

Installation and User Manual



VENMAR®



VB0121

PRO225 & PRO250 HEAT RECOVERY VENTILATORS

READ AND SAVE THESE INSTRUCTIONS

Venmar Ventilation inc., 550 Lemire Blvd., Drummondville, QC, Canada J2C 7W9

www.venmar.ca



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These products earned the ENERGY STAR® by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. They meet ENERGY STAR requirements only when used in Canada.

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WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSON(S) OBSERVE THE FOLLOWING:

1. These units are intended for residential installation only.
2. Use these units only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
3. Before servicing or cleaning the units, disconnect power cord from electrical outlet.
4. Installation must be done in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
5. These units are not designed to provide combustion and/or dilution air for fuel-burning appliances.
6. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
7. Do not use these units with any solid-state speed control devices other than the Breeze main control for the PRO250 unit exclusively or the 11136 main control for PRO225 unit. The optional auxiliary control 20-minute lighted push button can be used with both PRO250 and PRO225 units.
8. These units must be grounded. The power supply cord has a 3-prong grounding plug for your personal safety. It must be plugged into a mating 3-prong grounding receptacle, grounded in accordance with the national electrical code and local codes and ordinances. Do not remove the ground prong. Do not use an extension cord.
9. Do not install in a cooking area or connect directly to any appliances.
10. Do not use to exhaust hazardous or explosive materials and vapors.
11. Do not run any air ducts directly above or closer than 2 ft (0.61 m) to any furnace or its supply plenum, boiler, or other heat producing appliance.
12. When performing installation, servicing or cleaning of these units, it is recommended to wear safety glasses and gloves.
13. When applicable local regulations comprises more restrictive installation and/or certification requirements, the aforementioned requirements prevail on those of this document and the installer agrees to conform to these at his own expenses.

CAUTION

1. To avoid premature clogged filters, turn OFF the unit during construction or renovation.
2. Please read specification label on product for further information and requirements.
3. Be sure to duct air outside – Do not intake or exhaust air into spaces within walls or ceiling or into attics, crawl spaces, or garage.
4. Intended for residential installation only in accordance with the requirements of NFPA 90B.
5. The ductwork is intended to be installed in compliance with all applicable codes.
6. Do not use the PRO250 or PRO225 unit when varnishing. The varnish vapors may damage these units.
7. At least once in a year, the unit mechanical and electronic parts should be inspected by qualified service personnel.
8. During snow/rain storm, operate the PRO250 unit in recirculation mode to prevent water build up in the heat recovery ventilator. Turn OFF the PRO225 unit.

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Congratulations!

You have made an excellent choice!

The operating principle of your Heat Recovery Ventilator will protect your house and give you personal comfort you have never known before.

We have prepared this Manual especially for you. Please read it carefully to ensure you obtain full benefit from your Heat Recovery Ventilator unit.

Please take note this manual uses the following symbols to emphasize particular information:

WARNING

Identifies an instruction which, if not followed, might cause serious personal injuries including possibility of death.

CAUTION

Denotes an instruction which, if not followed, may severely damage the unit and/or its components.

NOTE: Indicates supplementary information needed to fully complete an instruction.

We welcome any suggestions you may have concerning this manual and/or the unit, and we would appreciate hearing your comments on ways to better serve you. Please forward all correspondence to us at the address indicated on the product registration card included with this manual.

1. FUNCTIONS OF YOUR HEAT RECOVERY VENTILATOR

Your PRO250 or PRO225 Heat Recovery Ventilator eliminates the excessive humidity problems by exhausting stale and humid air to the outside and by drawing in fresh air. Either unit offers superior air quality and fresh air sensation, an important factor to overall comfort, by eliminating the accumulation of pollutants and humidity.

These units also come equipped with a heat recovery core which reduces ventilating costs in winter.

The PRO250 and PRO225 Heat Recovery Ventilators are ventilation systems which carry out the following operations:

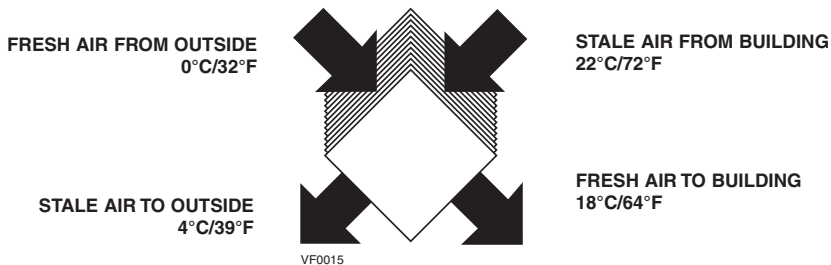
1.1 AIR EXCHANGE (PRO250 & PRO225)

These units exhaust stale and humid air from the house and replace it with fresh air from the outside.

1.2 HEAT RECOVERY (PRO250 & PRO225)

During winter, these units recover the heat contained in the stale air before it is exhausted, and transfer it to the fresh air drawn from the outside (reverse process in summer).

Example (in winter):

