15 27.5 40
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)						

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

Performance Data 25mm Centres

AREA FACTOR		3.0	4.0	5.0	6.0	8.15
NECK AREA — M ²		0.405	0.540	0.675	0.810	1.10
TYPICAL SIZES		675 x 600	900 x 600	900 x 750	900 x 900	1050 x 1050
		900 x 450	1200 x 450	1500 x 450	1350 x 600	
			1800 x 300		1800 x 450	
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
141	Throw Metres — max Static Pressure — (Pa)					
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)					
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.2 4.3 3.4 9.8 6.8 5.1 — — —				
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.1 4.8 3.4 10.6 7.6 5.9 — — —				
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	8.2 6.2 4.5 13.0 9.3 7.1 — — 2.5	6.8 4.8 3.7 10.4 7.6 5.7 — — —			
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8 7.1 5.1 15.2 11.3 8.4 — 2.5 5	7.6 5.7 4.3 12.4 8.7 6.5 — — 2.5			
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	11.3 8.2 6.2 17.4 13.0 9.6 — 2.5 5	8.7 6.5 4.8 14.1 9.8 7.6 — — 2.5			
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0 9.0 6.8 19.7 14.1 10.4 2.5 5 7.5	10.1 7.3 5.7 15.2 11.3 8.5 — 2.5 5	8.9 6.8 5.1 14.1 10.4 8.2 — — 2.5	8.4 6.2 4.0 13.5 9.8 7.6 — — —	
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	14.1 10.1 7.3 21.1 15.8 11.9 2.5 5 10	11.9 7.9 5.9 16.9 12.4 9.3 — 2.5 5	10.6 7.5 5.7 15.7 11.5 8.9 — — 2.5	9.8 7.1 5.4 15.2 10.9 8.4 — — —	
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4 12.6 9.6 27.1 19.7 14.7 5 10 12.5	14.1 9.8 7.6 21.7 15.2 11.9 2.5 5 7.5	13.1 9.6 7.3 20.1 14.3 10.9 — 2.5 5	12.4 9.2 7.1 18.4 13.4 10.4 — — 2.5	10.1 7.1 5.4 15.2 10.1 8.1 — — —
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	20.2 15.5 13.3 31.5 23.7 17.4 7.5 12.5 20	16.9 11.9 9.0 24.3 19.3 14.1 5 10 12.5	15.9 11.2 8.4 23.5 17.7 13.5 2.5 5 7.5	14.7 10.6 8.2 22.6 16.9 13.0 — 2.5 5	11.9 8.4 6.5 18.5 13.5 9.8 — — 2.5
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	28.2 17.4 12.7 40.8 30.4 23.7 12.5 22.5 32.5	23.0 15.8 11.9 34.1 24.8 18.5 9.5 12.5 20	20.2 14.9 11.0 32.2 22.9 17.7 5 7.5 12.5	18.5 14.1 10.6 30.4 21.1 16.9 2.5 5 7.5	15.6 11.3 8.4 24.5 18.0 14.5 — 2.5 5
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)		28.2 17.8 15.2 42.6 30.6 23.2 12.5 22.5 32.5	27.0 17.4 14.6 38.8 28.7 21.4 7.5 12.5 20	26.1 16.8 14.1 34.8 28.2 20.2 5 10 12.5	19.7 14.1 10.6 30.4 22.6 16.9 2.5 5 7.5

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

3.5 REGISTERS

CURVED DOUBLE DEFLECTION REGISTER (C2AR) WITH FIXED CORE

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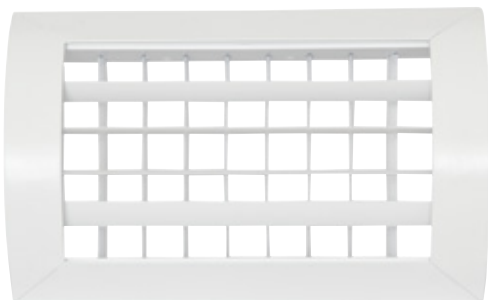


AIRFOIL

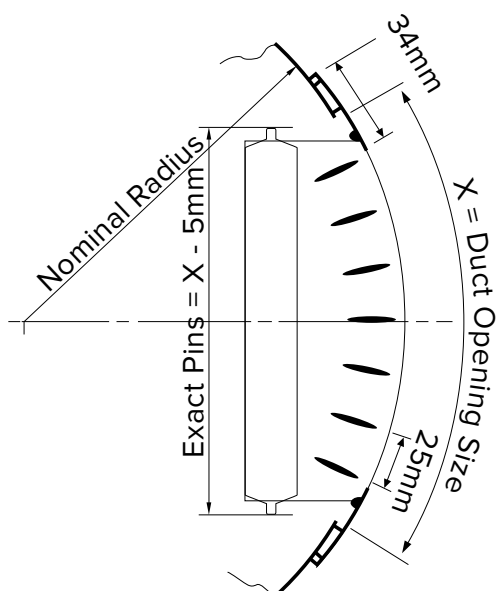


GRILLES
DUCT
FITTINGS

making it happen sooner...



Cross Sectional Diagram



Airfoil's Curved Double Deflection Register is manufactured to blend in with the circular spiral duct for supply air functions. The double set of fully adjustable blades gives a high level of control of the air pattern across four directions. Incorporating two sets of individually adjustable blades, the front blades may be set either horizontally or at angles either up or down. Rear blades are adjusted in a similar way but only in a vertical plane.

Made from high-grade extruded aluminium sections to ensure functional strength and performance, Airfoil's Curved Double Deflection Register provides a contemporary attractive feel and modern look. It comes in standard powder coated white with optional colours and finishes available on request.



AIRFOIL FACTORY, SYDNEY

Curved Double Deflection Register Options

- > Flange size: 32mm standard with optional 25mm or 38mm
- > Blade spacing: 19mm or 25mm
- > Custom-made to any size dimensions
- > Horizontal blades at front or vertical blades at front
- > Optional accessories SS (stream splitter) or OBD (opposed blade damper)
- > Specific colours and finishes available on request

Product specification codes:

- C2ARH** Fixed core curved double deflection register with front horizontal blades
C2ARV Fixed core curved double deflection register with front vertical blades

Specification: Product code + size.

Example: **C2ARH200x150** Fixed core curved double deflection register with front horizontal blades; width 200mm x height 150mm

C2ARV150x200 Fixed core curved double deflection register with front vertical blades; height 150mm x width 200mm

3.5 REGISTERS

CURVED DOUBLE DEFLECTION REGISTER (C2AR)

WITH FIXED CORE

Performance Data 25mm Centres

AREA FACTOR		0.17	0.33	0.5	0.66	1.0	1.25
NECK AREA — M ²		0.023	0.045	0.068	0.090	0.135	0.169
TYPICAL SIZES		150 X 150 225 X 100	225 X 200 300 X 150 450 X 100	300 X 225 450 X 150 675 X 100	300 X 300 400 X 225 600 X 150	450 X 300 600 X 225 900 X 150	450 X 375 675 X 250 750 X 225
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
47	Throw Metres — min	3.2 2.2 2.0	2.2 1.7 1.4				
	Throw Metres — max	5.1 3.4 2.2	3.4 2.5 2.0				
	Static Pressure — (Pa)	2.5 5.0 7.5	— — —				
94	Throw Metres — min	6.2 4.8 3.7	4.3 3.2 2.5	3.4 2.5 2.0	3.2 2.2 1.4		
	Throw Metres — max	9.3 7.1 5.4	6.8 4.8 3.7	5.4 4.0 2.8	4.8 3.4 2.8		
	Static Pressure — (Pa)	10 22.5 32.5	2.5 5 10	— — 2.5	— — —		
141	Throw Metres — min		6.5 4.5 3.7	5.4 3.7 2.8	4.5 3.4 2.2	4.0 2.5 2.0	
	Throw Metres — max		10.3 7.3 5.7	8.2 5.9 4.5	7.3 5.1 4.0	5.7 4.3 3.2	
	Static Pressure — (Pa)		7.5 12.5 20	2.5 5 7.5	— 2.5 5	— — —	
189	Throw Metres — min		8.4 6.2 5.1	7.1 5.1 3.7	6.2 4.8 3.4	5.1 3.7 2.5	4.5 3.4 2.4
	Throw Metres — max		13.5 9.8 7.3	10.2 7.9 5.9	9.8 7.1 5.1	7.6 5.7 4.0	7.3 5.3 3.9
	Static Pressure — (Pa)		10 22.5 32.5	5 7.5 12.5	2.5 5 10	— — 2.5	— — —
236	Throw Metres — min			8.1 6.2 5.2	7.6 5.7 4.3	6.2 4.5 3.4	5.7 4.3 3.3
	Throw Metres — max			13.5 9.8 7.3	12.4 9.0 6.5	9.6 7.1 5.4	8.7 6.8 5.1
	Static Pressure — (Pa)			7.5 12.5 20	5 10 12.5	— 2.5 5	— — 3.5
283	Throw Metres — min			10.4 7.6 5.7	9.3 6.8 4.8	7.6 5.4 4.0	7.1 4.9 3.9
	Throw Metres — max			16.3 11.9 8.7	14.7 10.1 7.9	11.5 7.9 6.2	10.9 7.5 6.0
	Static Pressure — (Pa)			10 17.5 25	7.5 12.5 20	2.5 5 7.5	1.5 4 6
330	Throw Metres — min				11.3 7.9 5.9	8.4 6.2 4.8	8.2 5.9 4.5
	Throw Metres — max				16.9 12.4 9.3	14.1 9.8 7.2	12.7 9.0 6.8
	Static Pressure — (Pa)				10 17.5 25	5 7.5 10	3.5 60 9
375	Throw Metres — min				12.4 9.3 6.8	9.6 7.1 5.1	9.3 6.8 4.8
	Throw Metres — max				19.7 14.1 10.3	15.2 10.4 8.2	14.4 10.1 7.7
	Static Pressure — (Pa)				12.5 22.5 32.5	5 7.5 12.5	3.5 6 11
425	Throw Metres — min				14.1 10.1 7.6	10.4 7.6 5.9	10.1 7.3 5.7
	Throw Metres — max				22.3 15.2 11.9	16.9 12.4 9.3	15.8 11.3 8.7
	Static Pressure — (Pa)				15 27.5 40	5 10 15	5 8.5 12.5
472	Throw Metres — min					12.4 8.7 6.5	11.3 8.2 6.2
	Throw Metres — max					18.5 14.1 10.4	17.6 13.1 9.8
	Static Pressure — (Pa)					7.5 12.5 20	6.5 11 15
566	Throw Metres — min					15.8 10.4 7.9	13.9 9.8 7.5
	Throw Metres — max					22.6 16.9 12.2	20.8 15.8 11.9
	Static Pressure — (Pa)					10 17.5 25	8.5 14 22.5
660	Throw Metres — min					16.9 12.2 9.3	16.6 11.6 8.7
	Throw Metres — max					27.3 19.7 14.1	25.2 18.2 13.6
	Static Pressure — (Pa)					12.5 25 35	11 20 30
755	Throw Metres — min						17.8 13.4 10.1
	Throw Metres — max						29.8 21.8 15.9
	Static Pressure — (Pa)						14 25 37.5
850	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						
944	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						
1180	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						
1416	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

3.5 REGISTERS

CURVED DOUBLE DEFLECTION REGISTER (C2AR) WITH FIXED CORE

75



Performance Data 25mm Centres

AREA FACTOR		1.33	1.5	1.66	2.0	2.5	2.66
NECK AREA — M ²		0.180	0.203	0.225	0.270	0.338	0.360
TYPICAL SIZES		600 x 300 900 x 200 1200 x 150	450 x 450 675 x 300 900 x 225	600 x 375 750 x 300 1500 x 150	600 x 450 900 x 300 1200 x 225	750 x 450 900 x 375 1125 x 300	600 x 600 800 x 450 1200 x 300
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
141	Throw Metres — max Static Pressure — (Pa)						
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	4.3 3.2 2.2 6.8 5.0 3.8 — — —					
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	5.4 4.0 3.2 8.7 6.2 5.2 — — 2.5	4.3 3.2 2.5 6.8 4.8 3.7 — — —				
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.5 4.5 3.7 10.4 7.3 4.8 — 2.5 5	5.9 4.3 3.2 9.3 7.1 4.8 — — 2.5	5.3 3.8 3.0 8.4 5.8 4.5 — — —	4.8 3.7 2.8 7.9 5.4 4.3 — — —		
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.6 5.7 4.3 11.9 8.7 6.5 2.5 5 7.5	6.8 4.8 3.7 10.4 7.6 5.9 — 2.5 5	6.2 4.5 3.4 9.8 6.5 5.1 — — 2.5	5.9 4.3 3.2 9.3 7.1 4.8 — — 2.5		
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.0 6.5 4.5 13.5 9.8 7.4 2.5 5 10	8.2 5.7 4.3 12.9 9.0 6.8 1.5 4 6	7.3 5.4 4.0 11.2 7.9 6.4 — 2.5 5	6.8 4.8 3.7 10.4 6.6 5.7 — — 2.5	6.2 4.3 3.3 9.4 6.6 5.1 — — —	5.9 4.0 3.2 8.7 6.2 4.8 — — —
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8 7.1 5.4 15.2 10.8 8.4 5 7.5 10	9.0 6.2 4.8 14.1 9.8 7.3 2.5 5 7.5	8.2 5.7 4.3 12.9 9.0 6.8 1.5 4 6	7.6 5.7 4.0 11.9 8.7 6.5 — 2.5 5	6.9 4.9 3.6 10.8 7.7 5.8 — — 3	6.5 4.5 3.4 10.4 7.1 5.4 — — 2.5
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	10.8 7.9 5.9 17.1 12.4 9.3 5 10 12.5	9.8 7.1 5.4 15.2 11.3 8.4 1.5 5 10	9.0 6.5 4.9 14.4 10.4 7.9 2.5 5 7	8.4 6.2 4.5 13.5 9.6 7.1 — 2.5 5	8.0 6.2 4.5 13.5 9.6 7.1 — 2.5 5	7.6 5.1 3.7 11.9 8.2 6.5 — — 2.5
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0 9.6 7.3 20.2 15.2 11.3 7.5 12.5 20	11.9 8.7 6.5 18.5 13.5 9.9 5 7.5 12.5	10.9 8.2 6.2 17.2 12.1 9.1 2.5 5 10	10.1 7.6 5.7 15.8 11.3 8.4 2.5 5 7.5	9.7 7.1 5.3 14.7 10.6 8.1 1.5 4 6	9.6 6.8 5.1 14.1 10.1 7.8 — 2.5 5
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	16.3 11.3 8.4 23.7 17.4 13.0 10 17.5 25	14.1 9.8 7.3 21.3 15.2 11.9 5 10 15	13.8 9.6 7.1 20.8 15.0 11.6 5 7.5 12.5	13.5 9.6 6.9 20.2 14.8 11.3 5 7.5 10	11.7 8.4 6.6 18.0 13.2 10.1 3.5 6 9	10.6 7.9 6.2 16.9 12.1 9.3 2.5 5 7.5
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4 13.0 9.6 28.4 19.7 15.2 12.5 22.5 32.5	15.2 11.9 8.2 24.9 18.0 13.5 7.5 12.5 20	14.1 10.1 7.7 22.2 16.3 12.1 5 10 15	13.5 9.6 7.3 20.8 15.2 11.3 5 7.5 12.5	12.8 9.4 6.9 20.2 14.6 10.6 3.5 6 11	12.4 8.9 6.8 19.7 14.1 10.1 2.5 5 7.5
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	19.7 14.7 10.6 30.4 22.6 16.9 15 27.5 40	17.4 13.0 9.6 28.9 19.7 14.7 10 17.5 25	16.0 12.1 8.7 25.5 17.7 13.8 7.5 12.5 20	15.2 10.8 8.2 23.7 16.9 13.0 7.5 10 15	14.7 10.4 7.7 23.1 16.1 12.4 5 8.5 12.5	14.1 10.1 7.4 22.6 15.6 11.7 5 7.5 10
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)		19.7 14.1 10.8 31.3 22.6 16.7 12.5 22.5 32.5	18.0 13.0 9.9 27.9 20.4 15.2 10 17.5 25	16.9 11.9 9.0 26.1 18.5 14.1 17.5 12.5 20	15.9 11.3 8.7 25.1 16.8 13.6 6.5 11 15	15.4 11.0 8.4 24.5 16.9 13.3 5 7.5 12.5
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)			21.4 15.8 11.9 32.6 25.2 19.5 12.5 22.5 32.5	20.8 15.2 11.3 31.5 23.7 18.1 10 20 30	20.1 14.6 11.0 30.5 22.9 16.9 8.5 14 22.5	18.4 13.9 10.7 29.8 22.6 16.3 7.5 12.5 20
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				24.7 18.4 13.4 38.2 28.2 20.8 15 27.5 40	23.4 17.2 13.1 35.2 26.8 19.5 12.5 22.5 32.5	22.6 16.6 12.5 33.7 26.1 18.7 10 17.5 25
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)						29.9 17.8 13.4 42.9 31.7 25.4 15 27.5 40
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)						

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

Due to going product development, data and dimensions are subject to change.

3.5 REGISTERS

CURVED DOUBLE DEFLECTION REGISTER (C2AR)

WITH FIXED CORE

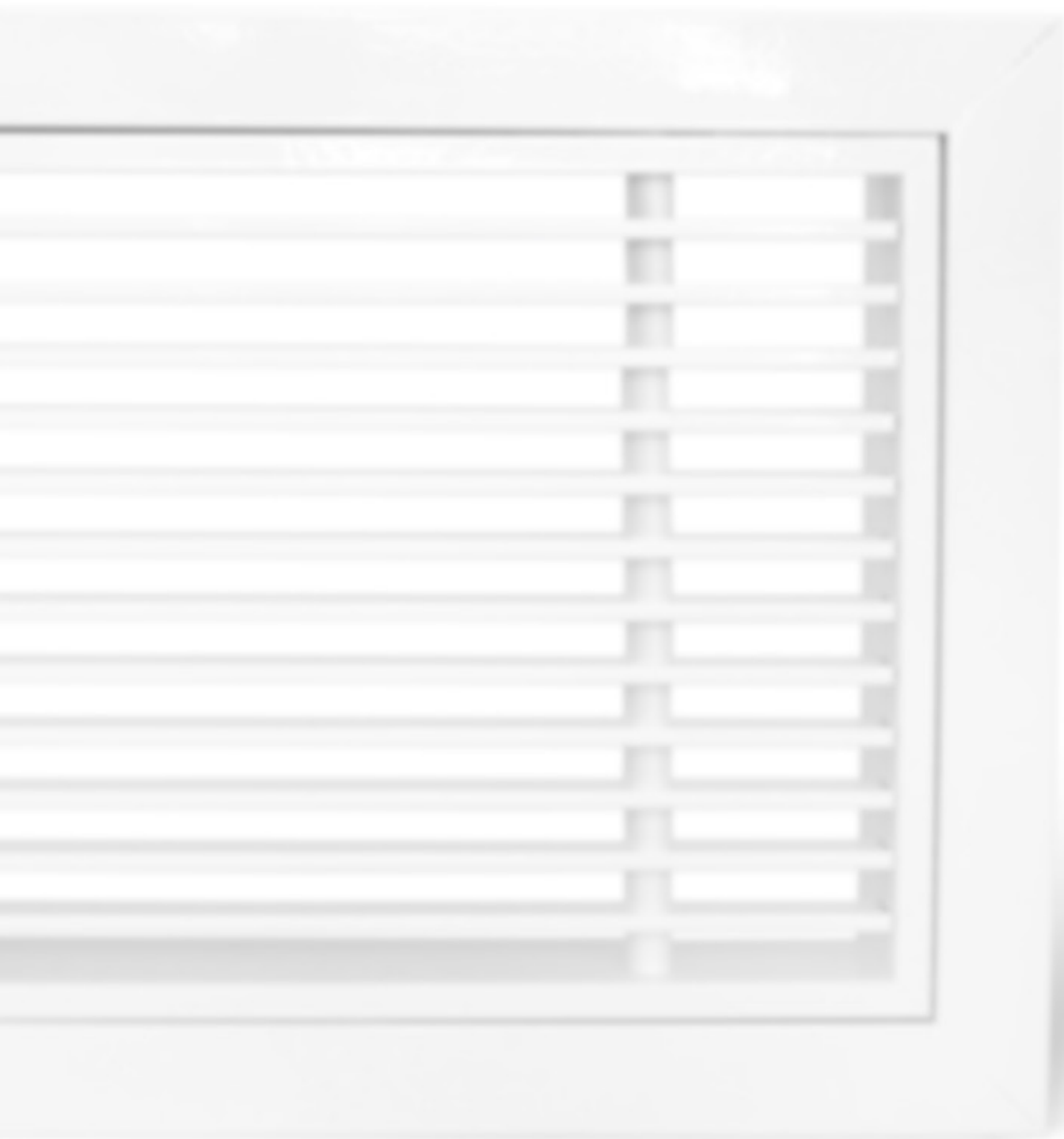
Performance Data 25mm Centres

AREA FACTOR		1.33	1.5	1.66	2.0	2.5	2.66
NECK AREA — M ²		0.180	0.203	0.225	0.270	0.338	0.360
TYPICAL SIZES		600 x 300 900 x 200 1200 x 150	450 x 450 675 x 300 900 x 225	600 x 375 750 x 300 1500 x 150	600 x 450 900 x 300 1200 x 225	750 x 450 900 x 375 1125 x 300	600 x 600 800 x 450 1200 x 300
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
141	Throw Metres — max						
	Static Pressure — (Pa)						
189	Throw Metres — min	4.3 3.2 2.2					
	Throw Metres — max	6.8 5.0 3.8					
	Static Pressure — (Pa)	— — —					
236	Throw Metres — min	5.4 4.0 3.2	4.3 3.2 2.5				
	Throw Metres — max	8.7 6.2 5.2	6.8 4.8 3.7				
	Static Pressure — (Pa)	— — 2.5	— — —				
283	Throw Metres — min	6.5 4.5 3.7	5.9 4.3 3.2	5.3 3.8 3.0	4.8 3.7 2.8		
	Throw Metres — max	10.4 7.3 4.8	9.3 7.1 4.8	8.4 5.8 4.5	7.9 5.4 4.3		
	Static Pressure — (Pa)	— 2.5 5	— — 2.5	— — —	— — —		
330	Throw Metres — min	7.6 5.7 4.3	6.8 4.8 3.7	6.2 4.5 3.4	5.9 4.3 3.2		
	Throw Metres — max	11.9 8.7 6.5	10.4 7.6 5.9	9.8 6.5 5.1	9.3 7.1 4.8		
	Static Pressure — (Pa)	2.5 5 7.5	— 2.5 5	— — 2.5	— — 2.5		
375	Throw Metres — min	9.0 6.5 4.5	8.2 5.7 4.3	7.3 5.4 4.0	6.8 4.8 3.7	6.2 4.3 3.3	5.9 4.0 3.2
	Throw Metres — max	13.5 9.8 7.4	12.9 9.0 6.8	11.2 7.9 6.4	10.4 6.6 5.7	9.4 6.6 5.1	8.7 6.2 4.8
	Static Pressure — (Pa)	2.5 5 10	1.5 4 6	— 2.5 5	— — 2.5	— — —	— — —
425	Throw Metres — min	9.8 7.1 5.4	9.0 6.2 4.8	8.2 5.7 4.3	7.6 5.7 4.0	6.9 4.9 3.6	6.5 4.5 3.4
	Throw Metres — max	15.2 10.8 8.4	14.1 9.8 7.3	12.9 9.0 6.8	11.9 8.7 6.5	10.8 7.7 5.8	10.4 7.1 5.4
	Static Pressure — (Pa)	5 7.5 10	2.5 5 7.5	1.5 4 6	— 2.5 5	— — 3	— — 2.5
472	Throw Metres — min	10.8 7.9 5.9	9.8 7.1 5.4	9.0 6.5 4.9	8.4 6.2 4.5	8.0 6.2 4.5	7.6 5.1 3.7
	Throw Metres — max	17.1 12.4 9.3	15.2 11.3 8.4	14.4 10.4 7.9	13.5 9.6 7.1	13.5 9.6 7.1	11.9 8.2 6.5
	Static Pressure — (Pa)	5 10 12.5	1.5 5 10	2.5 5 7	— 2.5 5	— 2.5 5	— — 2.5
566	Throw Metres — min	13.0 9.6 7.3	11.9 8.7 6.5	10.9 8.2 6.2	10.1 7.6 5.7	9.7 7.1 5.3	9.6 6.8 5.1
	Throw Metres — max	20.2 15.2 11.3	18.5 13.5 9.9	17.2 12.1 9.1	15.8 11.3 8.4	14.7 10.6 8.1	14.1 10.1 7.8
	Static Pressure — (Pa)	7.5 12.5 20	5 7.5 12.5	2.5 5 10	2.5 5 7.5	1.5 4 6	— 2.5 5
660	Throw Metres — min	16.3 11.3 8.4	14.1 9.8 7.3	13.8 9.6 7.1	13.5 9.6 6.9	11.7 8.4 6.6	10.6 7.9 6.2
	Throw Metres — max	23.7 17.4 13.0	21.3 15.2 11.9	20.8 15.0 11.6	20.2 14.8 11.3	18.0 13.2 10.1	16.9 12.1 9.3
	Static Pressure — (Pa)	10 17.5 25	5 10 15	5 7.5 12.5	5 7.5 10	3.5 6 9	2.5 5 7.5
755	Throw Metres — min	17.4 13.0 9.6	15.2 11.9 8.2	14.1 10.1 7.7	13.5 9.6 7.3	12.8 9.4 6.9	12.4 8.9 6.8
	Throw Metres — max	28.4 19.7 15.2	24.9 18.0 13.5	22.2 16.3 12.1	20.8 15.2 11.3	20.2 14.6 10.6	19.7 14.1 10.1
	Static Pressure — (Pa)	12.5 22.5 32.5	7.5 12.5 20	5 10 15	5 7.5 12.5	3.5 6 11	2.5 5 7.5
850	Throw Metres — min	19.7 14.7 10.6	17.4 13.0 9.6	16.0 12.1 8.7	15.2 10.8 8.2	14.7 10.4 7.7	14.1 10.1 7.4
	Throw Metres — max	30.4 22.6 16.9	28.9 19.7 14.7	25.5 17.7 13.8	23.7 16.9 13.0	23.1 16.1 12.4	22.6 15.6 11.7
	Static Pressure — (Pa)	15 27.5 40	10 17.5 25	7.5 12.5 20	7.5 10 15	5 8.5 12.5	5 7.5 10
944	Throw Metres — min		19.7 14.1 10.8	18.0 13.0 9.9	16.9 11.9 9.0	15.9 11.3 8.7	15.4 11.0 8.4
	Throw Metres — max		31.3 22.6 16.7	27.9 20.4 15.2	26.1 18.5 14.1	25.1 16.8 13.6	24.5 16.9 13.3
	Static Pressure — (Pa)		12.5 22.5 32.5	10 17.5 25	17.5 12.5 20	6.5 11 15	5 7.5 12.5
1180	Throw Metres — min			21.4 15.8 11.9	20.8 15.2 11.3	20.1 14.6 11.0	18.4 13.9 10.7
	Throw Metres — max			32.6 25.2 19.5	31.5 23.7 18.1	30.5 22.9 16.9	29.8 22.6 16.3
	Static Pressure — (Pa)			12.5 22.5 32.5	10 20 30	8.5 14 22.5	7.5 12.5 20
1416	Throw Metres — min				24.7 18.4 13.4	23.4 17.2 13.1	22.6 16.6 12.5
	Throw Metres — max				38.2 28.2 20.8	35.2 26.8 19.5	33.7 26.1 18.7
	Static Pressure — (Pa)				15 27.5 40	12.5 22.5 32.5	10 17.5 25
1888	Throw Metres — min						29.9 17.8 13.4
	Throw Metres — max						42.9 31.7 25.4
	Static Pressure — (Pa)						15 27.5 40
2360	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						

Throw measurements are at 1.5mls min and .65mls max terminal velocity.



4.0 BAR GRILLES



4.1 GRILLES

LINEAR BAR GRILLES (LBG) WITH FIXED CORE

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With its elegant design and robust construction, Airfoil's Linear Bar Grille with fixed core will look beautiful and perform brilliantly when mounted on a side wall for both supply and return air functions. Made from solid extruded aluminium the Linear Bar Grille comes in standard white.

Linear Bar Grille with Fixed Core Options

- Blade type 0 degree and 15 degree blow deflections
- Flange size: 25mm standard with 20mm or 12mm optional
- Blade spacing: 11.5mm standard, optional 7mm, 17.5mm and 25mm
- Custom-made to any size dimensions
- Natural anodised or specific Dulux powdercoat colours and finishes available on request

Product specification codes:

LBG15 Fixed core linear bar grille with 15° kick blades.

LBG00 Fixed core linear bar grille with 0° kick blades.

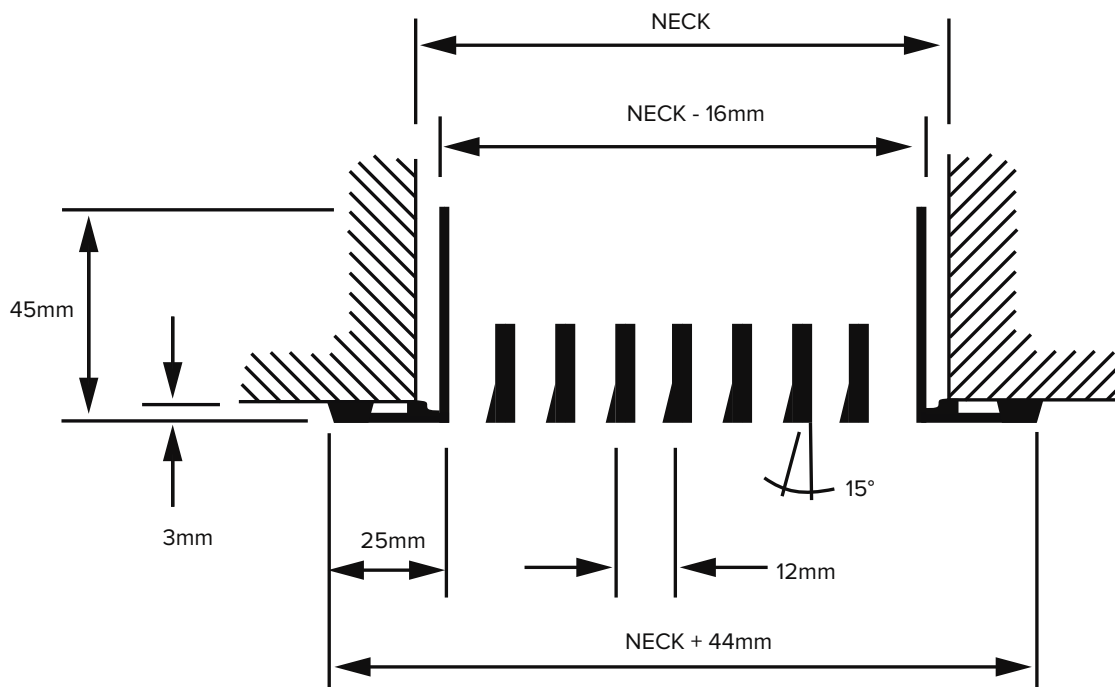
Specification: Product code + size.

Example: **LBG15 400x200** Hinged core bar grille with 15° kick blades with filter 400mm x 200mm

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

PROJECT: RIVER VISTA APARTMENTS PARRAMATTA, SYDNEY

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.

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

4.1 GRILLES

LINEAR BAR GRILLES (LBG00) WITH FIXED CORE & 0 DEGREE KICK BLADES

AIRFOIL



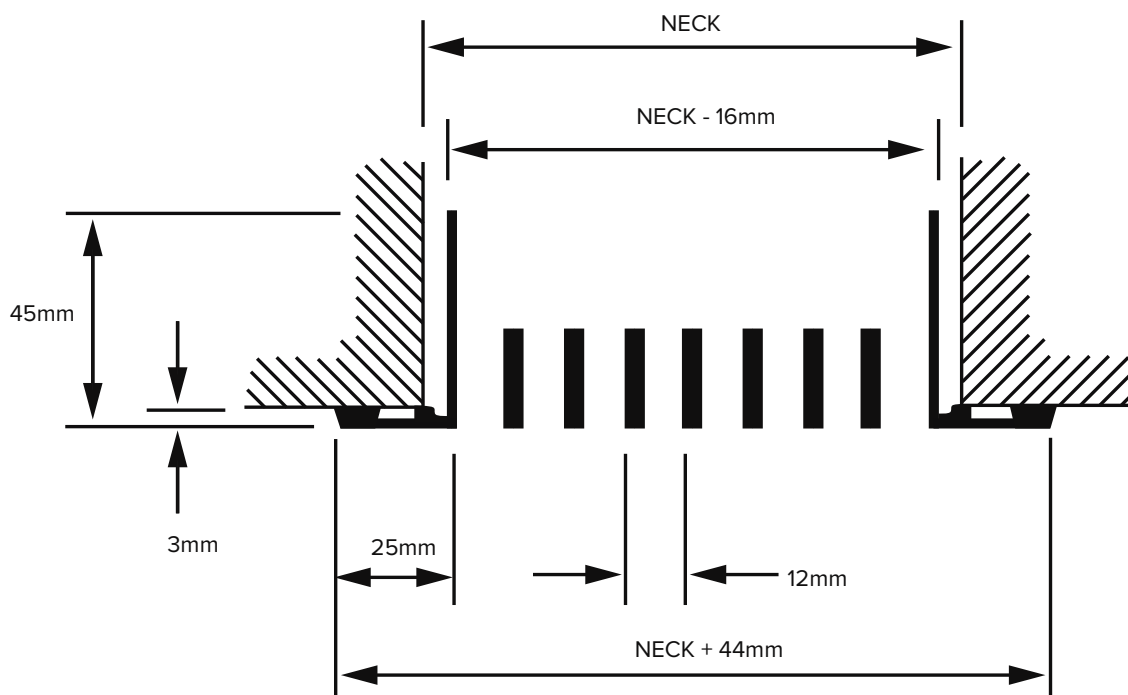
GRILLES
DUCT
FITTINGS

making it happen sooner...



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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 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.

1. NR value increases by 4.

2. Negative Static Pressure = Total Pressure (shown in the table) x 0.8

With its elegant design and robust construction, Airfoil's Hinged Core Linear Bar Grille with Filter will look beautiful and perform brilliantly when mounted in the wall or ceiling for both supply and return air functions. Made from solid extruded aluminium the Linear Bar Grille comes in standard white.



Hinged Core Linear Bar Grille with Filter Options

- > Blade type 0 degree and 15 degree blow deflections
- > Flange size: 25mm standard with 20mm & 12mm optional
- > Blade spacing: 11.5mm standard, optional 7mm, 17.5mm and 25mm
- > Custom-made to any size dimensions
- > Natural anodised or specific Dulux powdercoat colours and finishes available on request

Product specification codes:

HLBG15/F Hinged core linear bar grille with 15° kick blades with filter.

HLBG00/F Hinged core linear bar grille with 0° kick blades with filter.

Specification: Product code + size.

