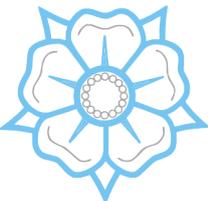


# POSITIVE INPUT VENTILATION (PIV)



CREATING  
A HEALTHY  
INDOOR  
ENVIRONMENT

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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



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.

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"





### 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 INVENTED PIV OVER 40 YEARS AGO

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



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

...to this

**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.

**MOISTURE AND CONDENSATION ARE DRIVEN OUT**  
The filtered air gently pressurises the home from inside out, forcing out the stale air.

## PIV How does it work?



**NO NEED TO OPEN WINDOWS TO VENTILATE**  
Clean, fresh air is continuously drawn in through the lofts natural leakage points, passed through the filters and fed into the property via a central hallway diffuser.

# 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

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 DRIMASTEReco 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.



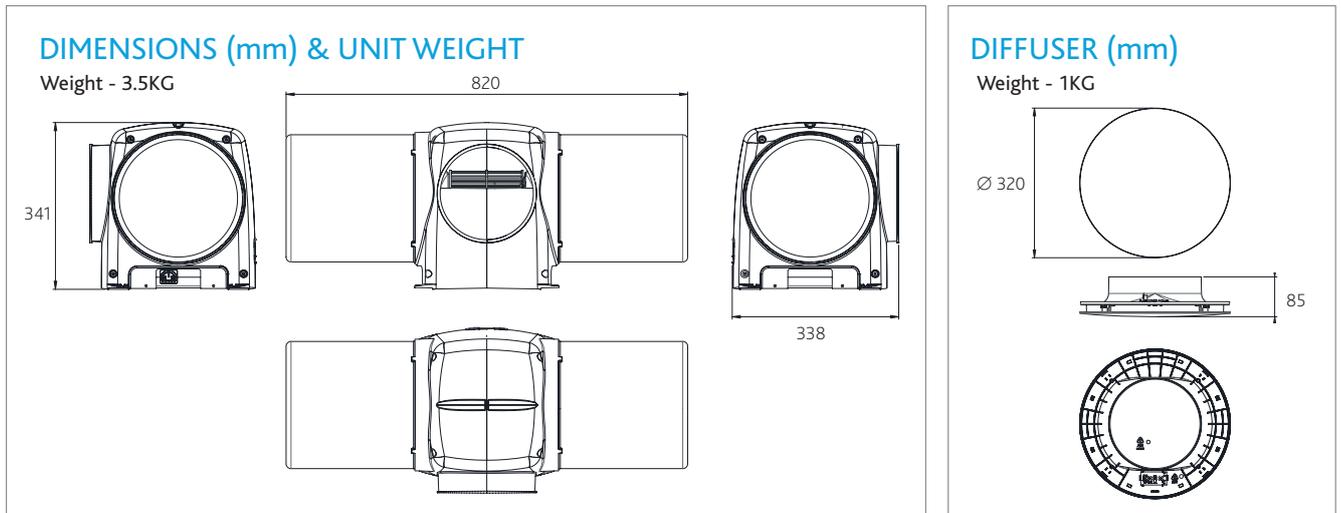
## DRI-ECO-HC

The DRI-ECO-HC enhances Nuair'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.



