

DuctTech

SPACESAVER LOW PROFILE DUCTING



THREE SIZES FOR EVERY APPLICATION

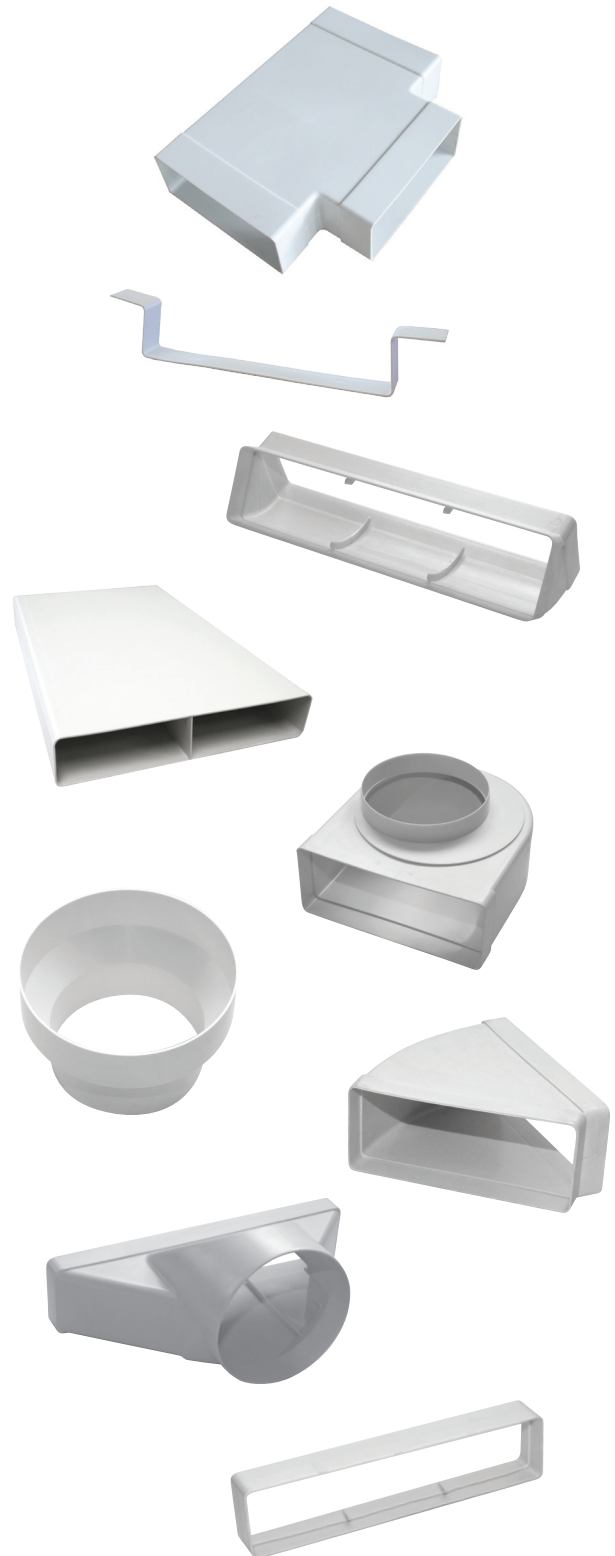
220mm x 90mm

300mm x 60mm

350mm x 75mm

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SPACESAVER LOW PROFILE DUCTING

INTRODUCTION

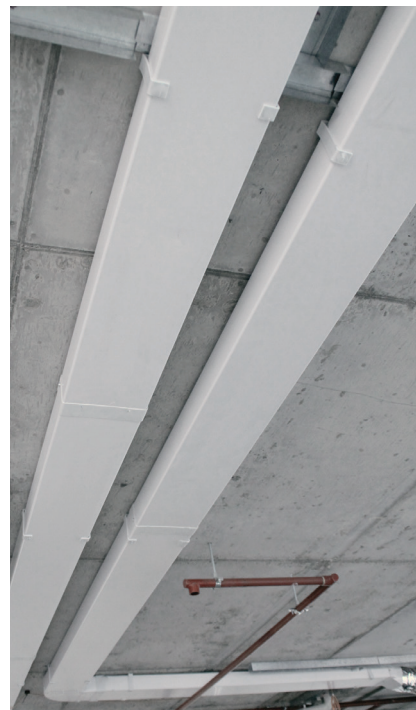
Spacesaver low profile ducting has been designed to provide quiet and efficient air extraction from bathrooms, kitchens, dryers and areas or appliances that need air extracted.

Spacesaver low profile ducting has been designed to be installed in confined ceiling and wall spaces, allowing for a more flexible design and providing architects with more freedom and scope. Available in three sizes to suit a large range of air quantities with low resistance at a low noise level to maximize fan performance. Made from polyvinyl chloride and engineered to be assembled quickly and easily saving time and money.

Spacesaver low profile ducting has been independently tested and comes with a fire rated certificate to suit as/nzs 1530.3 to comply with building standards and has been installed in many high-rise and small apartment developments plus domestic and commercial applications giving our clients great service, satisfaction and peace of mind.

ADVANTAGES OF SPACESAVER LOW PROFILE DUCT

- Save on joiners / cost saving
- Allows higher ceilings in apartments
- Channel duct comes in 2m length
- Used in limited ceiling space
- Brackets can be fixed using ramset charges thus reducing installation time
- Save on installation costs
- Maximises fan performance due to less resistance
- Can be easily altered on site to suit
- Smooth surface reduces dirt built up
- Fire resistant





PLASTIC LOW PROFILE DUCT

MEETING THE GREEN BUILDING CHALLENGE

Plastic meets the challenges of today's green building specifications. Green building refers to the growing importance of meeting sustainability requirements in construction materials and practices while at the same time limiting the impact on natural resources in both the construction and long-term maintenance and life cycle of a commercial or residential building.

Plastic pipe and fittings offer a number of green building advantages:

- Properly installed plastic ducts and fittings offer an especially long service life and offer dependable, maintenance free service free from rust and corrosion.
- Plastic is an inert substance, it does not react with chemicals around it. In fact, it's often the material of choice for chemical processing. Since plastic is so dependable, it protects the surrounding environment from contamination.
- Solvent cements and their use have been carefully studied. As a result guidance for their use is documented in ASTM D 2564 and ASTM 656. Concerns regarding the use of solvent cements are easily addressed by using appropriate ventilation and protection from skin contact.
- Plastics long life cycle means that the issue of handling discarded plastic materials is somewhat minimised. However, even discarded plastic is recycled. According to the Vinyl Institute, vinyl may be automatically sorted from other recyclables. And the demand for recycled vinyl exceeds the supply.
- No waste in the manufacturing process. Left over materials are simply reground for more products. Plastic pipe has been successfully tested against the ANSI/NSF 61 standard and other health effect standards for more than 35 years. Plastic is a thermoplastic material made from compounds that commonly meet Class 12434 per ASTM D.

GENERAL

Plastic piping systems are:

- Environmentally friendly.
- Provide long service life.
- Easy to install and handle.
- Corrosion resistant.
- Cost effective.
- Widely accepted by codes.

Plastic ducts are manufactured by extrusion in a variety of sizes and dimensions. Plastic ducts are made to conform to various ATSM standards for both pressure and non-pressure applications.

USES/APPLICATIONS

USES/APPLICATIONS

Plastic piping and ducts are used for:

- Drain-waste-vent (DWV)
- Ventilation ducting
- Sewers
- Water mains
- Water service lines
- Irrigation
- Conduit
- Various industrial installations

Plastic materials are resistant to many ordinary chemicals such as acids, bases, salts and oxidants.





CODE STATUS

Plastic ducting is a widely used and accepted material for ventilation, DWV, sewers in all model plumbing codes. These Codes normally identify acceptable products for specific uses based on the ATSM standard designation.

Installing plastic duct systems is easy. Contractors prefer this light weight piping material. Just follow some of these simple steps:

- Follow local code requirements.
- Follow recommended safe work practices.
- Follow proper handling procedures.
- Read the manufacturer's installation instructions.
- Keep pipe and fittings in original packaging until needed.
- Cover pipe and fittings with an opaque tarp if stored outdoors.
- Inspect pipe for damage prior to use.
- Use tools specifically designed for use with plastic pipes.
- Use a drop cloth to protect finishes in the work area.

When joining the plastic pipe and fitting with solvent cement, always:

- Cut the pipe ends square.
- Bevel and deburr the pipe ends with a chamfering tool.
- Use the proper primer and solvent cement and follow manufacturer's application instructions.
- Use the proper size applicator for the pipe being joined.
- Rotate the pipe at a ¼ turn when bottoming pipe in fitting socket.
- Avoid puddling of primer or cement in fitting pipe.

SPACESAVER DUCTING 220mm x 90mm
300mm x 60mm
350mm x 75mm

To properly support plastic piping systems:

- Allow for movement due to expansion and contraction.
- Use hangers designed for use with plastic.
- Follow proper hanger support spacing requirements.
- Protect from nails, screws, and abrasive surfaces.

When testing an installed plastic piping system:

- Follow the manufacturer's recommended cure times prior to pressure testing.
- Test in accordance with local codes.



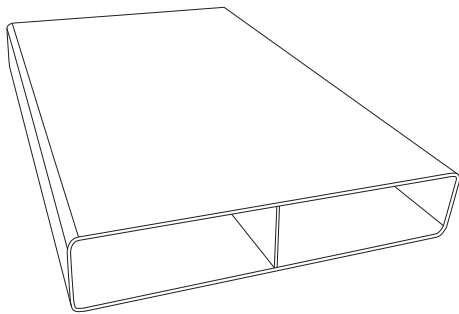
CHANNEL DUCT

2M Length

Size: 220mm x 90mm x 2m

Size: 300mm x 60mm x 2m

Size: 350mm x 75mm x 2m

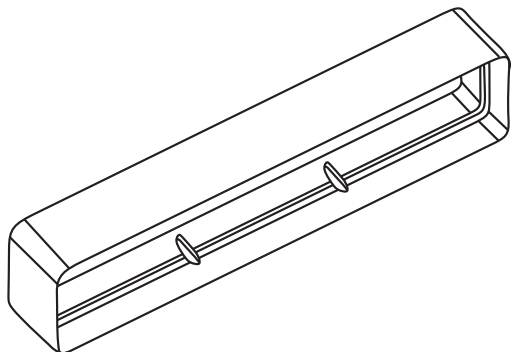


DUCT CONNECTOR

Size: 220mm x 90mm

Size: 300mm x 60mm

Size: 350mm x 75mm



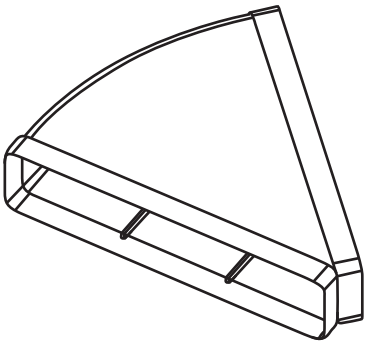
SPACESAVER DUCTING 220mm x 90mm
300mm x 60mm
350mm x 75mm

HORIZONTAL DUCT 45 DEGREE BEND

Size: 220mm x 90mm

Size: 300mm x 60mm

Size: 350mm x 75mm

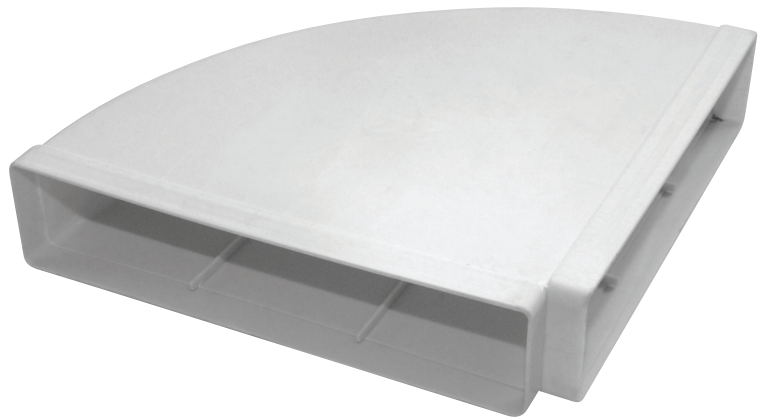
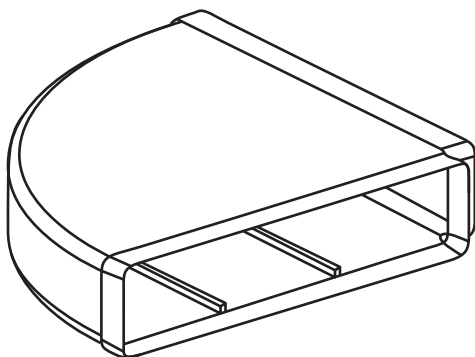


