



# Commercial Ventilation

## Why unit ventilation?

When it comes to air quality, there is nowhere more important than the workplace. At home the environment in which we live is largely within our control. At work the air we breathe and our thermal comfort is provided by others. Small wonder then that a World Health Organisation report suggests that up to 30% of new and refurbished buildings may be subject to excessive complaints relating to indoor air quality. The symptoms include headaches, eye, nose and throat irritation, dry coughs, dizziness and nausea, difficulty concentrating, fatigue and sensitivity to odours.

Since the 1970's as energy costs have risen, so buildings have become more airtight and in many cases the amount of recirculated fresh air has been reduced in order to improve energy efficiency. These reduced rates have been found to be, in many cases, inadequate to maintain the comfort and health of building

occupants. Frequently, problems result when the occupants activities are different from that which the building was originally intended.

Central systems can, in some cases, be energy wasteful as they ventilate all areas whether they are occupied or not. Studies have also shown that we react better to a varying air circulation than a carefully controlled consistent environment. The ability to control our own 'air space' to suit the activity or the number of people reduces the symptoms often referred to as sick building syndrome.

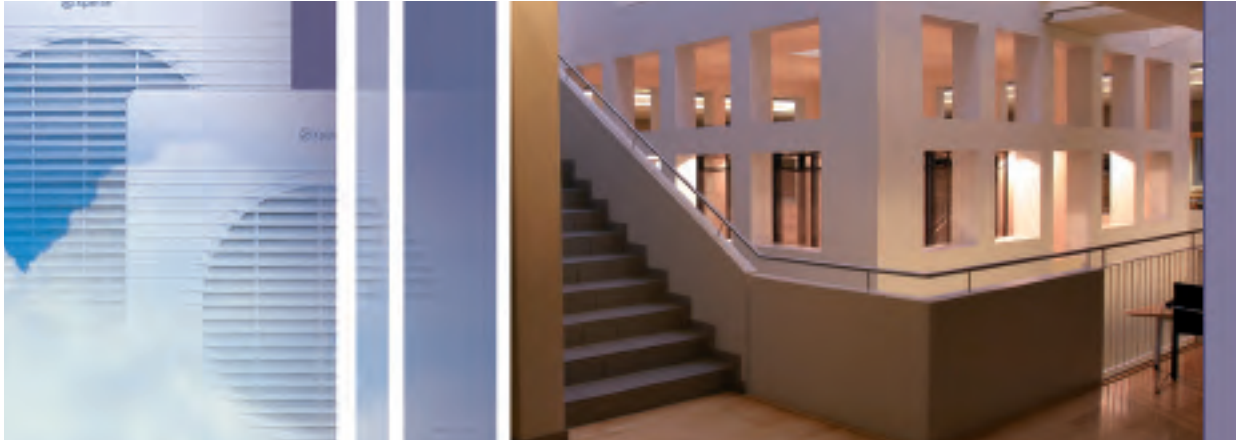
In retail and the hospitality sector, employers have an additional duty of care towards their staff with regard to passive smoking. Satisfactory air quality and thermal comfort is not just good for employee health, it's good for business too.

Localised heat, smells and moisture can be effectively removed with extract fans installed as close to the source as

possible. In staff rooms, photocopying rooms, toilets etc. usually a window or wall fan can be extremely effective.

In general office environments 4-6 air changes per hour is sufficient to provide circulation and remove volatile organic compounds from furnishings, cleaning agents and biological contaminants.

Unit ventilation can effectively extract tobacco smoke although specific provision of tempered air to the staff is recommended.



## Commercial Ventilation



	<b>GX</b>	<b>PX</b>	<b>RX</b>	<b>WX</b>	<b>WXXL</b>	<b>ChefX</b>
<b>Page Number</b>	<b>90</b>	<b>92</b>	<b>94</b>	<b>96</b>	<b>98</b>	<b>100</b>
Fan Type	Axial	Axial	Axial	Axial	Axial	Kitchen Canopies
Positioning	Window / Wall	Ceiling / Panel	Roof	Wall	Wall	Over hob
Models	3	3	3	4	6	3
Max extract performance (m <sup>3</sup> /h)	1614	1712	1100	1715	5000	2800
Max intake performance (m <sup>3</sup> /h)	1002	1037	915	969	5000	n/a
Max power (W)	85	85	87	85	245	940
Duct dia (mm)	n/a	200-315	n/a	n/a	n/a	See product

For Commercial Sensors, Switches & Accessories see pages 102 - 105

# Xpelair GX6, GX9 & GX12

## Commercial window fans



### Key features

Type:	<b>Commercial duty ventilation unit</b>
Application:	<b>Pubs, restaurants, offices, kitchens, factories, schools and shops</b>
Control options:	<b>Extensive range of optional controllers available</b>
Legislation:	<b>Conforms to Building Regulations Part F1</b>
Hole diameter:	<b>184mm (GX6 window) 257mm (GX9 window) 324mm (GX12 window) 203mm (GX6 wall) 266mm (GX9 wall) 330mm (GX12 wall)</b>



### The Range

Tried and tested, the Xpelair **GX6**, **GX9** and **GX12** window fans have remained a byword for commercial window fans for over forty years. The latest **GX** range is no exception – continuing that reputation for rugged reliability, whilst introducing a host of refinements to make the range safer, faster to install and easier to clean. Now supplied with longer ladder strips.

The contoured high gloss white housing is styled to blend in cleanly with modern décor. A shadow grey external grille is supplied for unobtrusive external appearance. For safety, a finger guard is integrated into the housing and the window grille design. On **GX9** & **GX12** range units, a tamper proof positive plug and socket assembly provides a means of isolation for service access without the safety risk of accidental disconnection.

Installation in single and sealed double glazed windows (up to 25mm) is rapid using Xpelair's unique metal ladder strip / screw system, ensuring a secure and watertight seal against the glass.

Both the **GX9** & **GX12** ranges are reversible and now feature totally enclosed external rotor motors providing constant volume outputs, even in gusty external conditions. Pre-balanced sickle bladed impellers eliminate 'fan judder' and ensure quiet trouble free operation. Sealed for life maintenance free bearings ensure suitability for running at any angle. Running costs are impressively low, and when not in use the silent electro-thermal shutter cassette closes silently against backdraughts. And cleaning has never been easier. The housing, shutter cassette and impeller are all removed in seconds.

### Select the right product for your application

		<b>GX6</b>	<b>GX9</b>	<b>GX12</b>
Reference number		90800AW	89994AW	90012AW
Remote switch (supplied separately)		■	■	■
Selectable intake, extract or controller operation		■	■	■
Speeds		1	2*	2*
Extract performance (FID, m³/h)	high	266	728	1614
	low		618	1214
Extract performance (FID, l/s)	high	74	202	448
	low		172	337
Intake performance (FID, m³/h)	high		456	1002
	low		412	819
Intake performance (FID, l/s)	high		127	278
	low		114	228
Sound pressure level (dB(A)@3m)	high	37	50	55
	low		48	50
Max. electrical power rating (W)		30	41	85
Hole diameter (mm)		184	257	324
Hole diameter with wall liner (mm)		203	266	330
Weight (kg)		1.9	4	7.9
Guarantee (years, UK)		3	3	3

\*low speed only applies if fan used with FR22/30 controller. If controller not used fan is only single (high) speed

## Models

### GX6

Ref. 90800AW

- 6" high performance extract axial ventilation unit
- Operated by remote On/Off switch (not supplied)
- Suitable for single and sealed double glazing windows and panels up to 25mm
- Sealed for life maintenance free bearings, suitable for running at any angle. Integrated safety thermal overload protection
- Built-in silent action electro-thermal shutter cassette
- Passive tricklevent facility for background ventilation with fan Off
- Easy clean high gloss ABS housing with integral finger safety guard
- Shadow grey external grille for unobtrusive external appearance
- Unique metal ladderstrip / screw connection to external grille for security and weather tight seal
- IPX4 rated motor

### GX9 with sickle blade

Ref. 89994AW

### GX12 with sickle blade

Ref. 90012AW

- High performance intake/extract axial ventilation unit
- Choice of optional controllers
- Suitable for single and sealed double glazing windows and panels up to 25mm
- Balanced external rotor motor and sickle blade impeller for quiet efficiency
- Sealed for life maintenance free bearings, suitable for running at any angle
- Built-in silent action electro-thermal shutter cassette
- Passive tricklevent facility for background ventilation with fan Off
- Easy clean high gloss ABS housing with integral finger safety guard
- Shadow grey external grille for unobtrusive external appearance
- Tamperproof internal connection safety plug and socket
- Unique metal ladderstrip / screw connection to external grille for security and weather tight seal
- IPX4 rated motor