DRI-ECO-HC INSTALLATION

## Technical



## Wiring

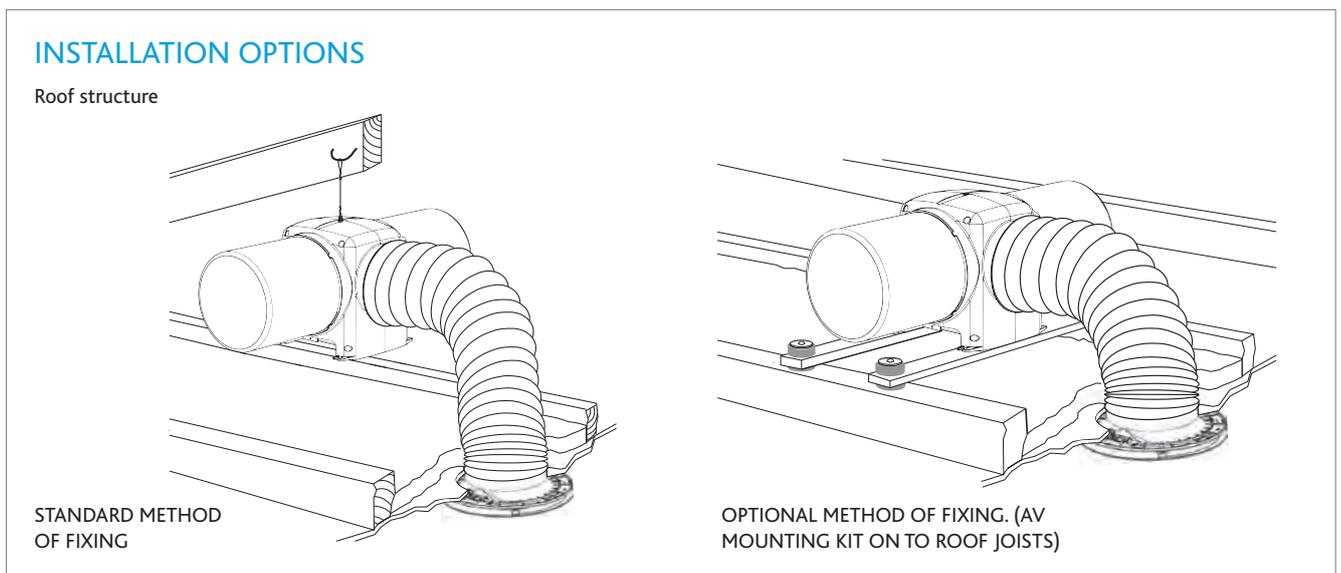
The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface, e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 3 core mains

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



# DRI-ECO-LINK-HC

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

By offering a choice of interactive sensors, Nuair 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

820

341

338

**DIFFUSER (mm)**  
Weight - 1KG

Ø 320

85

## 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.

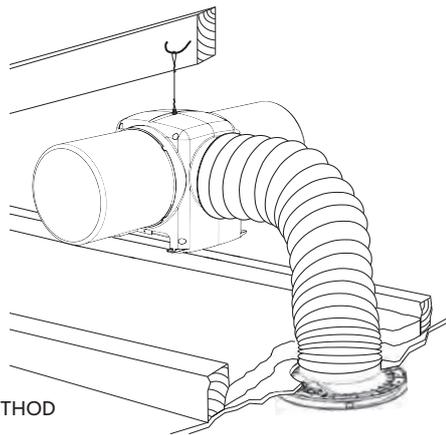
## Electrical Details

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

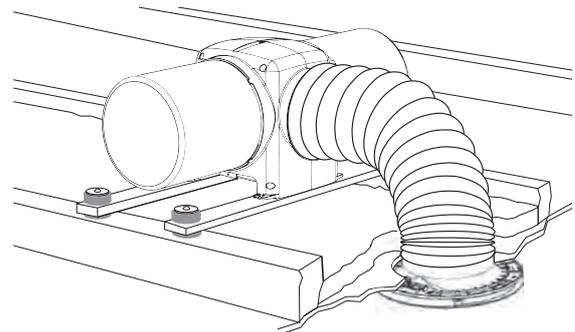
## Typical Installation

### 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

Technical drawings of the unit showing dimensions: 820mm width, 341mm height, and 338mm depth.

**DIFFUSER (mm)**  
Weight - 1KG

Technical drawings of the diffuser showing a diameter of 320mm and a circular mesh pattern.

**INTEGRAL HEATER (mm)**  
Weight - 2KG

Technical drawings of the integral heater showing a diameter of 316mm and a rectangular shape with a depth of 224mm.

## 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

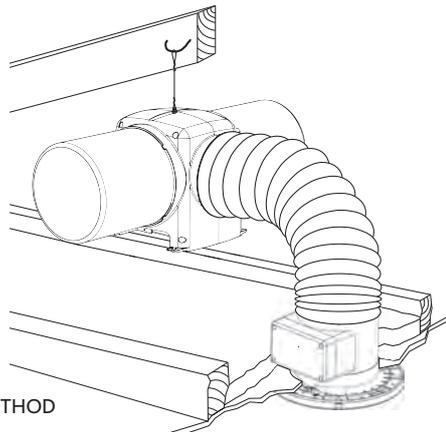
	Voltage	Consumption
DRI-ECO-HEAT-HC	230V 1ph 50Hz	1.6W(min) 15.3W(max)

