



**AccuraSEE  
Mechanical**

## **PORTABLE HEAT RECOVERY VENTILATOR**

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Model MINT

# User Manual

Our priority is to provide customers with products that are superbly engineered for exceptional performance.

Our products are hand-built and customized with emphasis on sustainability and quality.

Please, kindly contact us if there are any issues or errors in the User Manual.

## **Table of Contents**

Introduction.....	1
Product Description .....	1
Warning .....	3
Installation .....	4
Maintenance .....	5
Filter .....	5
Duct.....	6
Electrical Parts .....	6
Caveat .....	6
Terms and Agreements .....	7
Return Policy.....	7
Disclaimer .....	7



## Introduction

The User Manual simplifies the installation and operation of the product. The careful observation of the points that are laid out in the User Manual will ensure that the product works in accordance with the design of the manufacturer. The Terms and Agreements that are set forth by the manufacturer shall be invalidated if the instructions that are presented in the User Manual are not observed.

### ICON KEY

 Warning

 Note

 Caveat

## Product Description

The product is a portable heat recovery ventilator which is housed in a compact and attractive cabinet enclosure. The heat recovery ventilator is designed to supply filtered, fresh air into a building space, passively regulate the temperature and humidity of air, and simultaneously expel stale air and contaminants from the same space.

The external and internal parts of the product are visually depicted in **Figures 1 and 2**, respectively.

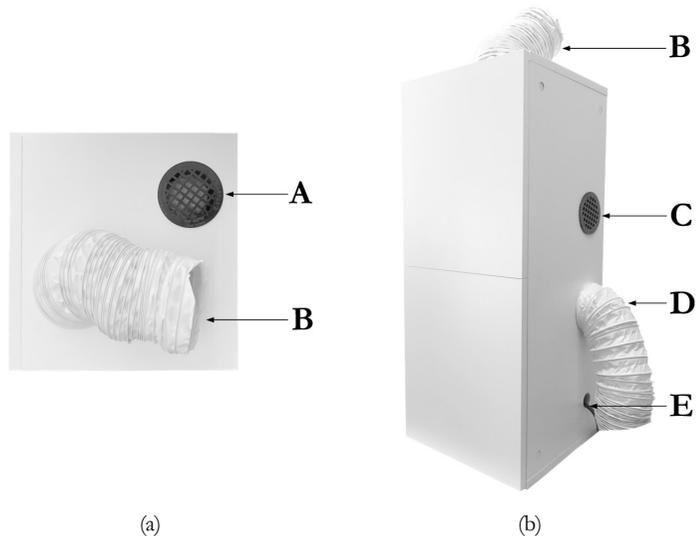


Figure 1. The (a) top and (b) side views of the portable heat recovery ventilator. The legends **A** to **E** are defined in **Table 1**. The approximate external dimensions of the product are 30" × 12" × 12.5". The actual product that is received by the customer may slightly differ from what is shown in **Figure 1**.

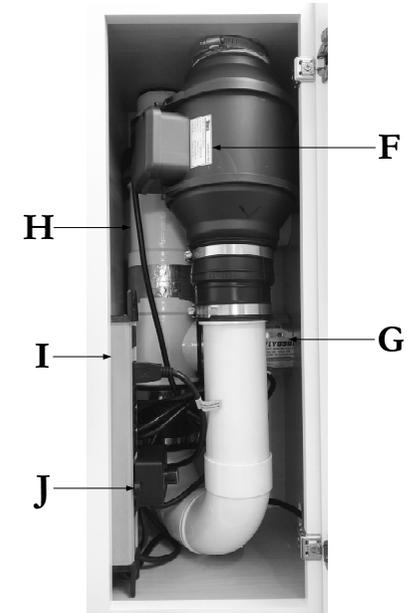


Figure 2. Internal parts of the portable heat recovery ventilator. The legends **F** to **J** are defined in **Table 1**. The actual product that is received by the customer may slightly differ from what is shown in **Figure 2**.

The parts of the product that have been identified with the legends **A** to **J** in **Figures 1** and **2** are defined in **Table 1**.

Table 1. Parts of the portable heat recovery ventilator.

