

Domestic Ventilation Systems

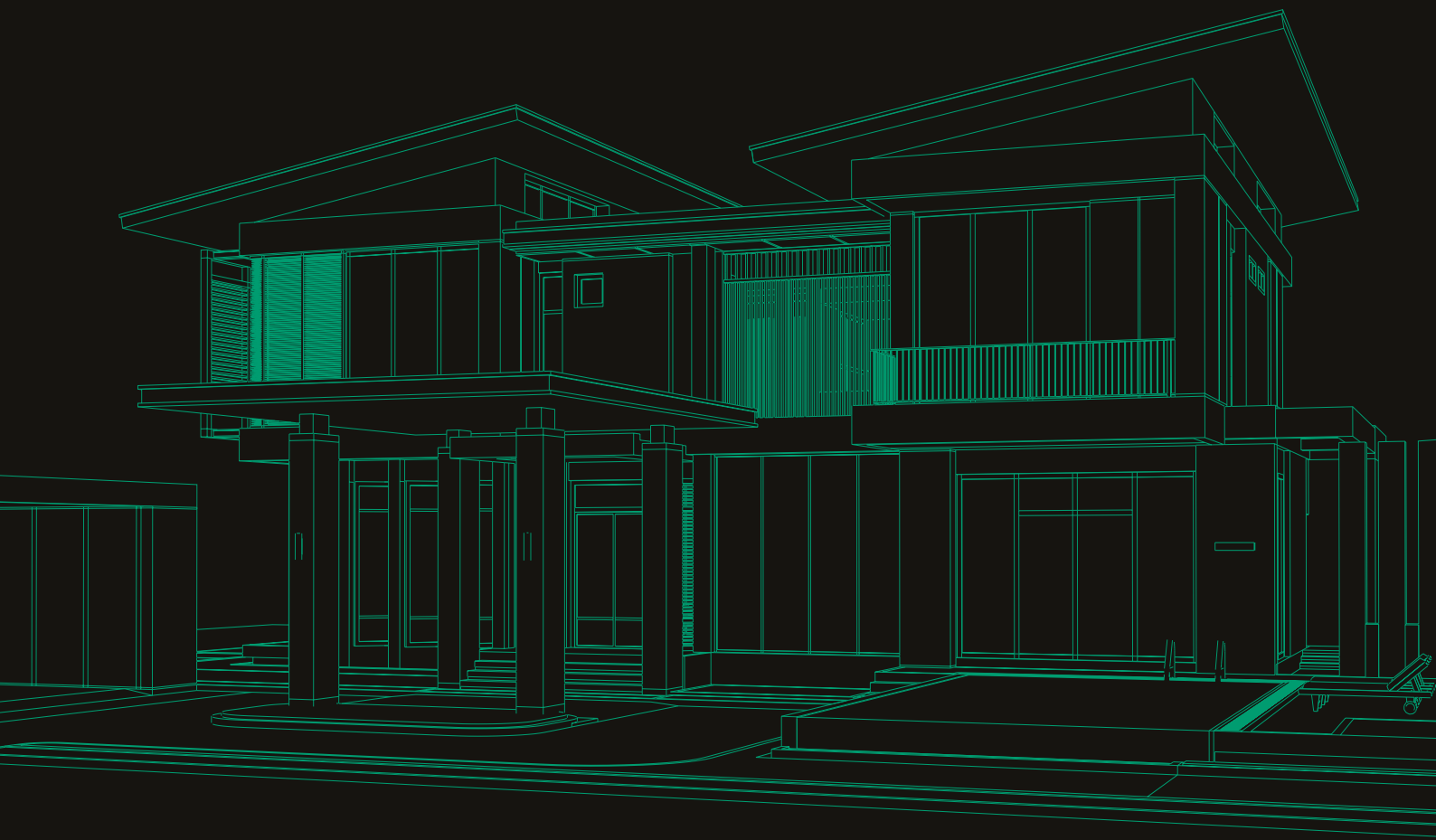
The Guide

MEV

MEV

MVHR

MEVHR



Introduction	
Product Selector	3
Xpelair Systems	4
A Guide to Mechanical Extract Ventilation (MEV)	5
A Guide to Mechanical Extract Ventilation with Heat Recovery (MVHR)	5
Features at a Glance	6
MEV System Solutions	7
MEV	
Xplus 2 EC and EC RF Low-energy Multi-point Domestic Ventilation Units	8
dMEV	
Simply Silent™ Contour CV & CVLV 4"/100mm Constant Volume Extractor Fans	10
Premier Centrifugal Extract and Condensation Control Fans	12
MVHR System Solutions	15
MVHR	
Xcell 150QVW and 200QVW Mechanical Ventilation with Heat Recovery Units	16
Xcell 300QVI and 400QVI Mechanical Ventilation with Heat Recovery Units	18
Xcell Stratum S120Q, S105QVI, S155QVI and S275QVI Horizontal Mechanical Ventilation with Heat Recovery Units	20
Xcell Compact XR Horizontal Mechanical Extract with Heat Recovery Unit	22
Xcell 200 Horizontal Mechanical Extract with Heat Recovery Unit	24
dMVHR	
Muro XHRM Through-the-wall Decentralised Mechanical Ventilation with Heat Recovery Unit	26
Solitair Single Room 4" Decentralised Mechanical Ventilation with Heat Recovery Unit	28
LoVolt XHR150 Single Room Decentralised Mechanical Ventilation with Heat Recovery Units	30
EverDri XEL, XELH, XEWHL, XEWHR and XEW Long-life Positive Pressure Ventilation Units	33
Controllers: Domestic Controls for Xpelair Systems	34
Sensors and Switches	
Ventmiser: Multi-input Controller	35

Domestic	Kitchens	•	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	
	Wet Rooms	1	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	8	8	
	Toilets	•	•	1	•	1	•	1	•	1	•	1	•	1	•	1	•	1	1	1	2
	Dwelling Size (m ²)	43	70	90	96	116	123	143	150	170	176	196	203	223	230	250	256	276	300	325	350
	Peak Airflow (m ³ /h)*	46.8	75.6	97.2	104.1	126.0	133.2	154.8	162	183.6	190.8	212.4	219.6	241.2	248.4	270.0	277.2	298.8	324	349	378
	Peak airflow (l/s)*	13	21	27	29	35	37	43	45	51	53	59	61	67	69	75	77	83	90	97	105
MEV	Xplus 2 EC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	•
	Xcell 150QVW	✓	✓	✓	✓	✓	✓	✓	✓	•	•	•	•	•	•	•	•	•	•	•	•
	Xcell 200QVW	•	•	•	✓	✓	✓	✓	✓	✓	✓	•	•	•	•	•	•	•	•	•	•
	Xcell 300QVI	•	•	•	•	•	•	✓	✓	✓	✓	✓	✓	✓	✓	•	•	•	•	•	•
	Xcell 400QVI	•	•	•	•	•	•	•	•	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Xcell Stratum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	•	•	•	•	•	•	•	•	•	•
	Xcell 200	•	•	•	✓	✓	✓	✓	✓	✓	✓	•	•	•	•	•	•	•	•	•	•
MVHR (Appendix Q)	Xcell 200	•	•	•	✓	✓	✓	✓	✓	✓	•	•	•	•	•	•	•	•	•	•	
	Xcell Compact XR	✓	✓	✓	✓	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Based on Part F of the Building Regulations and CIBSE Guidelines.
*Guide only for average number of rooms in dwelling.

Xpelair Systems

The solution to the challenges for condensation and mould



The effects of moisture created by everyday living can quickly lead to the deterioration of the fabric of a building. Cooking, washing, showering and breathing all create water vapour. Without a home being able to 'breathe', this moisture has nowhere to go.



Mould growth on cooler surfaces like window frames, and in unvented spaces such as the back of wardrobes, not only looks bad – it can be bad for occupant health too.

Mechanical Extract Ventilation (MEV)



What is MEV?

Mechanical Extract Ventilation (MEV) creates a healthy living environment for occupants by extracting stale, moist air continuously from the wet rooms of a dwelling and discharging this to the external atmosphere. There are two ways of achieving this type of system: by installing a central extraction unit (such as the Xpelair Xplus 2 EC) which is then ducted to multiple wet rooms and sited discreetly in a loft or airing cupboard; or by installing multiple extractor fans in each wet room that run and discharge air continuously. The latter is known as decentralised Mechanical Extract Ventilation (dMEV).



Simply Silent™
Contour CV

Is this system right for my application?

The primary aim of both MEV and dMEV is to provide a healthy, contaminant-free indoor environment. The suitability of each system will depend on a dwelling's size, occupancy and number of wet rooms. But the key distinctions are outlined below:

MEV

- Requires installation of one ventilation unit and ducting to wet rooms.
- Operated by controllers in each wet room – Xpelair supply both wired and wireless control options.
- Allows for out-of-sight product installation.

dMEV

- Requires installation of multiple extractor fans in each wet room.
- Allows each fan's performance to be set at install to meet the requirements of the wet room.
- Is ideal for refurbishments (no ducting required).

Mechanical Extract Ventilation with Heat Recovery (MVHR)

What is MVHR?

Mechanical extract ventilation with heat recovery (MVHR) combines the merits of MEV with the benefit of heat recovery. This enables up to 91% of the heat lost through extraction to be conserved and retained in other habitable rooms in a dwelling. Highly efficient and cost-effective, MVHR doesn't waste the existing heat in the property; instead, it distributes this heat evenly in living rooms, dining areas and bedrooms.

How does MVHR work?

MVHR works through a clever combination of air extraction and supply. Stale, moist air is extracted from wet rooms while, at the same time, fresh air is brought in from outside. The extracted air passes over a heat exchanger, at which point the heat is collected and used to warm the incoming air. The result: a consistently comfortable indoor environment and increased efficiency. Xpelair offers both centralised and single room MVHR systems, so there's a solution to suit all applications.



Xcell 150



Solitair

Features at a Glance



MEV

Mechanical Extract Ventilation: system extracts stale, moist air continuously from wet rooms to create a healthy, contaminant-free indoor environment.



MVHR

MEV with Heat Recovery: system uses heat from extracted stale air to warm incoming air for a comfortable indoor environment and increased efficiency.



AC/EC/DC Motors

Indicates whether a system uses an alternating current (AC), direct current (DC) or electrically commutated (EC) motor. The latter combines AC and DC voltages.



Constant Volume

System uses Intelligent Adaptiflow™ Sensing to deliver a constant volume of extracted air to eliminate humidity, condensation and mould growth.



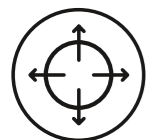
IP Rating

Defines the sealing effectiveness level of electrical enclosures; an IPX4 and IPX5 rating denotes systems that are suitable for installation in bathroom wet areas.



Centralised

A central extraction unit is sited discreetly in a loft or airing cupboard and ducted to multiple wet rooms.



Decentralised

Multiple extraction units are installed in each wet room, which run and discharge air continuously and independently.



PIV

Positive Input Ventilation: delivers a continuous supply of fresh, dry air into the home and forces old, moisture-laden air out through natural leakage points.



SAP Appendix Q Listed

This product is listed in Appendix Q of SAP, allowing for easy and impartial assessment of its performance.



Efficiency

Denotes how efficient the system is in terms of the heat recovered from extracted air. Xpelair heat recovery cells are 88 – 91% efficient, dependent on model.



House Installation

Model has been designed specifically for loft or airing cupboard installations, providing a suitable solution within a house.



Apartment/Flat Installation

Model has been designed for wall or floor void installations, providing an ideal solution for apartments and flats.



Wet Room(s)

Denotes the number of wet rooms that may be configured with this model.






Passivhaus

Passivhaus standard buildings provide a high level of occupant comfort while using very little energy for heating and cooling.

