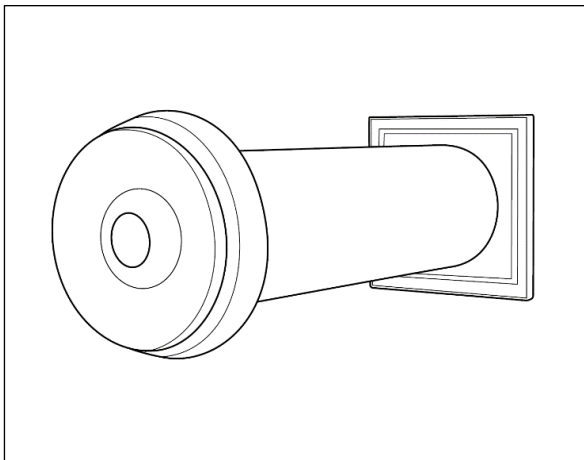




# Airflow Wallvent 100 Thermo Installation Guide



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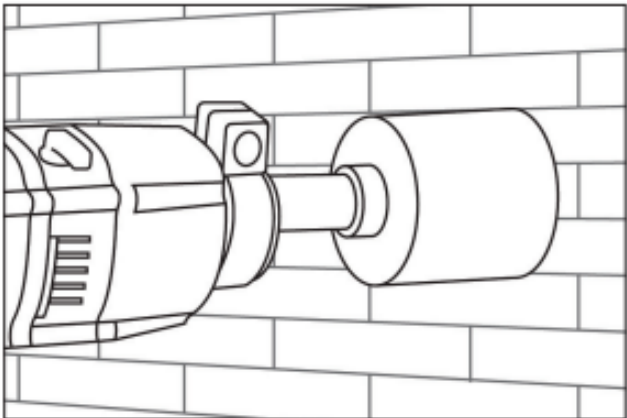
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## Preparation

1. For optimal flow and to reduce cold draughts, background ventilators should be installed 1.7m above floor level and remain easy for occupants to reach.
2. To minimise cracking, drill a pilot hole and then core drill from both sides into the wall cavity.

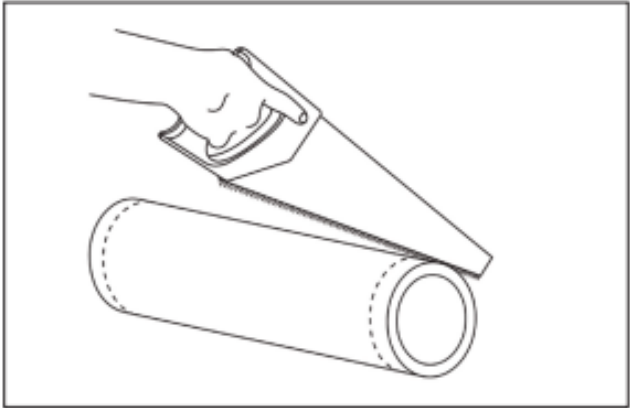
**NOTE!** *Horizontal ducting, including ducting in walls should be arranged to slope slightly downwards away from the internal grille to prevent backflow of any moisture into the property.*

*Use a 127mm dia. Core drill for Airflow Wallvent 125 Basic.*



*Fig.1*

3. Measure the wall thickness and cut the duct to length.
4. The tube should be flush to the inside and outside surfaces.



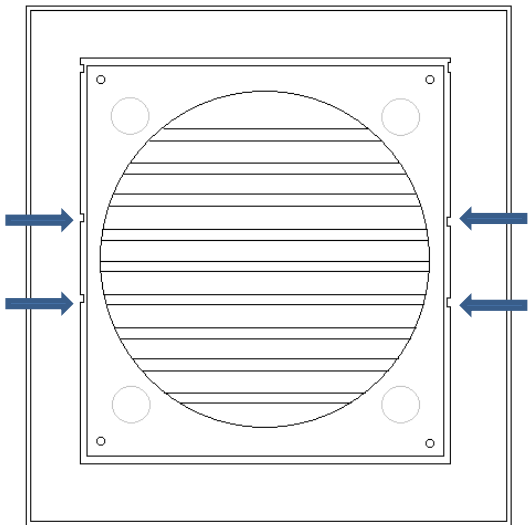
*Fig.2*

5. To ensure the integrity of the wall, each end of the cut duct, between the duct and wall should be sealed.

*The internal and external grilles can be fitted using either screws or sealant/mastic. However, the following steps can be followed for guidance purposes:*