HORIZONTAL DUCT 90 DEGREE BEND

Size: 220mm x 90mm

Size: 300mm x 60mm

Size: 350mm x 75mm

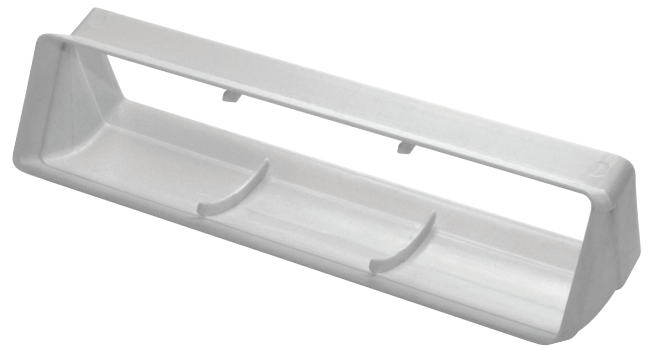
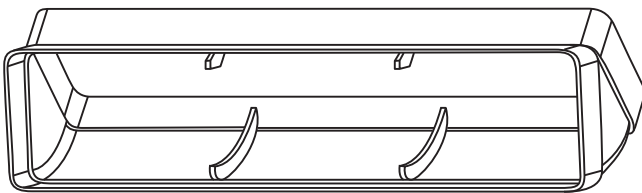


VERTICAL DUCT 45 DEGREE BEND

Size: 220mm x 90mm

Size: 300mm x 60mm

Size: 350mm x 75mm

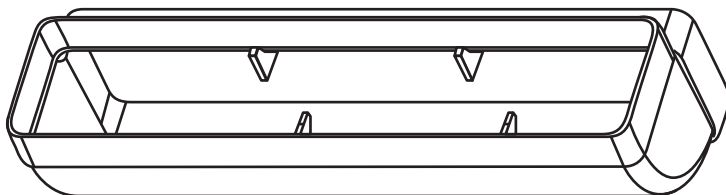


VERTICAL DUCT 90 DEGREE BEND

Size: 220mm x 90mm

Size: 300mm x 60mm

Size: 350mm x 75mm



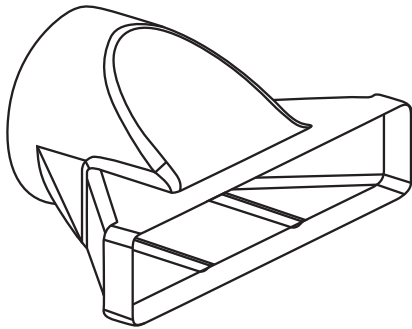
SPACE SAVER DUCTING 220mm x 90mm
300mm x 60mm
350mm x 75mm

ROUND TO RECTANGULAR ADAPTOR

Size: 220mm x 90mm / 150 Ø

Size: 300mm x 60mm / 150 Ø

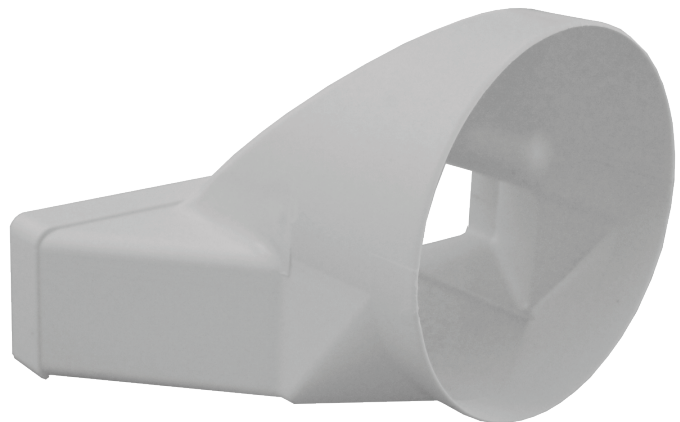
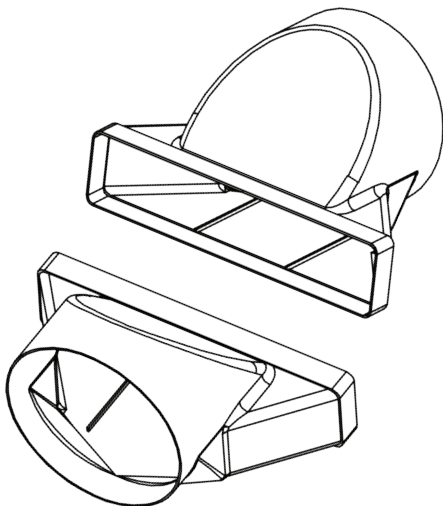
Size: 350mm x 75mm / 150 Ø



ROUND TO RECTANGULAR ADAPTOR

Size: 300mm x 60mm / 200 Ø

Size: 350mm x 75mm / 200 Ø

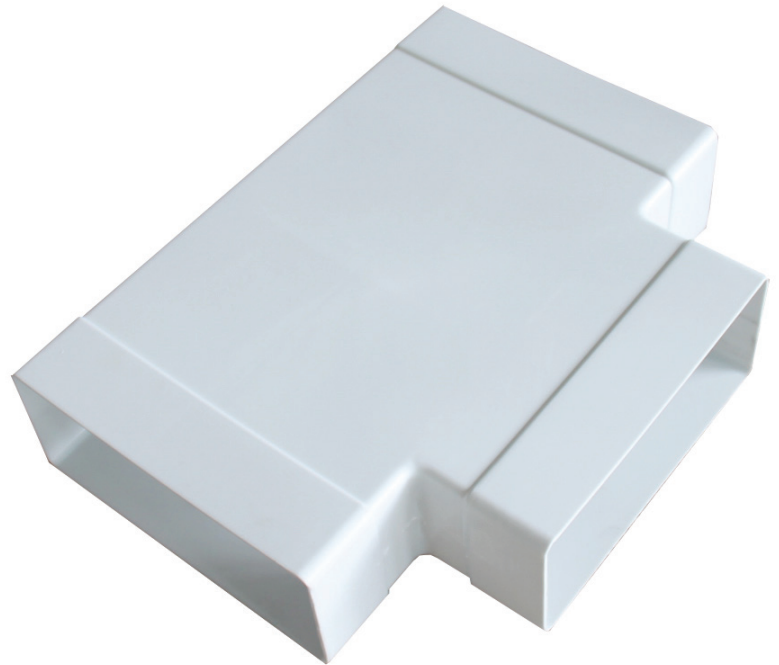
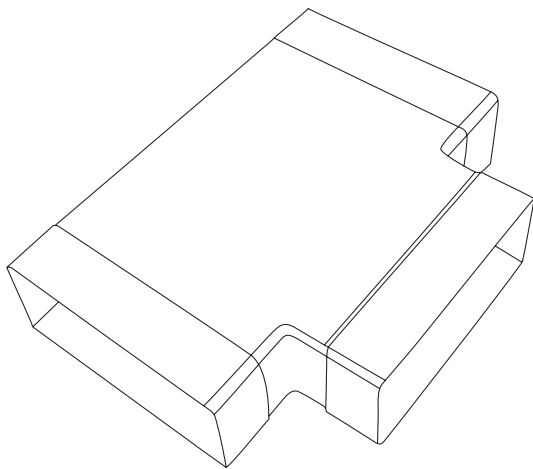


T PIECE DUCT

Size: 220mm x 90mm

Size: 300mm x 60mm

Size: 350mm x 75mm

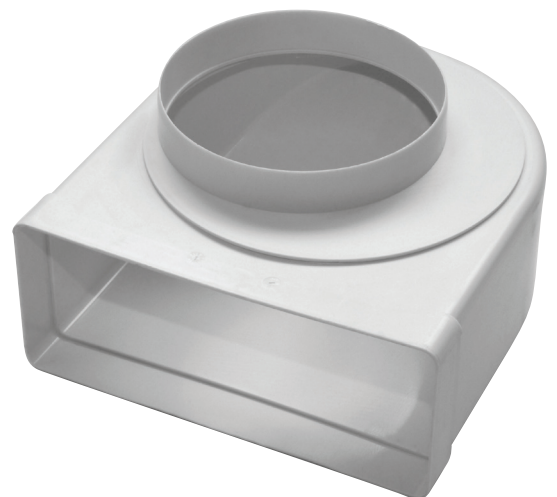
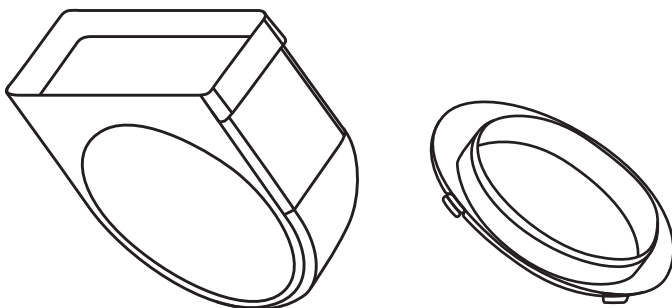