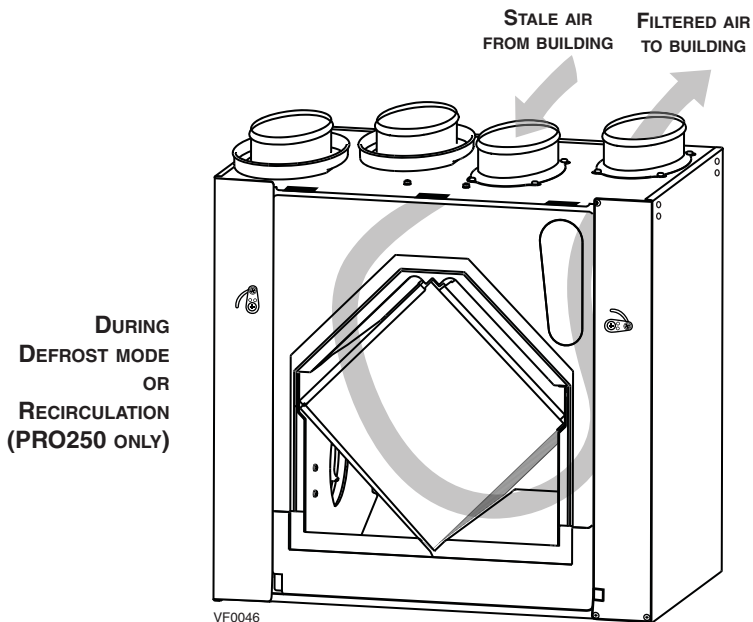
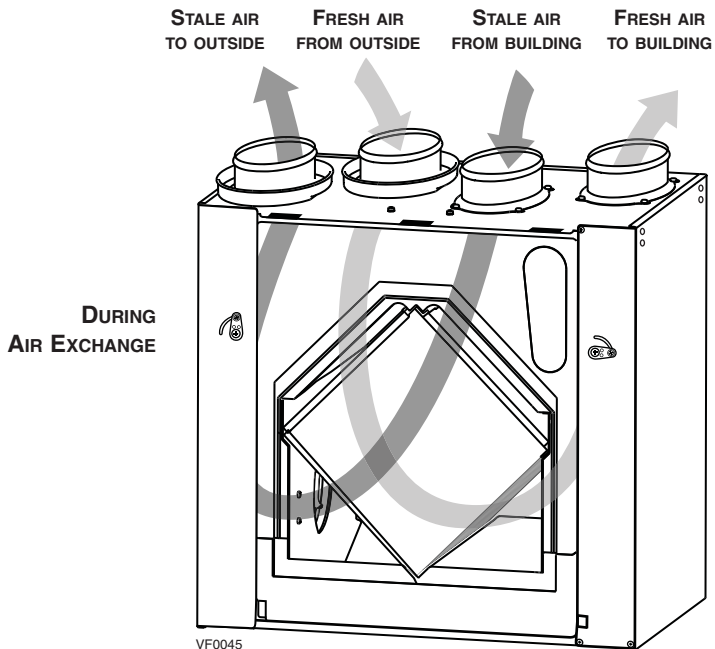


1.3 RECIRCULATION (PRO250 ONLY)

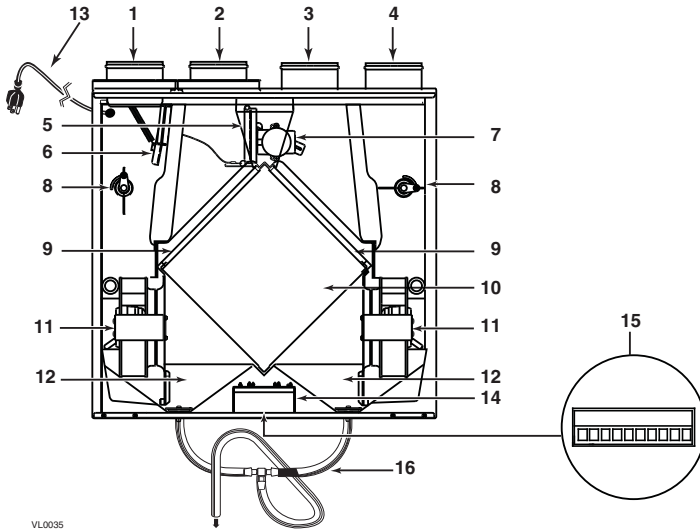
During the recirculation mode, this unit stops to exchange air with the exterior. Continuous recirculation is thus undertaken inside the home and insures the purification of the ambient air. Two mechanical filters trap the large dust particles (those visible to the eye).

2. DIAGRAMS OF AIRFLOWS

The direction of the airflows is indicated in each of the following diagrams. Please note that the stale air never mixes with the fresh air.



3. DESCRIPTION OF THE UNIT



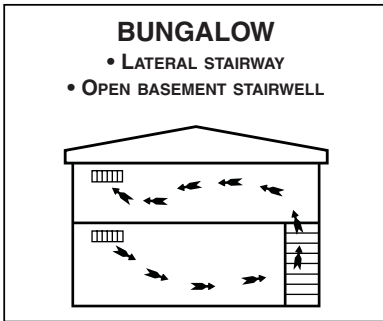
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- 1 Exhaust port:** exhausts stale air to the outside, after the air has transferred its heat inside the heat recovery core.
- 2 Fresh air port:** brings fresh air from the outside into the unit.
- 3 Stale air intake port:** is connected to the registers located in the larger rooms of the house.
- 4 Distribution port:** distributes fresh air into the house, after it has absorbed the heat of the stale air in the heat recovery core.
- 5 Main damper:** allows fresh air intake when open and defrost when closed.
- 6 Secondary damper:** allows stale air to exhaust when open and prevents negative pressure when closed, in defrost mode.
- 7 Automatic defrost unit :** consists of one damper actuator, dampers and related controls. The defrost cycle is electronically controlled in response to the outside temperature (-5°C [23°F] to -27°C [-17°F] or coldest) and will increase in frequency as the temperature decreases. Its duration is of 7 or 10 minutes.
- 8 Adjusting tools (2):** adjust the dampers (one on each side) in balancing process. Lock them in place once the unit is balanced.
- 9 Mechanical filters (2):** trap the dust contained in the air and prevents the heat recovery core from becoming obstructed.
- 10 Heat recovery core:** is a crossflow type. It transfers the heat between the two air streams.
- 11 Blowers (2):** draw fresh air from the outside and exhaust stale air to the outside.
- 12 Condensation tray:** is used to capture the water produced during heat transfer and defrost (in cold climate).
- 13 Electrical cord:** for 120 V electrical supply.
- 14 Electrical box:** contains capacitors (indispensable to proper motors operation) and electronic control circuit (insures proper operation of the unit).
- 15 Terminal connector:** located under the unit, allows to connect the controls.
- 16 Drainage tube:** is connected to the condensation tray and serves to drain the water accumulation.