Legend	Part	Reference Figure
A	Supply vent	Figure 1(a)
B	Supply duct	Figure 1(a) and (b)
C	Exhaust vent	Figure 1(b)
D	Exhaust duct	Figure 1(b)
E	Power supply cord	Figure 1(b)
F	Supply fan	Figure 2
G	Exhaust fan	Figure 2
H	Heat exchanger	Figure 2
I	Power bar	Figure 2
J	Supply fan controller	Figure 2



## Warning

The following warnings must be exactly observed:

- Failure to comply with the warnings may result in fire, property damage, electric shock, injury or death.
- To prevent suffocation, electric shock, injury or death, the customer is responsible to ensure that children shall NOT access the product.
- The product shall not be modified, disassembled or serviced.
- The product shall be shut down if the outdoor air temperature exceeds 35°C or 95°F.
- The vents (A and C) of the product shall NOT be blocked at all.
- The enclosure shall not be opened when the product is powered.
- The electrical parts of the product shall not be touched even if the product has been shut down. The electrical parts are the fans (F and G), power bar (I), and supply fan controller (J).
- As soon as possible, the power supply cord (E) shall be safely disconnected from the electrical mains if there is a spillage of liquid on or around the product.
- The power bar (I) shall only be connected to an electrical receptacle that is permanently installed in a building.
- The power bar (I) shall not be connected to a relocatable power tap.
- There shall be no connection of any external devices to the power bar (I).
- The cables of the fans (F and G) shall not be disconnected from the power bar (I).
- The supply fan controller (J) shall not be adjusted in order not to disrupt the calibration of the product.

### NOTE

The manufacturer supplies third-party locks that the customer may install to shut the door of the enclosure.

### NOTE

A strip of paper tape is attached to the supply fan controller (J) on a parallel axis to the calibrated position of the controller knob.

## Installation

The following points shall be strictly observed when installing the product:

- The product shall not be installed near hazardous or toxic materials.
- The product shall only be installed in either vertical or horizontal orientations and shall not be positioned at an oblique angle.
- For vertical orientation, the supply vent (A) shall face upwards as indicated in Figure 1(a). There is no restriction on the horizontal orientation of the product provided the exhaust vent (C), exhaust duct (D), and power supply cord (E) are not obstructed.
- The product can be placed on the floor or a sturdy table. Professional help may be needed to install the product on a wall.
- The vents (A and C) and ducts (B and D) shall NOT be connected to external appliances such as dryers, fans, furnaces, etc.
- The product shall be installed in the conditioned space of a building where the temperature and relative humidity of air are within the range of 22°C – 24°C and 35% – 50%, respectively.
- The product shall not be powered until the ducts (B and D) are installed.
- A ventilation kit (not bundled with the product) is needed to install the two ducts (B and D) such that air can securely and simultaneously be supplied to and expelled from the building space.
- The ventilation kit can interface with the outdoors through a window, door or wall as illustrated in Figure 3. If the product is vented through a wall, the customer is responsible for complying with all applicable codes.
- To power the product, connect the plug of the power supply cord (E) to the electrical mains (~120V AC, ~60Hz). To shut down the product, disconnect the power supply cord (E) from the electrical mains.

### NOTE

The product shall not be installed at a location where there is probable contact with liquids.

### NOTE

The product shall be carefully positioned such that it may not trip and cause property damage or bodily injury.

### NOTE

The product shall not be installed at a location where there is excessive heat or exposure to direct sunlight.

### NOTE

The ports of the ventilation kit shall be 4" (~10.2 cm).

### NOTE

The product is calibrated to an air flow rate of ~10 CFM.

### NOTE

The power consumed by the product is nominally 30W.

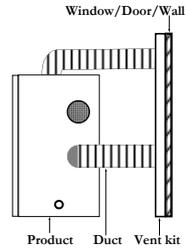


Figure 3. Installation of the product using a vent kit.

### RECOMMENDATIONS

- The product can be installed in a space with a floor area of up to 200 ft<sup>2</sup>.
- Screens (not bundled with the product) can be attached to the ports of the ventilation kit to prevent the encroachment of animals that can damage the product or constitute hazard to the building occupants.
- The ducts (**B** and **D**) should be installed without any bends that may impede the flow of air.
- The ducts (**B** and **D**) may be insulated to minimize energy losses to the building space.

## Maintenance

**NOTE**   
The heat exchanger (**H**) shall not be washed.

Although the product is designed to operate with minimal maintenance, a few activities may be performed during the course of using the product.

**The product shall be shut down before any maintenance activity is performed.**

### Filter

**NOTE**   
A filter shall not be installed in the exhaust vent (**C**).

It is recommended to change the filter in the supply vent (**A**) at least once a year depending on the outdoor air quality. The procedure for changing the filter is presented as follows:

- To remove the old filter in the supply vent (**A**):
  - Shut down the product;
  - Open the door of the enclosure;
  - Locate and hold the heat exchanger (**H**) firmly with one hand;
  - Carefully twist and pull out the supply vent (**A**) with the other hand.
- Remove the filters in the supply-vent (**A**) port and replace them with two sheets of an air filter pad that are cut to 5" × 7" (~12.7 cm × ~17.8 cm). A filter with a minimum efficiency reporting value of 4 is recommended.