ADJUSTABLE RANGEHOOD ADAPTORS

Size: 220mm x 90mm / 150 Ø

Size: 300mm x 60mm / 150 Ø

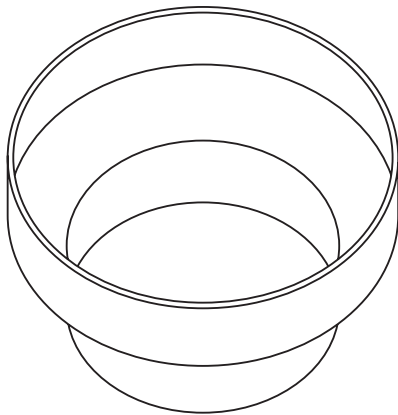
Size: 350mm x 75mm / 150 Ø



SPACESAVER DUCTING 220mm x 90mm
300mm x 60mm
350mm x 75mm

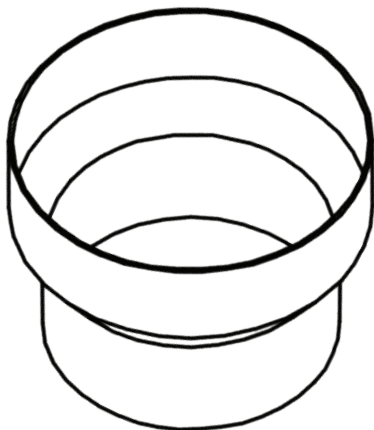
ROUND TO ROUND ADAPTORS

Size: 200 Ø to 150 Ø



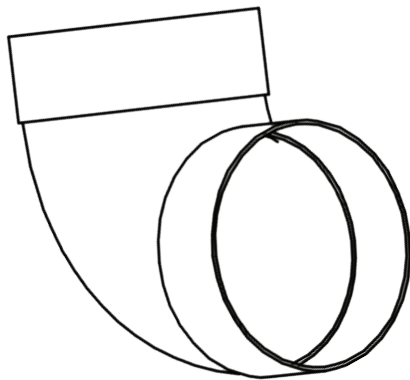
ROUND TO ROUND ADAPTORS

Size: 150 Ø to 125 Ø



90 DEGREE ELBOW

Size: 125mm Ø

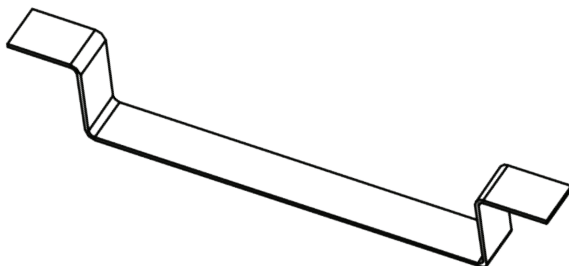


RECTANGULAR DUCT SUPPORT CLIP




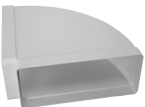

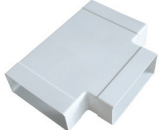

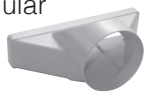



Size: 220mm x 90mm

Size: 300mm x 60mm

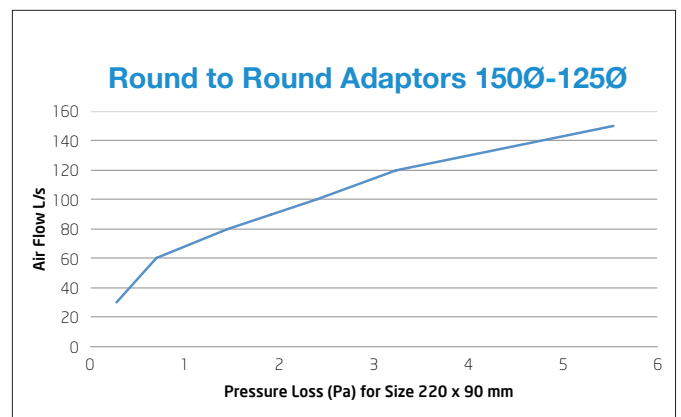
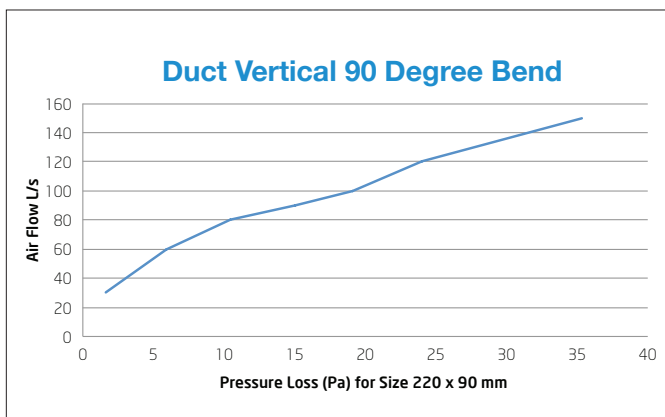
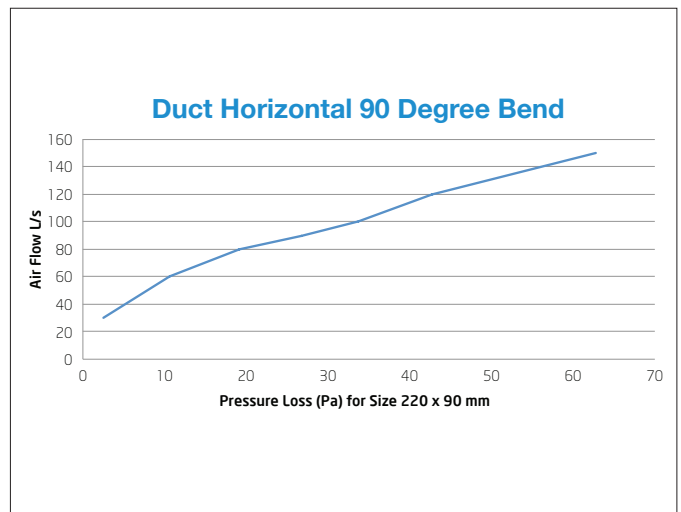
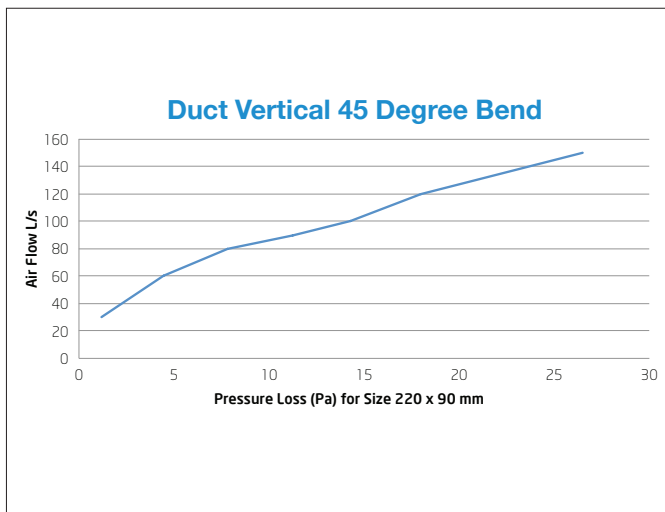
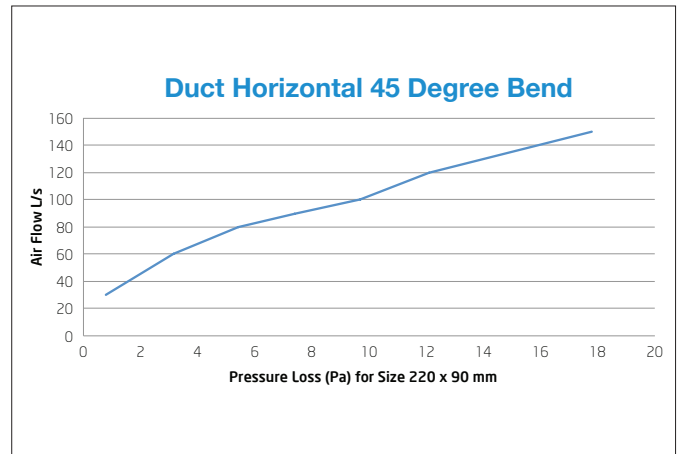
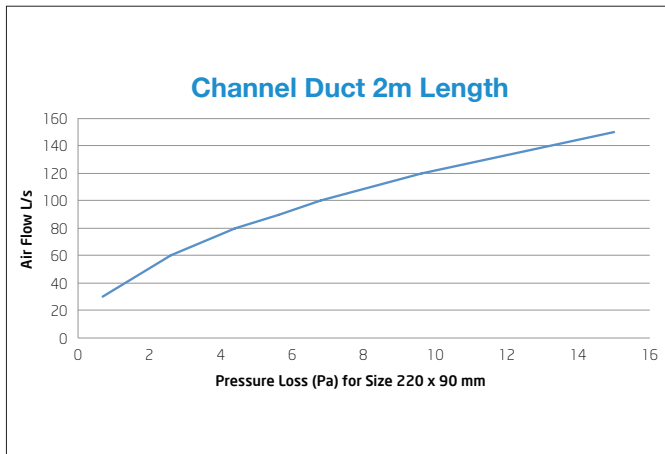
Size: 350mm x 75mm



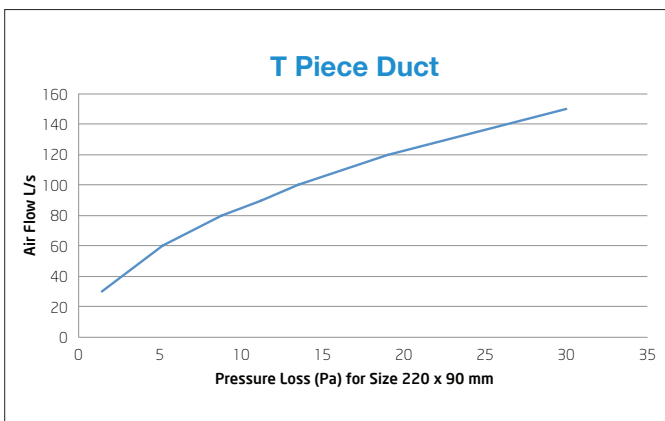
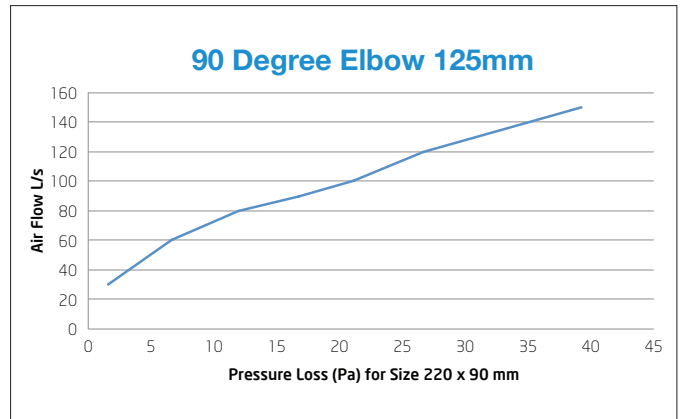
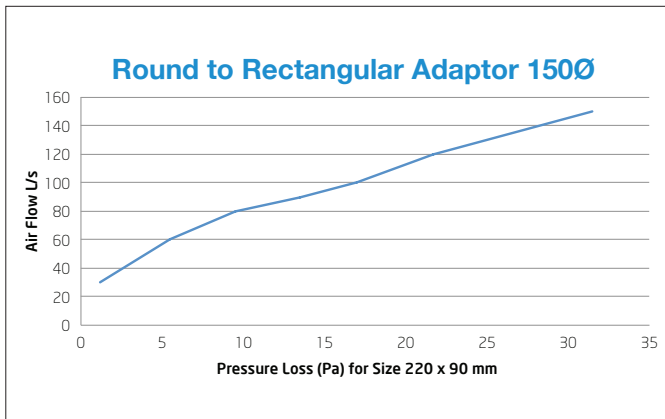
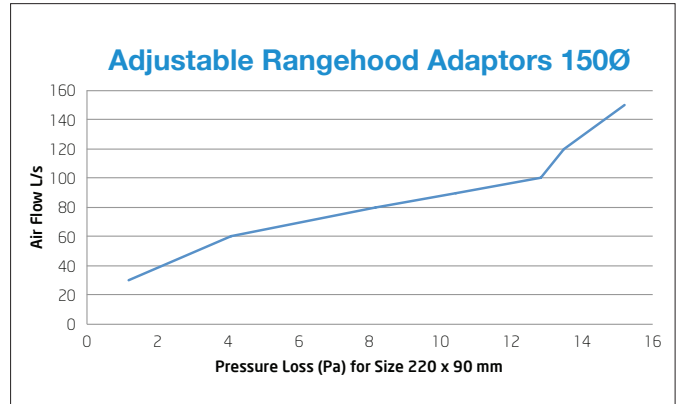
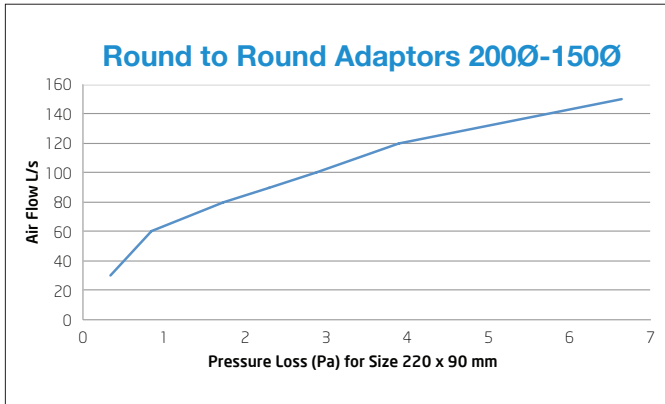
PERFORMANCE DATA (220mm x 90mm)

Part No. <i>Dimensions</i>	Contents	Air Flow						
		30 L/s	60 L/s	80 L/s	90 L/s	100 L/s	120 L/s	150 L/s
		Pressure Loss (Pa) for Size 220 x 90mm						
LPD220CD2 <i>220mm x 90mm</i>	Channel Duct 2m length 	0.68	2.6	4.4	5.6	6.8	9.6	15
LPD220HBEND45 <i>220mm x 90mm</i>	Horizontal 45 Degree Bend 	0.77	3.16	5.41	7.38	9.68	12.11	17.79
LPD220VBEND45 <i>220mm x 90mm</i>	Vertical 45 Degree Bend 	1.19	4.46	7.84	11.25	14.28	17.97	26.49
LPD220HBEND90 <i>220mm x 90mm</i>	Horizontal 90 Degree bend 	2.47	10.59	19.16	26.73	33.74	42.74	62.79
LPD220VBEND90 <i>220mm x 90mm</i>	Vertical 90 Degree bend 	1.62	5.94	10.45	15.02	19.09	24	35.36
LPD220TPIECE <i>220mm x 90mm</i>	T Piece Duct 	1.4	5.2	8.8	11.2	13.5	19	30
LPD125RBEND90	90 Degree Elbow 125mm 	1.54	6.62	11.98	16.71	21.09	26.71	39.24
LPD220RREC150 <i>220mm x 90mm</i>	Round to Rectangular Adaptor 150ø 	1.19	5.48	9.53	13.49	17	21.71	31.5
LPD220ARANGEH150 <i>220mm x 90mm</i>	Adjustable Rangehood Adaptors 150ø 	1.19	4.09	8.16	10.44	12.82	13.49	15.21
LPD220RTR150-125 <i>350mm x 75mm 300mm x 60mm 220mm x 90mm</i>	Round to Round Adaptors 150ø – 125ø 	0.28	0.70	1.45	1.91	2.4	3.24	5.53
LPD220RTR200-150 <i>350mm x 75mm 300mm x 60mm 220mm x 90mm</i>	Round to Round Adaptors 200ø – 150ø 	0.34	0.84	1.74	2.29	2.88	3.89	6.64

AIRFLOW DATA – LOW PROFILE DUCT (220mm x 90mm)