MEV System Solutions

Product Matrix



	Ventilation Type	Centralised	Decentralised	Product	Page
MEV	Low-energy Multi-point Domestic Ventilation Units	✓	•	 Xplus 2 EC Xplus 2 EC RF	8
dMEV	4"/100mm Constant Volume Extractor Fans	•	✓	 Simply Silent™ Contour CV Simply Silent™ Contour CVLV	10
	Centrifugal Extract and Condensation Control Fans	•	✓	 Premier	12

Xplus 2 EC and EC RF

Low-energy Multi-point Domestic Ventilation Units



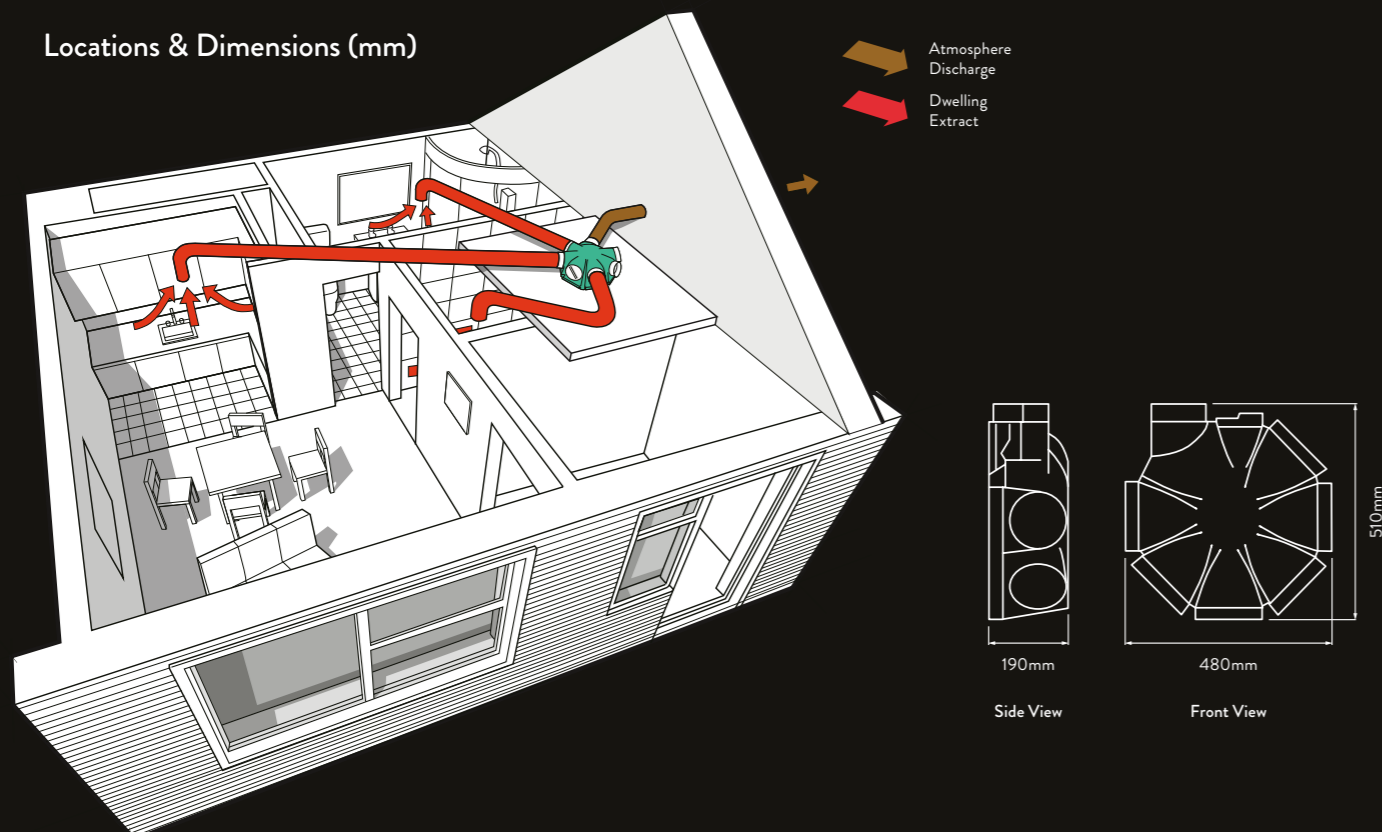
Xplus 2 EC models boast all of the benefits that centralised extraction systems offer – like flexible siting, multiple spigot connections and high-performance extraction – plus the added benefit of long-life, energy-efficient EC motors with backward curved impellers. This allows these units to be configured at install to match the required Part F extraction rates for the size and layout of the dwelling, ensuring that high-quality indoor air is maintained throughout.

Xplus 2 EC RF and RFH models are supplied with a wireless ConneX remote control. This uses kinetic energy to send control signals to the unit and allows it to be operated from anywhere around the home. The battery-less solution can reduce installation time by removing the need for cables running from the unit to a controller, making it an ideal refurbishment solution.

Key Features

- Long-life, low-energy EC motors.
- Low-profile design – only 190mm in height.
- Six 125mm Ø extract spigots and one 125mm Ø discharge spigot.
- Supplied with four blanking plates to cover spigot connections that aren't needed.
- Up to three installer adjustable speed settings to suit dwelling size.
- Suitable for horizontal or vertical installation.
- Suitable for temperatures up to 50°C.
- Integral fixing points.
- 100% recyclable.

Locations & Dimensions (mm)



Specification

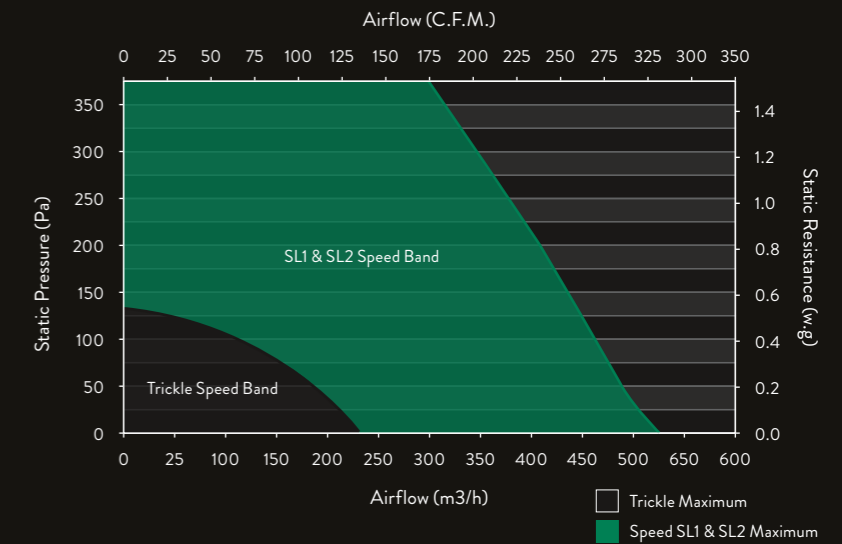
	Xplus 2 EC	Xplus 2 EC RF	Xplus 2 EC RFH
Reference Number	92795AG	92854AG	92795AG
Motor Type	EC	EC	EC
Speeds	3	2	4
Extract Performance (FID, m³/h)	260 to 550 (fully adjustable)	260 to 550 (fully adjustable)	260 to 550 (fully adjustable)
Maximum Extract Performance (m³/h @ 100Pa)	515	515	515
Maximum Power (W)	79	79	79
Spigot Diameter (mm)	125	125	125
Sound Pressure Level (dB(A)@3m)	20.1 / 30.7 / 37.1 / 45.1	20.6 / 35.2 / 47.1	20.6 / 35.2 / 47.1
Weight (kg)	3.4	3.4	3.4
UK Guarantee (years)	5*	5*	5*

*Motor only.

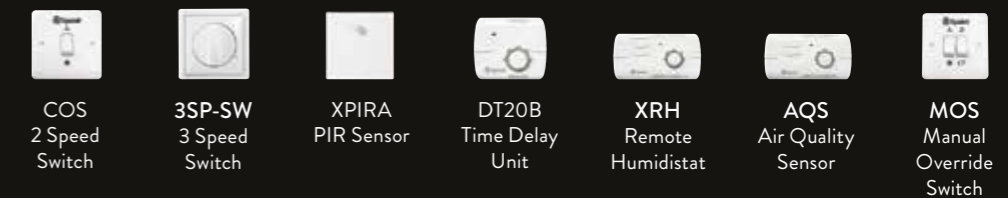
KITCHEN	100% Variable	S.F.P (W/l/s)	E.S.T Best Performance Compliant
+1 Additional Wet Room		0.21	
+2 Additional Wet Room		0.19	
+3 Additional Wet Room		0.19	
+4 Additional Wet Room		0.21	
+5 Additional Wet Room		0.24	
+6 Additional Wet Room		0.27	

Performance

Pa	Trickle Speed (full adjustable)	Med/High Speed (full adjustable)
0	260	550
25	227	532
50	198	515
75	162	500
100	122	515
125	80	485
150		471
175		457
200		444
225		429
250		409
275		392
300		377
325		345
350		331
375		321
400		306



Controller Options



Reference	90108AW	91457AA	21871AA	21850AW	21856AW	92097AW	90199AW
Xplus 2 EC	✓	✓	✓	✓	✓	✓	✓

Simply Silent™ Contour CV & LVCV

4"/100mm Constant Volume Extractor Fans



The Simply Silent™ Contour CV range has been designed to offer exceptionally low noise levels, while delivering a constant volume of extracted air to eliminate humidity, condensation and mould growth in bathrooms, shower rooms, cloakrooms, toilets and kitchens. These fans feature Xpelair's Intelligent Adaptiflow™ Sensing to deliver constant volume performance through a unique sensor housed within the duct. This sensor calculates and records the airflow of the fan and adapts the fan speed intuitively in accordance with changes in airflow to maintain the required setting.

LVCV (Low Volt) models boast the benefits of the CV fans but include a 24V Safety Extra Low Voltage (SELV) transformer that allow the fans to be installed in or over the splash area Zone 1, offering complete peace of mind and maximum performance.



Key Features

- Ghost™ Air Movement Technology ensures near-silent operation.
- Airflow can be set at install to suit bathroom and kitchen performance requirements in accordance with Building Regulations, making the fans suitable for whole house use.
- So Simple™ installation and maintenance for fuss-free fitting and cleaning.
- Datalogger records fan's daily use which can be interpreted by a technician to indicate how long the fan has been in operation – ideal to help landlords and local authorities avoid damage to housing stock through condensation and mould.
- Stylish fascia options available in square and round to suit all applications and design preferences.

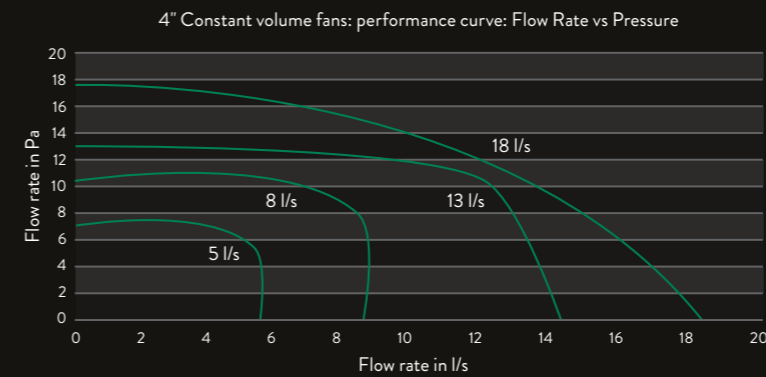
Specification

	Contour CV		Contour LVCV	
	Bathroom	Kitchen	Bathroom	Kitchen
Speeds	3	3	3	3
Extract Performance (l/s)	5/8/18	8/13/18	5/8/18	8/13/18
Extract Performance (m ³ /h)	18/29/65	29/47/65	18/29/65	29/47/65
Electrical Power Rating (W)	1.6/1.9/2.9	1.9/2.3/2.9	1.6/1.9/2.9	1.9/2.3/2.9
Specific Fan Power (W/l/s)	0.32/0.24/0.16	0.24/0.18/0.16	0.40/0.29/0.21	0.29/0.24/0.21
IP Rating	IPX4	IPX4	IPX5	IPX5
Motor Type	DC			
ErP Compliant	Yes			