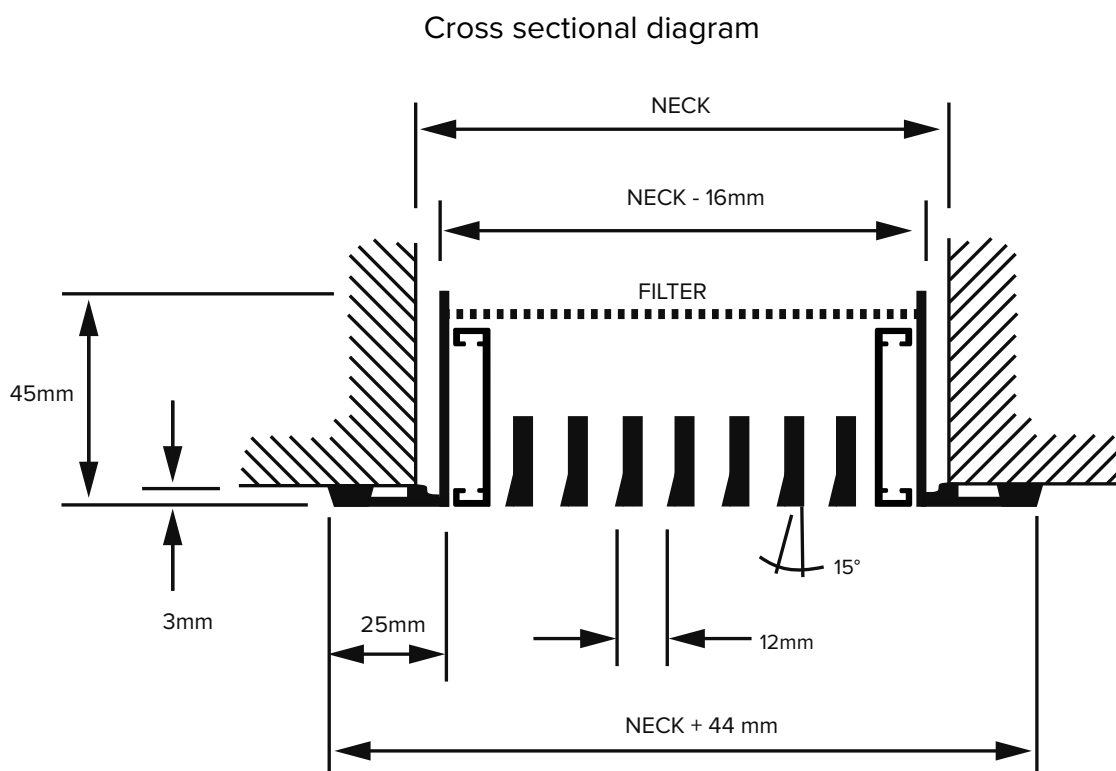
Example: **HLBG15/F 400x200** Hinged core bar grille with 15° kick blades with filter 400mm x 200mm

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



4.2 GRILLES

HINGED CORE LINEAR BAR GRILLES (HLBG15/F) WITH FILTER & 15 DEGREE KICK BLADES



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		

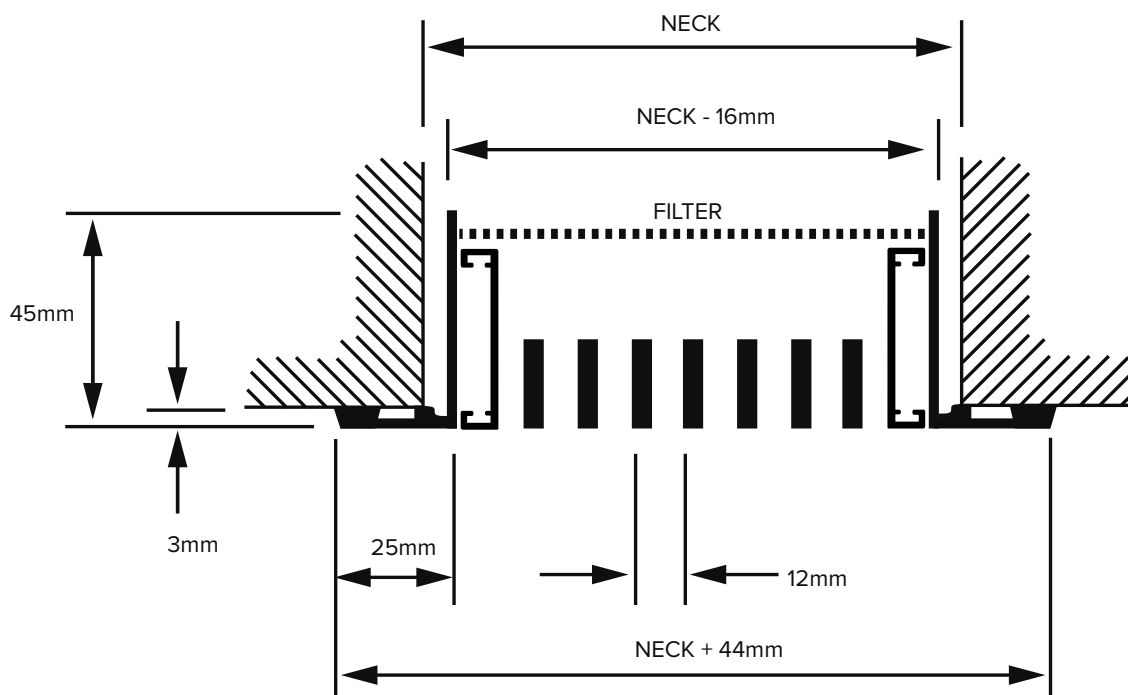
When used as a RETURN GRILLE the following corrections should be made.

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

4.2 GRILLES

HINGED CORE LINEAR BAR GRILLES (HLBG00/F) WITH FILTER & 0 DEGREE KICK BLADES

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 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.

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

4.3 GRILLES

LINEAR BAR GRILLES (RCLBG) WITH REMOVABLE CORE

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With its elegant design and robust construction, Airfoil's Removable Core Linear Bar Grille will look beautiful and perform brilliantly when mounted in the wall or ceiling for both supply and return air functions. Made from solid extruded aluminium the Removable Core Linear Bar Grille comes in standard white, but can be powdercoat finished in any Dulux colour for a modern seamless look.

Removable Core Linear Bar Grille Options

- > Blade type 0 degree and 15 degree blow deflections
- > Flange size: 25mm standard with 12mm and 20mm optional
- > Blade spacing: 11.5mm standard, optional 7mm, 17.5mm and 25mm
- > Custom-made to any size dimensions
- > Natural anodised or specific Dulux powdercoat colours and finishes available on request

Product specification codes:

RCBG15 Removable core linear bar grille with 15° kick blades.
RCBG00 Removable core linear bar grille with 0° kick blades.

Specification: Product code + size.

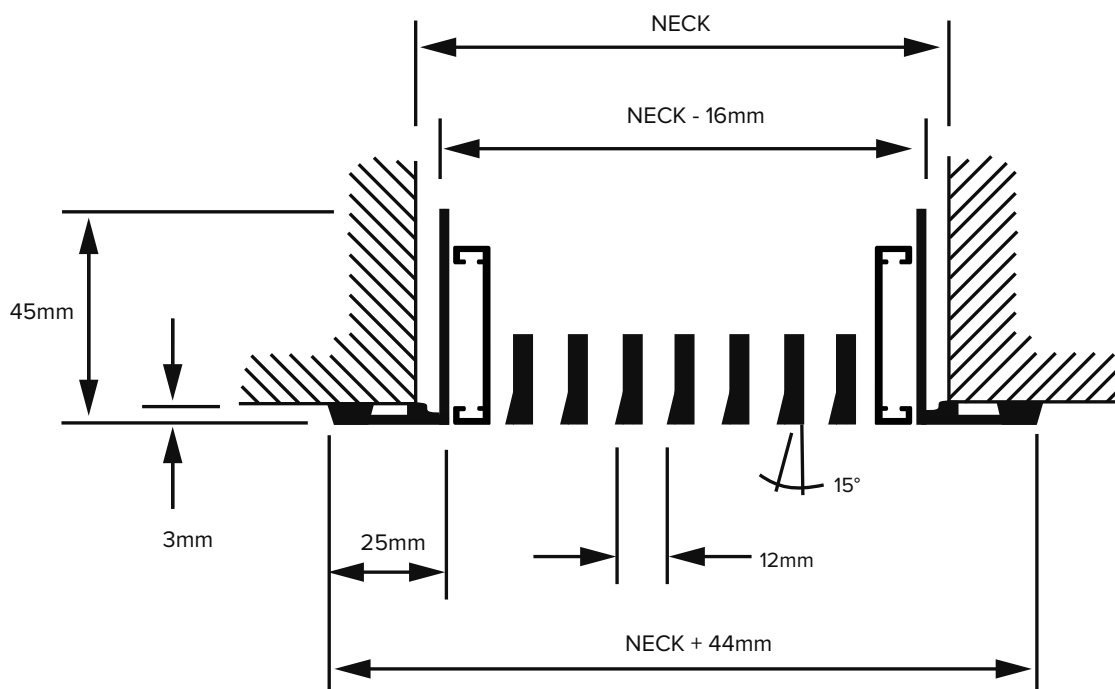
Example: **RCBG15 400x200** Removable core bar grille with 15° kick blades 400mm x 200mm

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



AIRFOIL FACTORY, SYDNEY

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.

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

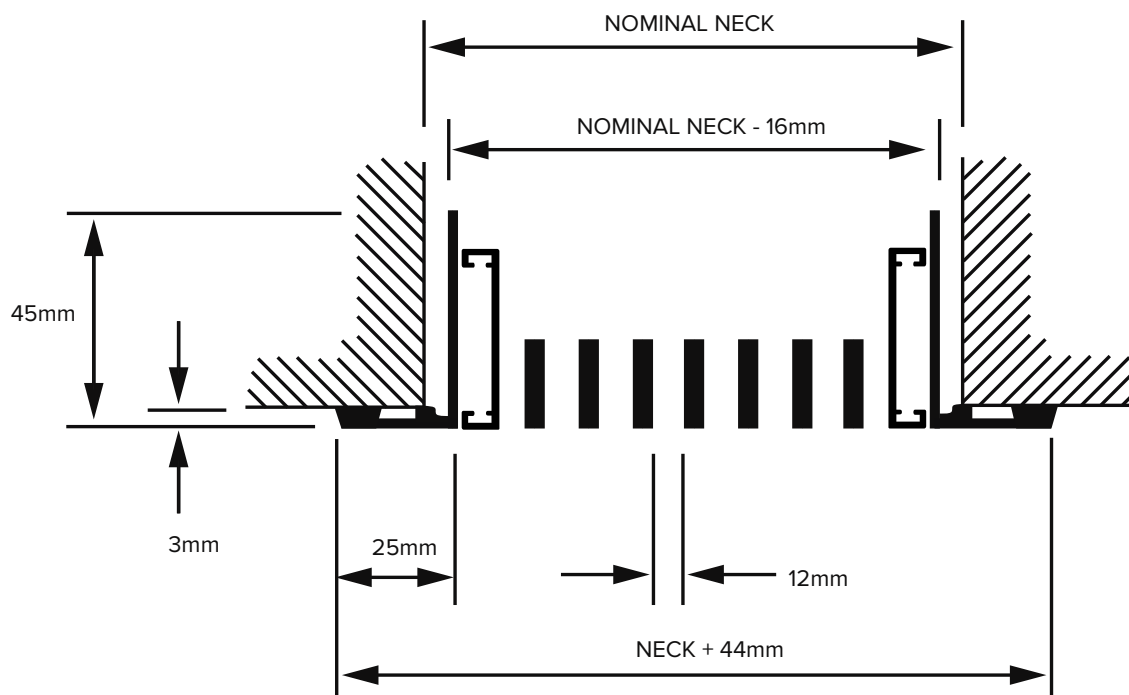
4.3 GRILLES

LINEAR BAR GRILLES (RCLB000) WITH REMOVABLE CORE & 0 DEGREE KICKBLADES

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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

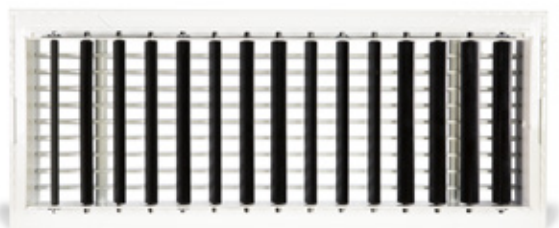
Sound values are based on a room absorption of 8 dB, re 10^{-12} watts for an active length of 3.0 metres.

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 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.

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



With its elegant design and robust construction, Airfoil's Linear Bar Grille with Rear Vertical Blades will look beautiful and perform brilliantly when mounted in the wall for both supply and return air functions. Made from solid extruded aluminium the Linear Bar Grille comes in a standard powder coated white, but can be finished in any Dulux colour for a seamless contemporary look. The single set of fully adjustable blades gives a high level of control of the air pattern and can be ordered in black or white for an unobtrusive appearance.

Linear Bar Grille with Vertical Blades Options

- > Blade type 0 degree and 15 degree blow deflections
- > Flange size: 25mm standard with 12mm and 20mm optional
- > Blade spacing: 11.5mm standard, optional 7mm, 17.5mm and 25mm
- > Accessory: Plaster mounting frame for side blow applications
- > Rear deflection blade in black or white
- > Custom made to any size dimensions
- > Natural anodised or specific Dulux powdercoat colours and finishes available on request

Product specification codes:

LBG1ARV/0 Fixed core linear bar grille with rear vertical blades with 0° kick blades.

LBG1ARV/15 Fixed core linear bar grille with rear vertical blades with 15° kick blades.

Specification: Product code + size.

Example: **LBG1ARV/15 400x200** Fixed core linear bar grille with rear vertical blades with 15° kick blades 400mm x 200mm

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



PROJECT: BELLE APARTMENTS, SYDNEY

4.4 GRILLES

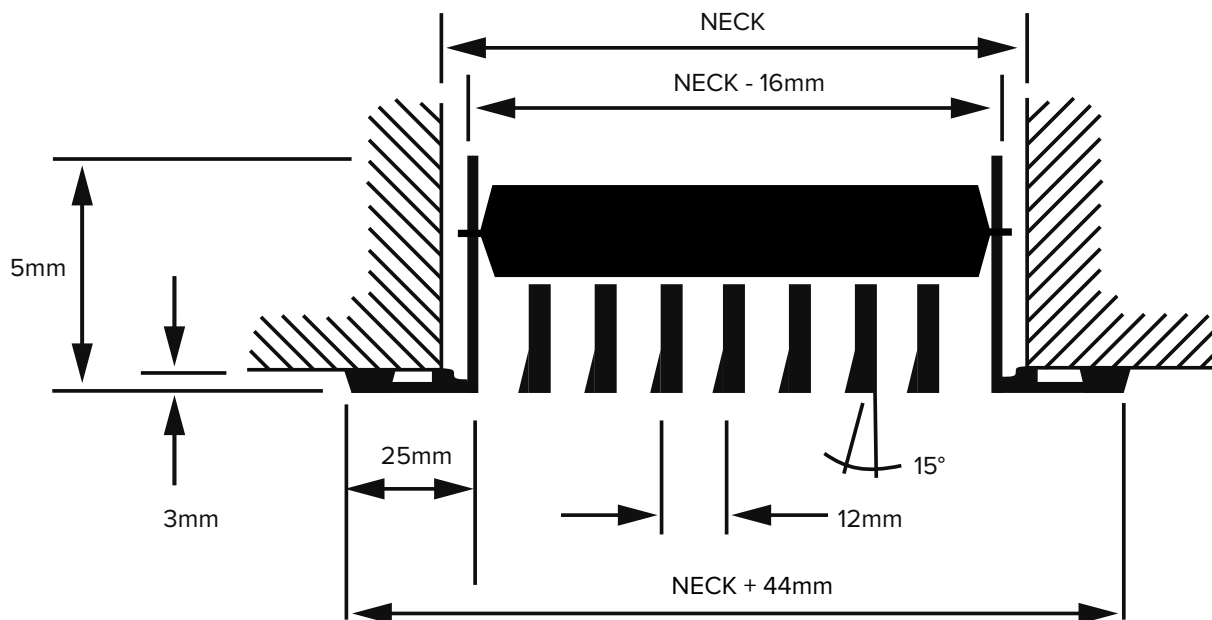
LINEAR BAR GRILLES (LBG1ARV15) WITH REAR VERTICAL BLADES & 15 DEGREE KICK BLADES

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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

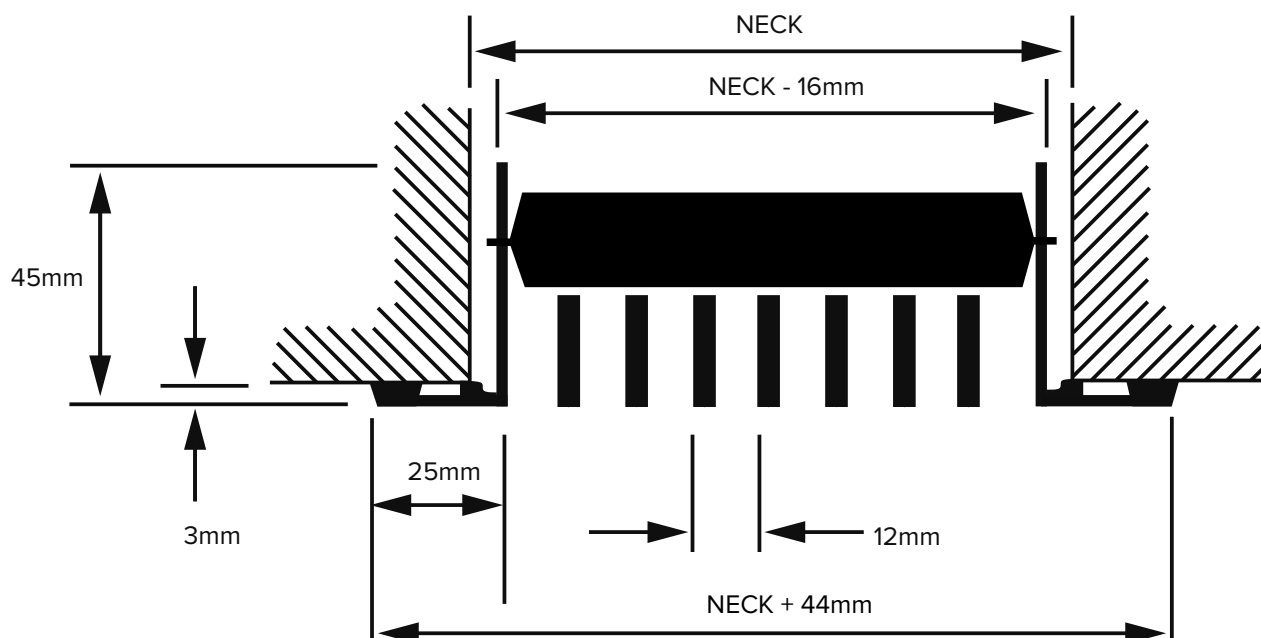
Sound values are based on a room absorption of 8 dB, re 10^{-12} watts for an active length of 3.0 metres.
Throw distances indicated are terminal velocities of 0.75 and 0.25 metres per second for an active length of 3 metres. The following corrections for length should be made.

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.

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

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 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.

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

4.5 GRILLES

REVERSE FLANGE BAR GRILLE (RFBG) (FLANGELESS)

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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.

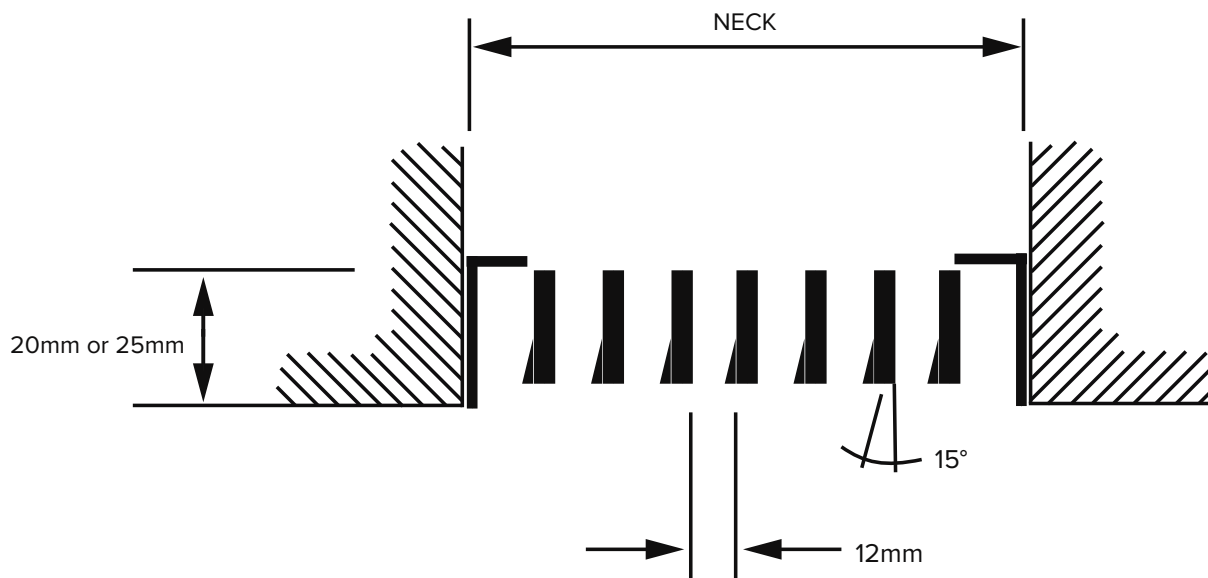
Specification: Product code + size.

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



PROJECT: CBC BEARINGS CHULLORA, NSW

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.

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

4.5 GRILLES

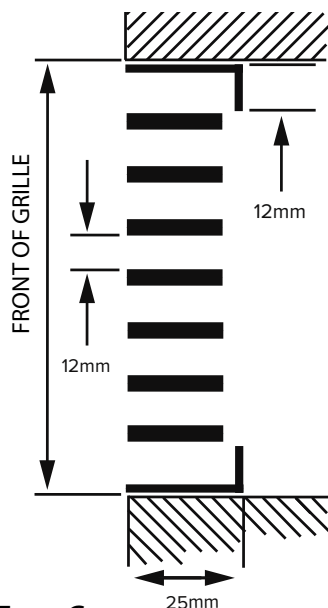
REVERSE FLANGE BAR GRILLE (RFBG00) (FLANGELESS) WITH 0 DEGREE KICK BLADES

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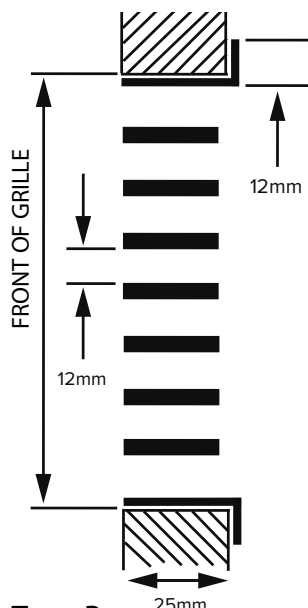
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Type C

RFLBG with special Angle Frame
Reverse Angle (Legs In)

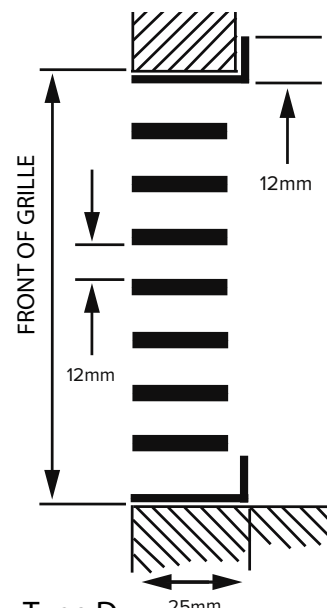
The most popular style. Easily fixed
through the rear angle from the front.
Straight Cut ends or with end angles
(Extra)



Type B

RFLBG with special Angle Frame
Reverse Angle (Legs Out)

Generally used when a Shadow line is
required. 12mm angle leaves a 9mm
Shadow Line top and Bottom



Type D

RFLBG with special Angle Frame
Reverse Angle (Leg In. Leg Out)

This type is used when a Shadow Line
is required at the bottom of the Grille
or when being used over a Cupboard

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 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.

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

With its elegant slim design and robust construction Airfoil's Slimline Linear Bar Grille will look beautiful and perform brilliantly when mounted in the wall for both supply and return air functions. Made from 25mm by 12mm solid extruded aluminium, the Slimline Linear Bar Grille comes in standard white, but can be powdercoat finished in any Dulux colour for a seamless contemporary look and feel.

Its 12mm frame gives a discreet modern appearance and the 25mm deep profile allows for easy installation in tight wall cavities and restricted spaces. Contemporary in look and design, Airfoil's Slimline Linear Bar Grille is the smart choice for modern interiors.



Slimline Linear Bar Grille Options

- > Blade type 0 degree and 15 degree blow deflections
- > Natural anodised or specific Dulux powdercoat colours and finishes available on request
- > Blade spacing: 11.5mm standard, optional 7mm, 17.5mm and 25mm
- > Custom made to any size dimensions

Product specification codes:

SLLBG/0 Fixed core Slimline Linear Bar Grille with 0° kick blades.
SLLBG/15 Fixed core Slimline Linear Bar Grille with 15° kick blades.

Specification: Product code + size.

Example: **SLLBG/15 400x200** Fix core Slimline Linear Bar Grille with 15° kick blades 400mm x 200mm

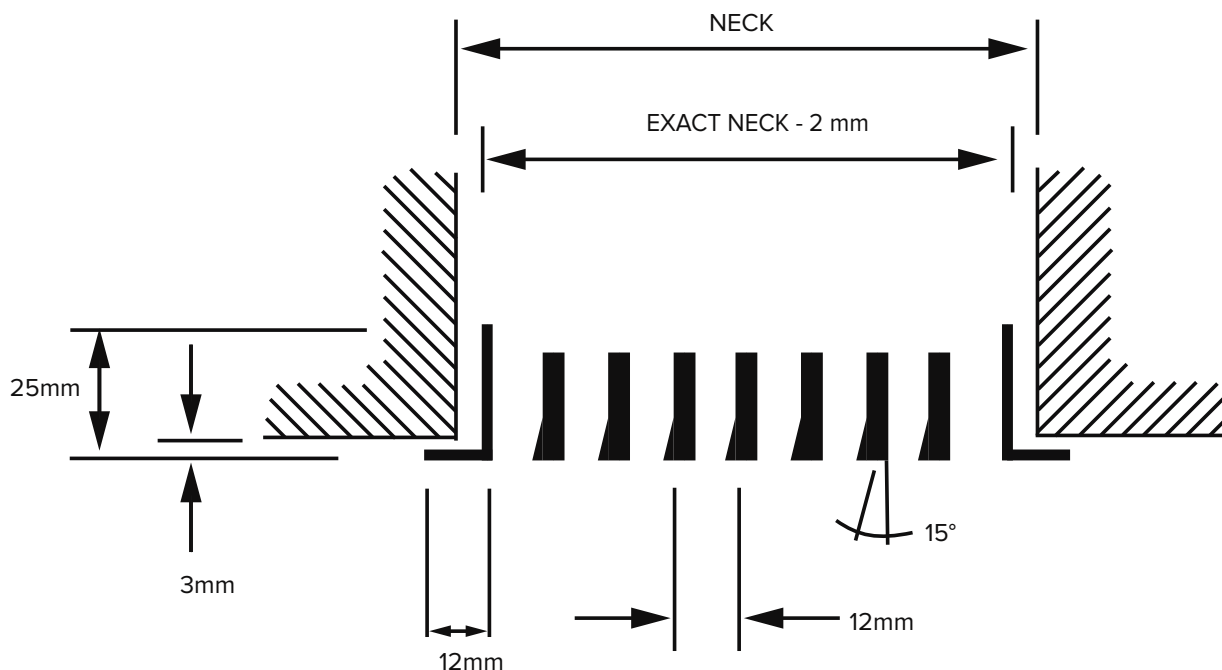
Important Note: Dimensions will be assumed nominal neck size unless otherwise specified.

4.6 GRILLES

SLIMLINE LINEAR BAR GRILLE (SLLBG15) WITH 15 DEGREE KICK BLADES



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

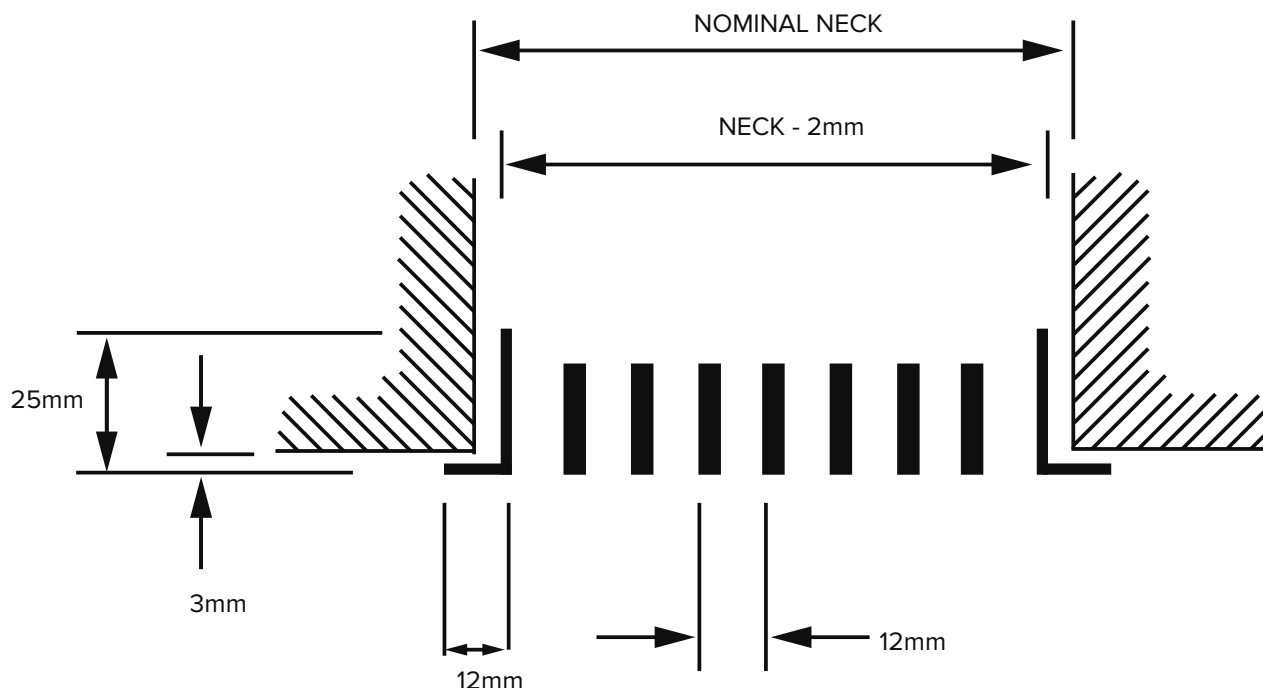
Sound values are based on a room absorption of 8 dB, re 10^{-12} watts for an active length of 3.0 metres.
Throw distances indicated are terminal velocities of 0.75 and 0.25 metres per second for an active length of 3 metres. The following corrections for length should be made.

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.

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

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



PROJECT: QUAY APARTMENTS, SYDNEY

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.



PROJECT: DISCOVERY POINT WOLLI CREEK, NSW

4.7 GRILLES

FLOOR GRILLE (BGF) WITH 15 DEGREE KICK BLADES

AIRFOIL

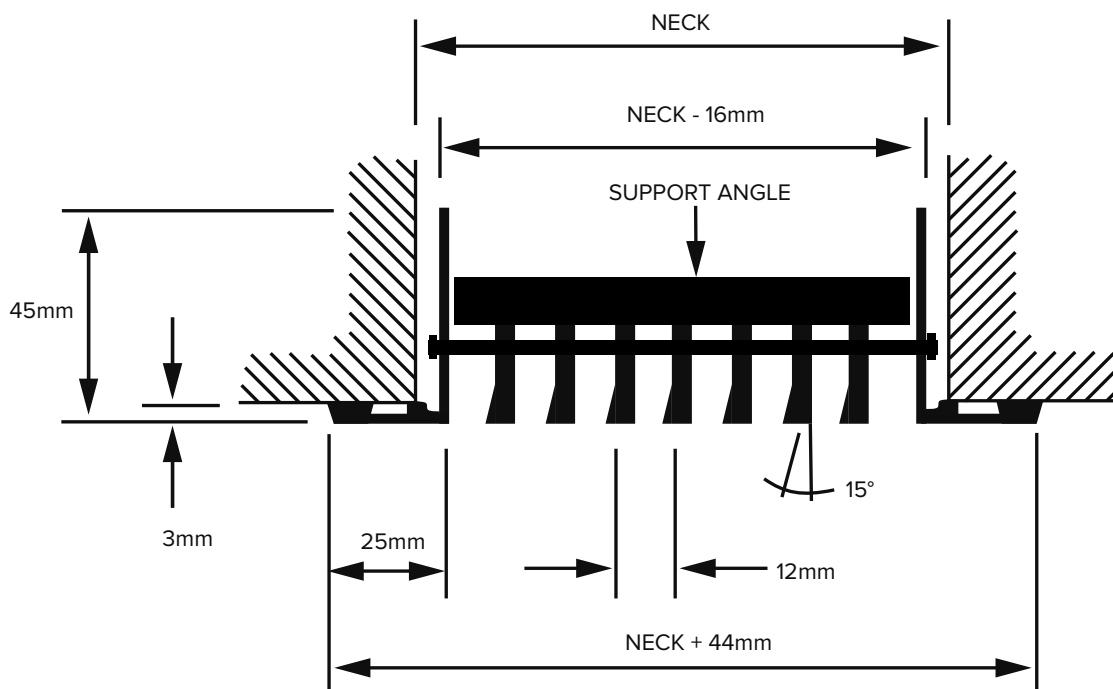


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Cross sectional diagram



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

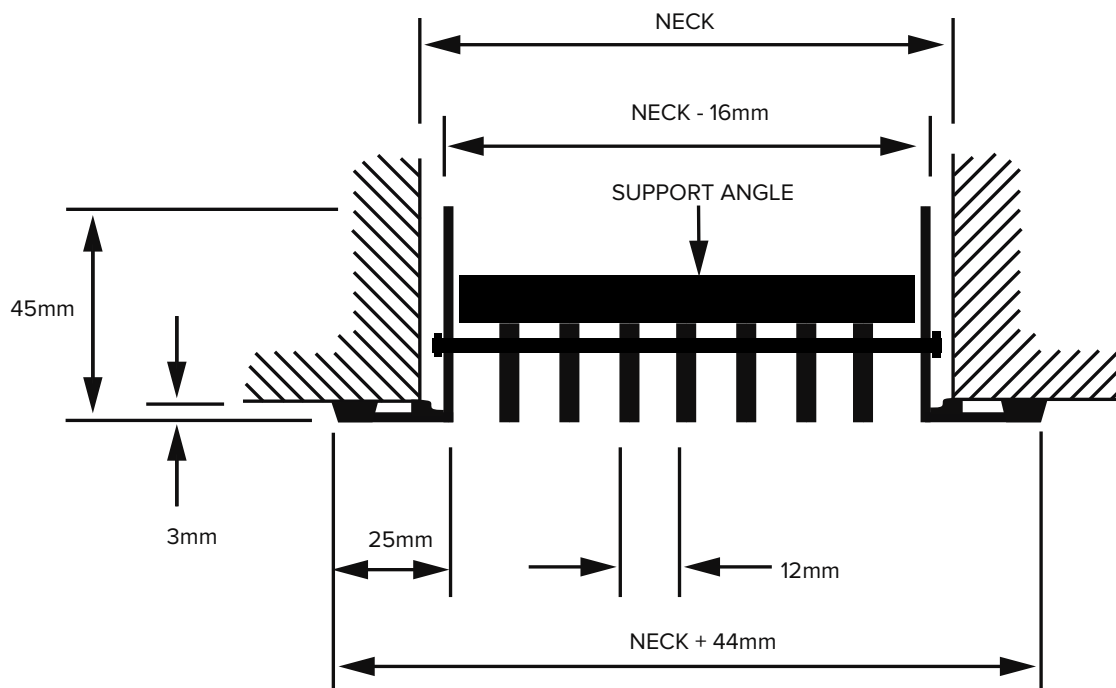
Sound values are based on a room absorption of 8 dB, re 10^{-12} watts for an active length of 3.0 metres.
Throw distances indicated are terminal velocities of 0.75 and 0.25 metres per second for an active length of 3 metres. The following corrections for length should be made.

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.

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

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 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.