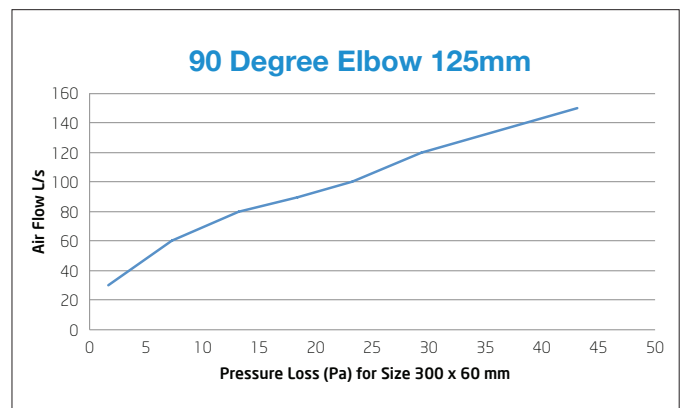
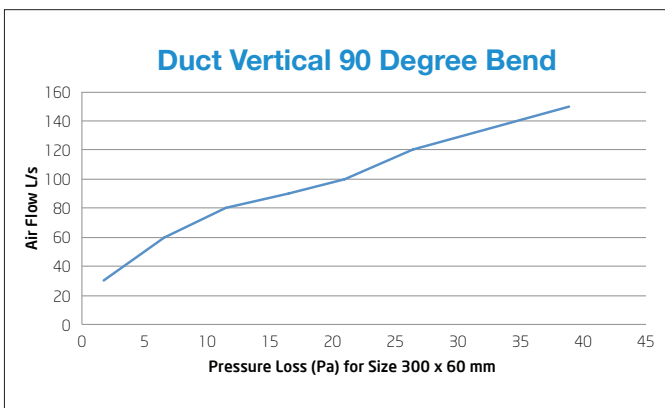
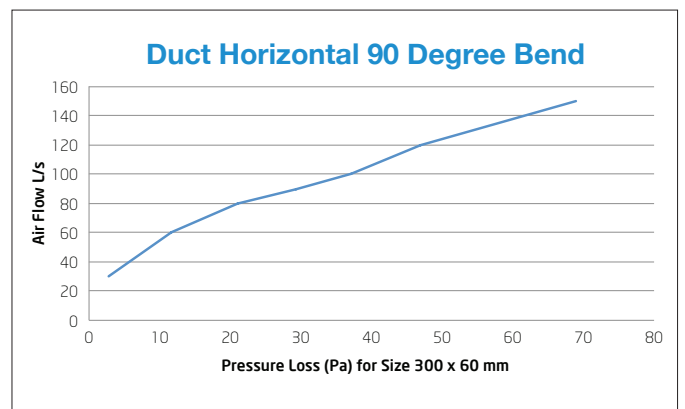
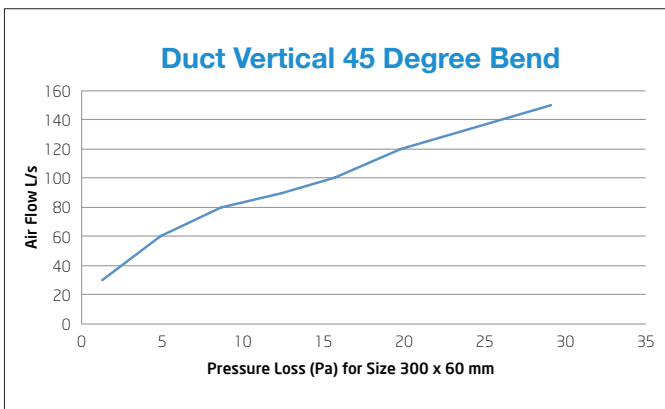
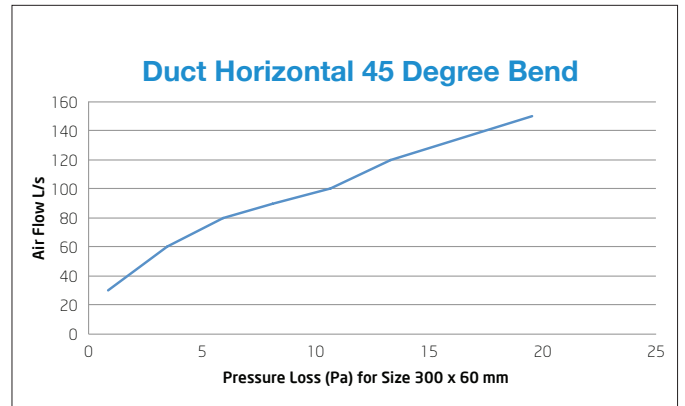
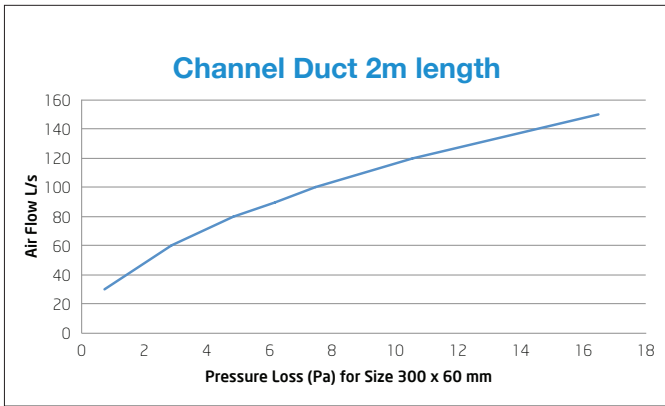
AIRFLOW DATA – LOW PROFILE DUCT (220mm x 90mm)



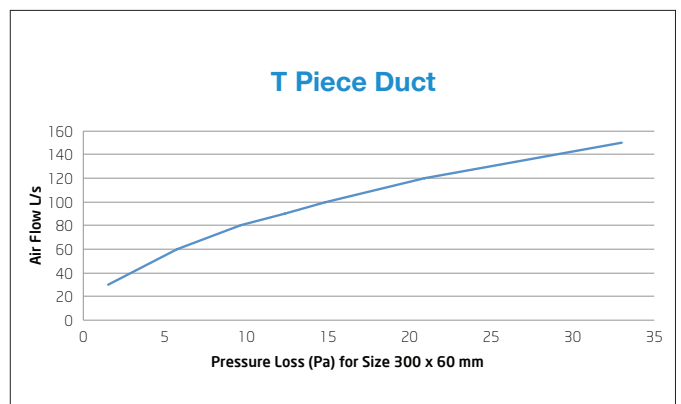
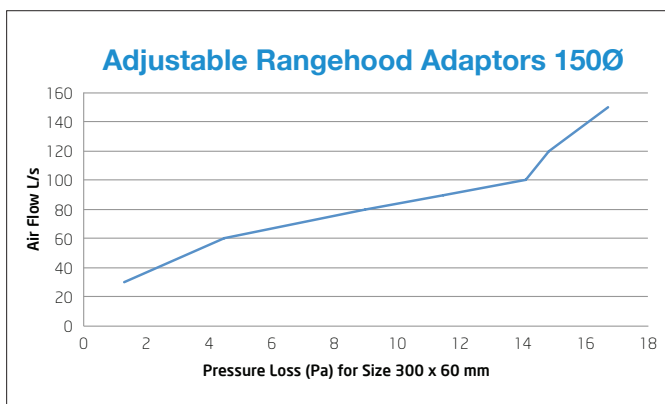
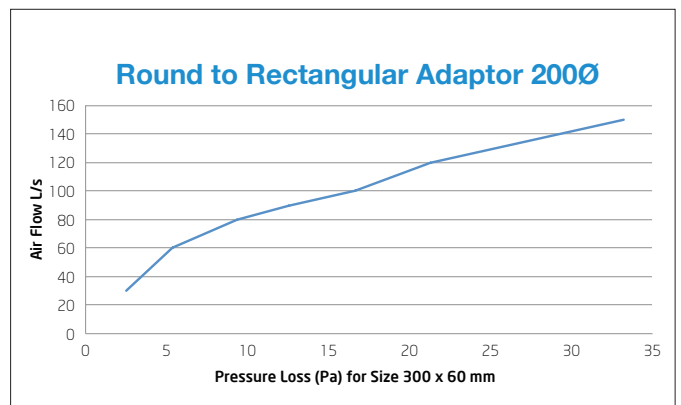
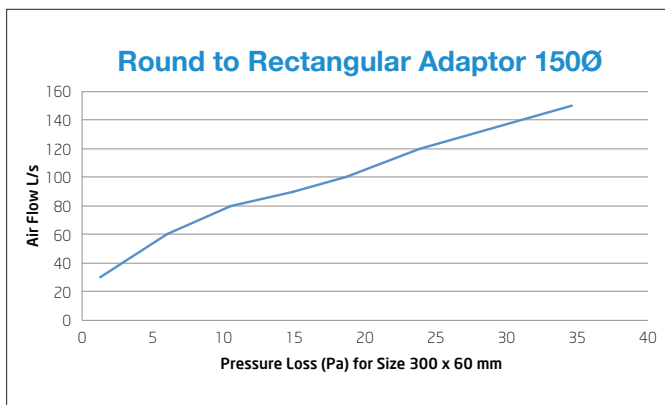
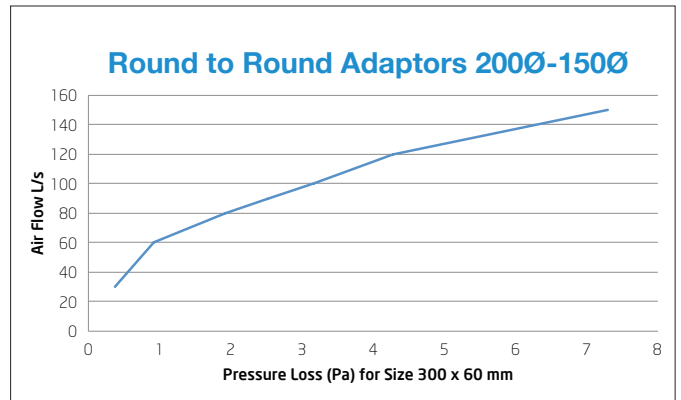
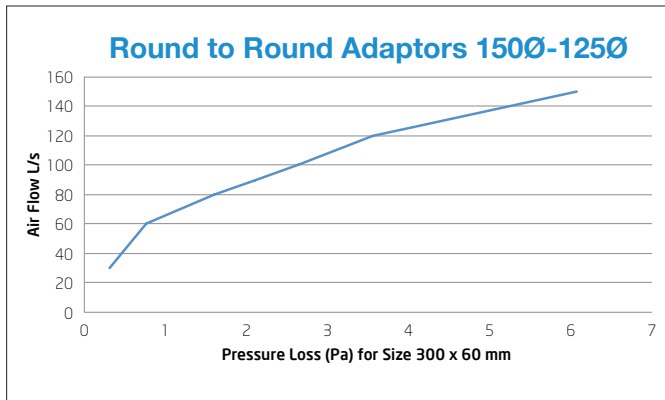
PERFORMANCE DATA (300mm x 60mm)

Part No. Dimensions	Contents	Air Flow						
		30 L/s	60 L/s	80 L/s	90 L/s	100 L/s	120 L/s	150 L/s
		Pressure Loss (Pa) for Size 300 x 60mm						
LPD300CD2 300mm x 60mm	Channel Duct 2m length 	0.75	2.86	4.48	6.15	7.47	10.55	16.48
LPD300HBEND45 300mm x 60mm	Horizontal 45 Degree Bend 	0.85	3.47	5.95	8.11	10.64	13.13	19.55
LPD300VBEND45 300mm x 60mm	Vertical 45 Degree Bend 	1.31	4.90	8.65	12.37	15.69	19.75	29.11
LPD300HBEND90 300mm x 60mm	Horizontal 90 Degree bend 	2.71	11.64	21.05	29.37	37.08	46.97	69
LPD300VBEND90 300mm x 60mm	Vertical 90 Degree bend 	1.78	6.53	11.48	16.51	20.98	26.37	38.86
LPD125RBEND90	90 Degree Elbow 125mm 	1.69	7.27	13.16	18.36	23.18	29.35	43.12
LPD300TPIECE 300mm x 60mm	T Piece Duct 	1.54	5.72	9.68	12.32	14.85	20.9	33
LPD300RREC150 300mm x 60mm	Round to Rectangular Adaptor 150ø 	1.31	6.02	10.47	14.82	18.68	23.86	34.62
LPD300RREC200 300mm x 60mm	Round to Rectangular Adaptor 200ø 	2.53	5.36	9.33	12.54	16.65	21.26	33.22
LPD300ARANGEH150 300mm x 60mm	Adjustable Rangehood Adaptors 150ø 	1.31	4.49	8.97	11.47	14.09	14.82	16.71
LPD300RTR150-125 350mm x 75mm 300mm x 60mm 220mm x 90mm	Round to Round Adaptors 150ø – 125ø 	0.31	0.77	1.59	2.10	2.64	3.56	6.08
LPD300RTR200-150 350mm x 75mm 300mm x 60mm 220mm x 90mm	Round to Round Adaptors 200ø – 150ø 	0.37	0.92	1.91	2.52	3.16	4.27	7.30

AIRFLOW DATA – LOW PROFILE DUCT (300mm x 60mm)