**NOTE**   
Excessive force shall not be applied when replacing the filter in the supply vent (**A**).

**NOTE**   
The length of a newly installed duct shall be 5" (~12.7 cm).

**NOTE**   
Do not apply excessive force when tightening the clamp.

- To reinsert the supply vent (**A**):
  - Remove the tape that is wrapped round the base perimeter of the supply vent (**A**) and clean the vent with a paper towel that is moistened with isopropyl alcohol.
  - Attach a roll of 24-mm green paper tape (also known as a painter's tape) to cover three-quarters of the base perimeter of the supply vent (**A**).
  - Use one hand to hold the heat exchanger (**H**) and ensure that it lines up with the port of the supply vent (**A**) at the top of the enclosure;
  - Use the other hand to insert the supply vent (**A**) into the port until it is flush with the top surface of the enclosure.

### Duct

A damaged duct can be replaced by using a similar duct with a diameter of 4" (~10.2 cm). The following steps can be followed when changing a duct:

- Shut down the product;
- Loosen the nuts of the clamp of the damaged duct using an 8-mm nut driver;
- Remove the damaged duct from the port of the appropriate fan;
- Attach a new duct to the port of the appropriate fan;
- Tighten the nuts of the clamp.

### Electrical Parts

An electrical part (**F**, **G**, **I** and **J**) shall only be replaced if it is faulty. In this situation, the product shall be shut down and the manufacturer shall be consulted for further instructions.

### Caveat

The Caveat applies to products that are not purchased directly from the manufacturer. The electrical parts (**F**, **G**, **I** and **J**) of the product are deemed to be certified to ensure customer safety. Products are submitted for field inspection only if they are purchased directly from the manufacturer. Consequently, the manufacturer is not liable if additional approval is required by the Authority Having Jurisdiction where the product is purchased and/or installed.



## Terms and Agreements

The product is protected by intellectual property and shall not be reverse-engineered, imitated or copied except under an approved licensing agreement with the manufacturer.

### Return Policy

**NOTE**

The manufacturer provides a warranty for the product that is subject to a Disclaimer.

- Please, check the return policies of the online merchant(s) and store owner(s) from whom the product was purchased. All sales are final for products that are purchased from our website. In the exceptional case that there are manufacturing defects in a product, please send us an email within 24 hours of receiving the product.
- The Return Policy is not applicable to products that are supplied by the manufacturer but sourced “as is” from third parties (i.e., any persons or organizations other than the manufacturer).
- The Return Policy is not applicable to products that are purchased directly from the manufacturer. A direct transaction is hereby defined as when the customer purchases the product in bulk (minimum of 10 units) from the manufacturer for the purpose of resale.

### Disclaimer

- The warranty does not apply to defects that are caused by normal wear and tear, normal corrosion, and normal failure that ensue from the operation of electrical or mechanical devices.
- The warranty does not extend to products that have been subject to misuse, neglect, abuse, alteration, testing, improper installation, improper storage, improper maintenance, improper handling during shipping, unauthorized attempts to repair, accident, fire, lightning or other hazard, and damage by current, temperature, physical stress, and deviation from the environmental specifications of a conditioned space that is stated in the User Manual.
- The warranty does not extend to products that have been modified, disassembled, serviced, or reassembled by a third party.
- The warranty is exclusive and in lieu of all other warranties, expressed or implied, including, without limitation, any warranty of merchantability or fitness for a specific purpose. Without limiting the generality of the foregoing, the manufacturer disclaims any other claim against the manufacturer (whether arising by operation of law or otherwise), including

any claim or liability for special, indirect or consequential damages of any kind relating to or arising out of the product or any part thereof.

- The manufacturer’s obligation is limited to repair or replacement, at the option of the manufacturer, of any product determined to be defective in workmanship or material during the applicable warranty period, subject to the fact that the warranty:
  - Covers the electrical parts (**F, G, I and J**) for a maximum period of six months from the date of purchase by the customer;
  - Covers the heat exchanger (**H**) for a maximum period of one year from the date of purchase by the customer;
  - Does not cover the enclosure;
  - Does not cover goods and services that are sourced from third-party and sold or delivered to the customer “as is”.
- The manufacturer neither assumes nor authorizes any person to assume for it any other liability in connection with the manufacture, sale, shipping, delivery, installation and operation of the product or any part thereof except as aforesaid.