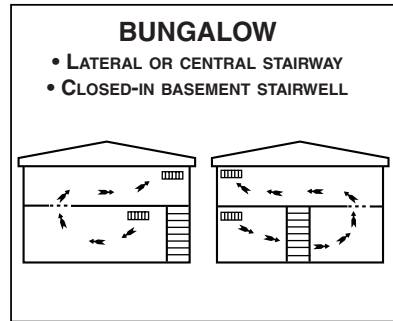
4. UNIT INSTALLATION

4.1 INSTALLATION TYPES WITH REQUIRED INSTALLATION KIT

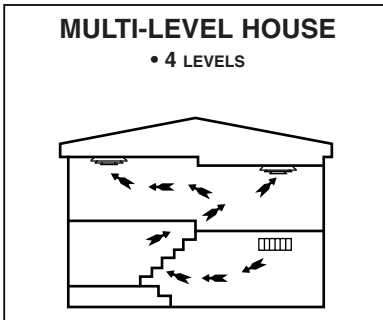
Here are the types of installation and installation kit needed depending on your house.



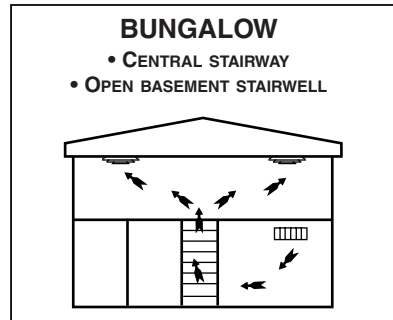
Basement installation kit no. CH30115.



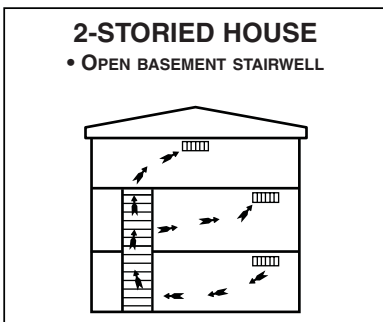
Basement installation kit no. CH30115 with 3 or 4 floor registers (4" x 10", not included).



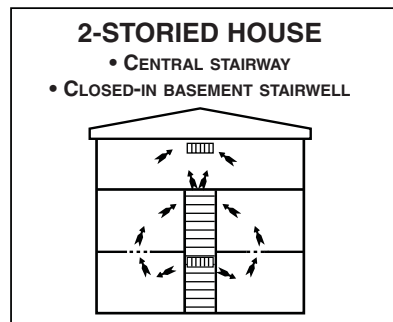
Basement installation kit no. CH30115 with additional multi-level kit no. UT 2004.



Basement installation kit no. CH30115 with additional multi-level kit no. UT 2004.



Basement installation kit no. CH30115 with one additional register (not included).



Basement installation kit no. CH30115 with 3 or 4 floor registers (4" x 10", not included).

4. UNIT INSTALLATION (CONT'D)

4.2 LOCATING AND MOUNTING THE UNIT

Choose an appropriate location for the unit:

- Within a heated area of the house (10 °C/50 °F or more)
- Away from living areas (dining room, living room, bedrooms), if possible
- So as to provide easy access for filter maintenance
- Close to an exterior wall, so as to limit the length of the insulated flexible ducts to and from the unit
- Close to a drain. (If no drain is close by, use a pail to collect run-off)
- Away from hot chimneys, electrical panel and other fire hazards
- Allow for a power source (standard 3-prong grounding outlet)

4.3 TOOLS AND MATERIALS

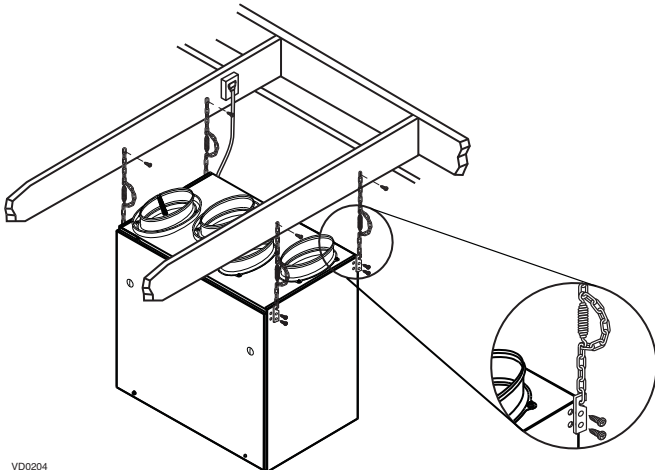
- Robertson no. 2 or Phillips no. 2 screwdriver
- Cutter pliers
- Drill
- Jig saw
- Duct tape
- Caulking gun with a tube of silicone sealant
- Metal shears (if the exterior covering is aluminum or vinyl)
- Chisel and hammer (if the exterior covering is brick)

4.4 HOW TO HANG THE UNIT

Use the 4 chains and springs (from the hardware pack included with the unit) to hang the unit to ceiling joists.

CAUTION

Make sure the unit is level.



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4. UNIT INSTALLATION (CONT'D)

4.5 PLANNING OF THE DUCTWORK

- Keep it simple. Plan for a minimum of bends and joints. Keep the length of the insulated ducts to a minimum.
- Do not use wall cavities as ducts. Do not use branch line smaller than 4" (102 mm) diameter.
- Do not ventilate crawl spaces or cold room. Do not attempt to recover the exhaust air from a dryer or a range hood; this will cause the clogging of the unit.
- Be sure to plan at least one exhaust register on the highest lived-in level of the house, if it has 2 floors or more.

4.6 INSTALLING NON-INSULATED FLEXIBLE DUCTS AND REGISTERS

CAUTION

If ducts have to go through an unconditioned space, always use insulated ducts (purchase separately).

4.6.1 STALE AIR EXHAUST DUCTWORK

⚠ WARNING

Never install a stale air exhaust register in a room where a combustion device operates, such as a gas water heater, a gas furnace or a fireplace.

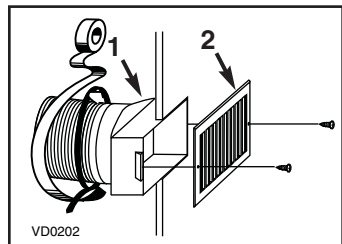
- Install the stale air exhaust register(s) in the main area where the contaminants are produced: kitchen, living room, etc. Position the register(s) as far from the stairway as possible and in such a way that the air circulates in all the lived-in spaces in the house.
- If a register is installed in the kitchen, it must be located at least 4 feet (1.2 m) from the range.
- Install the register(s) 6 to 12 inches (152 to 305 mm) from the ceiling on an interior wall OR install it in the ceiling.