## Controllers

### Single Fan Controller FR22/30

Ref. 21868AW

- For use with GX9 and GX12
- On/Off control with neon indicator. Used to select between high and low speed, intake and extract

### Group Fan Controller EC6H

Ref. 21854AW

- For use with GX9 and GX12
- On/Off control with neon indicator. Infinitely variable speed selection controls extract and intake air flow. For use with up to four fans (not mixed sizes)

### Group Fan Controller XCC1

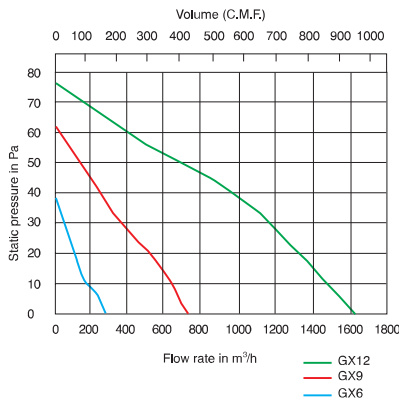
Ref. 21859AW

- For use with GX9 and GX12
- On/Off control with neon indicator



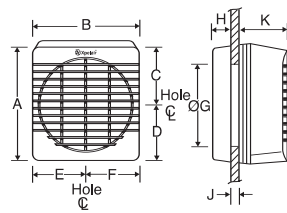
**Typical Specifications** on page 169.  
**Wiring Diagrams** on page 186.  
**Controller Details** on page 102.

## Performance

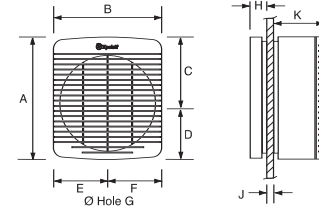


## Dimensions (mm)

### GX6



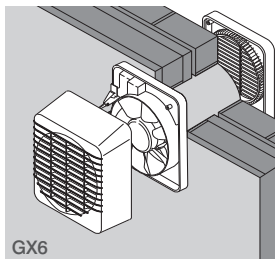
### GX9, GX12



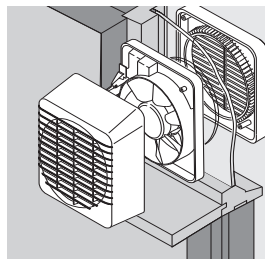
Model	Dimensions (mm)									
	A	B	C	D	E	F	G	H	J	K
GX6	226	210	119	107	109	101	184/203	32	4-35	112
GX9	312	294	165	147	147	147	257/266	32	4-35	117
GX12	408	380	216	192	190	190	324/330	34	4-35	161

## Installation and Accessories

The GX6, GX9 & GX12 ranges come complete with a universal mounting kit for window installations.



GX6



GX9/GX12

GX9 unit can be used for a variety of medical and photographic applications where light protection is required by replacing the external grille with a Darkroom Cowl.

### Wall Mounting

Hole diameter: 203mm

### Installation Accessories

Wall Kit 280mm Ref. 89370AA

### Window Mounting

Hole diameter: 184mm (GX6)  
257mm (GX9)  
324mm (GX12)

### Wall Mounting

Hole diameter: 266mm (GX9)  
330mm (GX12)

### Installation Accessories

Wall Kit Ref. 89372AA (GX9)  
Wall Kit Ref. 89374AA (GX12)

### Darkroom installation

### Installation Accessories

Darkroom Cowl DC9 Ref. 98409AK

# Xpelair PX6, PX9 & PX12

## Commercial ceiling fans



### Key features

Type:	<b>Commercial duty ceiling and panel mount axial ventilation unit</b>
Application:	<b>Kitchens, restaurants, pubs, offices, schools, shops and kiosks</b>
Control options:	<b>Extensive range of optional controllers available</b>
Legislation	<b>Conforms to Building Regulations Part F1</b>
Hole diameter:	<b>w246 x h268 (PX6) w345 x h375 (PX9) w434 x h434 (PX12)</b>
Duct Size:	<b>200/250/315</b>



### Select the right product for your application

	PX6	PX9	PX12
Reference number	91300AW	91299AW	91298AW
Remote switch (not supplied)	■	■	■
Extract only	■		
Selectable intake, extract or controller operation		■	■
Speeds	1	2*	2*
Extract performance (FID, m <sup>3</sup> /h)	246	790	1712
		685	1290
Extract performance (FID, l/s)	68	219	476
		190	358
Intake performance (FID, m <sup>3</sup> /h)		458	1037
		433	845
Intake performance (FID, l/s)		127	288
		120	235
Sound pressure level (dB(A)@3m)	39	50	54
		47	48
Ducting size (mm)	200	250	315
Electrical power rating (W)	34	41	85
Hole diameter (w x h mm)	245 x 268	345 x 375	434 x 434
Spigot size (mm)	200	250	315
Weight (kg)	2.8	4.7	7.9
Guarantee (years, UK)	2	2	2

\*low speed only applies if fan used with FR22/30 controller. If controller not used fan is only single (high) speed

### The Range

Introducing a new addition to the Xpelair commercial range. The **PX** range introduces even greater flexibility into the design of commercial and larger domestic ventilation systems. Based on the proven WX range, **PX** fans are perfect for ceiling and panel applications in kitchens, restaurants, pubs, offices, schools, shops and kiosks.

They can be installed at any angle in ceilings, voids and wall panels of any thickness. The ceiling hugging, low profile white fascia is styled to blend into any ceiling type, whether smooth, tiled or textured. For safety, a finger guard is integrated into the ultra slim high gloss ABS fascia. An integral spigot allows the attachment of flexible ducting, such as XFlex. Installation in ceilings and wall panels is rapid thanks to the concealed fixing points provided. Both the **PX9** & **PX12** are reversible making them ideal

for ducted input systems in the hospitality industry. On **PX9** & **PX12** units a positive plug and socket assembly provides a means of isolation for service access without the safety risk of accidental disconnection.

**PX9** & **PX12** models feature totally enclosed external rotor motors providing constant volume outputs, even in gusty external conditions. Pre-balanced sickle bladed impellers eliminate 'fan judder' and ensure quiet trouble free operation. Sealed for life maintenance free bearings ensure suitability for running at any angle. Running costs are impressively low, and when not in use the silent electro-thermal shutter cassette closes silently against backdraughts. And cleaning has never been easier. The housing, shutter cassette and impeller are all removed in seconds.

## Models

### PX6

#### Ref. 91300AW

- High performance extract only axial flow ventilation unit
- Operated by remote On/Off switch (not supplied)
- Suitable for installation at any angle in ceilings, voids and wall panels of any thickness
- Totally enclosed motor
- Sealed for life maintenance free bearings, suitable for running at any angle
- Built in silent action electrothermal shutter cassette
- Ultra slim high gloss ABS fascia with integral safety finger guard

### PX9 with sickle blade

#### Ref. 91299AW

- High performance intake / extract axial flow ventilation unit
- Choice of optional controllers
- Suitable for installation at any angle in ceilings, voids and wall panels of any thickness

- Balanced external rotor motor and sickle impeller for quiet efficiency
- Sealed for life maintenance free bearings, suitable for running at any angle
- Built in silent action electrothermal shutter cassette
- Ultra slim high gloss ABS fascia with integral safety finger guard

### PX12 with sickle blade

#### Ref. 91298AW

- High performance intake / extract axial flow ventilation unit
- Choice of optional controllers.
- Suitable for installation at any angle in ceilings, voids and wall panels of any thickness
- Balanced external rotor motor and sickle impeller for quiet efficiency
- Sealed for life maintenance free bearings, suitable for running at any angle
- Built in silent action electrothermal shutter cassette
- Ultra slim high gloss ABS fascia with integral safety finger guard

## Controllers

### Single Fan Controller FR22/30

#### Ref. 21868AW

- For use with PX9 and PX12
- On/Off control with neon indicator. Used to select between high and low speed, intake and extract

### Group Fan Controller EC6H

#### Ref. 21854AW

- For use with PX9 and PX12
- On/Off control with neon indicator. Infinitely variable speed selection controls extract and intake air flow. For use with up to four fans (not mixed sizes)

