



# POSITIVE INPUT VENTILATION (PIV)



CREATING  
A HEALTHY  
INDOOR  
ENVIRONMENT

A large, central image shows a close-up of a blue Positive Input Ventilation (PIV) unit. The unit has a blue plastic housing with a circular access panel. It is connected to a long, grey, flexible ribbed duct that curves around the unit. A blue flexible duct is also visible on the right side. A dotted line highlights the connection point between the two ducts. In the bottom left corner of the image, there is a blue semi-transparent oval containing the text "CREATING A HEALTHY INDOOR ENVIRONMENT".

## NUAIRE'S PEDIGREE

# Proud to Build British

Nuaire is a world leader in the design and manufacture of fans and ventilation systems. We put our energy into efficient ventilation so you don't waste yours.

Nuaire is a British company that designs and manufactures innovative ventilation products for the residential and commercial sectors. We are proud to be recognised for our expertise, commitment to innovation and the outstanding quality of our products and customer service.

Our people are at the heart of Nuaire, we have more than 400 experienced staff based at our headquarters, with a further 65 technical sales engineers throughout the UK and Ireland.



MADE IN  
GREAT BRITAIN

GETTING IT  
RIGHT FROM  
THE START



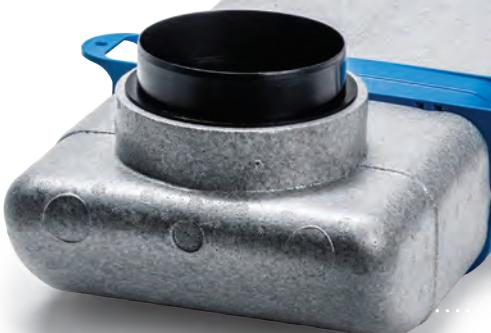
Based in South Wales, our factory covers 18,000m<sup>2</sup>, allowing us to manufacture almost all of our products on site; from small bathroom fans to large air handling units.

In recent years Nuaire has invested millions of pounds into a new manufacturing plant to support its plans for growth.

"Our manufacturing facility is approximately 4 x the size of the Wembley pitch"



Nuaire's technical application team can offer expert advice and support to help you make the right choice in your ventilation strategy. Providing a simple, quick selection or offering advice on compliance with the very latest building regulations and environmental issues, we are here for you every step of the way.





### Advice On Compliance and SAP Q

Stay ahead of the latest building regulations and make the best product and fabric choices.



### Over 65 Sales Staff

Field and office based staff to support you at every stage.



### Gold Star Aftercare

Our comprehensive product warranty and dedicated after sales support gives you peace of mind.



### The Full Service

Help with product selection, detailed parts lists and fast delivery to ensure you meet your deadline and budget.



# POSITIVE INPUT VENTILATION (Alternative Systems)

Nuaire's alternative approach to continuous mechanical ventilation is Positive Input Ventilation (PIV).

Invented by Nuaire and installed in thousands of dwellings each year, PIV can be a more cost-effective and simple to install ventilation solution, whilst still meeting building regulations.

From this...



THE ALTERNATIVE METHOD FOR BUILDING REGULATIONS



...to this

It has become the UK's most popular alternative method of low energy, cost-effective ventilation.

## CREATES A HEALTHY LIVING ENVIRONMENT

Significantly improves indoor air quality by removing indoor air pollutants such as carbon monoxide and keeping out external pollutants such as traffic fumes and pollen.

## PIV How does it work?

### MOISTURE AND CONDENSATION ARE DRIVEN OUT

The filtered air gently pressurises the home from inside out, forcing out the stale air.

### NO NEED TO OPEN WINDOWS TO VENTILATE

Clean, fresh air is continuously drawn in through the loft's natural leakage points, passed through the filters and fed into the property via a central hallway diffuser.



Nuaire offers solutions for homes with a loft, without a loft and even three-storey homes.

The simple installation of Drimaster is fully compliant to building regulations and only requires minimal maintenance.



For homes without a loft, the Flatmaster product is compact and can be fitted in a convenient location, such as a utility cupboard or hallway.



PIV systems are proven to be effective units in significantly reducing radon gas levels in affected areas.

The system works by gently supplying fresh, filtered air into the property. This process changes the airflow direction within the dwelling to force the air contaminated by radon out of the home.

PIV technology is also proven to help allergy and asthma sufferers by guaranteeing filtered, quality indoor air.

Averaging approximately 0.16 watts/l/s, with solar gains up to 550kw/hr/year, PIV is an ideal low power ventilation solution.



# The DRIMASTER eco Range

The DRIMASTER-ECO range provides whole home ventilation using the Positive Input Ventilation principle, which introduces fresh filtered air into the dwelling at a continuous rate, encouraging movement of air from inside to outside. To achieve this the unit is mounted in the loft space, drawing air through the filters and inputting it, at ceiling level, into the property.

The Drimaster units are fitted with an internal temperature sensor, which continuously monitors the temperature in the loft and boosts the air volume when the loft temperature is above a set level (heat recovery mode). If the loft temperature becomes excessive, the unit will switch to standby mode (no airflow). Once installed, the airflow can be set to suit the house size and if required, the way it responds to the temperature change within.



## DRI-ECO-HC

The DRI-ECO-HC enhances Nuaire's PIV technology with the added benefit of having the system controls located in the contemporary ceiling diffuser. This unique feature bestows the homeowner with complete control of the unit, without having to enter the loft space. Not only can settings be altered with the push of a button on the contemporary diffuser, but there is also a 7 segment display which notifies the user of the need for filter change and what setting the Drimaster is running on.



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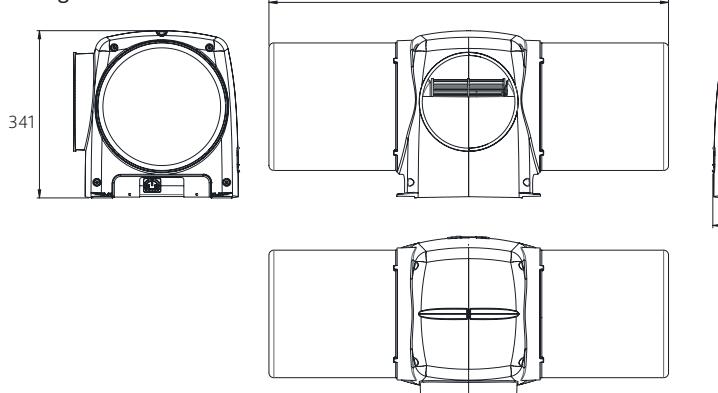
DRI-ECO-HC INSTALLATION



## Technical

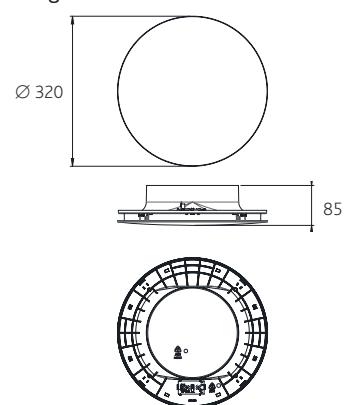
### DIMENSIONS (mm) & UNIT WEIGHT

Weight - 3.5KG



### DIFFUSER (mm)

Weight - 1KG



## Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface, e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 3 core mains

cable from the power supply should be connected to a fixed wiring installation, via the isolator, via the spur, in accordance with current IEE wiring regulations.