4.6.2 FRESH AIR DISTRIBUTION DUCTWORK

- Install the fresh air distribution register(s) in a large, open area in the lowest level to ensure the greatest possible air circulation. Keep in mind that the fresh air register(s) must be located as far as possible from the stale air register(s).
- Install the register(s) in the ceiling OR 6 to 12 inches (152 to 305 mm) from the ceiling on an interior wall. The duct length should be at least 15 feet (4.6 m). (The cooler air will then cross the upper part of the room and mix with room air before descending to occupant level.)

4.6.3 HOW TO CONNECT NON-INSULATED FLEXIBLE DUCTS TO THE REGISTERS

- Once the register location is determined, cut out a 3 $\frac{3}{4}$ " x 9 $\frac{3}{4}$ " rectangular hole.
- Fix one end of the flexible duct to the register transition (1), using a tie wrap and duct tape.
- From inside the wall (or ceiling), place the transition opening flush to the finished wall.
- Assemble the register (2) to its transition using its 2 no. 8 x 1 $\frac{1}{2}$ " screws. See illustration beside.



4. UNIT INSTALLATION (CONT'D)

4.6 INSTALLING NON-INSULATED FLEXIBLE DUCTS AND REGISTERS (CONT'D)

4.6.4 CONNECTION TO A FORCED AIR SYSTEM

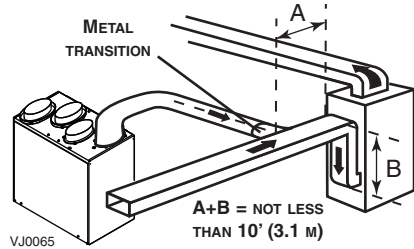
A. FRESH AIR TO BUILDING DUCT ONLY

⚠ WARNING

When performing duct connections, always use approved tools and materials. Respect all corresponding laws and safety regulations. Please refer to your local building code.

- Cut an opening into the return duct not less than 10 feet (3.1 m) from the furnace (A+B).
- Use a metal transition (not provided, available in hardware stores) to connect the fresh air to building duct to the furnace return duct.

NOTE: For this type of installation, it is not essential that the furnace blower runs when the unit is in operation, but we recommend it.



B. FRESH AIR TO BUILDING DUCT AND EXHAUST AIR FROM BUILDING DUCTS

⚠ WARNING

When performing duct connections, always use approved tools and materials. Respect all corresponding laws and safety regulations. Please refer to your local building code.

CAUTION

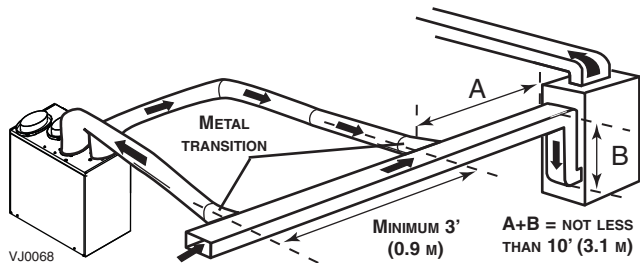
For this type of installation, the furnace blower must be in operation when the HRV is in operation.

Fresh air to building duct

- See point A above "Fresh air to building duct only".

Exhaust air from building duct

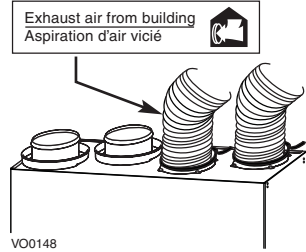
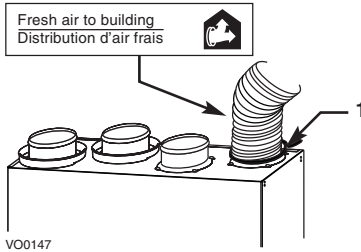
- Cut an opening into the return duct at least at 3 feet (0.9 m) from the fresh air to building duct connection to the return plenum.
- Use a metal transition (not provided, available in hardware stores) to connect the stale air intake duct to the furnace return duct.



4. UNIT INSTALLATION (CONT'D)

4.6.5 HOW TO CONNECT NON-INSULATED FLEXIBLE DUCTS TO THE UNIT PORTS

- Each port is identified on top of the unit (see illustrations below). Attach the fresh air to building duct and the exhaust air from building duct to their corresponding port, using tie wraps (1).



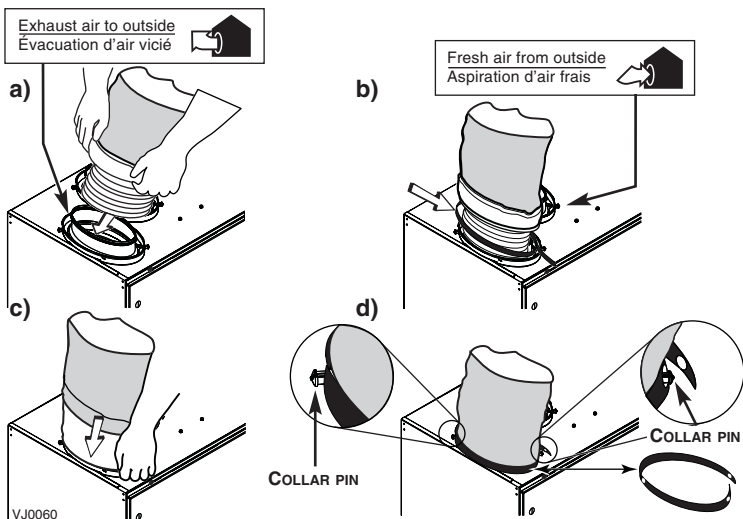
4.7 CONNECTING INSULATED FLEXIBLE DUCTS TO THE UNIT PORTS

CAUTION

Make sure the vapor barrier on the insulated ducts does not tear during installation to avoid condensation within the ducts.

Use the following procedure for connecting the insulated flexible ducts to the unit ports (exhaust to outside and fresh air from outside).