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

4.8 GRILLES

EGGCRATE GRILLE (R5)

101



Fixed core eggcrate grille



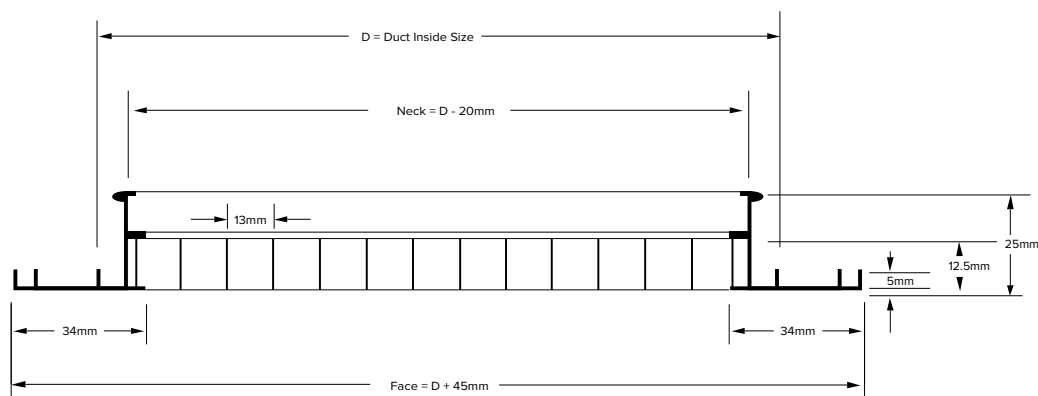
Removable core eggcrate grille

Airfoil's Eggcrate Grille is manufactured from lightweight, corrosion free aluminium. The Eggcrate Grille is most commonly used for ceiling mounted return air and toilet exhaust functions. It has a free area of approximately 85%.

The standard finish is white satin powder or natural anodised.



Cross sectional diagram



Eggcrate Grille Options

- > Dulux powdercoat colours and finishes available on request
- > Available with a fixing clip neck adaptor
- > Choice of spigot sizes to suit the flexible duct
- > Fixed core, removable core or hinged core with filter

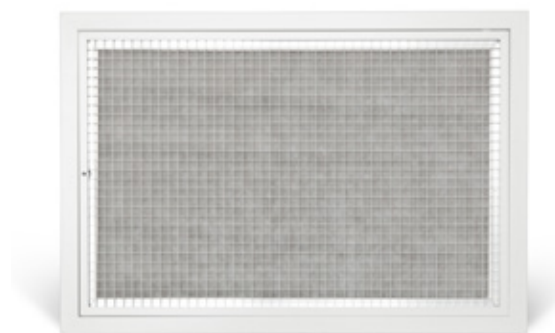
Product specification codes:

R5	Fixed core eggcrate grille.	Specification: Product code + size.
HR5/F	Hinged core eggcrate grille with filter.	Example: HR5/F 250x250
RCR5	Removable core eggcrate grille.	Hinged core eggcrate grille with filter
LCR5	Loose core eggcrate only (no frame).	250mm x 250mm

Due to going product development, data and dimensions are subject to change.



PROJECT: TOOWOOMBA GRAND CENTRAL

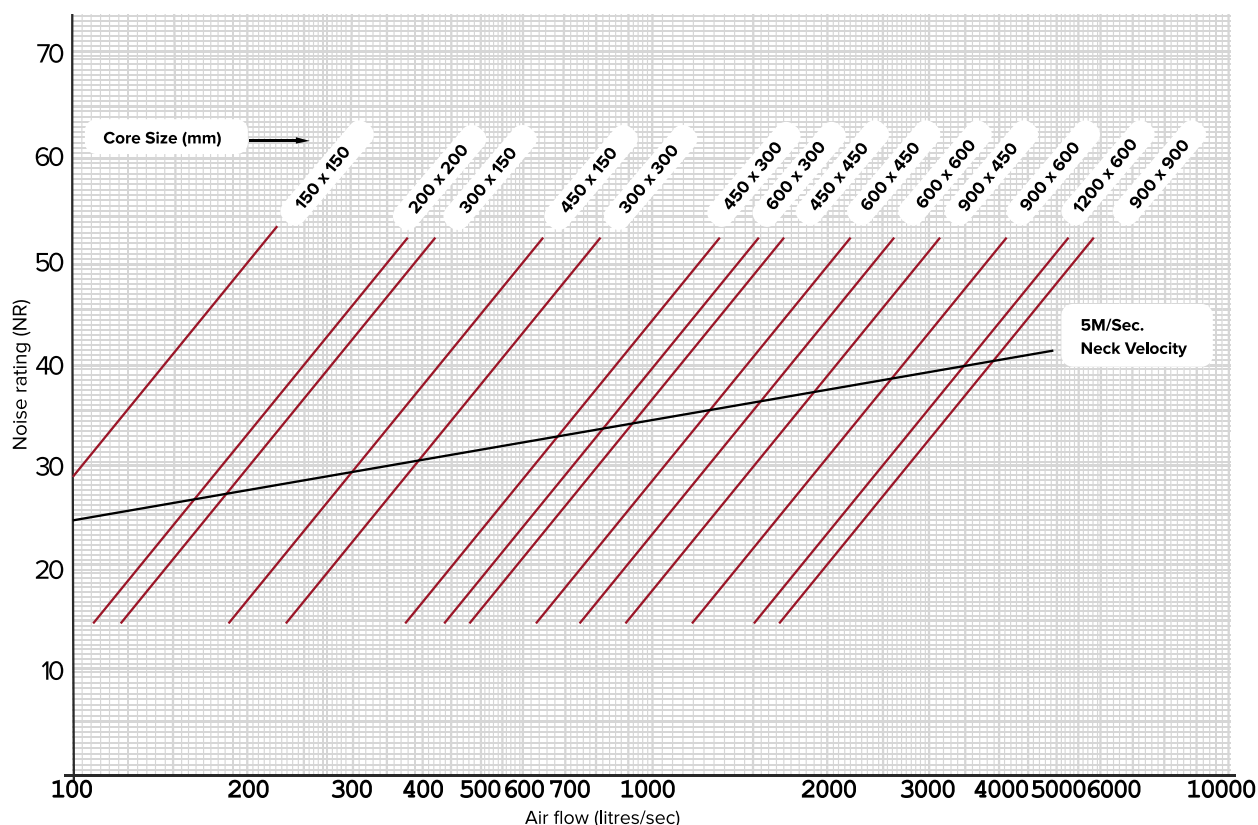


Hinged core eggcrate grille with filter

Performance Data

Neck Size	Neck Velocity m/s	1.5	2	2.5	3	3.5	4
200x200	Lit/sec	42	57	71	85	99	110
	NR	-	-	-	13	18	22
250x250	Lit/sec	66	87	110	130	150	170
	NR	-	-	-	16	21	25
600x300	Lit/sec	230	300	380	450	530	600
	NR	-	-	18	24	29	33
600x600	Lit/sec	510	680	850	1020	1190	1360
	NR	-	16	22	28	33	35
1200x600	Lit/sec	890	1180	1470	1770	2070	2360
	NR	13	20	26	32	37	41

Noise level vs airflow for various core sizes



Due to going product development, data and dimensions are subject to change.

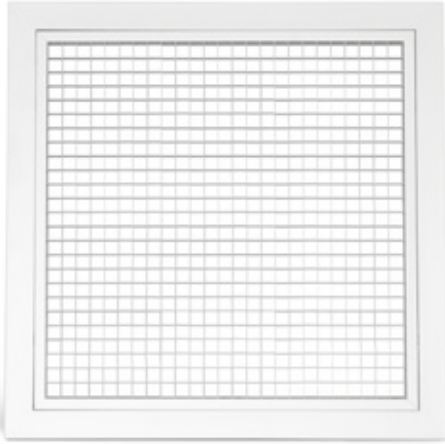
4.8 GRILLES

EGGCRATE GRILLE (R5)

103

Quality System
Quality
Endorsed
Company
ISO 9001
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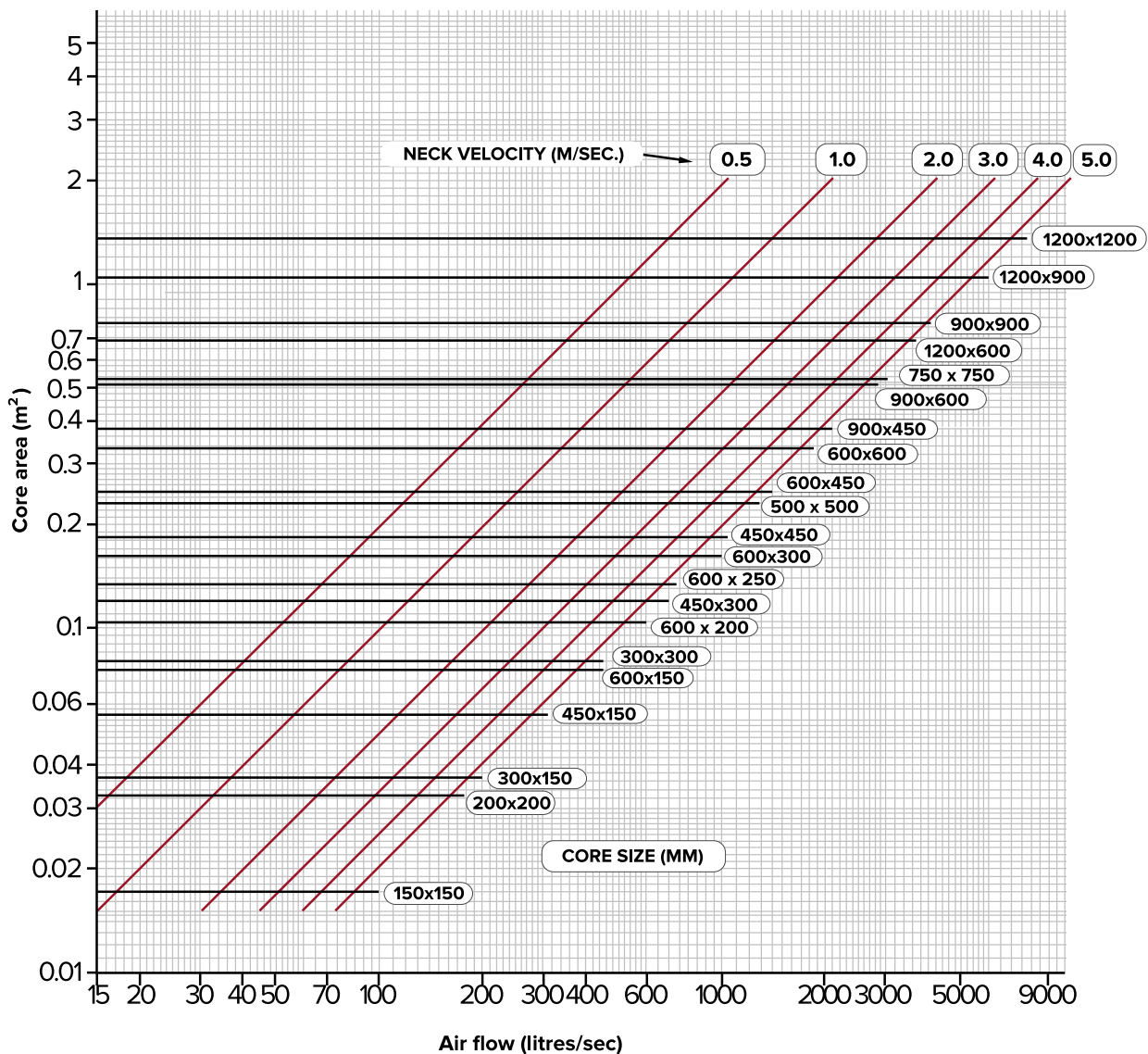


Removable core eggcrate grille

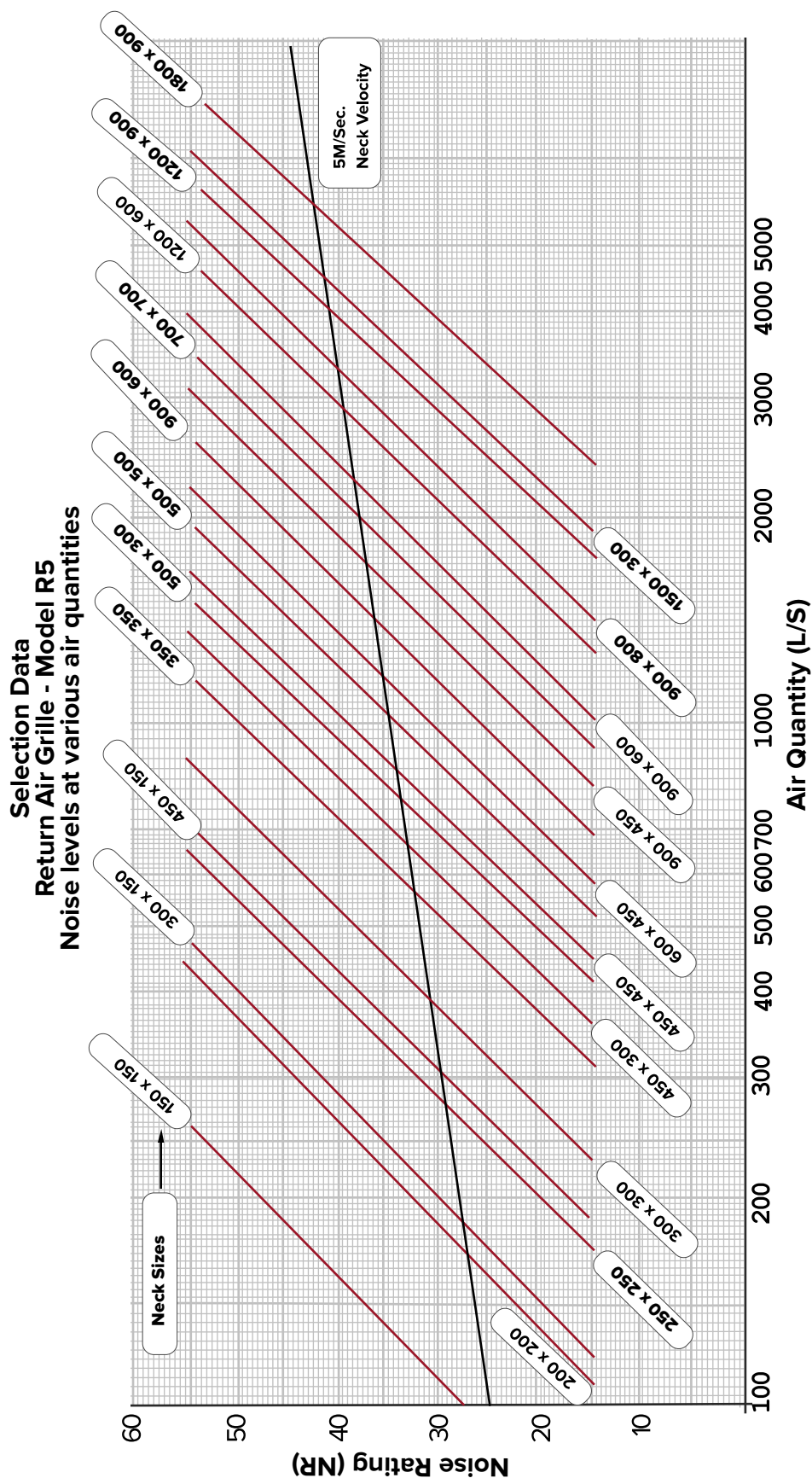


PROJECT: WARRINGAH MALL, NSW

Airflow vs core sizes for various neck velocities



Due to going product development, data and dimensions are subject to change.



4.8 GRILLES

EGGCRATE GRILLE (R5)

105



Return Air Grille - Model R5
Static Pressure at various air quantities and neck areas

Typical Sizes	300 x 300 600 x 150	450 x 300 900 x 150	600 x 300 900 x 200	750 x 300 600 x 375	900 x 300 600 x 450	1200 x 300 600 x 600	900 x 450 675 x 600	1200 x 450 900 x 600	900 x 900 1350 x 600	1000 x 1000 2000 x 500	1500 x 1000 1225 x 1225	2000 x 1000 1600 x 1250
Neck Area M ² L/S	0.090	0.0135	0.180	0.225	0.270	0.360	0.405	0.540	0.810	1.000	1.500	2.000
50												
75	2											
100	3											
125	5											
150	7.5	2.5										
175	9	3										
200	11	4										
250	12.5	5	2.5									
300	20	7.5	2.5	2.5								
350	25	10	5	2.5	2.5							
400	42.5	12	7.5	5	2.5							
450	57.5	12.5	8.5	5	3	2.5	2.5					
500		15	10	6	5	3	2.5	2.5				
600		22.5	12.5	7	6	5	2.5	2.5				
700		27.5	15	7.5	7.5	6	5	2.5				
800		35	20	12.5	10	7.5	6	2.5	2.5			
900		42.5	25	17.5	12	10	7	5	2.5			
1000		55	32.5	22.5	12.5	10	7.5	6	2.5	2.5		
1500			40	25	15	12.5	10	7.5	5	2.5		
2000					42.5	25	20	15	10	7.5	5	5
2500						42.5	42.5	25	15	10	7.5	5
3000							40	27.5	17.5	15	7.5	5
4000									47.5	30	10	7.5
5000										40	12.5	10

Due to going product development, data and dimensions are subject to change.

Return Air Grille - Model R5

Various neck velocities given air flow v neck areas

Neck velocity - metres/sec

Typical Sizes	300 x 300 600 x 150	450 x 300 900 x 150	600 x 300 900 x 200	750 x 300 600 x 375	900 x 300 600 x 450	1200 x 300 600 x 600	900 x 450 675 x 600	1200 x 450 900 x 600	900 x 900 1350 x 600	1000 x 1000 2000 x 500	1500 x 1000 1225 x 1225	2000 x 1000 1600 x 1250
Neck Area M ² L/S	0.090	0.0135	0.180	0.225	0.270	0.360	0.405	0.540	0.810	1.000	1.500	2.000
50	0.5											
75	1.0	0.5										
100			0.5									
125		1.0		0.5								
150	2.0				0.5							
175			1.0			0.5						
200				1.0			0.5					
250	3.0	2.0			1.0			0.5				
300	4.0		2.0									
350	4.5	3.0				1.0			0.5			
400	5.0			2.0			1.0			0.5		
450		3.5			2.0			1.0				
500		4.0	3.0					1.0				
600		5.0	4.0	3.0						0.5		
700			4.5	3.5	3.0	2.0			1.0			
800			5.0	4.0	3.5	2.5	2.0					
900				4.5	4.0	3.0						
1000				5.0	4.5	3.5	3.0	2.0		1.0		0.5
1500					5.0	4.5	4.0	3.0	2.0	1.5	1.0	
2000						5.5	4.5	4.0	3.0	2.0	1.5	
2500							5.5	5.0	3.5	2.5		
3000									4.0	3.0	2.0	1.0
3500									5.0	3.5	3.0	
4000										4.0		2.0
5000										5.0	3.5	3.0

4.9 GRILLES

SLIMLINE HALF CHEVRON GRILLE (3AR)

107



AIRFOIL



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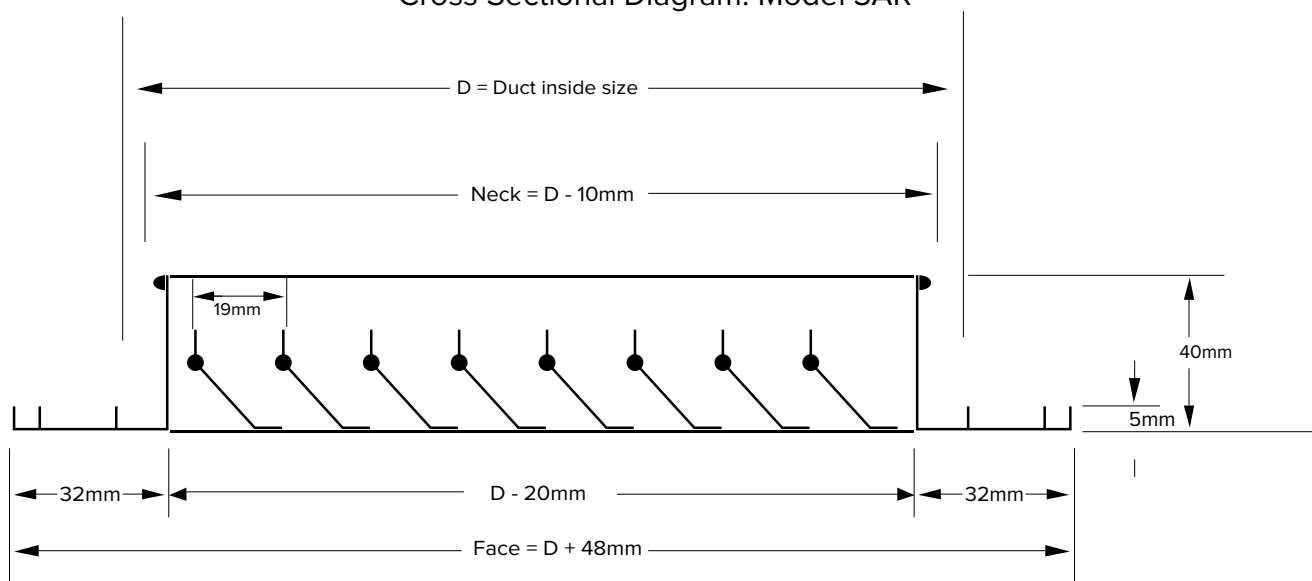
Airfoil's Slimline Half Chevron Return Air Grille is manufactured completely from lightweight, corrosion resistant aluminium. It features horizontal 45 degree fixed louvre blades spaced at 19mm centres.

The total free area is approximately 70%. Airfoil's Slimline Half Chevron Return Air Grille are ideal for wall return, or air transfer applications.



Fixed Core Half Chevron Grille

Cross Sectional Diagram: Model 3AR



Slimline Half Chevron Grille Options

- > Fixed core, removable core or hinged core with or without filter
- > Removable core flange size: standard, 25mm also available in 38mm
- > Fixed core flange size: standard 25mm. Available in 32mm or 38mm
- > Hinged core with filter flange sizes: 25mm standard, 38mm
- > Standard natural anodised, or white powder finishes
- > Non-standard colours or finishes available on request

Product specification codes:

3AR	Fixed core slimline half chevron grille.
RC3AR	Removable core slimline half chevron grille.
H3AR	Hinged core slimline half chevron grille.
H3AR/F	Hinged core slimline half chevron grille with filter.

Specification: Product code + size.

Example: **RC3AR 250x250**

Removable core slimline half chevron grille 250mm x 250mm



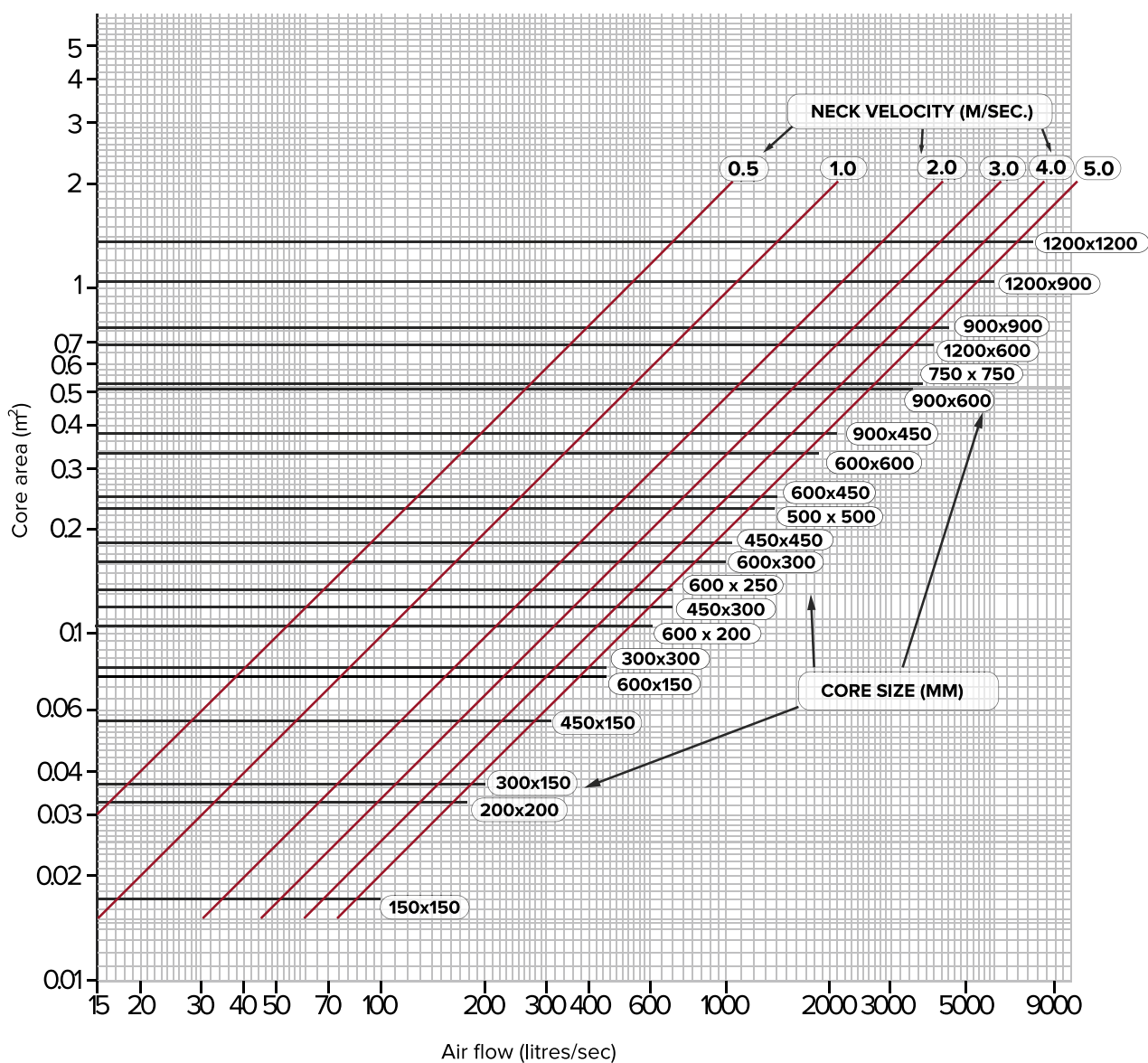
Removable Core Half Chevron Grille



PROJECT: SYDNEY CRICKET GROUND

Performance Data

Airflow vs core area for various neck velocities



Due to going product development, data and dimensions are subject to change.

4.9 GRILLES

SLIMLINE HALF CHEVRON GRILLE (3AR)

109



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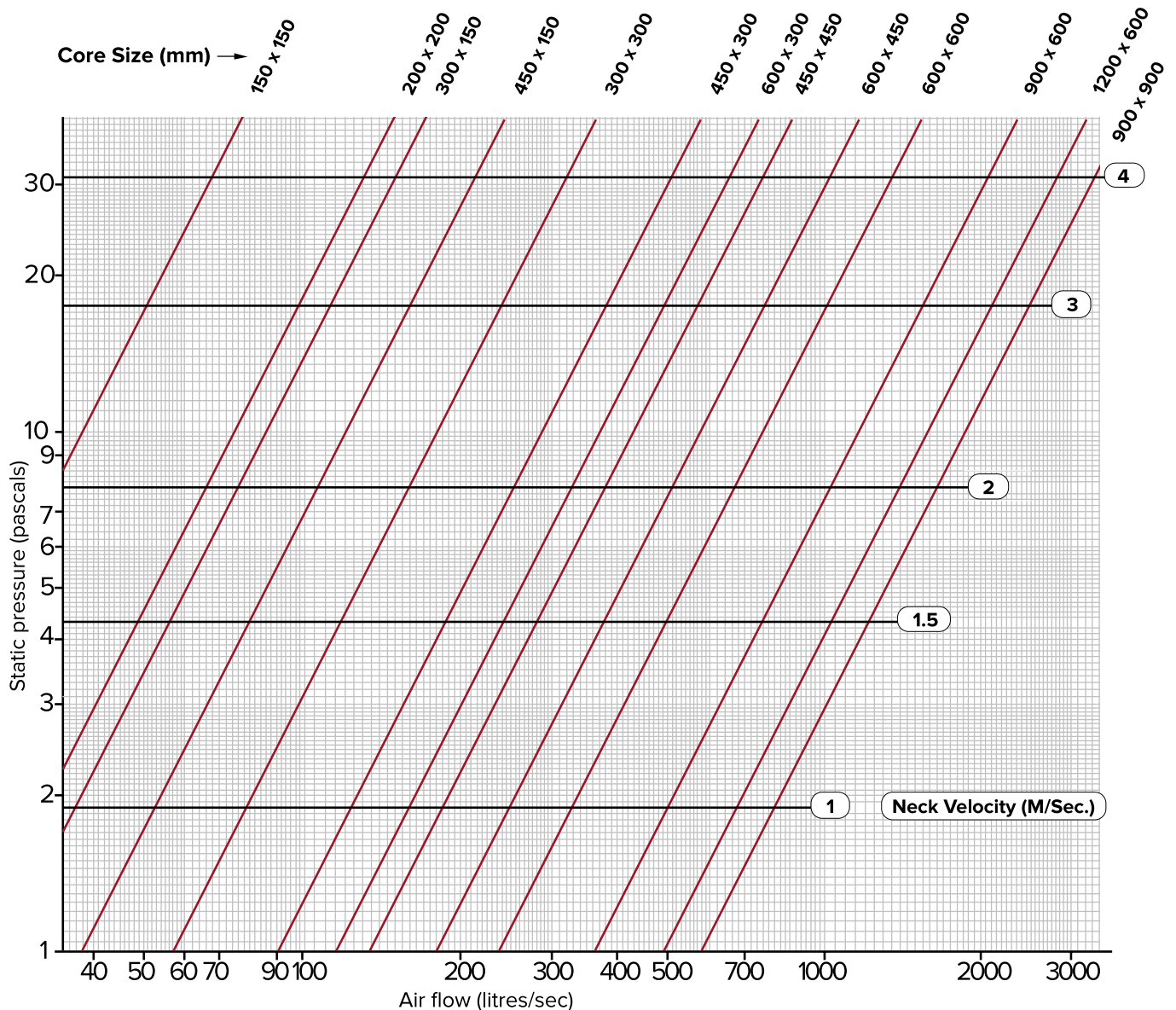
PROJECT: RMS PARRAMATTA, SYDNEY



Hinged Core Half Chevron Grille with filter

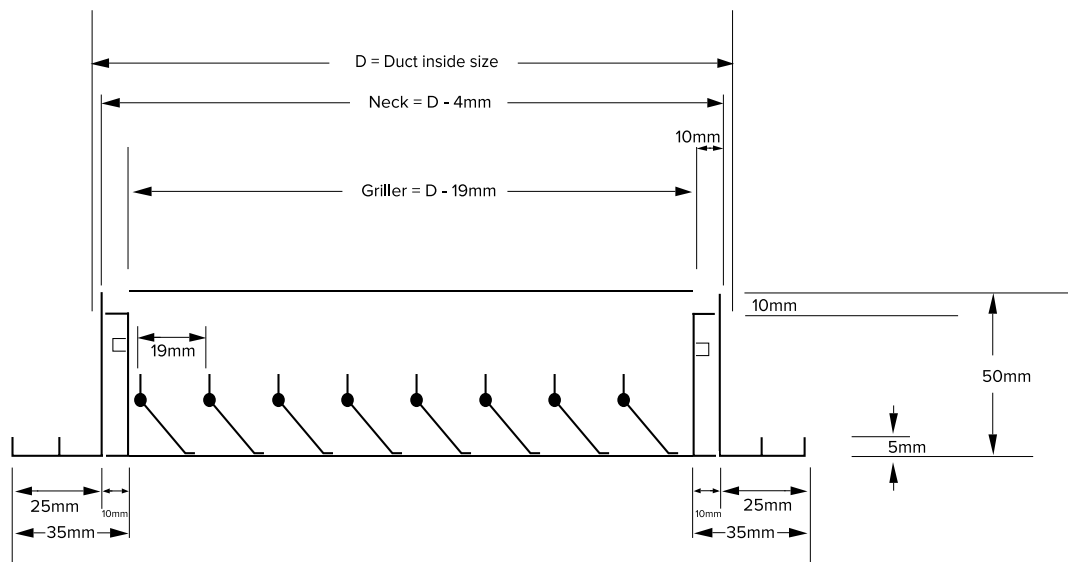
Performance Data

Static pressure vs airflow for various core sizes



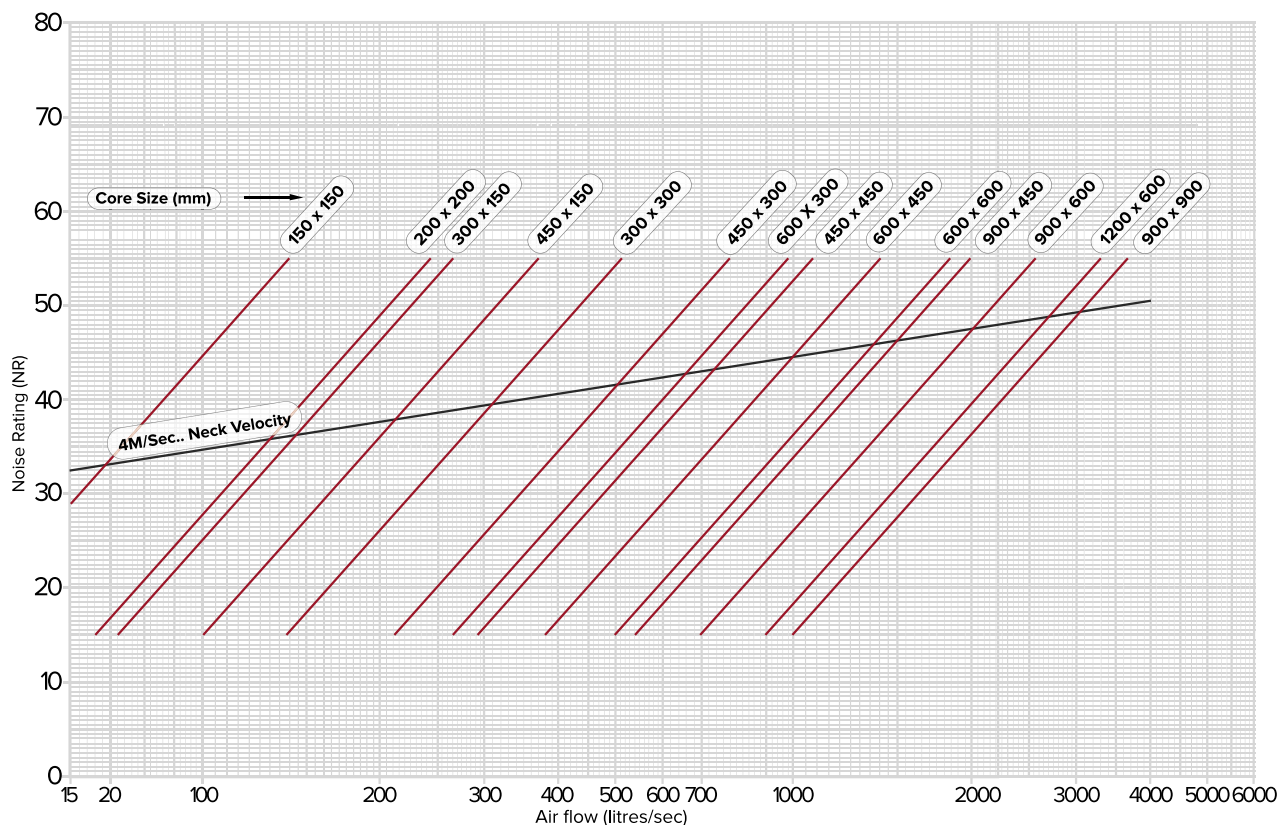
Due to going product development, data and dimensions are subject to change.