### Group Fan Controller XCC1

#### Ref. 21859AW

- For use with PX9 and PX12
- On/Off control with neon indicator



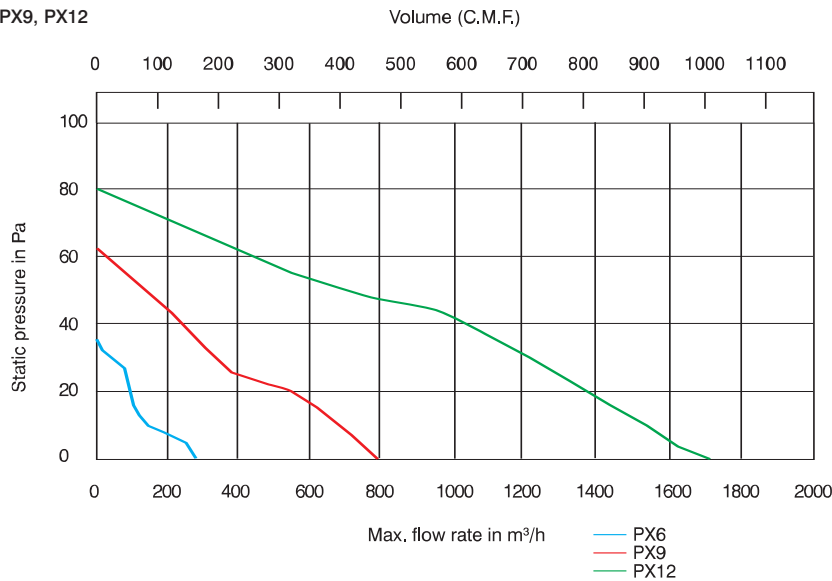
**Typical Specifications** on page 170.

**Wiring Diagrams** on page 186.

**Controller Details** on page 102.

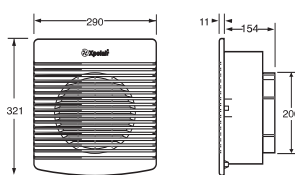
## Performance

PX6, PX9, PX12

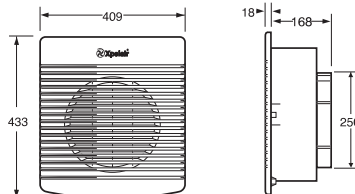


## Dimensions (mm)

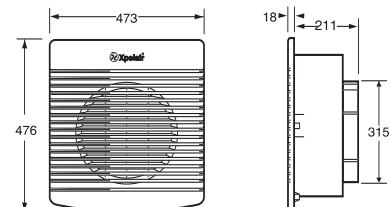
### PX6



### PX9



### PX12



# Xpelair RX6, RX9 & RX12

## Commercial roof fans



### Key features

Type: **Commercial duty roof mount axial ventilation unit with roof cowl**

Application: **Pubs, restaurants, offices, kitchens, factories, squash courts, schools and shops**

Control options: **Extensive range of optional controllers available**

Legislation: **Conforms to Building Regulations Part F1**

Hole diameter: **184mm (RX6)  
257mm (RX9)  
324mm (RX12)**



### Select the right product for your application

		RX6	RX9	RX12
Reference number		90818AW	90424AW	90425AW
Remote switch (not supplied)		■	■	■
Extract only		■		
Selectable intake, extract or controller operation			■	■
Speeds		1	2*	2*
Extract performance (FID, m <sup>3</sup> /h)	high	206	511	1100
	low		430	807
Extract performance (FID, l/s)	high	57	142	306
	low		119	224
Intake performance (FID, m <sup>3</sup> /h)	high		438	915
	low		384	709
Intake performance (FID, l/s)	high		122	254
	low		107	197
Sound pressure level (dB(A)@3m)	high	39	52	56
	low		49	48
Electrical power rating (W)		35	41	87
Hole diameter (Ømm)		184	257	324
Max wall thickness (mm)		25	25	25
Weight (kg)		3,8	4,5	7,9
Guarantee (years, UK)		3	3	3

\*low speed only applies if fan used with FR22/30 controller. If controller not used fan is only single (high) speed

### The Range

With commercial wall space at a premium, sometimes the only way is up!

Xpelair **RX** models are a neat way of ventilating through glazed and solid roofs and can be used vertically in windows on exposed sites such as coastal areas and high rise buildings. The commercial duty roof fans are particularly suitable for pubs, restaurants, offices, kitchens, factories, and squash courts, schools in areas like changing rooms, and kiln rooms and a wide range of shops.

The contoured high gloss white housing is sleekly styled. For safety, a finger guard is integrated into the ultra slim high gloss ABS fascia. The UV stabilised roof cowl assembly is a generous size to provide weather protection at all angles. They are suitable for single and sealed double glazed windows and panels up to 25mm. Installation in wire cast and sealed double glazed roof lights is rapid using Xpelair's unique metal ladderstrip and screw system, ensuring a secure and weather-tight

compression seal. For flat roofs an optional roof mounting plate allows **RX** models to be fitted to dressed curbs.

Both the **RX9** & **RX12** are reversible. All models offer a passive trickle vent option for background ventilation when the fan is off. On **RX9** & **RX12** units a positive plug and socket assembly provides a means of isolation for service access without the safety risk of accidental disconnection.

**RX9** & **RX12** models feature totally enclosed external rotor motors providing constant volume outputs, even in gusty external conditions. Pre-balanced sickle bladed impellers eliminate 'fan judder' and ensure quiet trouble free operation. Sealed for life maintenance free bearings ensure suitability for running at any angle. Running costs are impressively low, and when not in use the silent electro-thermal shutter cassette closes silently against backdraughts. And cleaning has never been easier. The housing, shutter cassette and impeller are all removed in seconds.

## Models

### RX6

#### Ref. 90818AW

- High performance extract only axial flow ventilation unit
- Operated by remote On/Off switch (not supplied)
- Suitable for single and sealed double glazed windows and panels up to 25mm
- Built in electrothermal shutter cassette
- Passive trickle vent option for background ventilation with fan Off
- Easy clean high gloss ABS housing
- Roof cowl assembly in UV stabilised material provides weather protection at all roof angles
- Unique metal ladderstrip/screw connection to external grille for security and weathertight seal
- Supply voltage 220-240V 50Hz

### RX9

#### Ref. 90424AW

### RX12

#### Ref. 90425AW

- High performance intake/extract axial flow ventilation unit
- Balanced external rotor motor and sickle bladed impeller for quiet efficiency
- Choice of optional controllers
- Tamper-proof internal connection safety plug and socket

**Typical Specifications** on page 170.  
**Wiring Diagrams** on page 186.  
**Controller Details** on page 102.

## Controllers

### Single Fan Controller FR22/30

#### Ref. 21868AW

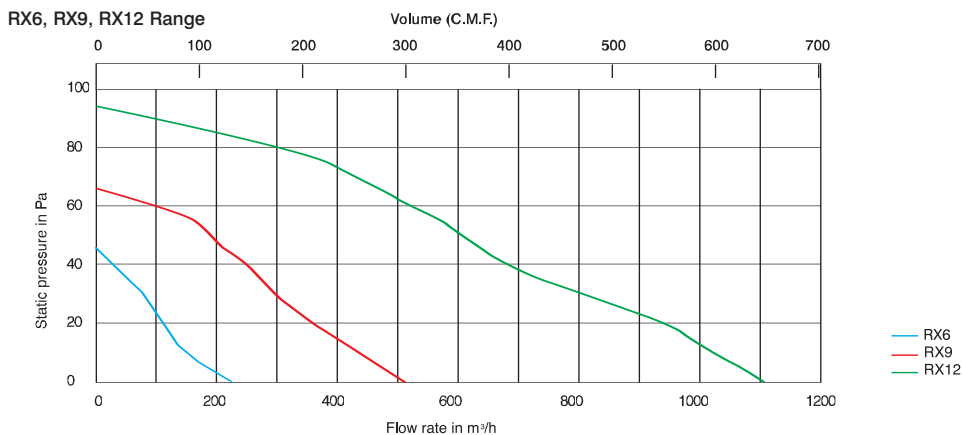
- For use with RX9 and RX12
- On/Off control with neon indicator. Used to select between high and low speed, intake and extract