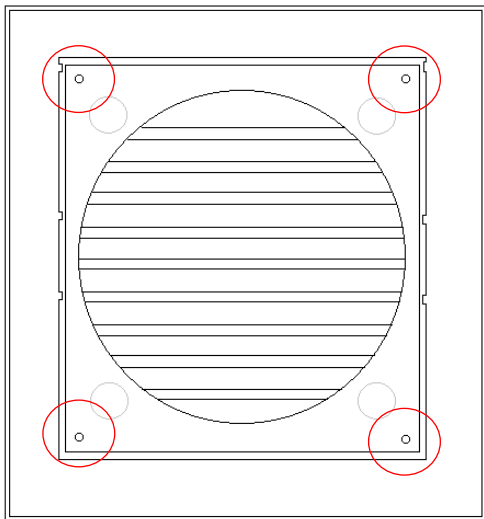
## Fixing External Grille

1. The external grille can be fixed to the brickwork using screws in the preformed holes located on the reverse side of the grille using the fixing kit supplied.
2. Carefully unclip the grille plate from the back plate by pushing in the clasps that are located on the reverse of the grille either side the spigot, avoiding damage to the louvres – see Fig.3 below.



*Fig.3*

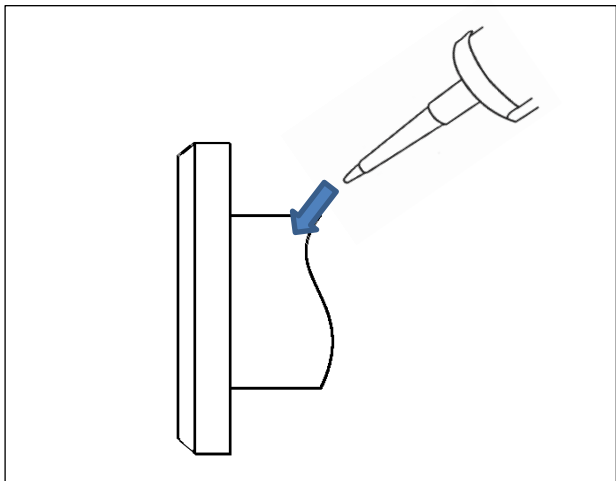
- The preformed holes for fixing the external grille to the brick will be located at each corner of the back plate. See Fig 4. Below.



*Fig.4*

- Dry fit external louvre in the duct and flush to the wall. Ensure the grille is flush and level.

5. Mark holes on to the external wall by using the external grille a template.
6. Using an 8mm diameter masonry drill, drill holes in the wall 35mm deep.
7. Fit supplied raw plugs in drilled holes.
8. Apply a bead of sealant around the spigot of the external grille. (Sealant not supplied.)



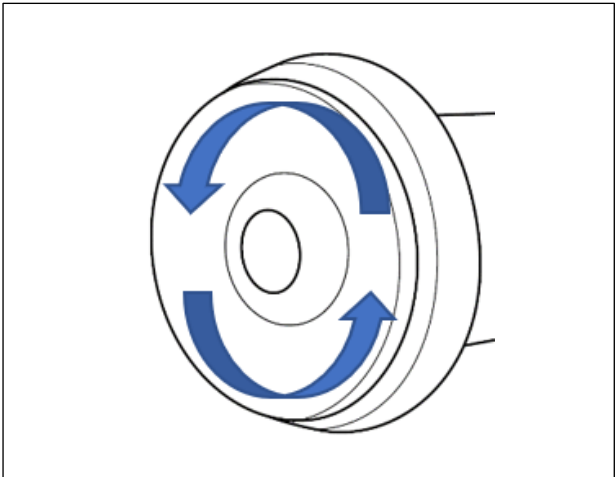
*Fig.5*

9. Insert the external grille inside the duct from the outside.

10. Before the sealant sets, ensure the grille is flush and level before screw fixing.
11. Once fixed, re-attach the grille plate ensuring they are securely in place.
12. Before fixing internal Valve, ensure sealant is applied between the duct and the wall on the inside to maintain the integrity of the wall.