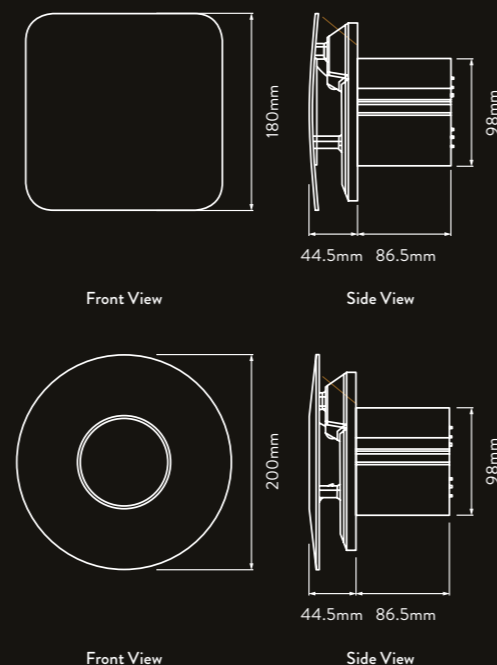
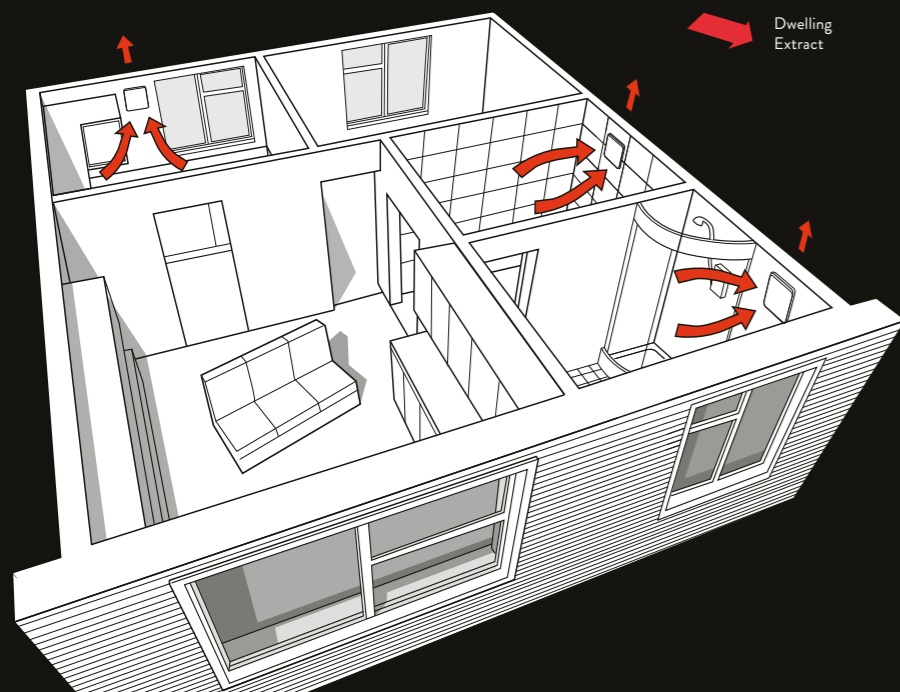
ISVR Consulting
Consultants in Noise and Vibration

		Design	External Transformer
CV4S	92968AW	■	•
LVCV4S	92970AW	■	✓
CV4R	92969AW	●	•
LVCV4R	92971AW	●	✓

Performance



Locations & Dimensions (mm)



Ancillaries

		Description
SSSB	92957AW	Replacement Square Baffle
SSRB	92958AW	Replacement Round Baffle
SSWKWR	92991AW	Wall Kit Round/White
SSWKWS	92992AW	Wall Kit Square/White
SSWKBR	92993AB	Wall Kit Round/Brown
SSWKBS	92994AB	Wall Kit Square/Brown
SSAK	93061AA	Adaptor Kit
SSWIN	92996AW	Window Kit

Premier

Centrifugal Extract and Condensation Control Fans



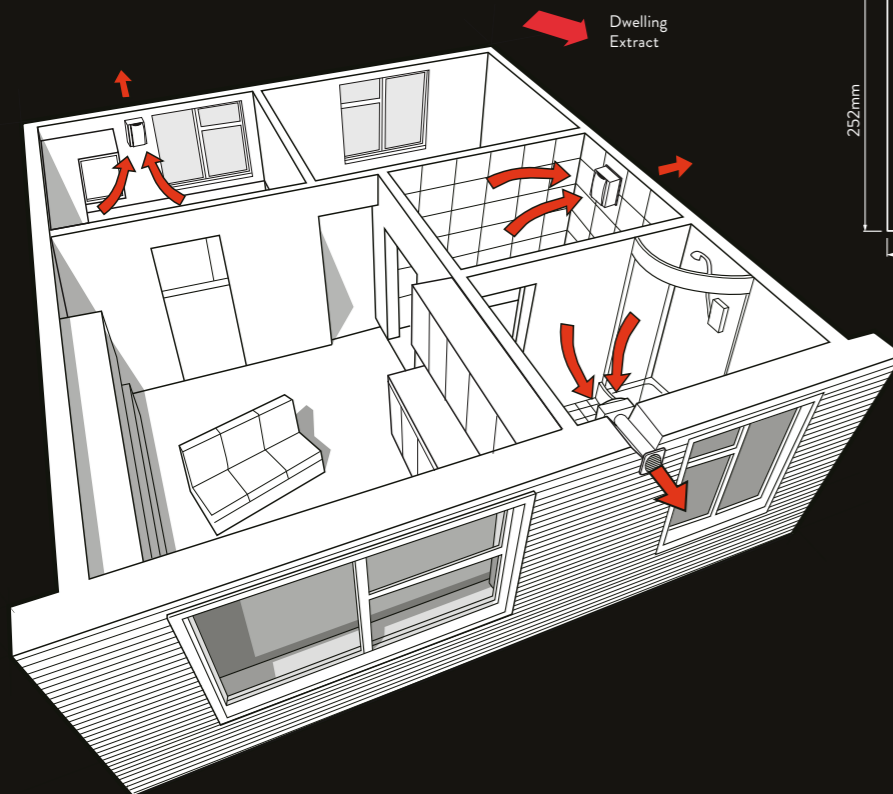
The Premier range of centrifugal fans (CF) is purpose-designed for domestic applications where longer duct runs are required, including bathrooms, shower rooms, toilets, utility rooms and kitchens. Premier fans can be conveniently surface or recess mounted, while the clip-off front cover and removable fan blade allow easy cleaning and maintenance.

All CF models feature condensation control, while LVCF models include a 12V Safety Extra Low Voltage (SELV) transformer that allows these fans to be installed within the splash area Zone 1, providing extra peace of mind and maximum performance.

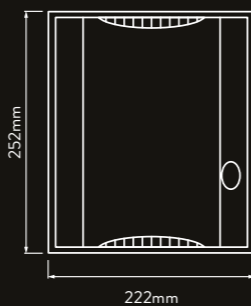
Key Features

- Intermittent operation selectable to suit all applications.
- Highly efficient, long-life EC motors ensure low running costs.
- Meets Building Regulations for intermittent and continuous use.
- Suitable for wall or ceiling mounting.
- Humidity control on CF models and external SELV transformer included with LVCF models.
- DC2 and DC3 models include integrated SELV transformer for safe siting in Zones 1 and 2.

Locations & Dimensions (mm)

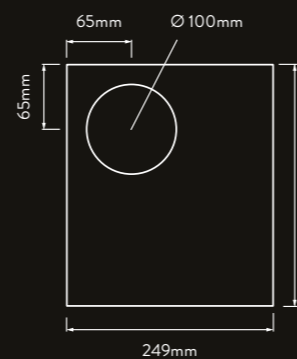


DX200/CF20

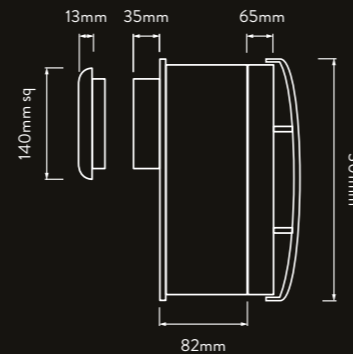


Front View

DX400/CF40



Back View



Side View

Specification

		DX200T	CF20	CF20T	LVCF20	LVCF20T
Reference Number		91014AW	91015AW	91016AW	91041AW	91042AW
Speeds		4	5	5	5	5
Trickle ventilation facility		Yes	Yes	Yes	Yes	Yes
Max. Electrical power rating (W)		34	34	34	42	42
IP rating		IPX5	IPX5	IPX5	IPX5	IPX5
Weight (kg)		2.2	2.2	2.2	3.35	3.35
UK Guarantee (years)		2	2	2	2	2
Extract performance (FID, m ³ /h)	Boost	108	108	108	108	108
	Speed 3	-	102	102	102	102
	Speed 2	79	79	79	79	79
	Speed 1	50	50	50	50	50
	Trickle	36	36	36	36	36
Extract performance (FID, l/s)	Boost	-	30	30	30	30
	Speed 3	30	28	28	28	28
	Speed 2	22	22	22	22	22
	Speed 1	14	14	14	14	14
	Trickle	10	10	10	10	10
Sound pressure level (dB(A)@3m)	Boost	-	50	50	50	50
	Speed 3	50	48	48	48	48
	Speed 2	42	42	42	42	42
	Speed 1	32	32	32	32	32
	Trickle	26	26	26	26	26

		DX400T	DX400PC	CF40	CF40TD	CF40RSTD
Reference Number		91084AW	91100AW	91086AW	91087AW	91088AW
Speeds		3	3	5	5	5
Trickle ventilation facility		Yes	Yes	Yes	Yes	Yes
Max. Electrical power rating (W)		78	78	77	77	77
Hole Diameter		115	115	115	115	115
IP rating		IPX5	IPX5	IPX5	IPX5	IPX5
Weight (kg)		3	3	3	3	3
UK Guarantee (years)		2	2	2	2	2
Extract performance (FID, m ³ /h)	Boost	-	-	250	250	250
	Speed 3	-	-	174	174	174
	Speed 2	245	245	143	143	143
	Speed 1	143	143	90	90	90
	Trickle	61	61	61	61	61
Extract performance (FID, l/s)	Boost	-	-	69	69	69
	Speed 3	-	-	48	48	48
	Speed 2	68	68	40	40	40
	Speed 1	40	40	25	25	25
	Trickle	17	17	17	17	17
Sound pressure level (dB(A)@3m)	Boost	-	-	55	55	55
	Speed 3	-	-	46	46	46
	Speed 2	55	55	40	40	40
	Speed 1	42	42	33	33	33
	Trickle	27	27	27	27	27

	LVCF20T DC2	CF20T DC3
Reference number	92335AW	92576AW
Humidistat		
Selectable installed performances – installed with WD* 00+CFWG100 kit	6l/s 8l/s 15l/s	6l/s 8l/s 15l/s
Sound pressure level (dB(A)@3m)	- - 32	- - 32
Electrical power rating (W) 220-240V AC 50-60Hz	2.7 3.1 5.6	2.7 3.1 5.6
Specific fan power (maximum W/l/s)	0.37	0.37
IP rating	IPX5	IPX5
Weight (kg)	1.8	1.8
Transformer on LV model		
UK Guarantee (years)	5*	5*









*Motor only.



MVHR System Solutions

Product Matrix



	Ventilation Type	Centralised	Decentralised	Product	Page
MVHR	Mechanical Ventilation with Heat Recovery Units	✓	•	 Xcell 150QVW Xcell 200QVW	16
	Mechanical Ventilation with Heat Recovery Units	✓	•	 Xcell 300QVI Xcell 400QVI	18
	Horizontal Mechanical Ventilation with Heat Recovery Units	✓	•	 Xcell Stratum S120Q S105QVI S155QVI S275QVI	20
	Horizontal Mechanical Extract with Heat Recovery Units	✓	•	 Xcell Compact XR	22
	Horizontal Mechanical Extract with Heat Recovery Units	✓	•	 Xcell 200	24
dMVHR	Through-the-wall Decentralised Mechanical Ventilation with Heat Recovery Units	•	✓	 Muro XHRM	26
	Single Room 4" Decentralised Mechanical Ventilation with Heat Recovery Units	•	✓	 Solitair	28
	Single Room Decentralised Mechanical Ventilation with Heat Recovery Units	•	✓	 LoVolt XHR150	30

Xcell 150QVW and 200QVW

Mechanical Ventilation with Heat Recovery Units



Specification

	Xcell 150QVW	Xcell 200QVW	Xcell 150QVWSB
Reference Number	92460AW	92462AW	93139AW
Motor type	EC	EC	EC
Maximum supply / extract performance (FID, m³/h)	160	240	160
Maximum supply / extract performance (m³/h @100Pa)	182	205	182
Maximum system pressure (Pa)	160	250	160
Power usage maximum (W) 220-240V AC 50-60Hz	85	80	85
Specific fan power (W/l/s)	0.74	0.74	0.74
Efficiency (%)	90	90	90
Speeds	3	3	3
Speed control type	Remote variable DC	Remote variable DC	Remote variable DC
Noise (dB(A)@3m) Low / Medium / Max	20 / 22.5 / 29.5	20 / 24.5 / 34.5	20 / 22.5 / 29.5
Spigot diameter (mm)	125	125	125
Installation orientation	Vertical	Vertical	Vertical
Weight (kg)	17.5	17.5	17.5
UK Guarantee (years)	5*	5*	5*

*Motor only.