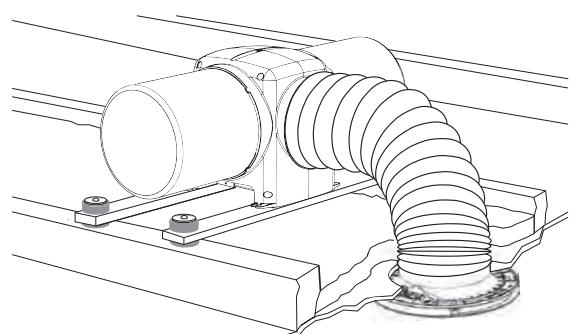
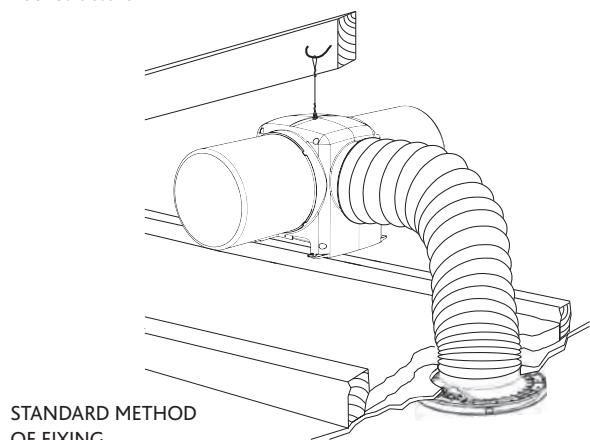
## Electrical Details

	Voltage	Consumption
DRI-ECO-HC	230V 1ph 50Hz	1.6W(min) 15.3W(max)

## Typical Installation

### INSTALLATION OPTIONS

Roof structure



## DRI-ECO-LINK-HC

The DRI-ECO-LINK-HC sees Nuaire offer its long-standing PIV technology alongside innovative remote control and sensor capabilities.

By offering a choice of interactive sensors, Nuaire has created an adaptable, market-leading PIV product. Homeowners can choose to use one or all of the sensors available for optimum system performance, in addition to the unique controls sited at our re-designed, modern ceiling diffuser.

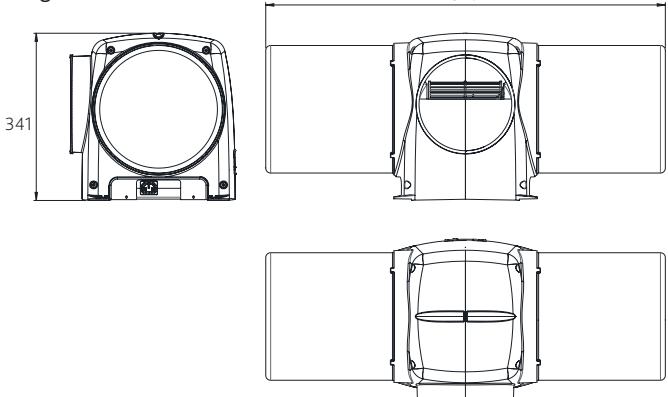


DRI-ECO-LINK-HC INSTALLATION

## Technical

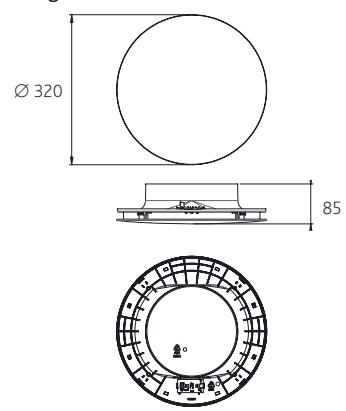
### DIMENSIONS (mm) & UNIT WEIGHT

Weight - 3.5KG



### DIFFUSER (mm)

Weight - 1KG



## Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface, e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 3 core mains

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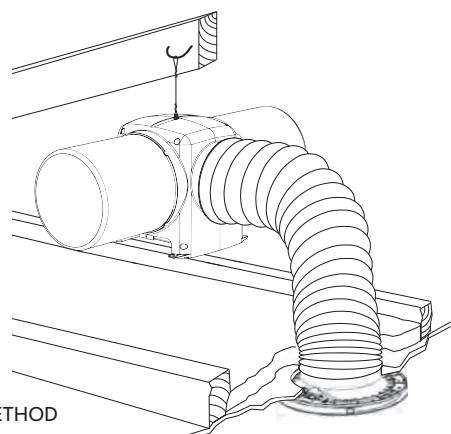
## Electrical Details

	Voltage	Consumption
DRI-ECO-LINK-HC	230V 1ph 50Hz	1.6W(min) 15.3W(max)

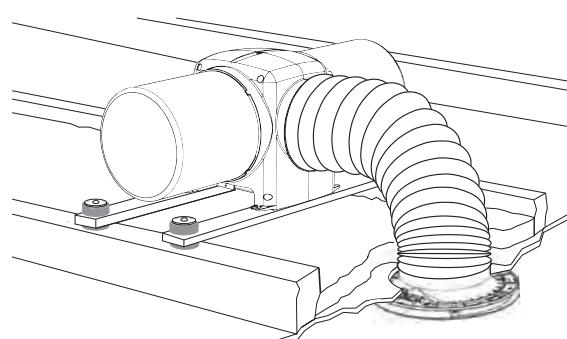
## Typical Installation

### INSTALLATION OPTIONS

Roof structure



STANDARD METHOD OF FIXING



OPTIONAL METHOD OF FIXING. (AV MOUNTING KIT ON TO ROOF JOISTS)

## Remote/Wired Sensors



DRI-ECO-2S

A 2 button switch that gives the homeowner control to increase the airflow within the property when required.



