



Product Catalogue

Melbourne



PRODUCT CATALOGUE

We Are Not Cool, Unless Your Are Cool!





PRODUCT CATALOGUE

Address: 522 Princes Hwy, Noble Park North, VIC 3174

Open: Monday to Friday between 7:30AM to 5:00PM

Phone: (03) 9790 0900

Fax: (03) 9790 0911

General: info@airlinx.com.au

Sales: Sales@airlinx.com.au





ORDERING



Phone: +61 (03) 97900 900



Fax: +61 (03) 9790 0911



Email: Enquiries: info@airlinx.com.au

Payables: Joanne Xia - joannex@airlinx.com.au

Director: Lewie Liu - lewieli@airlinx.com.au



Pick up is Monday—Friday 7am - 3.30pm

Delivery is price on distance and volume of each dispatch and need sufficient time notice.

Superior Quality & Services at Affordable prices

COMPANY PROFILE

Located in Melbourne, Airlinx Industries is an Australian owned company specialising in the custom manufacture and supply of air conditioning ductwork, Air diffusion products and components.

Airlinx Industries locally produces flexible and rigid ducting system at their factories in Noble Park. Through their integrated international network, they are able to deliver affordably priced products that can save companies thousands of dollars on final construction budgets.

In Australia, Airlinx Industries manufactures high quality ducting systems that comply with Australian Standard AS 4254, and exceed the Australian Standard on pressure holding and noise reduction.

Airlinx Industries has a complete turnkey manufacturing system. They control all phases of manufacturing, from quotation to samples, manufacturing, shipping and delivery. Their turnaround on drawings for quotation purposes is exceptional.

Our staff of engineers and quality assured personnel offer clients complete manufacturing support and backup for a full range of products including: quality flexible and rigid ducting, spiro ducts, drop boxes for air diffusers, Aluminum / metal air diffusers, ventilation fans, and component parts.

When you deal with Airlinx Heating & Cooling Supply, you receive a number of benefits that can make your projects come in on time, within budget, and without installation problems.



522 Princes Hwy, Noble Park North, Victoria 3174

T 03 9790 0900 F 03 9790 0911 E info@airlinx.com.au

www.airlinx.com.au



AIRLIX ADVANTAGE

- Customer is the greatest asset
- Service first
- Competitive pricing
- Full product and service range
- Quality for long term relationships
- Exceeding industry standards
- Industry know-how
- Maintaining and growing capacity
- Continual improvement
- Growing the business together

Superior Quality & Services at Affordable prices

Custom Sheet metal including (but not limited to):
Custom-Sized Plenums, Drain Trays, Blanking Plates, Filter Boxes & Transitions

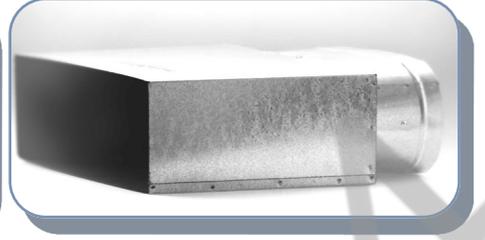
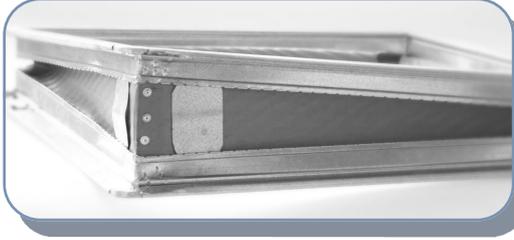
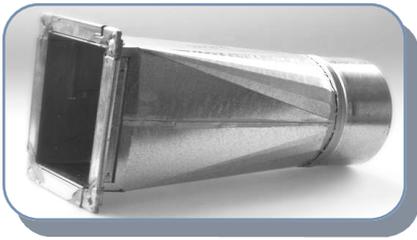


Table of Contents

A

Solid Ductwork



B

Spiral Duct & Fittings



C

Flexible Duct & Fittings



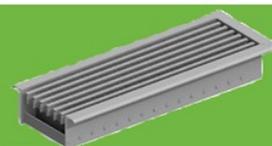
D

Fans



E

Grilles



F

Diffusion Boxes & Adaptors



G

Damper



H

Research & Development

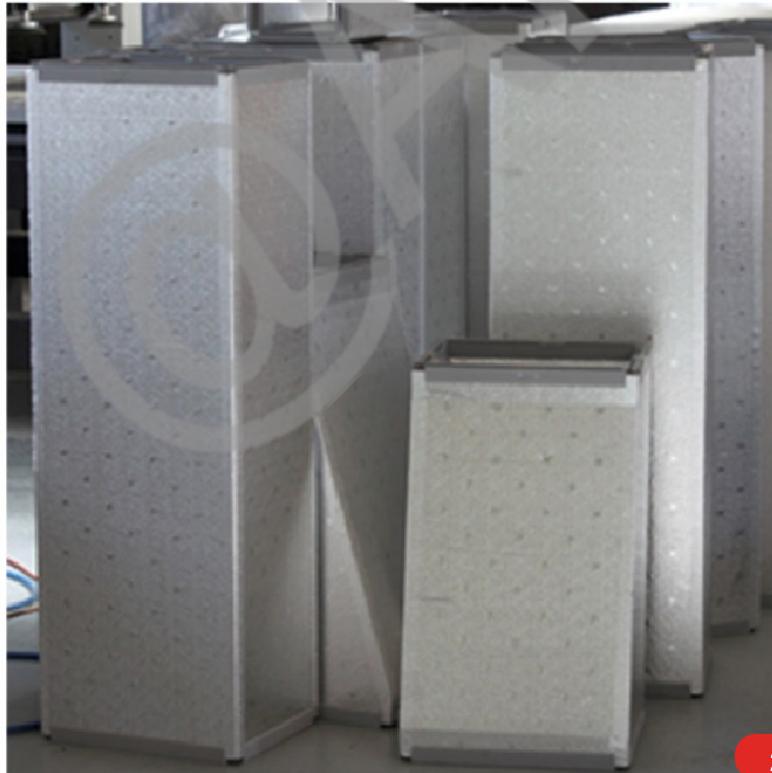
Call Us: 03 9790 0900



A

Solid
Ductwork

@_erlinx2024



Duct Board / Phenolic Board

Airlinx is able to manufacture Solid Ductwork from small to large building projects. Our staff will consult with project managers for estimating, and time requirements of each stage of the building process, to ensure that our customers receive quality ductwork on time and within budget.

R1.5 PRE INSULATED DUCT BOARD BOX FLAT PACKED

ORDERING TD BOX FLAT PACK OR ASSEMBLED

- Specify size, diameter, location and number of pops to allow for.
- No holes will be cut unless specified
- Starting collars will not be supplied unless specified (order separately)
- All opening sizes will be assumed as internal sizes unless otherwise specified

STOCK SIZES

ITEM NUMBER	ITEM NAME
TDB150	TD Box 150x150mm Flat
TDB200	TD Box 200x200mm Flat
TDB250	TD Box 250x250mm Flat
TDB300	TD Box 300x300mm Flat
TDB350	TD Box 350x350mm Flat
TDB400	TD Box 400x400mm Flat
TDB450	TD Box 450x450mm Flat
TDB500	TD Box 500x500mm Flat
TDB550	TD Box 550x550mm Flat
TD1150550	TD Box 1150x550mm Flat

R1.5 PRE INSULATED DUCT BOARD BOX ASSEMBLED

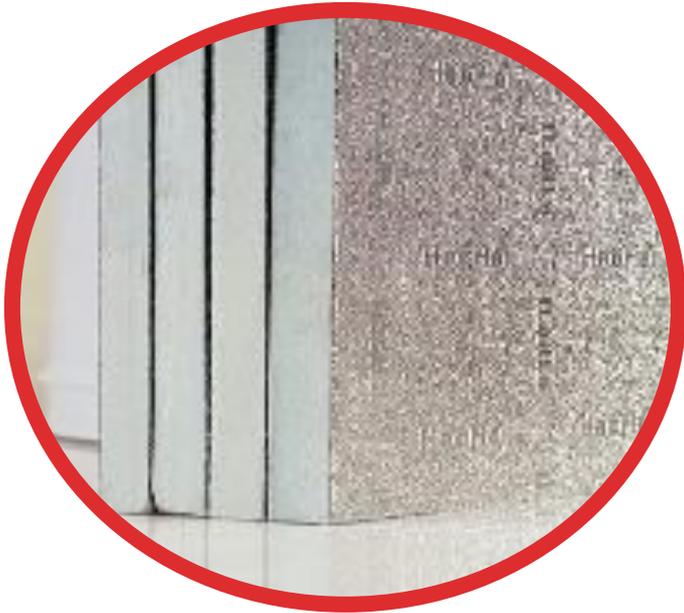
ORDERING TD BOX FLAT PACK OR ASSEMBLED

- Specify size, diameter, location and number of pops to allow for.
- No holes will be cut unless specified
- Starting collars will not be supplied unless specified (order separately)
- All opening sizes will be assumed as internal sizes unless otherwise specified
- All heights will be assumed as overall unless otherwise specified.

STOCK SIZES

ITEM NUMBER	ITEM NAME
TDBA150	TD Box 150x150mm
TDBA200	TD Box 200x200mm
TDBA250	TD Box 250x250mm
TDBA300	TD Box 300x300mm
TDBA350	TD Box 350x350mm
TDBA400	TD Box 400x400mm
TDBA450	TD Box 450x450mm
TDBA500	TD Box 500x500mm
TDBA550	TD Box 550x550mm
TDBA1150550	TD Box 1150x550mm

Superior Quality & Services at Affordable prices



R1.5 PRE INSULATED DUCT BOARD

Sheet size: 4000mm x 1200mm

Thickness of panel: 20mm

Fire retardant rigid polyurethane foam coated on both sides with a 75 micron embossed Aluminum foil

An extremely useful material suited to manufacturing cushion boxes and small to medium duct projects.

TD Duct Board is light-weight and has a high thermal rating providing a versatile and cost effective product that can be used in domestic and commercial applications.

TD Duct Board products are manufactured at Airlinx using state of the art CNC machinery.



522 Princes Hwy, Noble Park North, Victoria 3174

T 03 9790 0900 F 03 9790 0911 E info@airlinx.com.au

www.airlinx.com.au

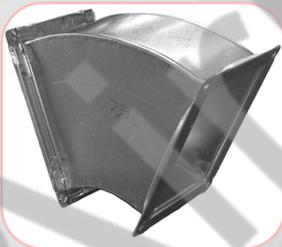
Solid Ductwork



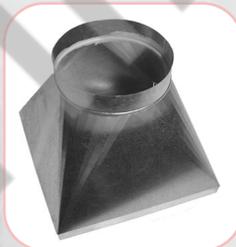
Dedicated staff with local material supply, customer ensured by high quality products and



Square Bend



Radius Bend



Square to Round



Ductwork Offset

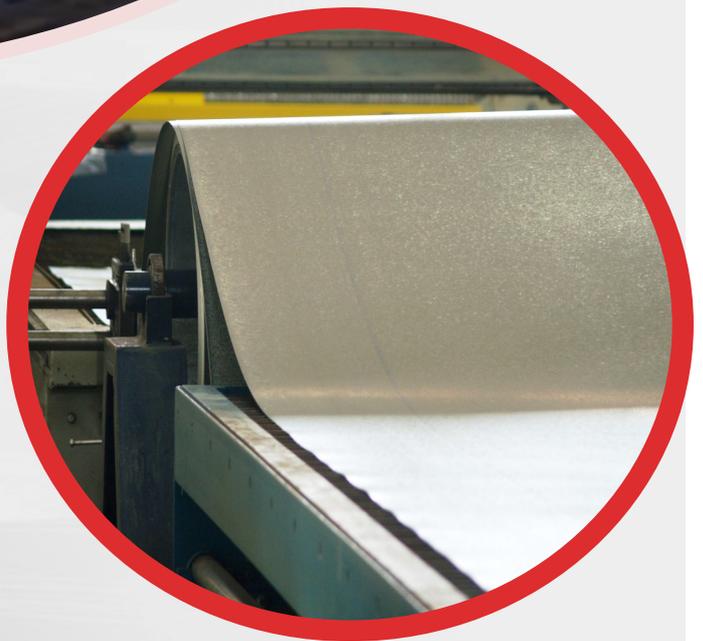


Flex Connection

From small piece sheetmetal to whole project.No small or big job.

Superior Quality & Services at Affordable prices

Filter Box



Metal fabrication

PRECISION SHEETMETAL FABRICATION



Drip Tray

All Drip Trays are Custom Made and require drawings before manufacture.



Metal Reducers

MDR64	Metal Reducer 150/100
MDR86	Metal Reducer 200/150
MDR106	Metal Reducer 250/150
MDR108	Metal Reducer 250/200
MDR1210	Metal Reducer 300/250
MDR128	Metal Reducer 300/200
MDR148	Metal Reducer 350/200
MDR1410	Metal Reducer 350/250
MDR1412	Metal Reducer 350/300
MDR1612	Metal Reducer 400/300
MDR1614	Metal Reducer 400/350



Metal Y's

Custom Made Metal Ys are available according to customer's required combination.

Superior Quality & Services at Affordable prices

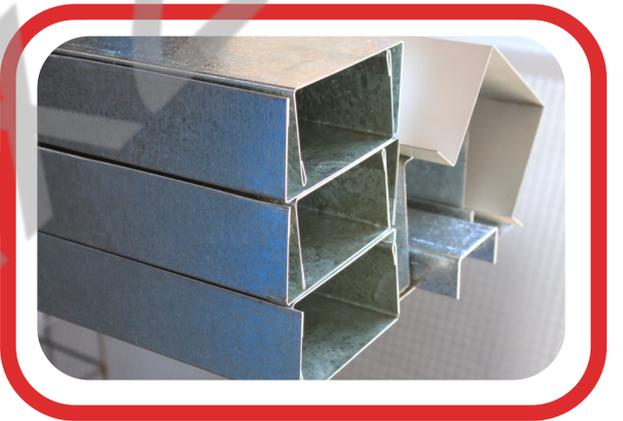
Galvanised Steel Angle

A252.4	Angle 25mm x 25mm x 2.4m Long
A501.2	Angle 50mm x 50mm x 1.2m Long
A502.4	Angle 50mm x 50mm x 2.4m Long



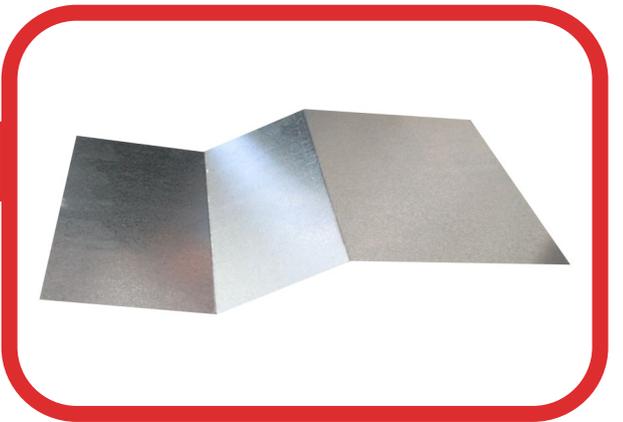
Galvanised Channel

Channel	Channel AAxAAxAAmm x Am Long
Channel255025	Channel Gal 25x50x25mm 2.4m 16#
Channel404040	Channel Gal 40x40x40mm 2.4m 22#



Galvanised Flashing

All Flashing is Custom Made, a drawing with dimensions is required before manufacture.



Metal fabrication



Chinaman Hat

Used for Ventilation Purpose can be find in Fan Section.

CH6	Chinamans Hat 150mm
CH8	Chinamans Hat 200mm
CH10	Chinamans Hat 250mm
CH12	Chinamans Hat 300mm
CH14	Chinamans Hat 350mm
CH16	Chainmans Hat 400mm
CH18	Chinamans Hat 450mm
CH20	Chinamans Hat 500mm



Roof Cowl

Used for Ventilation Purpose can be find in Fan Section.

	General Roof Cowl 100mm
RC5	General Roof Cowl 125mm
RC6	General Roof Cowl 150mm
RC8	General Roof Cowl 200mm

Superior Quality & Services at Affordable prices

All Metal Branch Take Offs are available
We make to order as customer requested combina-
tion. Insulated or Non-insulated

Metal Single Branch Take Offs

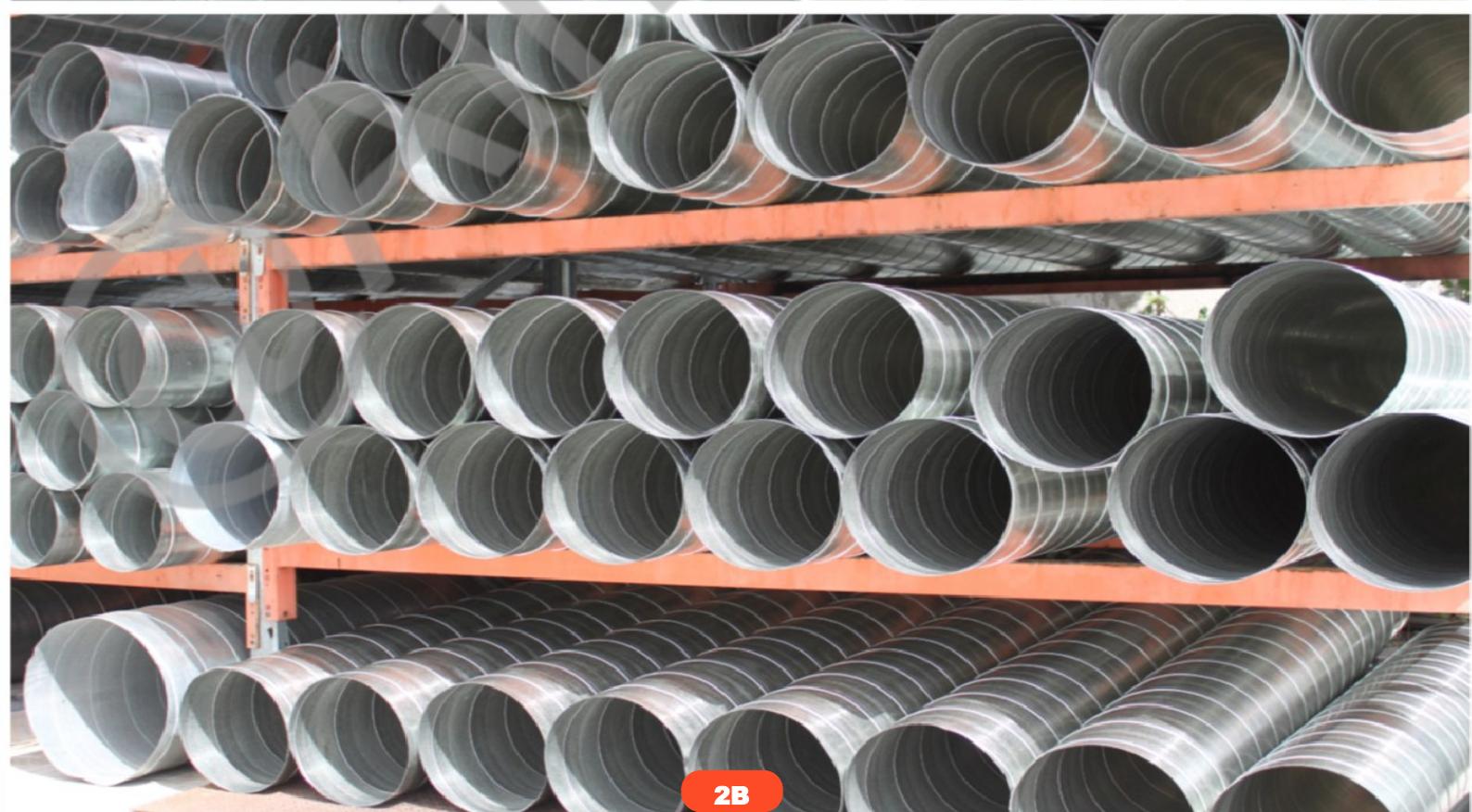


Metal Double Branch Take Offs



B

Spiral Duct & Fittings



Spiro Duct & Fittings

Dia OD (mm) Fixed Tooling	0.6mm (24#)	0.8mm (22#)	1.0mm (20#)	1.2mm (18#)
80				
90				
100				
125				
150				
160				
175				
200	AS 454 2006 3000Pa Positive			
230				
250				
280				
300				
350				
381				
400				
450				
500				
550				
600		AS 4254 2006 3000Pa Positive		
650				
700				
750				
800				
850				
900				
950				
1000			AS 4254 2006 3000Pa Positive	
1050				
1100				
1150				
1200				
1250				
1300				AS 4254 2006 3000 Pa Positive
1350				
1400				
1450				
1500				
1550				
1600				

SPIRO DUCT GAUGES & DIAMETERS

Made from Galvanised Steel using the latest technology to ensure that Airlinx Spiro is water tight.

Using suitable gauges for strength, Spiro can be manufactured up to 6m in length and up to 1.6m in diameter. Galvanised Steel gauges 24#, 22#, 20# and 18#.

Spiro can be used in Air conditioning, Ventilation, Concrete Formwork and Pier Liners.

Spiro is Available as Plain, Externally Insulated with R1 and R2 Insulation, Internally Insulated, and Acoustic with Internal Perforated Core.



Superior Quality & Services at Affordable prices

EXTERNAL INSULATED SPIRO

SDI066	R1 Externally Insulated Spiro 150mm
SDI086	R1 Externally Insulated Spiro 200mm
SDI106	R1 Externally Insulated Spiro 250mm
SDI126	R1 Externally Insulated Spiro 300mm
SDI146	R1 Externally Insulated Spiro 350mm
SDI166	R1 Externally Insulated Spiro 400mm
SDI186	R1 Externally Insulated Spiro 450mm
SDI206	R0.6 Externally Insulated Spiro 500mm



INTERNAL INSULATED SPIRO

Made to order, Airlinx will manufacture Internal Insulated Spiro with two layers of Spiro.

The outer Spiro will be Plain, with the internal Spiro being either Plain or Perforated.

Insulation can be 20mm, 50mm, 75mm or 100mm thick and should be stated when ordering.



Airlinx is able to manufacture Spiro Duct up to 6m in length with diameters up to 1.6m with an 18# / 1.2mm gauge. Prices available on request.

SPIRO DUCT PLAIN

SD086	Spiro Duct 200mm x 1m 0.6
SD086x2	Spiro Duct 200mm x 2m 0.6
SD086X3	Spiro Duct 200mm x 3m 0.6
SD086X4	Spiro Duct 200mm x 4m 0.6
SD106	Spiro Duct 250mm x 1m 0.6
SD106x2	Spiro Duct 250mm x 2m 0.6
SD106X3	Spiro Duct 250mm x 3m 0.6
SD106X4	Spiro Duct 250mm x 4m 0.6
SD126	Spiro Duct 300mm x 1m 0.6
SD126x2	Spiro Duct 300mm x 2m 0.6
SD126X3	Spiro Duct 300mm x 3m 0.6
SD126X4	Spiro Duct 300mm x 4m 0.6
SD146	Spiro Duct 350mm x 1m 0.6
SD146x2	Spiro Duct 350mm x 2m 0.6
SD146X3	Spiro Duct 350mm x 3m 0.6
SD146X4	Spiro Duct 350mm x 4m 0.6
SD166	Spiro Duct 400mm x 1m 0.6
SD166x2	Spiro Duct 400mm x 2m 0.6
SD166X3	Spiro Duct 400mm x 3m 0.6
SD166X4	Spiro Duct 400mm x 4m 0.6
SD186	Spiro Duct 450mm x 1m 0.6
SD186x2	Spiro Duct 450mm x 2m 0.6
SD186X3	Spiro Duct 450mm x 3m 0.6
SD18X4	Spiro Duct 450mm x 4m 0.6
SD206	Spiro Duct 500mm x 1m 0.6
SD206x2	Spiro Duct 500mm x 2m 0.6
SD206X3	Spiro Duct 500mm x 3m 0.6
SD206X4	Spiro Duct 500mm x 4m 0.6
SD221	Spiro Duct 550mm x 1m 1.0
SD221x2	Spiro Duct 550mm x 2m 1.0
SD221x3	Spiro Duct 550mm x 3m 1.0
SD221x4	Spiro Duct 550mm x 4m 1.0



45° Spiro Bends for Spiro Duct

Strong Solid Galvanised Bend
Made to suit Airlinx Spiro Duct

45° METAL BENDS

The Lobster Back Sectional Bend is made from Galvanised Steel.
The bend is air and water tight.

With rubber seals included on smaller imported sizes of bends
this ensures a tight seal at the join.

Airlinx Bends do not require a joiner when connected to Airlinx

Technical Data

S-LB4/6	45° Bend 150mm dia
S-LB4/8	45° Bend 200mm dia
S-LB4/10	45° Bend 250mm dia
S-LB4/12	45° Bend 300mm dia
S-LB4/14	45° Bend 350mm dia
S-LB4/16	45° Bend 400mm dia
S-LB4/18	45° Bend 450mm dia
S-LB4/20	45° Bend 500mm dia
S-LB4/22	45° Bend 550mm dia
S-LB4/24	45° Bend 600mm dia



45° Spiro Bends for Spiro Duct

Strong Solid Galvanised Bend
Made to suit Airlinx Spiro Duct

90° METAL BENDS

The Lobster Back Sectional Bend is made from Galvanised Steel.
The bend is air and water tight.

With rubber seals included on smaller imported sizes of bends
this ensures a tight seal at the join.

Airlinx Bends do not require a joiner when connected to Airlinx

Technical Data

S-LB9/6	90° Bend 150mm dia
S-LB9/8	90° Bend 200mm dia
S-LB9/10	90° Bend 250mm dia
S-LB9/12	90° Bend 300mm dia
S-LB9/14	90° Bend 350mm dia
S-LB9/16	90° Bend 400mm dia
S-LB9/18	90° Bend 450mm dia
S-LB9/20	90° Bend 500mm dia
S-LB9/22	90° Bend 550mm dia
S-LB9/24	90° Bend 600mm dia

END CAPS

Zinc Plated Mild Steel, to cap Spiro Duct, sizes up to 300mm diameter are manufactured using press construction. Sizes above and including 350mm may be made from Galvanised Steel manufactured by Airlinx.

Technical Data

END6	Spiro End Cap 150mm
END8	Spiro End Cap 200mm
END10	Spiro End Cap 250mm
END12	Spiro End Cap 300mm
END14	Spiro End Cap 350mm
END16	Spiro End Cap 400mm
END18	Spiro End Cap 450mm
END20	Spiro End Cap 500mm
END22	Spiro End Cap 550mm
END24	Spiro End Cap 600mm



End Cap

Male or Female End Capping of Spiro Duct or Fitting

SPIRO JOINERS

Spiro Joiners made from Galvanised Steel with the smaller sizes sold with a rubber seal to ensure a tight seal between Airlinx Spiro Duct and the Spiro Joiner.

Technical Data

SJ6	Spiro Joiner 150mm
SJ8	Spiro Joiner 200mm
SJ10	Spiro Joiner 250mm
SJ12	Spiro Joiner 300mm
SJ14	Spiro Joiner 350mm
SJ16	Spiro Joiner 400mm
SJ18	Spiro Joiner 450mm
SJ20	Spiro Joiner 500mm
SJ22	Spiro Joiner 550mm
SJ24	Spiro Joiner 600mm



Spiro Joiner

Use Spiro Joiners to connect Airlinx Spiro Duct with Spiro or Flexi-



External Full Moon Hangers

Strong Solid Galvanised Bend
Made to suit Airlinx Spiro Duct

EXTERNAL FULL MOON HANGERS

Two piece construction which is used to suspend Spiro Duct from the ceiling , requires a threaded rod for installation.