### Group Fan Controller EC6H

#### Ref. 21854AW

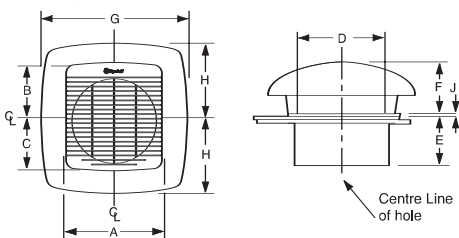
- For use with RX9 and RX12
- On/Off control with neon indicator. Infinitely variable speed selection controls extract and intake air flow. For use with up to four fans (not mixed sizes)

## Performance



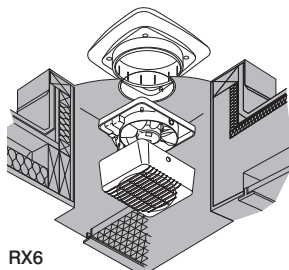
## Dimensions (mm)

### RX Range



Model	Dimensions (mm)								
	A	B	C	D	E	F	G	H	J
RX6	210	119	107	184	112	127	319	160	4/35
RX9	312	165	147	257	117	159	438	219	4/35
RX12	380	216	192	234	161	197	554	277	4/35

## Installation and Accessories



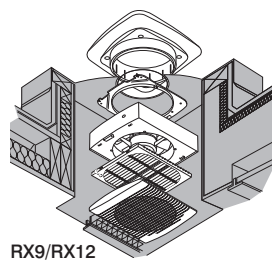
### RX6

#### Kerb Mounting

Hole diameter: 184mm

#### Installation Accessories

Roof Mounting Plate Ref. 00370AK  
 Kerb detail see **commercial accessories** on page 91



### RX9/RX12

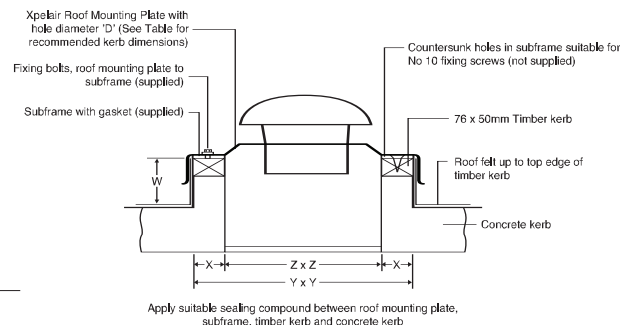
#### Kerb Mounting

Hole diameter: 257mm (RX9)  
 324mm (RX12)

#### Installation Accessories

Roof Mounting Plate Ref. 00371AK  
 Kerb detail see **commercial accessories** on page 91

### Roof Mounting Plate XRP for flat roof applications



Apply suitable sealing compound between roof mounting plate, subframe, timber kerb and concrete kerb

Model	Dimensions (mm)				
	W(min)	X	Y	Z	D hole
RX6	152	76	527	375	184
RX9	152	76	711	559	257
RX12	152	76	711	559	324



# Xpelair WX6, WX9 & WX12

## Commercial wall fans



### Key features

Type:	<b>Commercial duty ventilation unit</b>
Application:	<b>Pubs, restaurants, offices, kitchens, factories, schools and shops</b>
Control options:	<b>Extensive range of optional controllers available</b>
Legislation:	<b>Conforms to Building Regulations Part F1</b>
Hole diameter:	<b>w245 x h268 WX6/WX6T w345 x h375 WX9 w434 x h434 WX12</b>



### Select the right product for your application

	WX6	WX6T	WX9	WX12
Reference number	90822AW	90823AW	89996AW	90011AW
Remote switch (not supplied)	■	■	■	■
Integral adjustable run-on timer (2 to 20 mins)		■		
Extract only	■	■		
Selectable intake, extract or controller operation			■	■
Speeds	1	1	2*	2*
Extract performance (FID, m³/h)	246	246	783	1715
			663	1162
Extract performance (FID, l/s)	68	68	248	476
			184	179
Intake performance (FID, m³/h)			477	969
			437	815
Intake performance (FID, l/s)			133	269
			121	226
Sound pressure level (dB(A)@3m)	39	39	50	54
			47	48
Electrical power rating (W)	34	34	41	85
Hole diameter (w x h mm)	245 x 268	245 x 268	345 x 375	434 x 434
Max wall thickness (mm)	292	292	508	522
Weight (kg)	2.9	2.9	4.7	8.3
Guarantee (years, UK)	3	3	3	3

\*low speed only applies if fan used with FR22/30 controller. If controller not used fan is only single (high) speed

### The Range

Xpelair **WX** ventilation units – the ‘classic’ face of commercial wall fans. Discretely slim, tough and reliable within – a winning formula that has served generations of pubs, businesses and local authorities.

Stylish commercial duty unit ventilation designed for pubs, restaurants, offices, kitchens, factories, schools and shops. Suitable for single, cavity brick and current timber frame walls.

The wall hugging, low profile white fascia is styled to blend in cleanly with commercial surroundings. For safety, a finger guard is integrated into the Ultra slim high gloss ABS fascia and the exterior wall grille design. On **WX9** & **WX12** units a positive plug and socket assembly provides a means of isolation for service access without the safety risk of accidental disconnection.

All **WX** models come complete with a wall mounting kit which include a wall liner.

Both the **WX9** & **WX12** are reversible and now feature totally enclosed external rotor motors providing constant volume outputs, even in gusty external conditions. Pre-balanced sickle bladed impellers eliminate ‘fan judder’ and ensure quiet trouble free operation. Sealed for life maintenance free bearings ensure suitability for running at any angle. Running costs are impressively low, and when not in use the silent electro-thermal shutter cassette closes silently against backdraughts. And cleaning has never been easier. The housing, shutter cassette and impeller are all removed in seconds.

## Models

### WX6

#### Ref. 90822AW

- 6" high performance extract axial ventilation unit
- Suitable for single, cavity brick and current timber frame walls
- Sealed for life maintenance free bearings, suitable for running at any angle. Integrated safety thermal overload protection
- Built-in silent action electrothermal shutter cassette
- Passive tricklevent facility for background ventilation with fan Off
- Ultra slim high gloss ABS fascia with integral finger safety guard
- Shadow grey external grille for unobtrusive external appearance with built-in weather protection
- IPX4 rated motor

### WX6T

#### Ref. 90823AW

- As WX6 with overrun timer which typically connects to a lighting circuit
- Timer adjustable from 2-20mins run on period after light has been switched off
- IPX4 rated motor

### WX9

#### Ref. 89996AW

### WX12

#### Ref. 90011AW

- High performance intake/extract axial ventilation unit
- Optional controller available
- Suitable for single, cavity brick and current timber frame walls
- Balanced external rotor motor and sickle bladed impeller for quiet efficiency
- Sealed for life maintenance free bearings, suitable for running at any angle
- Built-in silent action electro-thermal shutter cassette
- Passive tricklevent facility for background ventilation with fan Off
- Ultra slim high gloss ABS fascia with integral finger safety guard
- Grey external grille for unobtrusive external appearance with built-in weather protection
- Tamperproof internal connection safety plug and socket
- IPX4 rated motor

**Typical Specifications** on page 171.  
**Wiring Diagrams** on page 186.  
**Controller Details** on page 102.

## Controllers

### Single Fan Controller FR22/30

#### Ref. 21868AW

- For use with WX9 and WX12
- On/Off control with neon indicator. Used to select between high and low speed, intake and extract

### Group Fan Controller EC6H

#### Ref. 21854AW

- For use with WX9 and WX12
- On/Off control with neon indicator. Infinitely variable speed selection controls extract and intake air flow. For use with up to four fans (not mixed sizes)