## Fixing Internal Valve

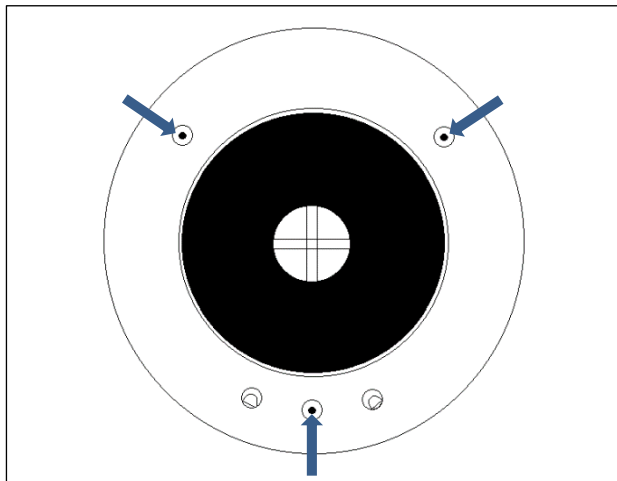
1. Unscrew the valve faceplate from it's mounting plate by turning the valve faceplate anti-clockwise.



*Fig.6*



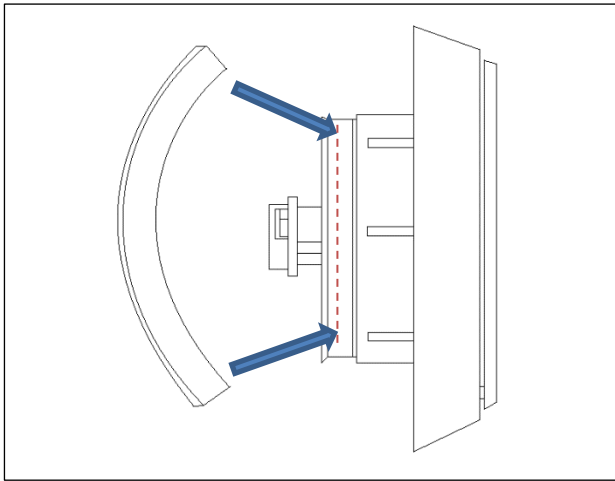
13. This will reveal the pre-formed holes through the mounting plate (see Fig 7. below). Dry fit internal valve in the duct and flush to the wall. Ensure the grille is flush and level.
14. Place mounting plate in duct and mark fixing holes on the wall.
15. Using an 8mm diameter masonry drill, drill holes in the wall 35mm deep.
16. Fit supplied raw plugs in drilled holes and fix the valve mounting plate in place using the screws provided, ensuring the grille is flush and level.



*Fig.7*

- Unpeel the paper film from the foam strip provided and apply the strip around the spigot of the valve mounting plate in the area detailed below– see Fig 8.

*The Strip should completely encircle the spigot – remove any excess foam that is not required.*



*Fig.8*

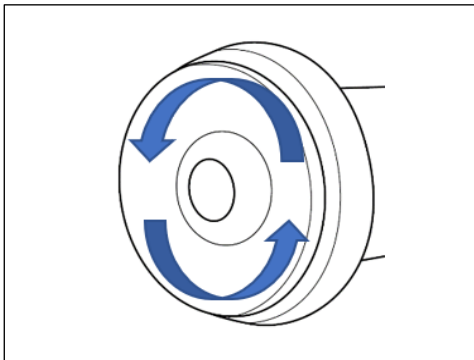
- Push the valve mounting plate into the duct and fix to wall using the pre-formed holes and fixing kit supplied.
- Refer to Wallvent 100 Thermo – Setup & Operation on steps on how to set the valve to the required setting to

provide adequate ventilation and inspection by building control bodies.