The Xcell 150QVW and 200QVW feature a high-efficiency counterflow heat exchanger, providing up to 90% heat recovery efficiency. These units are purpose-designed for modern, airtight apartments and houses, where less natural leakage can cause increased condensation and mould problems.

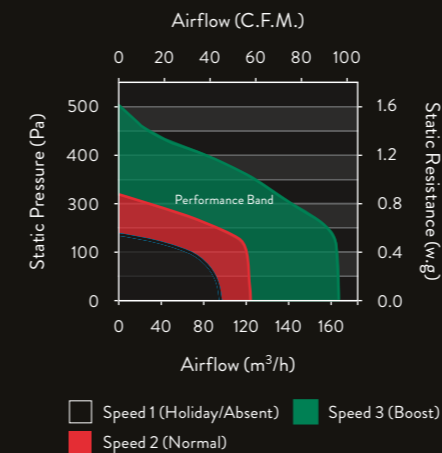
Both models have lightweight EPP construction and may be floor or wall-mounted in loft space. Low-energy EC motors ensure low annual running costs, while the long-life G4 filters can be inspected with ease – simply remove the front access panel for effortless maintenance.

The Xcell 150 with summer bypass provides the added benefit of a summer bypass facility. This stops the heat exchanger warming incoming fresh air during the summer months, for year-round comfort.

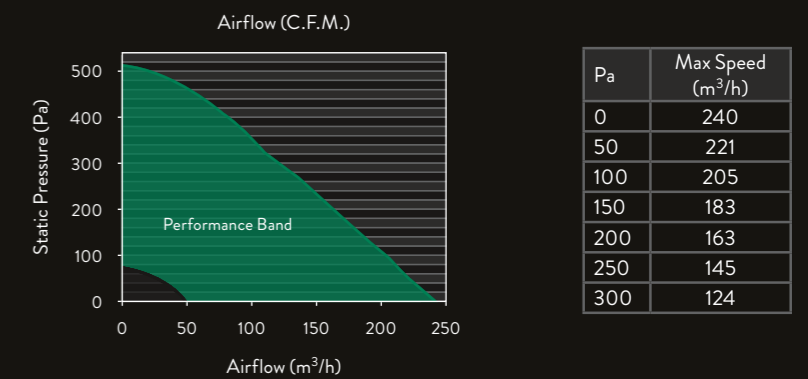
Key Features

- Highly efficient unit with EC motors and 90% efficient counterflow heat recovery cell.
- SAP Appendix Q listed and Part L and EST Best Practice compliant.
- Four 125mm Ø top entry connection spigots.
- Highly insulated, lightweight EPP construction.
- Installer-adjustable speed settings to suit dwelling size.
- G4 filters – recommended replacement every six months.
- Supplied with 1m length of 20mm Ø (O/D) plastic condensate tubing.

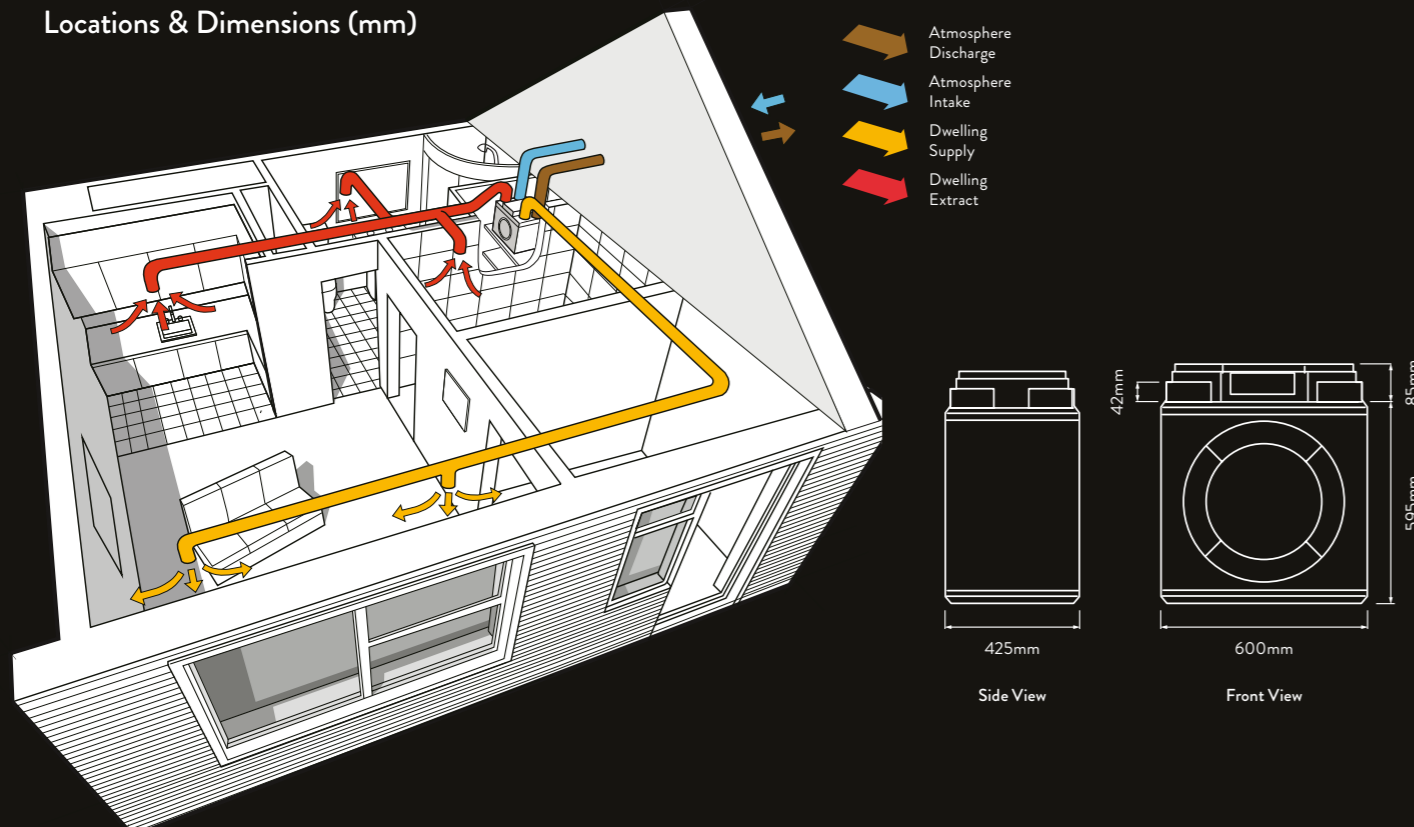
Performance (150QVW)



Performance (200QVW)



Locations & Dimensions (mm)



KITCHEN	S.F.P. (W/l/s)	Heat Recovery Efficiency		Xcell 200QVW
		Xcell 150QVW	Xcell 200QVW	
+1 Additional Wet Room	1.33	0.66	88%	91%
+2 Additional Wet Room	1.08	0.65	87%	91%
+3 Additional Wet Room	1.17	0.68	86%	90%
+4 Additional Wet Room	1.30	0.81	86%	89%
+5 Additional Wet Room	1.53	0.89	85%	88%

100% Variable

E.S.T. Best Performance Compliant

Controller Options

	Q3SP Automatic 3 Speed	QC02 CO ₂ Sensor	QHS Humidity Sensor
Reference	96005AA	96003AA	96040AA
Xcell 150QVW	✓	✓	✓
Xcell 200QVW	✓	✓	✓

Xcell 300QVI and 400QVI

Mechanical Ventilation with Heat Recovery Units



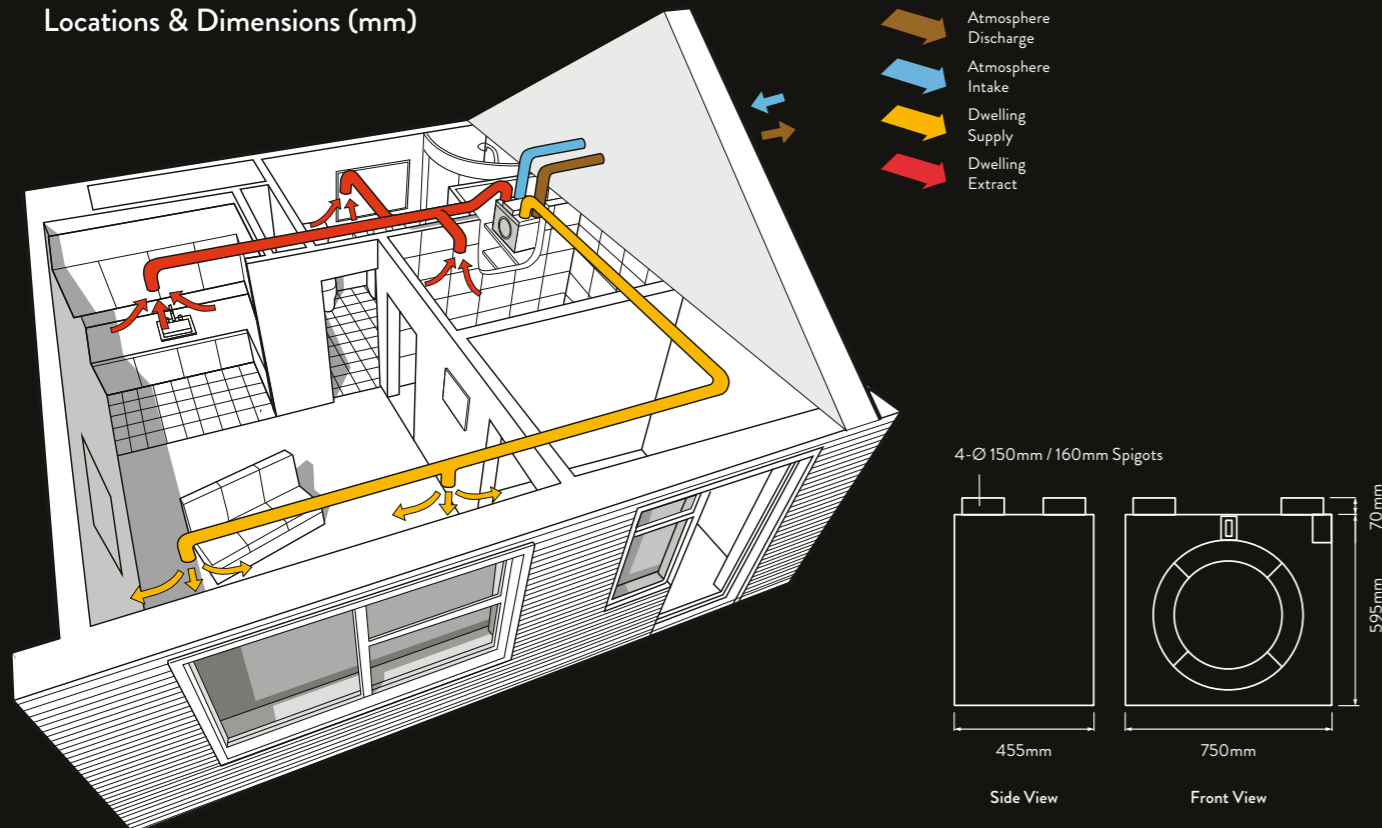
The Xcell 300QVI and 400QVI have been purpose-designed for modern, airtight houses with 3-4 bedrooms, or large apartments. With a counterflow heat exchanger capable of recovering up to 91% of the extracted heat, plus energy-efficient EC motors, they're a cost-effective solution. Both models may be wall or loft-mounted, feature long-life G4 filters, and are SAP Appendix Q listed and Passivhaus approved.