Technical Data

SHF4	Spiro Hanger Full Moon 100mm
SHF5	Spiro Hanger Full Moon 125mm
SHF6	Spiro Hanger Full Moon 150mm
SHF8	Spiro Hanger Full Moon 200mm
SHF10	Spiro Hanger Full Moon 250mm
SHF12	Spiro Hanger Full Moon 300mm
SHF14	Spiro Hanger Full Moon 350mm
SHF16	Spiro Hanger Full Moon 400mm
SHF18	Spiro Hanger Full Moon 450mm
SHF20	Spiro Hanger Full Moon 500mm



Wagon Wheel Hanger

Strong Internal Hanger made from
Mild Steel and painted black.

Custom Made to Order

INTERNAL WAGON WHEEL HANGERS

Made from Mild Steel and painted black, an Internal Wagon Wheel Hanger is made to order . For use with Airlinx Spiro Duct including and over 600mm diameter.

Technical Data

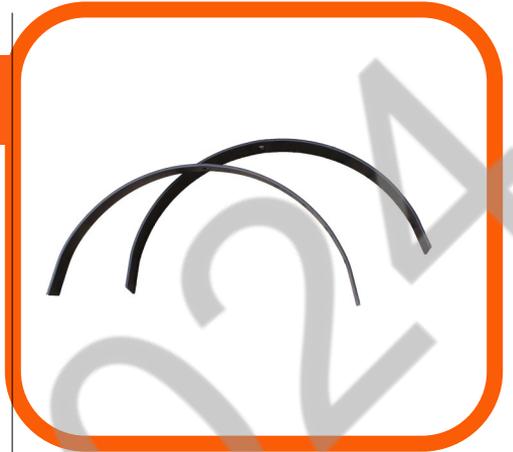
SWW	Spiro Wagon Wheel - Custom Size from 600mm to 1500mm
-----	---

INTERNAL HALF MOON HANGERS

Made from Mild Steel and painted black., an Internal Half Moon Hanger is made to order and can be used for Airlinx Spiro Duct from 150mm diameter up to 600mm diameter.

Technical Data

SHH6	Spiro Hanger Half Moon 150mm
SHH8	Spiro Hanger Half Moon 200mm
SHH10	Spiro Hanger Half Moon 250mm
SHH12	Spiro Hanger Half Moon 300mm
SHH14	Spiro Hanger Half Moon 350mm
SHH16	Spiro Hanger Half Moon 550mm
SHH18	Spiro Hanger Half Moon 600mm
SHH20	Spiro Hanger Half Moon 500mm
SHH22	Spiro Hanger Half Moon 550mm
SHH24	Spiro Hanger Half Moon 600mm



Internal Half Moon Hanger

Strong Internal Hanger made from Mild Steel and painted black.

Custom Made to Order

METAL REDUCERS

Metal Reducers, smaller imported sizes made with Zinc Plated Mild Steel complete with seals to ensure a secure fit. Larger sizes made from Galvanised Steel and manufactured at Airlinx.

Technical Data

MDR64	Metal Reducer 150/100
MDR86	Metal Reducer 200/150
MDR106	Metal Reducer 250/150
MDR108	Metal Reducer 250/200
MDR1210	Metal Reducer 300/250
MDR128	Metal Reducer 300/200
MDR148	Metal Reducer 350/200
MDR1410	Metal Reducer 350/250
MDR1612	Metal Reducer 400/300



Metal Reducer

Mild Steel or Galvanised Steel Metal Reducers to decrease or increase Spiro sizes in ductwork.



Spiro Offset

Strong Solid Galvanised Offset
Made to suit Airlinx Spiro Duct

SPIRO OFFSET

Spiro Offset allows the connection of two Spiro Ducts that are not aligned with one simple piece of fabricated Galvanised Steel Offset.

Technical Data

SO	Spiro Duct Offset AAmm Offset x AAmm Spiro Diameter x AAmm Height
----	---



Spiral Saddles

Strong Galvanised Branch that connected to Airlinx Spiro Duct

SPIRO SADDLES

Custom made Spiro Saddles are made by Galvanised Steel, which will enable a branch in the existing Spiro Duct and allow another Spiro to slip over the top of the branch.

Technical Data

SDS6	150mm Spiro Saddle suit AAmm Spiro
SDS8	200mm Spiro Saddle suit AAmm Spiro
SDS10	250mm Spiro Saddle suit AAmm Spiro
SDS12	300mm Spiro Saddle suit AAmm Spiro
SDS14	350mm Spiro Saddle suit AAmm Spiro
SDS16	400mm Spiro Saddle suit AAmm Spiro
SDS18	450mm Spiro Saddle suit AAmm Spiro

SPIRO T-PIECES

Manufactured with Galvanised Steel, T-Pieces provide a simple branch on a round duct that will connect with Spiro Duct without use of joiners

Technical Data

ST Spiro Duct "T" AAA/AAA/AAAmm Custom Made



45° Spiro Bends for Spiro Duct

Strong Solid Galvanised Bend
Made to suit Airlinx Spiro Duct

BLANKING PLATE

Blanking Plates for Spiro Duct

Technical Data

D-ENDBP6 Blanking Plate 150mm
D-ENDBP8 Blanking Plate 200mm
D-ENDBP10 Blanking Plate 250mm
D-ENDBP12 Blanking Plate 300mm
D-ENDBP14 Blanking Plate 350mm
D-ENDBP16 Blanking Plate 400mm
D-ENDBP18 Blanking Plate 450mm



45° Spiro Bends for Spiro Duct

Strong Solid Galvanised Bend
Made to suit Airlinx Spiro Duct

Spiro Duct & Fittings

ROUND SPIRO DUCT



LARGE STOCK RANGE OF SPIRO DUCT SIZES AND LENGTHS

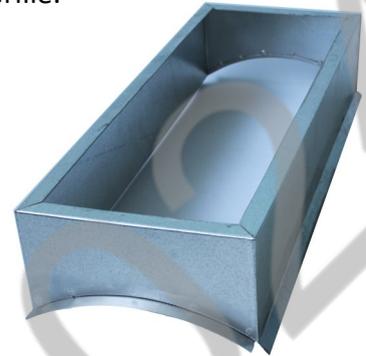
80	Dia. OD (mm) Fixed tooling
90	
100	
125	
150	
160	
200	
230	
250	
300	
350	
381	
400	
450	
500	
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
1050	
1100	
1150	
1200	
1250	
1300	
1350	
1400	
1450	
1500	
1550	
1600	
3"/75mm	Dia. OD (inches) 0.6 24#
4"/102mm	
5"/127mm	
6"/152mm	
7"/179mm	
8"/203mm	
9"/229mm	
10"/254mm	
11"/280mm	
12"/305mm	
14"/356mm	
16"/406mm	
18"/457mm	
20"/508mm	

Superior Quality & Services at Affordable prices

GRILLE SADDLE FOR SPIRO DUCTWORK

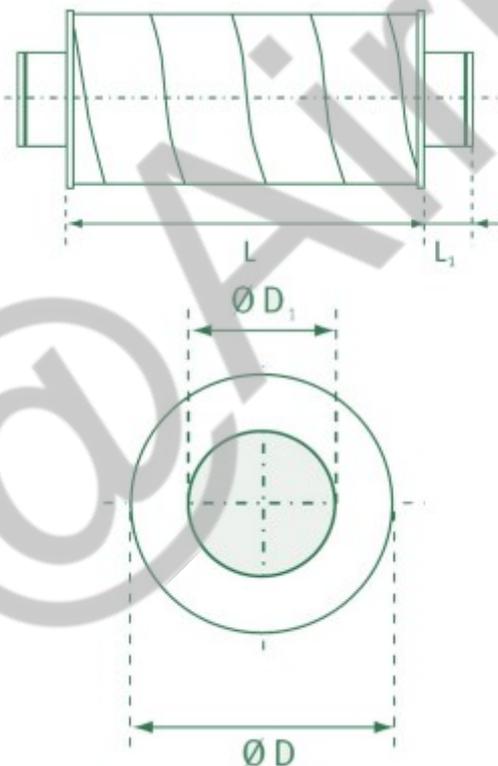
This kind of saddle is for grille sits on spiro duct, and suit Cured Faced Grille.

Also find under Grille Boxes and Adaptor.



SILENCER/ ATTENUATOR

Silencer or Attenuator is designed to reduce the noise in ventilation and air conditioning ducts. It's compatible with a standard spiro duct. The silencer should be fitted immediately behind a fan or bend to achieve most effective noise reduction. Length in 300mm, 600mm and 900mm are most commonly in use.



ØD1 /Inner Dia. (mm)	ØD/Outside Dia. (mm)	L1/Spigot (mm)	L(mm) / Length
100	200	30	600
125	225	30	600
150	250	30	600
200	300	50	600
250	350	50	900
300	400	50	900
350	450	50	900
400	500	60	900

C

Flexible Duct & Fittings



BCA 2011 VICTORIAN INSULATION REQUIREMENTS FOR AIRLINX FLEXIBLE

Table 3.12.5.2 Heating and Cooling ductwork and fittings— minimum material R-Value	Minimum material R-Value for ductwork and fittings in each climate zone				
	Heating only system or cooling only system including an evaporative cooling system		Combined heating and refrigerated cooling system		
	1, 2, 3, 4, 5, 6 and 7	8	1, 3, 4, 6 and 7	2 and 5	8
DUCTWORK	1.0	1.5	1.5 (see note)	1.0	1.5
FITTINGS	0.4	0.4	0.4	0.4	0.4

Note: The minimum material R-Value required for ductwork may be reduced by 0.5 for combined heating and refrigerated cooling systems in climate zones 1, 3, 4, 6 and 7 if the ducts are

- A) under a suspended floor with an enclosed perimeter; or
- B) In a roof space that has insulation of not less than R0.5 directly beneath the roofing

Existing homes that need to meet the requirements of HB 276 and AS4508 requires ductwork to have an R value 1.0 for heating and cooling and R-Value R0.6 and reflective foil for evaporative coolers (PIC will also accept R1.0 and no reflective foil). Fittings are required to be R.04

Flexible Duct & Fittings

SIZE MM	NUDE	R1.0 60mm / 420gsm	R1.5 90mm / 750gsm	4ZERO	4ZERO R1.0	4ZERO R1.5	ACOUSTIC	R1.0, R2.0 ACOUSTIC
100	X	X	X					
125	X	X	X					
150	X	X	X	X	X	X	X	X
175	X	X	X	X	X	X	X	X
200	X	X	X	X	X	X	X	X
225	X	X	X	X	X	X	X	X
250	X	X	X	X	X	X	X	X
300	X	X	X	X	X	X	X	X
350	X	X	X	X	X	X	X	X
400	X	X	X	X	X	X	X	X
450	X	X	X	X	X	X	X	X
500	X							
550								
600								

All Flexible Duct is in 6m lengths. Higher insulation ratings available on request.

- Airlinx Flexible Ducts Exceed Australian building standards
- Airlinx Flexible Ducts are made with 40mm pitch, extremely strong and due to tighter pitch our flexible duct won't sag when bent.
- Our insulated Ducts have a 100mm excess of insulation to overlap on connection and improve insulation properties in joins.
- Insulation is standard R1 and the grammage is 450mm per square meter, ensuring a high quality and effective product.

Flexible Duct & Fittings

R2 FLEXIBLE DUCT

Thermal Rating R2 Flexible Duct is insulation being more than 100mm thick and the density is 1100gs/m²

Technical Data

F-R2-06	R2 Insulation Flex Fire Rated 150mm x 6m
F-R2-08	R2 Insulation Flex Fire Rated 200mm x 6m
F-R2-10	R2 Insulation Flex Fire Rated 250mm x 6m
F-R2-12	R2 Insulation Flex Fire Rated 300mm x 6m
F-R2-14	R2 Insulation Flex Fire Rated 350mm x 6m
F-R2-16	R2 Insulation Flex Fire Rated 400mm x 6m



ACOUSTIC FLEXIBLE DUCT

Acoustic Duct is manufactured from a perforated core that once the air moves through the core, the air is absorbed into the insulation for a quieter air flow.

Technical Data

F-ADR106	Acoustic Flex R1 Ins 150mm x 6m
F-ADR108	Acoustic Flex R1 Ins 200mm x 6m
F-ADR110	Acoustic Flex R1 Ins 250mm x 6m
F-ADR112	Acoustic Flex R1 Ins 300mm x 6m
F-ADR114	Acoustic Flex R1 Ins 350mm x 6m
F-ADR116	Acoustic Flex R1 Ins 400mm x 6m



Superior Quality & Services at Affordable prices

Flexible Duct & Fittings

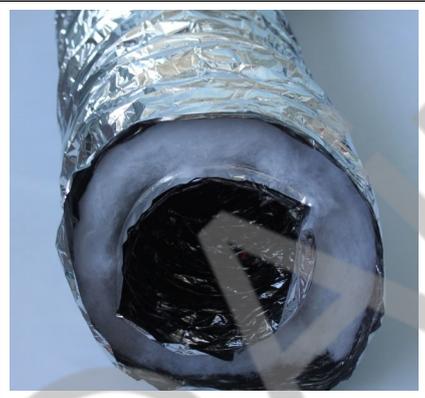


4 ZERO TWIN SKIN FLEXIBLE DUCT

4 Zero Twin Skin is manufactured from two layers of aluminium, this gives added strength the shape of the duct

Technical Data

F-TW4	4 Zero Twin Skin Flexible 100mm x 6m
F-TW5	4 Zero Twin Skin Flexible 125mm x 6m
F-TW6	4 Zero Twin Skin Flexible 150mm x 6m
F-TW8	4 Zero Twin Skin Flexible 200mm x 6m
F-TW10	4 Zero Twin Skin Flexible 250mm x 6m
F-TW12	4 Zero Twin Skin Flexible 300mm x 6m
F-TW14	4 Zero Twin Skin Flexible 350mm x 6m
F-TW16	4 Zero Twin Skin Flexible 400mm x 6m
F-TW18	4 Zero Twin Skin Flexible 450mm x 6m
F-TW20	4 Zero Twin Skin Flexible 500mm x 6m



4 ZERO R1 FLEXIBLE DUCT

4 Zero R1 Insulation is manufactured from an aluminium core with R1 Insulation and an aluminium sleeve. Fire Rated as smoke index 4.0.

Technical Data

F-4ZR6	4 Zero R1 Flexible Duct 150mm x 6m
F-4ZR8	4 Zero R1 Flexible Duct 200mm x 6m
F-4ZR10	4 Zero R1 Flexible Duct 250mm x 6m
F-4ZR12	4 Zero R1 Flexible Duct 300mm x 6m
F-4ZR14	4 Zero R1 Flexible Duct 350mm x 6m
F-4ZR16	4 Zero R1 Flexible Duct 400mm x 6m
F-4ZR18	4 Zero R1 Flexible Duct 450mm x 6m
F-4ZR20	4 Zero R1 Flexible Duct 500mm x 6m

Flexible Duct & Fittings

FLEX JOINERS

Metal joiner galvanised steel, best suit flexible duct. Two ring ridge for flexible duct wire to hook on. Mechanically produced to ensure precision fit

Technical Data

F-GJN4"	Galvanised Flex Joiner 100mm
F-GJN5"	Galvanised Flex Joiner 125mm
F-GJN6"	Galvanised Flex Joiner 150mm
F-GJN7"	Galvanised Flex Joiner 175mm
F-GJN8"	Galvanised Flex Joiner 200mm
F-GJN10"	Galvanised Flex Joiner 250mm
F-GJN12"	Galvanised Flex Joiner 300mm
F-GJN14"	Galvanised Flex Joiner 350mm
F-GJN16"	Galvanised Flex Joiner 400mm
F-GJN18"	Galvanised Flex Joiner 450mm



STARTING COLLARS

Castellated starting collar, galvanised steel, best suit flexible duct and cushion box

Technical Data

SC06	Starting Collar 150mm
SC08	Starting Collar 200mm
SC10	Starting Collar 250mm
SC12	Starting Collar 300mm
SC14	Starting Collar 350mm



Flexible Duct & Fittings

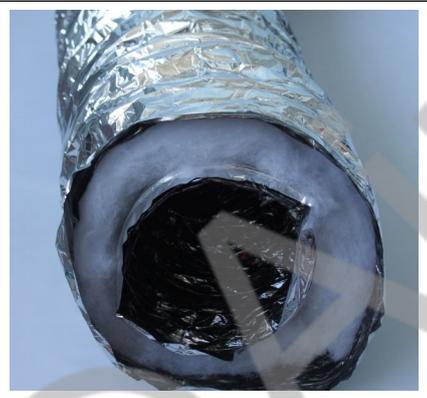


NUDE FLEX

Nude Duct is manufactured from metallised polyester film and hard cord wire. Smoke index is three zero.

Technical Data

F-U4	Fire Rated Nude Duct 100mm x 6m
F-U5	Fire Rated Nude Duct 125mm x 6m
F-U6	Fire Rated Nude Duct 150mm x 6m
F-U8	Fire Rated Nude Duct 200mm x 6m
F-U10	Fire Rated Nude Duct 250mm x 6m
F-U12	Fire Rated Nude Duct 300mm x 6m
F-U14	Fire Rated Nude Duct 350mm x 6m
F-U16	Fire Rated Nude Duct 400mm x 6m
F-U18	Fire Rated Nude Duct 450mm x 6m
F-U20	Fire Rated Nude Duct 500mm x 6m



R1 FLEXIBLE DUCT

Thermal Rating R1 Flexible Duct is manufactured a metallised polyester film nude flex with poly insulation at 60mm thick, and a outside metallised sleeve.

Technical Data

F-R4	R1 Insulation Flex Fire Rated 100mm x 6m
F-R5	R1 Insulation Flex Fire Rated 125mm x 6m
F-R6	R1 Insulation Flex Fire Rated 150mm x 6m
F-R8	R1 Insulation Flex Fire Rated 200mm x 6m
F-R10	R1 Insulation Flex Fire Rated 250mm x 6m
F-R12	R1 Insulation Flex Fire Rated 300mm x 6m
F-R14	R1 Insulation Flex Fire Rated 350mm x 6m
F-R16	R1 Insulation Flex Fire Rated 400mm x 6m
F-R18	R1 Insulation Flex Fire Rated 450mm x 6m
F-R20	R1 Insulation Flex Fire Rated 500mm x 6m

Silver Foil Tape

Venture tape, for foil reinforce on the duct work . Comply with AS-4254, it comes 50mm wide x 50mts per roll or 75mm wide x 50mts per roll.



Code and description	
ITEM NUMBER	ITEM NAME
FIT50	Foil reinforce Tape 50mm
FIT75	Foil reinforce Tape 75mm

FLANGED STARTING COLLAR

Material is galvanised metal 0.6 gauge.



Code and description	
SCR6	Flanged Starting Collar 150mm
SCR8	Flanged Starting Collar 200mm
SCR10	Flanged Starting Collar 250mm
SCR12	Flanged Starting Collar 300mm
SCR14	Flanged Starting Collar 350mm
SCR16	Flanged Starting Collar 400mm
SCR18	Flanged Starting Collar 450mm
SCR20	Flanged Starting Collar 500mm



Duct Tape

Sealed up flexible duct with it's fittings. Nitto brand lead free, 48mm x 30m per roll, comes in grey or black colour

Code and description

DT	Duct Tape Nitto Denko
----	-----------------------



Blue Hanging Strap

Hanging Strap comes in 50m to hanging flexible duct in the ceiling or under the floor. 25mm x 50mts a roll

Code and description

HS	Blue Hanging Strap
----	--------------------

D

Fans

@AirlinkX2024



HDD SERIES SILENT MIXED FLOW INLINE FAN

DESCRIPTION



1. Fan body is made of environmental protection material with beautiful lines and light weight, double insulation.
2. Fan blade is designed according to hydromechanical principle to reach the optimal airflow and air pressure, high efficiency working, low energy consumption and low noise.
3. Fan inside produced with two-layer sound absorbent and sound wave holes, to reduce noise level.
4. Double diameter connection, sealing-up, leak-proof and shock proof.
5. Backdraft damper designed inside, to prevent return air and insects.
6. Special design of joint to facilitate installation and dismounting; Easy installation and maintenance.
7. Outer rotor motor inside, with Japanese brand NMB ball bearing, long working life over 50000 hours.
8. Protection class: IP44.
9. Can be designed with user friendly features such as time delay, temperature sense, humidity sensor or other customized functions.
10. Operating temperature range: -20°C-60°C.
11. This series fans offers solution to ventilation problems, especially in places where people work and live and low sound level is required, such as meeting room, office, hotel, public place, residence, hospital, gym

Superior Quality & Services at Affordable prices

Fans

HDD SERIES SILENT MIXED FLOW INLINE FAN

DETAILS SHOW



Low-profile fan body with beautiful lines



High performance hydromechanical fan blades



Ultra quiet design with two-layer sound absorbent and sound wave holes



Special design of joint to facilitate



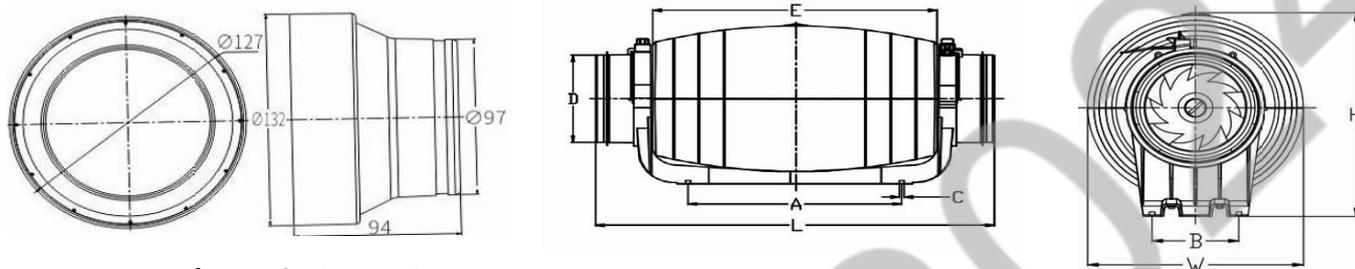
Backdraft dam per designed in side to



Easy installation and maintenance

HDD SERIES SILENT MIXED FLOW INLINE FAN

DIMENSIONS (MM)



HDD-100/125P(adaptor)

MODEL	A	B	C	φD	E	L	W	H
HDD-100/125P	248	82	4-φ5.5	97/123	330	580/462	205	225
HDD-150P	251	95	4-φ5.3	149/158	352	488	221	244
HDD-200P	339	128	4-φ5.6	198	436	567	262	301

PERFORMANCE PARAMETER

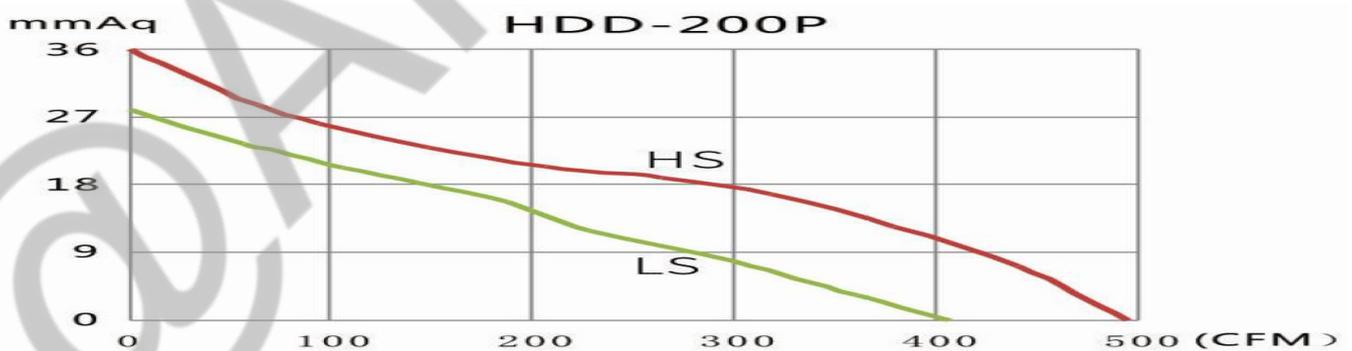
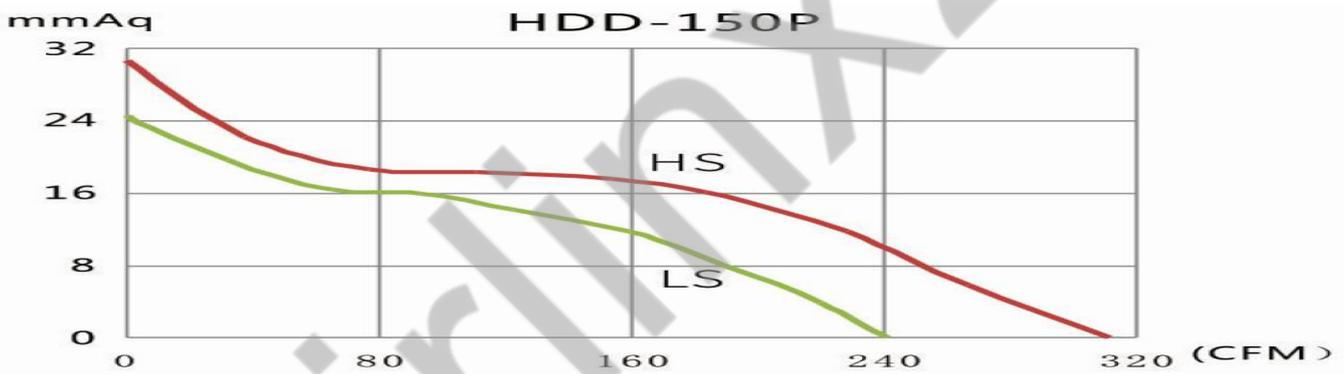
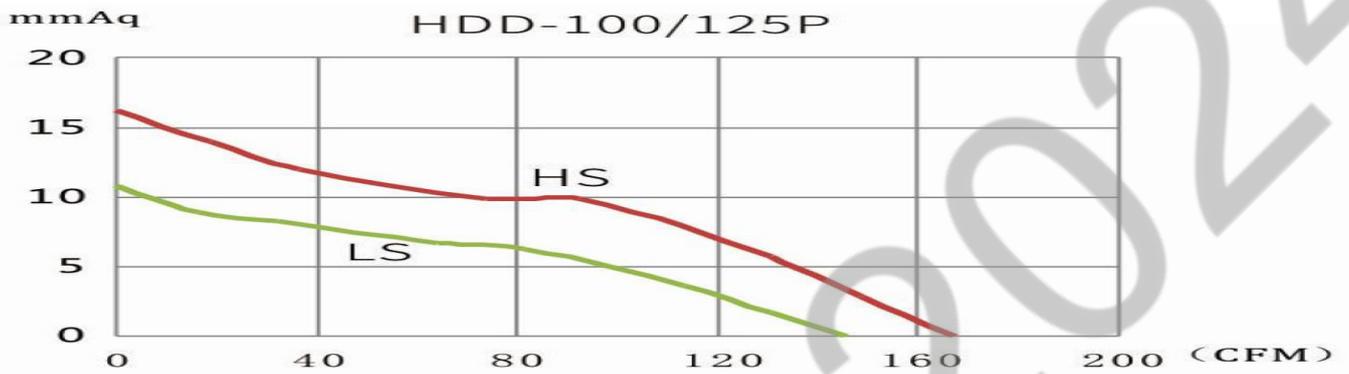
Model	Speed	Voltage /Frequency	Current (Amps)	Power (W)	Speed (RPM)	Airflow (m ³ /h)	Air Pressure (Pa)	Noise (dB)	Net Weight (kgs)
HDD-100/125P	H	220~240V/50Hz	0.14	33	2250	284	159	25	2.8
	L		0.13	28	1850	248	106	22	
HDD-150P	H	100~120V/60Hz	0.30	32	2250	284	159	25	4.0
	L		0.26	27	1850	248	106	22	
HDD-200P	H	220~240V/50Hz	0.25	50	2550	530	300	31	5.9
	L		0.20	43	1850	410	240	26	
HDD-200P	H	100~120V/60Hz	0.55	62	2550	530	300	31	5.9
	L		0.47	51	1850	410	240	26	
HDD-200P	H	220~240V/50Hz	0.57	128	2450	840	352	35	5.9
	L		0.52	123	1950	690	274	29	
HDD-200P	H	100~120V/60Hz	1.41	162	2450	840	352	35	5.9
	L		1.27	146	1950	690	274	29	