### Group Fan Controller XCC1

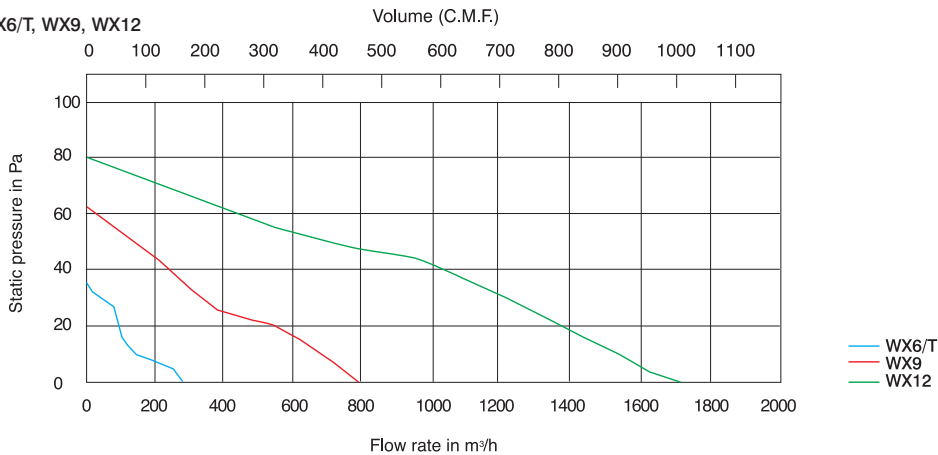
#### Ref. 21859AW

- For use with WX9 and WX12
- On/Off control with neon indicator



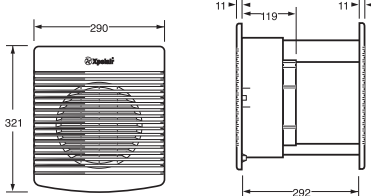
## Performance

WX6/T, WX9, WX12

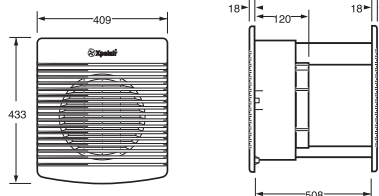


## Dimensions (mm)

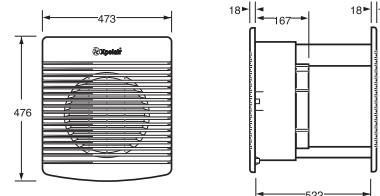
### WX6/T



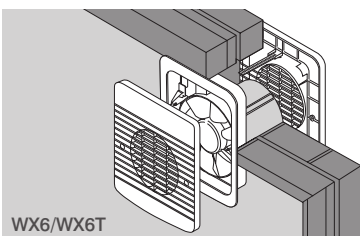
### WX9



### WX12

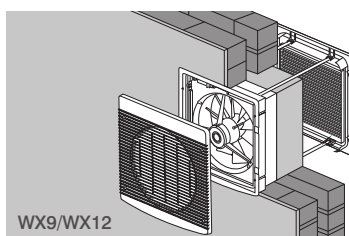


## Installation



### Wall Mounting

Hole diameter: w245 x h268mm



### Wall Mounting

Hole size: w345 x h375mm (WX9)  
w434 x h434mm (WX12)

# Xpelair WXXL350, WXXL400 & WXXL450

High performance extract and intake wall fans



## Key features

Type:	<b>Commercial duty ventilation unit</b>
Application:	<b>Pubs, restaurants, offices, kitchens, factories, schools and shops</b>
Control options:	<b>3 speed controller included</b>
Legislation:	<b>Conforms to Building Regulations Part F1</b>
Hole size:	<b>w400 x h400 WXXL350 w450 x h450 WXXL400 w500 x h500 WXXL450</b>

## The Range

The New Xpelair **WXXL** range is a designed for use in larger applications where extra extract or input performance is required.

Suitable for public areas in pubs, schools, municipal facilities and industry. Used in specialist applications such as squash courts, swimming pools, telephone exchanges, atriums.

Xpelair **WXXL** fans differ from comparable products in FOUR significant ways:

**Size**  
Although the fan diameters are the same **WXXL** fans require a substantially smaller hole through the wall.

**Security**  
Fitted with an electric shutter system and a tough flush fitting aluminium grille complete with bird guard on the external wall face.

**Control**  
Every fan comes complete with a built in control system which requires connection to a simple switch (also included).

**Ease of cleaning**  
The easy clean inner grille has a 'secret fixing' which allows the core of the grille to be removed for cleaning without the need to remove the frame.

## Select the right product for your application

	Extract wall fans			Intake wall fans		
	WXXL350	WXXL400	WXXL450	WXXLS350	WXXLS400	WXXLS450
Reference number	91301AA	91302AA	91303AA	91383AA	91384AA	91385AA
Extract wall fan	■	■	■			
Intake wall fan				■	■	■
Electric shutter				■	■	■
Speeds	3	3	3	3	3	3
Supplied with 3 speed control	■	■	■	■	■	■
Max extract performance (FID, m <sup>3</sup> /h)	2700	3600	5000			
Max extract performance (FID, l/s)	750	1000	1389			
Max intake performance (FID, m <sup>3</sup> /h)				2700	3600	5000
Max intake performance (FID, l/s)				750	1000	1389
Sound pressure level (dB(A)@3m)	54	59	63	54	59	63
Electrical power rating (W)	130	160	245	130	160	245
Weight (kg)	12	15	17	12	15	17
Hole size (w x h mm)	400 x 400	450 x 450	500 x 500	400 x 400	450 x 450	500 x 500
Max wall thickness (mm)	375	375	375	375	375	375
Guarantee (years)	2	2	2	2	2	2

## Models

WXXL350 Ref. 91301AA  
 WXXL400 Ref. 91302AA  
 WXXL450 Ref. 91303AA

- **Extract wall fan**
- G.S.M.telescopic wall liner is suitable for solid and cavity walls from 275mm to 375mm
- External rotor motor rated at IP44 with sealed for life maintenance free bearings
- Balanced motor and impeller for quiet efficiency
- Epoxy coated aluminium internal wall grille with removable core for easy cleaning
- Fan assembly is separately guarded for additional safety
- Electrically actuated heavy duty aluminium section gravity shutter system is housed behind an anodised aluminium external weather louvre and bird guard
- Built in three speed control. Separate slimline three position and Off selection switch provided for remote wall mounting
- Easy access terminal box

WXXLS350 Ref. 91983AA  
 WXXLS400 Ref. 91384AA  
 WXXLS450 Ref. 91385AA

- **Intake wall fan**
- Built in washable filter accessible from within the building
- G.S.M.telescopic wall liner is suitable for solid and cavity walls from 275mm to 375mm
- External rotor motor rated at IP44 with sealed for life maintenance free bearings
- Balanced motor and impeller for quiet efficiency
- Epoxy coated aluminium internal wall grille with removable core for easy cleaning fan assembly is separately guarded for additional safety
- Electrically actuated heavy duty aluminium section gravity shutter system is housed behind an anodised aluminium external weather louvre and bird guard
- Built in three speed control. Separate slimline three position and Off selection switch provided for remote wall mounting
- Easy access terminal box

## Controllers

### WXXL Integral Speed Control System

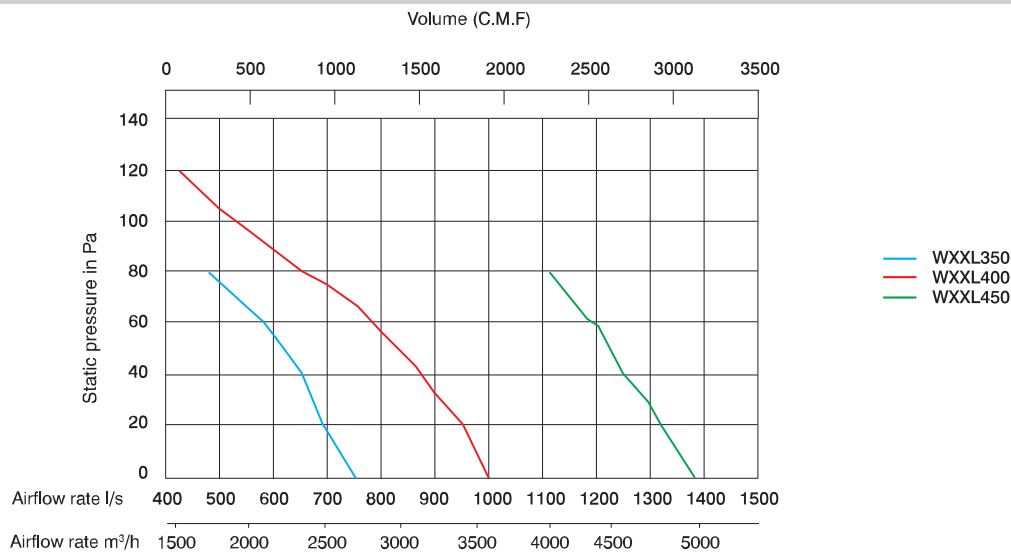
- A three speed transformer is located in the fan housing. The external slimline single gang speed selector provides three fan performances without motor 'hum' usually associated with electronic speed controls