Cross Sectional Diagram: Model RC3AR



Performance Data

Noise level vs airflow for various core sizes



Selection and performance data have been derived from testing in the laboratories of acoustic and vibration engineers Louis A. Challis & Associates Pty. Ltd., 246-248 Dowling, Street, Kings Cross, Sydney 2000.

Due to going product development, data and dimensions are subject to change.

4.10 GRILLES

HALF CHEVRON GRILLE (3AR45)

111

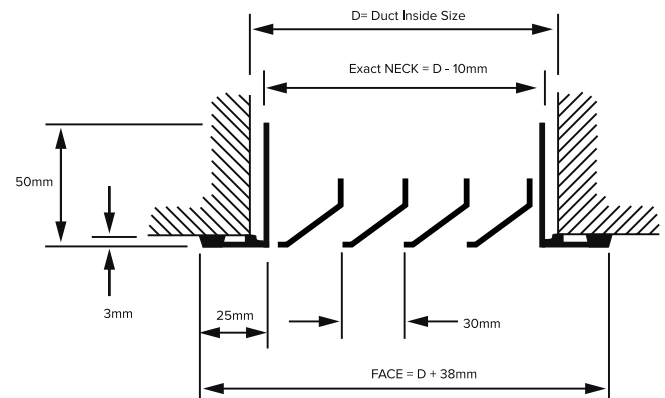


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The Airfoil Half Chevron is manufactured from high quality extruded aluminium. It is suitable for use as either a sidewall or ceiling mount return air grille. The half chevron features horizontal fixed louvre blades spaced at 30mm centres. The total free area is approximately 70% and are ideal for wall or ceiling return as well as air transfer applications.



Cross sectional diagram



Half Chevron Grille Options

- > Fixed core, removable core or hinged core with filter
- > Fixed core flange size: 12mm, 25mm standard, 38mm
- > Standard natural anodised, or white powder finishes
- > Removable core flange size: 25mm standard, optional 12mm and 25mm
- > Hinged core with filter flange sizes: 25mm standard, optional 12mm or 38mm
- > Non-standard colours or finishes available on request

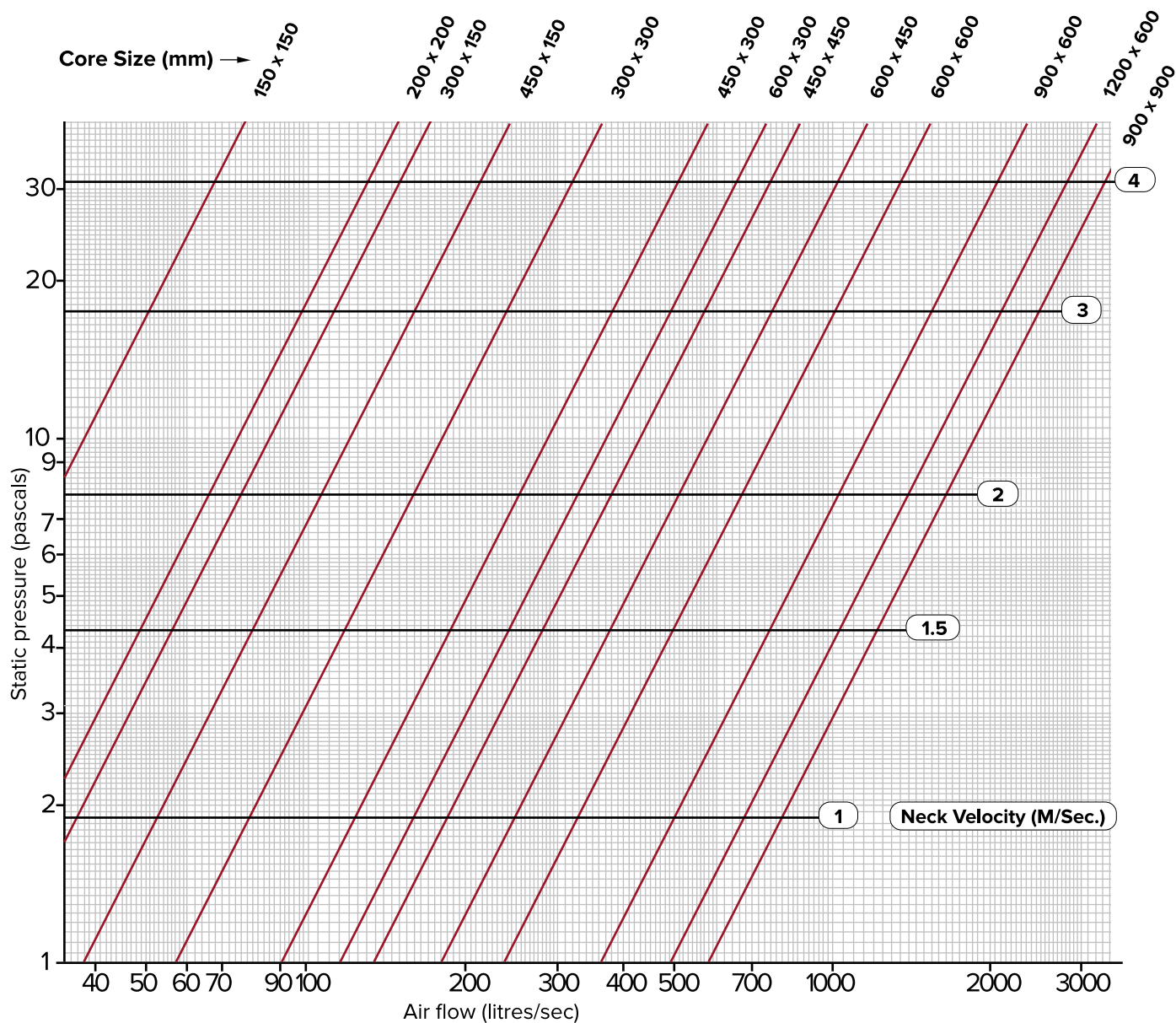
Product specification codes:

3AR45 Fixed core half chevron grille.
H3AR45 Hinged core half chevron grille.
H3AR45/F Hinged core half chevron grille with filter.
RC3AR45 Removable core half chevron grille.

Specification: Product code + size.
 Example: **RC3AR45 300x150**
 Removable core half chevron grille
 300mm x 150mm.

Due to going product development, data and dimensions are subject to change.

Performance Data
Static pressure vs airflow for various core sizes



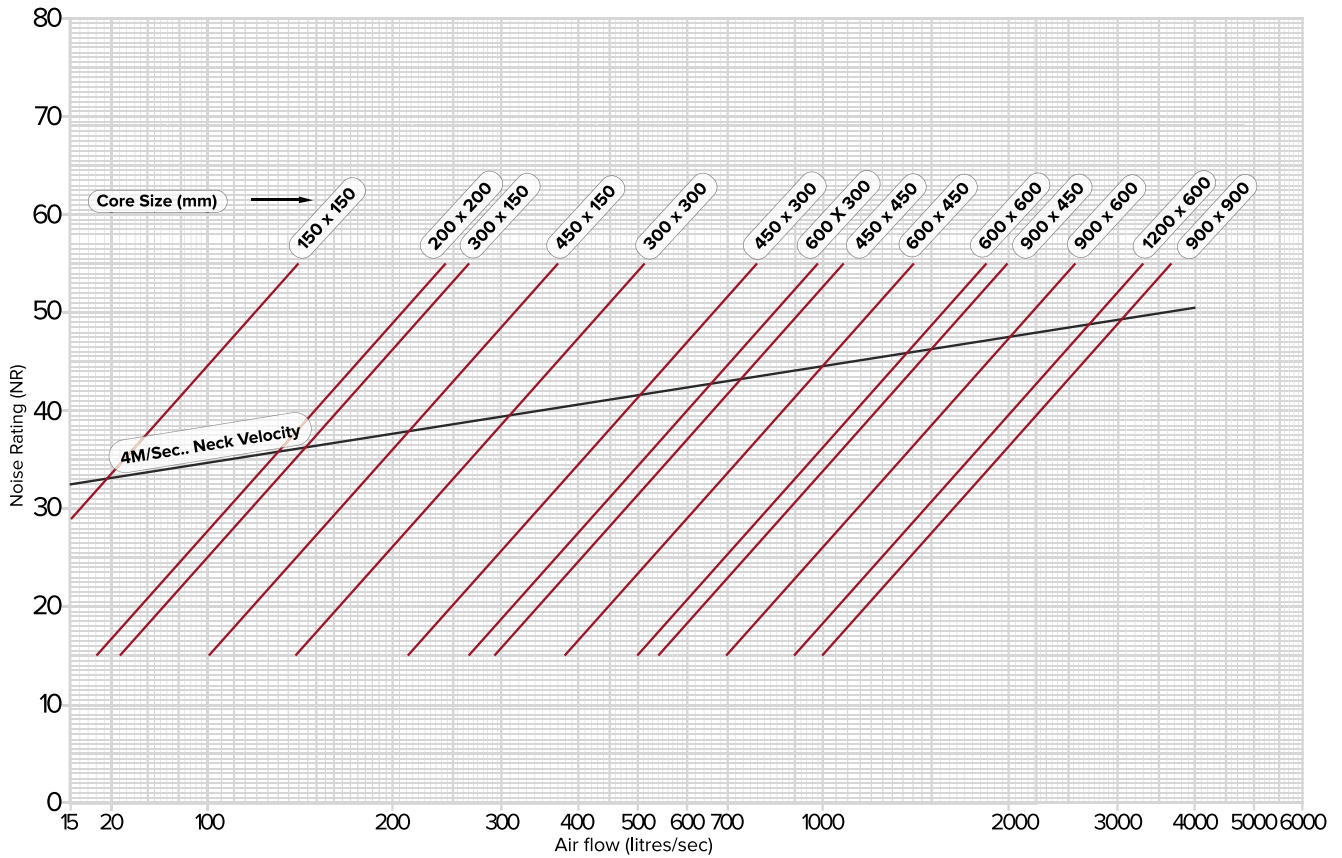
4.10 GRILLES

HALF CHEVRON GRILLE (3AR45)

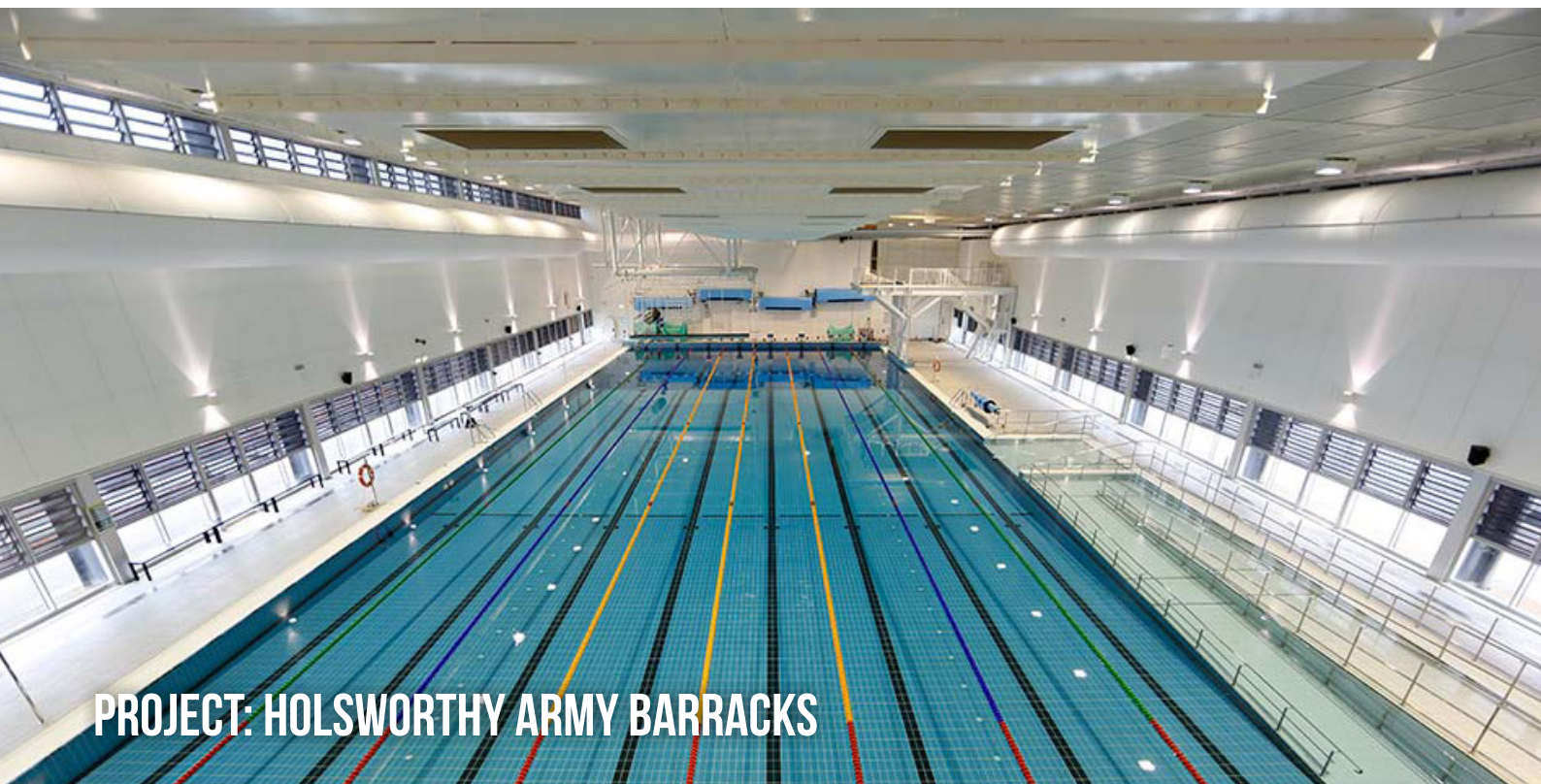
113



Performance Data
Noise level vs airflow for various core sizes



Selection and performance data have been derived from testing in the laboratories of acoustic and vibration engineers Louis A. Challis & Associates Pty. Ltd. , 246-248 Dowling, Street, Kings Cross, Sydney 2000.



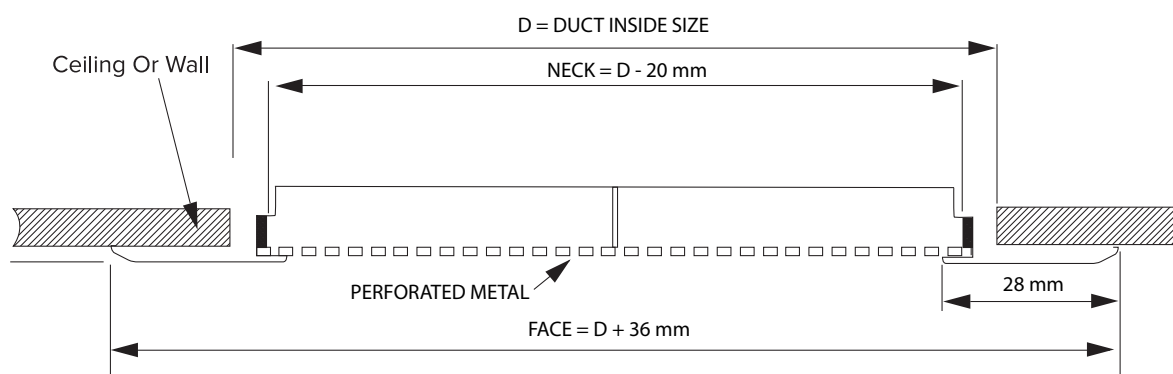
PROJECT: HOLSWORTHY ARMY BARRACKS



Airfoil's Perforated Return Air Grille combines a lightweight core of perforated aluminium plate. This grille has a free area of approximately 50% which makes it extremely effective in supply and return air functions.

Airfoil's Perforated Face Tamperproof Grille is manufactured to the highest standard providing utmost security. The outer frame is folded from 0.75mm zinc anneal for maximum strength and rigidity. The centre core is removable for ease of installation and is held in place by tamperproof security screws.

Cross Sectional Diagram Model PFG



Perforated Face Grille Options

- > Surround frame 19mm or 30mm wide as required
- > Standard finish is white powder coat or natural anodised. Special colour powdercoat finishes are available on request
- > Tamperproof standard mesh thickness is 0.5, thicker mesh up to 2mm is available

Product specification codes:

- RAPFG** Return air perforated fixed core grille
- SAPFG41** Supply air perforated fixed grille with 4 way blow pattern
- PFTG** Perforated air removable core tamper-proof with security screws

Specification: Product code + size.
Example: **RAPFG 300x300**
Return air perforated fixed core grille
300mm x 300mm

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

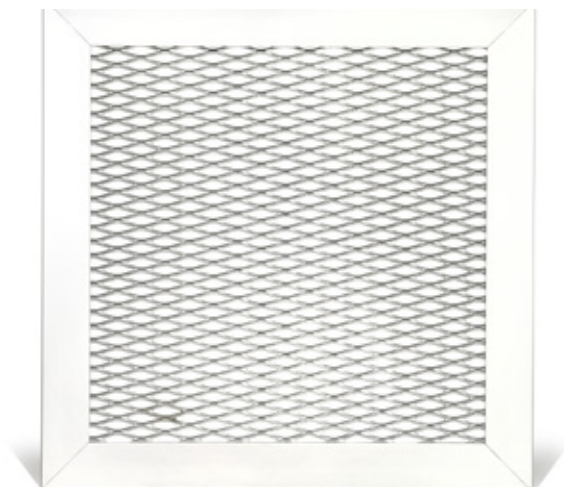
	Neck Velocity m/s	1.5	2.0	2.5	3.0	3.5	4.0	4.5
Nom Face	Neg. Stat Press. Pa	7.5	12.5	19.0	27.5	41.0	50.0	64.0
Neck/Face	Vel. Press Pa.	1.5	2.5	3.8	5.5	7.8	10	12.8
244 x 244 300 x 300	Volume L/S NR	89 -	119 <22	149 25	179 31	208 36	238 40	268 43
344 x 344 400 x 400	Volume L/S NR	178 -	237 <22	296 26	355 32	414 37	473 41	533 45
444 x 444 500 x 500	Volume L/S NR	295 -	394 <22	493 27	595 33	690 38	789 42	887 46
544 x 544 600 x 600	Volume L/S NR	444 -	592 <22	740 28	888 34	1036 39	1184 43	1332 47
544 x 244 600 x 300	Volume L/S NR	199 -	266 <22	332 26	398 32	465 37	531 42	597 45
1144 x 244 1200 x 300	Volume L/S NR	419 -	558 <22	698 28	837 34	977 39	1117 43	1256 47
1144 x 544 1200 x 600	Volume L/S NR	933 <22	1245 23	1556 31	1867 37	2178 41	2489 46	2800 49

Technical drawing of a duct face seal assembly. The drawing shows a cross-section of the assembly with the following dimensions and components:

- D = DUCT INSIDE SIZE**: The total width of the duct.
- NECK = D - 6 mm**: The width of the neck section.
- INLET = FACE/2**: The width of the inlet section.
- REDUCING NECK**: The section where the duct narrows.
- PERFORATED METAL**: The material used for the seal.
- FACE = D + 44 mm**: The total width of the face seal.
- 35 mm**: The height of the duct wall.
- 6 mm**: The thickness of the seal material.
- 11 mm**: The distance from the duct wall to the seal.
- 20 mm**: The distance between the two seal sections.
- 28 mm**: The distance from the seal to the duct wall.

Nom Face		Neck Velocity m/s		1.5	2.0	2.5	3.0	3.5	4.0	5.0
Inlet/Face	Air Pattern	Vel. Press Pa	1.5	2.5	4.0	5.8	7.8	10.0	15.8	
150 x 150 300 x 300		Total Press Pa	308	0.3	9.8	14.0	10.0	24.5	38.8	
		Volume L/S	35	47	59	70	82	94	118	
		NR	-	-	<22	25	29	33	39	
	1	Throw Metres	1.9 - 1.8	0.9 - 2.4	1.2 - 3.0	1.5 - 3.9	1.8 - 4.2	2.1 - 4.8	2.4 - 6.0	
	2	Throw Metres	1.6 - 1.5	0.9 - 2.1	0.9 - 2.4	1.2 - 3.0	1.5 - 3.9	1.5 - 4.0	2.1 - 4.8	
	3	Throw Metres	0.6 - 1.2	0.6 - 1.9	0.9 - 2.1	1.2 - 2.4	1.2 - 3.0	1.5 - 3.9	1.8 - 4.2	
	4	Throw Metres	0.6 - 1.2	0.6 - 1.5	0.9 - 2.1	0.9 - 2.4	1.2 - 3.0	1.2 - 3.2	1.5 - 4.0	
200 x 200 400 x 400		Total Press Pa	4.3	7.0	11.0	415.8	21.3	28	44	
		Volume L/S	63	84	103	125	146	167	209	
		NR	-	<22	24	30	34	37	43	
	1	Throw Metres	0.9 - 2.4	1.2 - 3.3	1.8 - 4.2	2.1 - 4.8	2.4 - 5.7	2.7 - 6.4	3.3 - 8.2	
	2	Throw Metres	0.9 - 1.8	1.2 - 2.7	1.2 - 3.3	1.5 - 4.0	1.8 - 4.5	2.1 - 5.1	2.7 - 6.4	
	3	Throw Metres	1.6 - 1.8	0.9 - 2.1	1.2 - 3.0	1.5 - 3.9	1.8 - 4.2	1.8 - 4.5	2.4 - 5.7	
	4	Throw Metres	0.6 - 1.5	0.9 - 2.1	1.2 - 2.7	1.2 - 3.3	1.5 - 4.0	1.8 - 4.2	2.1 - 5.4	
250 x 250 500 x 500		Total Press Pa	4.5	7.5	12	17.3	23.3	300	48	
		Volume L/S	99	132	162	195	228	261	327	
		NR	<22	22	28	33	37	41	46	
	1	Throw Metres	1.2 - 3.0	1.8 - 4.2	2.1 - 5.1	2.4 - 6.0	3.0 - 7.3	3.3 - 8.2	4.2 - 10.3	
	2	Throw Metres	0.9 - 2.4	1.2 - 3.3	1.5 - 4.0	2.1 - 4.8	2.4 - 5.7	2.7 - 6.4	3.3 - 8.2	
	3	Throw Metres	0.9 - 2.1	1.2 - 3.0	1.5 - 3.9	1.8 - 4.2	2.1 - 5.1	2.4 - 5.7	3.0 - 7.3	
	4	Throw Metres	0.9 - 2.1	1.2 - 2.7	1.5 - 3.3	1.8 - 4.0	1.8 - 4.5	2.1 - 5.4	2.7 - 6.7	
300 x 300 600 x 600		Total Press Pa	4.8	8	13	19	25	32	50	
		Volume L/S	141	188	235	283	330	377	471	
		NR	<22	25	31	36	40	44	50	
	1	Throw Metres	1.5 - 3.9	2.1 - 4.8	2.4 - 6.0	3.0 - 7.6	3.9 - 8.8	4.0 - 9.7	5.1 - 12.0	
	2	Throw Metres	1.2 - 3.0	1.5 - 4.0	2.1 - 4.8	2.4 - 5.7	2.7 - 7.0	3.0 - 7.9	4.0 - 9.7	
	3	Throw Metres	1.2 - 2.4	1.5 - 3.9	1.8 - 4.5	2.1 - 5.1	2.4 - 6.0	2.7 - 7.0	3.9 - 8.5	
	4	Throw Metres	0.9 - 2.4	1.2 - 3.3	1.8 - 4.2	2.1 - 4.8	2.4 - 5.7	2.7 - 6.7	3.3 - 8.2	
450 x 150 600 x 300		Total Press Pa	9	15	24	34	47	60	93	
		Volume L/S	106	141	176	212	247	283	353	
		NR	<22	26	32	37	41	45	51	
	1	Throw Metres	2.4 - 5.7	3.3 - 7.9	4.0 - 10.0	4.8 - 11.8	5.7 - 14.0	6.4 - 15.5	7.9 - 18.9	
	2	Throw Metres	1.5 - 4.0	2.1 - 5.4	2.7 - 6.7	3.3 - 8.2	4.0 - 9.7	4.5 - 10.6	5.7 - 13.4	
	3	Throw Metres	1.5 - 3.9	2.1 - 4.8	2.4 - 6.0	3.0 - 7.3	3.9 - 8.5	4.0 - 9.7	5.1 - 12.5	
	4	Throw Metres	1.2 - 2.7	1.8 - 4.8	2.4 - 6.0	3.0 - 7.3	3.9 - 8.5	4.0 - 9.7	4.8 - 11.8	

Due to going product development, data and dimensions are subject to change.



Airfoil's Expanded Mesh Grille is generally mounted in a wall or ceiling in security areas such as car parks for return air and exhaust functions. The grille is manufactured with 1mm thick mild steel in a 19mmx7mm diamond mesh pattern and fitted to the high-grade aluminium extrusion face. Airfoil's Expanded Mesh Grill offers a free area between 60-73% which ensures maximum air flows at minimum sound levels.

The Expanded Mesh Grille has the option of fitting Airfoil's OBD (Opposed Blade Damper) for an air balancing function. It comes in natural anodised or can be finished in any Dulux powdercoat colour.

Expanded Mesh Grille Options

- > Available in any size
- > Available in powder coated Dulux colours on request
- > Optional OBD to balance air flow

Product specification codes:

EMG Expanded Mesh Grille
Specification: Product code + size.
Example: **EMG 450x450** Expanded Mesh Grille 450mm x 450mm



PROJECT: EAST VILLAGE, SYDNEY

4.13 GRILLES

WEATHERPROOF LOUVRE (YLBS)

117



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Airfoil's Weatherproof Louvre is manufactured entirely from sturdy aluminium extrusion. The grilles are specifically designed to minimise the ingress of rainwater under normal climatic conditions. Bird mesh back plate is standard.



AIRFOIL FACTORY, SYDNEY

Weatherproof Louvre Options

- > Custom sizes and shapes to meet specific requirements
- > Standard natural anodised, or white powdercoat
- > Non-standard colours or finishes available on request
- > 2 blade profiles WL and YL
- > YLBS flange sizes: 38mm standard. Optional 50mm.
- > Optional flyscreen or bushfire mesh

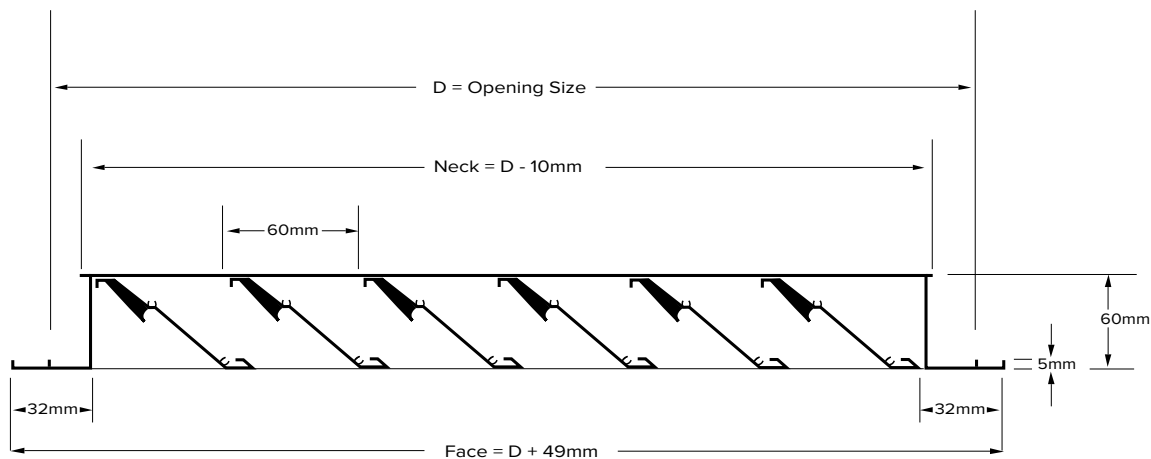
Product specification codes:

YLBS Double trap blade weatherproof louvre with bird mesh. Specification: Product code + size.
Example: **YLBS 150x150**
Double trap blade weatherproof louvre with bird mesh 150mm x 150mm



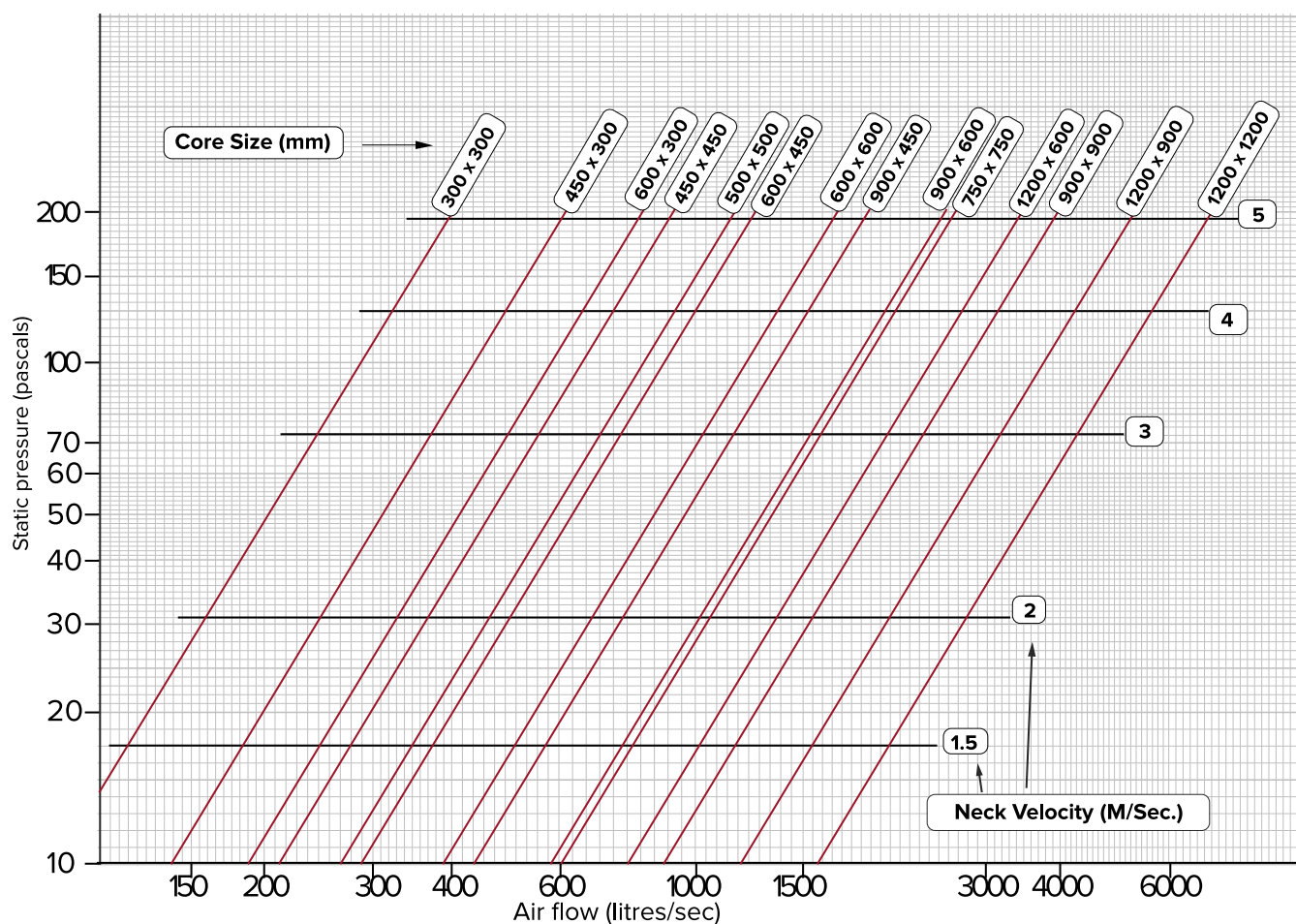
PROJECT: TAMWORTH HOSPITAL, NSW

Cross sectional diagram



Performance Data

Static pressure vs airflow for various core sizes



4.14 GRILLES

WEATHERPROOF LOUVRE (WLBS)

119



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Airfoil's Weatherproof Louvre is manufactured entirely from sturdy aluminium extrusion. The grilles are specifically designed to minimise the ingress of rainwater under normal climatic conditions. Bird mesh back plate is standard.



PROJECT: ORAN PARK TOWN CENTRE, NSW

Weatherproof Louvre Options

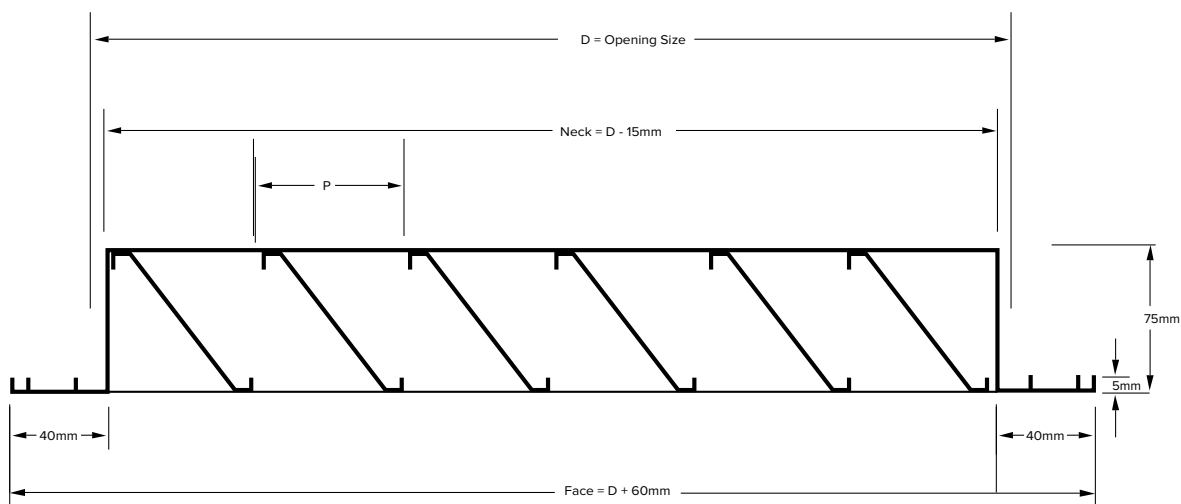
- > Custom sizes and shapes to meet specific requirements
- > Standard natural anodised, or white powdercoat
- > Non-standard colours or finishes available on request
- > 2 blade profiles WL and YL
- > WLBS flange sizes: 38mm standard. Optional 50mm.
- > Optional flyscreen or bushfire mesh

Product specification codes:

WLBS Weatherproof louvre with bird mesh. Specification: Product code + size.
Example: **WLBS 150x150**
Weatherproof louvre with bird mesh 150mm x 150mm

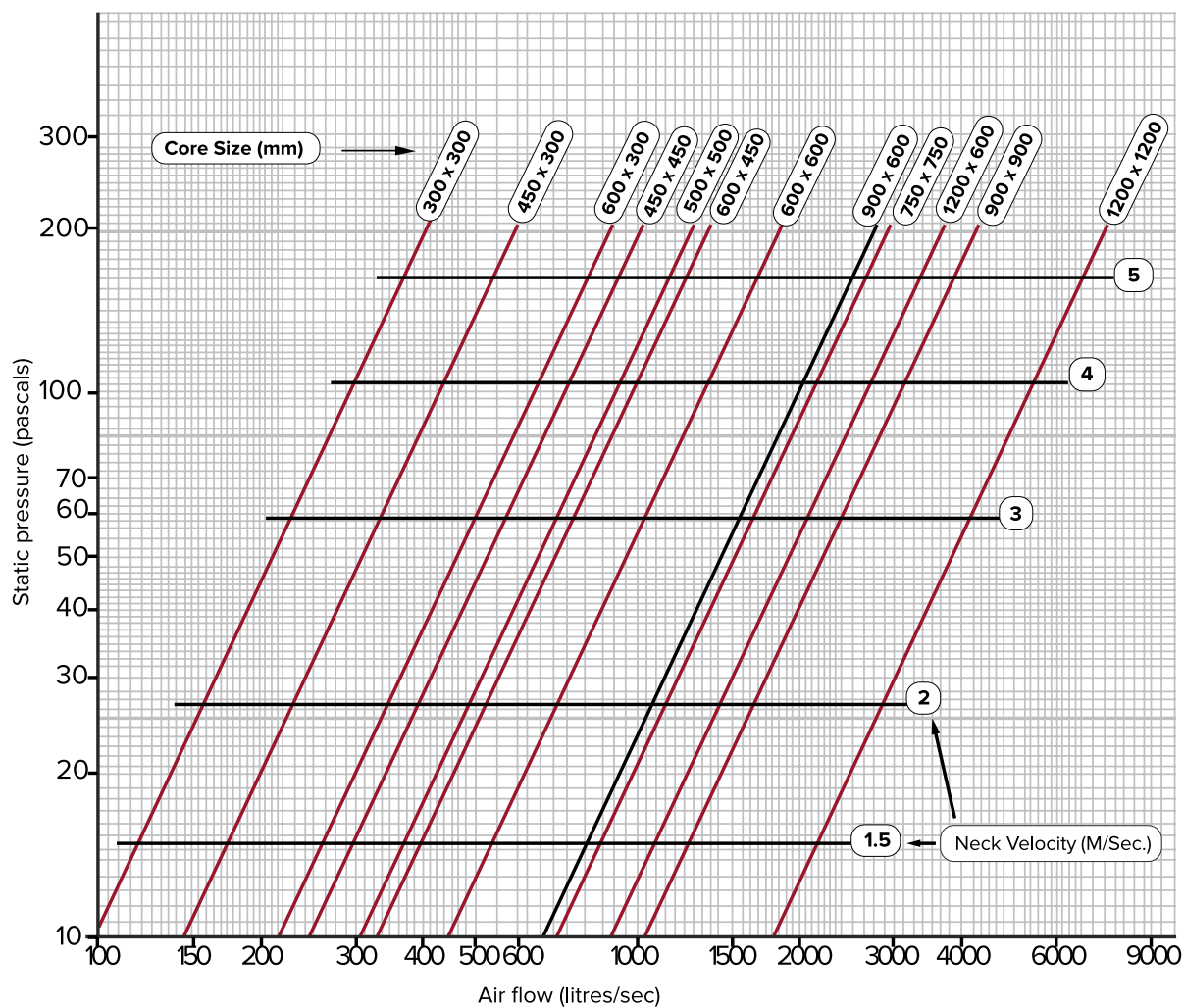
AIRFOIL FACTORY, SYDNEY

Cross sectional diagram



Performance Data

Static pressure vs airflow for various core sizes



Due to going product development, data and dimensions are subject to change.