- Pull back the insulation to expose the flexible duct.
- Connect the interior flexible duct to the port using a tie wrap.
- Pull the insulation over the joint and tuck it between the inner and outer ring of the double collar.
- Pull down the vapor barrier (shaded part in illustrations below) over the outer ring to cover it completely. Fasten in place the vapor barrier using the port strap (included in unit parts bag). To do so, insert one collar pin through vapor barrier and first strap hole, then insert the other collar pin through vapor barrier and center strap hole and close the loop by inserting the first collar pin in the last strap hole.



4. UNIT INSTALLATION (CONT'D)

4.8 LOCATING EXTERIOR PORTS

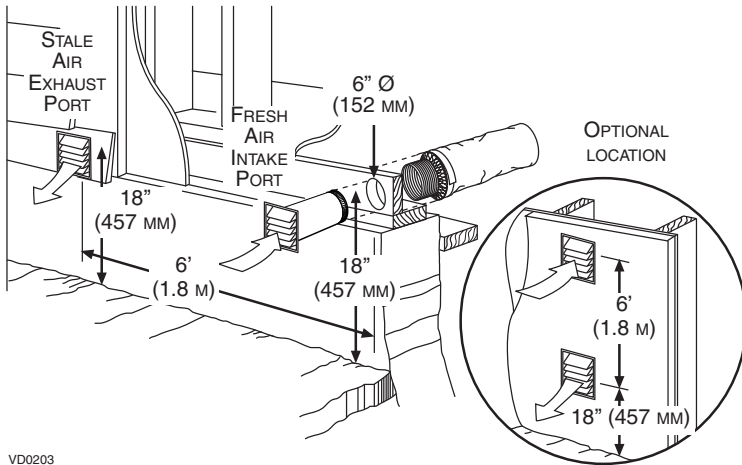
Choose an appropriate location for installing the exterior ports:

- At a distance of at least 6 feet (1.8 m) one from the other
- At a minimum distance of 18 inches (457 mm) from the ground

⚠ WARNING

Make sure the fresh air intake port is at least 6 feet (1.8 m) away (or more, as per applicable building codes or standards) from sources of contamination such as:

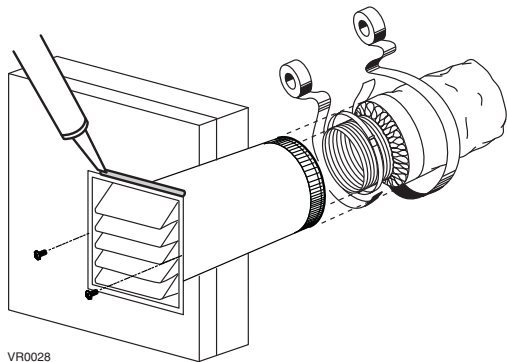
- High efficiency furnace vent
- Any exhaust from a combustion source
- Gas meter exhaust, gas barbecue-grill
- Garbage bin



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4.9 CONNECTING INSULATED DUCTS TO EXTERIOR PORTS

- For each exterior port, using a jig saw, cut a 6" diameter hole in the exterior wall.
- From the outside, slide the exterior port in place and attach it to the exterior wall, using 2 no. 8 x 1½" provided screws. Seal the outline with silicone.
- From the inside, pull back the insulation to expose the flexible duct and, using a tie wrap, attach it to the exterior port rigid duct. Carefully seal with duct



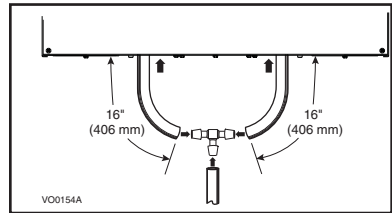
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tape. Pull the insulation over the joint. Pull the vapor barrier over the insulation and over the joint. Apply gently duct tape to the joint making an airtight seal. See above.

4. UNIT INSTALLATION (CONT'D)

4.10 CONNECTING THE DRAIN

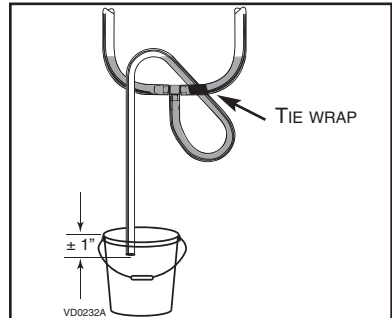
Cut 2 sections of the plastic tube, at least 16" (406 mm) long, and attach them to each inner drain fitting, located under the unit. Join both short sections to the "T" junction and main tube as shown.



Make a water trap loop in the tube to prevent the unit from drawing unpleasant odors from the drain source. Make sure this loop is located OVER the "T" as shown. Run the tube to the floor drain or to an alternative drain pipe or pail.

IMPORTANT

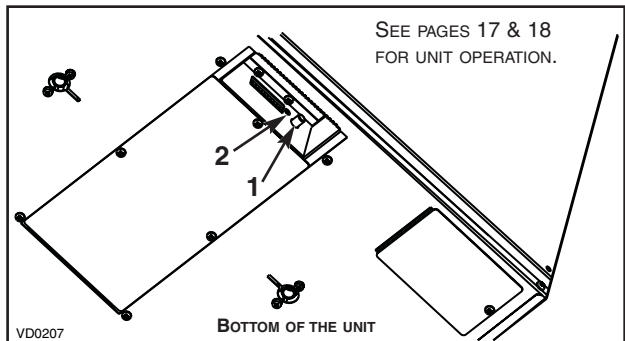
If using a pail to collect water, locate the tube end approximately 1" from top of the pail in order to prevent water from being drawn back up into the unit.



5. CONTROLS

5.1 INTEGRATED CONTROL

Those units are equipped with an integrated control, located under the unit, on the recessed side of electrical compartment. Plug the unit. Use the push button (1) to control the unit. The LED (2) will then show on which mode the unit is in.



Refer to table below to see how to operate the unit using its integrated control.

| PRESS ON PUSH BUTTON | LED COLOR | RESULTS |
|----------------------|-----------|-----------------------|
| ONCE | AMBER | UNIT IS ON LOW SPEED |
| TWICE | GREEN | UNIT IS ON HIGH SPEED |
| THREE TIMES | NO LIGHT | UNIT IS OFF |

5. CONTROLS (CONT'D)

5.1 INTEGRATED CONTROL (CONT'D)

If a problem occurs during the unit operation, its integrated control LED (2) will blink. The color of the blinking light depends on the type of error detected. Refer to Section 8 *Troubleshooting* on page 20 for further details.