### Three Speed Controller Ref. 91457AA

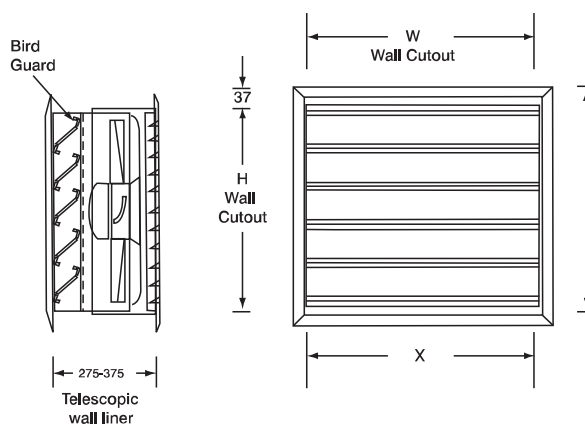


**Typical Specifications** on page 171.

## Performance



## Dimensions (mm)

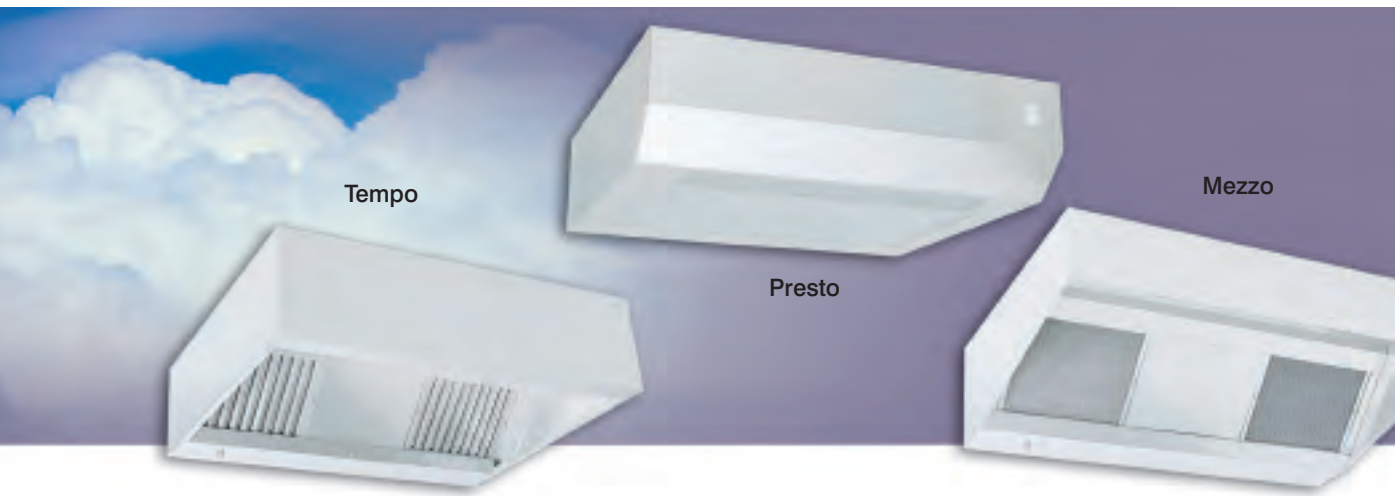


Telescopic wall duct

Model	Dimensions (mm)			
	W	H	X	I
350	400	400	474	474
400	450	450	524	524
450	500	500	574	574

# Xpelair ChefX

## Professional kitchen canopies



### Key features

Type: **Commercial kitchen extract canopies**

Application: **Kitchen extract**

Control options: **Transformer speed control**

Legislation: **Conforms to Building Regulations Part F1**



### The Range

A range of kitchen canopies designed for small professional catering and institutional applications.

Suitable for pub food preparation and wash up areas, club kitchens, cafeterias, smaller commercial kitchens, staff kitchenettes, student block kitchens, and a range of commercial applications.

**ChefX** canopies are an all in one solution to a range of standard commercial duty kitchen applications. Built to a professional specification.

**ChefX** are designed for continuous heavy use and a more demanding environment.

**ChefX** Presto and Mezzo canopies are fabricated in brush finish stainless steel complete with condensate channel and drain.

The three models in the range are manufactured complete with commercial duty filters and built in high pressure centrifugal fans allowing direct discharge to atmosphere or connection to ductwork.

When specifying, as a general guide, the hood should protrude outwards approximately 200mm beyond the working surface with the bottom of the hood 1900mm – 2000mm from the floor.

### Select the right product for your application

	Tempo	Presto	Mezzo
Reference number	91309AA	91310AA	91311AA
Air delivery (m <sup>3</sup> /h@100Pa)	400	2200	2800
Electrical power rating (W)	100	830	940
Electrical current rating (A)	0.45	3.8	4.4
Washable mesh filters	■	■	■
Width (mm)	600	1000	1000
Weight (kg)	6.5	44	43
Guarantee (years, UK)	2	2	2

## Models

### ChefX Tempo

#### Ref. 91309AA

- Robust design for institutional applications such as student block kitchens and staff rest room food preparation areas
- Brushed stainless steel housing
- 400m<sup>3</sup>/h extraction capacity @100Pa
- Washable G.S.M mesh filters
- Built in lighting - 1 x 11W CFL
- Top LH outlet
- Built in isolator and speed control with 'on' light
- Centrifugal fan / scroll assembly

### ChefX Presto

#### Ref. 91310AA

- For cafeterias, fast food outlets, food preparation and wash up areas
- Stainless steel housing with G.S.M support components
- 2200m<sup>3</sup>/h extraction capacity @100Pa
- Washable 25mm G.S.M mesh filters

- Top centre outlet to accept rectangular or circular ductwork
- Centrifugal double inlet fan and scroll assembly
- Speed controllable motor
- IPX4 rated motor
- Max ambient temp 65°C

### ChefX Mezzo

#### Ref. 91311AA

- Higher duty model for cafeterias, fast food outlets, food preparation and wash up areas
- Stainless steel housing with G.S.M support components
- 2800m<sup>3</sup>/h extraction capacity @100Pa
- Washable 25mm baffle filters
- Top centre outlet to accept rectangular or circular ductwork
- Centrifugal double inlet fan and scroll assembly
- Speed controllable motor.
- IPX4 rated motor
- Max ambient temp 65°C

## Controllers

### Five step auto transformer

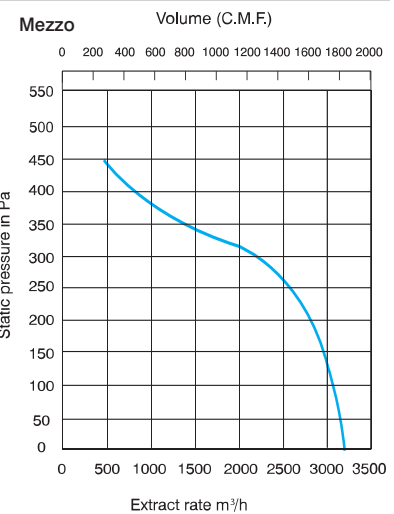
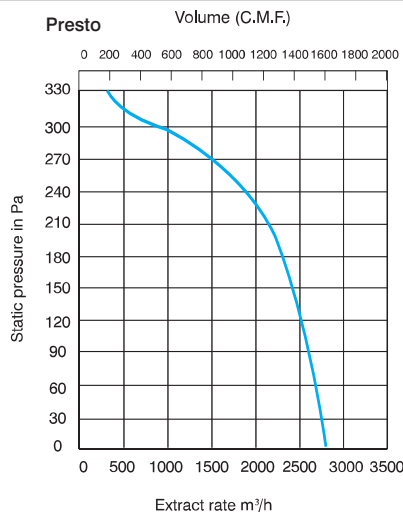
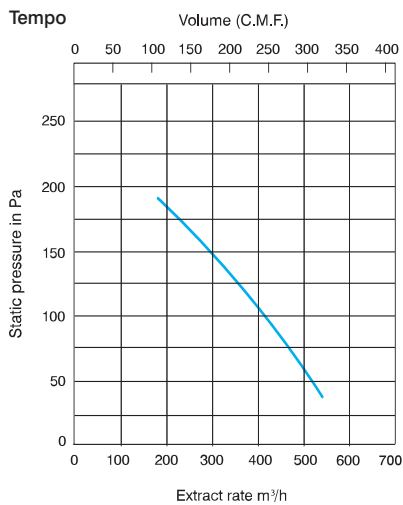
#### Ref. 91369AA

- Compatible with Presto and Mezzo models.
- 6 Amp transformer providing five speed operation. Robust ISO casing and IPX4 rated.