4.15 GRILLES

ROUND WEATHERPROOF LOUVRE (RWLBS)

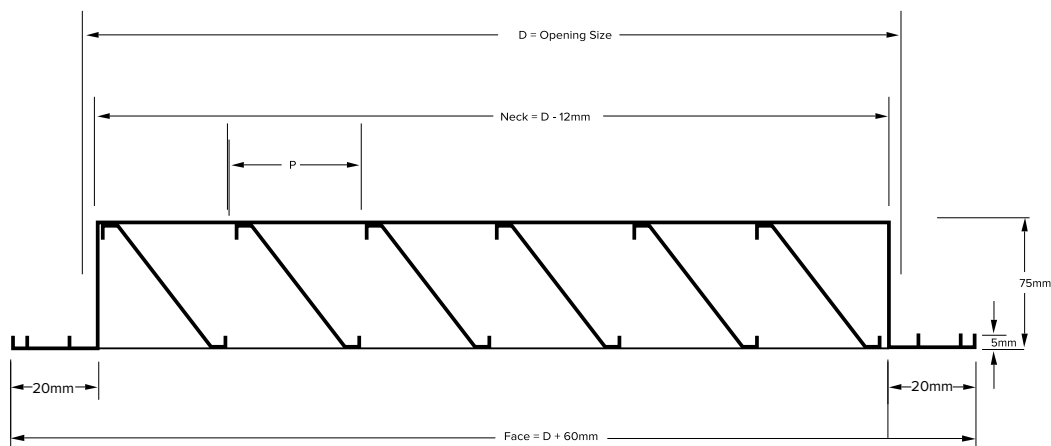
121



Airfoil's Round Weatherproof Louvre is manufactured entirely from sturdy aluminium extrusion. The grilles are specifically designed to minimise the ingress of rainwater under normal climatic conditions. Bird mesh back plate is standard.



Cross sectional diagram: RWLBS



Weatherproof Louvre Options

- > Custom sizes and shapes to meet specific requirements
- > Standard natural anodised, or white powdercoat
- > Non-standard colours or finishes available on request
- > Optional flyscreen or bushfire mesh
- > 2 blade profiles WL and YL
- > WLBS flange sizes: 38mm standard. Optional 50mm.
- > YLBS flange sizes: 32mm standard. 38mm standard. Optional 50mm.

Product specification codes:

RWLBS	Weatherproof louvre with bird mesh.	Specification: Product code + diameter size.
RYLBS	Storm trap weatherproof louvre with bird mesh.	Example: RWLBS 200 Weatherproof louvre with bird mesh 200mm in diameter

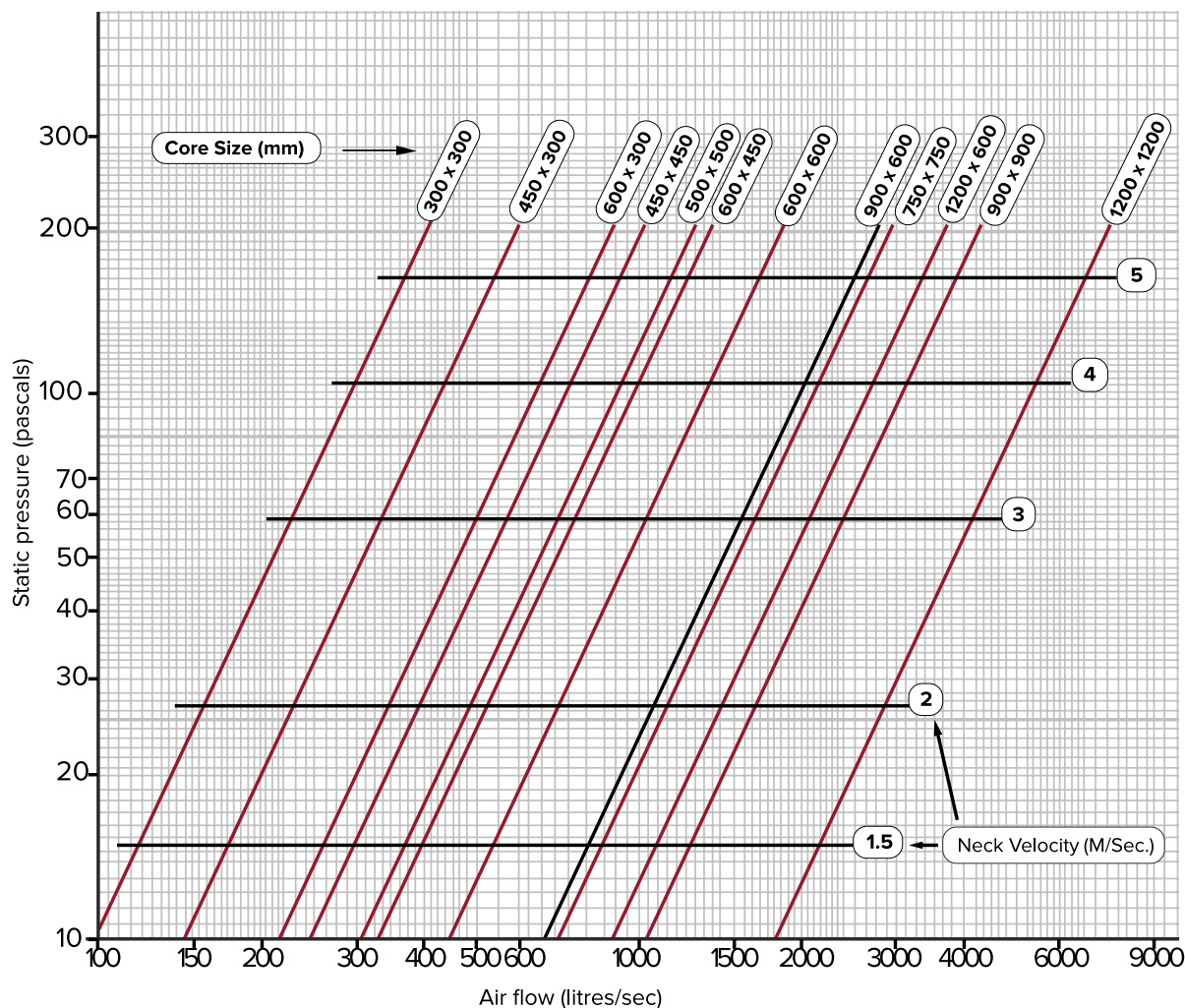
Due to ongoing product development, data and dimensions are subject to change.

Performance Data: RWPL

Product Code	Nom Face (mm)	Free Area m ²	Face Velocity (m/s) Pressure Drop (Pa)	1.00 2	1.50 4	2.00 8	2.50 12	3.00 18	3.50 24	4.0 32	4.5 40
RWLBS 150	150	0.007	Flow Rate (l/s) NC Level	7 <15	10 <15	14 <15	17 31	21 36	24 40	28 43	31
RWLBS 200	200	0.013	Flow Rate (l/s) NC Level	113 <15	20 <15	27 16	33 17	40 19	47 23	53 27	60 31
RWLBS 250	250	0.022	Flow Rate (l/s) NC Level	22 <15	33 <15	44 16	55 17	67 20	78 23	89 28	100 31
RWLBS 300	300	0.034	Flow Rate (l/s) NC Level	34 <15	51 <15	67 28	84 34	101 39	118 43	135 47	152
RWLBS 350	350	0.049	Flow Rate (l/s) NC Level	49 <15	74 <15	98 17	123 19	147 22	172 25	196 29	221 32
RWLBS 400	400	0.67	Flow Rate (l/s) NC Level	67 <15	100 <15	134 17	167 21	201 24	234 27	268 31	301 35

Performance Data: RWLBS

Static pressure vs airflow for various core sizes



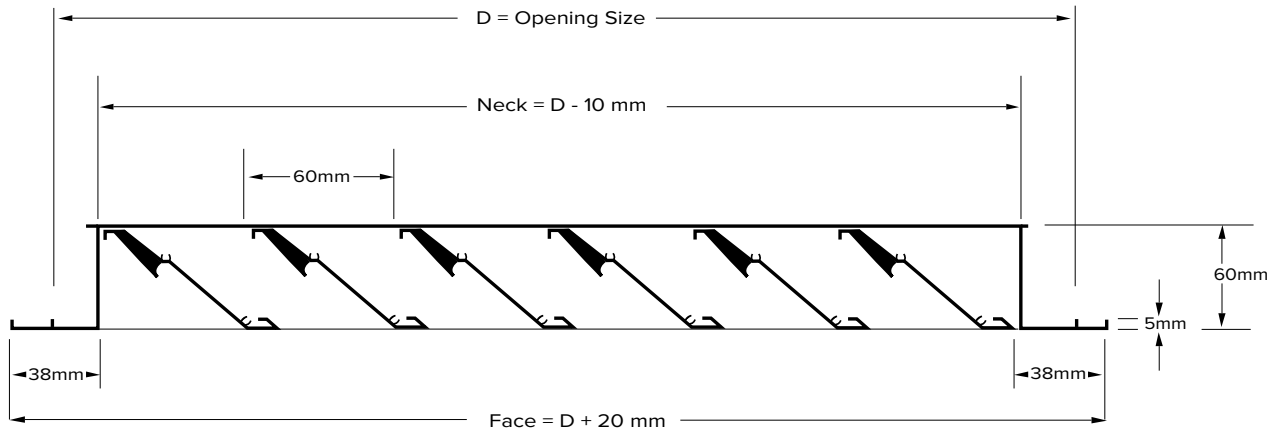
4.15 GRILLES

ROUND WEATHERPROOF LOUVRE (RWLBS)

123

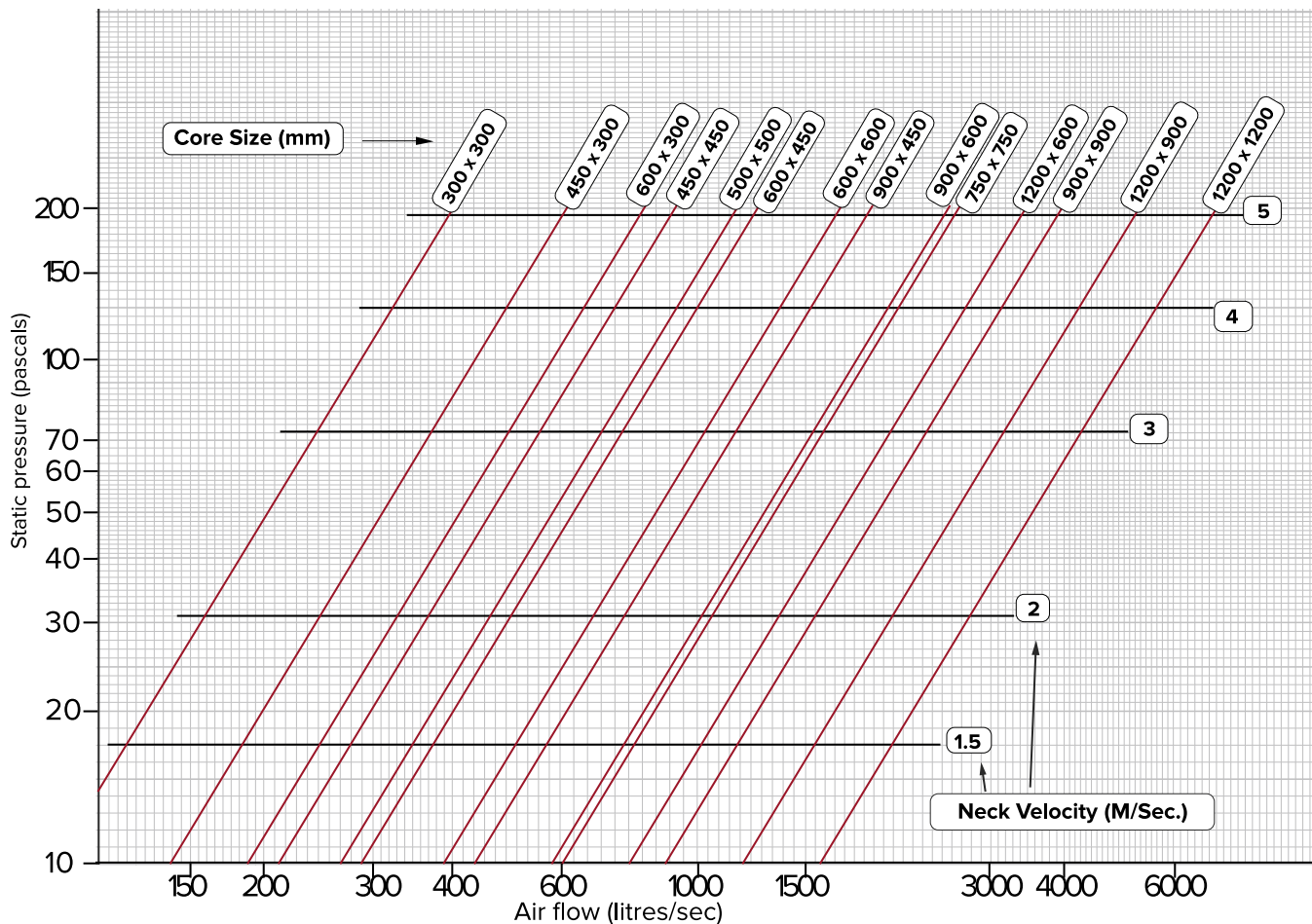


Cross sectional diagram: RYLBS



Performance Data: RYLBS

Static pressure vs airflow for various core sizes



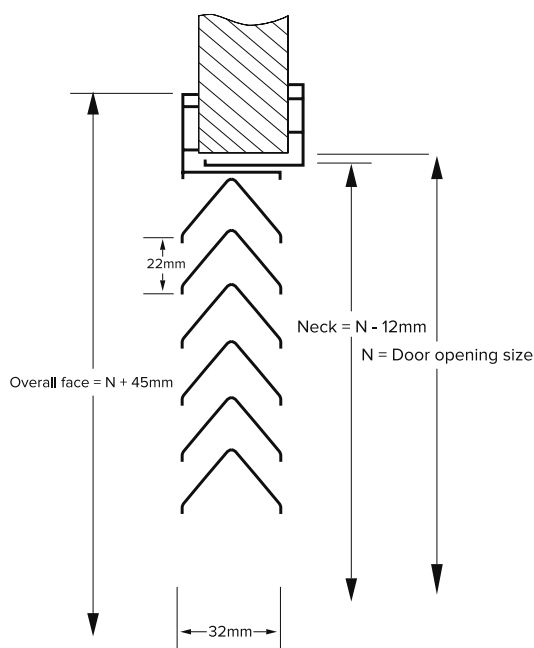
Due to going product development, data and dimensions are subject to change.

Airfoil's Door Grilles are manufactured with the highest quality, lightweight, corrosion free anodised aluminium. This type of grill utilises extruded aluminium inverted "V" type blades that have a free area of approximately 65% which ensures maximum air flow at minimum sound levels. The door grille comes complete with an adjustable frame and spring clips that fit into the rear of the door insert to provide a flush appearance. Suitable for a 30mm to 45mm door thickness.

It is recommended for doors, walls or partitions whenever a site-proof return, relief or any transfer is required.



Cross Sectional Diagram



Door Grille Options

> Available in any size

> Available in natural anodised or white powder coated. Other colours available on request

Product specification codes:

DG	Door grille	Specification: Product code + size. Example: DG 450x450 Door grille 450mm x 450mm
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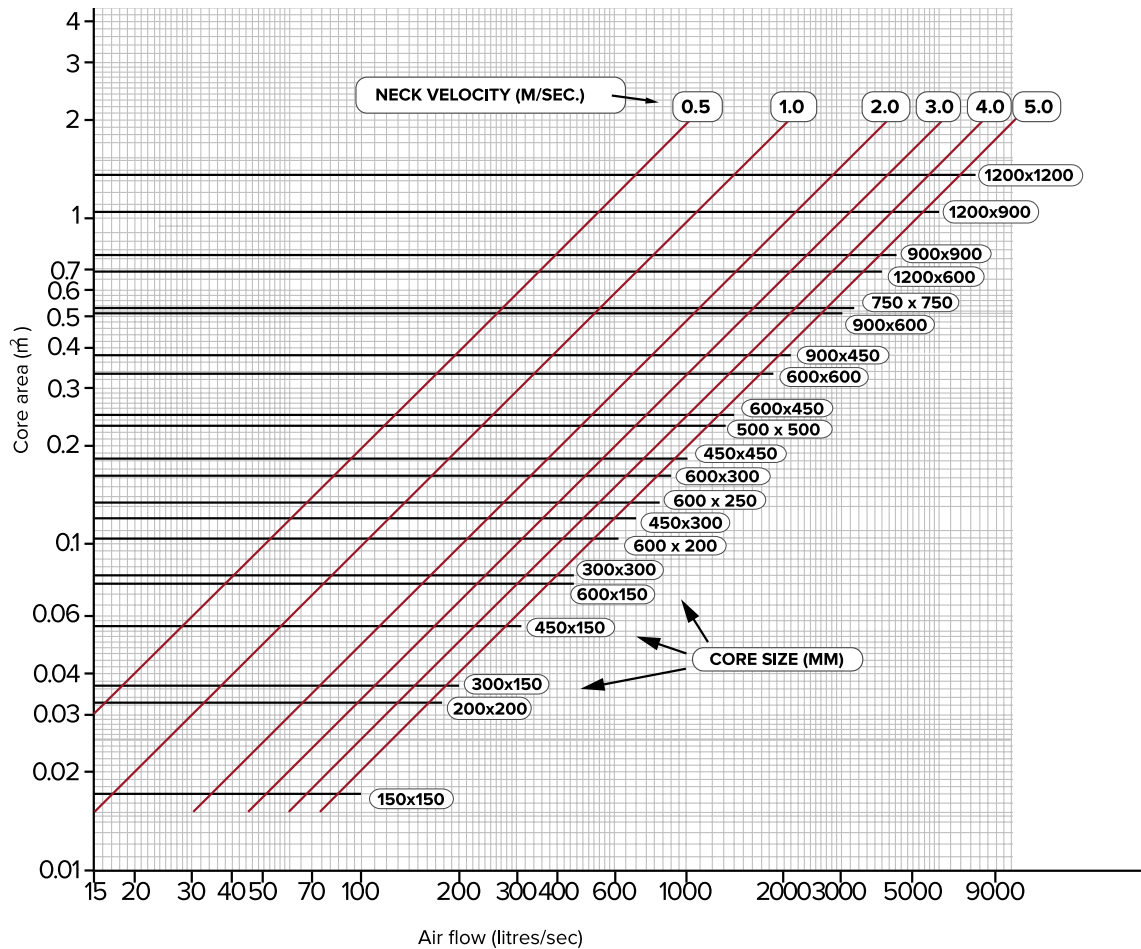
4.16 GRILLES

DOOR GRILLE (DG)

125



Static pressure vs airflow for various core sizes



Relief Air Door Grille - Model DG
Static pressure at various air quantities & neck areas

Static Pressure – Pa

Typical Neck Sizes:	300 x 150	450 x 150	600 x 150	600 x 200	450 x 300	600 x 250	600 x 300	450 x 450	600 x 450	600 x 600
Neck Area M2:	0.045	.068	0.090	0.120	0.135	0.150	0.180	0.203	0.270	0.360
L/S 30										
L/S 50	13									
L/S 75	35	15	9							
L/S 100	90	40	22	12	8	6				
L/S 150		62	35	18	14	12	8	5		
L/S 200			82	40	30	25	17	13	8	
L/S 250				75	55	45	30	24	13	8
L/S 300					85	70	45	37	20	12
L/S 400						100	68	52	28	17
L/S 500								90	50	30
L/S 600									808	45

Due to going product development, data and dimensions are subject to change.

Relief Air Door Grille - Model DG

Various neck velocities given airflow V neck area

Neck Velocity – Metres per Second

Typical Sizes	300 x 150	450 x 150	600 x 150	600 x 200	450 x 300	600 x 250	600 x 300	450 x 450	600 x 450	600 x 600	900 x 600	1200 x 600	900 x 900	1200 x 900	1200 x 1200
Neck Area M ² L/S	0.045	0.068	0.090	0.120	0.135	0.150	0.180	0.203	0.270	0.360	0.540	0.720	0.810	1.080	1.440
30	0.75	0.5													
50	1.5		0.6	0.5											
75	2.25	1.5	1.0		0.6	0.5									
100	2.75	2.0	1.5	1.0			0.6	0.5							
150	4.0	2.75	2.0	1.5	1.25	1.1	0.9								
200	5.5	3.75	2.75	2.0	1.75	1.5	1.25	1.1	0.5						
250		4.5	3.0	2.75	2.0	1.75	1.5	1.4	1.0	0.75	0.5				
300		5.5	4.0	3.5	2.5	2.25	1.9	1.75	1.25			0.5			
400			5.0	4.0	3.5	3.0	2.5	2.25	1.75	1.25			0.5		
500				5.0	4.0	3.75	3.0	2.75	2.0	1.5	1.0			0.5	
600					5.0	4.75	3.75	3.25	2.5	1.75		0.75			0.5
750							5.0	4.5	3.0	2.5	1.5				
1000									4.0	3.0	2.0	1.5	1.0		
1500										4.5	3.0	2.25	2.0	1.5	1.0
2000											4.0	3.0	3.5	2.0	
3000											6.0	4.5	4.0	3.0	2.0
4000												6.0	5.0	4.0	3.0

4.17 GRILLES

ARCHITECTURAL LOUVRE DOOR (ALD)

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Airfoil's Architectural Louvres consist of 3 models; Architectural Louvre Door (ALD), Channel Louvre 80mm (CWL) and Channel Louvre 55mm (CYL). They are robustly constructed in extruded aluminium to provide great strength while providing a stylish and discrete functionality.

Airfoil's Architectural Louvre Door (ALD) comes complete with stainless steel hinges and specified door handles. Options for the surrounding C channel are 80mm or 55mm deep.

Airfoil's Channel Louvre 80mm (CWL) and Channel Louvre 55mm (CYL) are designed to suit the Airfoil WL blade and YL blade range. The client has the option to 'turn in' or 'turn out' the exterior channel depending on the application.

Airfoil's Architectural Louvres can be ordered with a surrounding flange and finished in any colour, just contact our experienced sales team for expert advice on the construction of your Architectural Louvres.



Product specification codes:

ALD	Architectural Louvre Door
CWL	Channel Louvre 75mm
CYL	Channel Louvre 50mm

Specification: Product code + size.
Example: **ALD 1000x1500** Architectural Louvre Door
1000mm x 1500mm



PROJECT: HORNSBY HOSPITAL, NSW

Optional hardware: lock.



Optional hardware: hinges.





5.0 DAMPERS



5.1 DAMPERS

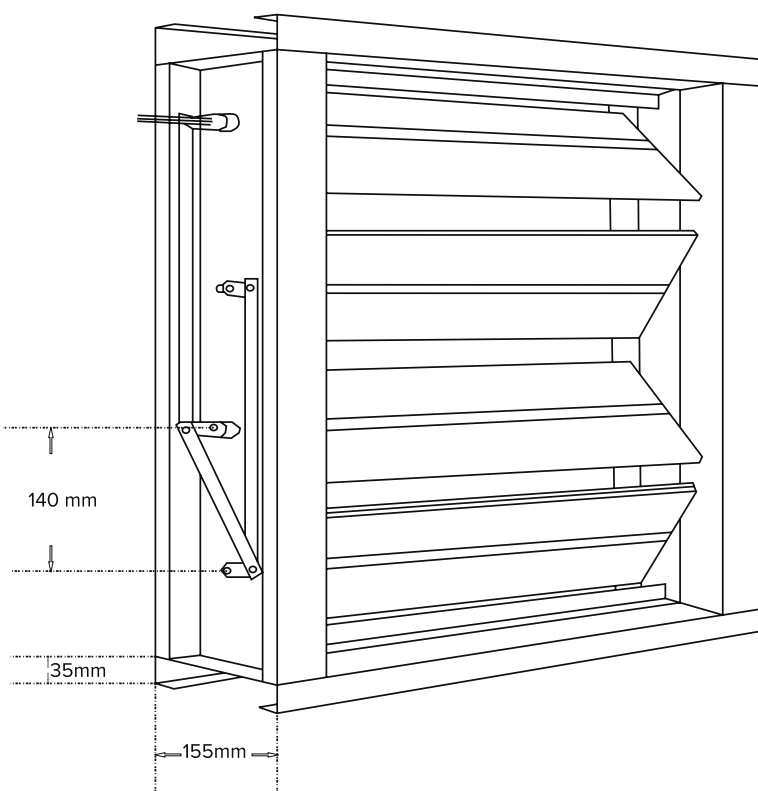
VOLUME CONTROL DAMPER (VCD)

131

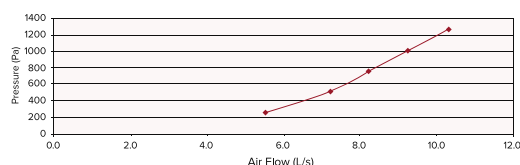


Airfoil's Volume Control Damper is used to provide efficient airflow control in air handling systems. It is manufactured using marine grade aluminium blades and frame with interlocking blades for low leakage.

All Airfoil's Volume Control Dampers are manufactured to 'airway size' and are available in manual or motorised function.



Performance Data



Volume Control Damper Options

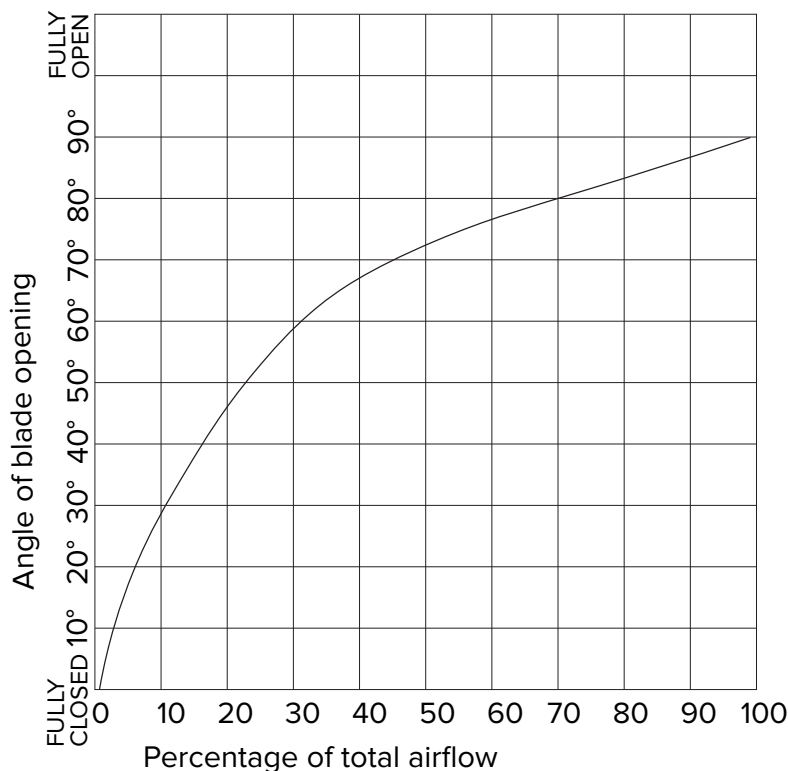
- > *Non-corrosive nylon bushes are used as standard. Optional brass bushes are available on request*
- > *Manual or motorised*
- > *Manufactured to any 'airway size'*

Product specification codes:

VCD	Volume Control Damper Manual	Specification: Product code + size.
VCDM	Volume Control Damper Motorised	Example: VCD 200x200
		Volume control damper manual 200mm x 200mm

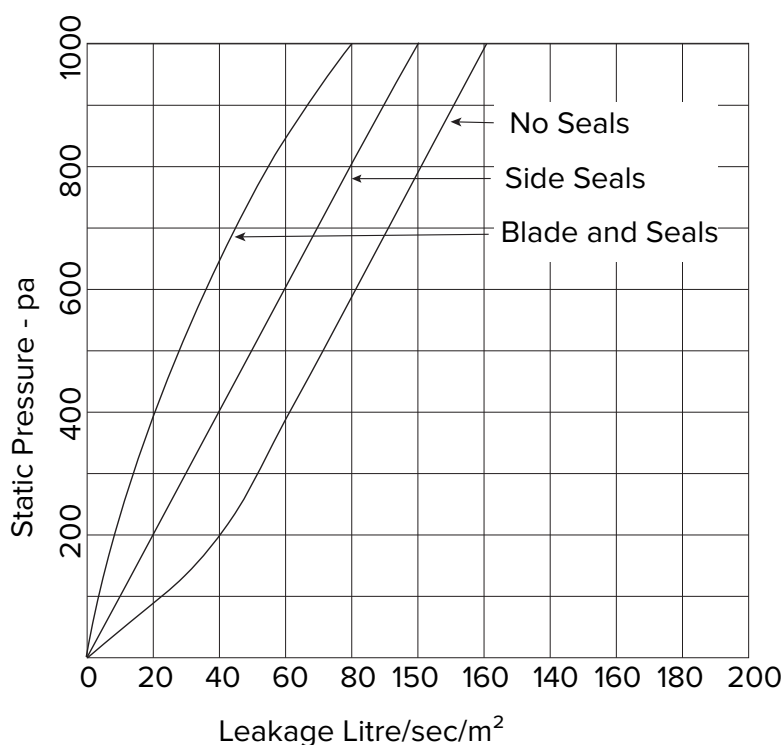
VCD and MVCD Airflow Characteristic

Typical airflow curve for showing percentage of total airflow for various blade opening positions.



VCD and MVCD Leakage Characteristic

Typical leakage chart for VCD and MVCD volume dampers.



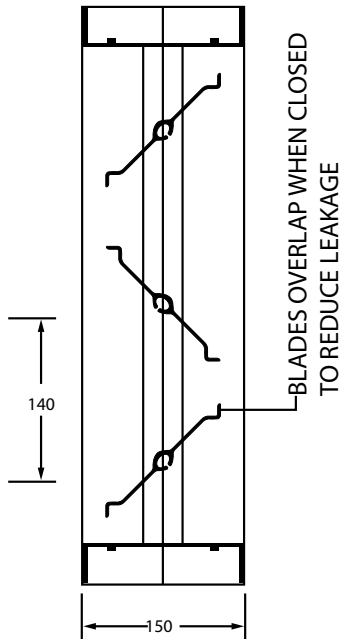
5.1 DAMPERS

VOLUME CONTROL DAMPER (VCD)

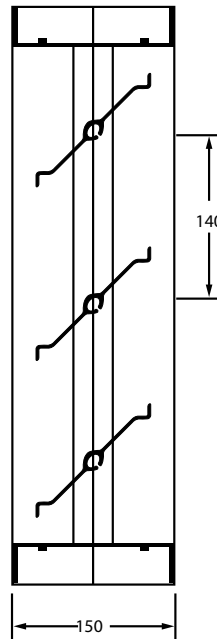
133



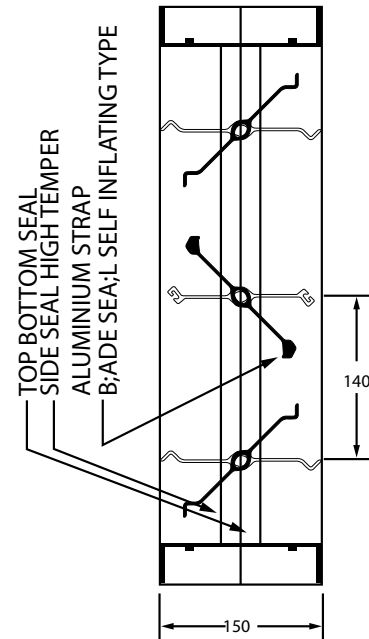
V - O
OPPOSED BLADE
ECONOMY



V - P
PARALLEL BLADE
ECONOMY



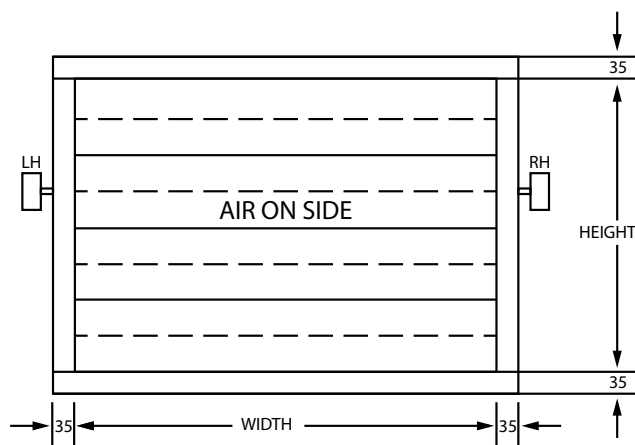
V - L
LOW LEAKAGE
BLADE & SIDE SEALS



- SHAFT = Hexagonal.
- FRAME = 2-mm extruded aluminium

- BLADES = extruded aluminium.
- LINKAGES = 3-m x 20-mm aluminium.
- CORNERS = Screwed and welded.

ORDERING DETAILS



MAXIMUM BLADE LENGTH 1200mm

DETAILS REQUIRED FOR ORDERING

1. MODEL
 2. SIZE - WIDTH X HEIGHT
 3. DRIVE (No. OFF)
(LOCATION)
- I.E.
V - OM 600 X 600
DRIVE LH X 1

Due to going product development, data and dimensions are subject to change.

Airfoil's Non Return Damper is designed to reduce backdraft of air through air conditioning and exhaust ventilation systems.