DRI-ECO-CO2

A Carbon Dioxide CO<sub>2</sub> sensor which must be wired directly in to the mains power supply. This ancillary will provide complete confidence in the property's air quality by alerting the home owner if dangerous levels of CO<sub>2</sub> arise.



DRI-ECO-RH

Nuaire's latest Relative Humidity sensor monitors the humidity levels within the home and instructs the unit within the loft to adjust the speed in order to maintain optimum comfort.



DRI-ECO-RM

The remote monitoring device will allow readings to be taken from outside the property to determine how long the unit has been running and the operating speed of the unit. This will benefit the social housing provider when checks are carried out to ensure measures put in place to alleviate condensation issues are being adhered to, without having to enter the property.

## DRI-ECO-HEAT-HC

The unique DRI-ECO-HEAT-HC incorporates all of the functions of our DRI-ECO-LINK-HC unit but with the benefit of an integral heating element, located between the flexible duct and ceiling diffuser.

This heating component will temper the air which is distributed through the property via the ceiling diffuser, thus ensuring a comfortable living environment. This pioneering design sees the low watt heater (400w) react efficiently and effectively, guaranteeing an economically friendly product.

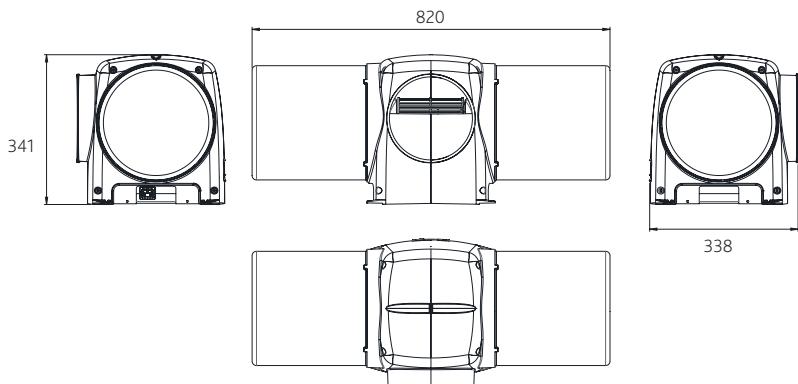


DRI-ECO-HEAT-HC INSTALLATION

## Technical

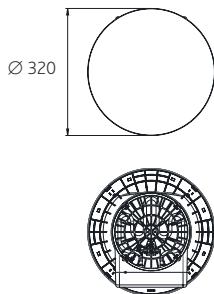
### DIMENSIONS (mm) & UNIT WEIGHT

Weight - 3.5KG



### DIFFUSER (mm)

Weight - 1KG



### INTEGRAL HEATER (mm)

Weight – 2KG



## Wiring

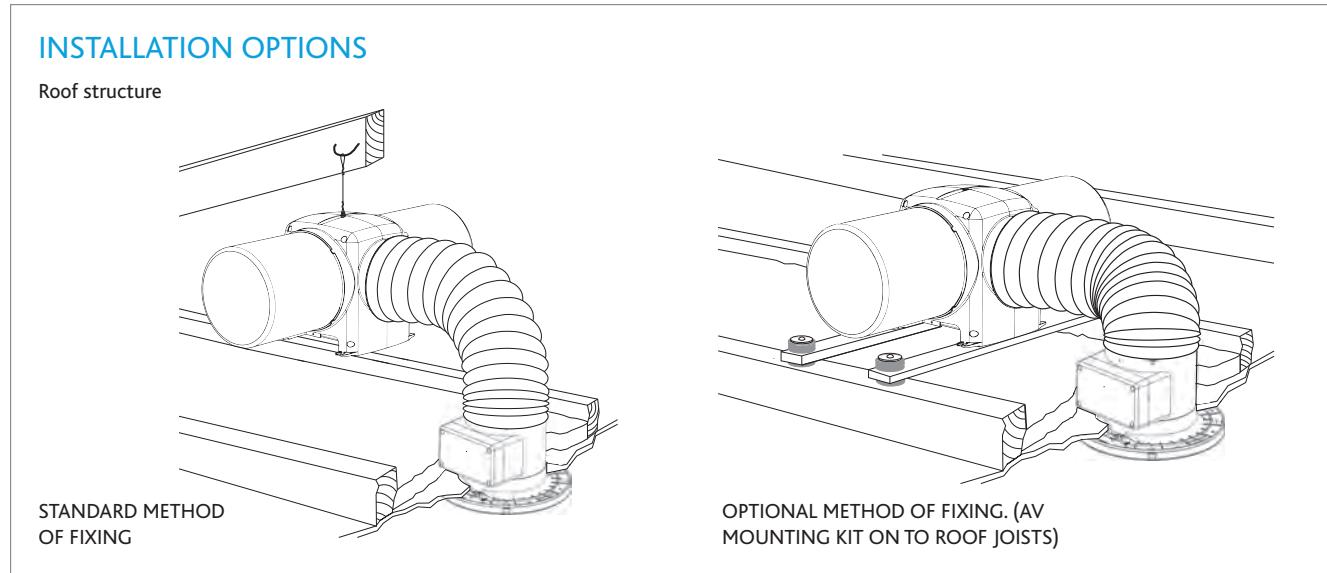
The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface, e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 3 core mains cable from the power supply should be connected to a fixed wiring installation, via the isolator, via the spur, in accordance with current IEE wiring regulations.

## Electrical Details

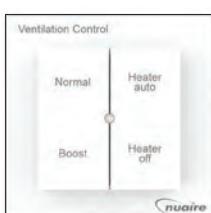
	Voltage	Consumption
DRI-ECO-HEAT-HC	230V 1ph 50Hz	1.6W(min) 15.3W(max)

Standard running: 1.6W(min) 15.3W(max) Up to 400W with heater at full load.

## Typical Installation



## Remote/Wired Sensors



**DRI-ECO-4S**

This remote 4 button switch controls the running functions of both the Drimaster unit itself as well as the integral heater. By splitting the control options the occupier is presented with the ability to choose the function which best suits their home.



**DRI-ECO-CO2**

A Carbon Dioxide CO<sub>2</sub> sensor which must be wired directly in to the mains power supply. This ancillary will provide complete confidence in the property's air quality by alerting the home owner if dangerous levels of CO<sub>2</sub> arise.



**DRI-ECO-RH**

Nuaire's latest Relative Humidity sensor which reads the humidity levels in the home and feeds back to the Drimaster unit, controlling its running speed in order to maintain optimum comfort.