Superior Quality & Services at Affordable prices

Fans

HDD SERIES SILENT MIXED FLOW INLINE FAN

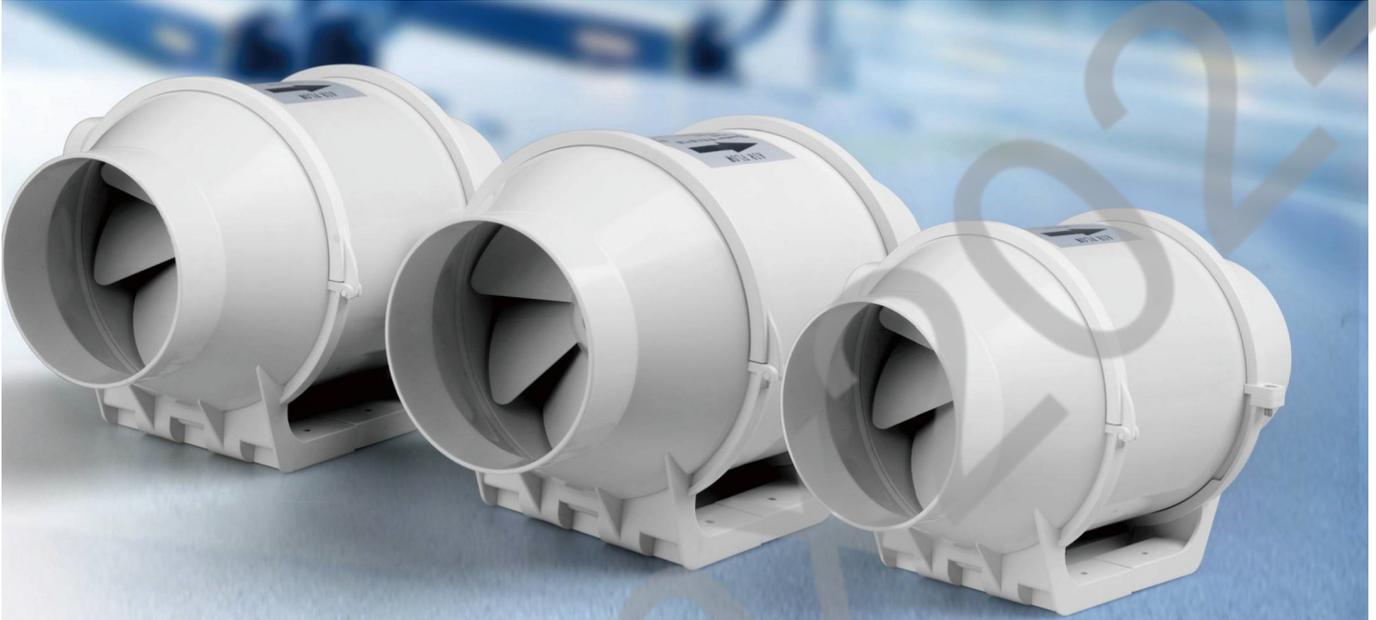
PERFORMANCE CURVES



HS: HIGH SPEED LS:LOW SPEED

HF-S SERIES INLINE DUCT FAN

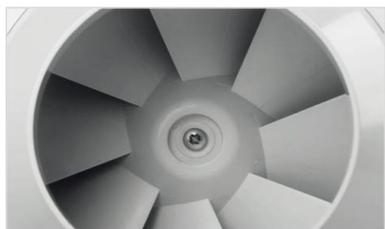
DESCRIPTION



1. Fan body is made of environmental protection material with beautiful lines and light weight, double insulation.
2. Fan blade is designed according to hydromechanical principle to reach the optimal airflow and air pressure, high efficiency working, low energy consumption and low noise.
3. Special design of joint to facilitate installation and dismounting; Easy installation and maintenance
4. Outer rotor motor inside, with Japanese brand NMB ball bearing, long working life over 50000 hours.
5. Protection class: IP44.
6. Can be designed with user friendly features such as time delay, temperature sense, humidity sensor or other customized functions.
7. Operating temperature range: -20°C-60°C.

HF-S SERIES INLINE DUCT FAN

DETAILS SHOW



High performance hydro-mechanical fan blades



Sealing ring in connection box, protection class IP44



High security mounting base, easy installation

FAN KITS

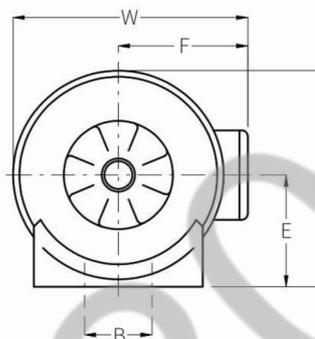
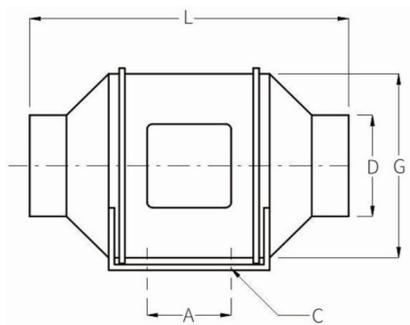


Customizable fan kits

This package details : Fan (HF-I00S) + Air diffuser + Backdraft damper + Flexible duct + Double speed control switch + Fasteners

HF-S SERIES INLINE DUCT FAN

DIMENSIONS (MM)



Model	A	B	C	ϕD	E	F	G	L	W	H
HF-75S	45	78	4- $\phi 4.5$	37	90	102	140	291	188	160
HF-100S	45	78	4- $\phi 4.5$	97	90	102	140	246	188	160
HF-125S	45	78	4- $\phi 4.5$	124	90	102	140	194	188	160

PERFORMANCE PARAMETER

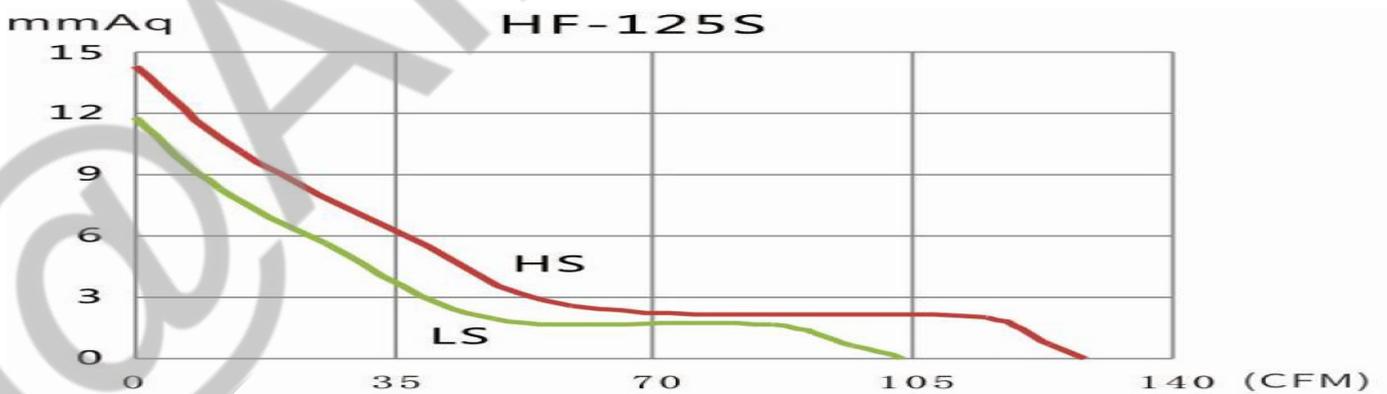
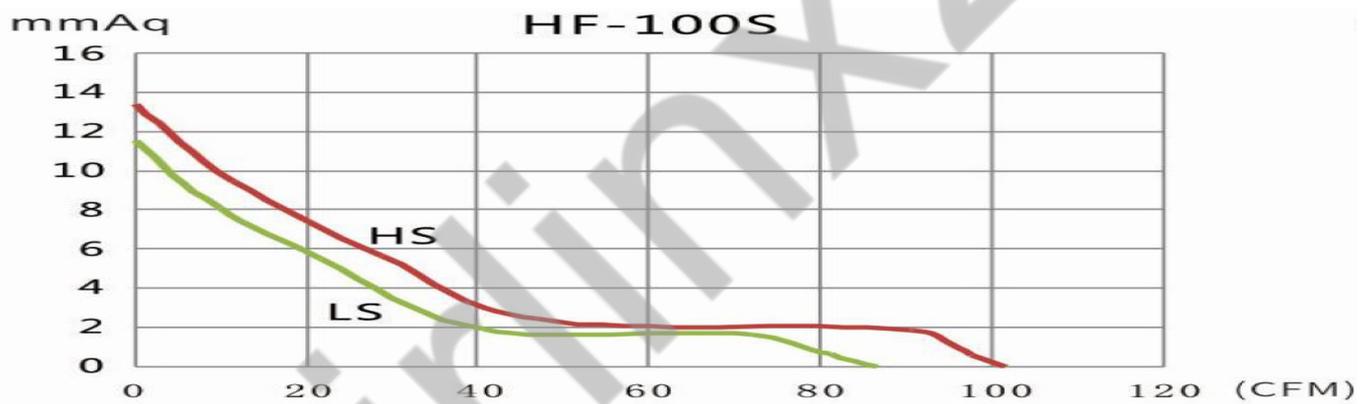
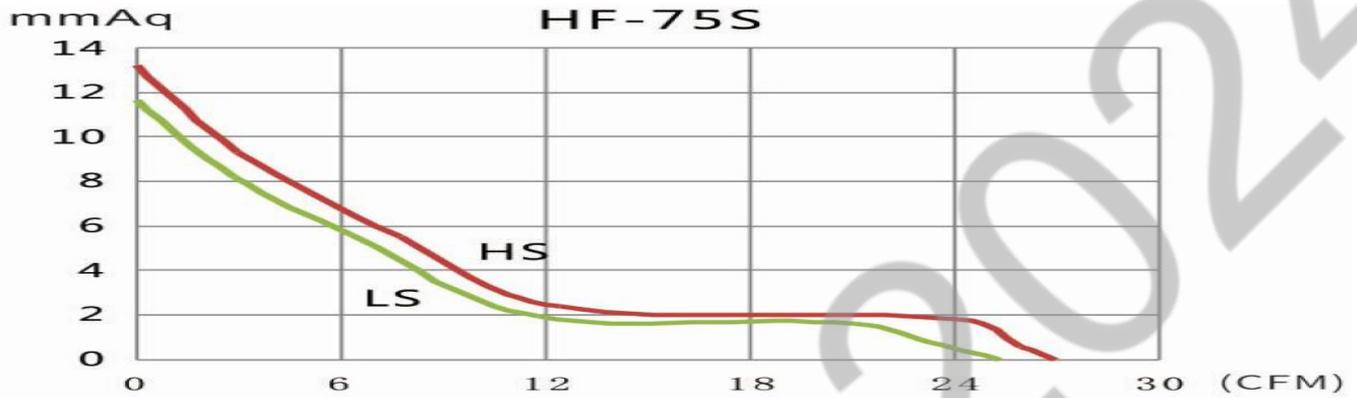
Model	Speed	Voltage /Frequency	Current (Amps)	Power (W)	Speed (RPM)	Airflow (m ³ /h)	Air Pressure (Pa)	Noise (dB)	Net Weight (kgs)
HF-75S	H	220~240V/50Hz	0.27	30	2750	46	129	26	1.4
	L		0.12	16	2550	43	114	21	
HF-100S	H	100~120V/60Hz	0.50	29	2750	46	129	26	1.3
	L		0.42	25	2550	43	114	21	
HF-100S	H	220~240V/50Hz	0.26	35	2600	170	125	31	1.3
	L		0.15	20	2100	133	105	26	
HF-125S	H	100~120V/60Hz	0.55	38	2600	170	125	31	1.3
	L		0.45	30	2100	133	105	26	
HF-125S	H	220~240V/50Hz	0.28	35	2600	218	140	31	1.3
	L		0.17	20	2100	181	115	26	
HF-125S	H	100~120V/60Hz	0.58	40	2600	218	140	31	1.3
	L		0.47	31	2100	181	115	26	

Superior Quality & Services at Affordable prices

Fans

HF-S SERIES INLINE DUCT FAN

PERFORMANCE CURVES



HS: HIGH SPEED LS:LOW SPEED

HF SERIES MIXED FLOW INLINE FAN

DESCRIPTION



1. Fan body is made of eco-friendly raw material with beautiful lines and double insulation.
2. Fan blade is designed according to fluid dynamics principle to reach optimal airflow and air pressure.
3. Special design of joint for easy installation and maintenance.
4. Japanese NMB ball bearing with long working life over 50000hours.
5. IP44 protection class
6. Optional timer delay, humidity sensor, temperature sensor or other functions.
7. Operating temperature range: -20°C-60°C.
8. Perfect for homes, apartments, office, public place, hotel , gym and etc

Superior Quality & Services at Affordable prices

Fans

HF SERIES MIXED FLOW INLINE FAN

DETAILS SHOW



High performance hydro-mechanical fan blades



Sealing ring in connection box, protection class IP44



Hydromechanical wind circle designed to achieve the highest efficiency



Safer mounting base designed according to safety requirements and fan

EASY TO MOUNT

1 Fix the support



2 Couple the ducts



3 Fix the fan body

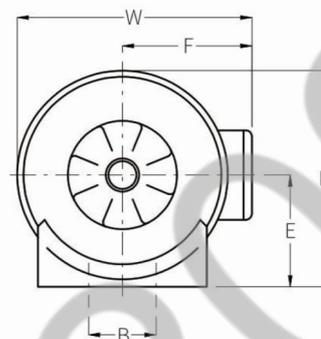
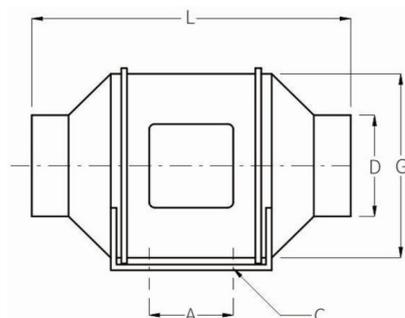


4 Make the connections



HF SERIES MIXED FLOW INLINE FAN

DIMENSIONS (MM)



Model	A	B	C	ΦD	E	F	ΦG	L	W	H
HF-100P	80	60	4-Φ4.5	97	99	116	163	302	204	195
HF-125P	80	60	4-Φ4.5	123	99	116	163	257	204	195
HF-150P	80	60	4-Φ5.0	147	109	127	187	313	227	208
HF-200P	100	94	4-Φ5.5	197	125	137	205	302	249	237
HF-250P	150	150	4-Φ8*11	247	150	174	261	383	310	286
HF-315P	181	178	4-Φ8*11	312	187	216	325	446	386	357

PERFORMANCE PARAMETER

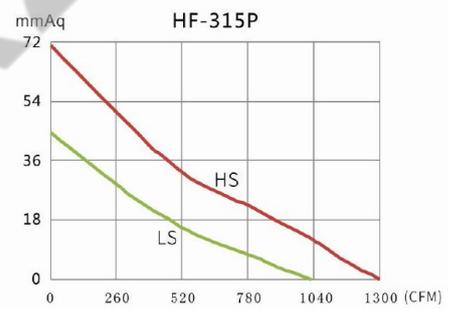
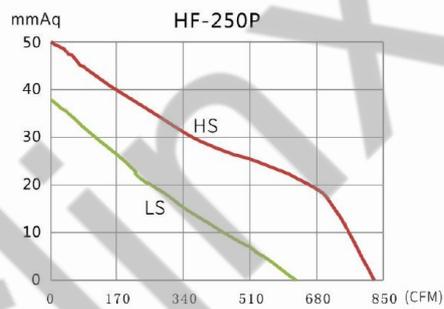
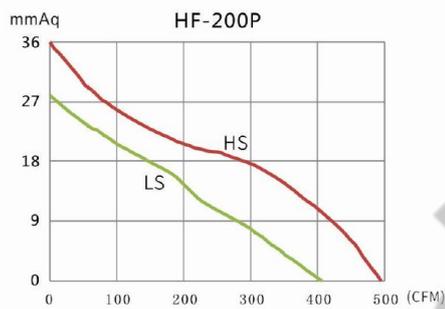
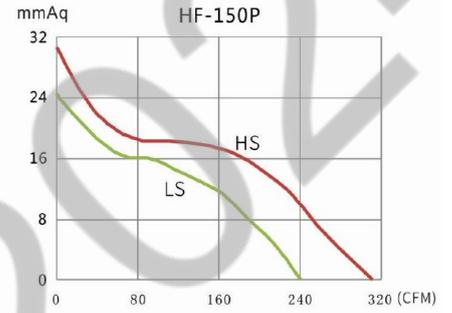
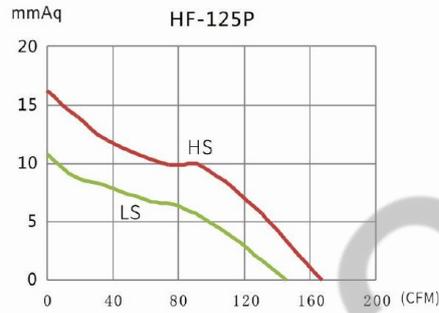
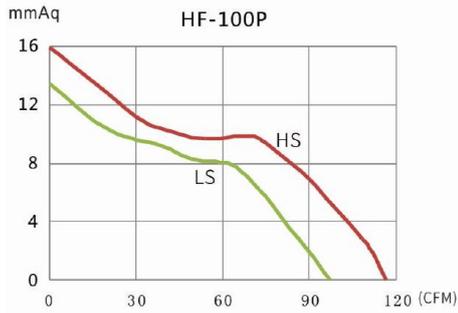
Model	Speed	Voltage /Frequency	Current (Amps)	Power (W)	Speed (RPM)	Airflow (m ³ /h)	Air Pressure (Pa)	Noise (dB)	Net Weight (kgs)
HF-100P	H	220~240V/50Hz	0.12	26	2200	198	156	31	1.5
	L		0.11	23	1850	165	131	26	
HF-125P	H	100~120V/60Hz	0.24	30	2200	198	156	31	1.5
	L		0.22	28	1850	165	131	26	
HF-150P	H	220~240V/50Hz	0.14	33	2250	284	159	31	1.5
	L		0.13	28	1850	248	106	26	
HF-200P	H	100~120V/60Hz	0.30	32	2250	284	159	31	2.6
	L		0.26	27	1850	248	106	26	
HF-250P	H	220~240V/50Hz	0.22	54	2550	530	300	33	4.9
	L		0.19	44	1850	410	240	29	
HF-315P	H	100~120V/60Hz	0.58	65	2550	530	300	33	7.5
	L		0.49	53	1850	410	240	29	
HF-100P	H	220~240V/50Hz	0.53	128	2450	840	352	63	4.9
	L		0.52	123	1950	690	274	55	
HF-125P	H	100~120V/60Hz	1.47	162	2450	840	352	63	7.5
	L		1.27	146	1950	690	274	55	
HF-150P	H	220~240V/50Hz	1.20	225	2450	1405	488	66	7.5
	L		0.75	165	1850	1064	371	58	
HF-200P	H	100~120V/60Hz	2.10	240	2450	1405	488	66	11
	L		1.50	166	1850	1064	371	58	
HF-250P	H	220~240V/50Hz	1.90	390	2350	2206	693	69	11
	L		1.40	275	1650	1750	435	61	
HF-315P	H	100~120V/60Hz	3.70	412	2350	2206	693	69	11
	L		2.90	306	1650	1750	435	61	

Superior Quality & Services at Affordable prices

Fans

HF SERIES MIXED FLOW INLINE FAN

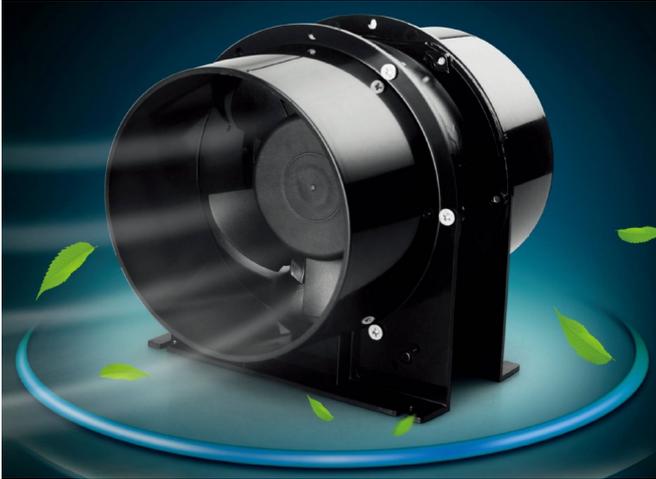
PERFORMANCE CURVES



HS: HIGH SPEED LS:LOW SPEED

HA SERIES AXIAL DUCT FAN

DESCRIPTION



1. Size: 120*120*38mm (duct diameter:
100mm)

Size: 172*150*50mm

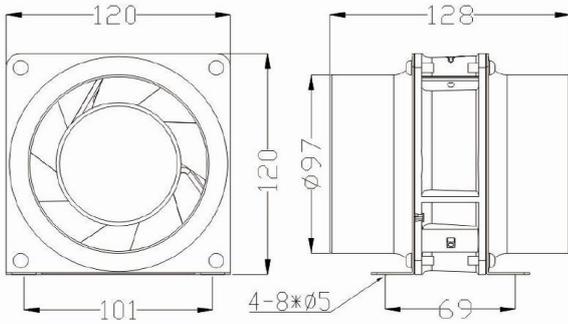
2. Housing: Aluminum

3. Sleeve or ball bearing optional

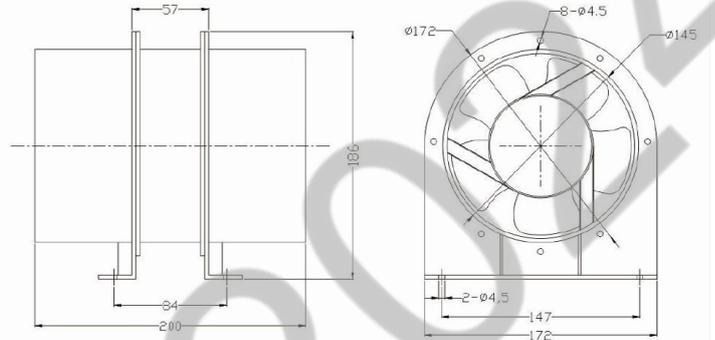
4. Insulation class: F

HA SERIES AXIAL DUCT FAN

DIMENSIONS (MM)



HA12038B2



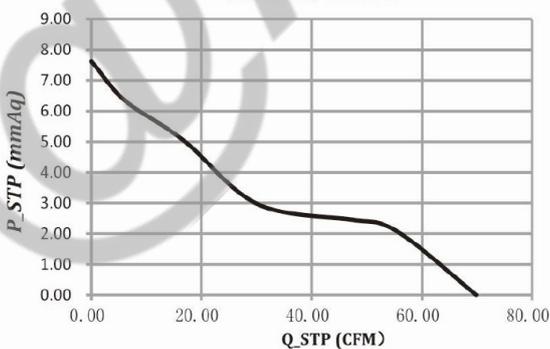
HA17551B2

PERFORMANCE PARAMETER

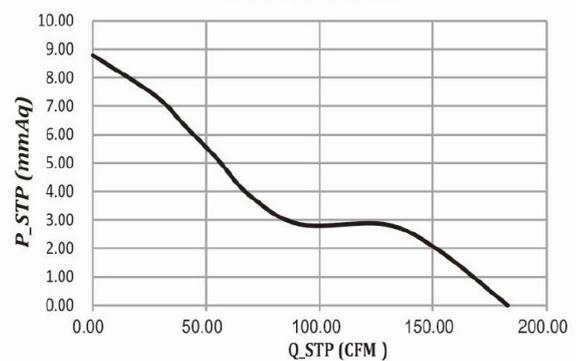
Model	Voltage (V)	Frequency (Hz)	Power (W)	Current (Amps)	Speed (RPM)	Airflow (m ³ /h)	Noise (dB)	Net Weigh (kgs)
HA12038B2	220-240	50	18	0.12	2700	119	40	0.75
HA17251B2	220-240	50	36	0.26	2500	323	45	1.3

PERFORMANCE CURVES

HA12038B2

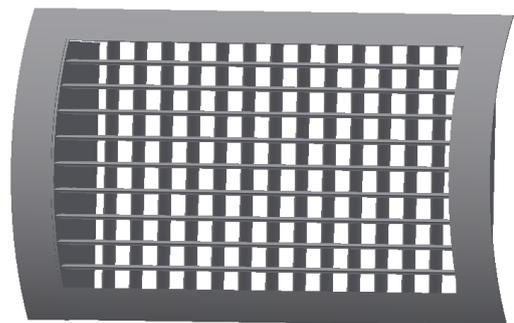
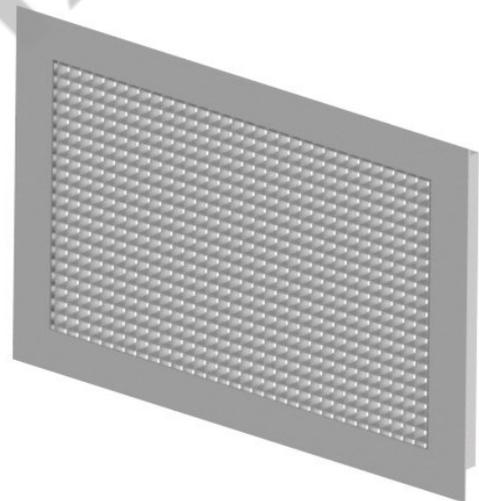
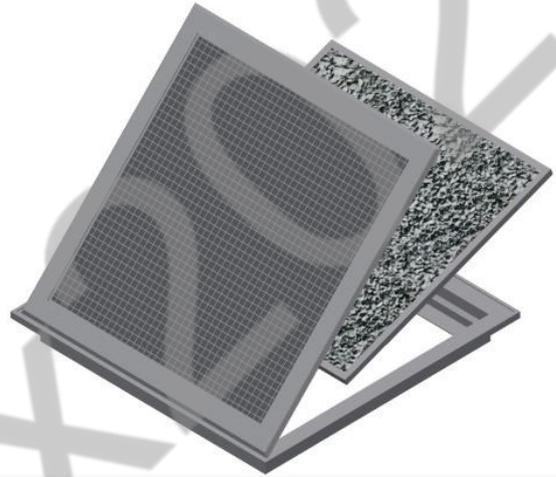
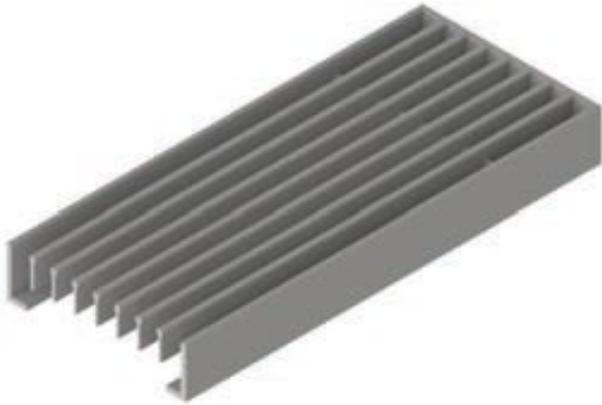
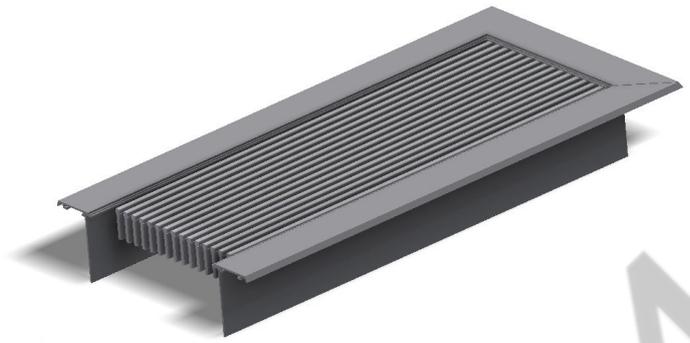


HA17251B2

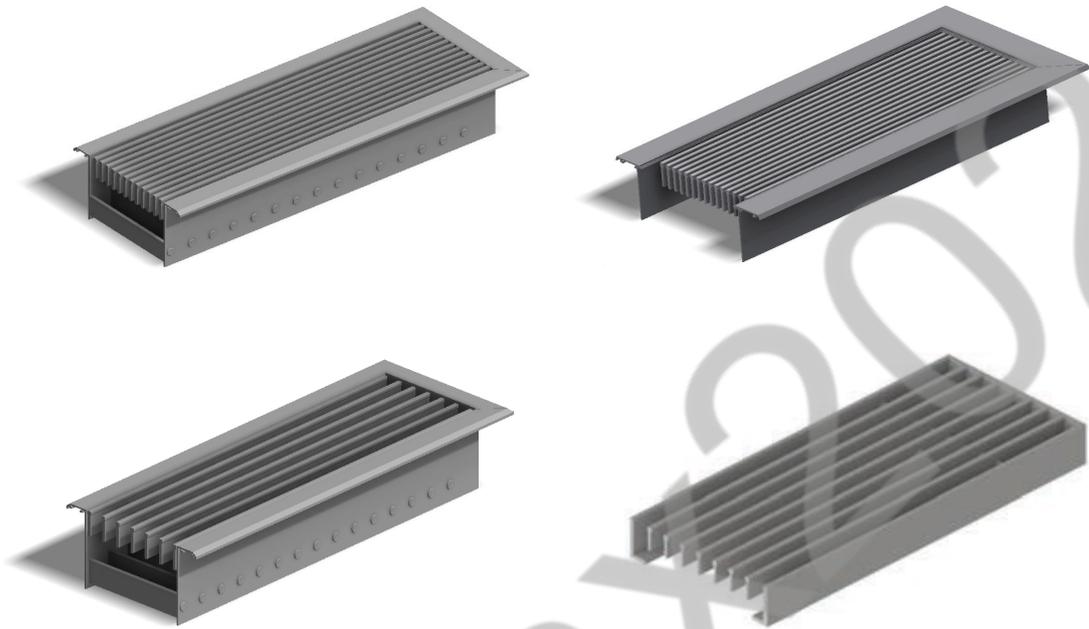


E

Grilles



LINEAR BAR GRILLES



DESCRIPTION

Airlinx Linear Bar Grilles are designed for high performance applications and have been engineered to provide outstanding performance and versatility for air distribution in Supply Air, Return Air and Exhaust Air applications.