The frame is manufactured from marine grade extruded aluminium which ensures optimal strength and rigidity whilst the blades are manufactured from lightweight aluminium to ensure maximum damper responsiveness.

All Airfoil's Non Return Dampers are manufactured to 'airway size'.



Non Return Damper Options



Manufactured to any 'airway size'



The blade stack can be linked or unlinked

Product specification codes:

NRD

Non return damper

Specification: Product code + size.

Example: **NRD 200x200** Non return damper
200mm x 200mm



PROJECT: UTZON ROOM OPERA HOUSE, SYDNEY

5.3 DAMPERS

BACK DRAFT DAMPER (BDD)

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Back Draft Dampers are designed to allow airflow in one direction and prevent reverse airflow. They give an effective back draft seal in ducted systems.

Airfoil's Back Draft Damper is made from high-grade galvanised sheet metal and the butterfly blades are made from lightweight aluminium. They are held in the closed position with low resistance steel springs. The airflow from the fans open the blades when the system is active, then close when the system is off. This stops reverse airflow or back draft through the duct.

Airfoil's Back Draft Damper are usually used in conjunction with in-line fans, but may also be used as simple backdraft dampers in a duct system.



Product specification codes:

BDD100 Back Draft Damper 100mm
BDD125 Back Draft Damper 125mm
BDD150 Back Draft Damper 150mm
BDD200 Back Draft Damper 350mm

BDD250 Back Draft Damper 250mm
BDD300 Back Draft Damper 300mm
BDD350 Back Draft Damper 350mm
Nominal neck size.

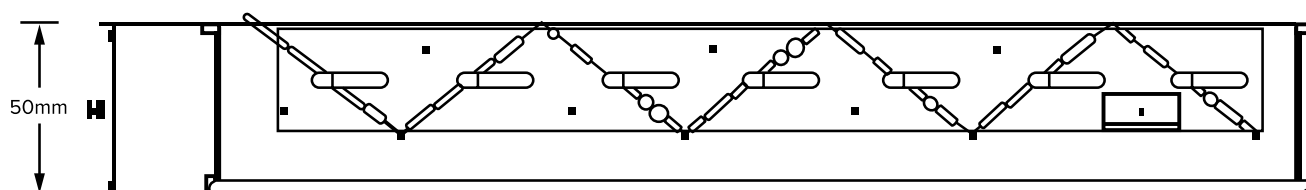
PROJECT: CHARLES STURT UNIVERSITY PORT MACQUARIE, NSW



Airfoil's Opposed Blade Damper (OBD) is manufactured from high quality extruded aluminium. The frame has been specifically designed to easily clip on to a variety of grille faces for ease of installation. It's suitable for use to balance a variety of grille types including eggcrate, double deflection, half chevron, bar grille or ceiling mounted diffusers.

The adjusting screw is easily accessible through the face of the grille, allowing for precise air balancing. The Opposed Blade Damper comes in black anodised as standard.

Cross Sectional Diagram



Performance Data

OBD Area (m2)	L/s	45	65	75	90	110
0.02	Static Pressure (Pa)	0.5	1	1.4	2.5	4
OBD Area (m2)	L/s	90	125	140	155	170
0.05	Static Pressure (Pa)	0.5	1	2.5	3.8	5
OBD Area (m2)	L/s	150	190	240	290	330
0.1	Static Pressure (Pa)	0.5	1.5	2.5	4	5.5
OBD Area (m2)	L/s	250	300	350	390	450
0.15	Static Pressure (Pa)	1.5	2	3	4.5	6
OBD Area (m2)	L/s	380	430	480	540	600
0.18	Static Pressure (Pa)	1.5	2	2.5	4	5.5

Product specification codes:

OBD Opposed Blade Damper

Specification: Product code + size.

Example: **OBD 250x250**

Opposed Blade Damper 250mm x 250mm

5.5 DAMPERS

STREAM SPLITTER DAMPER (SS)

137

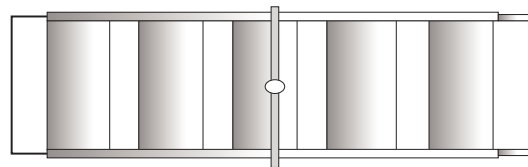
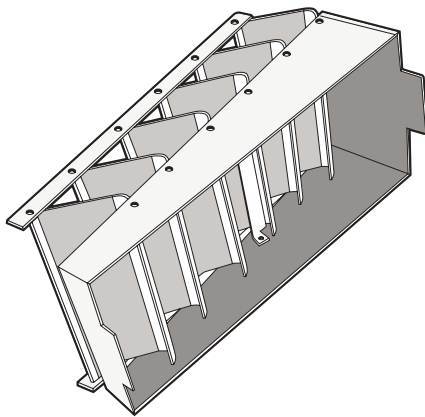


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Airfoil's Stream Splitter Dampers can be manufactured to any size and are adjusted with a screw through the face of the diffuser. This allows for an even discharge of air through the face of the grille through a series of air scoops and can be fitted to the neck of the grille or duct take off.



Cross Sectional Diagram



Product specification codes:

SS Stream Splitter Damper

Specification: Product code + size.

Example: **SS 300x800** Stream Splitter Damper
300mm x 800mm

PROJECT: OPAL AGED CARE, ASHFIELD, SYDNEY





The Motorised Line Damper allows the end user the flexibility to remotely open and close air flows to designated areas. The spiral casing offers easy attachment to the standard flexible duct sizes. Airfoil stocks the complete range of Motorised Line Dampers in 240V and 24V with a full range of electrical components such as touch pads, transformers and zone cables.



PROJECT: ARISE LANE COVE, SYDNEY

Motorised Line Damper Options

> Available in 24V or 240V

> Available in all standard sizes

> Optional touch pads, transformers and zone cables

Product specification codes:

MOTLD1524V 24V Motorised Line Damper 150mm dia
MOTLD2024V 24V Motorised Line Damper 200mm dia
MOTLD2524V 24V Motorised Line Damper 250mm dia
MOTLD3024V 24V Motorised Line Damper 300mm dia
MOTLD3524V 24V Motorised Line Damper 350mm dia
MOTLD4024V 24V Motorised Line Damper 400mm dia
MOTLD4524V 24V Motorised Line Damper 450mm dia

MOTLD1524V 24V Motorised Line Damper 150mm dia
MOTLD2024V 24V Motorised Line Damper 200mm dia
MOTLD2524V 24V Motorised Line Damper 250mm dia
MOTLD3024V 24V Motorised Line Damper 300mm dia
MOTLD3524V 24V Motorised Line Damper 350mm dia
MOTLD4024V 24V Motorised Line Damper 400mm dia
MOTLD4524V 24V Motorised Line Damper 450mm dia

5.7 DAMPERS

INTUMESCENT FIRE DAMPER (IFD)

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Quality System
Quality
Endorsed
Company
ISO 9001
SAI QL 0048

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The Intumescent Fire Damper is ideal for use in applications whereby it is necessary for systems of natural and mechanical ventilation to pass through a fire resistant wall or floor. Airfoil is a proud distributor of the Kilargo range of Intumescent Fire Dampers.

The Kilargo Intumescent Fire Damper is manufactured with parallel intumescent slats mounted in a rigid steel frame. In the event of a fire, the increase in temperature will cause the intumescent slats to expand and fuse together to provide a fire and hot smoke barrier. Intumescent Fire Dampers are available as a square or round cell and are also available mounted in sleeve.

Stock sizes are held, however, any size can be manufactured upon request.



Product specification codes:

IFD Intumescent Fire Damper

PROJECT: KFC MERRYLANDS, SYDNEY







6.0

SHEET METAL

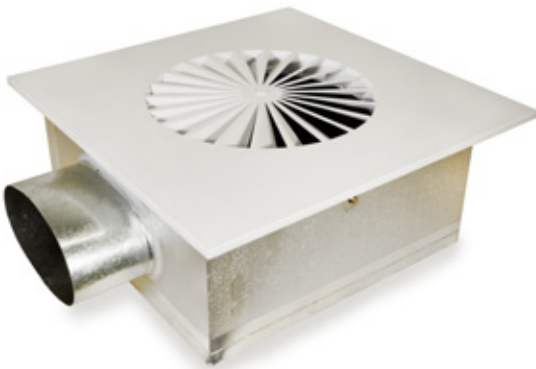


6.1 SHEET METAL SWIRL CUSHION BOX (SWCB)

143



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Airfoil's Swirl Cushion box is manufactured to suit our range of Swirl Diffusers. It can be produced in steel or our fire-rated pre-insulated poly panel board. The box is manufactured with an internal "T" brace and comes complete with the root nut to match the centre swirl screw for easy installation.

The fitting can be manufactured to any desired specification allowing for special height requirements and difficult spigot placements.

Airfoil's range of fire-rated pre-insulated poly panel board cushion boxes are a lightweight alternative to our metal versions.



Product specification codes:

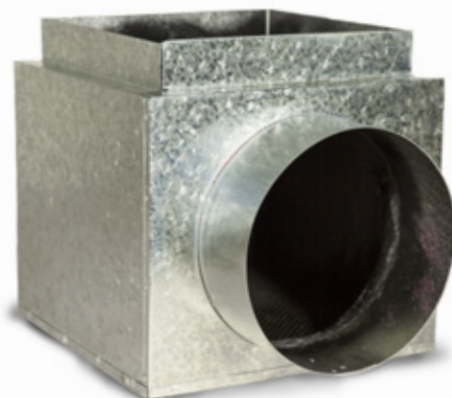
SWCB Swirl Cushion Box

AIRFOIL FACTORY, SYDNEY

Airfoil's Cushion Boxes are designed to "cushion" air movement through the grille in supply air applications. They are manufactured from 0.55 mm galvanised sheet metal to the highest standard and come in a variety of insulation 5mm and 10mm rubber or 13mm, 25mm, 38mm and 50mm fibreglass.

The Airfoil Cushion Box may be "stepped" allowing the insulation to be covered and not exposed.

The Cushion Box is used with most of Airfoil's range of grilles including our Louvre Face Diffuser (LFD), Bevelle Diffuser (BD) and Swirl Diffusers (CDS).



Cushion Box Options

> *No insulation, 5mm rubber, 10mm rubber, 13mm fibreglass, 25mm fibreglass, 38mm fibreglass or 50mm fibreglass are all available on request*

> *Optional "stepped" construction allows the insulation to be covered*

Product specification codes:

ICB Insulated Cushion Box

PCB Plain Cushion Box



6.3 SHEET METAL LINEAR BOX SIDE BOOT (LBSB)

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Airfoil's Linear Box Side Boot is manufactured from 0.55mm galvanised sheet metal. The box can be insulated in 5mm rubber, 10mm rubber, 13mm fibreglass, 25mm fibreglass, 38mm fibreglass or 50mm fibreglass. The spigot is placed on the long side as standard.

Airfoil can manufacture a user-friendly "H" box which enables the boot to be placed at any interval and allows the diffuser to be used for both supply and return applications.

Airfoil's Linear Box Side Boot is commonly used with our Linear Slot and Linear Bar Grille range.

Linear Box Side Boot Options

> No insulation, 5mm rubber, 10mm rubber, 13mm fibreglass, 25mm fibreglass, 38mm fibreglass or 50mm fibreglass are all available on request

> Optional 'H' box for supply and return applications

> Optional "stepped" design

Product specification codes:

LBSB Linear Box Side Boot

PROJECT: LOUIS VUITTON, SYDNEY



Airfoil's Linear Box End Boot are manufactured from 0.55 mm galvanised sheet metal to the highest standard.

They have a spigot placement adjacent to the open end, but differs to the side boot due to the spigot placement being on the short side or end of the box. This particular configuration is useful in areas of restricted ceiling space.

The Linear Box End Boot is compatible with all Airfoil's grille range.



Linear Box End Boot Options

> *No insulation, 5mm rubber, 10mm rubber, 13mm fibreglass, 25mm fibreglass, 38mm fibreglass or 50mm fibreglass are all available on request*

Product specification codes:

LBEB Linear Box End Boot



6.5 SHEET METAL UNI BOOT (UB)

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Airfoil's Uni Boot is manufactured from 0.55 mm galvanised sheet metal to the highest standard. It has a spigot placement opposite the open end (top entry) and is predominantly used in sideblow applications where it may be necessary to achieve maximum throw across the conditioned space.

The Uni Boot is compatible with most of Airfoil's range of grilles.

Uni Boot Options

> No insulation, 5mm rubber, 10mm rubber, 13mm fibreglass, 25mm fibreglass, 38mm fibreglass or 50mm fibreglass are all available on request

> Optional stepped design

Product specification codes:

UB Uni Boot

PROJECT: HAROLD PARK, SYDNEY



Airfoil's Return Air Boxes are manufactured from 0.55 mm galvanised sheet metal to the highest standard. The design allows the box to return air from the face of the Airfoil grille.

The **Top Entry Model** allows the sheet metal spigots to be placed opposite the open end of the box.

The **Side Entry Model** allows the sheet metal spigots to be placed at the side adjacent to the open end.

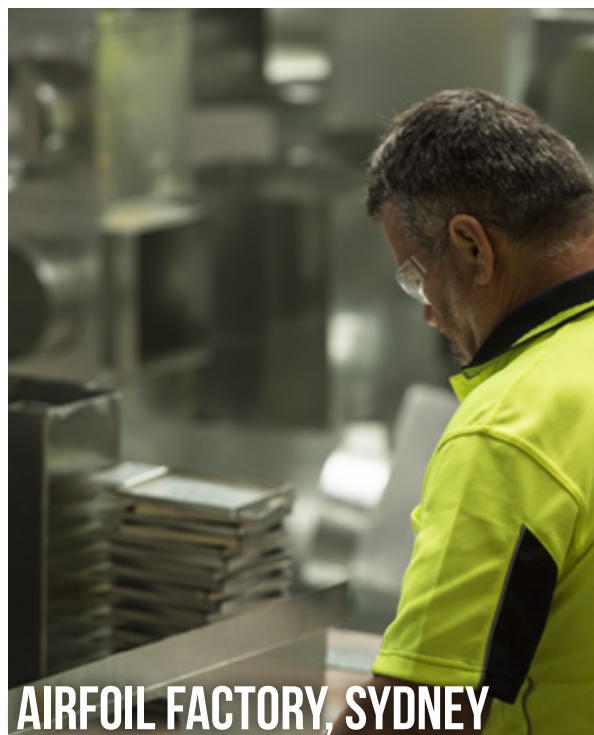
The Return Air Box is generally used in conjunction with Airfoil's range of Return Air Grilles.



Top Entry



Side Entry



AIRFOIL FACTORY, SYDNEY

Return Air Box Options

- > *Standard insulation 5mm rubber. Optional 10mm rubber or 13mm, 25mm, 38mm or 50mm fibreglass are all available on request*
- > *Optional "stepped" design*
- > *Top entry or side entry models*
- > *Multiple duct inlets/outlets*

Product specification codes:

RABTE Return Air Box with Top Entry

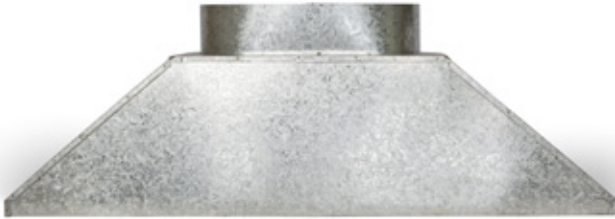
RABSE Return Air Box with Side Entry

6.7 SHEET METAL V-BOX (VB)

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One way V-Box

Airfoil's V-Boxes are manufactured from 0.55 mm galvanised sheet steel and can be manufactured in either a square to round 1 way, 2 way or 3 way configuration. Standard insulation is an internal 5mm rubber. Optional insulation types include 10mm rubber, 13mm fibreglass, 25mm fibreglass, 38mm fibreglass or 50mm fibreglass are all available upon request.



Two way V-Box



Three way V-Box

V-Box Options

- > 1 way, 2 way or 3 way configuration
- > Optional "stepped" designed

- > Standard insulation 5mm rubber. Optional 10mm rubber or 13mm, 25mm, 38mm, 50mm fibreglass are all available on request

Product specification codes:

VB1 One way V-Box

VB2 Two way V-Box

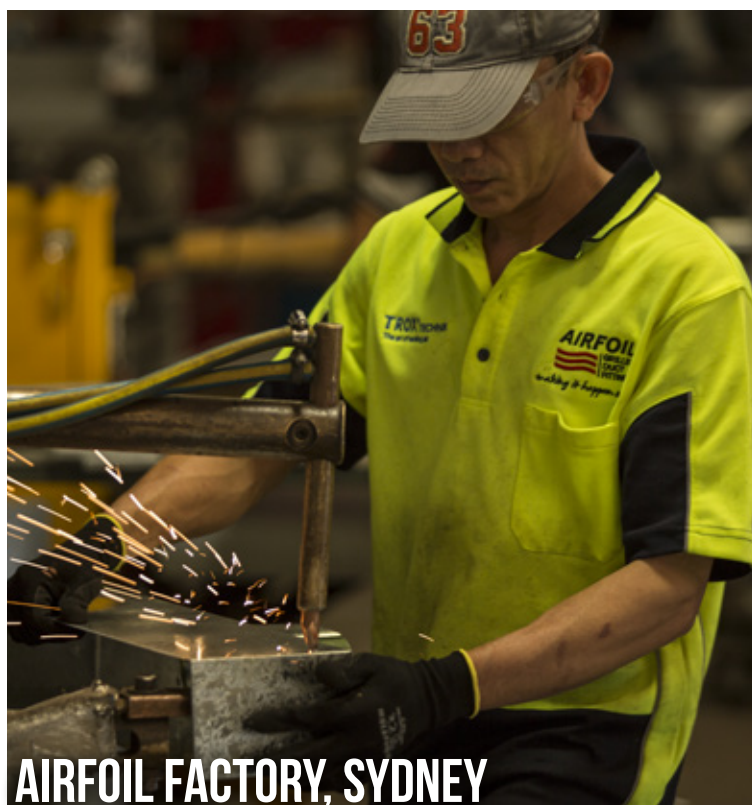
VB3 Three way V-Box



PROJECT: KNOX GRAMMAR SCHOOL, WAHROONGA, NSW

All three different fittings are used in domestic and commercial applications to attach flexible duct to allow the contractor to effectively deliver, supply and return air in a desired configuration plan.

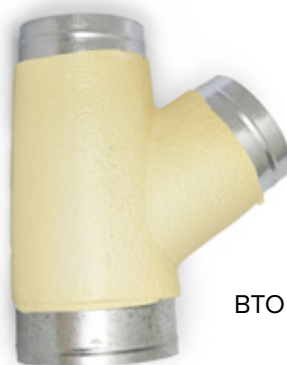
Airfoil's metal Y Fittings, Branch Take Off (BTO) Fittings and Double Branch Takeoff (DBTO) are manufactured from 0.55 mm galvanised sheet metal to the highest standards and come insulated as standard.



AIRFOIL FACTORY, SYDNEY



DBTO



BTO



YP

Duct Fittings Insulated Metal Options

> *Metal insulated or poly insulated*

> *Plain metal or poly*

> *Optional Volume Control Blade*

Product specification codes:

YP	Y Piece Fittings Insulated Metal
BTO	Branch Take Off Fittings Insulated Metal
DBTO	Double Branch Take Off Fittings Insulated Metal

6.8 SHEET METAL DUCT FITTINGS INSULATED METAL

151



Product ordering codes:

YP666 METAL	Y Fitting Insulated Metal 6" x 6" x 6"
YP866 METAL	Y Fitting Insulated Metal 8" x 6" x 6"
YP888 METAL	Y Fitting Insulated Metal 8" x 8" x 8"
YP1088 METAL	Y Fitting Insulated Metal 10" x 8" x 8"
YP101010 METAL	Y Fitting Insulated Metal 10" x 10" x 10"
YP121010 METAL	Y Fitting Insulated Metal 12" x 10" x 10"
YP121212 METAL	Y Fitting Insulated Metal 12" x 12" x 12"
YP141010 METAL	Y Fitting Insulated Metal 14" x 10" x 10"
YP141210 METAL	Y Fitting Insulated Metal 14" x 12" x 10"
YP141212 METAL	Y Fitting Insulated Metal 14" x 12" x 12"
YP141414 METAL	Y Fitting Insulated Metal 14" x 14" x 14"
YP161010 METAL	Y Fitting Insulated Metal 16" x 10" x 10"
YP161212 METAL	Y Fitting Insulated Metal 16" x 12" x 12"
YP161412 METAL	Y Fitting Insulated Metal 16" x 14" x 12"
YP161414 METAL	Y Fitting Insulated Metal 16" x 14" x 14"
YP161616 METAL	Y Fitting Insulated Metal 16" x 16" x 16"
YP181212 METAL	Y Fitting Insulated Metal 18" x 12" x 12"
YP181412 METAL	Y Fitting Insulated Metal 18" x 14" x 12"
YP181414 METAL	Y Fitting Insulated Metal 18" x 14" x 14"
YP181616 METAL	Y Fitting Insulated Metal 18" x 16" x 16"
BT0866 METAL	Branch Take Off Fittings Insulated Metal 8" x 6" x 6"
BT0886 METAL	Branch Take Off Fittings Insulated Metal 8" x 8" x 6"
BT0888 METAL	Branch Take Off Fittings Insulated Metal 8" x 8" x 8"
BT01066 METAL	Branch Take Off Fittings Insulated Metal 10" x 6" x 6"
BT01086 METAL	Branch Take Off Fittings Insulated Metal 10" x 8" x 6"
BT01088 METAL	Branch Take Off Fittings Insulated Metal 10" x 8" x 8"
BT010106 METAL	Branch Take Off Fittings Insulated Metal 10" x 10" x 6"
BT010108 METAL	Branch Take Off Fittings Insulated Metal 10" x 10" x 8"
BT0101010 METAL	Branch Take Off Fittings Insulated Metal 10" x 10" x 10"
BT01288 METAL	Branch Take Off Fittings Insulated Metal 12" x 8" x 8"
BT012106 METAL	Branch Take Off Fittings Insulated Metal 12" x 10" x 6"
BT012108 METAL	Branch Take Off Fittings Insulated Metal 12" x 10" x 8"
BT0121010 METAL	Branch Take Off Fittings Insulated Metal 12" x 10" x 10"
BT012126 METAL	Branch Take Off Fittings Insulated Metal 12" x 12" x 6"
BT012128 METAL	Branch Take Off Fittings Insulated Metal 12" x 12" x 8"
BT0121210 METAL	Branch Take Off Fittings Insulated Metal 12" x 12" x 10"
BT0141010 METAL	Branch Take Off Fittings Insulated Metal 14" x 10" x 10"
BT0141210 METAL	Branch Take Off Fittings Insulated Metal 14" x 12" x 10"
BT0141212 METAL	Branch Take Off Fittings Insulated Metal 14" x 12" x 12"
BT0141410 METAL	Branch Take Off Fittings Insulated Metal 14" x 14" x 10"
BT0141412 METAL	Branch Take Off Fittings Insulated Metal 14" x 14" x 12"
BT0161212 METAL	Branch Take Off Fittings Insulated Metal 16" x 12" x 12"
BT0161412 METAL	Branch Take Off Fittings Insulated Metal 16" x 14" x 12"
BT0161612 METAL	Branch Take Off Fittings Insulated Metal 16" x 16" x 12"
BT0161614 METAL	Branch Take Off Fittings Insulated Metal 16" x 16" x 14"
DBTO8666 METAL	Branch Take Off Fittings Insulated Metal 8" x 6" x 6" x 6"
DBTO8866 METAL	Branch Take Off Fittings Insulated Metal 8" x 8" x 6" x 6"
DBTO10666 METAL	Branch Take Off Fittings Insulated Metal 10" x 6" x 6" x 6"
DBTO10866 METAL	Branch Take Off Fittings Insulated Metal 10" x 8" x 6" x 6"
DBTO10888 METAL	Branch Take Off Fittings Insulated Metal 10" x 8" x 8" x 8"
DBTO101066 METAL	Branch Take Off Fittings Insulated Metal 10" x 10" x 6" x 6"
DBTO101086 METAL	Branch Take Off Fittings Insulated Metal 10" x 10" x 8" x 6"
DBTO101088 METAL	Branch Take Off Fittings Insulated Metal 10" x 10" x 8" x 8"
DBTO12866 METAL	Branch Take Off Fittings Insulated Metal 12" x 8" x 6" x 6"
DBTO12886 METAL	Branch Take Off Fittings Insulated Metal 12" x 8" x 8" x 6"
DBTO12888 METAL	Branch Take Off Fittings Insulated Metal 12" x 8" x 8" x 8"
DBTO121066 METAL	Branch Take Off Fittings Insulated Metal 12" x 10" x 6" x 6"
DBTO121086 METAL	Branch Take Off Fittings Insulated Metal 12" x 10" x 8" x 6"
DBTO121088 METAL	Branch Take Off Fittings Insulated Metal 12" x 10" x 8" x 8"
DBTO12101010 METAL	Branch Take Off Fittings Insulated Metal 12" x 10" x 10" x 10"
DBTO121288 METAL	Branch Take Off Fittings Insulated Metal 12" x 12" x 8" x 8"
DBTO12121010 METAL	Branch Take Off Fittings Insulated Metal 12" x 12" x 10" x 10"
DBTO14101010 METAL	Branch Take Off Fittings Insulated Metal 14" x 10" x 10" x 10"
DBTO141288 METAL	Branch Take Off Fittings Insulated Metal 14" x 12" x 8" x 8"
DBTO14121010 METAL	Branch Take Off Fittings Insulated Metal 14" x 12" x 10" x 10"
DBTO14121210 METAL	Branch Take Off Fittings Insulated Metal 14" x 12" x 12" x 10"
DBTO14121212 METAL	Branch Take Off Fittings Insulated Metal 14" x 12" x 12" x 12"
DBTO141488 METAL	Branch Take Off Fittings Insulated Metal 14" x 14" x 8" x 8"
DBTO14141010 METAL	Branch Take Off Fittings Insulated Metal 14" x 14" x 10" x 10"
DBTO14141212 METAL	Branch Take Off Fittings Insulated Metal 14" x 14" x 12" x 12"
DBTO16101010 METAL	Branch Take Off Fittings Insulated Metal 16" x 10" x 10" x 10"
DBTO16121010 METAL	Branch Take Off Fittings Insulated Metal 16" x 12" x 10" x 10"
DBTO16121212 METAL	Branch Take Off Fittings Insulated Metal 16" x 12" x 12" x 12"
DBTO16141212 METAL	Branch Take Off Fittings Insulated Metal 16" x 14" x 10" x 10"
DBTO16141212 METAL	Branch Take Off Fittings Insulated Metal 16" x 14" x 12" x 12"
DBTO16141414 METAL	Branch Take Off Fittings Insulated Metal 16" x 14" x 14" x 14"

Due to going product development, data and dimensions are subject to change.

Reducers are used in joining applications for duct and airflow management. Airfoil's Reducers are manufactured from 0.55 mm galvanised sheet metal to the highest standard and are available in all standard sizes.



AIRFOIL FACTORY, SYDNEY



Reducer Options

> *Available in all standard sizes
and can be manufactured to
specifications*

Product specification codes:

RED86	Reducer 8" to 6"	RED1210	Reducer 12" to 10"	RED1614	Reducer 16" to 14"	RED1816	Reducer 18" to 16"
RED108	Reducer 10" to 8"	RED1412	Reducer 14" to 12"	RED1814	Reducer 18" to 14"	RED2018	Reducer 20" to 18"



PROJECT: MCDONALDS, GREGORY HILLS, NSW

6.10 SHEET METAL COLLARS (C)

153



Joining Collar

Airfoil's Joining Collar (JC) is used to join flexible duct in various applications. Manufactured from 0.55 mm galvanised sheet metal to the highest standard, Airfoil's Joining Collar suits all common duct sizes.

Airfoil's Starting Collar (SC) is commonly used where flexible duct is mounted to rigid duct.

Airfoil also offers the Starting Collar with an optionally fitted Volume Control Blade (SCVCB) for balancing air flows during commissioning.

Product ordering codes:

JC10	Joining Collar 100mm diameter
JC15	Joining Collar 150mm diameter
JC20	Joining Collar 200mm diameter
JC25	Joining Collar 250mm diameter
JC30	Joining Collar 300mm diameter
JC35	Joining Collar 350mm diameter
JC40	Joining Collar 400mm diameter
JC45	Joining Collar 450mm diameter
JC50	Joining Collar 500mm diameter
SC15	Starting Collar 150mm diameter
SC20	Starting Collar 200mm diameter
SC25	Starting Collar 250mm diameter
SC30	Starting Collar 300mm diameter
SC35	Starting Collar 350mm diameter
SC40	Starting Collar 400mm diameter
SC45	Starting Collar 450mm diameter
SC50	Starting Collar 500mm diameter
SCVCB15	Starting Collar with Volume Control Blade 150mm diameter
SCVCB20	Starting Collar with Volume Control Blade 200mm diameter
SCVCB25	Starting Collar with Volume Control Blade 250mm diameter
SCVCB30	Starting Collar with Volume Control Blade 300mm diameter
SCVCB35	Starting Collar with Volume Control Blade 350mm diameter
SCVCB40	Starting Collar with Volume Control Blade 400mm diameter
SCVCB45	Starting Collar with Volume Control Blade 450mm diameter
SCVCB50	Starting Collar with Volume Control Blade 500mm diameter



Starting Collar



Starting Collar with Volume Control Blade

Collar Options

> *Joining collar, starting collar or starting collar with volume control blade*

> *Available in all common duct sizes, can be manufactured to specifications*

Product specification codes:

JC	Joining Collar
SC	Starting Collar
SCVCB	Starting Collar with Volume Control Blade

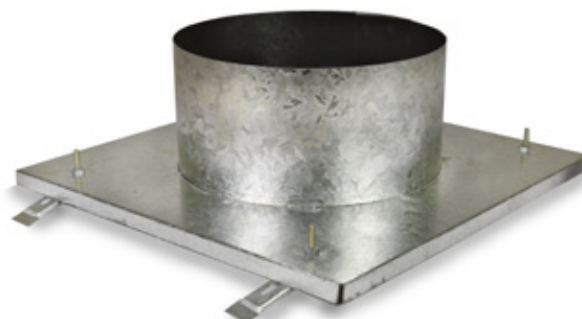
Due to going product development, data and dimensions are subject to change.

Airfoil's Square to Round Reducer with fixing clips are manufactured out of 0.55 galvanised steel to the highest standard. They are finished with matte black paint for a discreet presence when in place. It comes complete with fitted root nuts that holds four metal clips to fasten to a gyprock application.

The Fixing Clip is used for single gyprock applications.

The Z clip is used for double gyprock applications and to also fit our Airfoil flushed face diffusers.

Airfoil's Square to Round Reducer with fixing clips are commonly used on all supply and return air grilles. Airfoil's reducer necks are cost effective and easily installed.



Square to Round Reducer with fixing clips



Square to Round Reducer with Z fixing clips



Product specification codes:

FCRN	Square to Round Reducer with fixing clips
ZCRN	Square to Round Reducer with Z fixing clips

6.12 SHEET METAL REDUCER NECKS (RN)

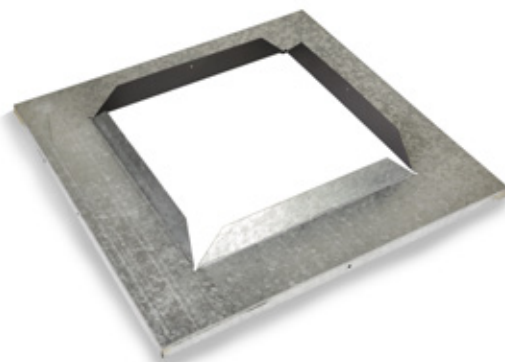
155



Square to Round Reducer Neck



Square to Round Reducer Neck



Square to Square Reducer Neck

Airfoil's Square to Square and Square to Round Reducer Necks are manufactured from 0.55 galvanised steel to the highest quality. They are finished with matte black paint for a discreet presence when positioned. Airfoil's reducer necks are cost effective and easily installed.

The Reducer Neck is commonly used with Airfoil's Louvre Face Diffuser range, which incorporates the 595x595 FACE model.

Product specification codes:

RN1515	Square to Square Reducer Neck 150mm x 150mm	RN200	Square to Round Reducer Neck 200mm diameter
RN225225	Square to Square Reducer Neck 225mm x 225mm	RN250	Square to Round Reducer Neck 250mm diameter
RN3030	Square to Square Reducer Neck 300mm x 300 mm	RN300	Square to Round Reducer Neck 300mm diameter
RN375375	Square to Square Reducer Neck 375mm x 375mm	RN350	Square to Round Reducer Neck 350mm diameter
RN150	Square to Round Reducer Neck 150mm diameter	RN400	Square to Round Reducer Neck 400mm diameter



AIRFOIL FACTORY, SYDNEY

Airfoil's Blanking Plates are manufactured from 0.55 mm black colourbond material to the highest standard. The plate allows for the diffuser to be blanked inactive to provide the correct air distribution movement.

Generally used with Airfoil's Louvre Face Diffuser (LD) and Bevelled Diffuser (BD) range.



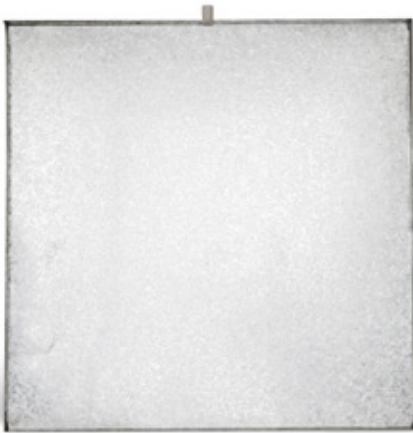
Product specification codes:

BP Blanking Plate



6.14 SHEET METAL DRIP TRAY (DT)

157



Drip Trays are generally placed below an air conditioning unit or in areas of high condensation.

Airfoil's Drip Trays are manufactured from 0.55 mm galvanised sheet metal to the highest standard. Generally 40mm deep, they come complete with the trap.

Airfoil's Drip Trays can be manufactured to any specification.