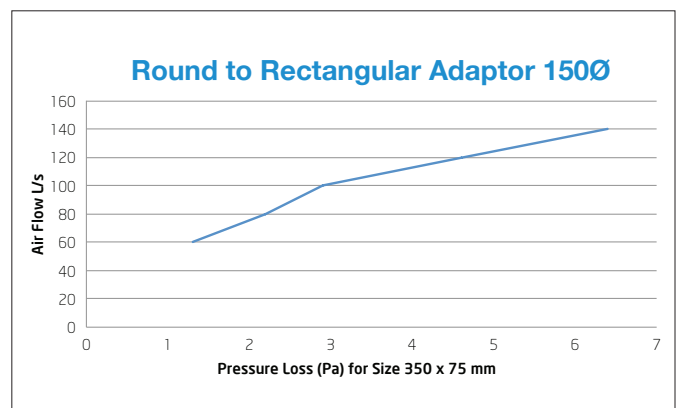
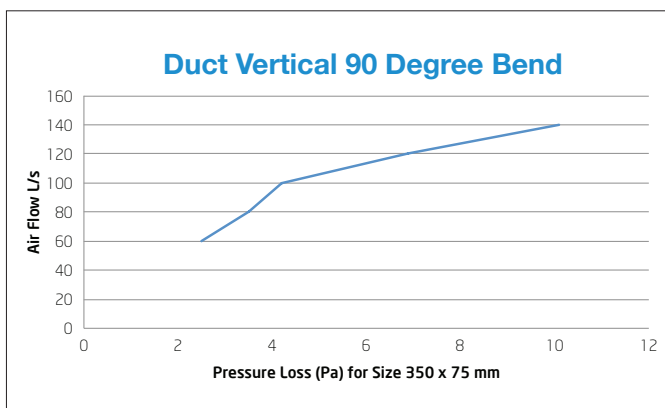
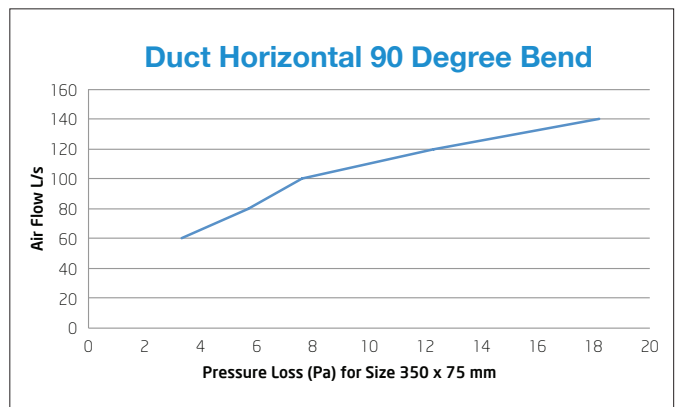
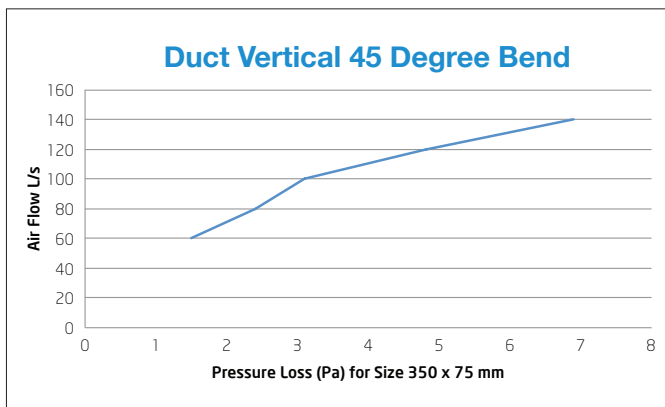
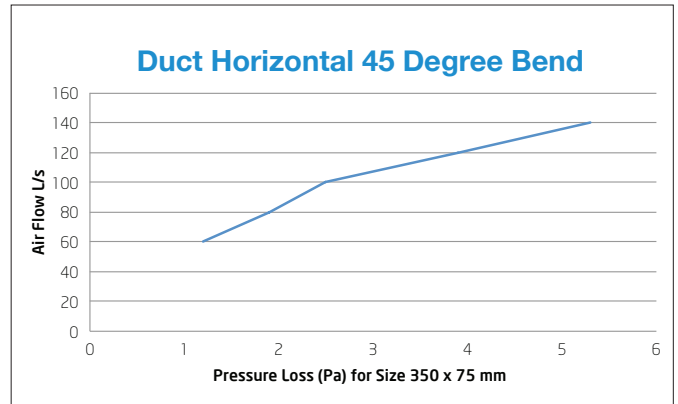
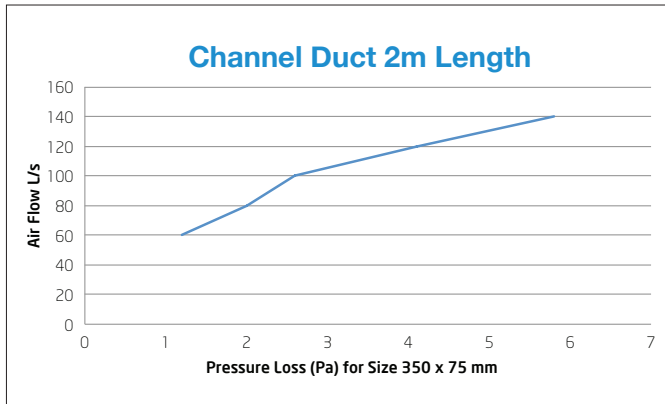
AIRFLOW DATA – LOW PROFILE DUCT (300mm x 60mm)



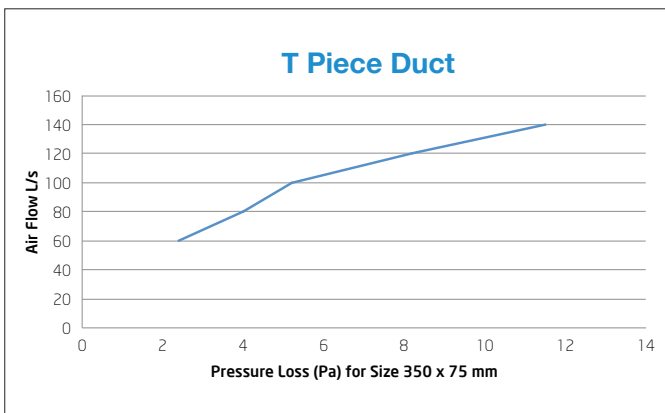
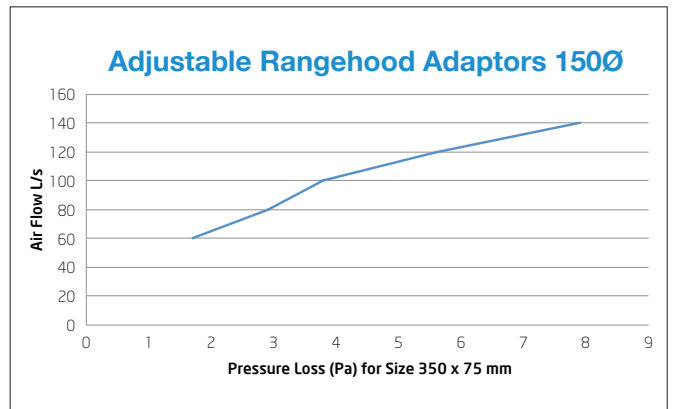
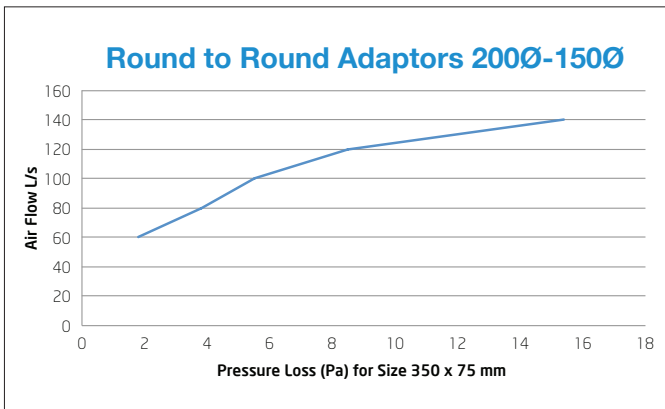
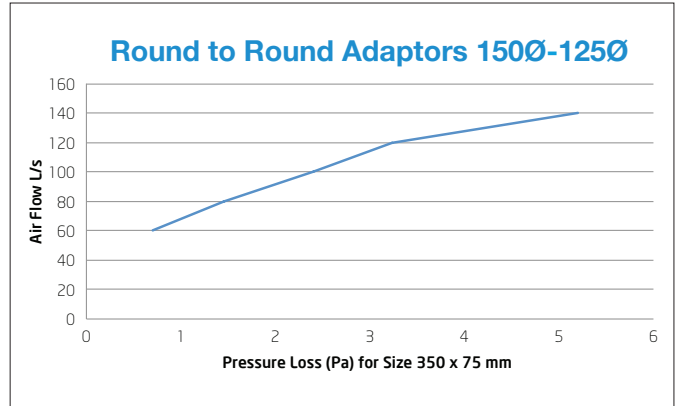
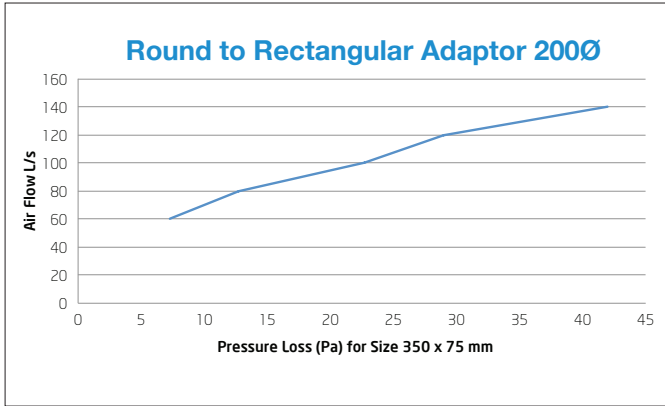
PERFORMANCE DATA (350mm x 75mm)

Part No. Dimensions	Contents	Air Flow				
		60 L/s	80 L/s	100 L/s	120 L/s	140 L/s
		Pressure Loss (Pa) for Size 350 x 75mm				
LPD350CD2 350mm x 75mm	Channel Duct 2m length 	1.20	2	2.60	4.10	5.80
LPD350HBEND45 350mm x 75mm	Horizontal 45 Degree Bend 	1.20	1.90	2.50	3.90	5.30
LPD350VBEND45 350mm x 75mm	Vertical 45 Degree Bend 	1.50	2.40	3.10	4.80	6.90
LPD350HBEND90 350mm x 75mm	Horizontal 90 Degree bend 	3.30	5.70	7.60	12.30	18.20
LPD350VBEND90 350mm x 75mm	Vertical 90 Degree bend 	2.50	3.50	4.20	6.90	10.10
LPD350TPIECE 350mm x 75mm	T Piece Duct 	2.4	4	5.2	8.2	11.5
LPD350RREC150 350mm x 75mm	Round to Rectangular Adaptor 150ø 	1.30	2.20	2.90	4.60	6.40
LPD350RREC200 350mm x 75mm	Round to Rectangular Adaptor 200ø 	7.30	12.70	22.66	28.94	31.99
LPD350ARANGEH150 350mm x 75mm	Adjustable Rangehood Adaptors 150ø 	1.70	2.90	3.80	5.60	7.90
LPD350RTR150-125 350mm x 75mm 300mm x 60mm 220mm x 90mm	Round to Round Adaptors 150ø – 125ø 	0.70	1.45	2.40	3.24	5.20
LPD350RTR200-150 350mm x 75mm 300mm x 60mm 220mm x 90mm	Round to Round Adaptors 200ø – 150ø 	1.80	3.80	5.50	8.50	15.40

AIRFLOW DATA – FLAT DUCT (350mm x 75mm)



AIRFLOW DATA – FLAT DUCT (350mm x 75mm)



DuctTech Space Saver installation tips for Apartment Ventilation

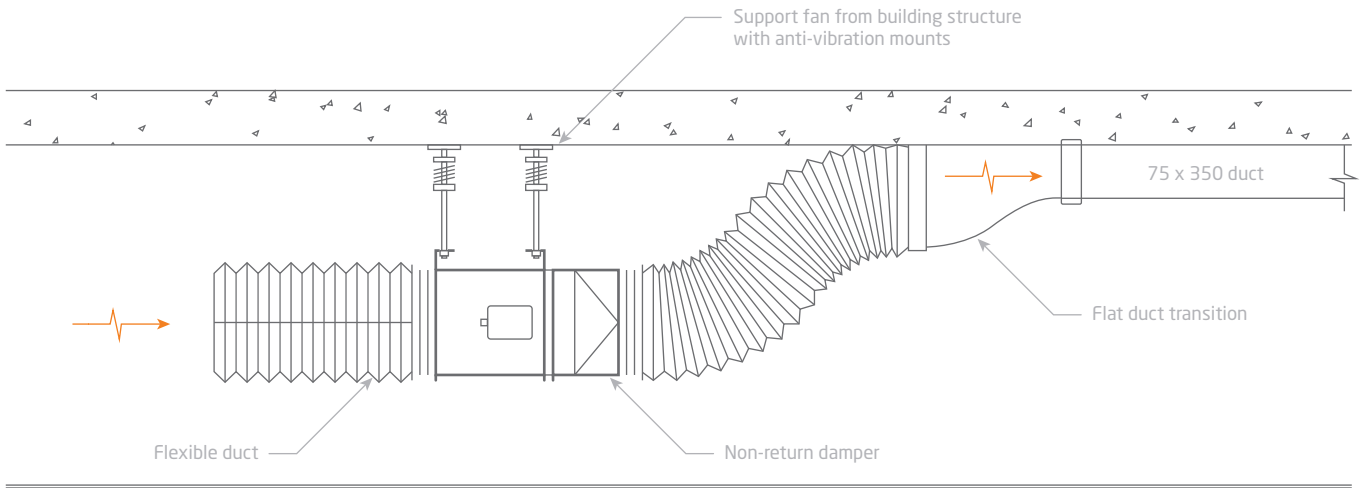
Residential Ventilation System

Install and commission the exhaust system as per the details on the mechanical drawings. Exhaust fans come complete with an exhaust rectangular duct, flexible ductwork and egg crate grilles. These are complete with acoustic cushion head and external weatherproof louvres.