**DRI-ECO-RM**

The remote monitoring device will allow readings to be taken from outside the property to determine how long the unit has been running and the operating speed of the unit. This will benefit the social housing provider when checks are carried out to ensure measures put in place to alleviate condensation issues are being adhered to, without having to enter the property.

# Consultants Specification

Low energy Positive Input Ventilation system for use in homes with a loft.

The unit shall be robustly constructed from ABS polymer and the casing shall be of spherical pattern, with a flat mounting base.

Flame retardant filters of G4 grade, surface area approximately 0.47m<sup>2</sup> (with 5 year typical maintenance period) shall be fitted, which may be removed from the unit without the use of tools. The filters shall be arranged such as to prevent their obstruction in the loft space.

The unit shall incorporate a forward curved centrifugal impeller and high efficiency brushless DC motor fitted with sealed for life, self-lubricating bearings and locked rotor protection. The unit's average power consumption shall be 0.16 watts per l/s airflow.

The unit shall be supplied with a 2m length of flexible ducting and all necessary connectors and fittings.

The unit shall weigh less than 6kg and we recommend the unit is suspended from the roof structure. The unit shall be supplied with a purpose designed flame retardant polymer diffuser for efficient, directable air input. The diffuser design shall be optimised for use in areas where smoke detectors are fitted. The unit shall include 5 programmable temperature control strategies, 6 volume control settings and an optional high duty boost setting, providing an airflow rate of 70 l/s for optimum performance and occupant comfort. All control/duty strategies shall be optimised for maximum performance and occupant comfort.

An internal run motor shall record the unit's operational time. The unit shall be offered with a 7 year warranty. For information on reducing radon egress, it is suggested that the details given in Positive Pressurisation: A BRE Guide to Radon Remedial Measures in Existing Dwellings may be considered.

## DRI-ECO-HC

The DRIMASTER-ECO-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor is to increase airflow to the dwelling when the loft is warmer than the house. The units 'Fixed Temperature Heat Recovery' strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly. This unit has all of the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property.

## DRI-ECO-LINK-HC

The DRIMASTER-ECO-LINK-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor is to increase airflow to the dwelling when the loft is warmer than the house. The units 'Fixed Temperature Heat Recovery' strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. It also has the ability to be controlled using a RF function and can be boosted from a remote wall mounted switch, remote CO<sub>2</sub> detector and an RH sensor.

## DRI-ECO-HEAT-HC

The DRIMASTER-ECO-HEAT-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor is to increase airflow to the dwelling when the loft is warmer than the house. The units 'Fixed Temperature Heat Recovery' strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. A heater section incorporating a 400w heating element shall be fitted to the fan unit. It shall be electronically controlled so as to minimise energy use. A temperature sensor shall be fitted to the outlet of the heater and will control the output of the heater in an attempt to maintain the set point. The set point will be adjustable between 6°C and 20°C. It also has the ability to be controlled using a RF function and can be boosted from a remote wall mounted switch, remote CO<sub>2</sub> detector and an RH sensor.

# Nuaire invented PIV over 40 years ago!



OUR REPUTATION IS BASED  
ON PROVEN ACHIEVEMENTS

1st to introduce the  
Positive Input Ventilation strategy

1st to develop MVHR and MEV systems

1st to offer REVIT compatible BIM files

1st to provide a free  
design service to customers

## DRI-ECO-LC

The DRIMASTER-ECO range provides whole home ventilation using the Positive Input Ventilation principle, which introduces fresh filtered air into the dwelling at a continuous rate, encouraging movement of air from inside to outside.

The DRI-ECO-LC is our basic unit which provides all of the benefits of Positive Input Ventilation, offering system controls on the unit within the loft space. Whilst the controls offer variable options, when the Drimaster is installed the system should be set to a speed that is suitable to the property meaning access to the loft is only necessary for the replacement of filters.

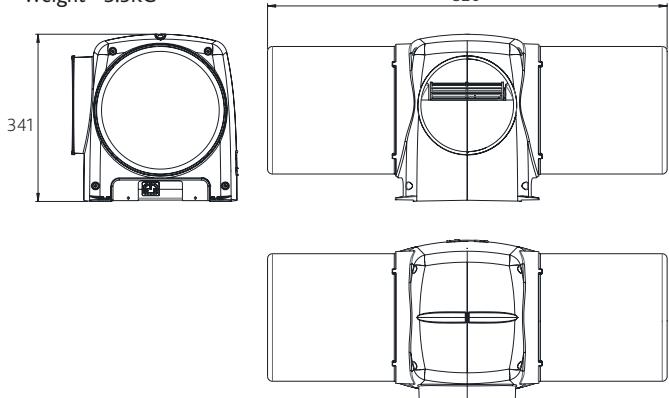


DRI-ECO-LC INSTALLATION

## Technical

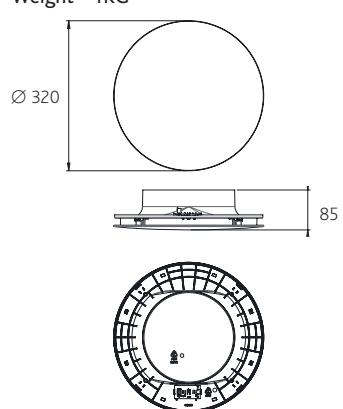
### DIMENSIONS (mm) & UNIT WEIGHT

Weight - 3.5KG



### DIFFUSER (mm)

Weight - 1KG



## Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface, e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 3 core mains

cable from the power supply should be connected to a fixed wiring installation, via the isolator, via the spur, in accordance with current IEE wiring regulations.