Product specification codes:

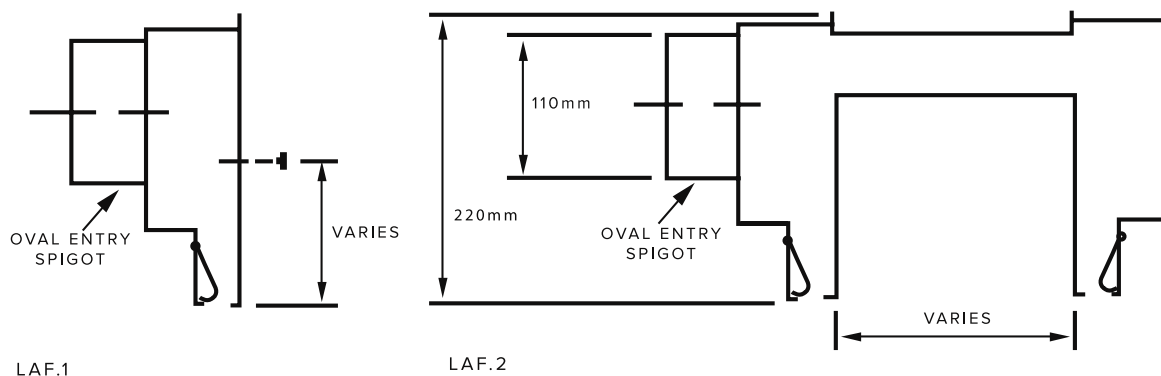
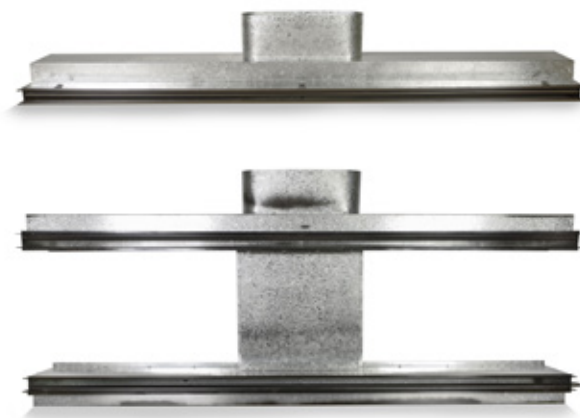
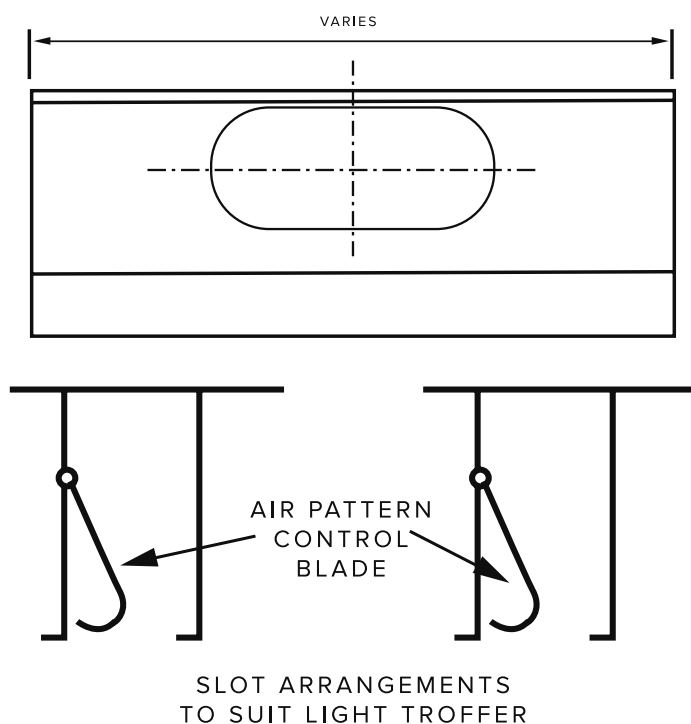
DT11383	Drip Tray 1130mm x 830mm x 50mm	DT14383	Drip Tray 1430mm x 830mm x 50mm
DT14353	Drip Tray 1430mm x 530mm x 50mm	DT15090	Drip Tray 1500mm x 950mm x 50mm



AIRFOIL FACTORY, SYDNEY

Airfoil's Light Air Boot is installed behind a specialised light fitting and is custom-made to any specification. It is made from 0.55mm galvanised steel to the highest standard and comes complete with an internal "J" blade to balance all air movement. Installation is easy with an optional fixed button. The face is finished in black for discreet appearance on installation. Airfoil's Light Air Boot is designed for supply and return air applications.

Sectional diagram



Product specification codes:

SLAB Single Light Air Boot

DLAB Double Light Air Boot

7.0 DUCT



7.1 FLEXIBLE DUCT 3-ZERO PLAIN FLEX (PF)

161



Airfoil's 3-Zero flexible nude core has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8", 10", 12", 14", 16", 18", 20" and is available in standard or acoustic.

Product specification codes:

PF4 6M	4 inch 3-ZERO Plain Flex 6 metres	PF4 3M	4 inch 3-ZERO Plain Flex 3 metres
PF5 6M	5 inch 3-ZERO Plain Flex 6 metres	PF5 3M	5 inch 3-ZERO Plain Flex 3 metres
PF6 6M	6 inch 3-ZERO Plain Flex 6 metres	PF6 3M	6 inch 3-ZERO Plain Flex 3 metres
PF8 6M	8 inch 3-ZERO Plain Flex 6 metres	PF8 3M	8 inch 3-ZERO Plain Flex 3 metres
PF10 6M	10 inch 3-ZERO Plain Flex 6 metres	PF10 3M	10 inch 3-ZERO Plain Flex 3 metres
PF12 6M	12 inch 3-ZERO Plain Flex 6 metres	PF12 3M	12 inch 3-ZERO Plain Flex 3 metres
PF14 6M	14 inch 3-ZERO Plain Flex 6 metres	PF14 3M	14 inch 3-ZERO Plain Flex 3 metres
PF16 6M	16 inch 3-ZERO Plain Flex 6 metres	PF16 3M	16 inch 3-ZERO Plain Flex 3 metres
PF18 6M	18 inch 3-ZERO Plain Flex 6 metres	PF18 3M	18 inch 3-ZERO Plain Flex 3 metres
PF20 6M	20 inch 3-ZERO Plain Flex 6 metres	PF20 3M	20 inch 3-ZERO Plain Flex 3 metres

AIRFOIL FACTORY, SYDNEY



Airfoil's 3-Zero R0.6 flexible duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R0.6 with a thickness of 25mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.



Product specification codes:

FF 46R0.6 6M	4 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 46R0.6 3M	4 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 56R0.6 6M	5 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 56R0.6 3M	5 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 66R0.6 6M	6 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 66R0.6 3M	6 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 86R0.6 6M	8 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 86R0.6 3M	8 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 106R0.6 6M	10 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 106R0.6 3M	10 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 126R0.6 6M	12 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 126R0.6 3M	12 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 146R0.6 6M	14 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 146R0.6 3M	14 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 166R0.6 6M	16 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 166R0.6 3M	16 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 186R0.6 6M	18 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 186R0.6 3M	18 inch 3-ZERO R0.6 Flame Flex 3 metres
FF 206R0.6 6M	20 inch 3-ZERO R0.6 Flame Flex 6 metres	FF 206R0.6 3M	20 inch 3-ZERO R0.6 Flame Flex 3 metres



PROJECT: ZARA, BRISBANE

7.3 FLEXIBLE DUCT

3-ZERO R1.0 FLAME FLEX (FF)

163



Airfoil's 3-Zero R1.0 flexible duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R1.0 with a thickness of 70mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

Product specification codes:

FF 4R1.0 6M	4 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 4R1.0 3M	4 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 5R1.0 6M	5 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 5R1.0 3M	5 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 6R1.0 6M	6 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 6R1.0 3M	6 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 8R1.0 6M	8 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 8R1.0 3M	8 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 10R1.0 6M	10 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 10R1.0 3M	10 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 12R1.0 6M	12 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 12R1.0 3M	12 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 14R1.0 6M	14 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 14R1.0 3M	14 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 16R1.0 6M	16 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 16R1.0 3M	16 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 18R1.0 6M	18 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 18R1.0 3M	18 inch 3-ZERO R1.0 Flame Flex 3 metres
FF 20R1.0 6M	20 inch 3-ZERO R1.0 Flame Flex 6 metres	FF 20R1.0 3M	20 inch 3-ZERO R1.0 Flame Flex 3 metres



AIRFOIL FACTORY, SYDNEY

Airfoil's 3-Zero R1.5 flexible duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R1.5 with a thickness of 90mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.



Product specification codes:

FF4R1.5 6M	4 inch 3-ZERO R1.5 Flame Flex 6 metres	FF4R1.5 3M	4 inch 3-ZERO R1.5 Flame Flex 3 metres
FF5R1.5 6M	5 inch 3-ZERO R1.5 Flame Flex 6 metres	FF5R1.5 3M	5 inch 3-ZERO R1.5 Flame Flex 3 metres
FF6R1.5 6M	6 inch 3-ZERO R1.5 Flame Flex 6 metres	FF6R1.5 3M	6 inch 3-ZERO R1.5 Flame Flex 3 metres
FF8R1.5 6M	8 inch 3-ZERO R1.5 Flame Flex 6 metres	FF8R1.5 3M	8 inch 3-ZERO R1.5 Flame Flex 3 metres
FF10R1.5 6M	10 inch 3-ZERO R1.5 Flame Flex 6 metres	FF10R1.5 3M	10 inch 3-ZERO R1.5 Flame Flex 3 metres
FF12R1.5 6M	12 inch 3-ZERO R1.5 Flame Flex 6 metres	FF12R1.5 3M	12 inch 3-ZERO R1.5 Flame Flex 3 metres
FF14R1.5 6M	14 inch 3-ZERO R1.5 Flame Flex 6 metres	FF14R1.5 3M	14 inch 3-ZERO R1.5 Flame Flex 3 metres
FF16R1.5 6M	16 inch 3-ZERO R1.5 Flame Flex 6 metres	FF16R1.5 3M	16 inch 3-ZERO R1.5 Flame Flex 3 metres
FF18R1.5 6M	18 inch 3-ZERO R1.5 Flame Flex 6 metres	FF18R1.5 3M	18 inch 3-ZERO R1.5 Flame Flex 3 metres
FF20R1.5 6M	20 inch 3-ZERO R1.5 Flame Flex 6 metres	FF20R1.5 3M	20 inch 3-ZERO R1.5 Flame Flex 3 metres



7.5 FLEXIBLE DUCT

3-ZERO R2.0 FLAME FLEX (FF)

165



Airfoil's 3-Zero R2.0 flexible duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R2.0 with a thickness of 90mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

Product specification codes:

FF 4R2.0 6M	4 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FF 4R2.0 6M	4 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres
FF 5R2.0 6M	5 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 5R2.0 6M	5 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FF 6R2.0 6M	6 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 6R2.0 6M	6 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FF 8R2.0 6M	8 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 8R2.0 6M	8 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FF 10R2.0 6M	10 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 10R2.0 6M	10 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FF 12R2.0 6M	12 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 12R2.0 6M	12 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FF 14R2.0 6M	14 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 14R2.0 6M	14 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FF 16R2.0 6M	16 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 16R2.0 6M	16 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FF 18R2.0 6M	18 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 18R2.0 6M	18 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FF 20R2.0 6M	20 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FF 20R2.0 6M	20 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres



PROJECT: WOOLWORTHS CROWS NEST, SYDNEY

Airfoil's 3-Zero R0.6 flexible acoustic duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R0.6 with a thickness of 25mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8", 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.



Product specification codes:

FFAC 46R0.6 6M	4 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 46R0.6 3M	4 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 56R0.6 6M	5 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 56R0.6 3M	5 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 66R0.6 6M	6 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 66R0.6 3M	6 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 86R0.6 6M	8 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 86R0.6 3M	8 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 106R0.6 6M	10 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 106R0.6 3M	10 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 126R0.6 6M	12 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 126R0.6 3M	12 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 146R0.6 6M	14 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 146R0.6 3M	14 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 166R0.6 6M	16 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 166R0.6 3M	16 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 186R0.6 6M	18 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 186R0.6 3M	18 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres
FFAC 206R0.6 6M	20 inch 3-ZERO R0.6 Flame Flex Acoustic 6 metres	FFAC 206R0.6 3M	20 inch 3-ZERO R0.6 Flame Flex Acoustic 3 metres



7.7 FLEXIBLE DUCT

3-ZERO R1.0 FLAME FLEX ACOUSTIC (FFAC)

167



Airfoil's 3-Zero R1.0 flexible acoustic duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R1.0 with a thickness of 70mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

Product specification codes:

FFAC 4R1.0 6M	4 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 4R1.0 3M	4 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 5R1.0 6M	5 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 5R1.0 3M	5 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 6R1.0 6M	6 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 6R1.0 3M	6 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 8R1.0 6M	8 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 8R1.0 3M	8 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 10R1.0 6M	10 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 10R1.0 3M	10 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 12R1.0 6M	12 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 12R1.0 3M	12 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 14R1.0 6M	14 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 14R1.0 3M	14 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 16R1.0 6M	16 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 16R1.0 3M	16 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 18R1.0 6M	18 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 18R1.0 3M	18 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres
FFAC 20R1.0 6M	20 inch 3-ZERO R1.0 Flame Flex Acoustic 6 metres	FFAC 20R1.0 3M	20 inch 3-ZERO R1.0 Flame Flex Acoustic 3 metres



PROJECT: 200 GEORGE STREET, SYDNEY

Airfoil's 3-Zero R1.5 flexible acoustic duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R1.5 with a thickness of 90mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.



Product specification codes:

FFAC 4R1.5 6M	4 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 4R1.5 6M	4 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 5R1.5 6M	5 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 5R1.5 6M	5 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 6R1.5 6M	6 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 6R1.5 6M	6 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 8R1.5 6M	8 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 8R1.5 6M	8 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 10R1.5 6M	10 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 10R1.5 6M	10 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 12R1.5 6M	12 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 12R1.5 6M	12 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 14R1.5 6M	14 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 14R1.5 6M	14 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 16R1.5 6M	16 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 16R1.5 6M	16 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 18R1.5 6M	18 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 18R1.5 6M	18 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres
FFAC 20R1.5 6M	20 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres	FFAC 20R1.5 6M	20 inch 3-ZERO R1.5 Flame Flex Acoustic 6 metres



7.9 FLEXIBLE DUCT

3-ZERO R2.0 FLAME FLEX ACOUSTIC (FFAC)

169



AIRFOIL
GRILLES
DUCT
FITTINGS
making it happen sooner...



Airfoil's 3-Zero R2.0 flexible acoustic duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The duct has a black inner core with a metalised outer surface multi-layered construction containing high-level grade flame retardant water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R2.0 with a thickness of 90mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

Product specification codes:

FFAC 4R2.0 6M	4 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 4R2.0 3M	4 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 5R2.0 6M	5 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 5R2.0 3M	5 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 6R2.0 6M	6 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 6R2.0 3M	6 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 8R2.0 6M	8 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 8R2.0 3M	8 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 10R2.0 6M	10 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 10R2.0 3M	10 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 12R2.0 6M	12 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 12R2.0 3M	12 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 14R2.0 6M	14 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 14R2.0 3M	14 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 16R2.0 6M	16 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 16R2.0 3M	16 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 18R2.0 6M	18 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 18R2.0 3M	18 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres
FFAC 20R2.0 6M	20 inch 3-ZERO R2.0 Flame Flex Acoustic 6 metres	FFAC 20R2.0 3M	20 inch 3-ZERO R2.0 Flame Flex Acoustic 3 metres



PROJECT: WET & WILD EASTERN CREEK, NSW

Airfoil's 4-Zero nude core duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

This duct has an Aluminium/Polyester inner surface, Metalised Polyester outer surface multi-layered construction containing high-level flame retardant Water based adhesive with high tensile wire helix encapsulated. The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

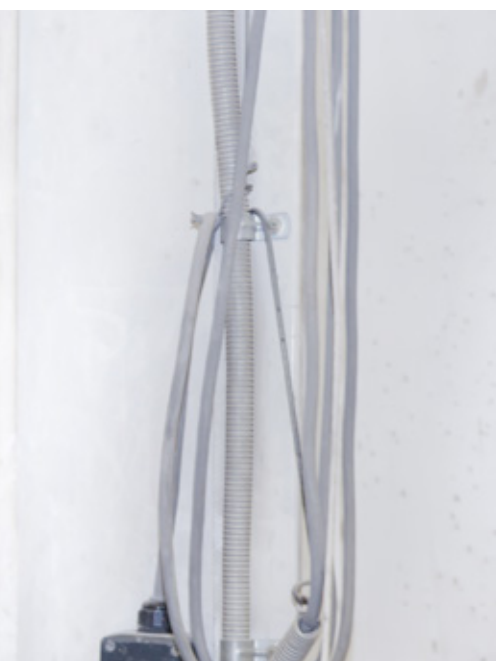


Product specification codes:

PF44 6M	4 inch 4-ZERO Plain Flex 6 metres	PF44 3M	4 inch 3-ZERO Plain Flex 3 metres
PF54 6M	5 inch 4-ZERO Plain Flex 6 metres	PF54 3M	5 inch 3-ZERO Plain Flex 3 metres
PF64 6M	6 inch 4-ZERO Plain Flex 6 metres	PF64 3M	6 inch 3-ZERO Plain Flex 3 metres
PF84 6M	8 inch 4-ZERO Plain Flex 6 metres	PF84 3M	8 inch 3-ZERO Plain Flex 3 metres
PF104 6M	10 inch 4-ZERO Plain Flex 6 metres	PF104 3M	10 inch 3-ZERO Plain Flex 3 metres
PF124 6M	12 inch 4-ZERO Plain Flex 6 metres	PF124 3M	12 inch 3-ZERO Plain Flex 3 metres
PF144 6M	14 inch 4-ZERO Plain Flex 6 metres	PF144 3M	14 inch 3-ZERO Plain Flex 3 metres
PF164 6M	16 inch 4-ZERO Plain Flex 6 metres	PF164 3M	16 inch 3-ZERO Plain Flex 3 metres
PF184 6M	18 inch 4-ZERO Plain Flex 6 metres	PF164 3M	18 inch 3-ZERO Plain Flex 3 metres
PF204 6M	20 inch 4-ZERO Plain Flex 6 metres	PF204 3M	20 inch 3-ZERO Plain Flex 3 metres



AIRFOIL FACTORY, SYDNEY



7.11 FLEXIBLE DUCT

4-ZERO R0.6 PYRO FLEX (PYF)

171



Airfoil's 4-Zero R0.6 flexible duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The Aluminium 4-Zero Inner Core with Metalised Outer surface has a multi-layered construction containing high-level grade Flame Retardant Water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R0.6 with a thickness of 25mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

Product specification codes:

PYF 4R0.6 6M	4 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 4R0.6 3M	4 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 5R0.6 6M	5 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 5R0.6 3M	5 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 6R0.6 6M	6 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 6R0.6 3M	6 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 8R0.6 6M	8 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 8R0.6 3M	8 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 10R0.6 6M	10 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 10R0.6 3M	10 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 12R0.6 6M	12 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 12R0.6 3M	12 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 14R0.6 6M	14 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 14R0.6 3M	14 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 16R0.6 6M	16 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 16R0.6 3M	16 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 18R0.6 6M	18 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 18R0.6 3M	18 inch 4-ZERO R0.6 Pyro Flex 3 metres
PYF 20R0.6 6M	20 inch 4-ZERO R0.6 Pyro Flex 6 metres	PYF 20R0.6 3M	20 inch 4-ZERO R0.6 Pyro Flex 3 metres

PROJECT: MACQUARIE PARK VILLAGE, NSW



Airfoil's 4-Zero R1.0 flexible duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The Aluminium 4-Zero Inner Core with Metalised Outer surface has a multi-layered construction containing high-level grade Flame Retardant Water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R1.0 with a thickness of 70mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8", 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.



Product specification codes:

PYF 4R1.0 6M	4 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 4R1.0 3M	4 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 5R1.0 6M	5 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 5R1.0 3M	5 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 6R1.0 6M	6 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 6R1.0 3M	6 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 8R1.0 6M	8 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 8R1.0 3M	8 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 10R1.0 6M	10 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 10R1.0 3M	10 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 12R1.0 6M	12 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 12R1.0 3M	12 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 14R1.0 6M	14 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 14R1.0 3M	14 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 16R1.0 6M	16 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 16R1.0 3M	16 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 18R1.0 6M	18 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 18R1.0 3M	18 inch 4-ZERO R1.0 Pyro Flex 3 metres
PYF 20R1.0 6M	20 inch 4-ZERO R1.0 Pyro Flex 6 metres	PYF 20R1.0 3M	20 inch 4-ZERO R1.0 Pyro Flex 3 metres

7.13 FLEXIBLE DUCT 4-ZERO R1.5 PYRO FLEX (PYF)

173



Airfoil's 4-Zero R1.5 flexible duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The Aluminium 4-Zero Inner Core with Metalised Outer surface has a multi-layered construction containing high-level grade Flame Retardant Water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R1.5 with a thickness of 90mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8" 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

Product specification codes:

PYF 4R1.5 6M	4 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 4R1.5 6M	4 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 5R1.5 6M	5 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 5R1.5 6M	5 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 6R1.5 6M	6 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 6R1.5 6M	6 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 8R1.5 6M	8 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 8R1.5 6M	8 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 10R1.5 6M	10 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 10R1.5 6M	10 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 12R1.5 6M	12 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 12R1.5 6M	12 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 14R1.5 6M	14 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 14R1.5 6M	14 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 16R1.5 6M	16 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 16R1.5 6M	16 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 18R1.5 6M	18 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 18R1.5 6M	18 inch 4-ZERO R1.5 Pyro Flex 6 metres
PYF 20R1.5 6M	20 inch 4-ZERO R1.5 Pyro Flex 6 metres	PYF 20R1.5 6M	20 inch 4-ZERO R1.5 Pyro Flex 6 metres



PROJECT: COFFS HARBOUR JUSTICE PRECINCT, NSW

Airfoil's 4-Zero R2.0 flexible duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The Aluminium 4-Zero Inner Core with Metalised Outer surface has a multi-layered construction containing high-level grade Flame Retardant Water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R2.0 with a thickness of 90mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8", 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.



Product specification codes:

PYF 4R2.0 6M	4 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 4R2.0 3M	4 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 5R2.0 6M	5 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 5R2.0 3M	5 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 6R2.0 6M	6 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 6R2.0 3M	6 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 8R2.0 6M	8 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 8R2.0 3M	8 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 10R2.0 6M	10 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 10R2.0 3M	10 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 12R2.0 6M	12 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 12R2.0 3M	12 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 14R2.0 6M	14 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 14R2.0 3M	14 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 16R2.0 6M	16 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 16R2.0 3M	16 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 18R2.0 6M	18 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 18R2.0 3M	18 inch 4-ZERO R2.0 Pyro Flex 3 metres
PYF 20R2.0 6M	20 inch 4-ZERO R2.0 Pyro Flex 6 metres	PYF 20R2.0 3M	20 inch 4-ZERO R2.0 Pyro Flex 3 metres



7.15 FLEXIBLE DUCT

4-ZERO R0.6 PYRO FLEX ACOUSTIC (PYFAC)

175



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Airfoil's 4-Zero R0.6 flexible acoustic duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The Aluminium 4-Zero Inner Core with Metalised Outer surface has a multi-layered construction containing high-level grade Flame Retardant Water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R0.6 with a thickness of 25mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8", 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

Product specification codes:

PYFAC 4R0.6 6M	4 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 4R0.6 3M	4 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 5R0.6 6M	5 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 5R0.6 3M	5 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 6R0.6 6M	6 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 6R0.6 3M	6 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 8R0.6 6M	8 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 8R0.6 3M	8 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 10R0.6 6M	10 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 10R0.6 3M	10 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 12R0.6 6M	12 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 12R0.6 3M	12 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 14R0.6 6M	14 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 14R0.6 3M	14 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 16R0.6 6M	16 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 16R0.6 3M	16 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 18R0.6 6M	18 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 18R0.6 3M	18 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres
PYFAC 20R0.6 6M	20 inch 4-ZERO R0.6 Pyro Flex Acoustic 6 metres	PYFAC 20R0.6 3M	20 inch 4-ZERO R0.6 Pyro Flex Acoustic 3 metres



PROJECT: SOKYO RESTAURANT, THE STAR, SYDNEY

Airfoil's 4-Zero R1.0 flexible acoustic duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The Aluminium 4-Zero Inner Core with Metalised Outer surface has a multi-layered construction containing high-level grade Flame Retardant Water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R1.0 with a thickness of 70mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8", 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.



Product specification codes:

PYFAC 4R1.0 6M	4 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 4R1.0 3M	4 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 5R1.0 6M	5 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 5R1.0 3M	5 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 6R1.0 6M	6 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 6R1.0 3M	6 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 8R1.0 6M	8 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 8R1.0 3M	8 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 10R1.0 6M	10 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 10R1.0 3M	10 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 12R1.0 6M	12 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 12R1.0 3M	12 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 14R1.0 6M	14 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 14R1.0 3M	14 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 16R1.0 6M	16 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 16R1.0 3M	16 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 18R1.0 6M	18 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 18R1.0 3M	18 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres
PYFAC 20R1.0 6M	20 inch 4-ZERO R1.0 Pyro Flex Acoustic 6 metres	PYFAC 20R1.0 3M	20 inch 4-ZERO R1.0 Pyro Flex Acoustic 3 metres



7.17 FLEXIBLE DUCT

4-ZERO R1.5 PYRO FLEX ACOUSTIC (PYFAC)

177



Airfoil's 4-Zero R1.5 flexible acoustic duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The Aluminium 4-Zero Inner Core with Metalised Outer surface has a multi-layered construction containing high-level grade Flame Retardant Water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R1.5 with a thickness of 70mm.

The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8", 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.

Product specification codes:

PYFAC 4R1.5 6M	4 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 4R1.5 6M	4 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 5R1.5 6M	5 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 5R1.5 6M	5 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 6R1.5 6M	6 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 6R1.5 6M	6 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 8R1.5 6M	8 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 8R1.5 6M	8 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 10R1.5 6M	10 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 10R1.5 6M	10 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 12R1.5 6M	12 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 12R1.5 6M	12 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 14R1.5 6M	14 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 14R1.5 6M	14 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 16R1.5 6M	16 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 16R1.5 6M	16 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 18R1.5 6M	18 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 18R1.5 6M	18 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres
PYFAC 20R1.5 6M	20 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres	PYFAC 20R1.5 6M	20 inch 4-ZERO R1.5 Pyro Flex Acoustic 6 metres

PROJECT: CONVENTION CENTRE, DARLING HARBOUR, SYDNEY



Airfoil's 4-Zero R2.0 flexible acoustic duct has been tested and meets all requirements of Australian Standards AS 4254.1 2012 and Building Codes of Australia Domestic and Commercial Air Handling Systems.

The Aluminium 4-Zero Inner Core with Metalised Outer surface has a multi-layered construction containing high-level grade Flame Retardant Water based adhesive with high tensile wire helix encapsulated. The Metalised Outer Layer has a multi-layered construction containing high quality grade flame retardant adhesive. The Polyester Insulation Blanket achieves a thermal rating of R2.0 with a thickness of 90mm.

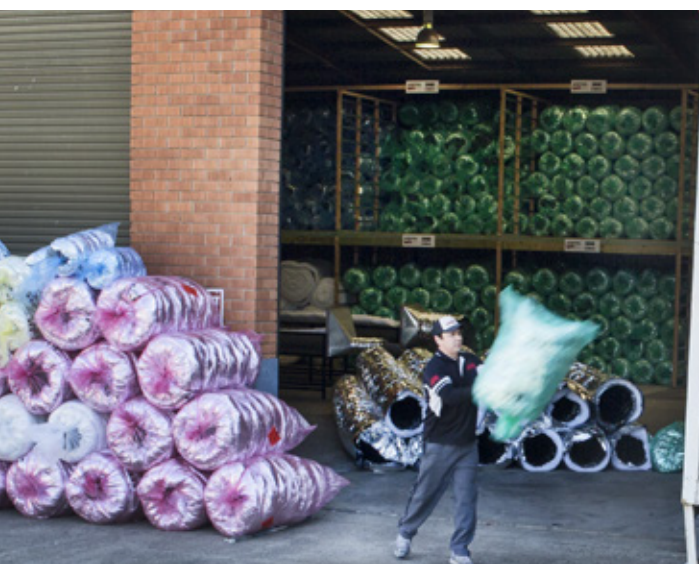
The operating pressure range is 1000 Pa positive to 200 Pa negative and the operating temperature range is -10C to +80C.

Available sizes are 4", 5", 6", 8", 10", 12", 14", 16", 18", 20" in standard or acoustic and in 3 or 6 metre lengths.



Product specification codes:

PYFAC 4R2.0 6M	4 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 4R2.0 3M	4 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 5R2.0 6M	5 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 5R2.0 3M	5 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 6R2.0 6M	6 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 6R2.0 3M	6 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 8R2.0 6M	8 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 8R2.0 3M	8 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 10R2.0 6M	10 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 10R2.0 3M	10 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 12R2.0 6M	12 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 12R2.0 3M	12 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 14R2.0 6M	14 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 14R2.0 3M	14 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 16R2.0 6M	16 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 16R2.0 3M	16 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 18R2.0 6M	18 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 18R2.0 3M	18 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres
PYFAC 20R2.0 6M	20 inch 4-ZERO R2.0 Pyro Flex Acoustic 6 metres	PYFAC 20R2.0 3M	20 inch 4-ZERO R2.0 Pyro Flex Acoustic 3 metres



AIRFOIL FACTORY, SYDNEY



7.19 FLEXIBLE DUCT SEMI RIGID ALUMINIUM DUCT (SRAD)

179



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DUCT
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Airfoil's Semi Rigid Aluminium Duct is made from high quality aluminium that provides excellent flexibility without loss of strength. This lightweight 3 metre duct is easy to use and manipulate on installation, provides air tight seams without the need for adhesives and is highly puncture and corrosion resistant. The Triple Locked corrugated construction with a high operating temperature and low pressure loss makes it perfect for commercial and domestic applications; kitchen range hoods, bathrooms and laundry ventilation.

Technical Data

Temperature Rating -30C to +240C

Manufactured material thickness 0.10mm

Complies with Australian Standards – AS1668.1

4 Zero Fire Rating complies to Australian Standards – 1530.3

Product specification codes:

SR100	Semi Rigid Aluminium Duct 100mm diameter (4 inches) 3 metres length
SR125	Semi Rigid Aluminium Duct 125mm diameter (5 inches) 3 metres length
SR150	Semi Rigid Aluminium Duct 150mm diameter (6 inches) 3 metres length
SR200	Semi Rigid Aluminium Duct 200mm diameter (8 inches) 3 metres length
SR250	Semi Rigid Aluminium Duct 250mm diameter (10 inches) 3 metres length



PROJECT: THE MATER HOSPITAL, SYDNEY

Climate Zone Maps

Australia has a varied climate, leading to different locations around the country having different heating and cooling requirements. To account for these differences the energy efficiency Deemed-to-Satisfy Provisions vary from location to location and for simplicity, locations with similar climates have been combined into eight climate zones.

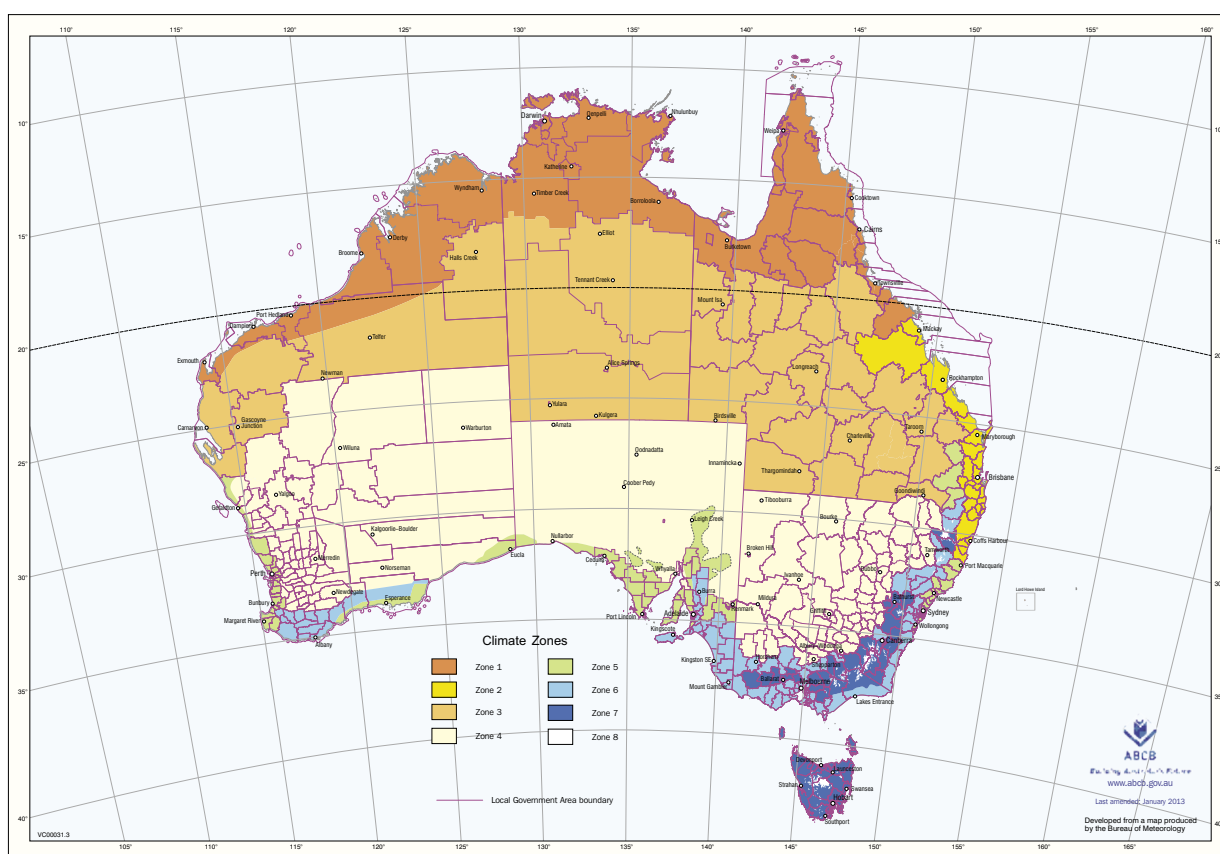
The following provides a brief description of each NCC climate zone:

Climate zone 1 - High humidity summer, warm winter
Climate zone 2 - Warm humid summer, mild winter
Climate zone 3 - Hot dry summer, warm winter

Climate zone 4 - Hot dry summer, cool winter
Climate zone 5 - Warm temperate
Climate zone 6 - Mild temperate
Climate zone 7 - Cool temperate
Climate zone 8 - Alpine

These eight climate zones are illustrated in the form of a climate zone map which was created using Bureau of Meteorology climatic data with two supplementary zones added to accommodate an additional temperate zone and alpine area. The climate zone boundaries are also aligned with local government areas and are therefore subject to change from time to time.

Location and element	Minimum Total R-Value for ductwork							
Location	1	2	3	4	5	6	7	8
Ductwork within conditioned space	R1.2	R1.2	R1.2	R1.0	R1.2	R1.0	R1.0	R1.6
Ductwork exposed to Sun	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.4
Ductwork in all other locations	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.4



Due to going product development, data and dimensions are subject to change.