Every QVI unit benefits from a winter defrost cycle and cold home guard. Plus, a summer bypass facility ensures comfortable temperatures all year round. Filter and motor inspection alerts make maintenance simple.

Key Features

- Highly efficient unit with EC motors and 91% efficient counterflow heat recovery cell.
- SAP Appendix Q listed and Part L and EST Best Practice compliant.
- Four 150-160mm Ø top entry connection spigots.
- Highly insulated, lightweight EPP construction.
- Installer-adjustable speed settings to suit dwelling size.
- Winter defrost and summer bypass.
- G4 filters – recommended replacement every six months.
- Supplied with 1m length of 20mm Ø (O/D) plastic condensate tubing.

Locations & Dimensions (mm)

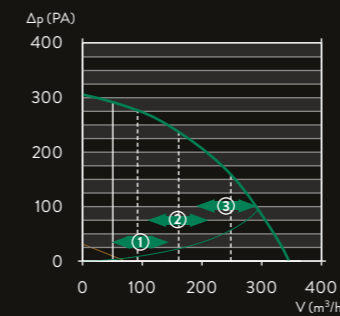


Specification

	Xcell 300QVI	Xcell 400QVI
Reference Number	92465AW	92478AW
Maximum Extract Performance (FID, m³/h)	290	380
Extract Performance (m³/h @ 100Pa)	265	460
Maximum System Pressure (Pa)	350	410
Speeds	3	3
Speed Control Type	Remote DC	Remote DC
Noise Level (dBA @ 3m)	20.5/24.5/35.5	29/34/44
Power Usage @ 220-240V 50-60Hz (W)	136	338
Specific Fan Power (W/l/s)	0.73	
Weight (kg)	33	35
UK Guarantee (years)	5*	5*
Kg Carbon Saving (per year)	1520†	1520†

†Based on comparison with 3 standard intermittent AC fans on a 557m² detached 6 wet room house, gas heated, build 2006 using SAP 2006 software using best practice (3) tightness. *Motor only.

Performance (300QVW)



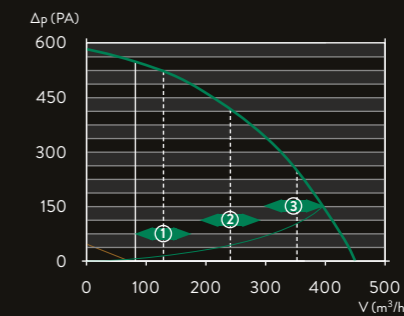
Pa	Max Speed (m³/h)
0	310
50	221
100	205
150	183
200	163
250	145
300	124

- 1 Speed 1 (default setting*)
 - 2 Speed 2 (default setting*)
 - 3 Speed 3 (default setting*)
- *freely programmable

V Volume flow rate
 Δp External pressure loss
 $\Delta p_{ext, min}$ Minimum pressure reserve for the air-duct system

KITCHEN		S.F.P (W/l/s)	Heat Recovery Efficiency	
+1 Additional Wet Room	100% Variable	0.65	91%	E.S.T Best Performance Compliant
+2 Additional Wet Room		0.60	91%	
+3 Additional Wet Room		0.61	90%	
+4 Additional Wet Room		0.68	89%	
+5 Additional Wet Room		0.76	88%	
+6 Additional Wet Room		0.84	87%	
+7 Additional Wet Room		1	87%	

Performance (400QVW)



- 1 Speed 1 (default setting*)
 - 2 Speed 2 (default setting*)
 - 3 Speed 3 (default setting*)
- *freely programmable

V Volume flow rate
 Δp External pressure loss
 $\Delta p_{ext, min}$ Minimum pressure reserve for the air-duct system



92951AA QVI Controller

- Wired operation from a distance of up to 10m
- 3 speeds plus auto
- Indicates when heat recovery filters need changing

Controller Options

	Reference	96005AA	96003AA	96040AA
Xcell 300QVI		✓	✓	✓
Xcell 400QVI		✓	✓	✓



Q3SP Automatic 3 Speed



QC02 CO₂ Sensor



QHS Humidity Sensor

Xcell Stratum S120Q, S105QVI, S155QVI and S275QVI

Horizontal Mechanical Ventilation with Heat Recovery Units



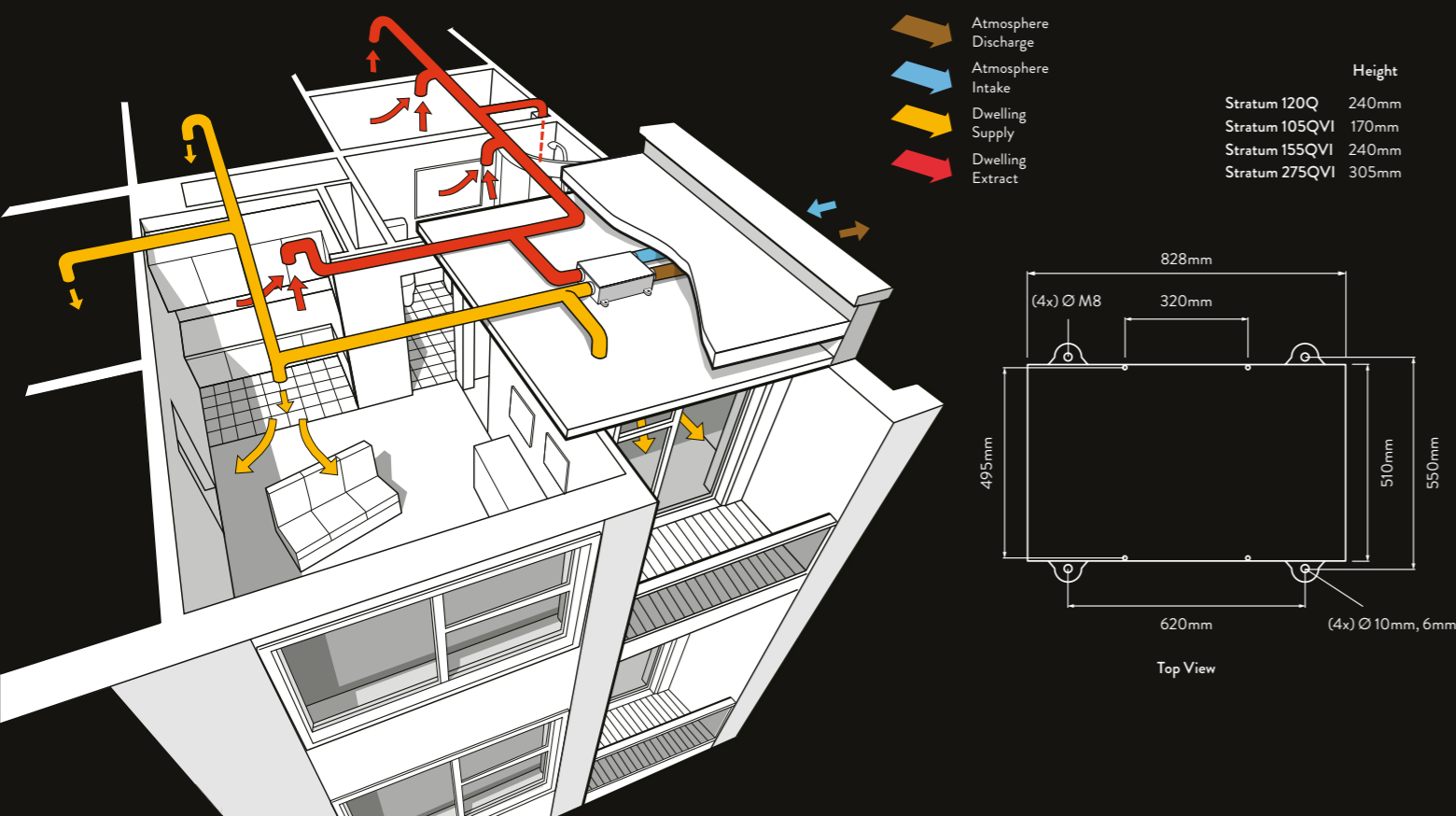
The Xcell Stratum range is purpose-designed to be extremely installer friendly. With a compact, low-profile design and lightweight EPP structural body material, these models are significantly easier to handle than metal-cased units. As a result, they may be installed in both loft and ceiling spaces in apartments or houses, providing extra siting flexibility.

Each unit features a heat recovery cell that is 88-90% efficient, long-life G4 filters and EC motors. All models have variable speed control, frost protection and winter defrost. Plus, selected models also feature a summer bypass, providing year-round, indoor air comfort.

Key Features

- Compact design with lightweight EPP construction.
- Highly efficient unit with EC motors and up to 90% efficient counterflow heat recovery cell.
- 120Q model SAP Appendix Q listed.
- Integral programmable digital multi-speed control (QVI models only).
- Frost protection and winter defrost.
- Summer bypass on 155QVI and 275QVI; partial bypass on 120Q.
- G4 filters – recommended replacement every six months.

Locations & Dimensions (mm)



Specification

	S120Q	S105QVI	S155QVI	S275QVI
Reference Number	92923AW	92919AW	92920AW	92921AW
Motor Type	EC	EC	EC	EC
Maximum Supply / extract performance (FID, m³/h)	185	105	155	275
Maximum supply / extract performance (m³/h @100Pa)	170	95	155	240
Maximum system pressure (Pa)	170	70	120	170
Power usage maximum (W) 220-240V AC 50-60Hz	120	75	110	193
Efficiency (%)	90	88	88	90
Speeds (adjustable)	2	3	3	3
Speed control type	Multi programmable	Multi programmable	Multi programmable	Multi programmable
Noise (dB(A)@3m)	-	33 / 39 / 46	31 / 37 / 46	32 / 39 / 47
Spigot diameter (mm)	125	125	125	160
Installation orientation	Horizontal	Horizontal	Horizontal	Horizontal
Body material	EPP B1 Fire Rated	EPP B1 Fire Rated	EPP B1 Fire Rated	EPP B1 Fire Rated
Weight (kg)	11	9	11	12
UK Guarantee (years)	5*	5*	5*	5*

*Motor only.

All Models

- Four 125mm diameter spigots (120Q, 105QVI and 155QVI)
- Four 160mm diameter spigots (275QVI)

Xcell Stratum S120Q

- Multi-speed performance up to 185m³/h
- Recuperator efficiency up to 90%

Xcell Stratum S105QVI

- Multi-speed performances up to 105m³/h
- Factory settings 50, 70 & 90m³/h
- Minimum setting 30m³/h
- Recuperator efficiency up to 88%


Xcell Stratum S155QVI

- Multi-speed performances up to 155m³/h
- Minimum setting 30m³/h
- Recuperator efficiency up to 88%

Xcell Stratum S275QVI

- Multi-speed performances up to 275m³/h
- Factory settings 100, 155 & 200m³/h
- Minimum setting 50m³/h
- Recuperator efficiency up to 90%

Controller Options



92951AA QVI Controller

- Wired operation from a distance of up to 10m
- 4 speed settings
- Indicates when heat recovery filters need changing
- Compatible with QVI models only



Q3SP
Automatic
3 Speed



QC02
CO₂ Sensor



QHS
Humidity Sensor

Reference	96005AA	96003AA	96040AA
Xcell Stratum S120Q	✓	✓	✓
Xcell Stratum S105QVI	✓	✓	✓
Xcell Stratum S155QVI	✓	✓	✓
Xcell Stratum S275QVI	✓	✓	✓