With an aesthetically pleasing design, Linear Bar Grilles are suitable for installation in Sidewall, Ceiling and Floor applications.

Airlinx have a wide range of core and frame style options providing versatility for all design and installation applications.

Linear Bar Grilles can be installed as individual sections or in a continuous line.

Typical installations are for residential, commercial and retail applications including homes, apartments, offices, hospitals, shops, hotels and restaurants.

Superior Quality & Services at Affordable prices

LINEAR BAR GRILLES

CONSTRUCTION

All Airlinx Linear Bar Grilles are manufactured from high quality extruded aluminum.

Standard stock sizes are available, however due to the multiple core, blade and frame style options available these are made to order in our factory.

CORE OPTIONS

Airlinx Linear Bar Grilles can be manufactured with a Fixed, Removable or Hinged Core and also with a filter where required for Return Air Applications.

ACCESSORIES

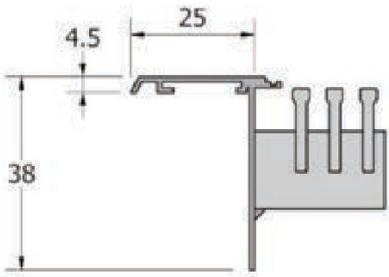
Available with optional opposed blade dampers, plain and insulated header boxes.

FINISH

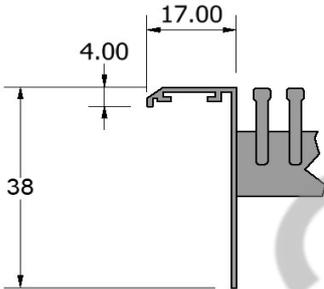
Available as standard in White Powder Coat Finish.
Other Powder Coat finishes are also available.

FRAME STYLE OPTIONS

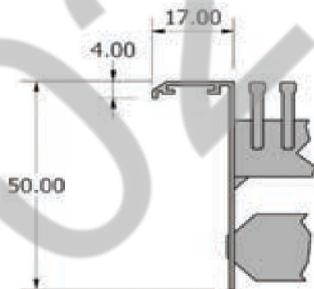
TYPE 1A



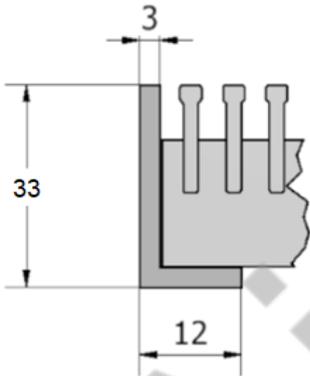
TYPE 2A



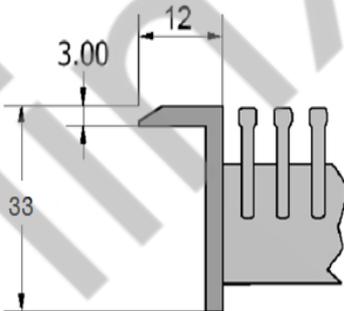
TYPE 2B



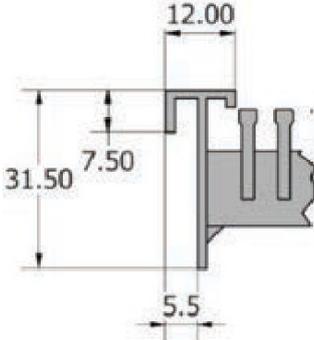
TYPE 3A



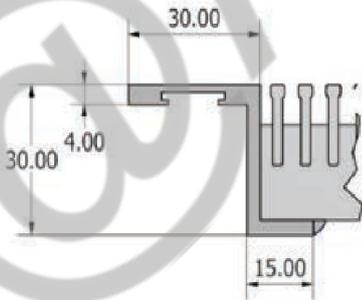
TYPE 3B



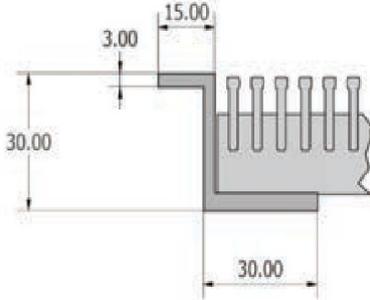
TYPE 4A



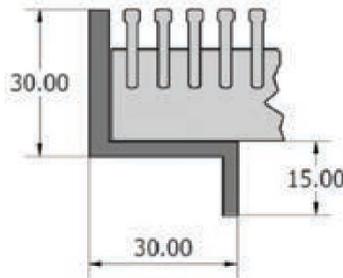
TYPE 5A



TYPE 5B



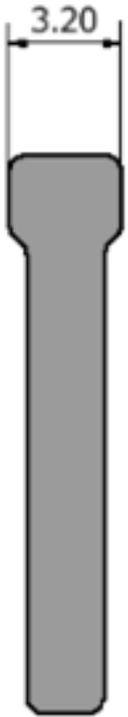
TYPE 5C



Superior Quality & Services at Affordable prices

BLADE PROFILE OPTIONS

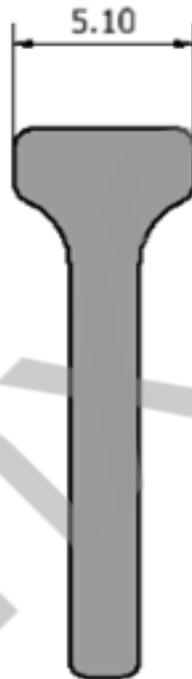
0 DEGREE



15 DEGREE

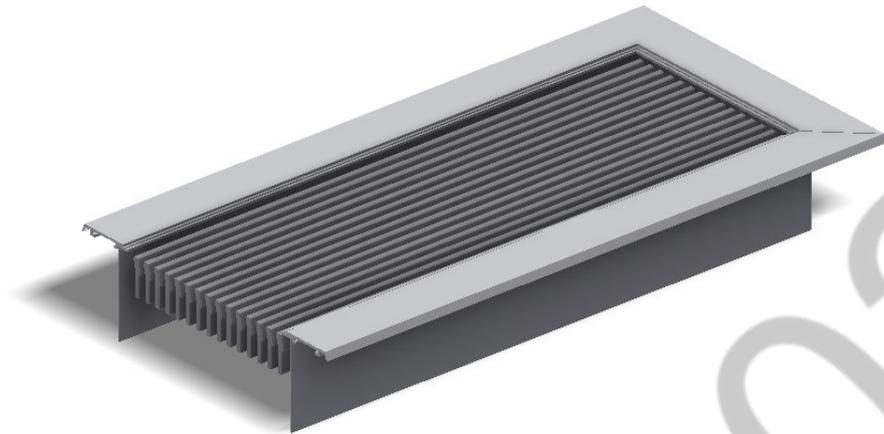


0 DEGREE HVY



30 DEGREE HVY





LINEAR BAR GRILLE: G-B615

DESCRIPTION

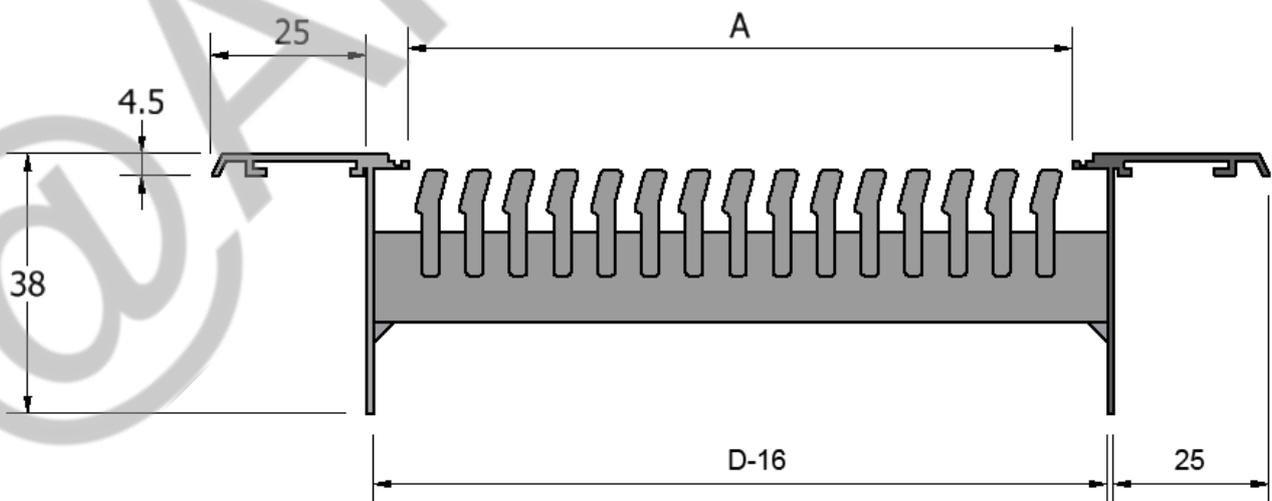
Slimline Bar Grille with Narrow Blade Spacing

6.35mm Blade Spacing

3.2mm Blade Width

15 Degree Blade Deflection

Frame Style Options*: Type 1A, Type 2A, Type 3A, Type 3B, Type 4A



Superior Quality & Services at Affordable prices



LINEAR BAR GRILLE: G-B600

DESCRIPTION

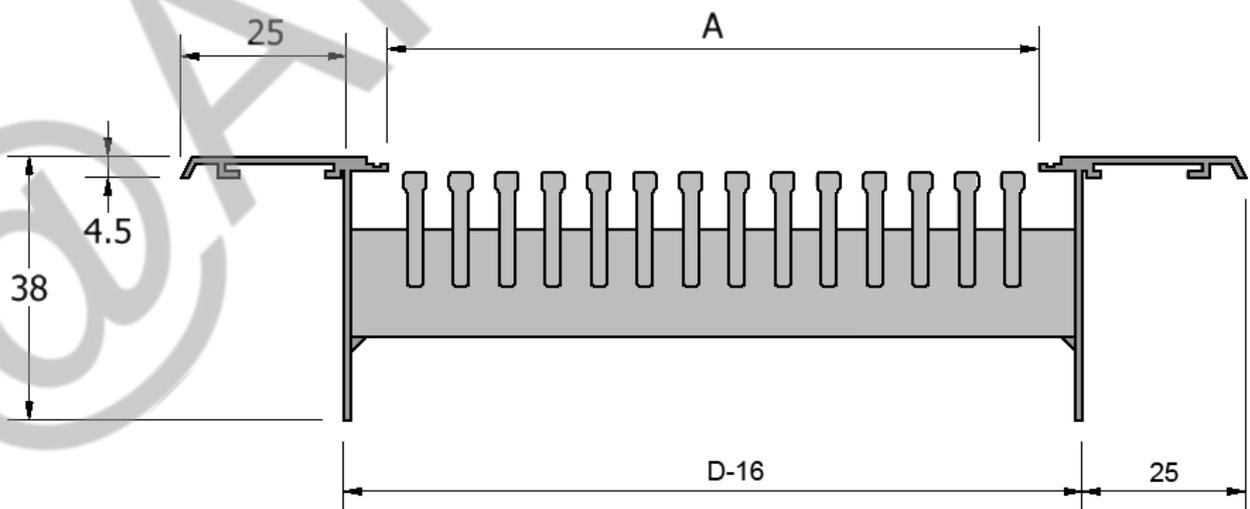
Slimline Bar Grille with Narrow Blade Spacing

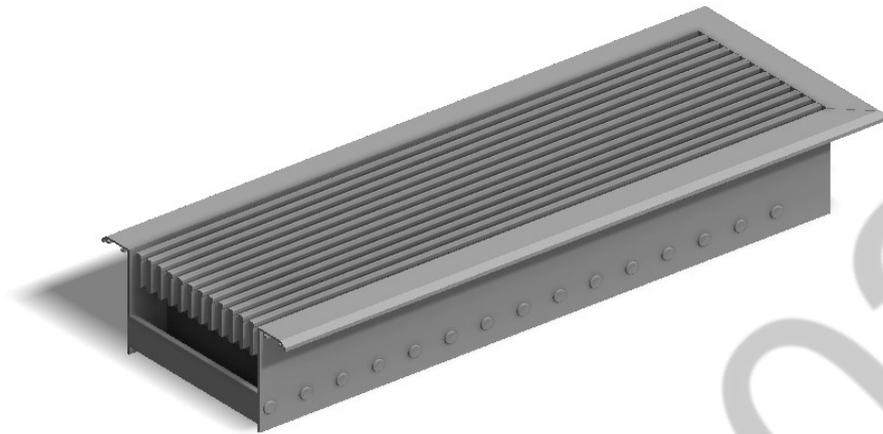
6.35mm Blade Spacing

3.2mm Blade Width

0 Degree Deflection

Frame Style Options*: Type 1A, Type 2A, Type 3A, Type 3B, Type 4A





LINEAR BAR GRILLE: G-BA600

DESCRIPTION

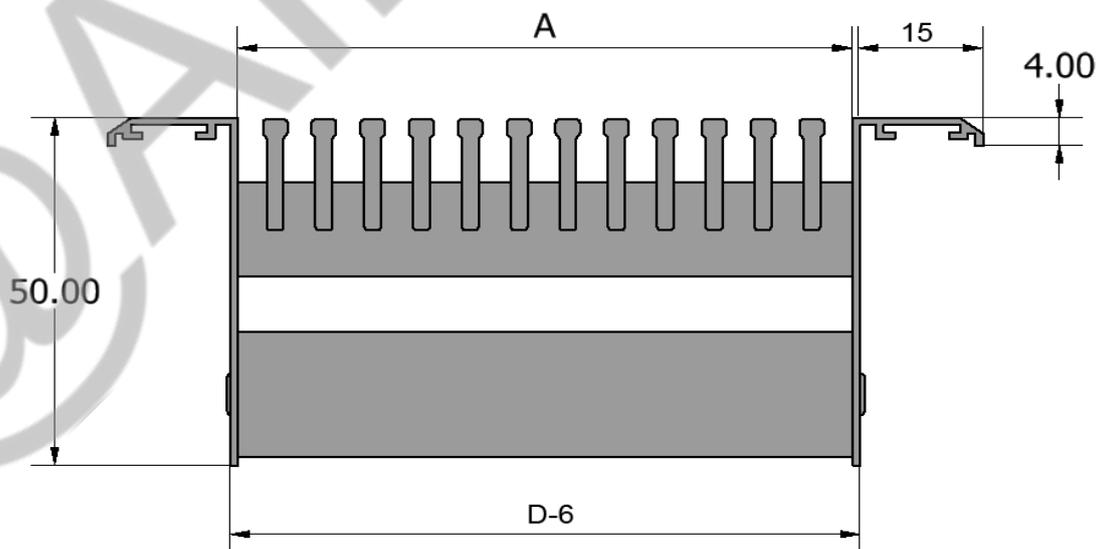
Same as G-B600 however with additional Rear Adjustable Blades allowing air-flow to be directed horizontally, left and right at 0-90°

6.35mm Blade Spacing

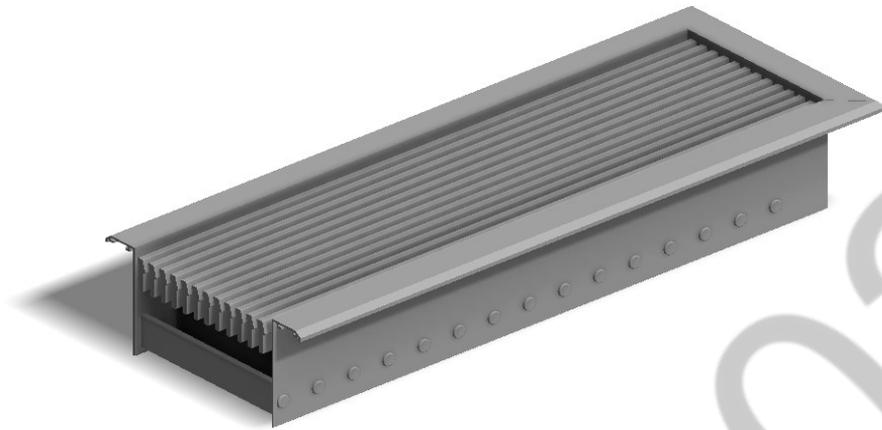
3.2mm Blade Width

0 Degree Blade Deflection

Front Blades Fixed



Superior Quality & Services at Affordable prices



LINEAR BAR GRILLE: G-BA615

DESCRIPTION

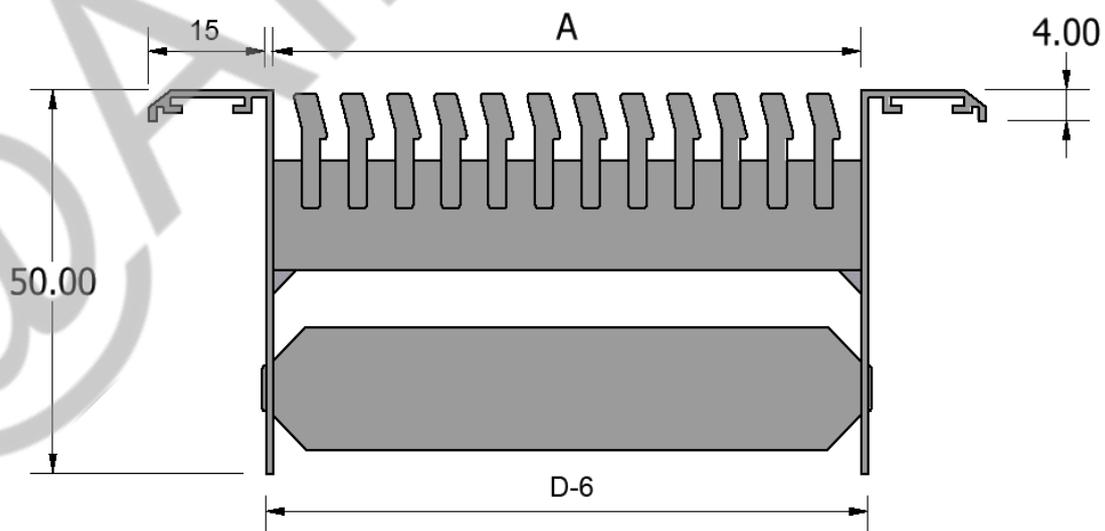
Same as G-B615 however with additional Rear Adjustable Blades allowing air-flow to be directed horizontally, left and right at 0-90°

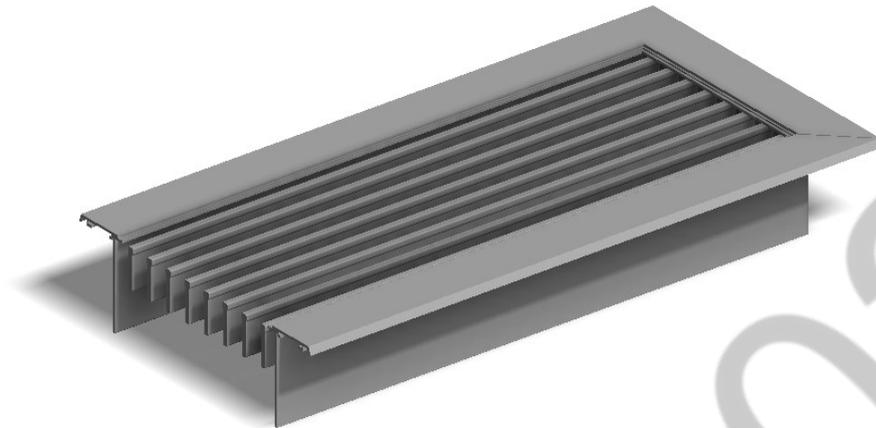
6.35mm Blade Spacing

3.2mm Blade Width

15 Degree Blade Deflection

Front Blades Fixed





LINEAR BAR GRILLE: G-B1200

DESCRIPTION

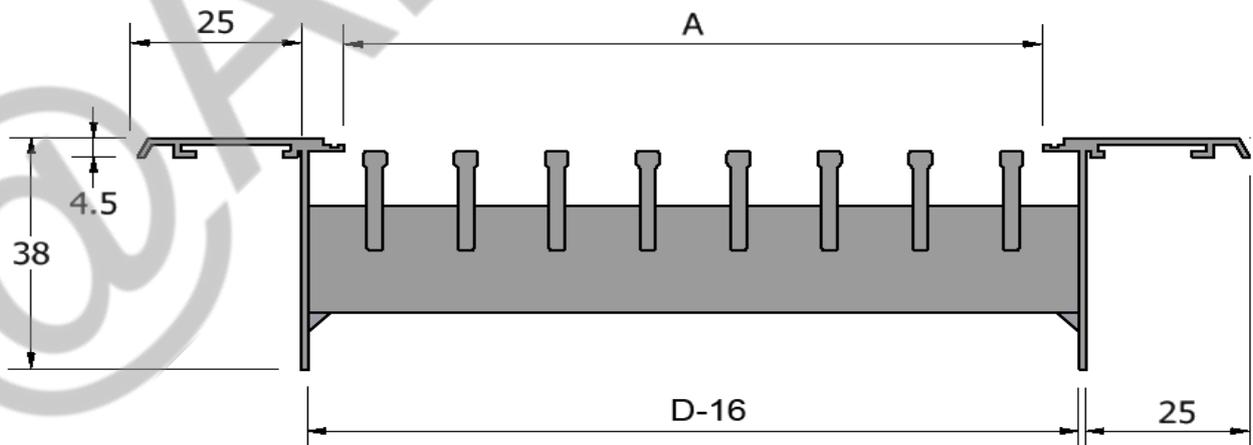
Slimline Bar Grille with Standard Blade Spacing

12.5mm Blade Spacing

3.2mm Blade Width

0 Degree Blade Deflection

Frame Style Options*: Type 1A, Type 2A, Type 3A, Type 3B, Type 4A



Superior Quality & Services at Affordable prices



LINEAR BAR GRILLE: G-BA1200

DESCRIPTION

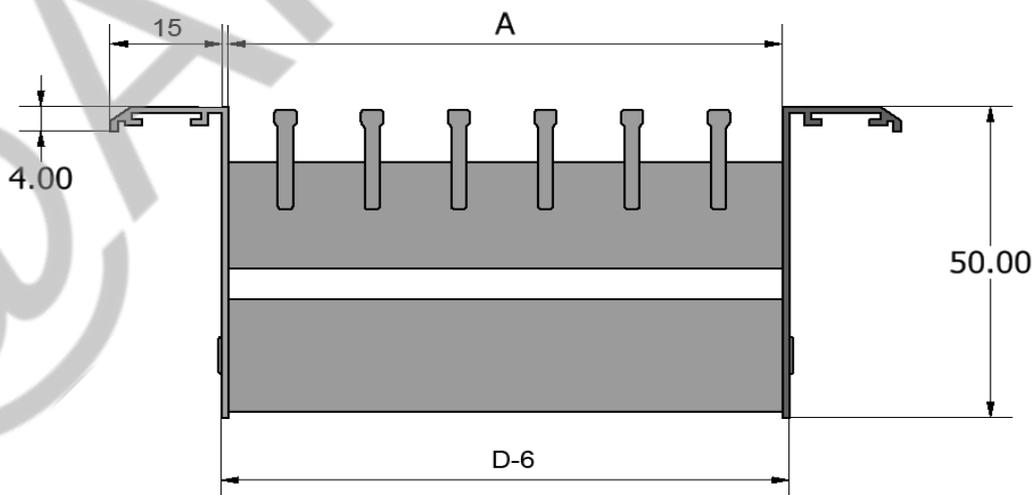
Same as G-B1200 however with additional Rear Adjustable Blades allowing airflow to be directed horizontally, left and right at 0-90°

12.5mm Blade Spacing

3.2mm Blade Width

0 Degree Blade Deflection

Front Blades Fixed





LINEAR BAR GRILLE: G-BH1200

DESCRIPTION

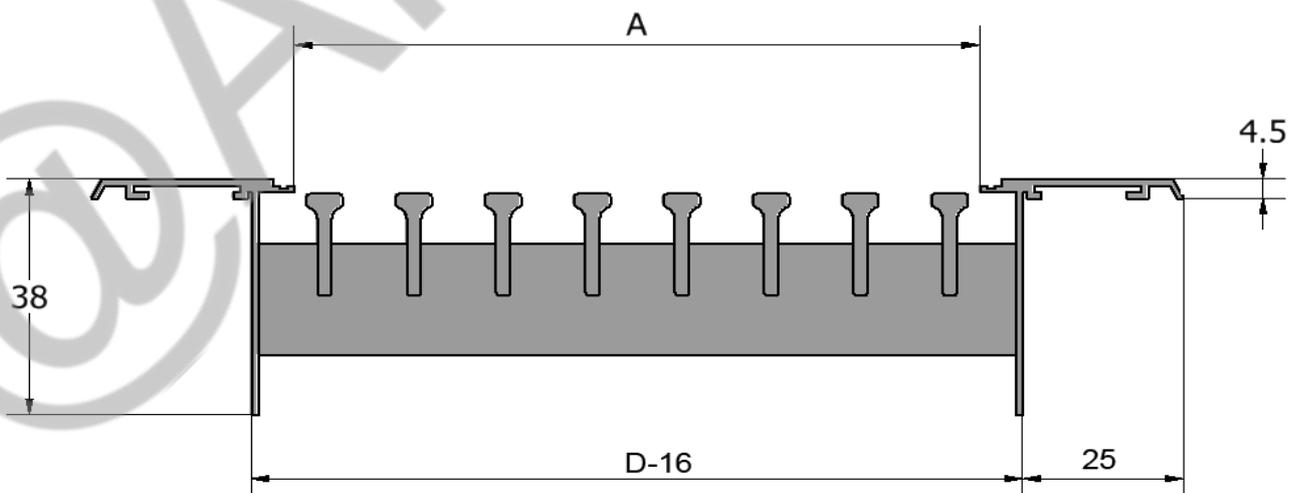
Model: G-BH1200 is designed for Wall or Floor Mounted applications where a stronger grille is required and is suitable for foot trafficable areas.