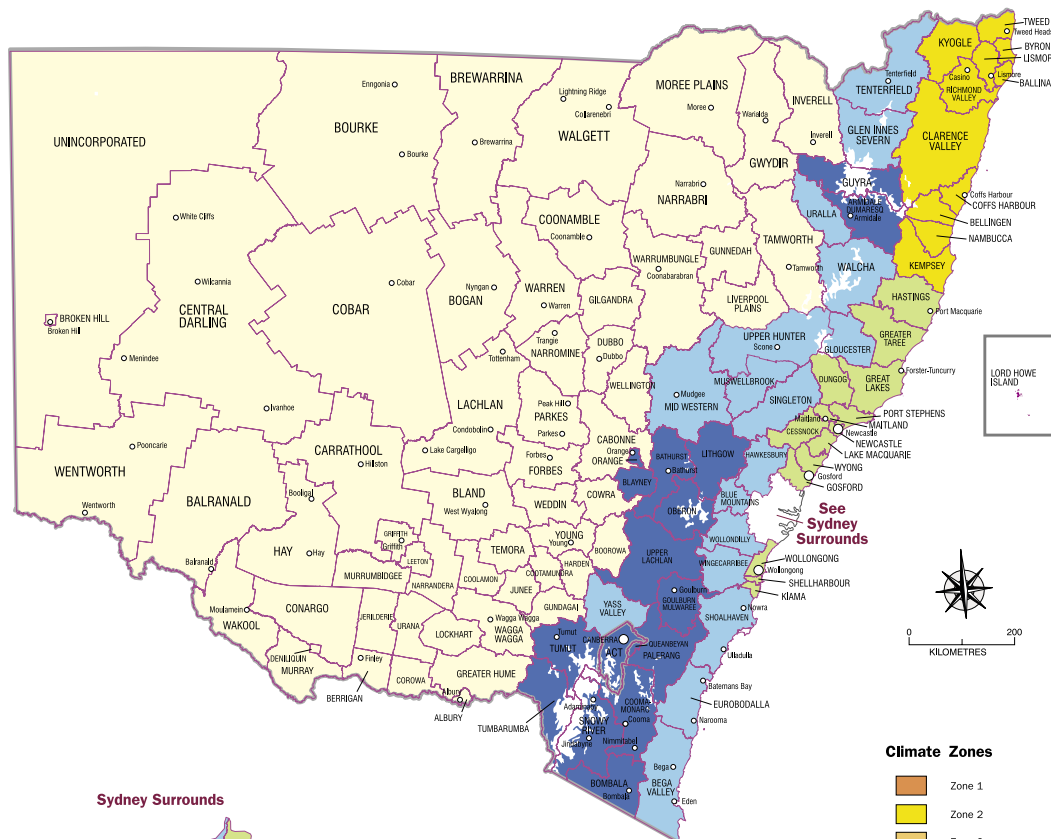
7.21 CLIMATE ZONE MAPS NEW SOUTH WALES

181

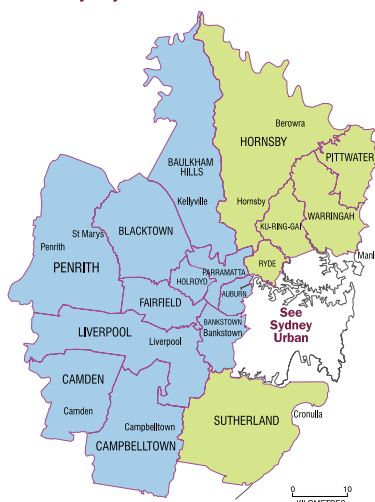
Quality System
Quality Endorsed Company
ISO 9001
SAS QI-001

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DUCT
FITTINGS
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NEW SOUTH WALES



Sydney Surrounds



Sydney Urban



Climate Zones

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6
- Zone 7
- Zone 8

Local Government Area boundary

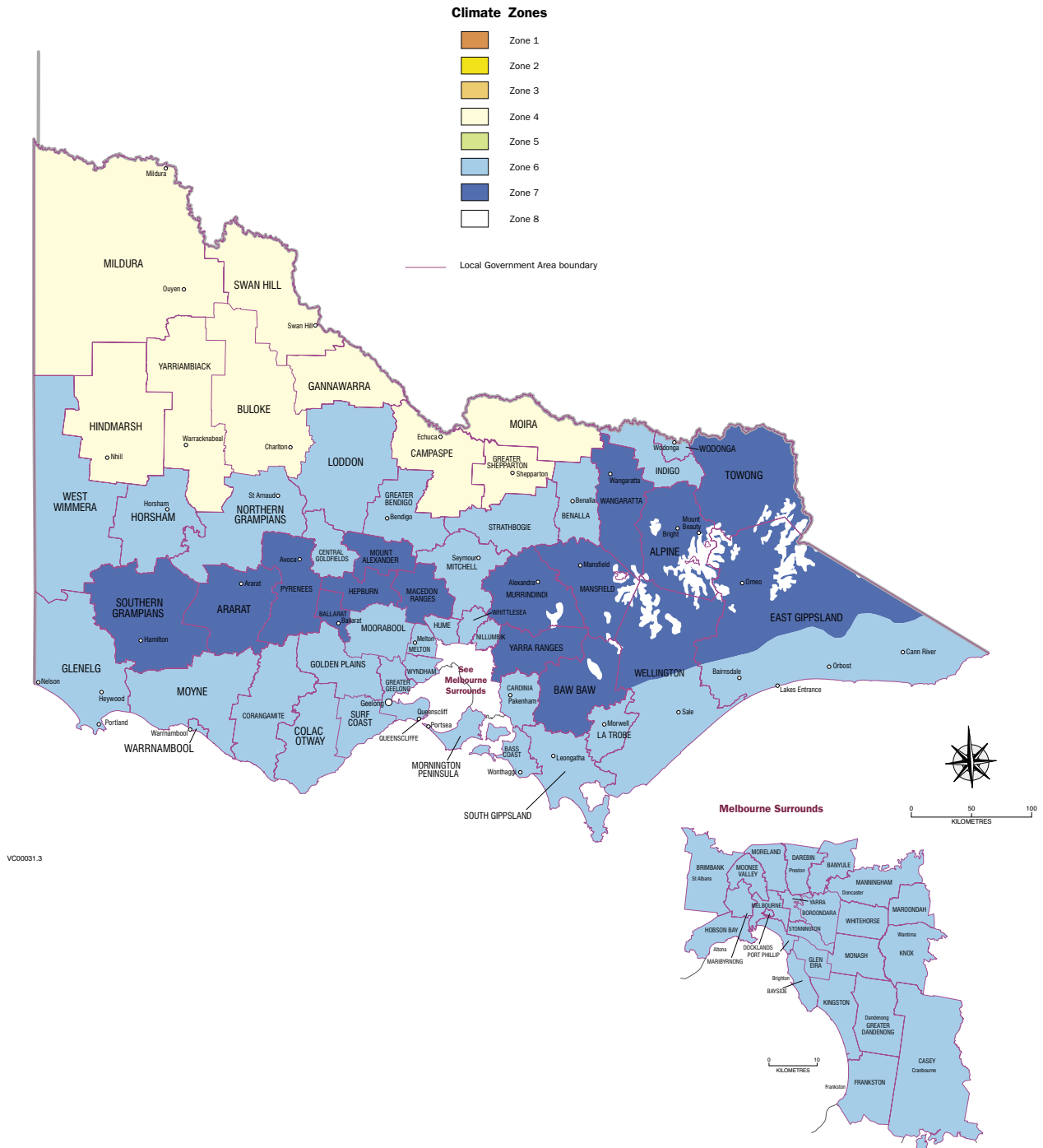
VC00031.3

ABC
Building Australia's Future
www.abc.gov.au
Last amended: May 2009
Developed from a map produced by the Bureau of Meteorology

Location and element	Minimum Total R-Value for ductwork							
Location	1	2	3	4	5	6	7	8
Ductwork within conditioned space	R1.2	R1.2	R1.2	R1.0	R1.2	R1.0	R1.0	R1.6
Ductwork exposed to Sun	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.4
Ductwork in all other locations	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.4

Due to going product development, data and dimensions are subject to change.

VICTORIA



Location and element	Minimum Total R-Value for ductwork							
Location	1	2	3	4	5	6	7	8
Ductwork within conditioned space	R1.2	R1.2	R1.2	R1.0	R1.2	R1.0	R1.0	R1.6
Ductwork exposed to Sun	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.4
Ductwork in all other locations	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.4

Due to going product development, data and dimensions are subject to change.

7.23 CLIMATE ZONE MAPS QUEENSLAND

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Quality System
Quality Endorsed Company
ISO 9001
SAI GLOBAL

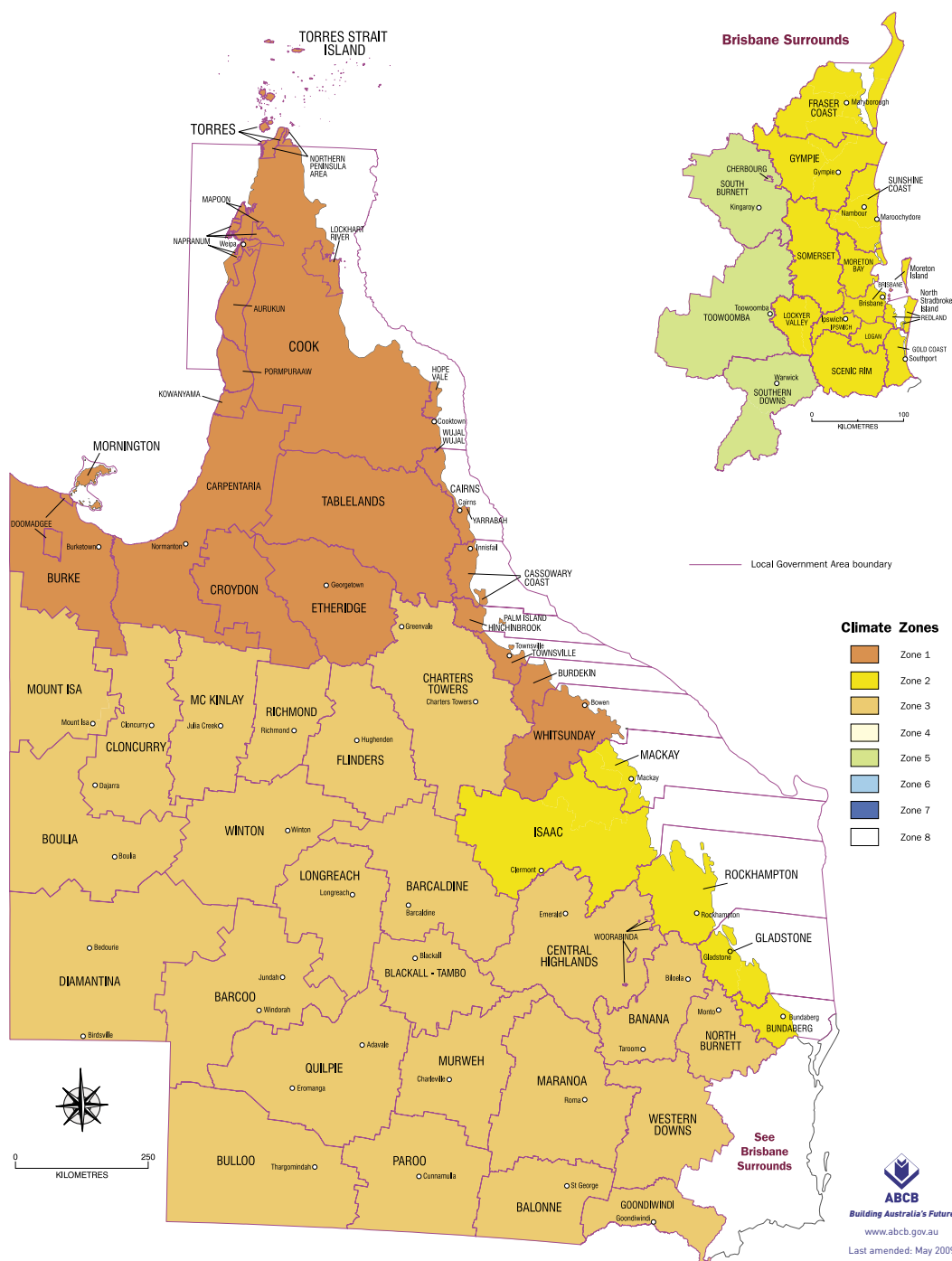
AIRFOIL



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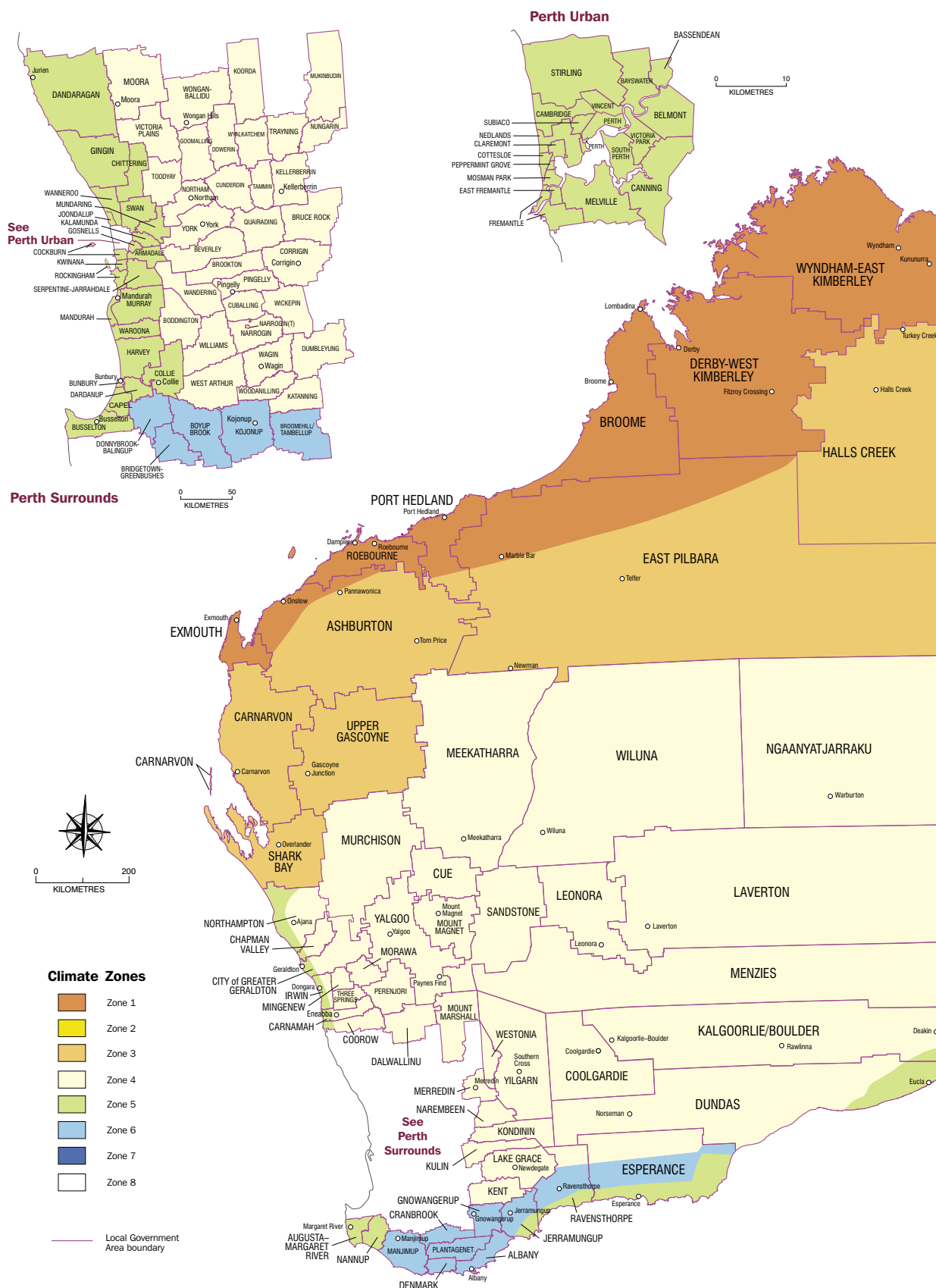
QUEENSLAND



Location and element	Minimum Total R-Value for ductwork							
Location	1	2	3	4	5	6	7	8
Ductwork within conditioned space	R1.2	R1.2	R1.2	R1.0	R1.2	R1.0	R1.0	R1.6
Ductwork exposed to Sun	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.4
Ductwork in all other locations	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.4

Due to going product development, data and dimensions are subject to change.

WESTERN AUSTRALIA



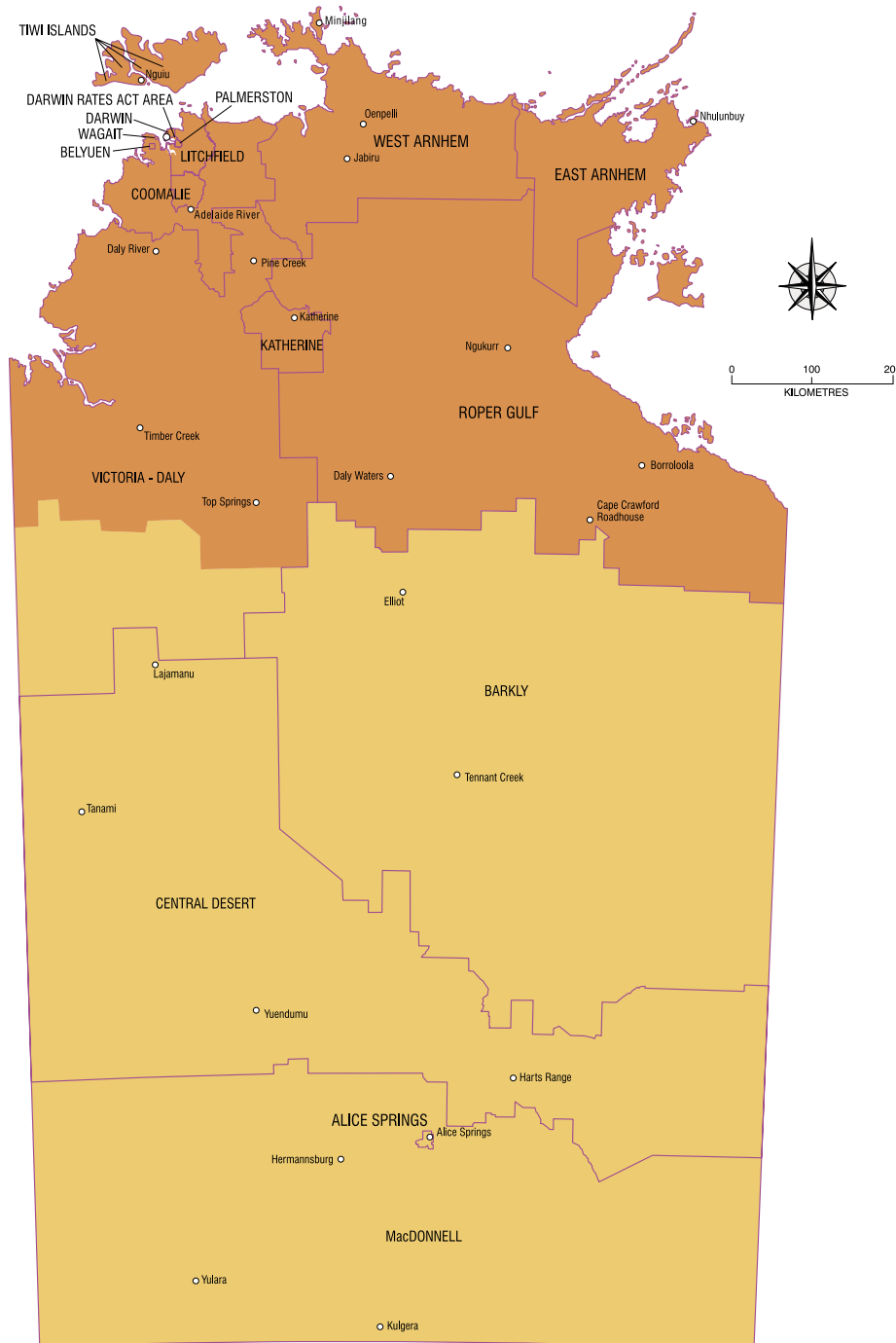
7.25 CLIMATE ZONE MAPS

NORTHERN TERRITORY

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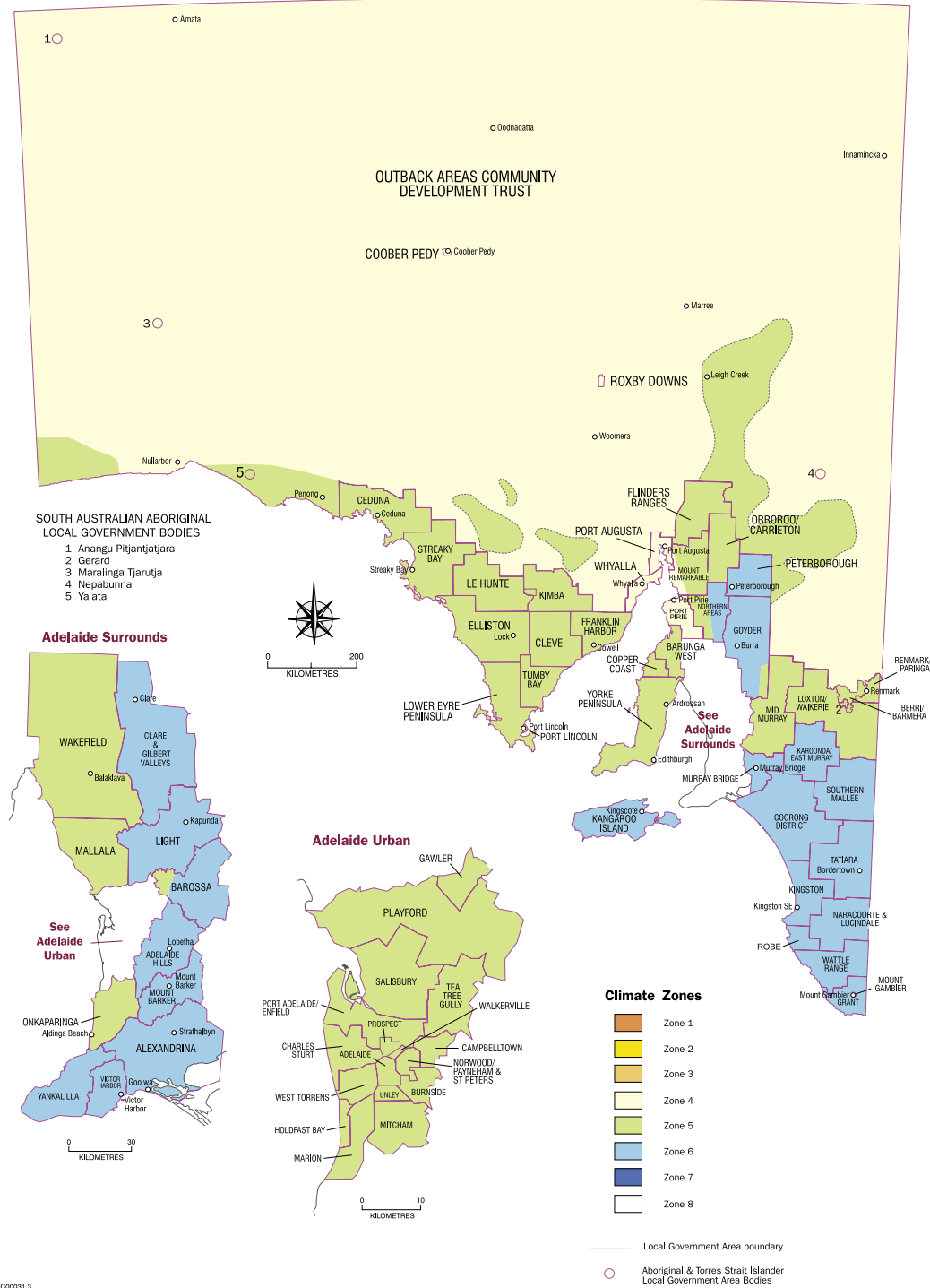
NORTHERN TERRITORY



Location and element	Minimum Total R-Value for ductwork							
Location	1	2	3	4	5	6	7	8
Ductwork within conditioned space	R1.2	R1.2	R1.2	R1.0	R1.2	R1.0	R1.0	R1.6
Ductwork exposed to Sun	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.0	R3.4
Ductwork in all other locations	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.0	R2.4

Due to going product development, data and dimensions are subject to change.

SOUTH AUSTRALIA

[illegible]

Due to going product development, data and dimensions are subject to change.

9.0 RECENT PROJECTS

9.1 RECENT PROJECTS

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PROJECT: DHA LINFIELD, SYDNEY



PROJECT: HORNSBY RSL, SYDNEY



PROJECT: SHERATON, SYDNEY



PROJECT: WOLLONGONG COURTHOUSE

Novartis Head Office Macquarie Park, NSW
North Shore Private Hospital, Sydney
Level 5 Extension Macquarie University, NSW
Building E7A Northside Wentworthville, NSW
Sydney Cricket Ground Redevelopment, Sydney
Auburn Marketplace, Sydney
Macquarie Shopping Centre Extension, NSW
Wollongong Courthouse, NSW
Hakea Aged Care, Meadowbank, Sydney
The Garland Apartments Gold Coast, QLD
The Mater Hospital, Sydney
Charles Sturt University Port Macquarie, NSW
Sydney International Airport T1 Mega B
St George Bank Head Office Kogarah, NSW
St George Private Hospital, NSW
Wet n Wild Eastern Creek, Sydney
Belmont Police Station and Courthouse, NSW
Lakeside Apartments, Sydney
Belle Apartments, Sydney
Woolworths Crows Nest, Sydney
Woolworths Canterbury, Sydney
Woolworths Hornsby, Sydney
Woolworths Mascot, Sydney
Woolworths Crossroads, Sydney
Woolworths Gungahlin, Sydney
Woolworths Gladstone, Sydney
Woolworths Canelands, Sydney
Woolworths Lisarow, Sydney
Woolworths Mt Hutton, Sydney
Woolworths Warriewood
Coles Lisarow, NSW
Coles Amaroo, NSW
Coles Narellan Town Centre, NSW
Coles Kincumber, NSW
Coles Hornsby, Sydney
Coles North Sydney
Coles Wetherill Park, Sydney

Narellan Town Centre Extension, NSW
David Jones Macarthur Square, NSW
Merrylands Shopping Centre, NSW
Stocklands Wetherill Park, NSW
Westfield Hurstville refurbishment, Sydney
177 Pacific Highway North Sydney
333 George St Sydney
The Greenland Hotel, Sydney
Prince of Wales Hospital, Sydney
Aqua Apartments Bondi, Sydney
DHA Lindfield, Sydney
Capitol Apartments Bondi, Sydney
The Moreton Apartments Bondi, Sydney
Barangaroo Residential R8&R9, Sydney
AstraZeneca Head Office, Sydney
East Village Retail, Sydney
Charlestown Square extension, NSW
Toronto Aged Care, NSW
Harbour St Apartments Wollongong, NSW
Westport Bowling Club, NSW
Port City Bowling Club, NSW
1 Parramatta Square, Sydney
Four Points Sussex St, Sydney
Southbank Building C, Sydney
Town Hall House, Sydney
Tamworth Hospital, NSW
Tamworth Hospital Bruderlin Building, NSW
Port Macquarie Base Hospital, NSW
Kempsey Base Hospital, NSW
Baptistcare Kellyville, Sydney
Panthers Rugby League Academy, Sydney
Gregory Hills Homemaker Centre, NSW
Shark Park Residential Development, Sydney
Bondi Pacific Apartments, Sydney
University of New England Building C1, Sydney
AE Building Dutton Lane Cabramatta, Sydney
Arena Apartments Redevelopment Newcastle, NSW
Coffs Harbour Justice Precinct, NSW



9.1 RECENT PROJECTS

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PROJECT: LIFESTYLE MANOR, SYDNEY



PROJECT: GLENROSE VILLAGE, NSW



PROJECT: NORWEST HOSPITAL, NSW



PROJECT: LISMORE HOSPITAL, NSW

Sydney Opera House, Sydney
Royal Prince Alfred Hospital, Sydney
Lismore Hospital, NSW
Byron Bay Hospital, NSW
Parks Hospital, Mount Lawley, WA
Hornsby Hospital, Sydney
Blacktown Hospital, Sydney
Sutherland Hospital, NSW
Griffith Hospital, NSW
Wagga Wagga Hospital, NSW
Campbelltown Hospital, NSW
Canberra Hospital, NSW
Dubbo Hospital, NSW
Norwest Private Hospital, Bella Vista, NSW
Gosford Hospital, NSW
Woolworths Spring Farm, NSW
Glenrose Shopping Village, NSW
OPAL Aged Care, Ashfield, Sydney
Children's Cancer Institute, Sydney
200 George St, Sydney
Lifestyle Manor Anglesea Bondi, Sydney
Toowoomba Grand Central, QLD
Rack Unit Data Centre, Smeaton Grange, NSW
Rack Unit Data Centre Eastern Creek, NSW
Bowral Public School, NSW
MacDonald's Broadway Shopping Centre, Sydney
Prestons Aged Care, NSW
Kmart, Top Ryde Centre, Sydney
Newington College, Stanmore, Sydney
Tyremax, Ashfield, Sydney
Meriton Apartments Lane Cove, Sydney
Metro Apartments Chatswood, Sydney
Holsworthy Amy Barracks, Sydney
Westfield's Miranda, Sydney
Central Park Block 4S, Sydney
Oran Park Town Centre, NSW
Green Square Town Centre, Block 15A-15B, Sydney

Equinix SY4 Alexandria, Sydney
Moran Aged Care Vacluse, NSW
Putney Hill Ryde, Sydney
Garden Island Bld 89/90, Sydney
The Star, Sokyo Room, Sydney
Sydney Airport Bussing Lounge
Nelson Bay Woolworths, Sydney
Flinders Village, Castle Hill, NSW
ARV Woodberry, Winston Hills, NSW
Warringah Mall, Brookvale, NSW
Sky By Crown North Sydney
V by Crown Parramatta, Sydney
Lucent Apartments North Sydney
Quay Apartments Haymarket, Sydney
Union Apartments Rozelle, Sydney
Macquarie Park Village, Sydney
Clemton Park Village Campsie, Sydney
Sundale A1 Apartments Southport, QLD
Eve Apartments Erskineville, Sydney
Retail Ready Meats Erskine Park, NSW
Toll Orica Banksmeadow, Sydney
CBC Bearings Chullora, NSW
Kew Apartments Roseville, Sydney
Watermark Apartments Baulkham Hills, Sydney
Bunnings Kingsgrove, Sydney
Boston Consulting Group, Sydney
North Steyne Manly, Sydney
Aura Construction Marrickville, Sydney
Narellan Hotel, NSW
Marist Brothers College Kogarah, NSW
Chifley Tower, Sydney
Parkroyal Hotel, Parramatta, Sydney
Telstra, Sydney
Randwick Barracks, Sydney
BUPA Willoughby, Sydney
Cairnsfoot Special School Brighton Le Sands, Sydney
Huntingdon Gardens Bexley, Sydney
Cranebrook Aged Care, North Sydney
UNSW Randwick, Sydney



9.1 RECENT PROJECTS

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PROJECT: NIER SHORTLAND



PROJECT: THE PONDS ARV



PROJECT: CATHOLIC CLUB



PROJECT: PARLIAMENT HOUSE

Hand Clinic Sydney
Pennant Hills Day Surgery, Sydney
UNSW Kensington, Sydney
Chatswood Private Hospital, Sydney
Tamworth Hospital, NSW
Suncorp Penrith, Sydney
Zara Brisbane, QLD
Lot 9 Hill Rd Wentworth Pt, Sydney
33 Alfred St, Sydney
200 Crown St Wollongong
OLMC Parramatta, Sydney
Horton House Gordon, Sydney
Kings School, Parramatta, Sydney
Nagle College, Blacktown, Sydney
The Ponds ARV Stanhope Gardens, NSW
Hornsby RSL, Sydney
Lithgow Workers Club, NSW
Bankstown Sports Club, Sydney
ARB Moorebank, Sydney
St Benedict's College Oran Park, NSW
Governor Phillip Nursing Home Penrith, Sydney
ARV Castle Hill, Sydney
UTS Ultimo, Sydney
Hammond Care Miranda, Sydney
NIER Shortland, NSW
Muswellbrook Tafe, NSW
Campbell's Corner Muswellbrook, NSW
Mariners Tuggerah, NSW
Mariners Medical Centre Tuggerah, NSW
Discovery Point Wolli Creek, NSW
Fairways Bowral, NSW
Campbelltown Catholic Club, Sydney
Southern Cross Village, Plumpton, NSW
Knox Grammar School, Wahroonga, Sydney
Wetherill Park Tafe, Sydney
NSW Parliament House, Sydney
Wilson Parking, Sydney

RMS Parramatta, Sydney
Central Station, Sydney
End Of Trip. 345 George St, Sydney
Roche North Ryde, Sydney
McDonald's West Gosford, NSW
McDonald's Guildford, VIC
McDonald's Hoxton Park, VIC
McDonald's Hurlstone Park, Sydney
Harbord Diggers Club, Sydney
Ingham North Ryde, Sydney
100 William East Sydney
Dee Why RSL, Sydney
St Patrick's College Strathfield, Sydney
River Vista Apartments Parramatta, Sydney
Breakfast Point 7D3, NSW
Breakfast Point 7D2, NSW
Bridge Plaza, Lithgow, NSW
Wynyard Station, Sydney



Airfoil Catalogue Edition 8.1

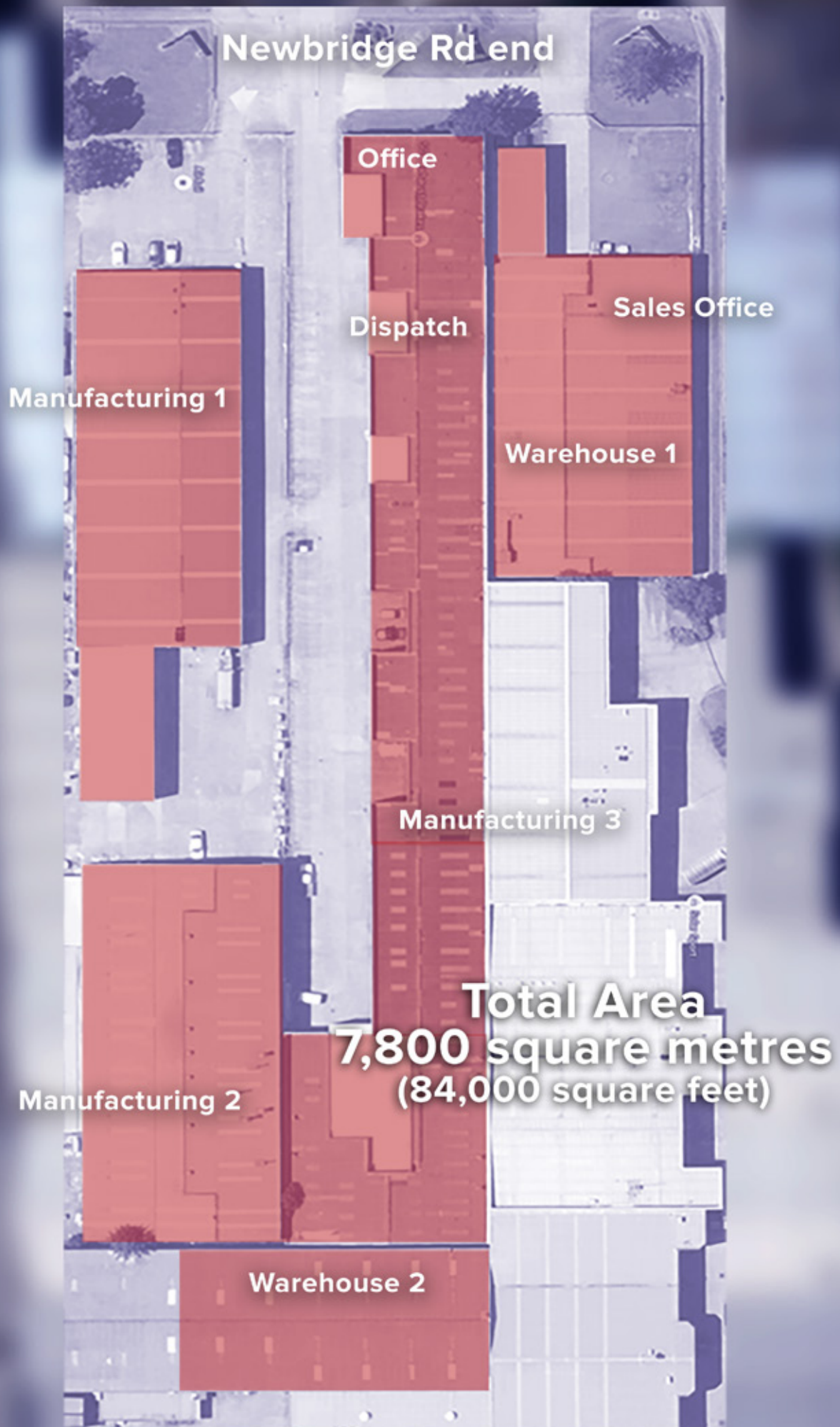
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AIRFOIL FACTORY COMPLEX OVERVIEW, MOOREBANK SYDNEY

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1300 AIRFOIL sales@airfoil.com.au airfoil.com.au



AIRFOIL SALES CONTACTS

133 Newbridge Road Moorebank NSW 2170 Ph (02) 9601 1066

David Henderson

National General Manager
0426 151 331
david@airfoil.com.au

Daniel Hood

Account manager
(02) 9601 1066
daniel@airfoil.com.au

Lili Doria

Sales Consultant
(02) 9601 1066
lili@airfoil.com.au

Robert Johnstone

Operations Manager
(02) 9601 1066
rob@airfoil.com.au

Marc Santamaria

Sheet Metal Production Manager
(02) 9601 1066
marc@airfoil.com.au

Minh To (Engineer)

Sales Engineer/Tenders
0432 237 397
tenders@airfoil.com.au