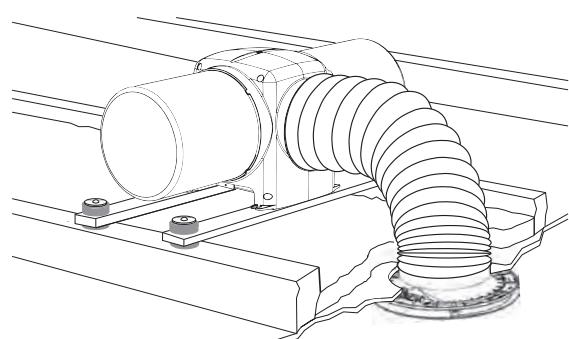
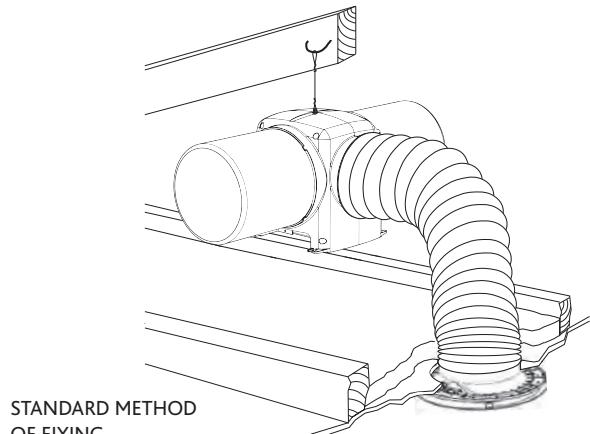
## Electrical Details

	Voltage	Consumption
DRI-ECO-LC	230V 1ph 50Hz	1.6W(min) 15.3W(max)

## Typical Installation

### INSTALLATION OPTIONS

Roof structure



## DRI-ECO-3STOREY

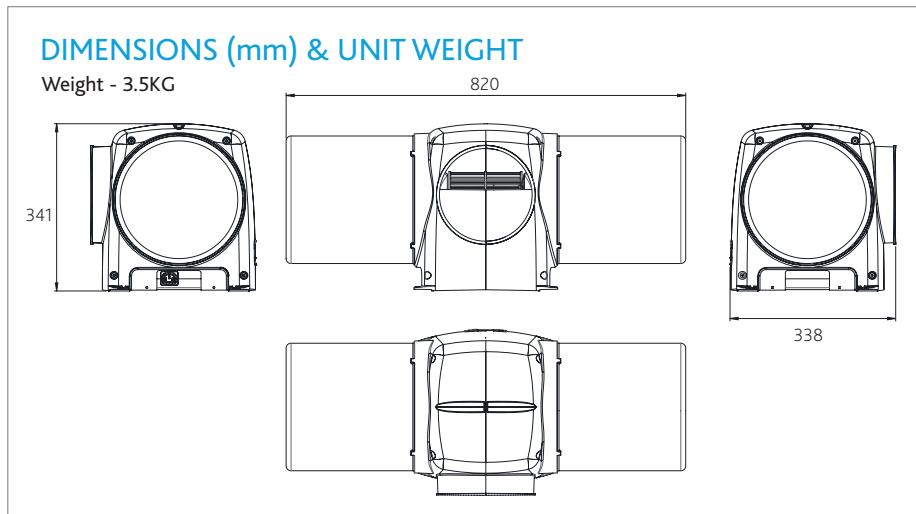
The DRI-ECO-3STOREY is the only unit within the DRIMASTER-ECO range which is suitable for install within three storey properties, by using an intumescent aluminium diffuser in order to meet fire regulation standards.

The unit itself works by drawing fresh air in from the loft space and dispersing it through the property via a powder coated ceiling diffuser, which provides a 1 hour fire-block. This technology is fundamental to the well-being of the home owner and allows Nuaire to offer a ventilation solution for every property type.



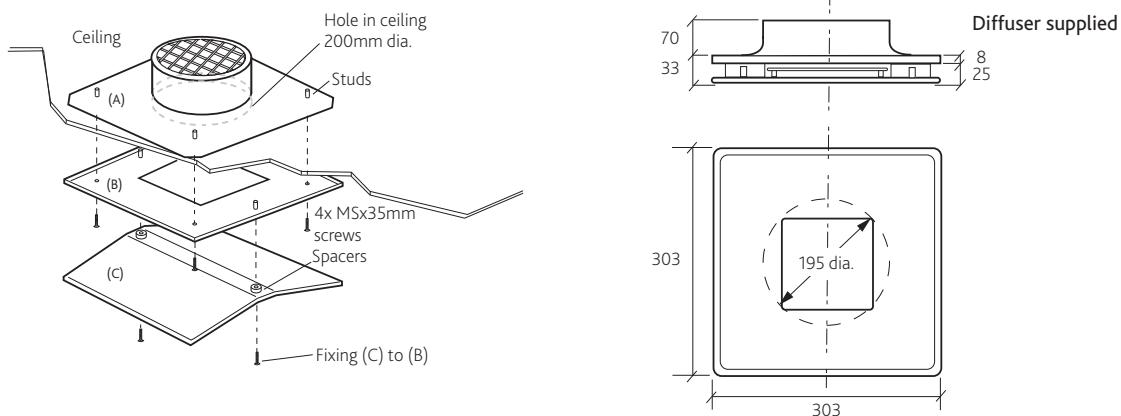
DRI-ECO-3STOREY INSTALLATION

## Technical



## AIR DIFFUSER FOR THREE STOREY DWELLINGS

For use in stairwells of three storey properties, the optional powder-coated aluminium diffuser with 'fire-block' provides 1 hour of fire resistance in accordance with BS476 Part 20 and ISO834.



## Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface, e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 3 core mains

cable from the power supply should be connected to a fixed wiring installation, via the isolator, via the spur, in accordance with current IEE wiring regulations.

## Electrical Details

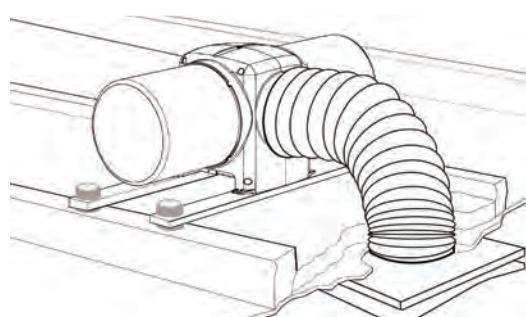
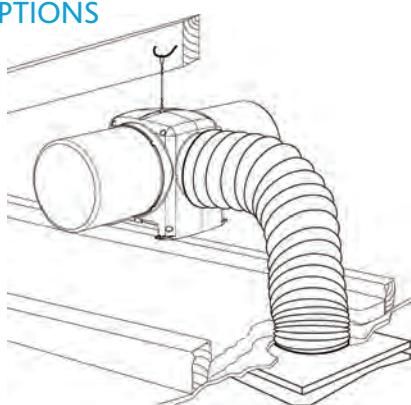
	Voltage	Consumption
DRI ECO-3STOREY	230V 1ph 50Hz	2W(min) 24W(max)

## Typical Installation

### INSTALLATION OPTIONS

Roof structure

STANDARD METHOD  
OF FIXING



OPTIONAL METHOD OF FIXING. (AV MOUNTING KIT ON TO ROOF JOISTS)

# Consultants Specification

Low energy Positive Input Ventilation system for use in homes with a loft.