Xcell Compact XR

Horizontal Mechanical Extract with Heat Recovery Unit



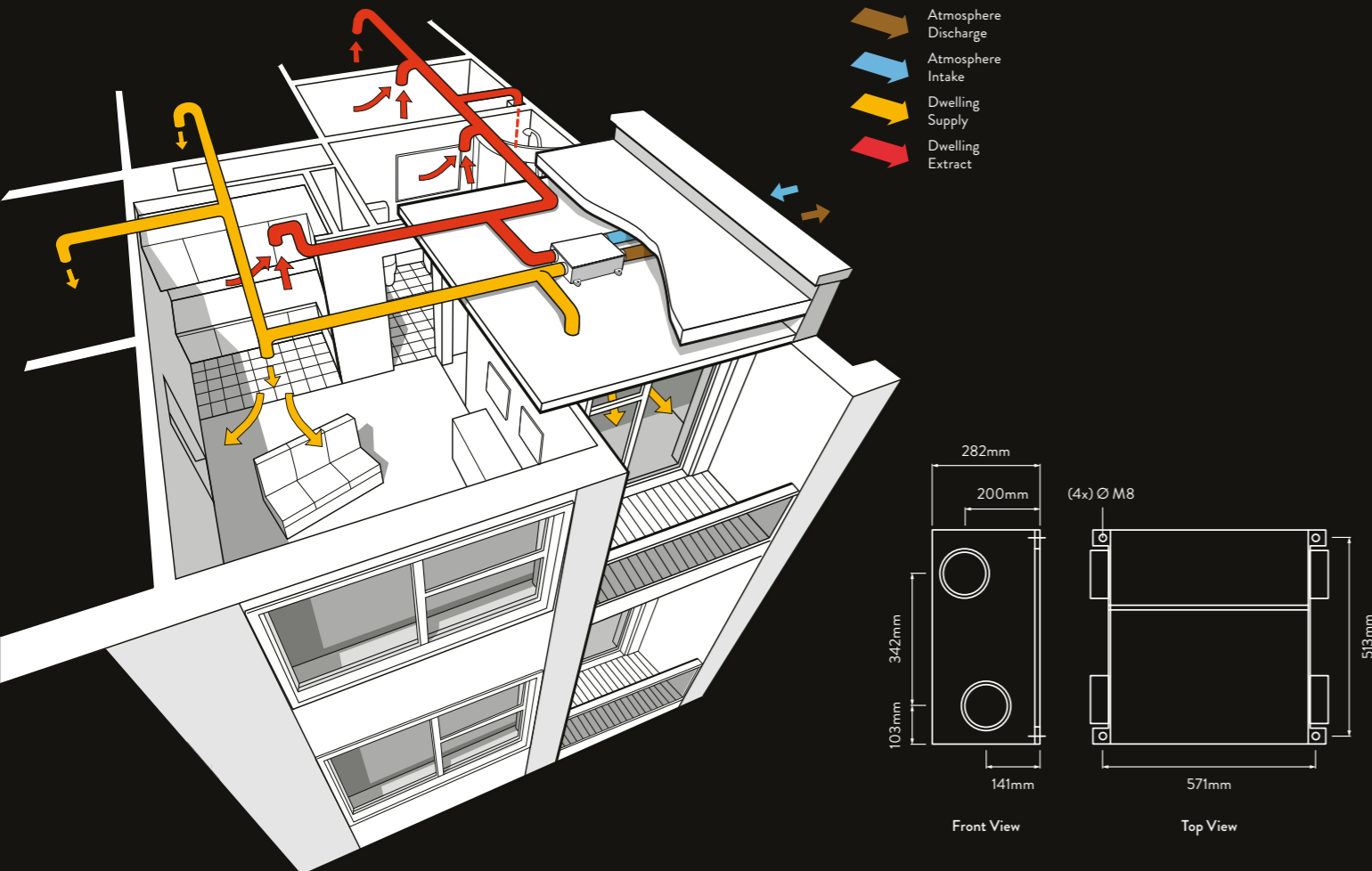
The Xcell Compact XR is ideal for smaller dwellings – particularly airtight, modern residential properties with up to two bedrooms. Its heat recovery cell is up to 91% efficient, while a long-life, low energy EC motor keeps running costs to a minimum.

The Xcell Compact XR also benefits from built-in frost protection, ensuring that the unit can accommodate temperature extremes in winter months.

Key Features

- Highly efficient unit with EC motors and 91% efficient heat recovery cell.
- SAP Appendix Q listed.
- Sturdy galvanised steel construction.
- Frost protection function.
- G4 filters – recommended replacement every six months.
- Specific fan power as low as 0.46 W/l/s.

Locations & Dimensions (mm)



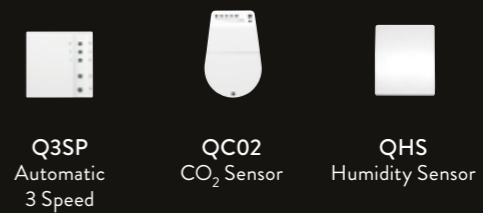
Specification

	Xcell Compact XR
Reference Number	92849AA
Motor type	EC
Maximum supply / extract performance (FID, m³/h)	159
Maximum supply / extract performance (m³/h @100Pa)	127
Maximum system pressure (Pa)	337
Power usage maximum (W) 220-240V AC 50-60Hz	30.3
Specific fan power (maximum W/l/s – specific fan power is subject to system design resistance)	0.68
Maximum efficiency (%)	91
Speeds	Variable
Speed control type	0-10Vdc
Sound power (LWA (dB)@Full Speed FID)	43.5
Spigot diameter (mm)	125
Installation orientation	Horizontal
Body material	Galvanised Steel
Weight (kg)	21
UK Guarantee (years)	5*

*Motor only.

KITCHEN	100% Variable	Flow Rate (l/s)	S.F.P (W/l/s)	Heat Recovery Efficiency
+1 Additional Wet Room		15	0.46	91%
+2 Additional Wet Room		21	0.48	90%
+3 Additional Wet Room		27	0.54	89%
+4 Additional Wet Room		33	0.66	88%

Controller Options



Reference	96005AA	96003AA	96040AA
Xcell Compact XR	✓	✓	✓

Xcell 200

Horizontal Mechanical Extract with Heat Recovery Unit



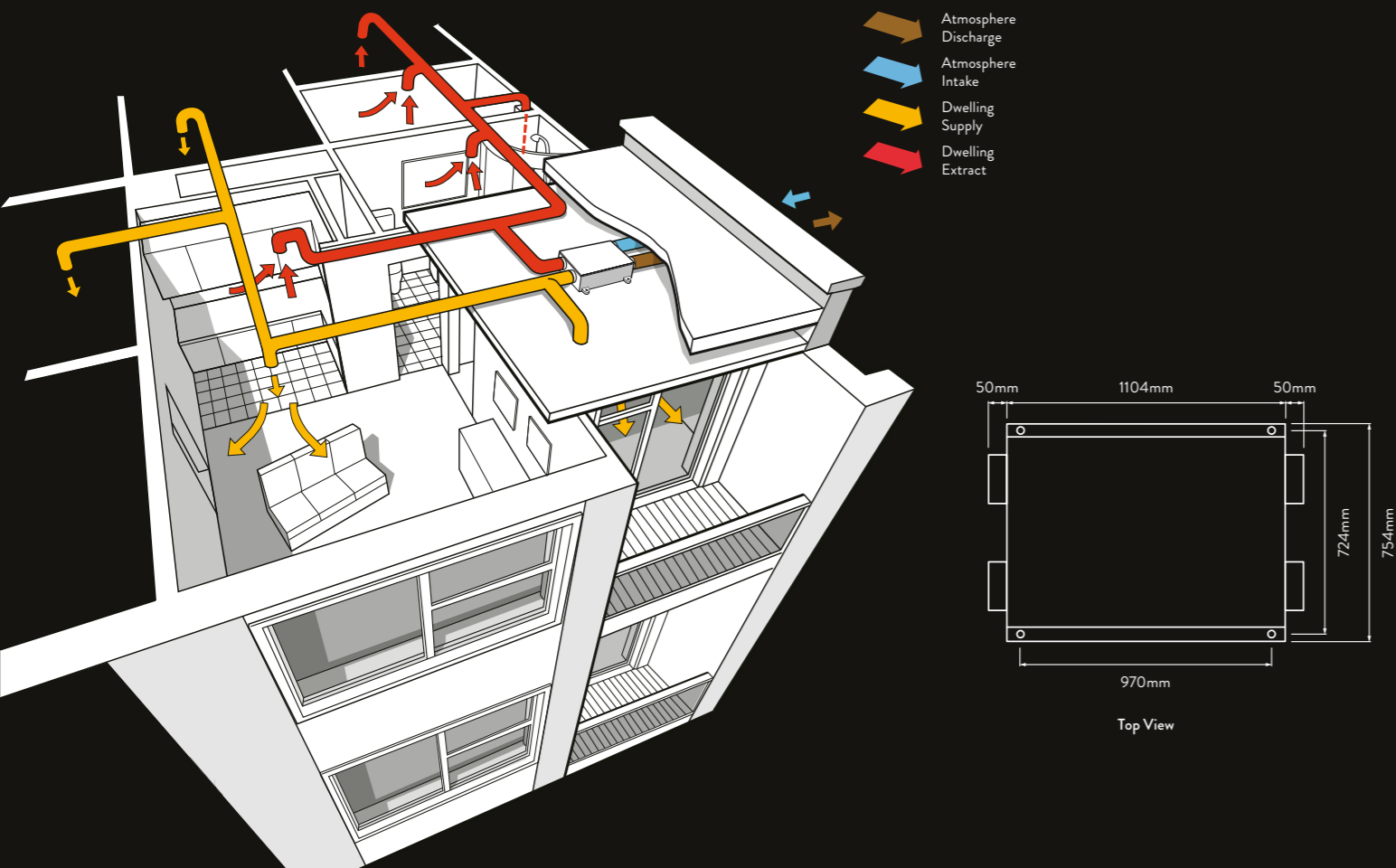
Designed for smaller dwellings with up to 5 wet rooms, the Xcell 200 boasts a compact design making it ideal for recess fitting in confined spaces, such as ceilings, lofts or cupboards. Its multiple speed settings may be set at install to meet the requirements of a dwelling. This ensures that high quality air comfort is maintained throughout the property, in accordance with Building Regulations.

Each unit features a counterflow heat recovery cell that's up to 90% efficient, as well as low-energy EC motors for significant cost savings.

Key Features

- Highly efficient unit with EC motors and 90% efficient heat recovery cell.
- Four 150mm Ø extract spigots.
- Sturdy galvanised steel construction.
- Four-speed tapped motor, with two selectable speeds at install to suit dwelling requirements.
- Fresh air intake and dwelling extract filters (EU4).
- Supplied with 1m length of 12mm Ø (O/D) plastic condensate tubing.

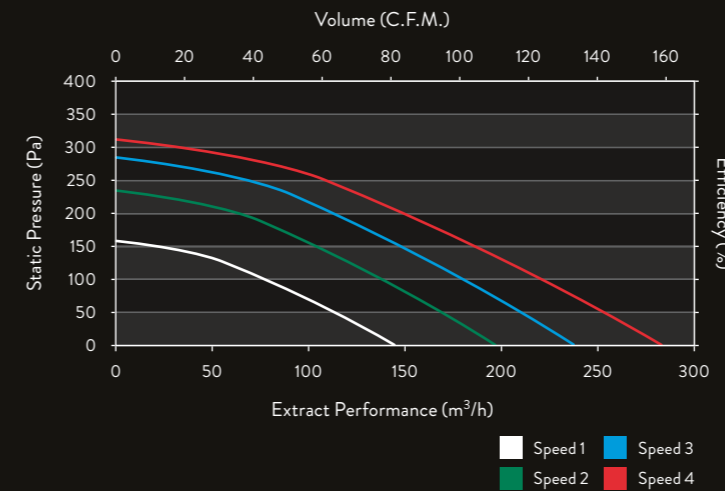
Locations & Dimensions (mm)



Specification

	Xcell 200
Reference Number	91977AA
Maximum supply / extract performance (FID, m ³ /h)	284
Maximum supply / extract performance (m ³ /h @100Pa)	228
Maximum System Pressure (Pa)	350
Specific fan power (maximum W//s – Specific fan power is subject to system design resistance)	3.4
Speed Options	4
Selectable Speeds	2
Speed control type	Tapped Motor
Noise Levels (dB(A)@3m)	30 (low) / 38 (high)
Power Usage (@ 220-240V 50-50Hz (W)	141 (low) / 268 (high)
Weight (kg)	40
UK Guarantee (years)	3

Performance



Pa	Speed 1 (m ³ /h)	Speed 2 (m ³ /h)	Speed 3 (m ³ /h)	Speed 4 (m ³ /h)
0	143	192	241	284
50	112	168	212	256
100		135	183	228
150		99	151	197
200		43	114	160
250			63	112
300				54

Controller Options

Reference	90108AW
Xcell 200	✓



COS
2 Speed Switch
Summer/Winter

One COS Switch is included with Xcell 200/R.
*Supplied with One COS/BP 2 Speed Switch and Summer/Winter option.