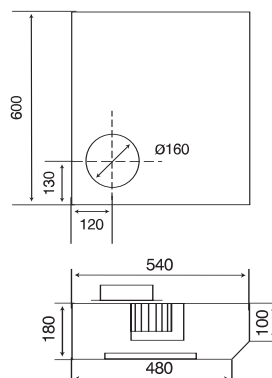
**Typical Specifications** on page 172.  
**Wiring Diagrams** on page 187.  
**Remote Sensors** on page 154.

## Performance

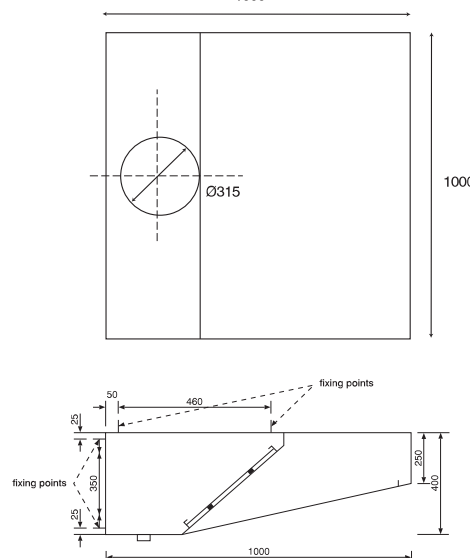


## Dimensions (mm)

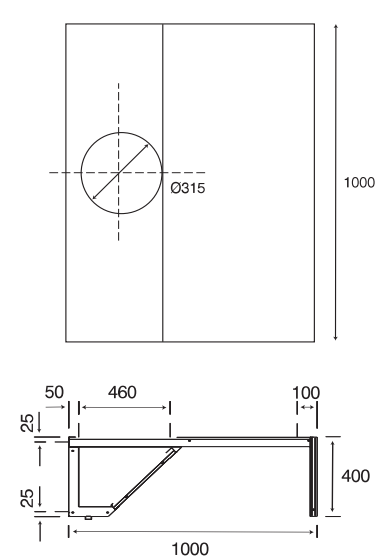
### Tempo



### Presto 1000



### Mezzo



# Xpelair Commercial Sensors and Switches



## Single Fan Controller FR22/30

Ref. 21868AW

- Sliding switches
- On/Off
- 2 speeds: low- high speed
- Extract - intake airflow
- Power 'on' indicator
- For surface or recess mounting
- Supply voltage: 220 -240V 50Hz
- Gloss white
- Use with: GX9, GX12, WX9, WX12, PX9, PX12, RX9, RX12
- w210 x h86 x d41mm



## Single Direction Group Fan Controller XCC1

Ref. 21859AW

- Sliding switches and speed control knob
- On/Off
- Infinitely variable speed control
- Single direction: extract or intake selected at installation
- Power 'on' indicator
- For surface or recess mounting
- Supply voltage: 220 - 240V 50Hz
- Gloss White
- Use with: GX9, GX12, WX9, WX12, PX9, PX12, RX9, RX12

Note: do not mix fan size. For use with up to 4 - size 12 or 6 - size 9 fans units.

- w160 x h86 x d45mm



## Reversible Group Fan Electronic Controller EC6H

Ref. 21854AW

- Sliding switches and speed control knob
- On/Off
- Infinitely variable speed control
- Extract - intake airflow
- Power 'on' indicator
- For surface or recess mounting
- Supply voltage: 220 - 240V 50Hz
- Gloss White
- Use with: GX9, GX12, WX9, WX12, PX9, PX12, RX9, RX12

Note: do not mix fan size. For use with up to 4 - size 12 or 6 - size 9 fans units.

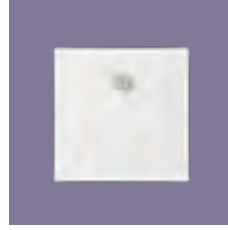
- w160 x h86 x d45mm



## Remote Humidistat XRH

Ref. 21856AW

- Stand alone humidistat switches on when RH rises to preset level and Off when it declines
- Fan operation indicator light
- Pullcord operated override switch
- Surface or recess mounting
- White finish
- Supply voltage 220 - 240V 50Hz
- Use with: GX6, GX9, GX12, WX6, WX9, WX12, PX6, PX9, PX12, RX6, RX9 & RX12
- w160 x h86 x d41mm



## Passive Infrared Sensor XPIRA

Ref. 21871AA

- Position to switch the fan on when body movement is detected. Ideal for infrequently used public spaces
- Built in run on timer to avoid nuisance tripping
- For indoor use only
- Use with: GX6, GX9, GX12, WX6, WX9, WX12, PX6, PX9, PX12, RX6, RX9 & RX12
- w86 x h86mm



## Time Controller DT20B

Ref. 21850AW

- Usually connected to the lighting circuit. Fan switches On with the light. Provides continued ventilation run-on period after the light has been switched off
- User adjustable up to 20min
- Surface or recess mounting
- White finish
- Supply voltage 220-240V 50Hz
- Use with: GX6, GX9, GX12, WX6, WX9, WX12, PX6, PX9, PX12, RX6, RX9 & RX12
- w100 x h86 x d45mm



## Controller HC301

Ref. 21877AW

- On/Off switch
- Fan only/fan and heater options
- Variable thermostatic control
- Suitable for surface or recessed installation
- Colour: White
- Used with WH30 and WHP30
- w210 x h86 x d41mm



## Air Quality Sensor AQS

Ref. 92097AW

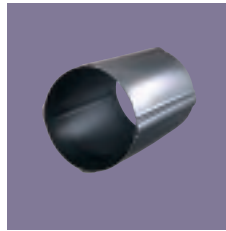
- Provides fully automatic control
- Detects contaminants such as cigarette smoke, body odours, toilet odours and cooking smells
- Activates ventilation system when preset threshold level is exceeded
- Can control up to six fans and accessories
- Integral timer adjustable from 3 - 30 mins
- LED status indicator
- Surface or recess mounting
- Supply voltage 220-240V 50Hz
- w160 x h86 x d41mm



### GX Wall Kits WK

WK6/8	200mm (GX6)	Ref. 89369AA
WK6/11	280mm (GX6)	Ref. 89370AA
WK9/8	200mm (GX9)	Ref. 89371AA
WK9/11	280mm (GX9)	Ref. 89372AA
WK12/8	200mm (GX12)	Ref. 89373AA
WK12/11	280mm (GX12)	Ref. 89374AA

- For bridging cavity walls and lining double brick walls
- Steel wall liner
- Length: 200mm and 280mm
- Set of 508mm ladder strips



### Extendible Interlocking Wall Kits WK6

WK6/300	Ref. 90085AA
WK6/450	Ref. 90086AA

- For bridging cavity wall constructions, or lining solid double brick walls
- Interlocking facility to build up to required length
- Available in 300mm or 450mm lengths
- Complete with 508mm ladder strips



### Darkroom Cowl DC9

Ref. 98409AK

- For use in scientific and photographic applications
- Replaces the outer grille on GX9 and GXC9 models
- Roof, window or wall mounting
- Hole Ø257mm
- Colour: black
- Use with: GX9, GXC9
- w475Ø d144 x 117



### Distance Pieces GXDP

Ref. 56708AA

- Allows GX units to be fixed to distorted walls of 38mm minimum thickness
- By spacing the fan unit and outer grille away from the wall or panel, distortion through over tightening is prevented
- Set of 6



### Roof Cows RC

RC6	Ref. 89997AW (GX6, GXC6)
RC9	Ref. 90048AW (GX9, GXC9)
RC12	Ref. 90092AW (GX12)

- For use in roof applications.
- The cowl is fitted in place of an exterior grille.
- Can also be used in exposed window or wall applications subject to strong prevailing winds



### Roof Mounting Plates XRP

XRP6 (RX6)	Ref. 00370AK
w592 x h542 x d89 Ø105	
XRP9 (RX9)	Ref. 00371AK
w774 x h774 x d101 Ø257	
XRP12 (RX12)	Ref. 00371AK
w774 x h774 x d101 Ø324	

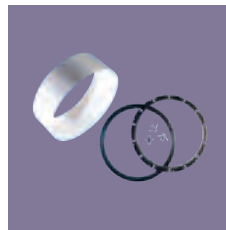
- Provides effective and secure installation in flat roof applications
- Flame retardant resin bonded fibre glass.
- Requires the installer to build a kerb onto which plate is fixed. Always use sealant to bed in the outer cowl seal for weatherproof joint
- Colour black