BOOT SEQUENCE

The unit boot sequence is similar to a personal computer boot sequence. Each times the unit is plugged after being unplugged, or after a power failure, the unit will perform a 30-second booting sequence before starting to operate. During the booting sequence, the integrated control LED will light GREEN or AMBER for 5 seconds, and then will shut off for 2 seconds. After that, the LED will light RED for the rest of the booting sequence. During this RED light phase, the unit is checking and resetting the motorized damper position. Once the motorized damper position completely set, the RED light turns off and the booting sequence is done.

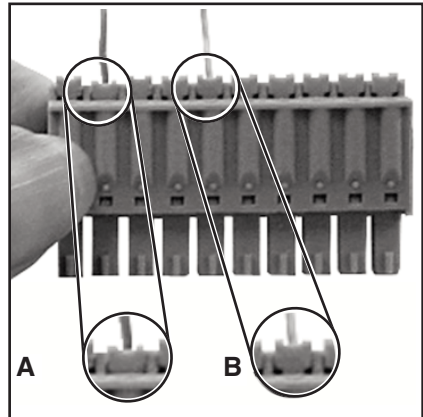
NOTE: No command will be taken until the unit is fully booted.

5.2 CONTROLS CONNECTION TO THE UNIT

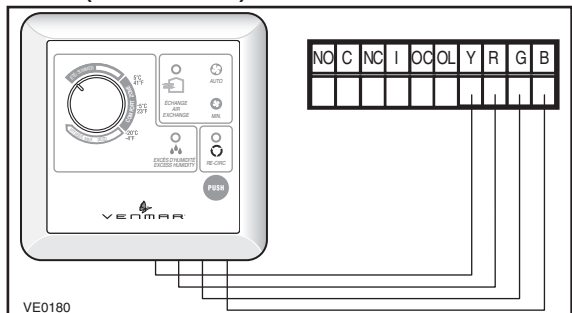
WARNING

Always disconnect the unit before making any connections. Failure in disconnecting power could result in electrical shock or damage of the control or electronic module inside the unit.

Use the terminal connector included in the installation kit to perform the electrical connection for control. Check if all wires are correctly inserted in their corresponding holes in the terminal block. (A wire is correctly inserted when its orange receptacle is lower than another one without wire. On picture beside, wire **A** is correctly inserted, but not wire **B**.)



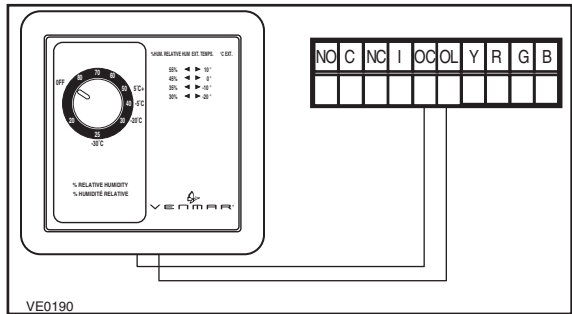
5.2.1 BREEZE MAIN CONTROL (PRO250 ONLY)



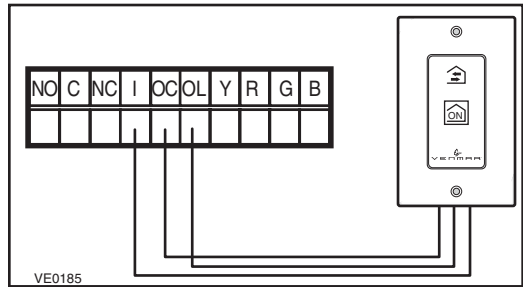
5. CONTROLS (CONT'D)

5.2 CONTROLS CONNECTION TO THE UNIT (CONT'D)

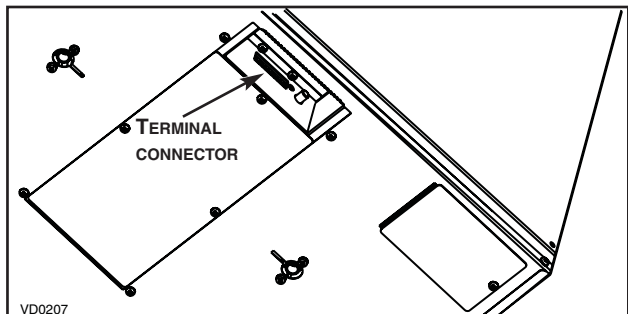
5.2.2 11136 MAIN CONTROL (PRO225 ONLY)



5.2.3 20-MINUTE LIGHTED PUSH BUTTON OPTIONAL AUXILIARY CONTROL (PRO250 & PRO 225)



Once the control(s) connection has been made, insert the terminal connector under the unit, on the recessed side of the electrical compartment.



5. CONTROLS (CONT'D)

5.3 MAIN CONTROLS INSTALLATION

For more convenience, the PRO250 and PRO225 units can also be controlled using the included main controls: the Breeze main control for the PRO250 unit and the 11136 main control for the PRO225 unit.

WARNING

Always disconnect the unit before making any connections. Failure in disconnecting power could result in electrical shock or damage of the control or electronic module inside the unit.

CAUTION

The Breeze main control must be installed with the PRO250 unit only and the 11136 main control with PRO225 unit.

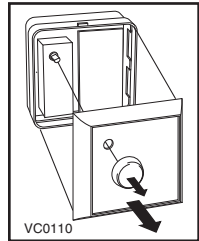
CAUTION

Failure to comply with the following can cause erratic operation of the unit:

- **Never install more than one control per unit.**
- **Keep control low voltage wiring at least 1 foot (305 mm) away from motors, lightning ballast, light dimming circuit and power distribution panel. Do not route control wiring alongside electrical wires.**
- **Ensure the wires are securely connected.**
- **Disconnect power from the unit before removing the control faceplate from its mounting plate.**

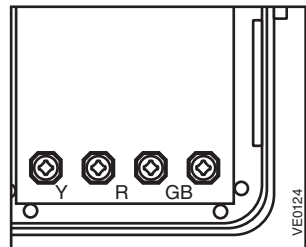
1. Route the cable from the unit to a convenient location for the control.