Muro XHRM

Through-the-wall Decentralised Mechanical Ventilation with Heat Recovery Unit



Muro is a single room heat recovery unit that offers extremely quiet noise levels. This makes it ideal for installation, not just in a dwelling's wet rooms, but also other habitable areas – such as bedrooms and living rooms.

Each unit is installed through an outside wall. Muro extracts stale air continuously, all while bringing in fresh air thanks to its counterflow heat exchanger which offers up to 80% efficiency. Its DC motor ensures quiet and low-cost operation. Plus, the removable front fascia provides easy access to filters for cleaning and maintenance.

Key Features

- Highly efficient single room heat recovery unit with DC motors and up to 80% efficient heat recovery cell.
- Square wall set constructed from lightweight EPP material.
- LED display shows fan speed selection and continuous operation option.
- Frost protection and automatic defrost functions prevent freezing.
- Condensate drain provided to outside of the property.
- Four-speed performance selectable via integral air quality sensor or wireless RF controller.

Specification

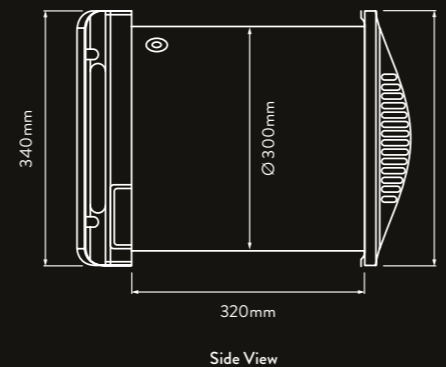
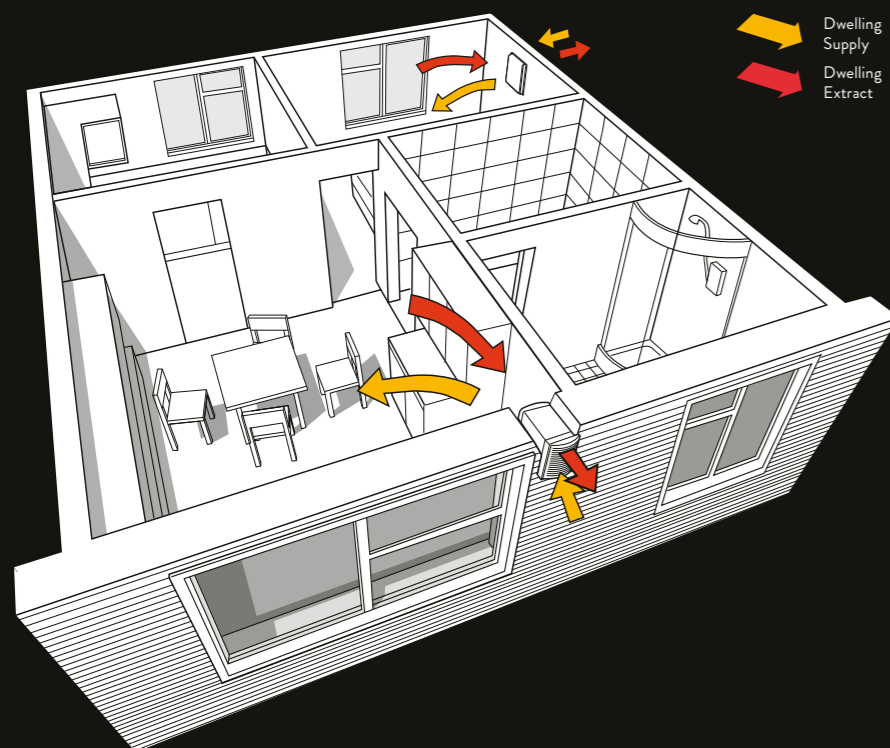
	Muro XHRM
Reference Number	92922AW
Motor type	DC
Maximum supply / extract performance (FID, m ³ /h)	15, 30, 45 & 55
Power usage maximum (W) 220-240V AC 50-60Hz	3.5, 9, 17 & 25
Efficiency (%)	80 – 83
Speeds	4
Speed control type	Integral
Sound Pressure (dB (A) @ 1m) Speeds 1, 2, 3, 4	15/25/33/39
Wall cut out (mm)	320 x 320
Installation orientation	Horizontal
Wall sleeve material	EPP
Weight (kg)	4
UK Guarantee (years)	5*

*Motor only.

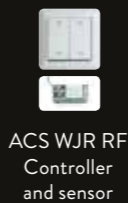
Muro XHRM

- Four speed performances up to 55m³/h.
- Extract/supply performance speeds 15, 30, 45 & 55m³/h.
- Recuperator efficiency up to 83%.
- Unit uses 15mm with copper pipe.

Locations & Dimensions (mm)



Controller Options



ACS WJR RF
Controller
and sensor



AQ DL 50
Air quality/humidity sensor

	Reference	96051AA	96050AA
Muro XHRM		For central control using RF radio frequency to control multiple units.	Air quality/humidistat sensor providing infinitely variable control between 10-45 m ³ /h.

Solitair

Single Room 4" Decentralised Mechanical Ventilation with Heat Recovery Unit



Solitair is an expertly engineered single room heat recovery system designed specifically for 4"/100mm ducted installations – either as a replacement or as a new installation. Installed through an outside wall, it's ideal for bathroom, toilet, kitchen and utility room applications.

A cylindrical heat wheel exchanger with optimised rotational speed offers best-in-class heat recovery efficiency of 83%, while the triple filtration system ensures that incoming air is clean and fresh. Xpelair's advanced Ghost™ Air Movement Technology delivers near-silent operation.

Performance

	Trickle	Boost
Airflow (l/s)	6	15
Sound pressure level (dB(A)@3m)		
Power (W)	9	22
Specific fan power (W/l/s)	1.5	1.5
Thermal efficiency (%)	>76	>83
Weight (kg)	5	5

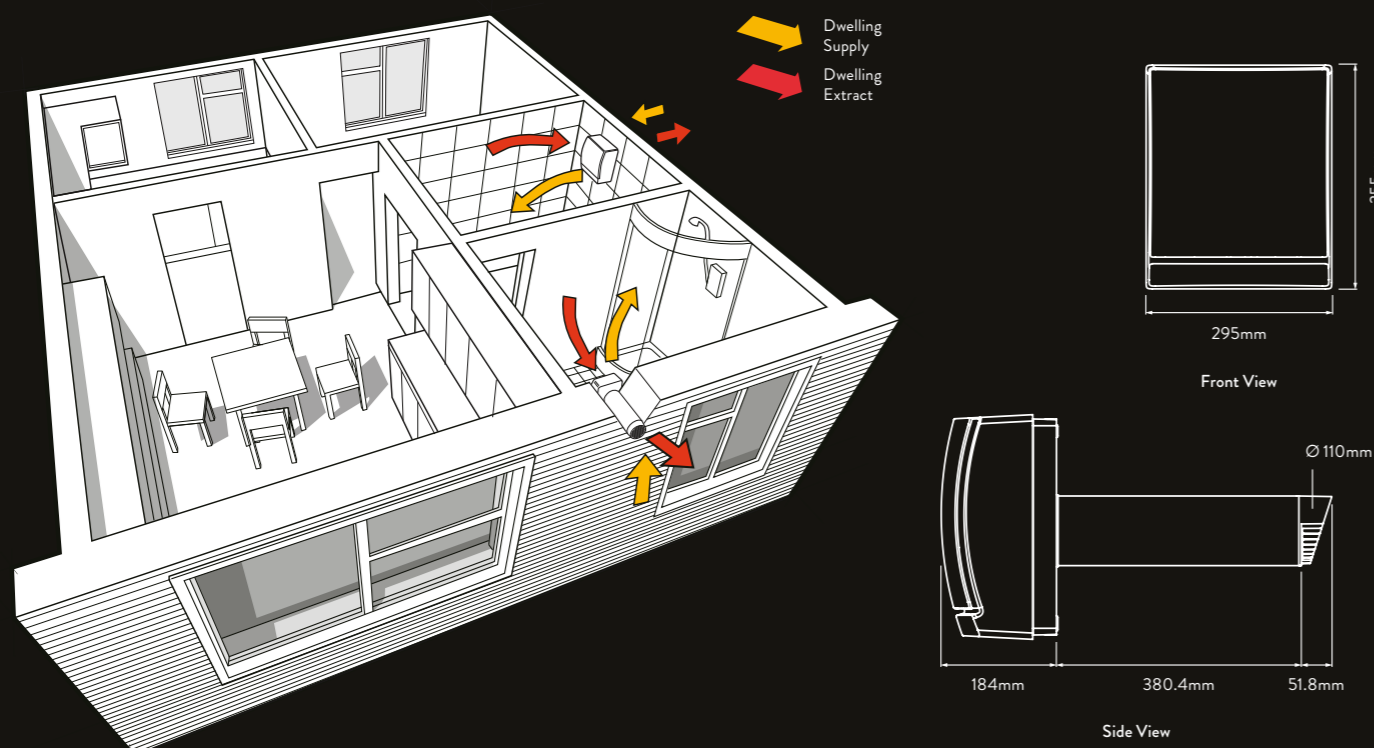
Key Features

- Highly efficient single room heat recovery unit with EC motors and best-in-class heat recovery efficiency of 83%.
- Suitable for fitting into existing 4"/100mm diameter holes.
- Configured straight out of the box – ready for installation.
- Triple filtration system prevents large particles entering the heat exchanger and removes pollutants from incoming air.
- Two speed operation – trickle and boost – via internal humidistat to ensure excess moisture is extracted promptly.

1 Solitair Unit Running at boost for 1.5 hours a day Annual carbon saving 327 kg CO₂e

1 Solitair Unit Running at boost for 1.5 hours a day Annual utility bill saving £74*

Locations & Dimensions (mm)



LoVolt XHR150

Single Room Decentralised Mechanical Ventilation with Heat Recovery Units



Providing an energy-efficient alternative to traditional extraction, the LoVolt XHR150 is ideal for household applications in bathrooms, utility rooms, bedrooms and living rooms where condensation and mould is an issue.

These through-the-wall units can operate in two speed settings, while the heat recovery cell provides up to 80% efficiency, resulting in very low running costs. Additionally, the LoVolt XHR150 boasts a unique 'daylight sensor'. This innovative feature inhibits the fan's boost function during the night to ensure low night-time noise levels.

