

## A141PIR CONSTANT VOLUME EXTRACT GRILLE

**The A141PIR constant volume extract grille with passive infra red timed boost is designed for 'wet rooms', allowing a low level of continuous ventilation (15m<sup>3</sup>/hr), with an added boost facility to increase ventilation to 65m<sup>3</sup>/hr for a timed period of 30 minutes when the extract senses motion.**

### Operation

The A141PIR extract grille incorporates a specially designed flexible rudder which allows the extract to self regulate and ensure that ventilation does not increase above the desired level.

In addition, it has a PIR (Passive Infra Red) sensor which upon detecting motion, boosts ventilation to a high rate for a period of 30 minutes.

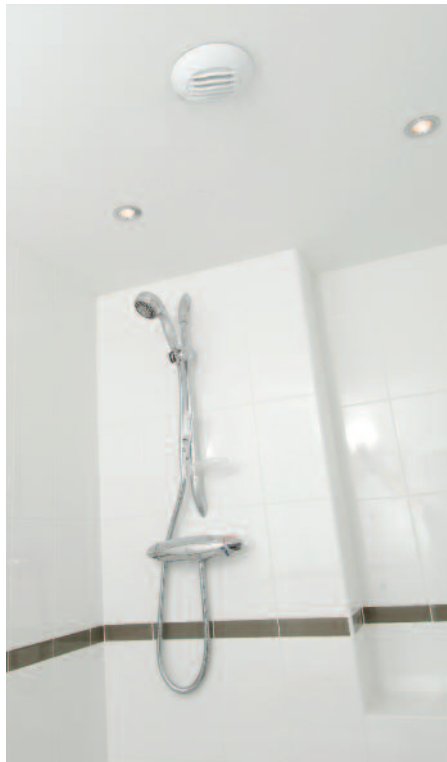
The extract forms part of a whole-house mechanical ventilation solution, and is located in 'wet rooms' such as kitchens, utility rooms, bathrooms, en-suites and WCs.

The extract is ducted to a centrally located, continuously running extract fan which drives the ventilation system.

By upgrading standard MEV extracts to 'intelligent' A141PIRs, the dwelling becomes more energy efficient as the extract only responds where there is increased ventilation demand.

The A141PIR is particularly suited to applications where a constant low level of ventilation is wanted whilst a 'wet room' is unoccupied, but a high rate when it is being used.

The timed facility ensures that ventilation does not remain at the high rate when it is not needed, but instead returns to the desired constant low level.



## BENEFITS

- **Fully automatic**  
The extract is fully automatic, ensuring controlled ventilation with no occupant input required.
- **Occupant comfort**  
Ensures that the room in which it is situated is not over ventilated for long periods of time by returning to constant level after 30 minutes.
- **Energy efficiency**  
The extract ensures that ventilation is at a low level when a room is unoccupied and therefore not being used.
- **Visually unobtrusive**  
The attractive design ensures that the extract is aesthetically pleasing to the occupant.
- **Flexibility**  
The ceiling or wall mounted A141PIR extract grille can be retrofitted to upgrade most existing MEV fan systems, making them 'intelligent'.
- **Ease of installation**  
As there are no electrical connections to be made, installation is made as simple as possible.



## DESCRIPTION

Constant volume extract grille requiring no mains power but 2 x AA batteries required for PIR timed boost to operate.

## Dimensions

External diameter: 180mm  
 Thickness: 50mm  
 Spigot diameter: 125mm

## Airflow (at 80Pa)

Constant volume: 15m<sup>3</sup>/hr (4l/s)  
 Boost: 65m<sup>3</sup>/hr (18l/s)