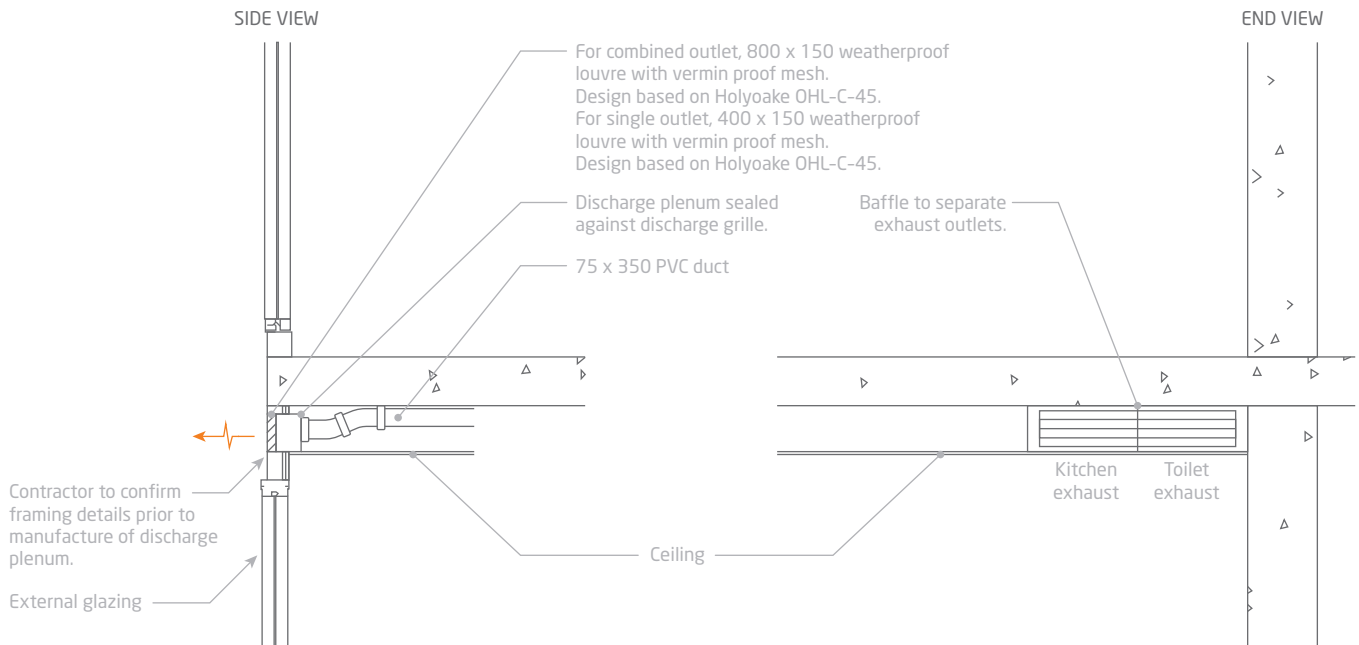
- 1.** Install the Space Saver rectangular ductwork using the manufacturer's joiners, bends, supporting clips and end connectors, range hood, toilet and laundry grilles as specified in the mechanical drawings (Page 25 - 31). Ductwork should be fire rated and complete with AS 1530.3 (1999) Building Standard Specification and AS 4254 (2002).
- 2.** Space Saver ductwork to be fitted within ceiling space as per drawings. Aluminium flexible duct length must be kept to a minimum to avoid causing a higher ESP than specified and reduced airflows.
- 3.** Connect kitchen exhaust to Space Saver ductwork, and to the range hood. Keeping separate from toilets and laundry ventilation, connect to external weatherproof louvres as per mechanical drawing details (Page 25- 31). Range hood supplied separately.
- 4.** Connect Space Saver ductwork to toilet and laundry fans as per drawing and install ductwork to external weatherproof louvres, as per detail on the drawings (Page 25 - 31).
- 5.** Separate fan switches located adjacent to light switches in laundry and toilet with operated fan extraction. Kitchen booster fans for range hood will be operated by the separate switch/switches adjacent to range hood.
- 6.** All exhaust fans shall be fitted with a non-return damper installed in outlet before connecting to Space Saver ductworks.
- 7.** When ductwork is to pass under existing beams, Space Saver 90-degree or 45-degree vertical bends must be used, as per the drawings (Page 25 - 31), to maintain low airflow resistance and achieve specified air delivery.
- 8.** Space Saver plastic ductwork should be glued together with silicone or another suitable adhesive to ensure joints are sealed. They should be installed to manufacturer's recommendations, using moulded clips. Do not fix self-tapping screw into the duct for joining purposes.

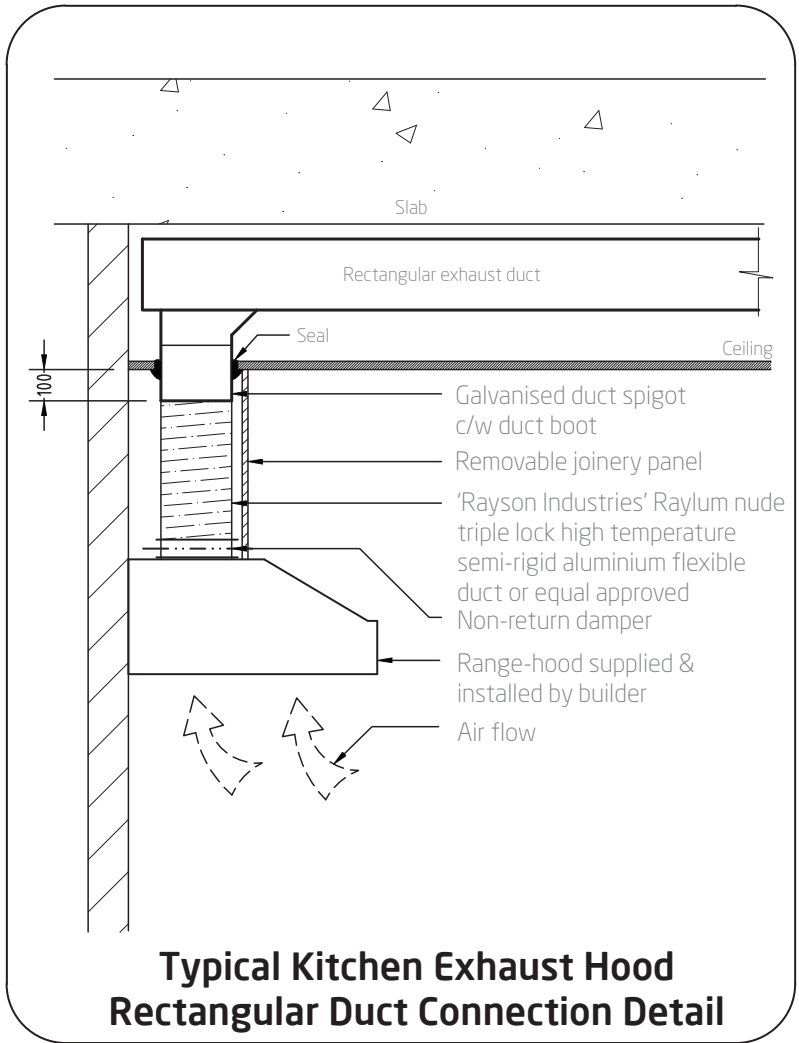
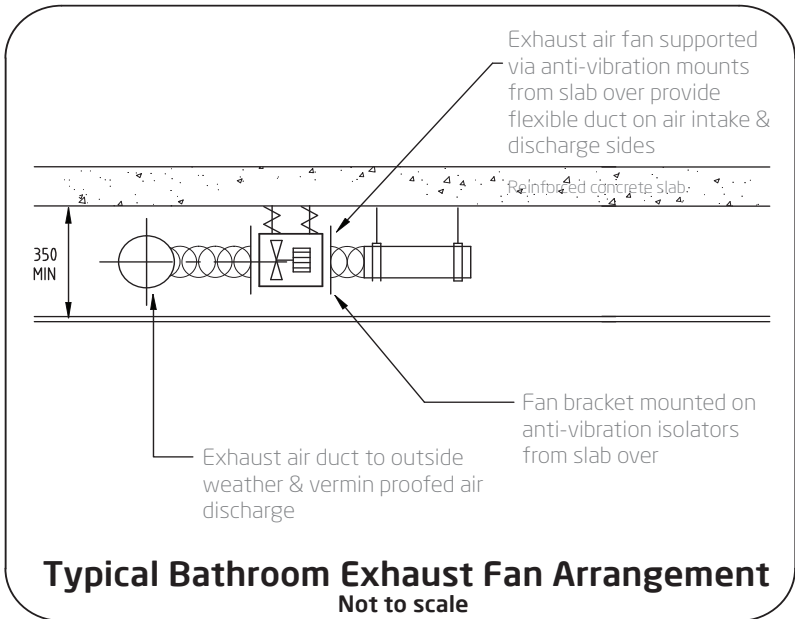
MECHANICAL SERVICES INFORMATION

TYPICAL INLINE FAN MOUNTING DETAIL



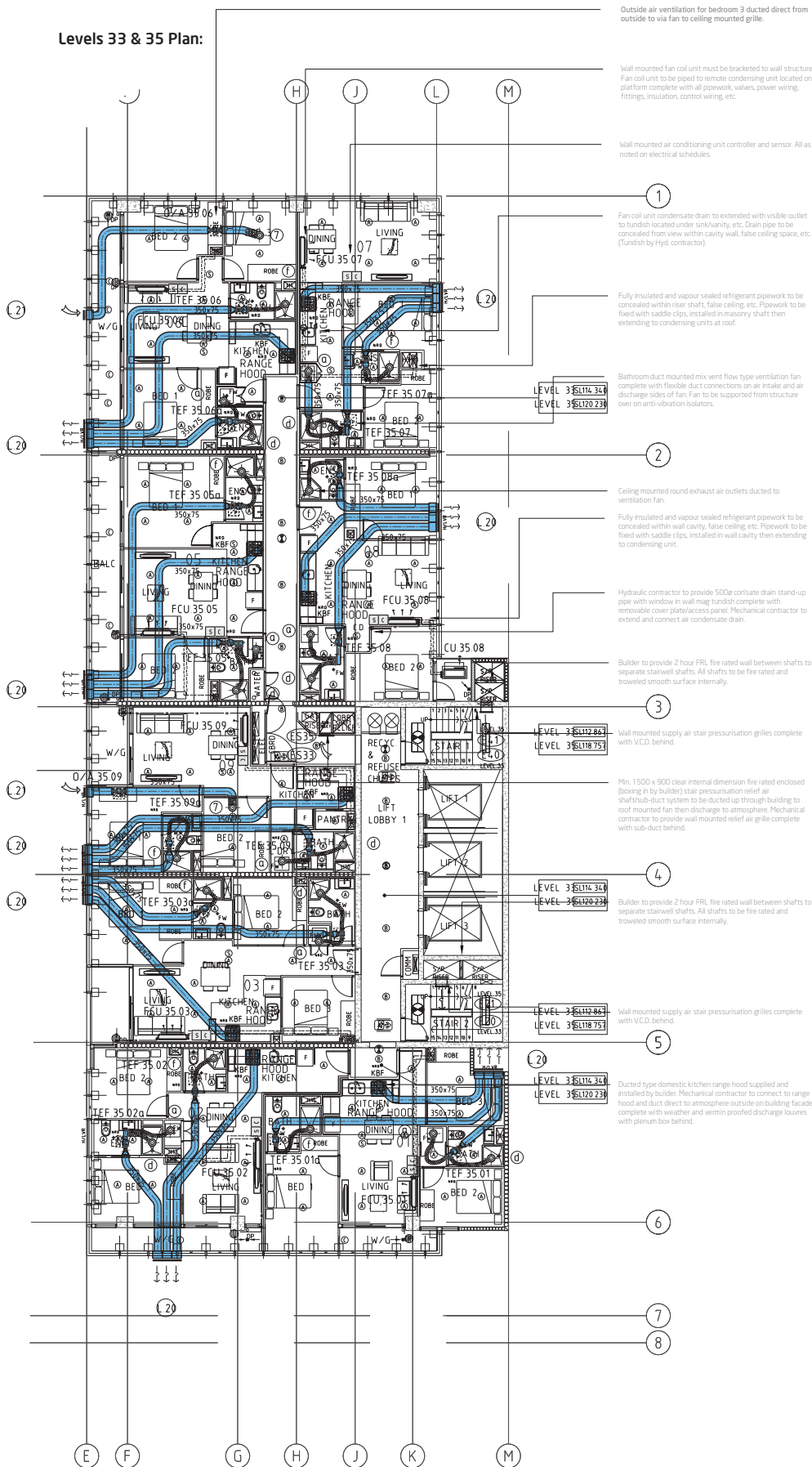
TYPICAL WEATHERPROOF LOUVRE DETAIL C/W FLAT DUCT CONNECTION BEHIND





TYPICAL APPLICATION OF SPACESAVER DUCTWORK IN APARTMENT

Levels 33 & 35 Plan:



Outside air ventilation for bedroom 3 ducted direct from outside to via fan to ceiling mounted grille.

Wall mounted fan coil unit must be bracketed to wall structure. Fan coil unit to be piped to remote condensing unit located on platform complete with all pipework, valves, power wiring, fittings, insulation, control wiring, etc.

Wall mounted air conditioning unit controller and sensor. All as noted on electrical schedules.

Fan coil unit condensate drain to extended with visible outlet to tundish located under sink/vanity, etc. Drain pipe to be concealed from view within cavity wall, false ceiling space, etc. (Tundish by Hyd. contractor)

Fully insulated and vapour sealed refrigerant pipework to be concealed within riser shaft, false ceiling, etc. Pipework to be fixed with saddle clips, installed in masonry shaft then extending to condensing units at roof.