The unit shall be robustly constructed from ABS polymer and the casing shall be of spherical pattern, with a flat mounting base.

Flame retardant filters of G4 grade, surface area approximately 0.47m<sup>2</sup> (with 5 year typical maintenance period) shall be fitted, which may be removed from the unit without the use of tools. The filters shall be arranged such as to prevent their obstruction in the loft space.

The unit shall incorporate a forward curved centrifugal impeller and high efficiency brushless DC motor fitted with sealed for life, self-lubricating bearings and locked rotor protection. The unit's average power consumption shall be 0.16 watts per l/s airflow.

The unit shall be supplied with a 2m length of flexible ducting and all necessary connectors and fittings.

The unit shall weigh less than 6kg and we recommend the unit is suspended from the roof structure. The unit shall be supplied with a purpose designed flame retardant polymer diffuser for efficient, directable air input. The diffuser design shall be optimised for use in areas where smoke detectors are fitted. The unit shall include 5 programmable temperature control strategies, 6 volume control settings and an optional high duty boost setting, providing an airflow rate of 70 l/s for optimum performance and occupant comfort. All control/duty strategies shall be optimised for maximum performance and occupant comfort.

An internal run motor shall record the unit's operational time. The unit shall be offered with a 5 year warranty. For information on reducing radon egress, it is suggested that the details given in Positive Pressurisation: A BRE Guide to Radon Remedial Measures in Existing Dwellings may be considered.

## DRI-ECO-LC

The DRI-ECO-LC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor is to increase airflow to the dwelling when the loft is warmer than the house. The units 'Fixed Temperature Heat Recovery' strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly.

## DRI-ECO-3STOREY

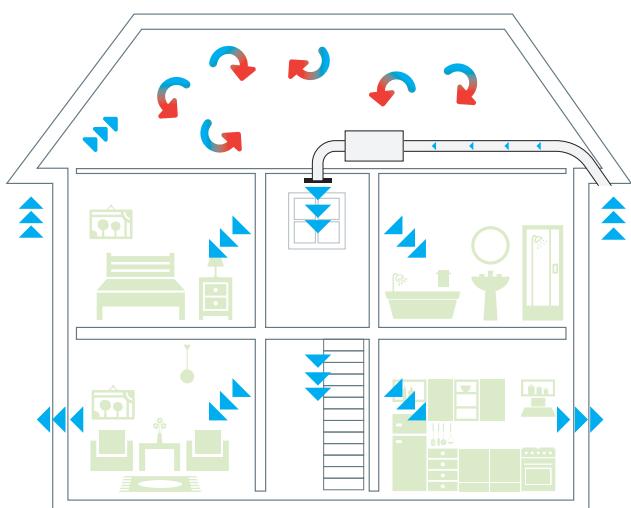
The DRI-ECO-3STOREY fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor is to increase airflow to the dwelling when the loft is warmer than the house. The units 'Fixed Temperature Heat Recovery' strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly. The aluminium ceiling vent supplied includes an intumescent closure element.

## DRI-365

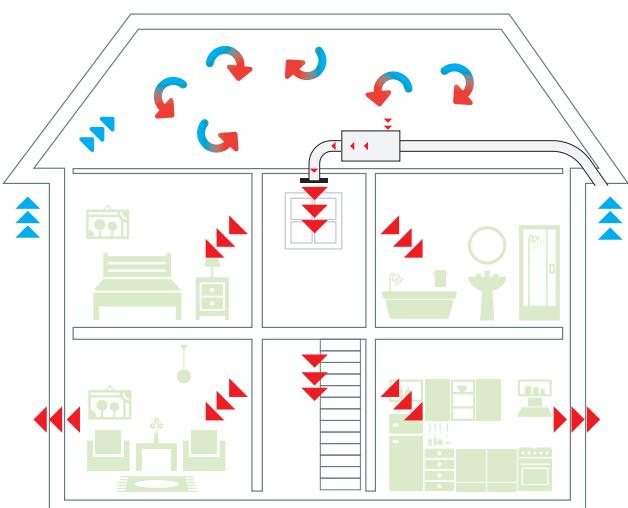
DRI-365 is a unique low-energy, loft mounted Positive Input Ventilation unit, providing whole home ventilation all year round. The unit is fully automatic and intelligently decides which location to supply the air from. It utilises the solar gain within the loft during the colder months subsequently bringing in fresh air during the warmer months.



### SUMMER



### WINTER



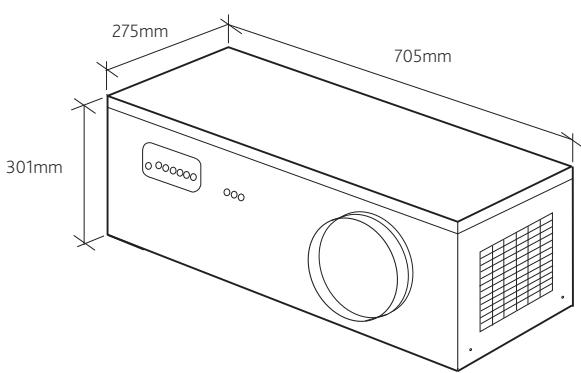
If the loft temperature is above 24°C air is drawn directly from outside, to provide background ventilation. In addition a boost switch is supplied to increase airflow when required.

During the colder months tempered air is drawn from the loft space taking advantage of solar gain combined with the heat conducted through the ceiling of the home.

## Technical

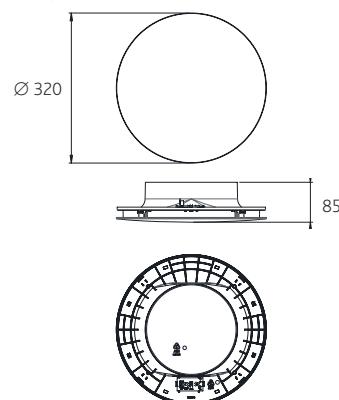
### DIMENSIONS (mm) & UNIT WEIGHT

Weight - 10KG



### DIFFUSER (mm)

Weight - 1KG



## Wiring

Please note: the electrical connection of the unit must be carried out by a qualified electrician.