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

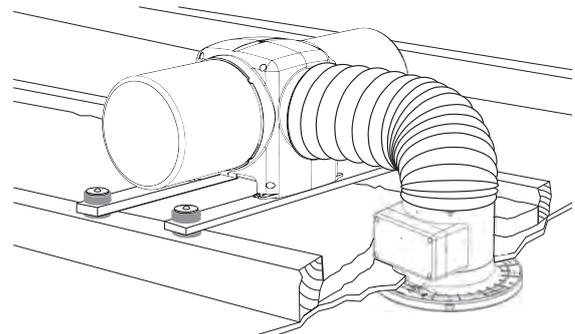
## Typical Installation

### INSTALLATION OPTIONS

Roof structure

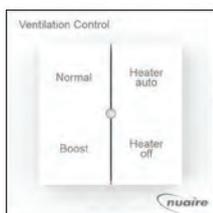


STANDARD METHOD OF FIXING



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

## 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 it's 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.

# 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

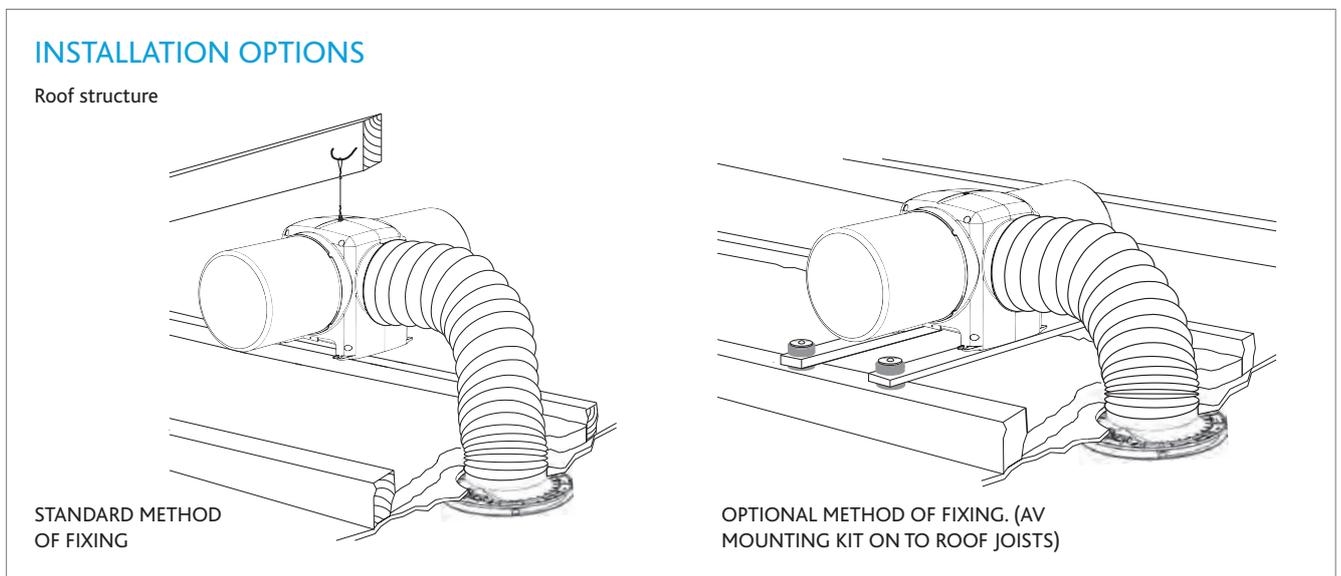
The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface, e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 3 core mains