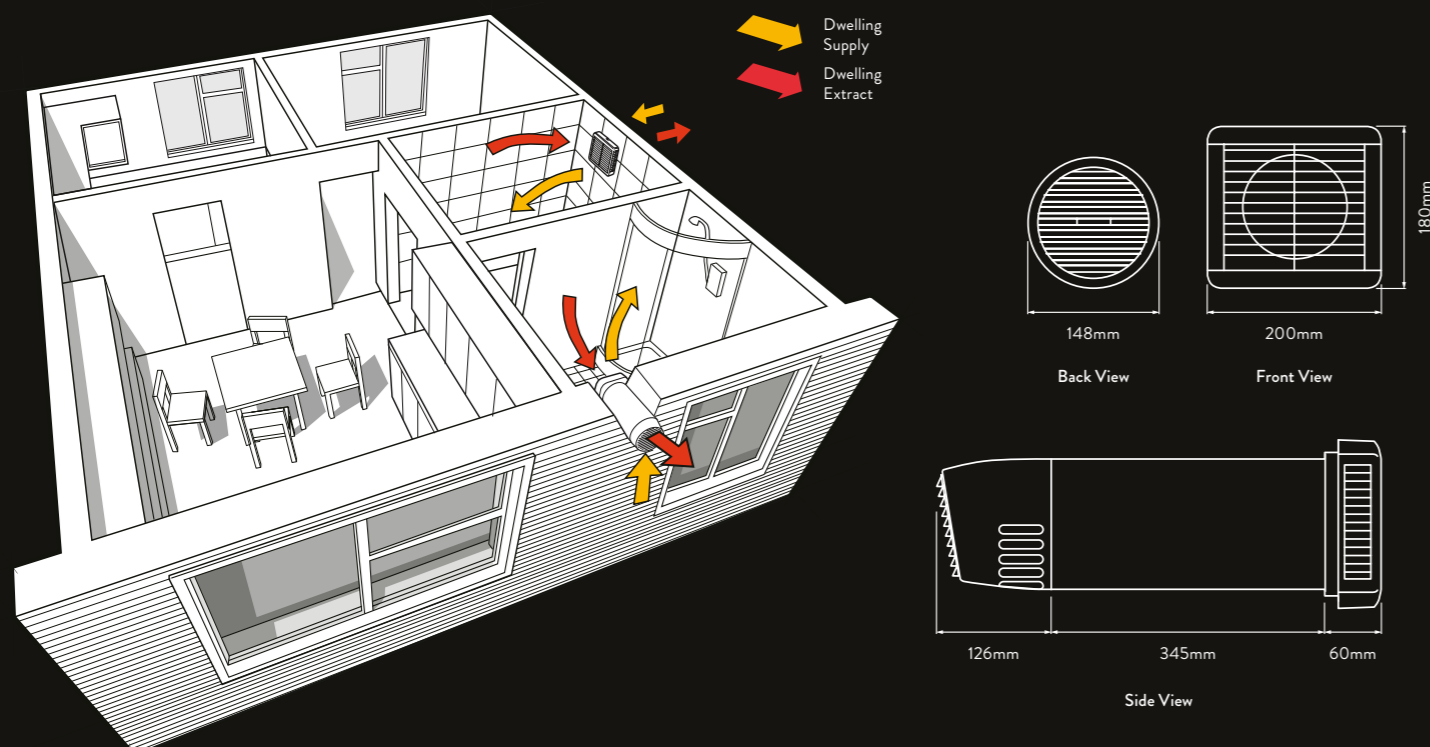
Key Features

- Highly efficient single room heat recovery unit capable of recovering up to 80% of the heat lost through extraction.
- Two speed operation – trickle and boost – to ensure excess moisture is extracted promptly.
- Innovative daylight sensor inhibits boost function at night time, ensuring that the fan operates quietly throughout the night.
- Includes Safety Extra Low Voltage (SELV) transformer to enable safe installation of the fan in Zones 1 and 2, and efficient operation for low running costs.

Specification

	XHR150PC	XHR150HP
Reference Number	90821AA	90820AA
Integral pullcord	Yes	Yes
Automatic control from remote humidistat	No	Yes
Maximum efficiency (%)	80	80
Speeds	2	2
Extract performance (m ³ /h) boost / trickle	31 / 12	31 / 12
Extract performance (l/s) boost / trickle	9 / 3	9 / 3
Sound pressure level (dB(A)@3m) boost / trickle	41 / 21	41 / 21
Power (W) boost / trickle	46 / 9	46 / 9
Hole diameter (mm)	152	152
Wall thickness range (mm)	229 – 356	229 – 356
UK Guarantee (years)	2	2

Locations & Dimensions (mm)





EverDri XEL, XELH, XEWHL, XEWHR and XEW



The Xpelair EverDri System



The Xpelair EverDri system is based on a continuous supply of fresh, dry air into the home. This creates a slight positive pressure, forcing moisture and contaminant-laden air out through natural leakage points in the building. **The result: a moisture-free internal environment.**



Long-life Positive Pressure Ventilation Units

The EverDri is ideal for refurbishment applications where inadequate ventilation has led to the build-up of condensation and mould. These units operate continuously to maintain a fresh and healthy indoor environment.

Meanwhile, XEW models are suitable for wall installation, making them ideal for apartments and flats. Both unit types have optional heater models. Additionally, XEW units are available with either left-hand (XEWHL) or right-hand (XEWHR) discharge to suit any refurbishment application.

XEL models have been designed specifically for loft installation, providing a suitable solution for houses.

Key Features

XEL and XELH

- Highly efficient unit for So Simple™ installation in a loft space, with fully automatic operation after install.
- So Simple™ maintenance – easy access to filters with recommended replacement or cleaning every five years.
- Improves indoor air quality significantly by removing air pollutants (such as carbon monoxide) and preventing outdoor pollutants (including pollen and traffic fumes) from entering the property.
- System standby mode operates when loft temperatures exceed 23°C.
- Compliant with Part F and L of England and Wales Building Regulations.
- Five-year warranty for extra peace of mind.
- Integral heater warms incoming air, if required (XELH model only).

XEWHL, XEWHR and XEW

- Highly efficient unit for So Simple™ installation in a wall space, with fully automatic operation after install, and left and right hand spigot position models to suit all applications.
- So Simple™ maintenance – easy access to filters with recommended replacement or cleaning every 18 months.
- Improves indoor air quality significantly by removing air pollutants (such as carbon monoxide) and preventing outdoor pollutants (including pollen and traffic fumes) from entering the property.
- High efficiency filters remove up to 95% of dust particles to maintain high-quality indoor air.
- Compliant with Part F and L of England and Wales Building Regulations.
- Five-year warranty for extra peace of mind.
- Integral heater warms incoming air, if required (XEWHL and XEWHR models only).

Product Matrix

Installation Type	With Heater	Without Heater	Discharge	Product
Loft (XEL)	✓	•	•	EverDri XELH
	•	✓	•	EverDri XEL
Wall (XEW)	✓	•	Left-hand	EverDri XEWHL
			Right-hand	EverDri XEWHR
	•	✓	•	EverDri XEW

Specification

	Reference Number	Description
EverDri XEL	93063AA	Loft-mounted positive input ventilation unit
EverDri XELH	93064AA	Loft-mounted positive input ventilation unit with fitted heater
EverDri XEWHL	93065AA	Wall-mounted positive input ventilation unit with fitted heater – left-hand discharge
EverDri XEWHR	93066AA	Wall-mounted positive input ventilation unit with fitted heater – right-hand discharge
EverDri XEW	93067AA	Wall-mounted positive pressure ventilation unit

Performance

Fan Speed	EverDri XEL & EverDri XELH (at 19 – 23°C loft temperature)						EverDri XEWHR & EverDri XEWHL				EverDri XEW		
	1	2	3	4	5	6	Low	Medium	High	Boost	Low	Medium	High
Airflow (l/s)	30	35	42	52	62	70	13.2	18.7	22.7	35.2	12.5	18.2	21.8
Power (W)	3.6	4.2	5.2	7.5	11.2	15.3	5.1	8.3	12.8	47.2	3.1	5.7	9.4

Domestic Controls for Xpelair Systems

Xpelair offers a range of domestic controls to complement its Systems product range. Sensors and Switches are outlined below, while Ventmiser – a multi-input controller – is introduced on the next page.

	Name	Product
	COS Change Over Switch	Xplus 2 EC; Xcell 200
	DT20B Time Delay Controller	Xplus 2 EC
	XPIRA Infrared Sensor	Xplus 2 EC
	MOS Manual Override Switch	Xplus 2 EC
	XRH Remote Humidistat	Xplus 2 EC
	3SP-SW Speed Switch	Xplus 2 EC

	Name	Product
	AQS Air Quality Sensor	Xplus 2 EC
	MS 2 Speed Switch	Xcell 150 & 200QVW; Xcell 300 & 400QVI
	QHS Humidity Sensor	Xcell 150 & 200QVW; Xcell 300 & 400QVI
	Q3SP 3 Speed Switch	Xcell 150 & 200QVW
	QC02 Sensor	Xcell 150 & 200QVW; Xcell 300 & 400QVI
	ACS WJR RF	Muro
	AQ DL 50	Muro

Ventmiser

Multi-input Controller



Ventmiser is a temperature and/or current sensing demand control device which activates an extractor fan whenever it detects that a cooker, bath or shower is in use.

Ventmiser can also be used to boost the speed of a centralised ventilation system – such as an MEV or MVHR – when activities like cooking, showering or bathing are taking place.

Key Features

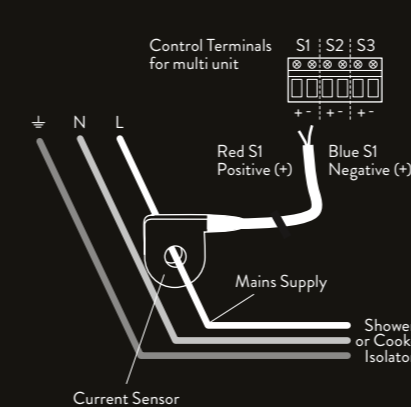
- Boosts fans as required when moisture creating appliances are used, such as a bath or cooker – able to sense up to six appliances.
- Adjustable overrun timer to suit all applications.
- Temperature and/or current sensors to suit all application requirements.
- SELV manual override input provides manual on or boost control for 25 minutes.

Compatible with;

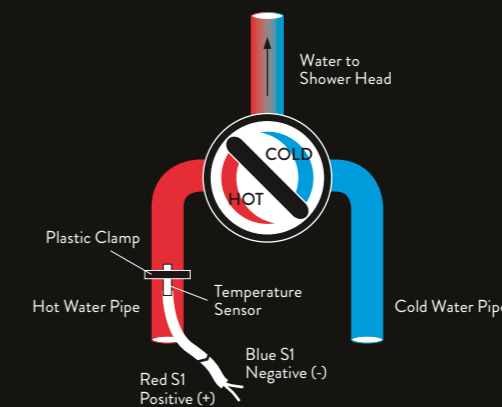
- Xplus 2EC (standard only)
- Xcell 150 & 200 QVW
- Xcell 300 & 400 QVI
- Stratum 120Q and 105, 155, 275QVI
- Xcell Compact XR

Specification

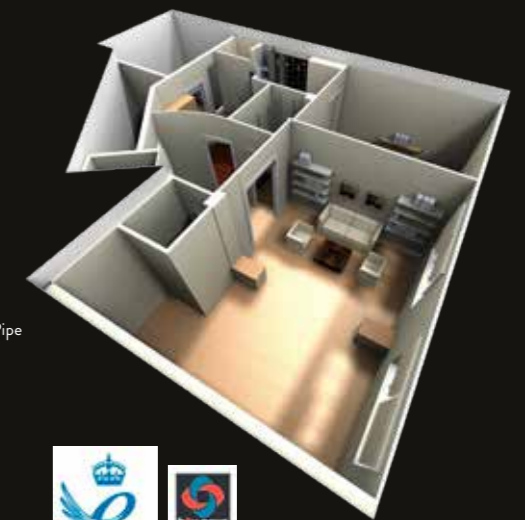
	Reference Number
Dual Ventmiser Controller	92589AA
Multi Ventmiser Controller	92630AA
Temperature Sensor	92590AA
Current Sensor	92591AA
Momentary Boost Switch	92800AA



Current sensor simply fits over the live conductor to an electric shower or cooker.



Temperature sensor securely clamped to the hot water pipe leading to the shower mixing valve or bath tap.



UK Sales

Sales Hotline: 0844 372 7750

Sales Fax: 0844 372 7760

Sales Email: rxsalesoffice@redringxpelair.com

International Sales

Sales Hotline: +44 (0) 1733 456789

Sales Fax: +44 (0) 1733 456727

Sales Email: int.sales@redringxpelair.com

Technical Services

Service Hotline: 0844 372 7766

Service Fax: 0844 372 7767

Service Email: service.request@redringxpelair.com



Newcombe House, Newcombe Way
Orton Southgate, Peterborough
United Kingdom, PE2 6SE

t 0844 372 7761
f 0844 372 7762
www.xpelair.co.uk

5 Charlestown Avenue,
Charlestown Industrial Estate
Craigavon, Co. Armagh, BT63 5ZF

t (028) 38 337317
e sales@glendimplexni.co.uk

Improving population health and well-being with innovative and energy efficient indoor air quality and air comfort solutions.

Xpelair is a registered trademark of Redring Xpelair Group Ltd (RXG). RXG reserves the right to alter product specification or appearance without prior notice. All finishes in this brochure are as accurate as printing processes allow. Based on performance independently tested at 15l/s by ISVR June 2014.

All rights reserved.

www.xpelair.co.uk