## Opening area

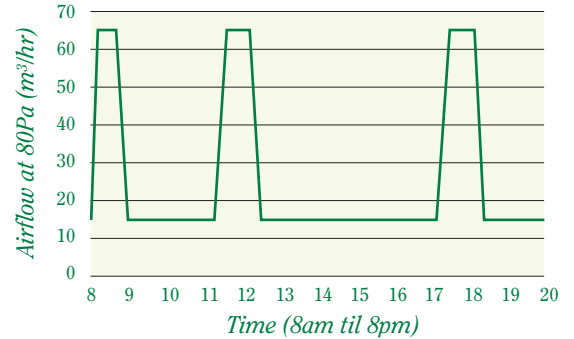
Constant volume: 170mm<sup>2</sup>  
 Maximum: 730mm<sup>2</sup>

## Control method

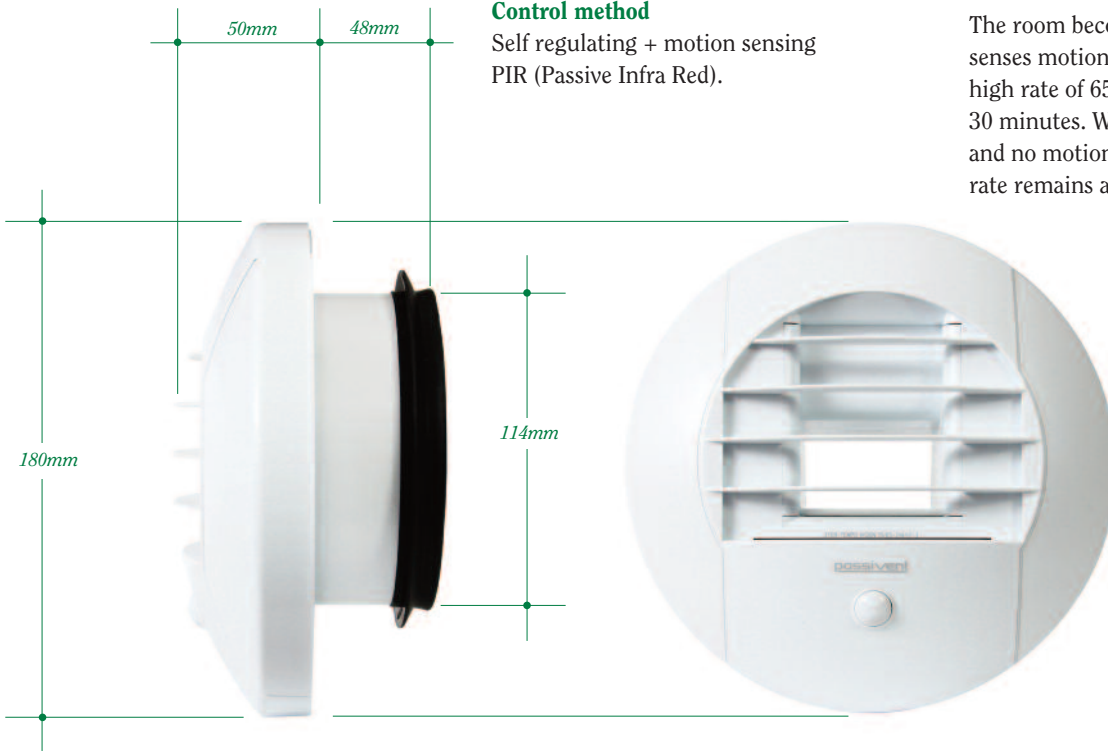
Self regulating + motion sensing PIR (Passive Infra Red).

## Example of boost function

The diagram below illustrates how the timed boost function allows the occupant to increase the ventilation rate as and when required for a period of 30 minutes.



The room becomes occupied and A141PIR senses motion, increasing ventilation to the high rate of 65m<sup>3</sup>/hr for a period of 30 minutes. When the room is unoccupied, and no motion is sensed, the ventilation rate remains at a constant rate of 15m<sup>3</sup>/hr.



Extract grille	Standard operation range	Additional boost	Use with boost switch	Power supply	
	Mains	Battery			
A141PIR	Constant volume 15m <sup>3</sup> /hr (4l/s)	30min timed boost at 65m <sup>3</sup> /hr (18l/s)	None	None	2 x AA

## PASSIVENT

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