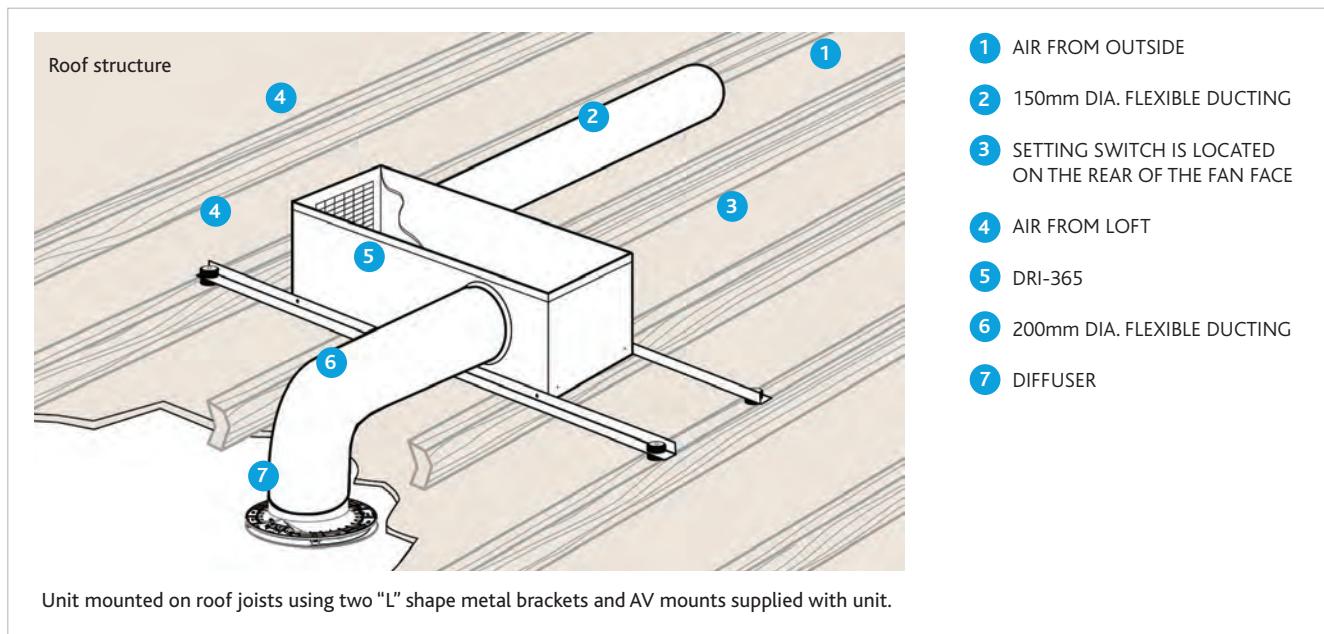
**Note:** This unit must be earthed.

The three core cable from the mains power supply should be connected to a fixed wiring installation, via a fused isolator, in accordance with current IEE wiring regulations.

## Electrical Details

	Voltage	Consumption
DRI-365	230V 1ph 50Hz	2W(min) 24W(max)

## Typical Installation



A remote boost switch comes as standard with the DRI-365 model. This must be wired directly in to the unit and can be used to control the fan with the choice of "Normal" or "Boost" functionality.

For installation the choice of either a Sofit Kit or Wall Kit must be made and ordered separately to the DRI-365 unit.

Please note part codes are DRI365-SOFITKIT and DRI365-WALLKIT.

## ACCESSORIES



G4 FILTER



BOOST SWITCH

# Consultants Specification

## DRI-365

Nuaire DRI-365 ultra low energy Positive Input Ventilation unit.

The unit casing shall be manufactured from thermally lined pre-painted steel.

The casing shall have an easily removable panel to allow access for maintenance.

The unit shall incorporate a filter of G4 grade with an area of approximately 0.47m<sup>2</sup>.

The unit shall incorporate a forward curved centrifugal impeller and high efficiency brushless DC motor fitted with sealed for life, self-lubricating bearings and locked rotor protection.

The unit shall be supplied with a purpose designed polymer diffuser for efficient, directable air input using side blanking pieces supplied. The diffuser design shall minimise the accumulation of any condensate run off that may occur in the event of power to the unit being switched off.

The ducting between the unit and the diffuser is supplied with unit.

The unit shall incorporate 6 volume control settings for maximum flexibility and occupant comfort. The unit is fully automatic. If the loft temperature is below 24°C then the unit will draw fresh air from the loft. If the loft temperature is above 24°C then cool fresh air will be drawn from outside the dwelling.

The unit shall incorporate two air inlets, one draws air from the loft, the other from outside via a 150mm dia. spigot.

The unit can be boosted to obtain maximum ventilation by the operation of a boost switch (supplied).

An internal monitor shall record the unit's operational time. The unit shall be offered with a 5 year warranty. For information on reducing radon egress, it is suggested that the details given in Positive pressurisation: a guide to radon remedial measures in existing dwellings may be considered.

## DRIMASTER-ECO PIV Product Selector

Page No.	6	8	10	14	16	19
Feature	DRI-ECO-HC	DRI-ECO-LINK-HC	DRI-ECO-HEAT-HC	DRI-ECO-LC	DRI-ECO-3STOREY	DRI-365
For properties with lofts						
Integral heater						
Compatible with relative humidity sensor						
Compatible with CO <sub>2</sub> sensor						
Compatible with remote two-way boost switch						
Compatible with four-way remote switch with boost and heater control						
Remote monitoring device						
Easy accessible discreet commissioning and controls behind diffuser						
Controls/commissioning at unit						
Modern circular ceiling diffuser						
Aluminium intumescent diffuser						
5-year warranty						
7-year warranty						

**KEY:** DRI Drimaster (loft-mounted) ECO Eco-friendly HC Hall control (diffuser) HEAT Integral heater  
 LC Loft control/unit 3STOREY 3 storey properties 365 Operates 365 days a year



# Nuaire offers other forms of residential ventilation!

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# The FLATMASTER Range



## FOR PROPERTIES WITHOUT LOFT SPACE

Low cost ventilation for properties with no loft space. The unit is designed to take fresh air from outside, clean the air and discharge it into the central hallway via a system of ducting.

The dwelling's internal air discharge grille is usually installed at a high level in a central location within the hallway, although discharging the air down the length of the hallway (away from the front door) should also prove acceptable. Unit performance may be enhanced if an existing heat source can warm the discharged air, e.g. by locating the discharge grille above a radiator.

### FLAT2000L/FLAT2000R

The unit is designed to take fresh air from outside, clean the air, warm it (if fitted with a heater) and discharge it into the central hallway via a system of ducting. The dwelling's internal discharge grille is usually installed at a high level in a central hallway, although discharging the

air down the length of the hallway (away from the front door), should also prove acceptable.