2. Remove the button and the cover plate of the control (see figure beside). If necessary, bore the mounting holes and insert anchors.



3. Pass the cable (4 wires) through the opening of the mounting plate and mount the plate to the wall using the provided screws.

4. Splice back the end of the cable to access to the 4 wires. Strip the end of each wire. Connect each wire to its corresponding terminal: YELLOW wire to "Y", RED wire to "R", GREEN to "G" and BLACK to "B". See illustration beside.



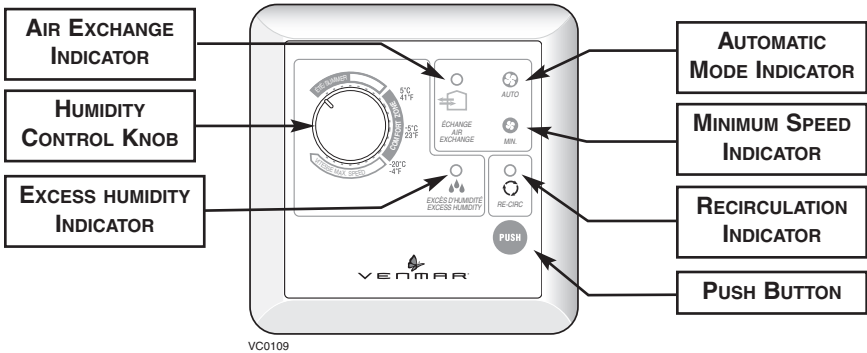
5. Reinstall cover plate and button.

6. Plug the unit.

6. OPERATING CONTROLS

6.1 BREEZE MAIN CONTROL (PRO250 ONLY)

NOTE: The integrated control must be turned OFF to use this control.



ADJUSTING AIR SUPPLY CONTROL

1) Select "RE-CIRC", "MIN." or "AUTO" using the push button.

- When "RE-CIRC" is selected, the recirculation indicator lights up. If the humidity control knob is set to the left of the "click", the unit will recirculate air on high speed and if it is set to the right of the "click", the unit will exchange air, on high speed, with the outside until the desired humidity level has been reached. During this time, the excess humidity and air exchange indicators will be lit.
- When "MIN." is selected, the minimum speed and air exchange indicators light-up. If the humidity control knob is set to the left of the "click", the unit will exchange in low speed with the outside and if it is set to the right of the "click", the unit will exchange air, on high speed, with the outside until the desired humidity level has been reached. During this time, the excess humidity indicator will be lit.
- When "AUTO" is selected, the automatic indicator lights-up. If the humidity control knob is set to the left of the "click", the unit will turn OFF for the first 40 minutes and operate on air exchange mode with the outside, in low speed, during the last 20 minutes of the hour. The air exchange indicator will be lit. If the humidity control knob is set to the right of the "click", the unit will exchange air, on high speed, with the outside until the desired humidity level has been reached. During this time, the excess humidity indicator will be lit.

2) To turn off the unit, press on the push button once again.

ADJUSTING HUMIDITY CONTROL

SETTING DURING THE SUMMER MONTHS:

During this period, unless being afflicted with breathing problems, using the humidity control is unnecessary; set the unit in recirculation mode. (Do not exchange in day time; exchange at night time if cool outside or if it's not raining.)

SETTING DURING THE FALL, WINTER AND SPRING MONTHS (CONDENSATION APPEARS ON WINDOWS):

- 1) Determine the humidity level in your house (bring the knob counterclockwise to its maximum position, then bring it back clockwise slowly until you hear a "click").
- 2) Set the knob to one line under this temperature level or "click".

CAUTION

Do not set a temperature below -20°C (-4°F). This could lead to excessive dryness in the air causing discomfort for the occupants.

It is possible (and normal) to experience condensation on your windows when drastic changes in temperature happen (for example: -5°C [23°F] to -20°C [-4°F]). In that case, we suggest waiting a few days to allow the situation to stabilize.

6. OPERATING CONTROLS (CONT'D)

6.2 11136 MAIN CONTROL (PRO225 ONLY)

NOTE: The integrated control can be turned OFF (no light) or at Minimum speed (amber led) to use this control.

USING THE HUMIDITY LEVEL SELECTOR:

Winter: (outside temperature between 5°C and -30°C)

- Position the selector between 50% and 25%, pointing approximately to the corresponding outside temperature.
- If there is condensation or frost on the windows, then lower the humidity level by 1% to 2% every 24 hours until the condensation has evaporated.
- Do not go lower than 25%: the air will become too dry for human comfort.

Spring and Fall:

- Position the selector anywhere between 75% and 50% (higher on warm days, lower on cold days).
- If certain periods during the spring and fall seem more like winter, follow the instructions given for humidity control during the winter.

Summer:

- Position the selector at 80% during the day.
- Lower the selector to 20% to introduce cool fresh air into the house during certain summer nights.

IMPORTANT EXPLANATIONS ABOUT HUMIDITY LEVELS:

The comfort level for human beings is between 30% and 45% relative humidity. To measure the present humidity level in your house, proceed as follows:

- Turn the dial to 80%.
- Turn the dial slowly clockwise until you hear a “click”. The dial will then be pointing to the value for the present humidity level (precision of 5%).

Turn the selector to the right of the “click” to lower the humidity level in the house. This will initiate the «air exchange» mode on your ventilation system and replace the stale humid air from inside with dryer air from outside. Avoid to try to lower the humidity with «air exchange» on rainy or foggy days.

Turn the selector to the left of the “click” to cancel «air exchange» mode.

NOTE: The above instructions are guidelines. According to home insulation, type of windows or to meet specific needs, different values can be selected to achieve comfort.

6.3 20-MINUTE LIGHTED PUSH BUTTON OPTIONAL AUXILIARY CONTROL (PRO250 & PRO225)

Location: Located in the bathroom or in other locations where there is temporary humidity excess or pollutants.