Same design as G-B1200 however the blades are of a heavier construction at 5.1mm wide x 16mm deep.

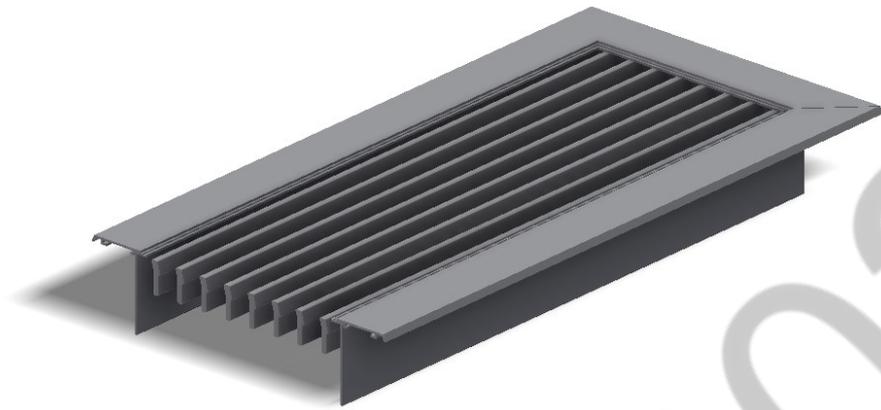
12.5mm Blade Spacing

5.1mm Blade Width

0 Degree Blade Deflection



Superior Quality & Services at Affordable prices



LINEAR BAR GRILLE: G-B1215

DESCRIPTION

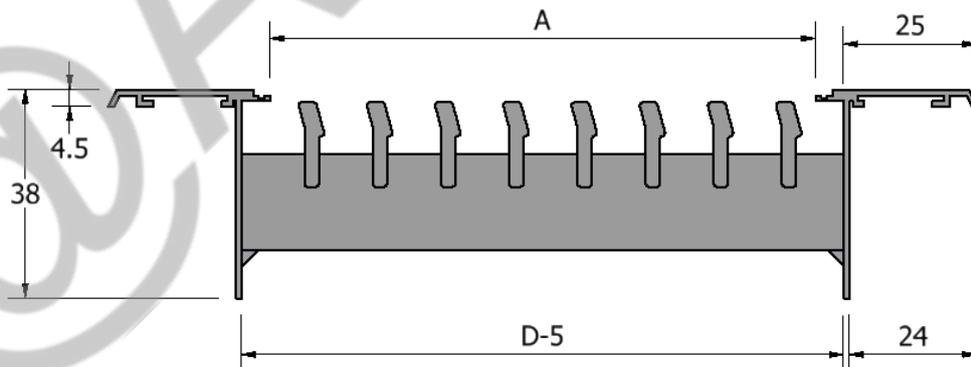
Slimline Bar Grille with Standard Blade Spacing

12.5mm Blade Spacing

3.2mm Blade Width

15 Degree Blade Deflection

Frame Style Options*: Type 1A, Type 2A, Type 3A, Type 3B, Type 4A



LINEAR BAR GRILLE: G-BH1230

DESCRIPTION

Model: G-BH1230 is designed for Wall or Floor Mounted applications where a stronger grille is required and is suitable for foot trafficable areas.

Same design as G-B1200 however the blades are of a heavier construction at 5.1mm wide x 16mm deep.

12.5mm Blade Spacing

5.1mm Blade Width

30 Degree Blade Deflection



LINEAR BAR GRILLE: G-BH2500

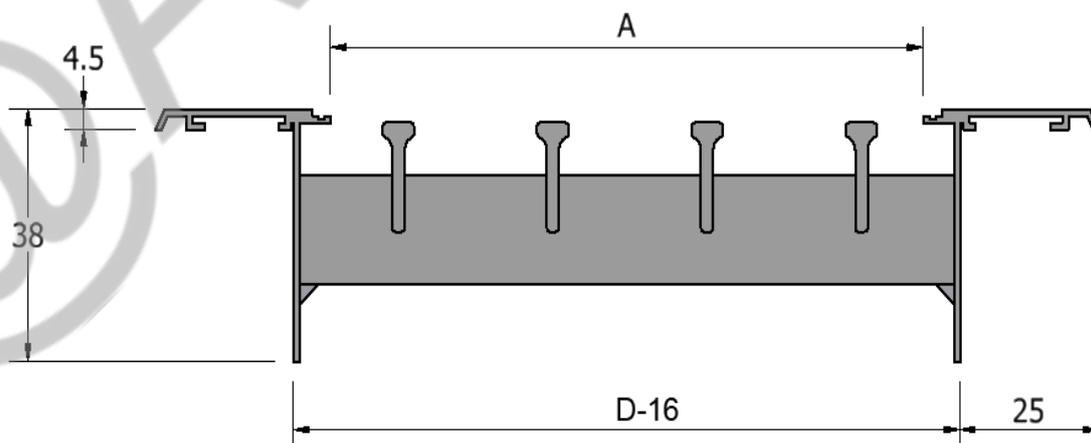
DESCRIPTION

Model G-BH2500 is designed for Return and Exhaust Applications requiring a greater free area for higher air volumes. Blades are spaced at 25mm and are of heavier construction at 5.1mm wide x 16mm deep. Suitable for applications where a stronger grille is required including applications such as Car Park Exhaust Grilles or Stadium R/Air Grilles.

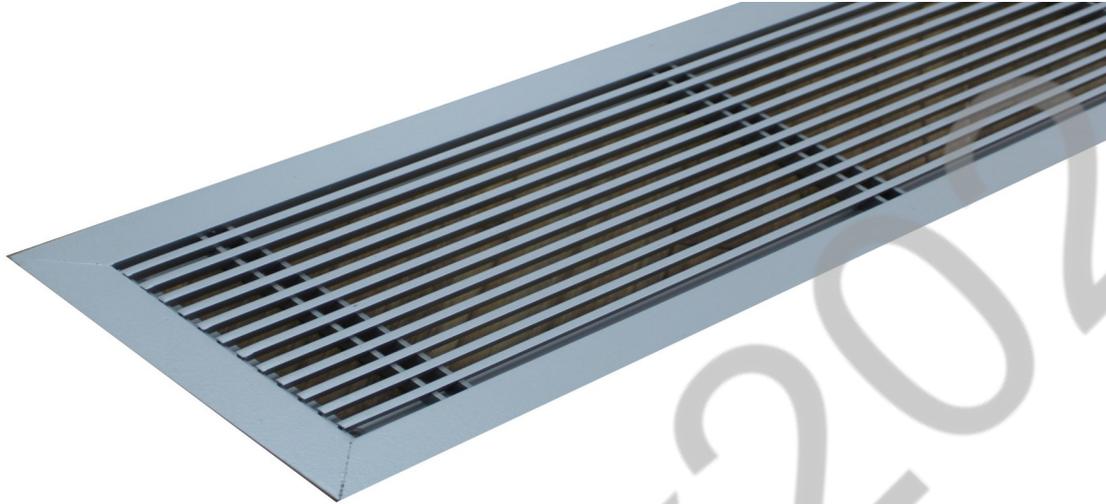
25mm Blade Spacing

5.1mm Blade Width

0 Degree Blade Deflection



HEAVY DUTY FLOOR GRILLE



DESCRIPTION

Airlinx Linear Heavy Duty Floor Grilles are designed for high performance applications and have been engineered to provide outstanding performance and versatility for air distribution in Supply Air, Return Air and Exhaust Air applications.

With an aesthetically pleasing design, Airlinx Heavy Duty Floor grilles are manufactured from extruded aluminium with 5.1mm thick bars at 12.5mm spacing. Various flange styles are available to accommodate different floor systems and structures including 15mm, 30mm and flangeless. Airlinx Heavy Duty Floor Grilles can be installed as individual

sections or in a continuous line providing versatility for all design and installation applications.

Typical installations are commercial and retail applications including offices, hospitals, shops, hotels and restaurants. Heavy Duty Floor Grilles are also used for Computer Room HVAC applications. Heavy duty floor grilles are also commonly used for residential applications including homes and apartments.

Superior Quality & Services at Affordable prices

HEAVY DUTY FLOOR GRILLE

CONSTRUCTION

All Airlinx Linear Floor Grilles are manufactured from extruded aluminum.

CORE OPTIONS

Airlinx Linear Floor Grilles can be manufactured with a Fixed core or with a filter where required for Return Air Applications.

ACCESSORIES

Available with optional plain and insulated header boxes.

FINISH

Available as standard in Powder Coat Finish. Other finishes also available including Anodised.

LINEAR SLOT DIFFUSERS



DESCRIPTION

Airlinx Linear Slot Diffusers are designed for high performance applications and have been engineered to provide flexibility for air distribution in Supply Air, Return Air and Exhaust Air applications.

Incorporating a 25mm slot, Linear Slot Diffusers provide an aesthetically pleasing design and are suitable for installation in Ceilings or Sidewall applications.

Linear Slot Diffusers are available with the number of slots ranging from 1 to 7. Each slot incorporates individual air pattern control blades that can be adjusted from the face of the Slot Diffuser providing 180 degree horizontal and vertical airflow pattern adjustment.

Linear Slot Diffusers can be installed as individual sections or in a continuous line and can be installed in any type of ceiling application.

Typical installations are for residential, commercial and retail applications including homes, offices, hospitals, shops, hotels, restaurants and schools.

Superior Quality & Services at Affordable prices

LINEAR SLOT DIFFUSERS

CONSTRUCTION

All Airlinx Linear Slot Diffusers are manufactured from extruded aluminum with a removable internal pattern control blade assembly that is securely held in place with high tensile spring clips.

CORE OPTIONS

Airlinx Linear Slot Diffusers can be manufactured with a Fixed Core

ACCESSORIES

Available with optional mounting track, blanking plate, plain and insulated header boxes.

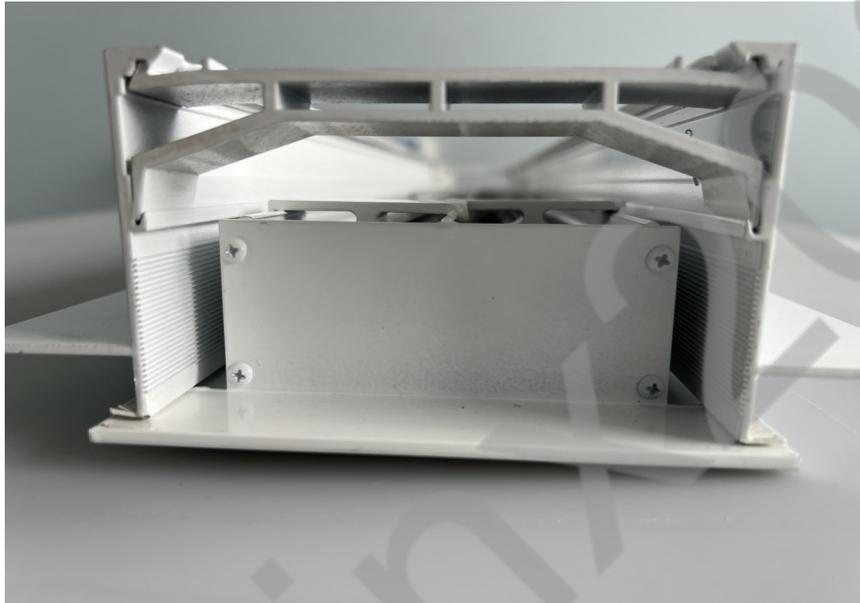
FINISH

Available as standard in White Powder Coat Finish. Other Powder Coat finishes are also available.

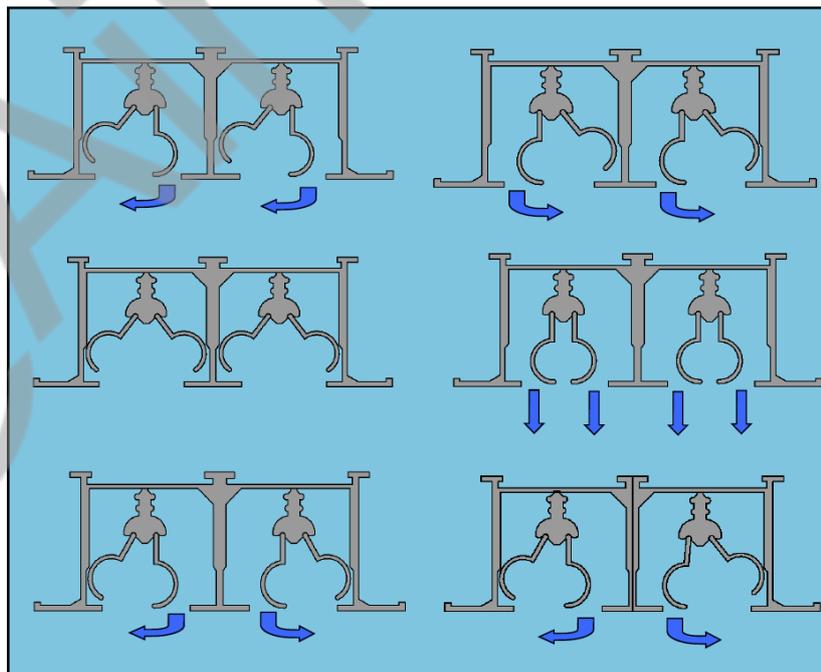
(Note: The internal pattern control blades are black)

LINEAR SLOT DIFFUSERS

MOUNTING TRACK



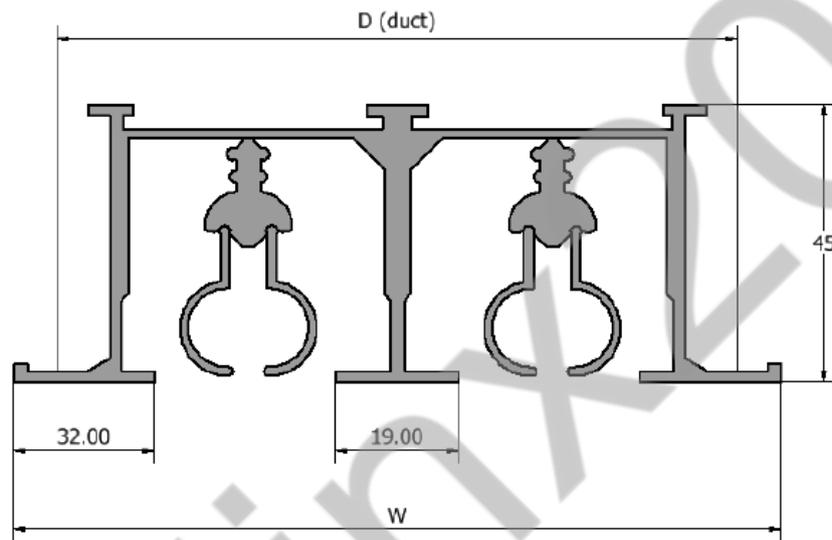
THROW OPTIONS



Superior Quality & Services at Affordable prices

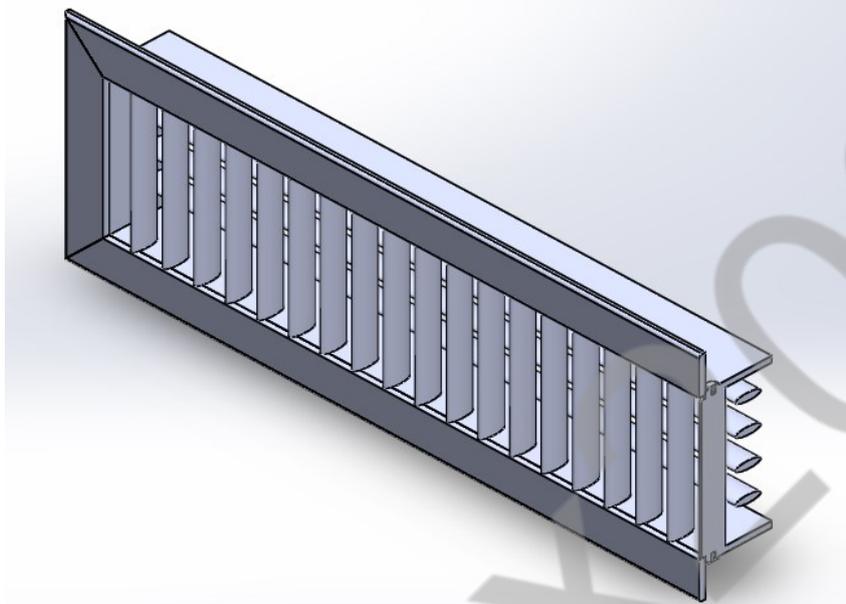
LINEAR SLOT DIFFUSERS

FRAME DIMENSIONS



NO. SLOTS	G-SL25	
	D(mm)	W(mm)
1	55	88
2	98	130
3	142	175
4	187	219
5	227	260
6	272	305
7	315	348

DOUBLE DEFLECTION REGISTERS



DESCRIPTION

Airlinx Double Deflection Registers (also commonly referred to as a Universal Register) are designed for Supply Air applications and are typically used in wall or duct mounted installations.

With an aesthetically pleasing design, Double Deflection Registers have two sets of fully adjustable individual blades. The front set of blades run parallel to the long dimension and the rear set runs parallel to the short dimension. Each blade is individually adjustable providing maximum flexibility for both horizontal and vertical air throw.

Airlinx have a wide range of core and frame style options providing versatility for all design and installation applications. Single Deflection Registers are also available with horizontal adjustable blades or alternatively front vertical blades

Typical installations are for residential, commercial and retail applications including homes, apartments, offices, hospitals, shops, hotels and restaurants.

DOUBLE DEFLECTION REGISTERS

CONSTRUCTION

All Airlinx Double Deflection Registers are manufactured from extruded aluminum. The core consists of horizontal blades at the front complimented by rear vertical blades at the rear. The blades have an aerofoil design and each blade is individually adjustable at spacing of 20mm.

Standard stock sizes are available, and custom sizes are made to order in our factory.

CORE OPTIONS

Airlinx Double Deflection Registers can be manufactured with a Fixed or a Removable Core.

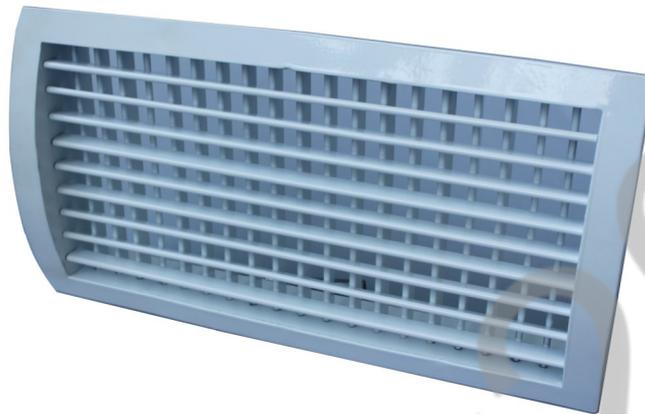
ACCESSORIES

For accurate control of air flow, Airlinx Double Deflection Registers can be provided with optional Opposed Blade and Stream Splitter Dampers in addition to plain or insulated plenum boxes

FINISH

Available as standard in White Powder Coat Finish. Other Powder Coat finishes are also available.

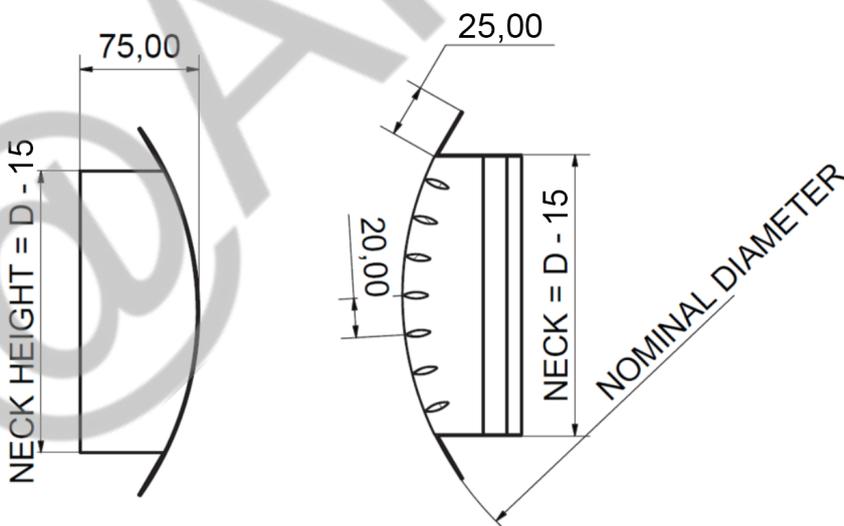
CURVED DOUBLE DEFLECTION REGISTERS



DESCRIPTION

Double Deflection Registers (along with Single Deflection) can be manufactured with a Curved Face to suit installations into Circular or Oval Spiral Ductwork

FRAME DIMENSIONS



Superior Quality & Services at Affordable prices

CURVED DOUBLE DEFLECTION REGISTERS

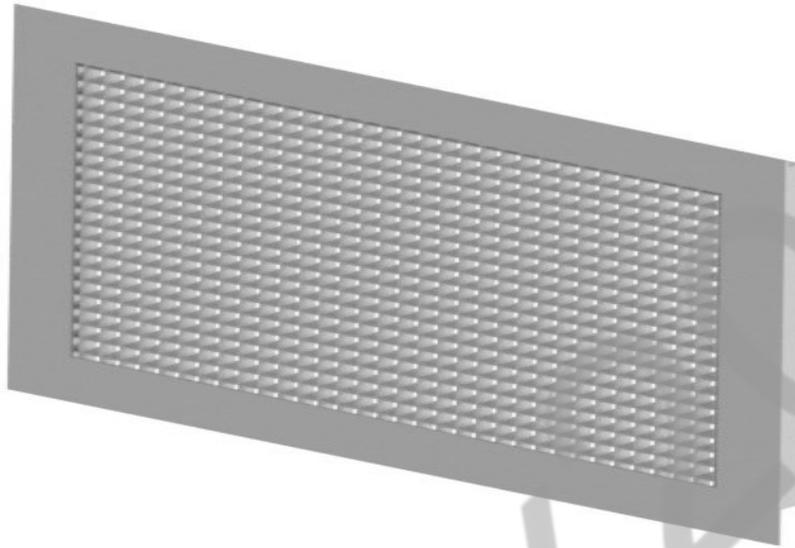


522 Princes Hwy, Noble Park North, Victoria 3174

T 03 9790 0900 F 03 9790 0911 E info@airlinx.com.au

www.airlinx.com.au

EGG CRATE GRILLES



DESCRIPTION

Airlinx Egg Crate Grilles are a high free area grille (90%) specifically designed for Return Air, Transfer / Relief Air and Exhaust Air applications. Egg Crate grilles are typically used in ceiling, wall and duct mounted installations.

Airlinx have a wide range of core and frame style options providing versatility for all design and installation applications.

Typical installations are for residential, commercial and retail applications including homes, apartments, offices, hospitals, shops, hotels and restaurants.

CONSTRUCTION

Airlinx Egg Crate Grilles are manufactured from an extruded aluminum frame and the core is comprised of an aluminum lattice with each square measuring 12.5mm in length and 12.5mm in depth.

Standard stock sizes are available for R/Air, Transfer, Exhaust Grilles, and custom sizes are made to order in our factory.

Superior Quality & Services at Affordable prices

EGG CRATE GRILLES

CORE AND FRAME OPTIONS

Airlinx Egg Crate Grilles can be manufactured as Core Only, Fixed Core, along with Removable and / or Hinged Core with (or without) the removable filter

Standard flange is 25mm and a U channel is used on Removable and Hinged Core options

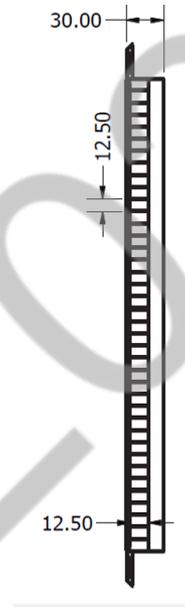
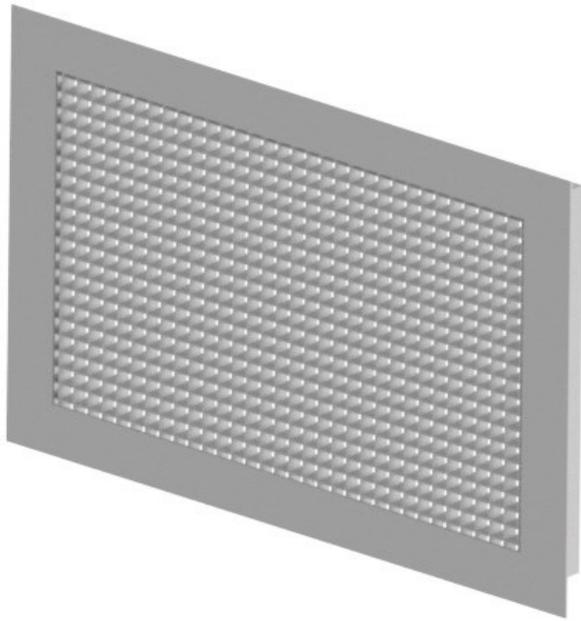
ACCESSORIES

For accurate control of air flow, Airlinx Egg Crate Grilles can be provided with optional Opposed Blade Dampers, Mounting Frames, Adapters and plain or insulated Plenum Boxes.

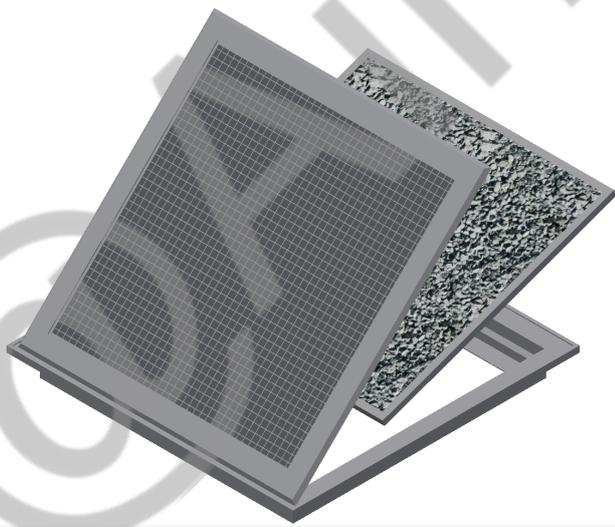
FINISH

Available as standard in Mill Finish, Natural Anodised or White Powder Coat Finish. Other Powder Coat finishes are also available.