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



## DRI-ECO-3STOREY

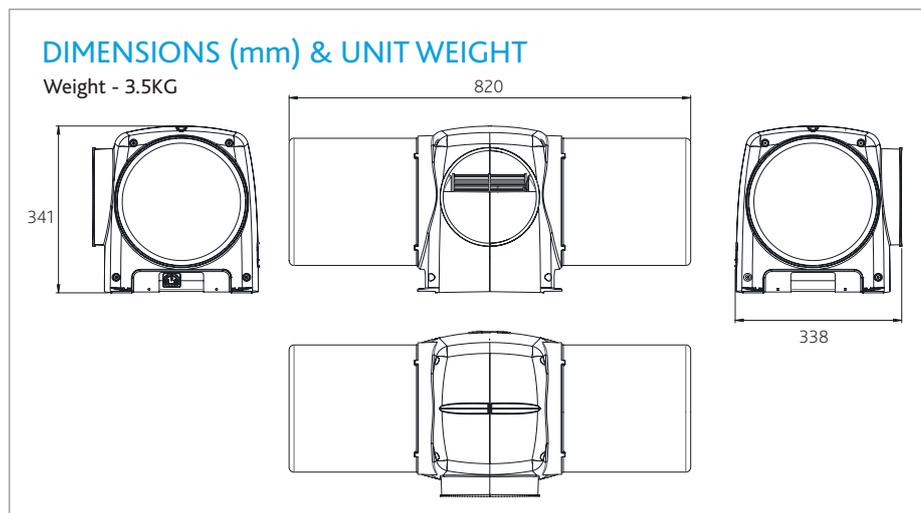
The DRI-ECO-3STOREY is the only unit within the DRIMASTER-ECO range which is suitable for install within three storey properties, by using an intumescent aluminium diffuser in order to meet fire regulation standards.

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 Nuair to offer a ventilation solution for every property type.



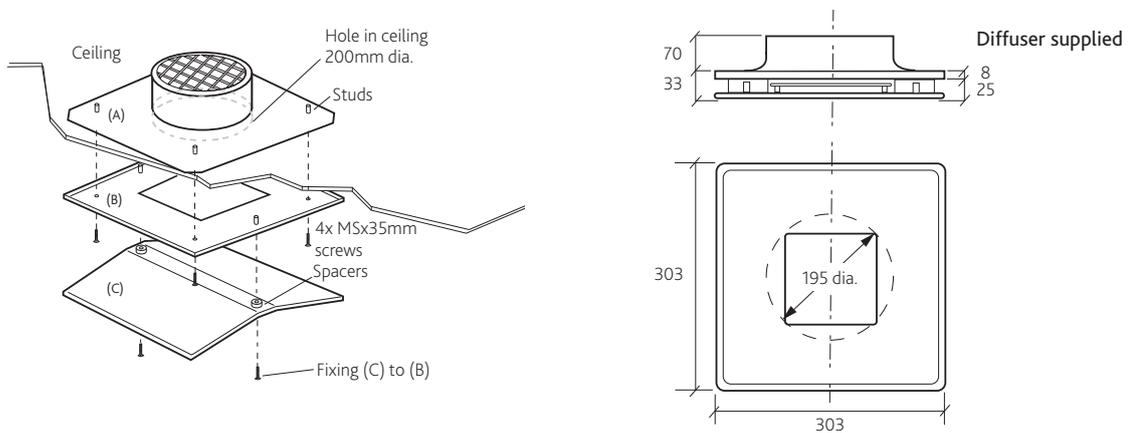
DRI-ECO-3STOREY INSTALLATION

## 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

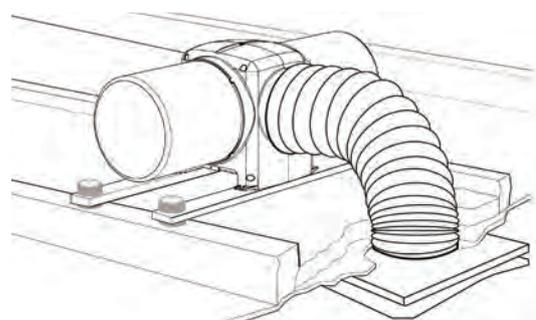
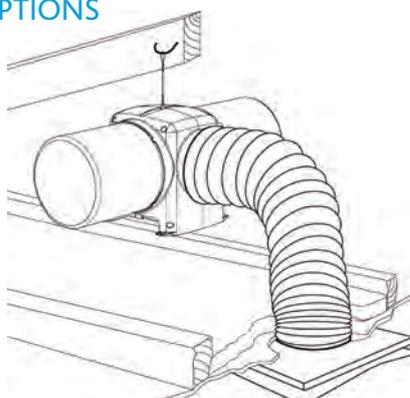
	Voltage	Consumption
DRI ECO-3STOREY	230V 1ph 50Hz	2W(min) 24W(max)

## Typical Installation

### INSTALLATION OPTIONS

Roof structure

STANDARD METHOD OF FIXING



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

# 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