### GX Longer Length Ladder Strips GXL

GXL20	20 pack	Ref. 89382AA
GXL50	50 pack	Ref. 89383AA

- Used when installing GX fans through walls
- Length 508mm
- Easy to cut
- GX6 & GXC6 2 strips
- GX9 & GXC9 3 strips
- GX12 4 strips



### Double Window Kits GXDW

GXDW6	(GX6 & GXC6)	Ref. 98229AA
GXDW9	(GX9 & GXC9)	Ref. 98228AA
GXDW12	(GX12)	Ref. 98227AA

- For hinged double windows only
- For installation of GX fans into separate double windows spaced between 32mm and 102mm
- Allows inner casement window to be opened without dismantling the fan



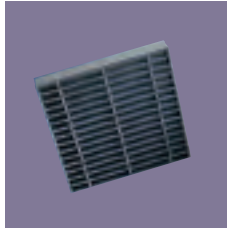
# Xpelair Commercial Accessories



## Air-Replacement Grilles ARG

ARG20 w200 x h200 mm Ref. 89833AA  
 ARG30 w300 x h300 mm Ref. 89834AA

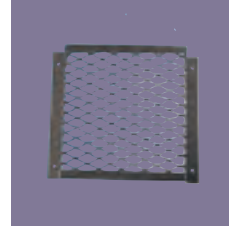
- For use with all commercial fans
- Fitted to doors or partition walls to provide adequate air replacement for a fan
- Can be used in conjunction with FIRE BLOCK FB in fire doors and panels to prevent the breach of fire protected areas or compartments
- Each set comprises 2 grilles



## Fire Blocks FB

FB20 w200 x h200 mm Ref. 89835AA  
 FB30 w300 x h300 mm Ref. 89836AA

- For use with air replacement grille (ARG)
- Fitted between two grilles in a fire door or compartment
- Spec fire rated 60 mins to BS478 Part 8



## Protective Wall Grilles PG

PG6 (GX6, GXC6, WX6) Ref. 89375AA  
 PG9 (GX9, GXC9, WX9) Ref. 89376AA  
 PG12 (GX12) Ref. 89377AA  
 PGW12 (WX12) Ref. 90204AA

- For use with GX and WX fans to protect the exterior grille from damage by vandals
- Constructed from steel mesh and finished in black epoxy powder paint
- Surface mounted to exterior wall using fixing screws and wall plugs provided
- w356 x h305 x d67mm



## Flexible Ducting Xflex FD

	Dia	Length	
FD100	100mm	3m	Ref. 89663AA
		6m	Ref. 89669AA
FD125	125mm	3m	Ref. 89664AA
		6m	Ref. 89670AA
<b>Commercial Diameters</b>			
FD150	150mm	3m	Ref. 89665AA
		6m	Ref. 89671AA
FD200	200mm	3m	Ref. 89666AA
		6m	Ref. 89672AA
FD250	250mm	3m	Ref. 89667AA
		6m	Ref. 89673AA
FD315	315mm	3m	Ref. 89668AA
		6m	Ref. 89674AA

- Glass fibre fabric on a PVC coated close pitch steel wire helix. 54 minute fire integrity from within as measured to BS 476: Part 20 - (1987)
- Can be interlocked and sealed with duct tape to form an airtight seal
- Attached to spigots using worm drive clips



## New Aluminium Flexible Ducting Xflex ALU

	Dia	Length	
ALU100	100mm	10m	Ref. 91435AA
ALU125	125mm	10m	Ref. 91436AA
ALU150	150mm	10m	Ref. 91437AA
<b>Commercial Diameters</b>			
ALU200	200mm	10m	Ref. 91438AA
ALU250	250mm	10m	Ref. 91439AA
ALU315	315mm	10m	Ref. 91440AA
ALU400	400mm	10m	Ref. 91441AA

- Tough foil construction on a high strength wire helix
- Over 40 minute fire rating BS 476: Part 20 (1987)



## Thermal Flexible Ducting Xflex TFD

	Dia	Length	
TFD100	100mm	5m	Ref. 89847AA
		10m	Ref. 91459AA
TFD125	125mm	5m	Ref. 89848AA
		10m	Ref. 91460AA
TFD150	150mm	5m	Ref. 89849AA
		10m	Ref. 91461AA
<b>Commercial Diameters</b>			
TFD200	200mm	5m	Ref. 89850AA
		10m	Ref. 91462AA
TFD250	250mm	5m	Ref. 89851AA
		10m	Ref. 91463AA
TFD315	315mm	5m	Ref. 89852AA
		10m	Ref. 91464AA

- Double skinned insulated aluminium duct with high density fibreglass insulation to minimise condensation formulation
- 25 minute fire integrity from within as measured to BS 476: Part 20 - (1987)
- Can be interlocked and sealed with duct tape to form an airtight seal
- Attached to spigots using worm drive clips



**Worm Drive Clips WDC**  
Dia

WDC5 100 -125mm	Ref. 89684AA
WDC8 150 - 200mm	Ref. 89685AA
WDC13 250 - 315mm	Ref. 89686AA

- Steel clips for connecting flexible ductwork to spigots.
- Supplied in packs of 10



**Grille Box GB**

	Duct Dia	Square	
GB20/100	100mm	200mm	Ref. 89676AA
GB20/125	125mm	200mm	Ref. 89677AA
GB20/150	150mm	200mm	Ref. 89678AA
GB30/200	200mm	300mm	Ref. 89679AA
GB30/250	250mm	300mm	Ref. 89680AA
GB45/315	315mm	450mm	Ref. 89681AA
GB50/315	315mm	500mm	Ref. 89828AA
GB60/315	315mm	600mm	Ref. 90296AA

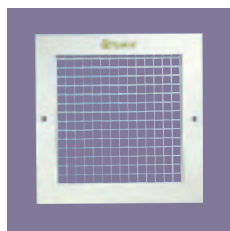
- Used in conjunction with egg-crate ceiling grille and ceiling diffuser grille to connect to ductwork
- Use Xflex FD or TFD to attach to spigot and secure with worm drive dip



**Spigot Plates SP**

	Duct Dia	Square	
SP100	100mm	180mm	Ref. 89697AA
SP125	125mm	175mm	Ref. 89698AA
SP150	150mm	200mm	Ref. 89699AA
SP200	200mm	250mm	Ref. 89700AA
SP250	250mm	300mm	Ref. 89701AA
SP315	315mm	365mm	Ref. 89702AA

- Fixes to the interior surface of wall to connect to Xflex ducting
- Connect duct using worm drive clips
- Material: plastic



**Egg-crate Ceiling Grilles CG**

	Square	SATIN SILVER
CG20	200mm	Ref. 89675AA
CG30	300mm	Ref. 89532AA
CG45	450mm	Ref. 89533AA
CG50	500mm	Ref. 89827AA
CG60	600mm	Ref. 90295AA

	Square	WHITE
CG20	200mm	Ref. 89823AW
CG30	300mm	Ref. 89824AW
CG45	450mm	Ref. 89825AW
CG50	500mm	Ref. 89826AW

- Can be used on ceilings or internal walls as an air replacement grille with large free area
- Aluminium construction
- Fixing screws provided (not size 600)
- Use with grille boxes and Xflex ducting
- Colours: Satin silver or white



**Ceiling Diffuser Grilles DG**

	Square	SATIN SILVER
DG20	200mm	Ref. 89816AA
DG30	300mm	Ref. 89818AA
DG45	450mm	Ref. 89820AA
DG50	500mm	Ref. 89822AA
DG60	600mm	Ref. 90292AA

	Square	WHITE
DG20	200mm	Ref. 89815AW
DG30	300mm	Ref. 89817AW
DG45	450mm	Ref. 89819AW
DG50	500mm	Ref. 89821AW
DG60	600mm	Ref. 90603AW

- For air input systems terminating at ceilings and internal walls
- Adjustable grille vanes to set up direction of airflow for a particular area
- Fixing screws provided (not size 600)
- Use with grille boxes and Xflex ducting
- Aluminium construction
- Colours: Satin Silver or White



**Air Volume Dampers AVD**

	Square	
AVD20	200mm	Ref. 89829AA
AVD30	300mm	Ref. 89830AA
AVD45	450mm	Ref. 89831AA
AVD50	500mm	Ref. 89832AA

- Clips directly to an eggcrate grille or ceiling diffuser grille to adjust the volume of air entering the room
- Lever adjustment
- Depth 44mm
- Used together with Grille Box and Xflex ducting
- Material: Aluminium Mill finish