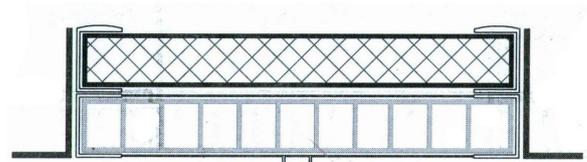
EGG CRATE CORE



EGG CRATE GRILLE HINGED CORE WITH FILTER

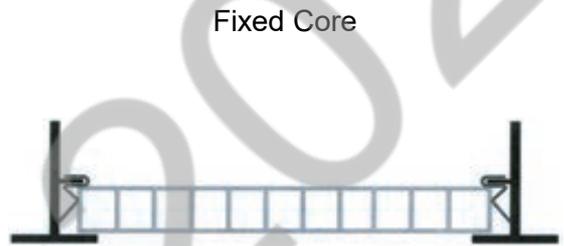
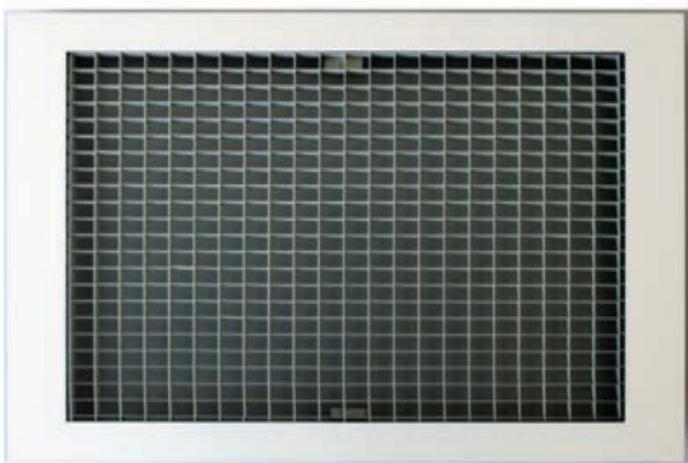


Hinged Core with Filter

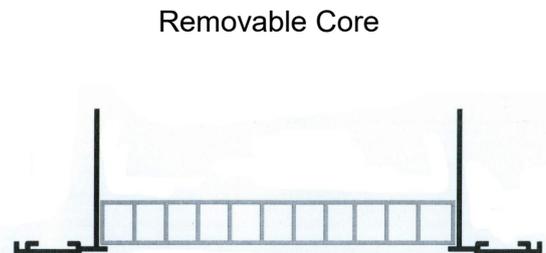
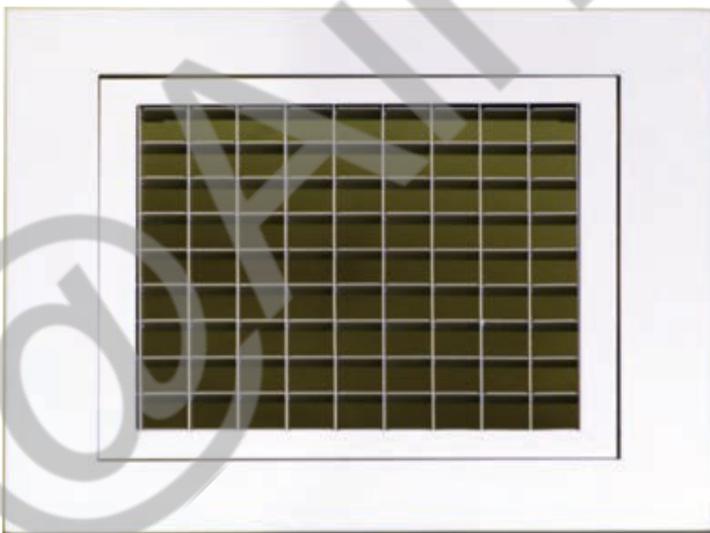


Superior Quality & Services at Affordable prices

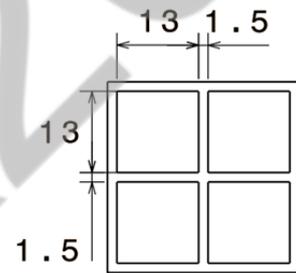
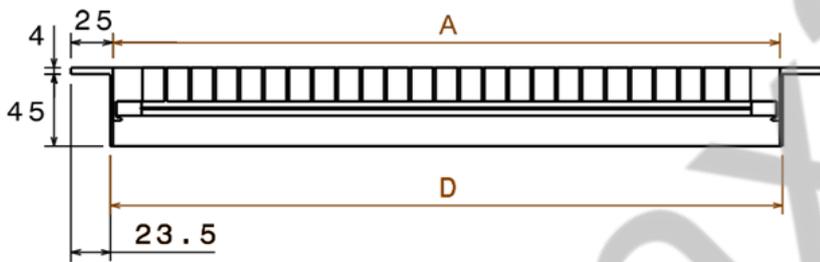
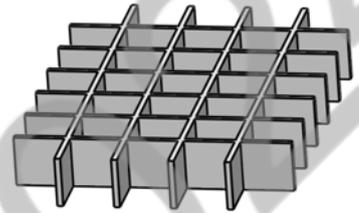
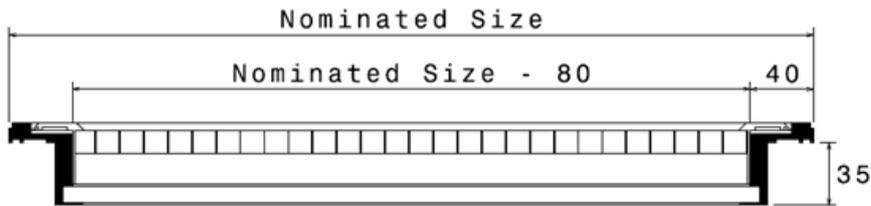
EGG CRATE GRILLE PLAIN FIXED CORE



EGG CRATE GRILLE REMOVABLE CORE



CORE DIMENSIONS



@Airlinx2024

522 Princes Hwy, Noble Park North, Victoria 3174

T 03 9790 0900 F 03 9790 0911 E info@airlinx.com.au

www.airlinx.com.au

DOOR GRILLES



DESCRIPTION

Door Grilles are designed for mounting in Doors and can also be installed in walls and partitions. They are used primarily for air transfer and relief applications and provide an aesthetic non-vision appearance. Typical installations are for commercial, retail and industrial applications including offices, hospitals, shops, hotels, restaurants and schools.

CONSTRUCTION

Door Grilles are manufactured from aluminum extrusion with a 25mm wide flanged frame that contains inverted full chevron blades which provide the vision proof internal core. A matching backing frame provides a rear telescopic secure fitment to a door with a range of thicknesses from 30-50mm.

Standard stock sizes are available with a standard width of 600mm and custom sizes can be made to order

Superior Quality & Services at Affordable prices

DOOR GRILLES

CORE OPTIONS

Airlinx Linear Floor Grilles can be manufactured with a Fixed core

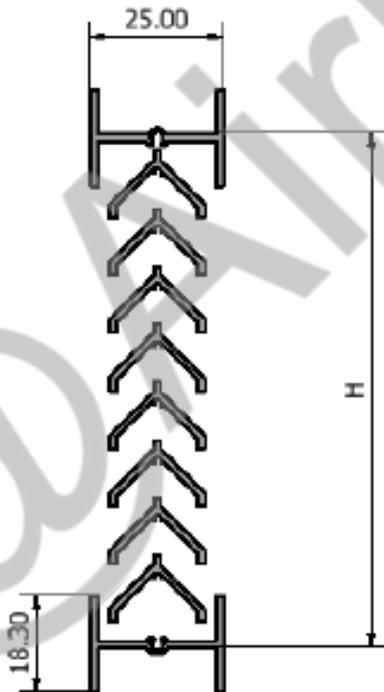
ACCESSORIES

Available with optional plain and insulated header boxes.

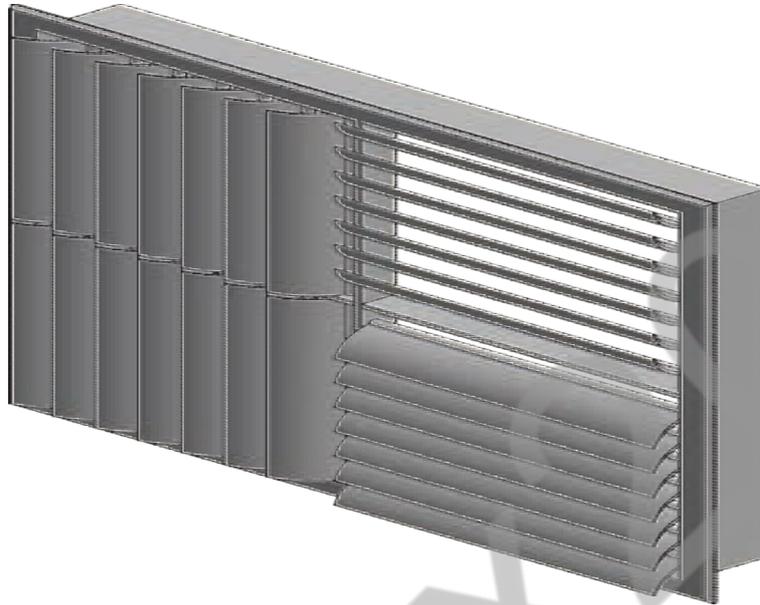
FINISH

Available as standard in Anodised. Other Powder Coat finishes also available.

FRAME DIMENSIONS



EYELASH GRILLES



DESCRIPTION

Curved Blade Diffusers (Eyelash Grilles) are designed for Supply Air applications in Ceilings and are available with a 1, 2, 2 and 4 Way Blow pattern. Curved Blade Diffusers (Eyelash Grilles) are commonly used in Evaporative Cooling Systems and provide a very versatile distribution pattern and excellent diffusion characteristics to suit the spatial layout of the room.

Typical installations are for residential, commercial, retail and industrial applications including homes, offices, hospitals, shops, hotels, restaurants and

EYELASH GRILLES

CONSTRUCTION

Curved Blade Diffusers (Eyelash Grilles) are manufactured from extruded aluminum with internal adjustable curved blades that are securely held in place with high tensile spring wire. The surround frame is suitable for lay-in ceiling applications and for surface mounting in plasterboard or similar ceilings.

Standard stock sizes are available, however due to the multiple blow patterns and size configurations available these are made to order in our factory. Please refer to table of Air Patterns.

CORE OPTIONS

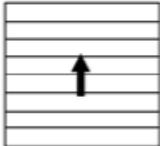
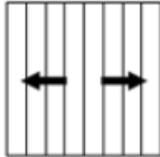
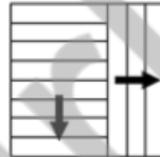
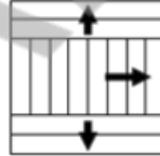
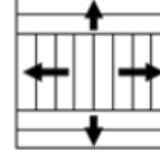
Curved Blade Diffusers (Eyelash Grilles) can be manufactured with a fixed core

FINISH

Available as standard in White Powder Coat Finish. Other Powder Coat finishes are also available.

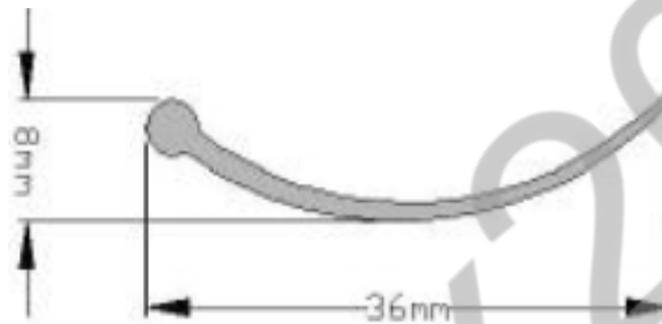
EYELASH GRILLES

AIR PATTERNS

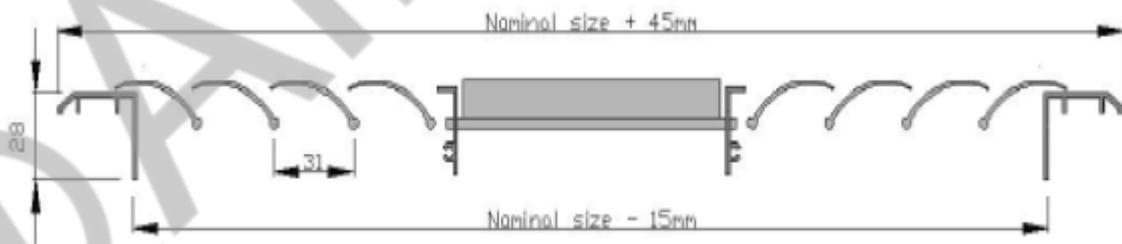
Order Pattern	Square	Rectangular	
1-Way			
2-Way Opposite			
2-Way Corner			
3-Way			
4-Way			

EYELASH GRILLES

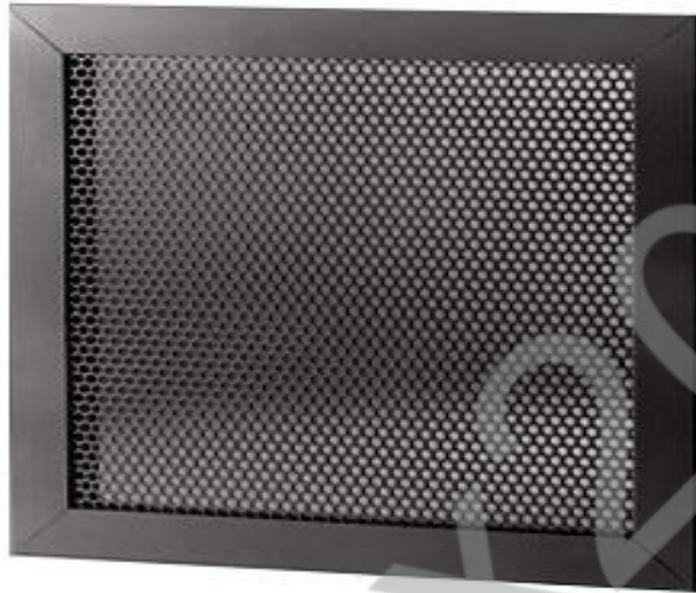
BLADE DIMENSIONS



FRAME DIMENSIONS



PERFORATED GRILLES



DESCRIPTION

Airlinx Perforated Grilles are commonly used for Return Air, Transfer / Relief Air & Exhaust Air applications and are typically used for ceiling mounted installations. Perforated Grilles can also be used as a Supply Air Diffuser predominantly in commercial design applications.

Where vandal proof or secure grilles are required Airlinx provide a heavier construction perforated grille designed to meet specifications for Prisons, Police Stations and similar secure environments.

Airlinx have a wide range of perforated core style options providing versatility for all design and installation applications.

Typical installations are for commercial and industrial applications including offices, hospitals, prisons, police stations and secure facilities. Decorative perforated grilles are also available for residential applications.

PERFORATED GRILLES

CONSTRUCTION

Airlinx standard Perforated Grilles are manufactured from an extruded aluminum frame. The core consists of 50 % free area perforated metal with circular staggered perforations.

Security Perforated Grilles are manufactured from fully welded steel frames and heavy perforated metal. (Note: thickness and free area varies according to specification on project)

Perforated Grilles are made to order in our factory.

CORE OPTIONS

Airlinx Perforated Grilles can be manufactured with a Fixed Core along with Removable and / or Hinged Core with (or without) removable filter.

ACCESSORIES

For accurate control of air flow, Airlinx Perforated Grilles can be provided with optional Opposed Blade and other accessories including Mounting Frames, Adapters and plain or insulated Plenum Boxes.

FINISH

Available as standard in White Powder Coat Finish. Other Powder Coat finishes are also available.

AIRLINX PROVIDES IN-HOUSE CUSTOM PERFORATION.

HALF CHEVRON LOUVRE



DESCRIPTION

Airlinx Half Chevron Louvres are designed for Return Air, Transfer / Relief Air & Exhaust Air applications and are typically used in wall, ceiling or duct mounted installations.

Airlinx have a wide range of core and frame style options providing versatility for all design and installation applications.

Typical installations are for residential, commercial and retail applications including homes, apartments, offices, hospitals, shops, hotels and restaurants.

Superior Quality & Services at Affordable prices

HALF CHEVRON LOUVRE

CONSTRUCTION

Airlinx Half Chevron Louvres are manufactured from extruded aluminum. The core consists of fixed horizontal louvre blades set at 45 degrees.

Half Chevron Louvres are made to order in our factory.

Free area: 25%-58% (depending on the height).

CORE OPTIONS

Airlinx Half Chevron Louvres can be manufactured with a Fixed Core along with Removable and / or Hinged Core with (or without) removable filter.

ACCESSORIES

For accurate control of air flow, Airlinx Half Chevron Louvres can be provided with optional Opposed Blade Dampers.

FINISH

Available as standard in White Powder Coat Finish. Other Powder Coat finishes are also available.

WEATHER LOUVRE



DESCRIPTION

Airlinx Weather Proof Louvers are designed to provide weather protection of outside air or discharge air through the opening while allowing free passage of air. Airlinx Weather Proof Louvers minimise the ingress of rain water in all normal climatic conditions and are suitable for supply, relief and exhaust air applications. Weather Proof Louvers may also be used for natural ventilation

Airlinx have a wide range of core and frame style options providing versatility for all design and installation applications.

Typical installations are for residential, commercial and retail applications including homes, apartments, offices, hospitals, shops, hotels and restaurants.

WEATHER LOUVRE

CONSTRUCTION

From extruded aluminum sections, frame and blades 1.0mm thick. Hairline miters mechanically held. Fitted as standard with rear galvanized steel bird/vermin mesh screen for external use.

Free area: 22%-58% (depending on the height).

CORE AND FRAME OPTIONS

Airlinx Weather Louvres can be manufactured with a Fixed Core along with Hinged Core.

2 flange sizes: 25mm, 50mm

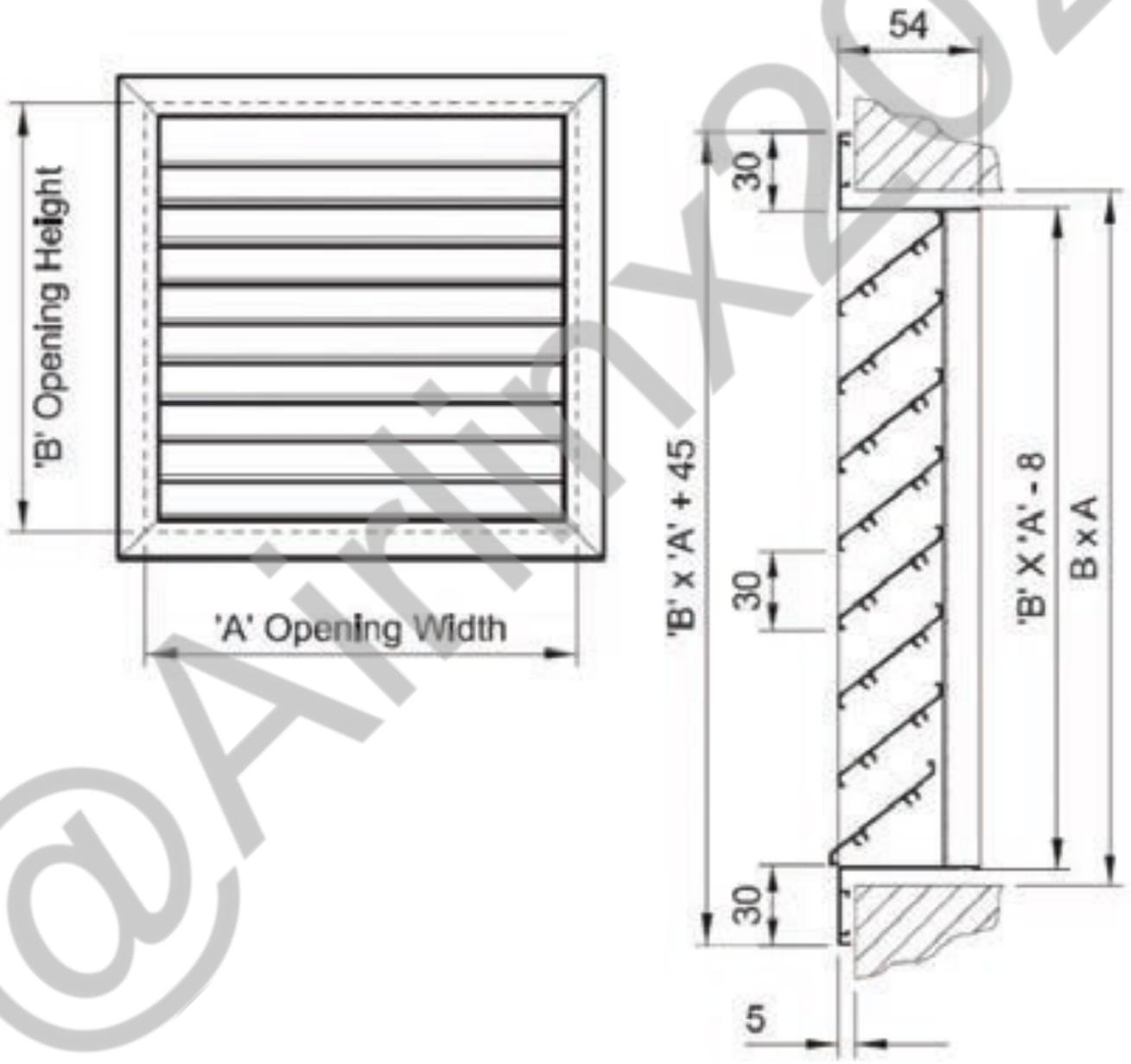
3 blade sizes: 52mm, 75mm, 117mm

FINISH

Available as standard in Nature Anodised / Silver Powder Coat Finish. Other Powder Coat finishes are also available.

LOUVRES

DIMENSIONS

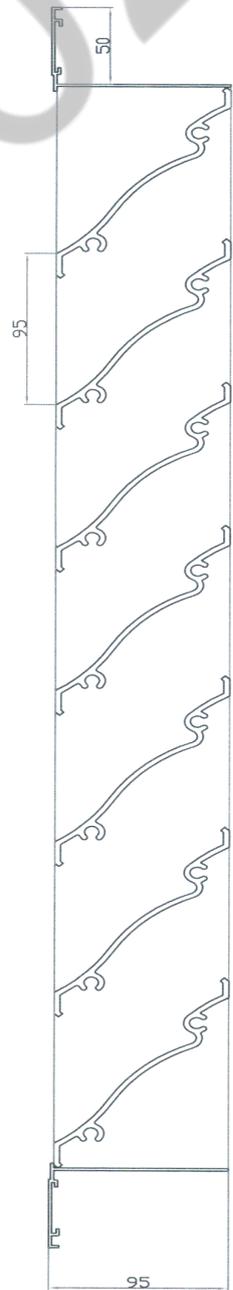
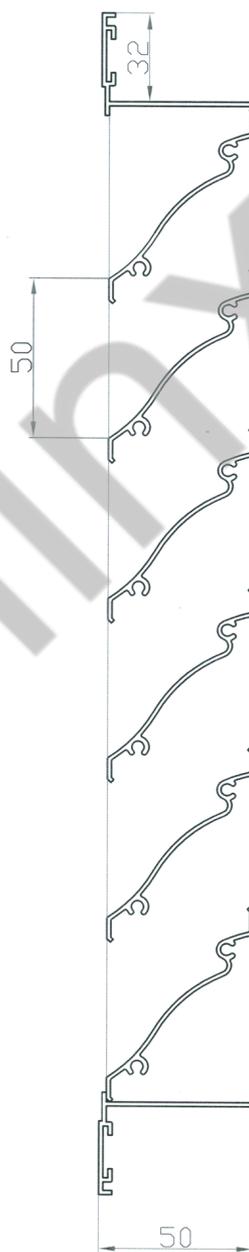
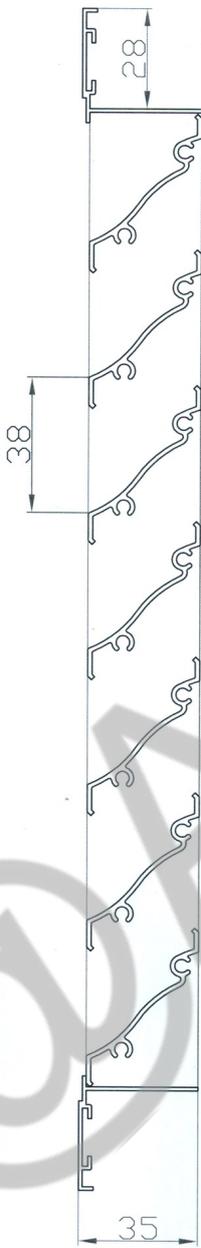


*30mm Flange

Superior Quality & Services at Affordable prices

LOUVRES

DIMENSIONS



Three blade sizes for Weather Louvre; 52mm, 75mm, 117mm

522 Princes Hwy, Noble Park North, Victoria 3174

T 03 9790 0900 F 03 9790 0911 E info@airlinx.com.au

www.airlinx.com.au

4-WAY SQUARE CEILING DIFFUSER



DESCRIPTION

Ceiling Diffusers are designed for Supply Air applications in Ceilings and are typically provided with a 4 Way Blow pattern for an even distribution of air. Ceiling Diffusers can also be provided with internal blanking plates to achieve a 1-way, 2-way or 3-way blow distribution pattern to suit the special layout of the room.

Typical installations are for residential, commercial, retail and industrial applications including offices, hospitals, shops, hotels, restaurants and schools.

4-WAY SQUARE CEILING DIFFUSER

CONSTRUCTION

Ceiling Diffusers are manufactured from extruded aluminum with internal louvres and a frame that is suitable for lay-in ceiling applications and for surface mounting in plasterboard or similar ceilings.

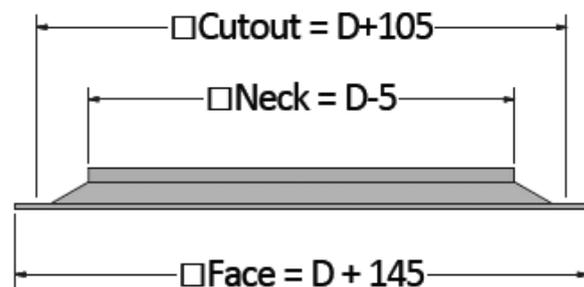
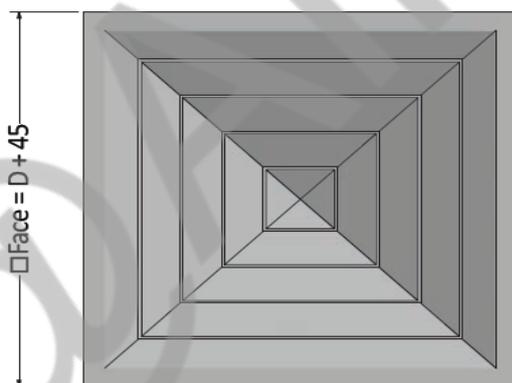
Standard stock sizes are available that include;

250/400, 300/450, 375/525, 450 / 595 (Lay-in)

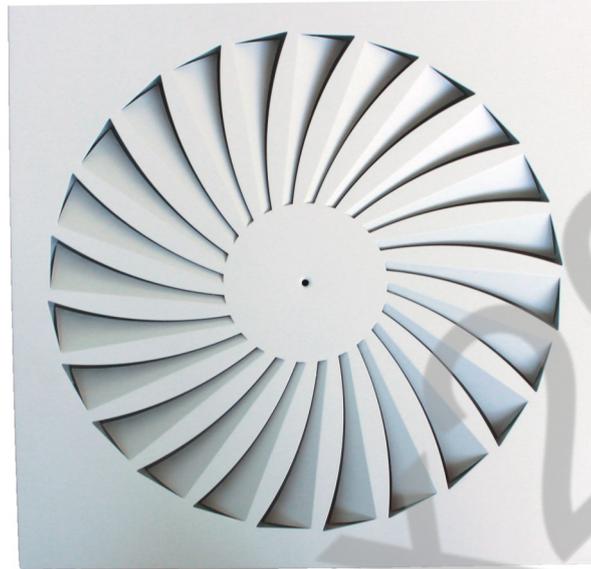
FINISH

Available as standard in White Powder Coat Finish. Other Powder Coat finishes are also available.