Bathroom duct mounted mix vent flow type ventilation fan complete with flexible duct connections on air intake and air discharge sides of fan. Fan to be supported from structure over anti-vibration isolators.

Ceiling mounted round exhaust air outlets ducted to ventilation fan.

Fully insulated and vapour sealed refrigerant pipework to be concealed within wall cavity, false ceiling, etc. Pipework to be fixed with saddle clips, installed in wall cavity then extending to condensing unit.

Hydraulic contractor to provide 500e concrete drain stand-up pipe with window in wall-mtg tundish complete with removable cover plate/access panel. Mechanical contractor to extend and connect air condensate drain.

Builder to provide 2 hour FRL fire rated wall between shafts to separate stairwell shafts. All shafts to be fire rated and troweled smooth surface internally.

Wall mounted supply air stair pressurisation grilles complete with V.C.D. behind.

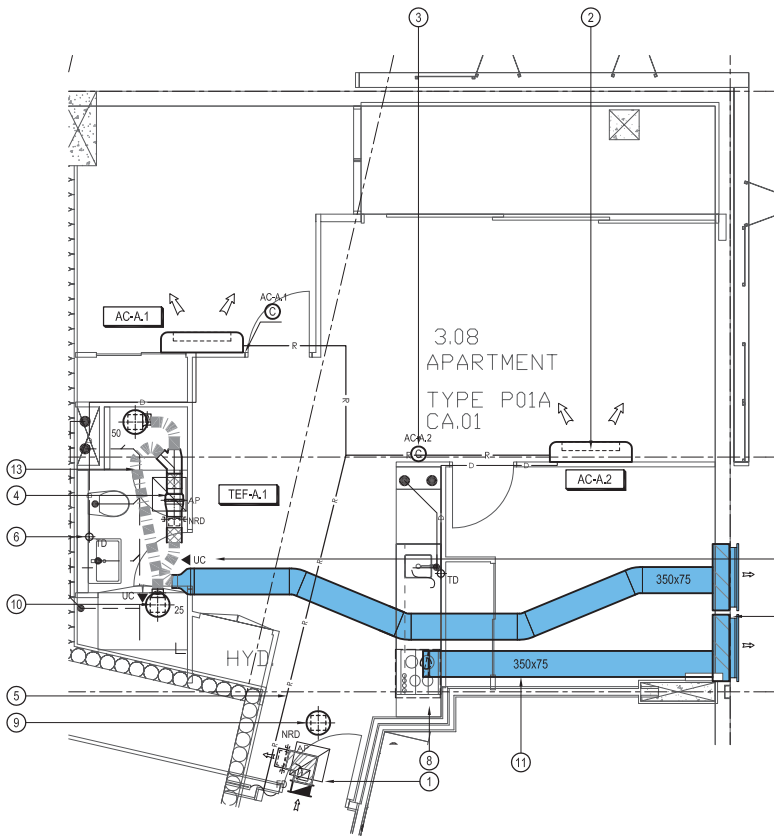
Min. 1500 x 900 clear internal dimension fire rated enclosed (boxing in by builder) stair pressurisation relief air shaft/sub-duct system to be ducted up through building to roof mounted fan then discharge to atmosphere. Mechanical contractor to provide wall mounted relief air grille complete with sub-duct behind.

Builder to provide 2 hour FRL fire rated wall between shafts to separate stairwell shafts. All shafts to be fire rated and troweled smooth surface internally.

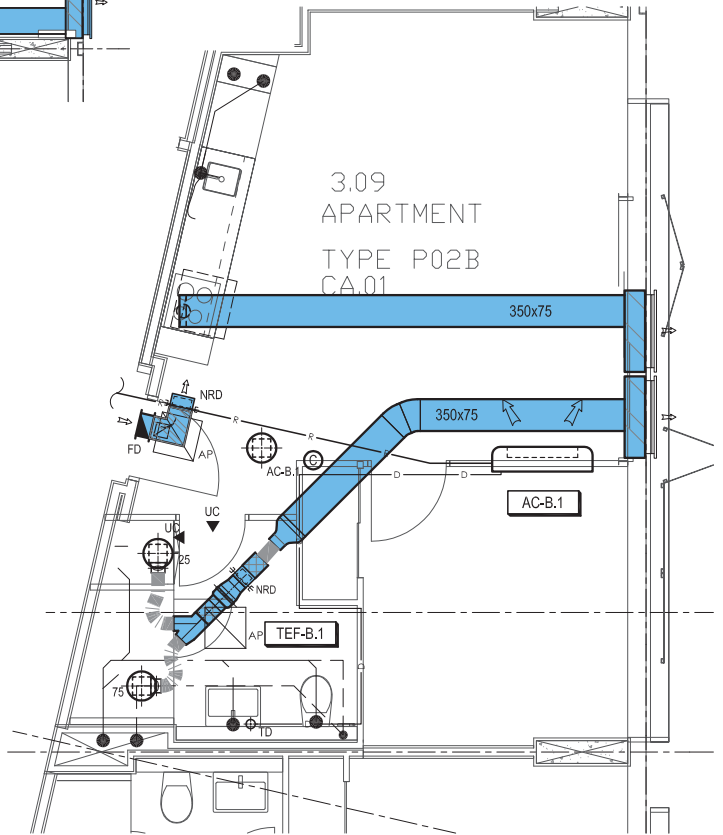
Wall mounted supply air stair pressurisation grilles complete with V.C.D. behind.

Ducted type domestic kitchen range hood supplied and installed by builder. Mechanical contractor to connect to range hood and duct direct to atmosphere outside on building facade complete with weather and vermin proofed discharge louvers with plenum box behind.

TYPICAL APPLICATION OF SPACESAVER DUCTWORK IN APARTMENT

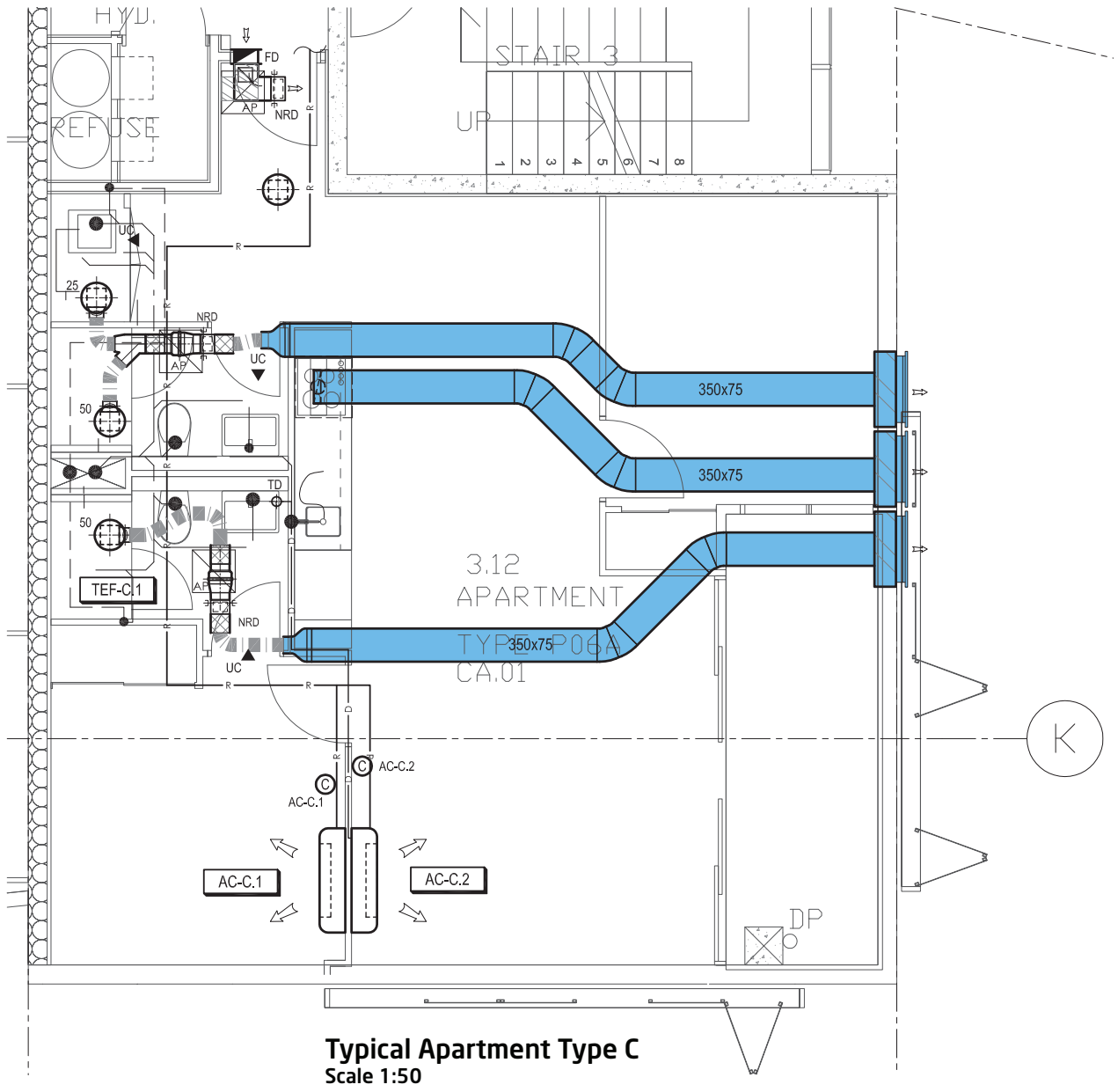


Typical Apartment Type A
Scale 1:50



Typical Apartment Type B
Scale 1:50

TYPICAL APPLICATION OF SPACESAVER DUCTWORK IN APARTMENT



Ø 300 circular face ceiling mounted toilet/laundry exhaust grille c/w internally lined cushion head. Pal tech circular diffuser cone (plastic) model 108 or equal (max 15pa pd).

350mm x 75mm SpaceSaver duct oval ducting system. Toilet exhaust & kitchen exhaust ducts to run side by side within ceiling space and mounted to u/s of slab.

TYPICAL APPLICATION OF SPACESAVER DUCTWORK IN APARTMENT

Typical note:

Wall mounted pressure switch at approx. 1550mm AFFL

150x200 (ground floor) toilet exhaust duct riser from below, to above

150x200 bin chute room exhaust duct riser to above. Duct to be c/w 200x100 duct branch at high level and 150x150 mounted 'egg crate grille' with fire damper behind

250x300 (carpark levels) bin room exhaust duct riser from below, to above

Space allowance for future refrigerant pipes

1700x2150 high wall mounted 'linear bar type grille complete with 1-Off 750-200 vertical motorised smoke damper for normal corridor ventilation. 2-Off 750x950 & 2-Off 750x800 vertical blade motorised damper smoke dampers driven by common motor for corridor pressurisation mode. Bottom of grille shall be installed at 100mm AFFL Refer to detail Type 4