Unit performance may be enhanced if an existing heat source can warm the discharged air, e.g. by locating the discharge grille above a radiator.

#### Additional heat when required

If additional heating of the incoming air is required, e.g. during very cold weather, the integral heater can be used to distribute filtered, warmed air throughout the property.

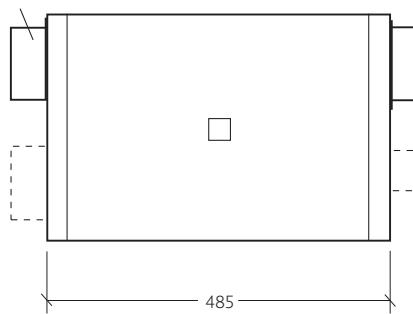


## Technical

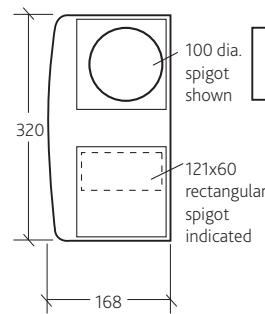
### DIMENSIONS (mm) & UNIT WEIGHT

WEIGHT: Flatmaster: 4.7kg Flatmaster 2000: 5.2kg

100mm dia. or 121x60mm interchangeable  
spigots supplied with unit



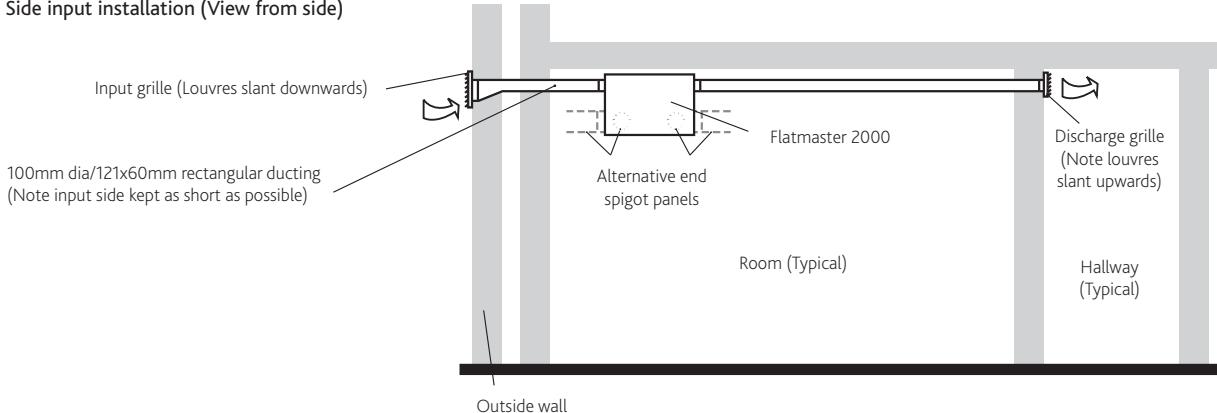
Alternative end  
spigot panels



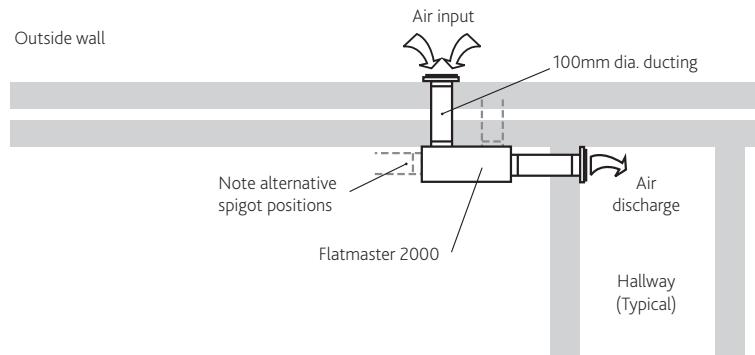
# Typical Installation

## INSTALLATION OPTIONS

Side input installation (View from side)



Rear input installation (View from above)



(If the heater option is required, the wiring should be connected to the appropriate terminal on the PCB).

## Electrical Details

	Voltage	Consumption
FLATMASTER	230V 1ph 50Hz	Speed 1 1.5W(max)
		Speed 2 8W(max)
		Speed 3 13W(max)
FLAT2000L/FLAT2000R	230V 1ph 50Hz	Heater 300W(max)

## Wiring

Please note the electrical connections to the unit should be carried out by a qualified electrician.

With the PCB cover removed, pull the PCB forward to gain access to the Earth post behind. Connect Earth cable to Earth post next to the grommet hole. Slide PCB into slot and connect the mains supply L and N to the terminal block.

The unit should be wired in accordance with current IEE regulations.

A remote boost switch comes as standard with the FLAT2000L and FLAT2000R models. This must be wired directly in to the unit and can be used to control the fan with the choice of "Normal" or "Boost" functionality.

Please note this boost switch does not come as standard with the FLATMASTER model, but can be ordered separately under part number 779891.

# Consultants Specification

## FLATMASTER

The attractively designed unit casing shall be manufactured from easy to clean flame retardant VO rated ABS polymer and thermally insulated pre-coated mild steel. A washable flame retardant filter of G3 grade (with 1-2 year typical maintenance period) shall be fitted, which may be accessed via the easily removable front cover.

The unit shall incorporate an injection moulded radial bladed centrifugal impeller. The impeller shall be driven by a high efficiency, reversible brushless DC motor fitted with steel, self-lubricating bearings and locked rotor protection.

The unit shall have a maximum power consumption of 0.45w/l/s of airflow for the Flatmaster and 1.4w/l/s of airflow for the Flatmaster 2000. The unit shall be highly adaptable for ease of installation, allowing circular or rectangular duct connections and for air entry from side or rear of the case at high or low level.

A selection of spigots enabling connection to 100mm circular or 121x60mm rectangular distribution ductwork, without the use of transformation sections, shall be provided. Ducting and grilles shall be supplied separately.

The unit shall be offered with a 5 year warranty.

## FLAT2000L/FLAT2000R

See FLATMASTER specification.

The unit shall be suitable for the incorporation of an optional plug in monitor, which shall record the unit's operational time (code: FLATMASTER-HRM).

## FLATMASTER PIV Product Selector

Page No.	18	18
Feature	FLATMASTER	FLAT2000L/FLAT2000R
For properties without lofts		
Integral heater		
Manual boost switch provided - when additional ventilation is required, i.e. cooking odours		
Controls/commissioning at unit		
5 year warranty		