DIMENSIONS



SWIRL DIFFUSER



DESCRIPTION

Swirl Diffusers are designed for Supply Air applications in Ceilings and provide a horizontal radial distribution of air. Swirl Diffusers are very effective as they are a High Induction Diffuser which provides rapid mixing of supply and room air

Typical installations are for commercial, retail and industrial applications including offices, hospitals, shops, hotels, restaurants and schools.

High quality diffuser with radial diffusion pattern to generate airflow according to the principle of turbulent mixed airflow

Low sound level and pressure loss

Installation for prefabricated ceiling or surface mounted for closed false ceilings

Superior Quality & Services at Affordable prices

SWIRL DIFFUSER

CONSTRUCTION

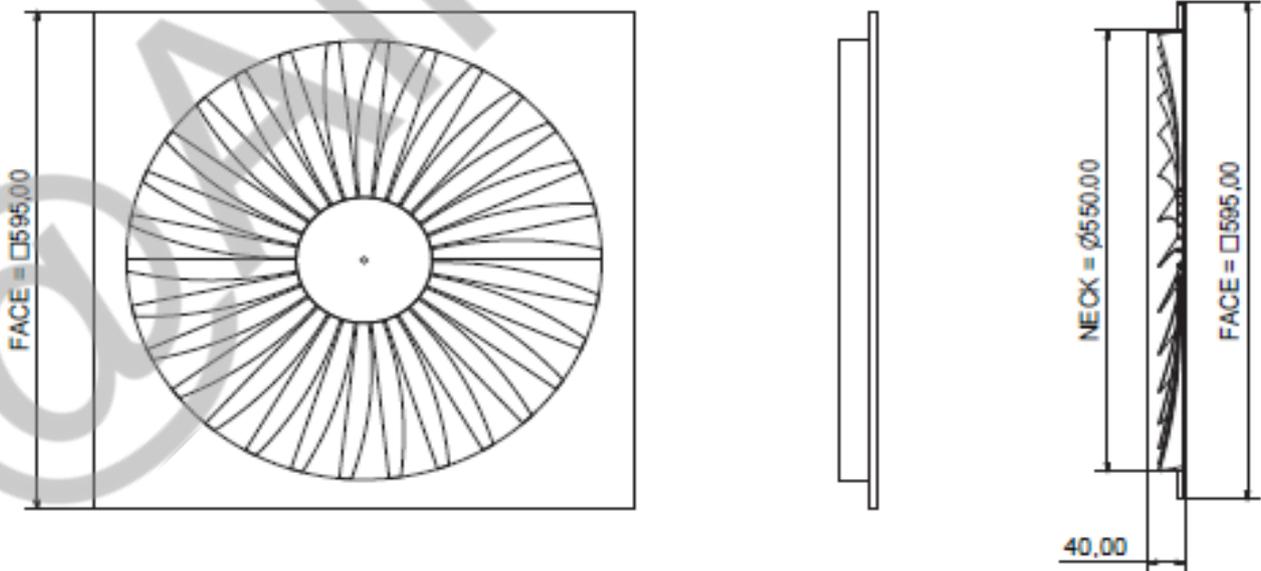
Swirl Diffusers are manufactured from steel with pressed internal blades that is suitable for lay-in ceiling applications and for surface mounting in plaster-board or similar ceilings.

Standard stock size is 595 x 595 (Lay-in). Additional sizes and styles available on request

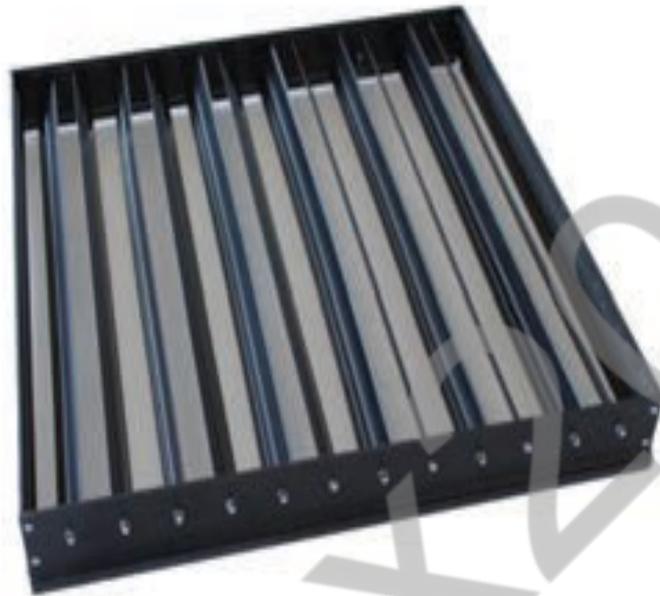
FINISH

Available as standard in White Powder Coat Finish. Other Powder Coat finishes are also available.

DIMENSIONS



OPPOSED BLADE DAMPER



DESCRIPTION

Airlinx Opposed Blade Dampers (OBD's) are a device that is designed to regulate airflow by a series of linked blades that rotate in an opposite direction. The design of the Opposed Blade Damper maintains an even and controllable air flow over all operating positions.

Opposed Blade Dampers are most commonly used in supply and exhaust systems to control the volume of air and achieve the desired air flow. Located directly behind the register or grille the opposed blade

damper has an adjustment screw that can be accessed through the face of the register or grille.

OPPOSED BLADE DAMPER

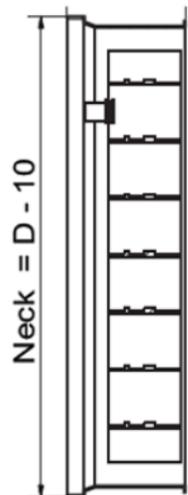
CONSTRUCTION

Airlinx Opposed Blade Dampers are constructed from zincanneal.

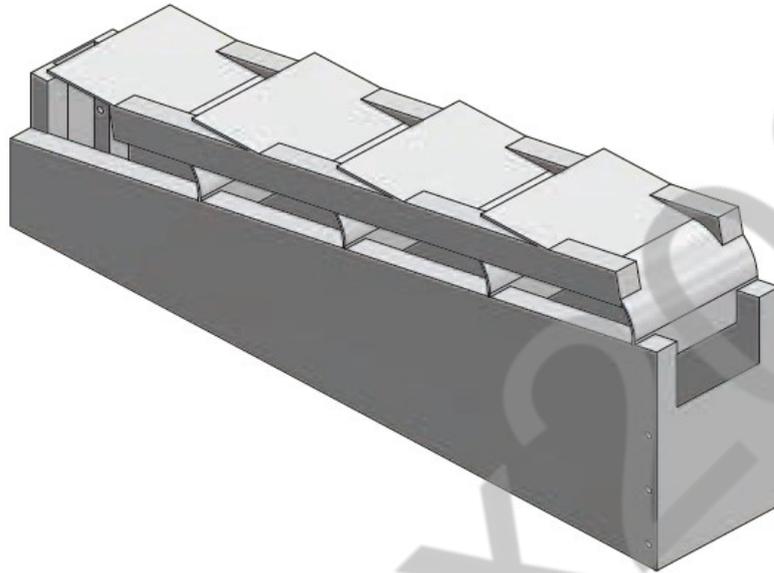
FINISH

Available with a Black enamel finish.

DIMENSIONS



STREAM SPLITTER DAMPER



DESCRIPTION

Airlinx Stream Splitter Dampers (SSD's) are a device that is designed scoop the air passing through a duct by a series of linked blades that rotate in a parallel direction. The Stream Splitter Damper blades have an adjustment screw that is accessed through the face of the registers, where the blades can be opened to capture more air from the duct or closed for less air as required.

The design of the Stream Splitter Damper provides an even air flow across the register face and further provides regulation of air flow over all operating positions.

Airlinx Steam Splitter Dampers should be fixed where the outlet connection to the grille joins the main supply duct in order to turn the air and provide a uniform distribution of air over the face of the grille.

STREAM SPLITTER DAMPER

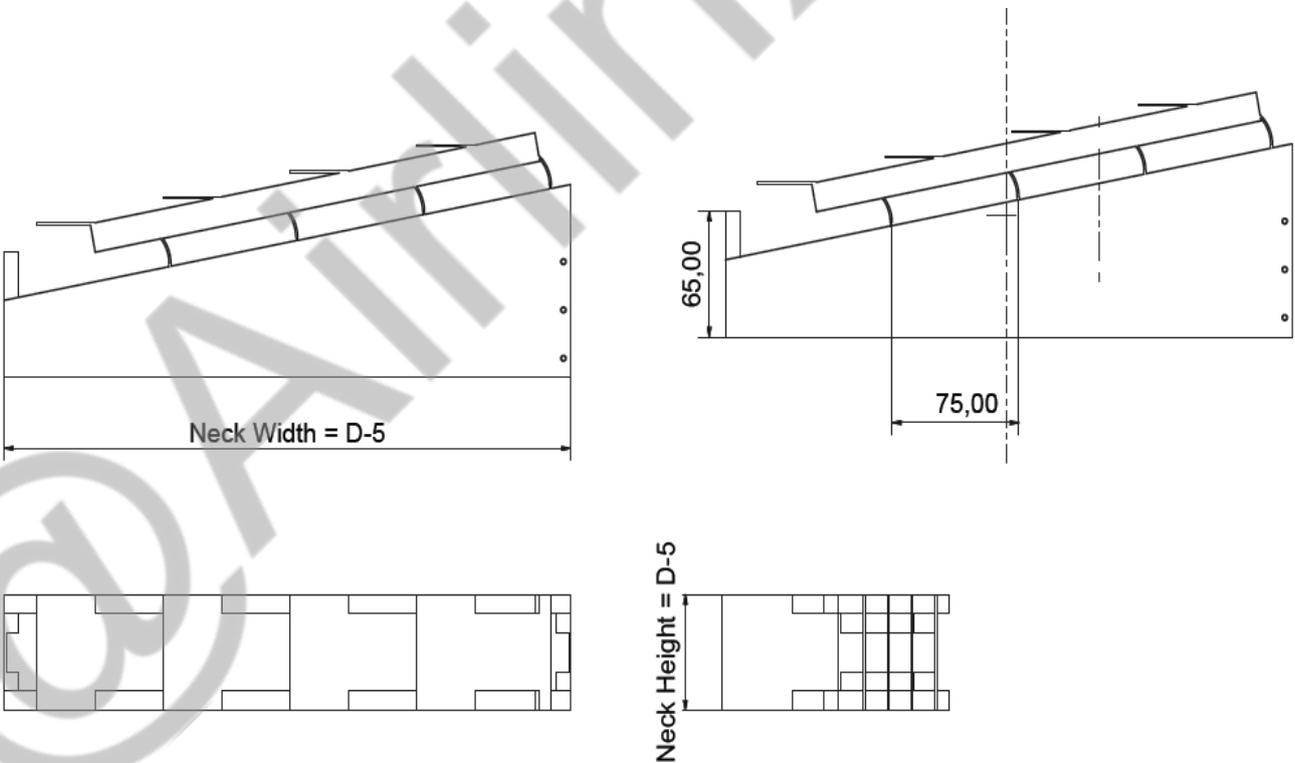
CONSTRUCTION

Airlinx Stream Splitter Dampers are constructed from zincanneal.

FINISH

Available with a Black enamel finish.

DIMENSIONS



SADDLE FOR CURVED FACE GRILLES



Saddles for Curved Face Grilles are custom made by galvanised metal sheet. It can sit on Spiral duct or oval duct.

Please contact Airlinx for any enquiries



DIFFUSER MOUNTING FRAME

Diffuser Mounting Frames are custom made.

Please contact Airlinx for any enquiries.

Aluminium is 1mm thick



**All Metal or Aluminium Grille
can be Powder Coated.**

@Airlinx2024

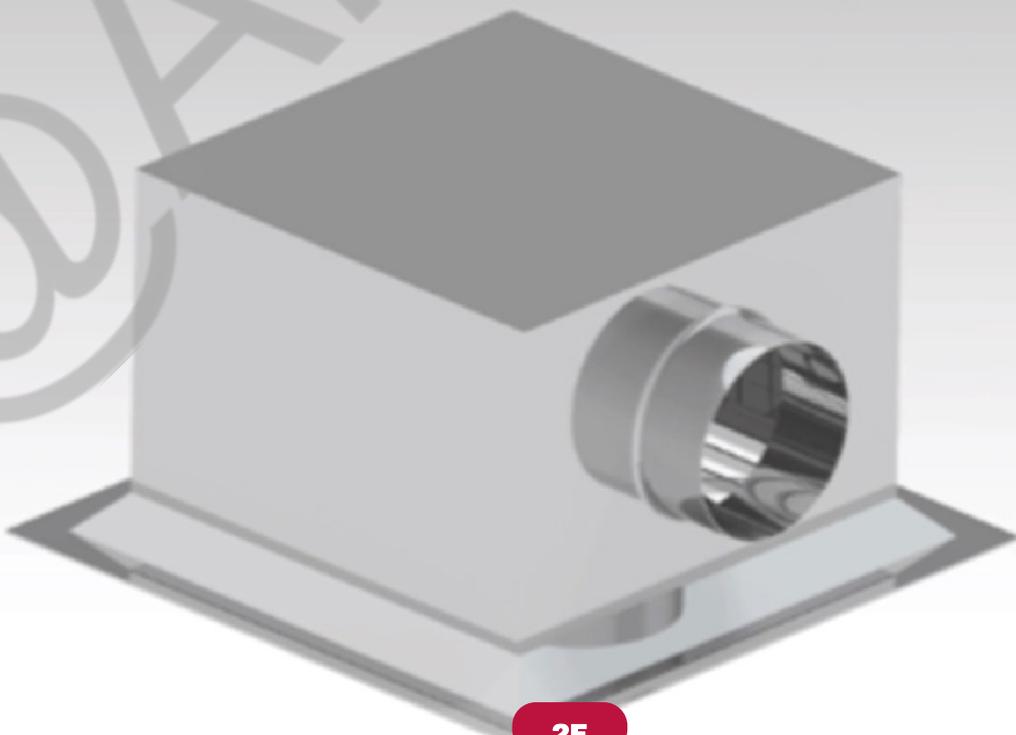
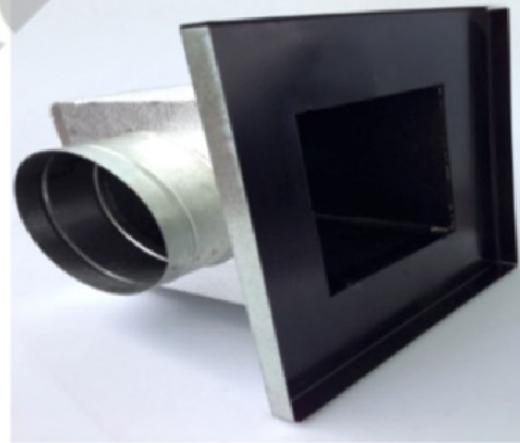
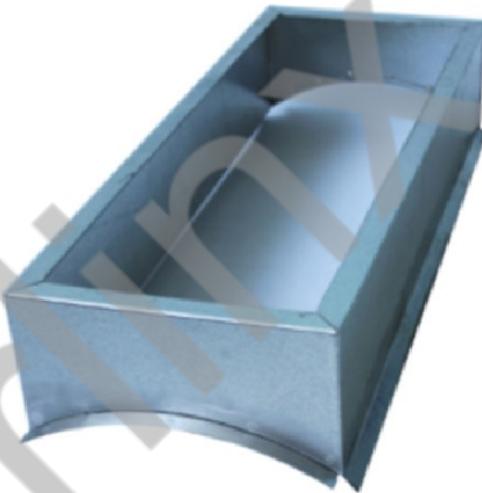
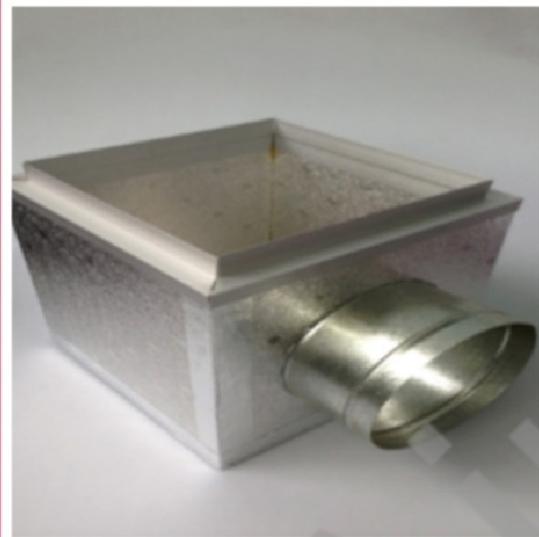
522 Princes Hwy, Noble Park North, Victoria 3174

T 03 9790 0900 F 03 9790 0911 E info@airlinx.com.au

www.airlinx.com.au

F

Diffusion Boxes & Adaptors



Saddle for Curved Face Double Deflection Grille



Saddles for Curved Face Grilles are custom made by galvanised metal sheet. It can sit on Spiral duct or oval duct.

Please contact Airlinx for any enquiries

Diffuser Mounting Frame



Diffuser Mounting Frames are custom made.

Please contact Airlinx for any enquiries.

Aluminium is 1mm thick



Dulux

All Metal or Aluminium Grille
can be Powder Coated.

All Boxes are custom made.

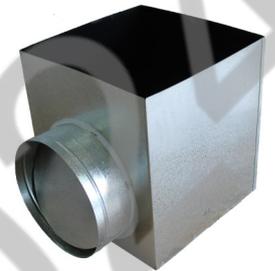
Please contact Airlinx for any enquiries

Boxes allow side entry or top entry air connections to diffusers or grilles. When ceiling height is limited, side entry is better option. Flexible duct connections may be either round or oval. Damper can be fit on the pop.

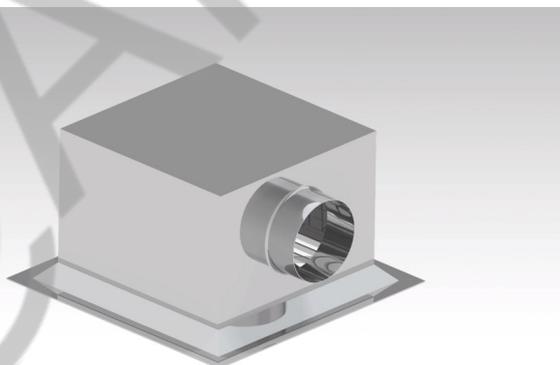
Can be plain with no insulation or insulated. Small sizes of box for ventilation or exhaust purpose, can be plain box.

Contraction: galvanised metal sheet or phenolic board.

Plain Cushion Box



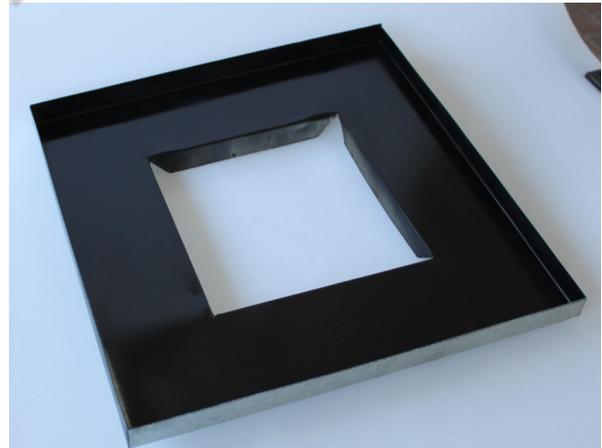
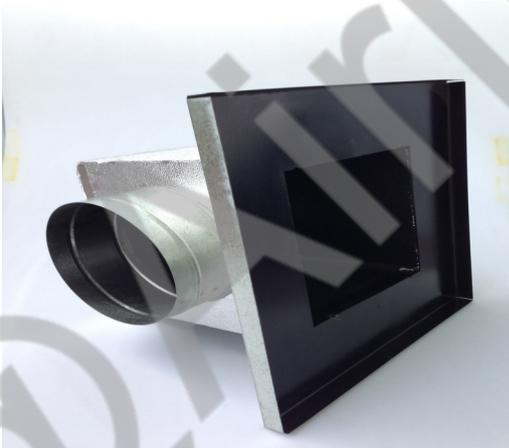
Insulated Cushion Box





Adaptor

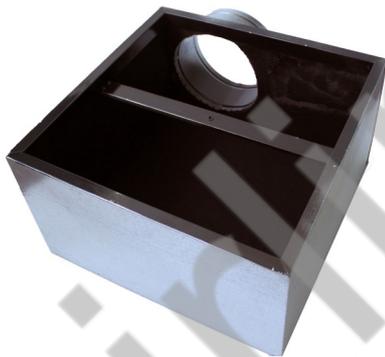
Diffuser adaptor can Mont on grille neck directly. For a better air flow and limited space in the ceiling, the adaptor can be on a smaller box with adaptor size suits the grille.



Linear Slot Boxes



Swirl Diffuser Box

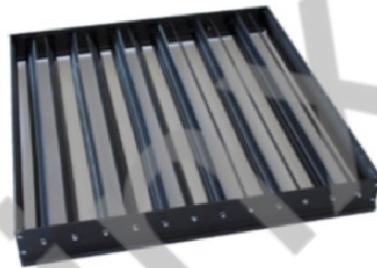


Phenolic Board Box = R1 Insulated Metal Box



G

Damper



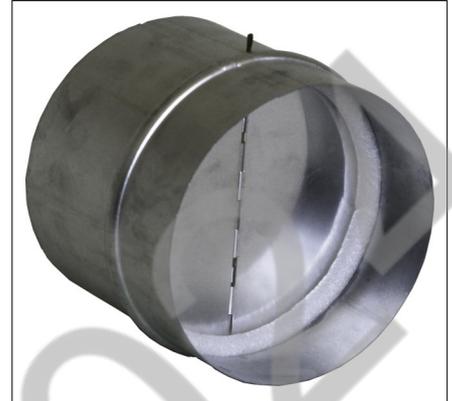
Back Draft Damper

Another name for Back draft damper is Non-Return damper. The airflow goes one direction and back draft air cannot blow back. It is a butterfly damper in the middle.

Material is galvanised sheet metal with rubber seal inside .

Code and Description

DMP-BD4	Back Draft Damper 100mm
DMP-BD5	Back Draft Damper 125mm
DMP-BD6	Back Draft Damper 150mm
DMP-BD8	Back Draft Damper 200mm
DMP-BD10	Back Draft Damper 250mm



Barrel Shaft Damper

The long shaft is for a motor which put on to be come a motorised damper. Some customers prefer to use their own motor, they only need the damper so we call as it looks Barrel Shaft Damper.

Code and Description

DMP-ISD6	Barrel Shaft Damper 150mm
DMP-ISD8	Barrel Shaft Damper 200mm
DMP-ISD10	Barrel Shaft Damper 250mm
DMP-ISD12	Barrel Shaft Damper 300mm
DMP-ISD14	Barrel Shaft Damper 350mm
DMP-ISD16	Barrel Shaft Damper 400mm



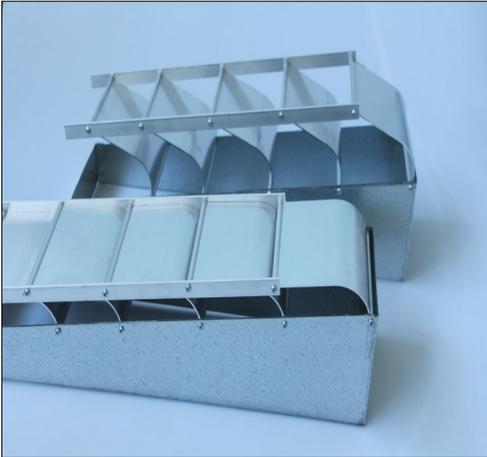


Bellmouth Starting Collar with Damper

The rapid kit allows locking of the blade and has an indicator arm to show blade position on the starting collar

Code and Description

DMP-SCD08	Starting Collar with Damper 200mm
DMP-SCD10	Starting Collar with Damper 250mm
DMP-SCD12	Starting Collar with Damper 300mm
DMP-SCD14	Starting Collar with Damper 350mm
DMP-SCD16	Starting Collar with Damper 400mm



Stream Splitter Dampers

The method employed to achieve a reasonably straight air flow and obtain volume control is to use a Stream Splitter Damper as SSD.

SSD should be fixed where the outlet connection to the grille joins the main supply duct in order to turn the air and provide a uniform distribution of air over the face of the grille.

Alternatively, the SSD can be made as an integral part of the register to allow direct fixing to the main duct.



Opposed Blade Dampers

Mount directly on the neck of Air Grille to achieve volume control, from full air flow to shut off.

Volume Control Dampers

**NEW
PRODUCT**



Rapid Kit Damper

You can use this kit to put on any size of starting collars or metal joiners to become a manual damper. Locking wing nut on side of blade with indicator arm to show blade angle. Suitable for starting collars, branch take-off's and Y pieces

Code and Description

DMP-RKD4	Rapid Kit Damper Blades 100mm
DMP-RKD5	Rapid Kit Damper Blades 125mm
DMP-RKD6	Rapid Kit Damper Blades 150mm
DMP-RKD7	Rapid Kit Damper Blades 175mm
DMP-RKD8	Rapid Kit Damper Blades 200mm
DMP-RKD9	Rapid Kit Damper Blades 225mm
DMP-RKD10	Rapid Kit Damper Blades 250mm
DMP-RKD12	Rapid Kit Damper Blades 300mm
DMP-RKD14	Rapid Kit Damper Blades 350mm
DMP-RKD16	Rapid Kit Damper Blades 400mm
DMP-RKD18	Rapid Kit Damper Blades 450mm
DMP-RKD20	Rapid Kit Damper Blades 500mm



Damper Blades

Code and Description

DB	Damper Blades AAmm
----	--------------------





Starting Collar with Damper

The rapid kit allows locking of the blade and has an indicator arm to show blade position on the starting collar

Code and Description	
DMP-SCD08	Starting Collar with Damper 200mm
DMP-SCD10	Starting Collar with Damper 250mm
DMP-SCD12	Starting Collar with Damper 300mm
DMP-SCD14	Starting Collar with Damper 350mm
DMP-SCD16	Starting Collar with Damper 400mm



Inline Flex Balancing Damper

Another name is Barrel damper. Purpose adjust airflow in the connected flexible duct or spiral duct. Inline damper sits between the round duct. We can manufacture oval shape or square shape.