850x650 kitchen exhaust duct riser from below, to above

Refrigerant pipe rises

COND-1

AC-1

TEF-2

TEF-4

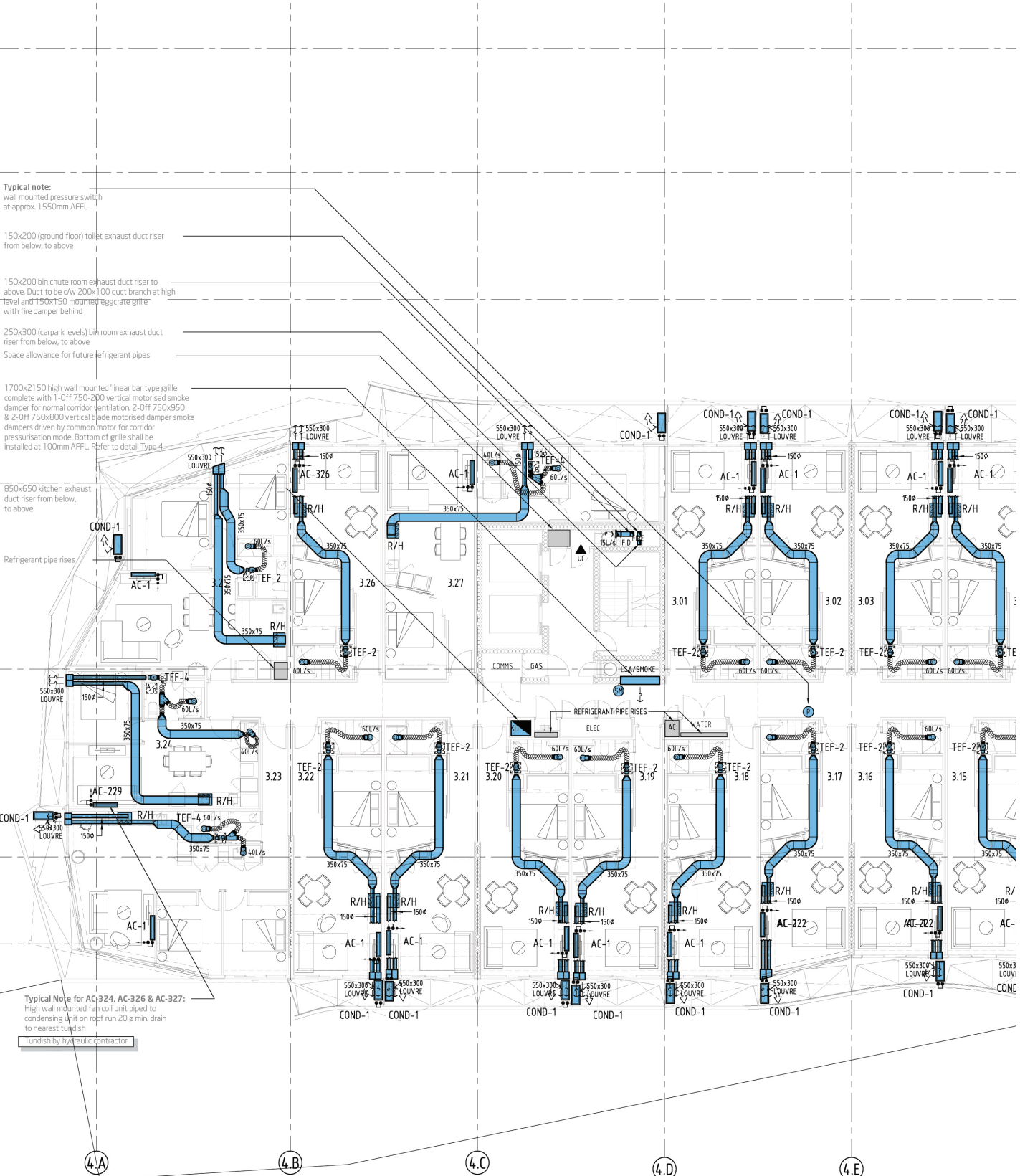
AC-229

COND-1

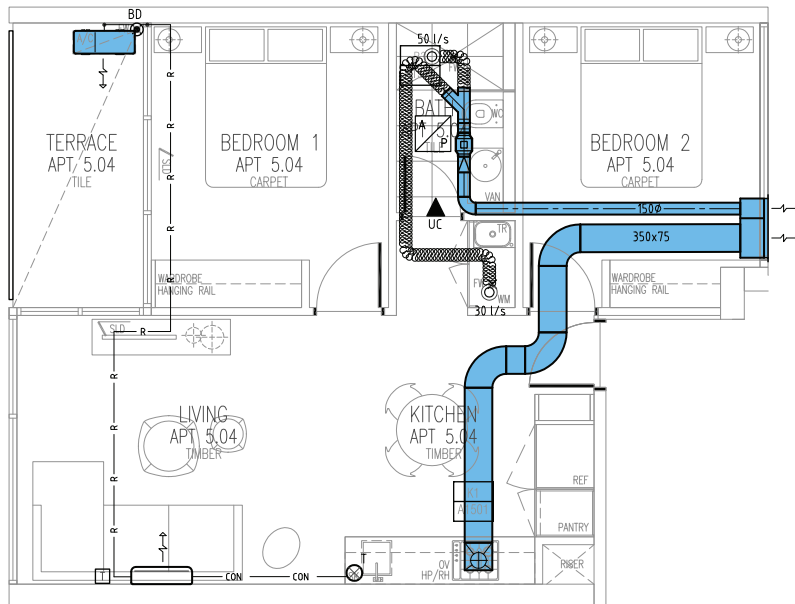
AC-1

Typical Note for AC-324, AC-326 & AC-327:
High wall mounted fan coil unit piped to condensing unit on roof run 20 min. drain to nearest tundish

tundish by hydraulic contractor



TYPICAL APPLICATION OF SPACESAVER DUCTWORK IN APARTMENT



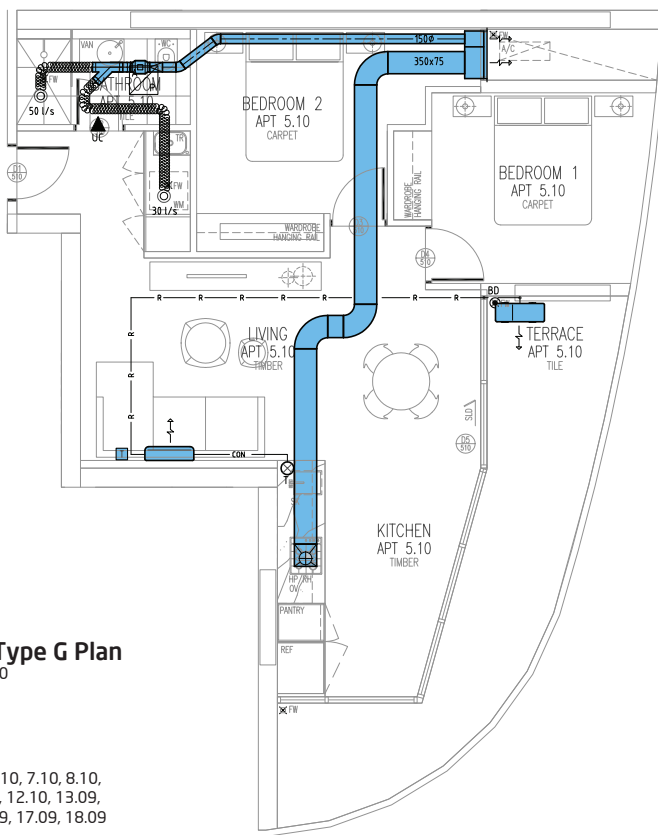
Apartment Type F Plan

Apt Reference: 5.04

Scale: 1:50

APTS:

3.04, 4.04, 5.04, 6.04, 7.04, 8.04,
9.04, 10.04, 11.04, 12.04, 13.03,
14.03, 15.03, 16.03, 17.03, 18.03



Apartment Type G Plan

Apt Reference: 5.10

Scale: 1:50

APTS:

3.10, 4.10, 5.10, 6.10, 7.10, 8.10,
9.10, 10.10, 11.10, 12.10, 13.09,
14.09, 15.09, 16.09, 17.09, 18.09



How to Specify Low Profile Ductwork

General:

Kitchen, Bathroom and Laundry Exhaust Ductwork.

Exhaust ductwork for apartments shall be DuctTech SpaceSaver Low Profile Duct, distributed by DuctTech Pty Ltd and be of the size as shown on the schedule and drawing

No's. _____ Rev No. _____

The product shall be manufactured from self-extinguishing PVC with a smooth inner surface. The system shall be a modular, slide-together design. The product shall be supported with proprietary hanging brackets. Builders hanging strap/hoop iron is not an acceptable method of support.

The duct and all associated fittings shall be manufactured of rigid Polyvinyl Chloride (PVC) and comply with AS 4254-2 (2012) and UL 181.11 (2013). The duct shall be tested against AS/NZS 1530.3 (1999) and exhibit maximum regulatory indices as follows:

Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Developed index	3

NATA certified test reports must be provided to the Consulting Engineer upon request.

Sustainability:

If the product is to be used to comply with the Green Buildings Code of Australia then the product supplied shall under no circumstance contain any virgin PVC and must be manufactured using 100% recycled and reprocessed PVC.

Joining Method:

The product must only be joined using a proper primer and solvent cement and follow the manufacturer's application instructions. Duct tape, silver reinforced tape, and other similar tape products including silicone are not an acceptable joining method. Pipe ends shall be cut square, beveled & deburred with a chamfering tool. Self-tapping screws shall not be used in the joining process.

AWTA PRODUCT TESTING

Australian Wool Testing Authority Ltd - trading as AWTA Product Testing
A.B.N 43 006 014 106

1st Floor, 191 Racecourse Road, Flemington, Victoria 3031
P.O Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400 Fax (03) 9371 2499

TEST REPORT

Client : Duct Tech Pty Ltd
302-304 Boundary Road
Dingley VIC 3172

Test Number : 15-001486
Issue Date : 08/04/2015
Print Date : 8/04/2015

Sample Description Clients Ref : "Spacesaver Low Profile Duct"
Rigid ducting
Colour : Neutral
End Use : Domestic & Commercial ventilation
Nominal Composition : PVC
Nominal Mass per Unit Area/Density : Approx. Mass per unit area: 2.09kg/m²
Nominal Thickness : Approx. Thickness: 2mm

AS/NZS 1530.3-1999

Methods for Fire Tests on Building Materials, Components and Structures Part 3: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release

Face tested: Face
Date tested: 02/04/2015

	Standard Error	Mean
Ignition time	Nil	Nil min
Flame propagation time	Nil	Nil sec
Heat release integral	Nil	Nil kJ/m ²
Smoke release, log d	0.0536	-1.2365
Optical density, d		0.0603 / metre

Number of specimens ignited: 0
Number of specimens tested: 6

Regulatory Indices:

Ignitability Index	0	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10
Smoke Developed Index	3	Range 0-10

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Page 1 of 2

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Accredited for compliance with ISO/IEC 17025

- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



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0204/11/06

APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR

AWTA PRODUCT TESTING

Australian Wool Testing Authority Ltd - trading as AWTA Product Testing
A.B.N 43 006 014 106

1st Floor, 191 Racecourse Road, Flemington, Victoria 3031
P.O Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400 Fax (03) 9371 2499

TEST REPORT

Client : Duct Tech Pty Ltd
302-304 Boundary Road
Dingley VIC 3172

Test Number : 15-001486
Issue Date : 08/04/2015
Print Date : 8/04/2015

Ignition is initiated by a pilot flame that is held near, but does not touch the specimen. A material that does not ignite during the standard test may ignite if contacted with a pilot flame during the test.

The specimens were mounted to simulate use in an unsupported or free hanging mode. The results may be significantly different when mounted to simulate a wall cladding or upholstery application.

Each test specimen was sandwiched between two layers of galvanised welded square mesh made from wire of nominal diameter 0.8mm and nominal spacing 12mm in both directions, stapled through at four points, each 100mm from the centre of the sample and the assembly clamped in four places.

These results only apply to the specimen mounted, as described in this report. The result of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

20392

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Page 2 of 2

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0204/11/06

APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR

AWTA PRODUCT TESTING

A Division of Australian Wool Testing Authority Limited

Laboratory: 1st Floor, 191 Racecourse Rd, Flemington, Victoria 3031 P.O. Box 240 Nth Melbourne 3051
Website: www.awtaproducttesting.com.au

A.B.N. 43 006 014 106
Tel: (03) 9371 2400 Fax: (03) 9371 2499
Email: producttesting@awta.com.au

This is to confirm that the product as described below has been tested by AWTA Product Testing.

Testing was performed in accordance with AS/NZS 1530.3 - 1999

Test Number 15-001486
Issue Date 08/04/2015

Test Sponsor

Duct Tech
302-304 Boundary Road
Dingley, Vic 3072

Sponsor Product Reference: "Spacesaver Low Profile Duct"

Sponsor Product Description: Rigid Ducting
Colour: Neutral
Nominal Composition: PVC
Nominal Mass: Approx. 2.09 kg/m²
Nominal Thickness: Approx. 2mm

The above sample is deemed to pass the requirements as specified in AS 4254.2-2012, clause 2.1(a)

Simone Sabatino
Laboratory Supervisor

It should be borne in mind that the opinions expressed in this letter are based on a limited number of observations made on a single sample and may be subject to alteration if more detailed testing was to be carried out. We recommend that you have further testing conducted if the information above is critical to your decisions on this product.

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P.O. Box 240, North Melbourne, Victoria 3051

Phone (03) 9371 2400 Fax (03) 9371 2499

TEST REPORT

CLIENT : AIR SYSTEMS
302-304 BOUNDARY ROAD
DINGLEY VIC 3172

TEST NUMBER : 7-597579-CV
ISSUE DATE : 27/05/2014
PRINT DATE : 27/05/2014

SAMPLE DESCRIPTION Clients Ref: "Spacesaver low profile duct"
Rigid ducting
Nom Com: Polyvinyl chloride
End Use: Domestic and commercial ventilation

UL 181.11-2013 Burning Test - Air Duct

- EXTERNAL	Vertical	45deg	Horizontal	
1st after flame time	0	0	0	s
1st after glow time	0	0	0	s
2nd after flame time	0	0	0	s
2nd after glow time	0	0	0	s
Did flaming or glowing travel				
full length of specimen	No	No	No	
Did flaming droplets ignite cotton	-	No	NO	

- INTERNAL	Vertical	45deg	Horizontal	
1st after flame time	0	0	0	s
1st after glow time	0	0	0	s
2nd after flame time	0	0	0	s
2nd after glow time	0	0	0	s
Did flaming or glowing travel				
Full length of specimen	No	No	No	

Requirements: Duration of flaming or glowing of any sample after withdrawal of the test flame is not to exceed 60 seconds, flaming or glowing is not to travel the full length of the sample and flaming particles dropped from the exterior surface of the sample during the horizontal and 45 degree exterior exposures are not to ignite the surgical cotton

Complies

Compliance to AS 4254-2, 2012, Clause 2.1.2
Requirement: Shall pass the UL181 test

Complies

207313

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(END OF REPORT)

PAGE 1

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0204/11/06

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MICHAEL A. JACKSON B.Sc. (Hons)
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