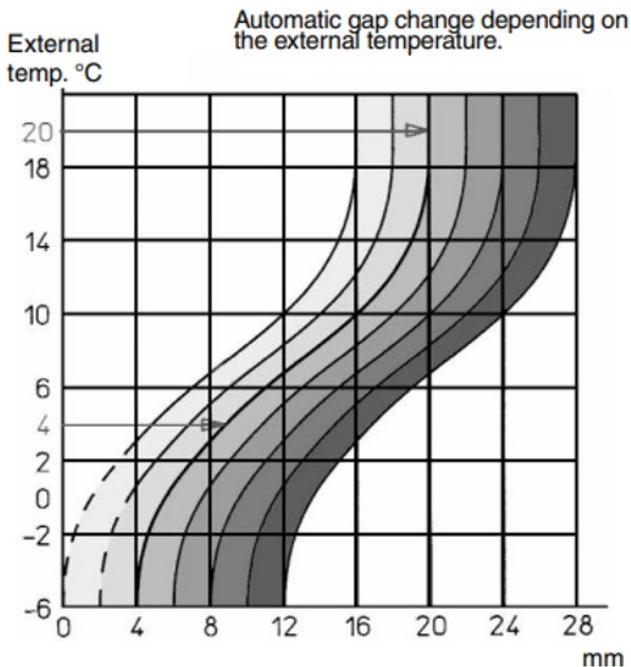
## Setup & Operation

The Wallvent 100 Thermo is a fully automated, thermally controlled passive background ventilator intended to provide fresh air inside a dwelling allowing the circulation of fresh, natural air. Ideally suited to intermittent and centralised/ decentralised continuous mechanical extract systems (dMEV, Centralised MEV). The valve can also be manually adjusted if required.

1. Once the ventilator has been installed, the valve disc will need to be adjusted to ensure adequate ventilation.
2. The valve can be adjusted by rotating the valve disc anti-clockwise.



3. As the valve disc is rotated, the disc moves forward, widening the gap, thus increasing the volume of air that can enter the dwelling. In doing so you are creating a larger equivalent free area.
4. The thermostat responds to a temperature range of  $-6^{\circ}\text{C}$  to  $+20^{\circ}\text{C}$ .
5. See performance diagram for below:



If an **intermittent extract** system has been installed refer to Approved Document F 2021 edition of building regulations, Table 1.7 for minimum equivalent area of background ventilator rates.

If a **continuous mechanical extract** ventilation system (dMEV, Centralised MEV) has been installed refer to Approved Document F 2021 edition of building regulations (page16) for minimum equivalent area of background ventilators.

6. The table below provides guidance on the gap in mm required to achieve a minimum equivalent free area:

Equivalent Free Area (mm <sup>2</sup> )*			
Opening (mm)	8mm	10mm	12mm
Equivalent Free Area (mm <sup>2</sup> )	1946	2429	2446

at \*1Pa

6. Measure the gap to the desired opening (mm) as detailed in the table above. This will achieve the corresponding Equivalent Free area required.
7. The corresponding opening (mm) and equivalent area sticker provided with this product must be applied on the valve where it will be easy to see by building control bodies.



**IMPORTANT:** This instruction sheet must be provided to the homeowner or included in the homeowner's manual upon handover.

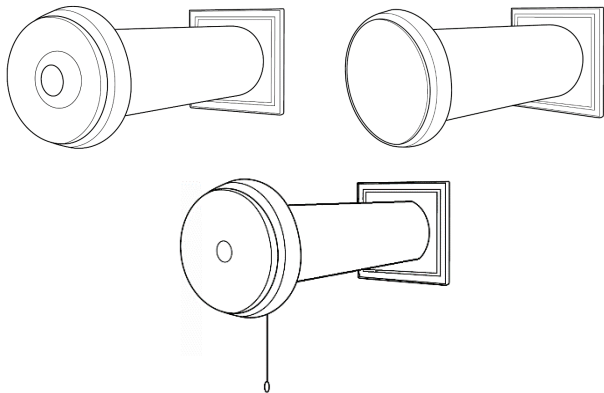
## Maintenance

1. The valve faceplate and mounting plate can be cleaned using a damp cloth.



Do not use abrasives or chemicals.

2. The Wallvent 100 Thermo comes with a polyester G3 filter. This can be washed using warm water. The filter must be completely dried before re-inserting into the valve.



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