Material is galvanised sheet metal. Round blade damper in the middle

Code and Description	
DMP-ID6	Inline Manual Damper 150mm
DMP-ID8	Inline Manual Damper 200mm
DMP-ID10	Inline Manual Damper 250mm
DMP-ID12	Inline Manual Damper 300mm
DMP-ID14	Inline Manual Damper 350mm
DMP-ID16	Inline Manual Damper 400mm

@Airlinx2024

H

Research & Development

Airlinx is committed to continual improvement with product competitiveness and product quality.

Since 2010 Airlinx has provided funding along with other Ausindustry businesses into research and development.

These projects have included:

- Developing a Predictive Model for Optimal Design of Ventilation System
- Wood Dust Exposures and its Effects on Respiratory Health
- Developing a Virtual Platform for HVAC Diffuser Performance

Airlinx has also partnered with Australian and overseas universities in a project that investigates air quality with the ventilation in Boeing aeroplane cabins.



From 2015 Airlinx has engaged in a project with seven other private industries and nine Australian universities to research and develop a high efficient and low cost air ventilation solution to public rail transport. To improve air quality with optimised ventilation and using computational fluid dynamics (CFD) the airflow and temperature in high speed trains cabins could be precisely predicted. Being able to visualise the diffusion, particulate contaminates could also be visualised and may lead to a reliable assessment of risk exposure in concerned cabins.

Airlinx engages with RMIT final year students who are completing their capstone projects. This involves putting their research into professional engineering practice to produce useful and original engineering solutions for industry relevant scientific issues.

SCHOOL OF AEROSPACE, MECHANICAL
AND MANUFACTURING ENGINEERING

FINAL YEAR PROJECTS

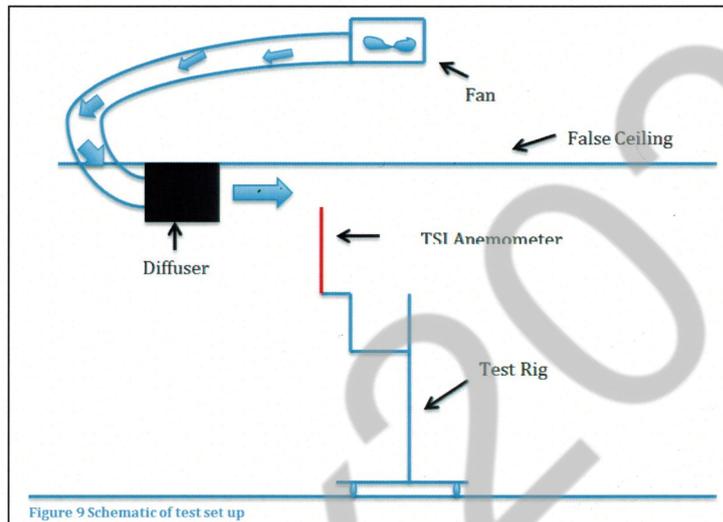
2014

PERFORMANCE ASSESSMENT OF HVAC DIFFUSERS BY EXPERIMENTAL MEASUREMENTS

Authors: Pendlebury Andrew Steven, Xiangdong Li, Jiyuan Tu

HVAC systems are used in the vast majority of commercial buildings in the western world, to achieve thermal comfort for the occupants.

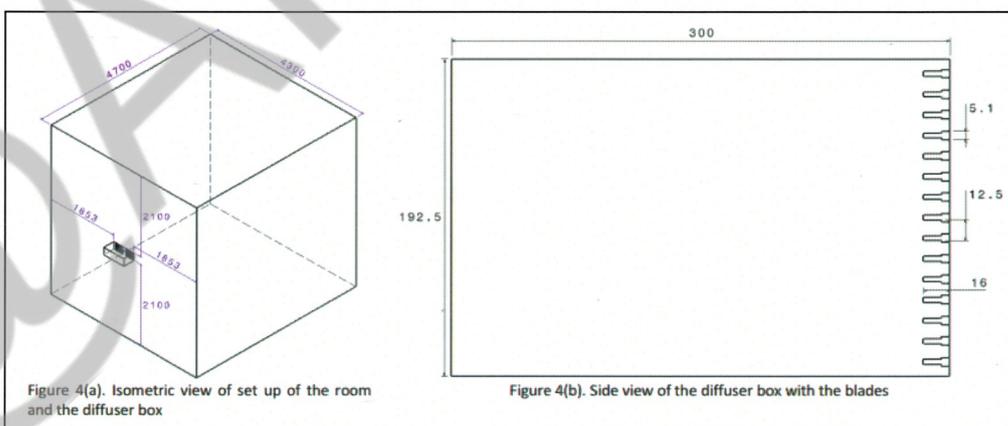
This report looks into the performance of a number of different HVAC diffusers manufactured by Airlinx in Nobel Park. Testing for this will take place in a design built testing room in the Nobel Park facility. This performance data will be compared to competitor product and used to assist customers in selecting the correct diffusers for their application.



DIFFUSER MODELLING, MEASUREMENT AND PERFORMANCE

Authors: Li Tsz Hin, Xiangdong Li, Jiyuan Tu

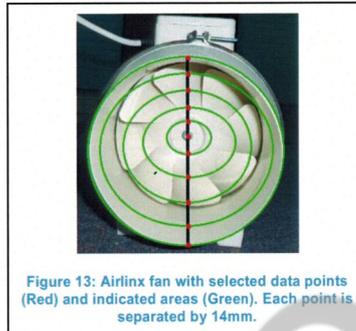
Diffusers are used to drive ventilation. A number of different diffusers need to be characterised and tested to assess their performance. Such diffusers may be linear and swirl. An experimental test room has been designed and built specifically for this purpose. A number of diffusers are needed to be characterised and CFD modelling techniques will be used to visualise performance. This work is sponsored by Airlinx, where the testing will take place. Through this project, students would gain direct experience of resolving engineering problems in the industry.



DIFFUSER MODELLING, MEASUREMENT AND PERFORMANCE

Authors: Corado Oscar, Xiangdong Li, Jiyuan Tu

HVAC diffusers must undergo performance assessments in order to determine whether they can meet current standards to supply thermal comfort and system efficiency to individuals who spend 90 per cent of their time indoors. By creating a contained field and mapping the airstream using velocity vectors, the behaviour of air exiting a diffuser can be studied.

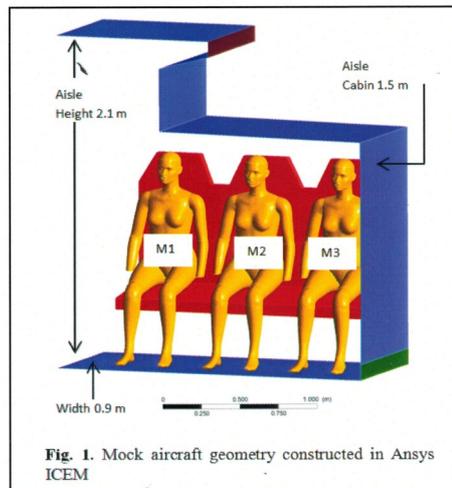


EFFECT OF VENTILATION CONFIGURATION ON THERMAL COMFORT AND PARTICLE INHALATION OF COMMERCIAL AIRCRAFT PASSENGERS

Authors: Melin Cedric, Xiangdong Li, Kiao Inthavong

Commercial aircraft cabin have a sub-optimal air quality when considering both passenger thermal comfort and particle exposure. The current state-of-the-art design and research have difficulties with integrating key ventilation parameters such as air inlet variables with regard to detrimental pollutant doses on airline users. It is also reasonable to assume that the actual cost benefit of investing in commercial aircraft cabin (CAC) ventilation is dwarfed by safety, fuel consumption and future environmental regulations. In such a context, solving complex interactions to improve air quality in CAC using experiments is time consuming and onerous. Therefore, the use of a computational fluid dynamic (CFD) to simulate CAC environment will provide engineers with numerical data to effectively pinpoint

improvement areas and efficiently conduct experimental work. The purpose of this study is to chart passenger thermal comfort and the characteristics of particulate pollutant transport under a range of ventilation configuration within a typical CAC environment. From a research point of view, preference is given to construct a numerical mock up of a CAC with greater emphasis on passengers as a point of reference to evaluate future CAC design. The research philosophy objective is to create a 'CAC-CFD-Unit' that could be used for successive research and shared with research collaborators.



Diffuser Modelling, Measurement and Performance

Students conducted research into the Modelling, Measurement and Performance of Diffusers, This research was conducted by Oscar Corado, Andrew Pendelbury, Nedialko Dimov and Tsz Hin Li.

This section shows a portion of their research.

PROJECT OBJECTIVES

- To conduct an experimental test to determine the performance of various diffusers.
- Understanding the behaviour of the airstream exiting a diffuser from test outcomes.
- Velocity fields will be translated into a map, graph, or equivalent informative diagram.
- Heating Ventilation and Air Conditioning is used world wide for thermal comfort
- Performance assessment based around flow rate
- Effect on flow field and throw

CFD Approach

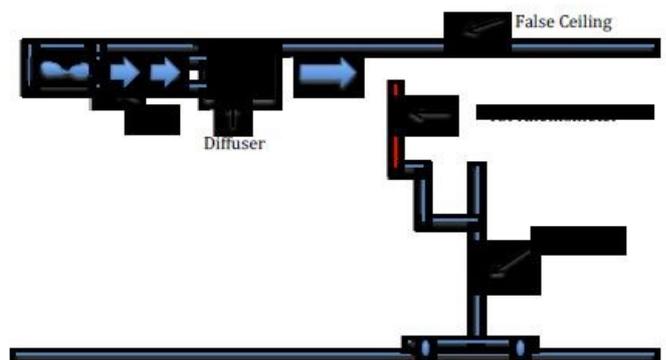
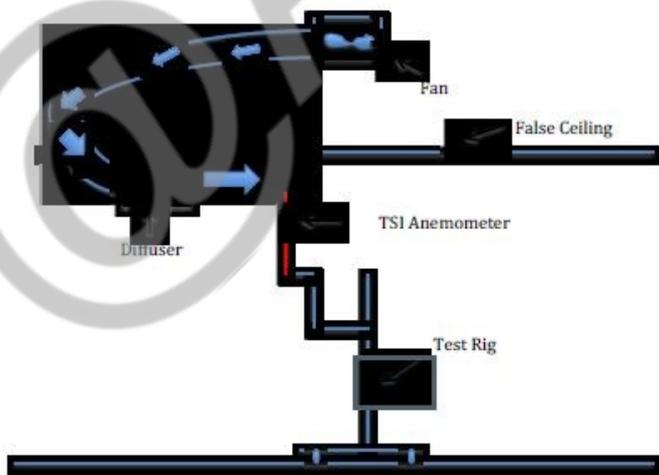
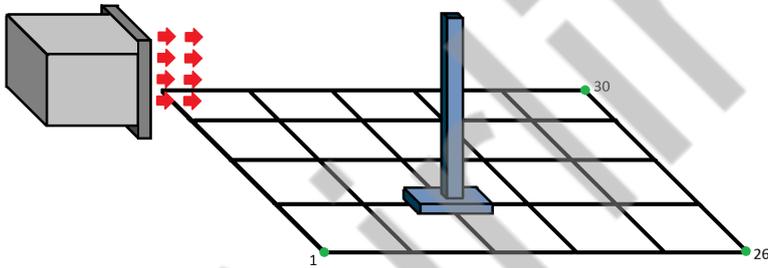
- Becoming a popular tool for research in the sciences of fluid dynamics and heat transfer
- Providing an alternative cost-effective means of simulating real fluid flows
- Higher capacity to simulate flow conditions that are not reproducible in experimental tests
- Provide detailed visualization and comprehensive information when compared to analytical and experimental fluid dynamics
- Limitations: numerical errors exist in computations → difference in computed results and reality
- Results obtained must always be thoroughly examined before they are believed.

Airlinx Test Room

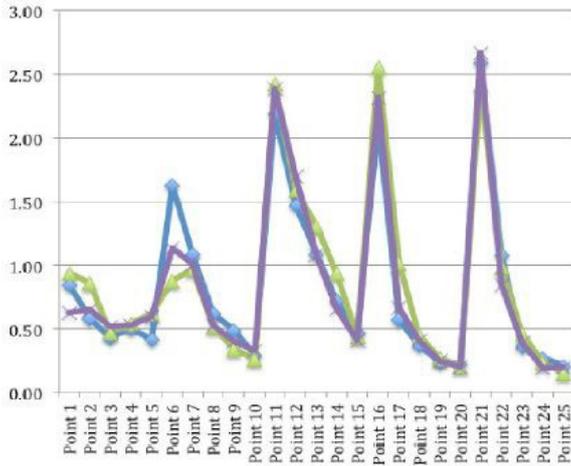
Bar Grille with Double Deflection



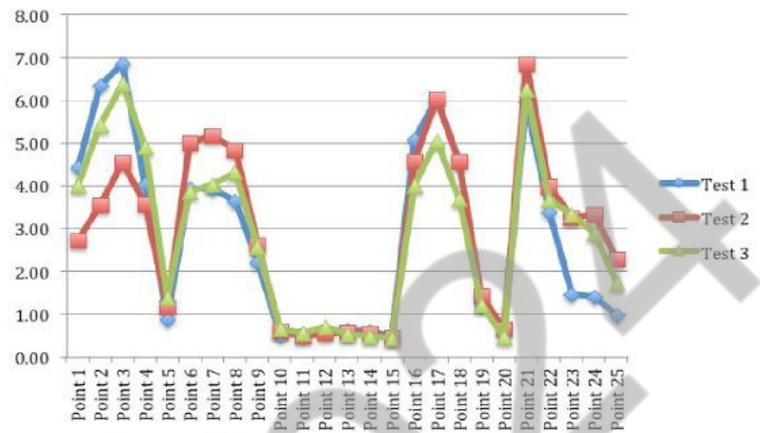
Swirl Lay-in Versus Square Lay-in Diffuser



Calibration Testing



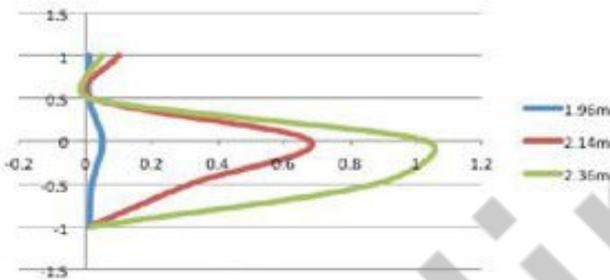
150mm Dia Fan Ave. Flow Rate: 93.12l/s



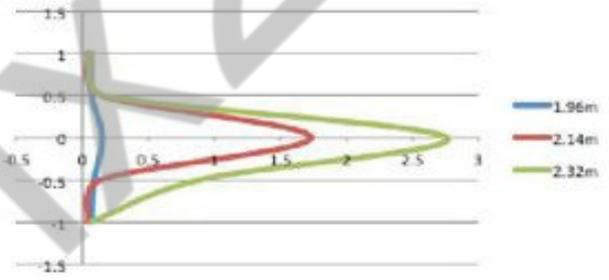
200mm Dia Fan Ave Flow Rate :316.49 l/s

O Degree Thin Gauge Velocity Profiles

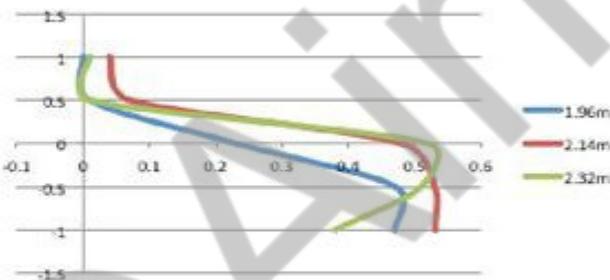
150mm Fan at 1m



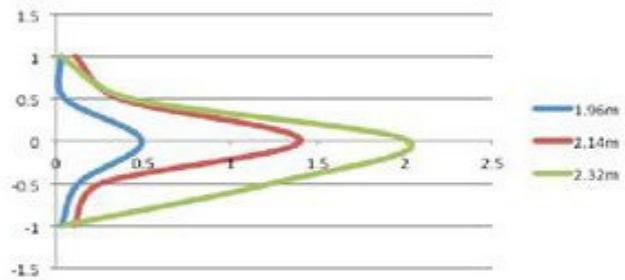
200mm Fan at 1m



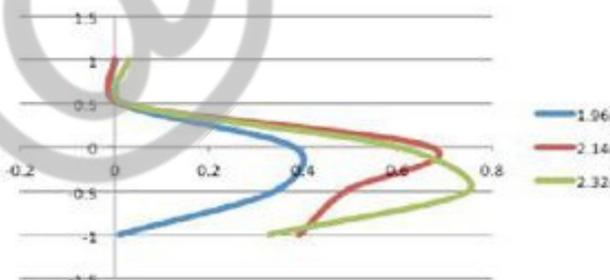
150mm Fan at 3m



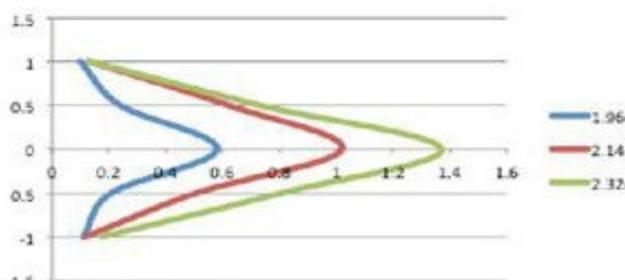
200mm Fan at 2m



150mm Fan at 2m



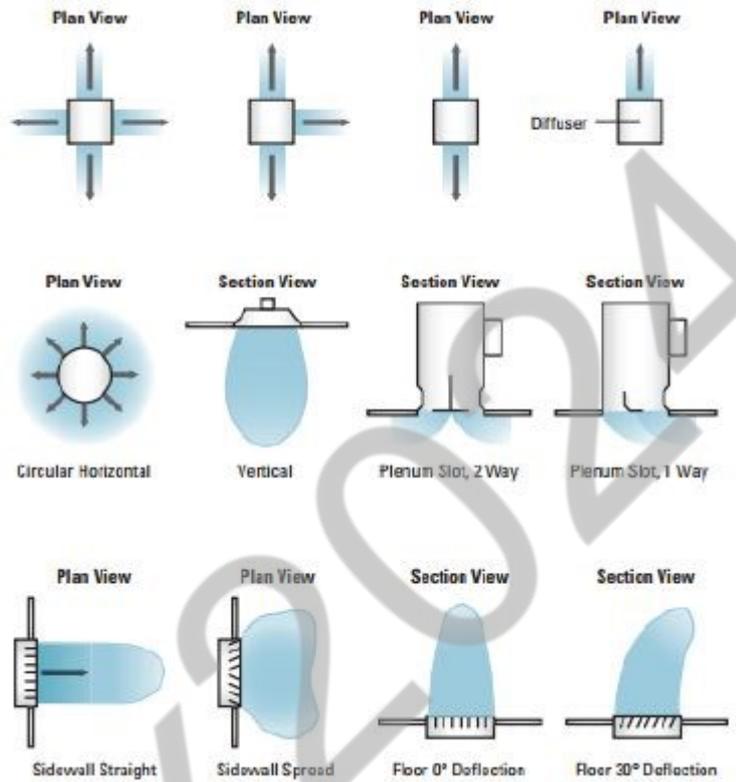
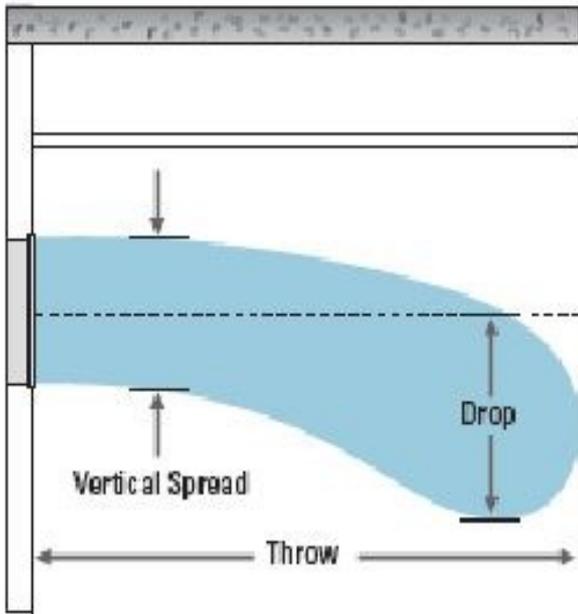
200mm Fan at 3m



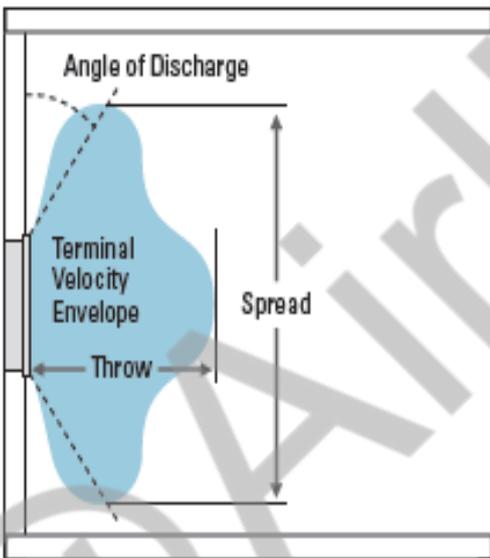
Superior Quality & Services at Affordable prices

Air Patterns

Understanding the behaviour of air exiting a diffuser will avoid purchasing and utilising over sized HVAC systems.

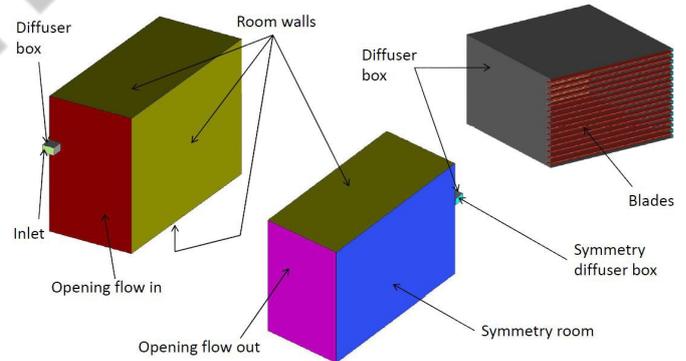


Plan View



Parts Allocation

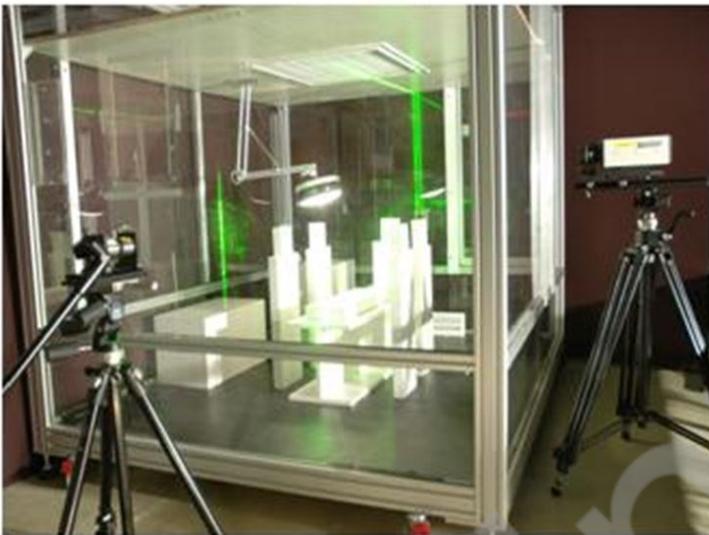
- To have better control of mesh size of individual part
- Allow boundary conditions to be applied in later stage



For the detailed paper into the research conducted by RMIT, please contact Airlinx.

Airlinx Research and Development

Airlinx started as a manufacturer and supplier of air-conditioning duct hardware and accessory products to the HVAC industry, with particular emphasis on commercial-industrial requirements. We are committed to providing our industry with excellent user-friendly products and we can successfully say that this has been a pivotal part of our growth.



The above image shows a model operating room and the experimental set-up for flow measurement using the PIV and LDA/PDA techniques.

Now Airlinx is rapidly expanding its services in providing Research and Development, manufacturing and supplying, and consultancy services to the development and application of many HVAC systems. The company is gradually developing vital research links with a number of companies in the Asia region such as in China and Hong Kong to further expand the company's profile of the provision of services.

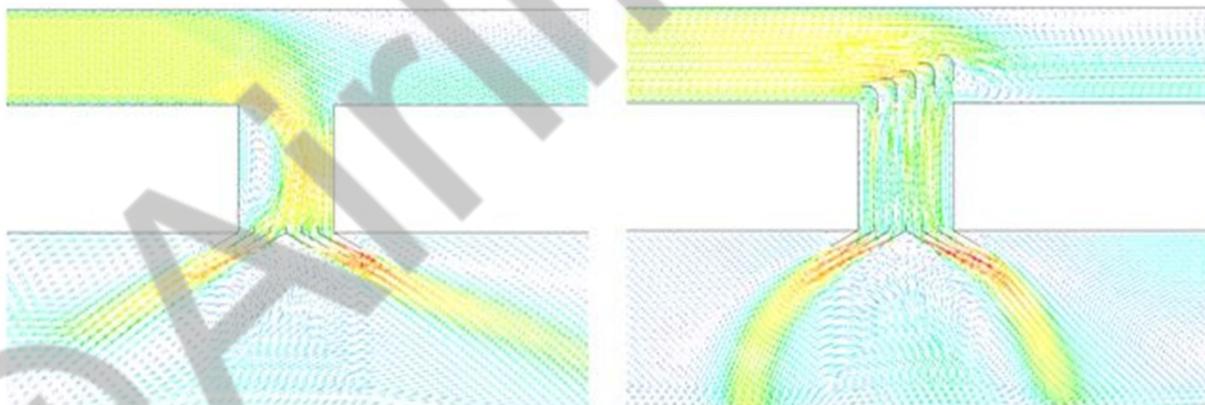
The HVAC companies face significant technical challenges today. In an increasingly competitive global market, HVAC systems need to make use of advance technologies and improved component performance.

Airlinx is currently a major player in providing design and expert advice through various research and development activities in collaboration with RMIT University in Melbourne and the research organization CSIRO. Advance experimental techniques such as Particle Imaging Velocimetry (PIV) and Laser Doppler Anemometry/Phase Doppler Anemometry (LDA/PDA) are used to study the indoor airflow patterns and contaminant particle concentration. The wealth of information generated will assist in developing strategic long term decisions as to the development path needed for the longevity and prosperity for building ventilation system design in the domestic and international market places.

Over the last decade, the cutting edge computational fluid dynamics (CFD) techniques have been widely employed and pursued as a tool to achieve innovative designs for HVAC systems. Airlinx has used CFD for the analysis and optimisation of air duct, diffuser and other ventilation components. CFD helps reveal flow structures and comprehensive flow field information where the experiment cannot provide adequate resolution.

Doppler Anemometry (LDA/PDA) are used to study the indoor airflow patterns and contaminant particle concentration. The wealth of information generated will assist in developing strategic long term decisions as to the development path needed for the longevity and prosperity for building ventilation system design in the domestic and international market places.

Over the last decade, the cutting edge computational fluid dynamics (CFD) techniques have been widely employed and pursued as a tool to achieve innovative designs for HVAC systems. Airlinx has used CFD for the analysis and optimisation of air duct, diffuser and other ventilation components. CFD helps reveal flow structures and comprehensive flow field information where the experiment cannot provide adequate resolution.



Two figures compare our computer simulation of air flow pattern within the duct system that consists of a branch duct, outlet collar and diffuser. It is showed that the flow pattern from the diffuser is more symmetric with turning vanes (right hand side) than without turning vale (left hand side). More simulation can be performed to study various types of turning vanes affecting of flow distribution, and then, optimised design and flow distribution can be realised.

@Airlinx2024

www.airlinx.com.au

03 9790 0900