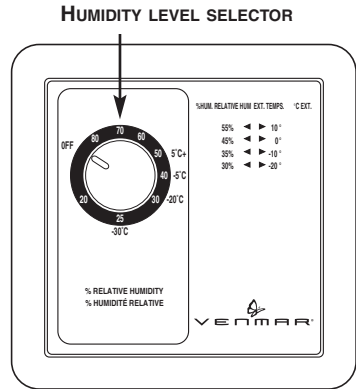
Purpose: To eliminate excess humidity produced by showers or other periodic activities producing pollutants.

NOTE: This control is sold separately.

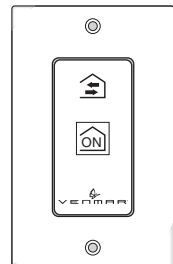
Press once to activate the push-button.

The unit will operate on high speed for 20 minutes and the indicator will light up. To stop activation before the end of the 20-minute cycle, push one more time.

The unit will get back to its previous setting.



VC0022



VC0082

7. MAINTENANCE

WARNING

Dangerous voltage may be present. During maintenance and repairs, the unit must always be turned off, then unplugged. We take great care to minimize sharp edges; however, please proceed with caution when handling all components. When cleaning the unit, it is recommended to wear safety glasses and gloves.

7.1 REGULAR MAINTENANCE

1. The motors are factory lubricated for life. Lubricating the bearings is not recommended.
2. The heat recovery core must be handled with care. We recommend that it be washed once a year, following the season of most intense use, in order to insure maximum efficiency of the plastic partitions. Allow the heat recovery core to soak for 3 hours in a solution of warm water and mild soap. Rinse under a stream of water.

CAUTION

Hot water and a strong detergent will damage the heat recovery core.

3. The air filters are washable. Under normal conditions, we recommend that they be washed every 3 months.
Use vacuum cleaner to remove the heaviest portion of accumulated dust, then wash in hot water.
4. Regularly check the exterior fresh air intake port and clean when necessary. Also check during very cold weather because ice may grow on the screen located at the exterior intake hood.

7.2 ANNUAL MAINTENANCE

NOTE: Ask your installer for an annual service contract.

Annual service should include:

- 1) Cleaning filters, heat recovery core and the exterior air intake/exhaust ports.
- 2) Cleaning the wheels and the blowers blades.
- 3) Cleaning the condensation tray with soapy water (make sure that the drain is not clogged).
- 4) Running the system and checking the different operating modes.

8. TROUBLESHOOTING

If you think your unit is malfunctioning, check some of the followings:

| | PROBLEMS | TRY THIS... |
|----|--|--|
| 1. | The LED of the integrated control is blinking red. | <ul style="list-style-type: none"> • There is a problem with the exhaust motor. The unit is OFF. Contact your installer. |
| 2. | The LED of the integrated control is blinking green. | <ul style="list-style-type: none"> • There is a problem with the thermistor. The unit is still working, but will defrost frequently. Contact your installer. |
| 3. | The LED of the integrated control is blinking amber. | <ul style="list-style-type: none"> • There is a problem with the motorized damper. The unit is OFF. For a 2½-hour period, the unit will try to reset the damper at every 30 minutes. After 2½ hours, if the problem is not solved, the unit stops trying to reset damper. • Contact your installer. • Check control wiring. |
| 4. | The integrated control push button does not work. | <ul style="list-style-type: none"> • The 30-second boot sequence is not completed. See Booting Sequence on page 14. |
| 5. | Nothing works. | <ul style="list-style-type: none"> • See if the unit is plugged in. • See if the unit is receiving power from the house circuit breaker or fuse. |
| 6. | Condensation on windows. (Air too humid.) | <ul style="list-style-type: none"> • Adjust the humidity control knob as per instructions (see Section 6). • Leave curtains half-open to allow air circulation. • Store all firewood in a close room with a dehumidifier or in a well ventilated room, or store the wood outside. • Keep the temperature in your house above 18°C (64°F). • Set the unit at high speed during activities generating excess humidity (family gatherings, extra cooking, etc.). |
| 7. | Air too dry. | <ul style="list-style-type: none"> • Temporarily use a humidifier. • Using integrated control, set the unit at low speed. • <u>PRO250 unit only (with Breeze control)</u> <ul style="list-style-type: none"> - Do not adjust your humidity control below -20°C (-4°F). - Set the unit at minimum speed (MIN.). - Temporarily switch to the AUTOMATIC mode. • <u>PRO225 unit only (with 11136 control)</u> <ul style="list-style-type: none"> - Set the Humidity level selector below 30% (see 6.2 on page 18). |
| 8. | Air too cold at the air supply grille. | <ul style="list-style-type: none"> • Make sure the outside ports are not blocked. • Have the unit defrost system checked. • Install a duct heater. • Using integrated control, set the unit at low speed. • <u>PRO250 unit only (with Breeze control)</u> <ul style="list-style-type: none"> - Set the unit at minimum speed (MIN.). |

This Venmar ventilation unit is a high quality product, built and packaged with care. Venmar Ventilation ULC warrants to the original purchaser of its products, that such products will be free from defects for the period stated below, from date of original purchase. For this Venmar unit, the warranty covers parts only against any operational defect. This is a 2-year warranty. Subject to perform the core maintenance according to user guide recommendations, the heat recovery core (HRV) has a limited lifetime warranty. If any defect should occur, we urge you to read the user guide carefully. If the problem persists, observe the following rules:

RULES TO FOLLOW

If the unit is defective, contact your ventilation contractor (see address on your user manual cover page). The contractor will determine with you the reason for the defect, and if needed, do the replacement or repair.

If ever it is impossible to reach your ventilation contractor, call 1-800-567-3855 (in North America); the personnel will be pleased to give you the phone number of a distributor or a service center near you.

REPLACEMENT PARTS AND REPAIR

In order to ensure your ventilation unit remains in good working condition, you must use Venmar Ventilation ULC genuine replacement parts only. Venmar Ventilation ULC genuine replacement parts are specially designed for each unit and are manufactured to comply with all the applicable certification standards and maintain a high standard of safety. Any third party replacement part used may cause serious damage and drastically reduce the performance level of your unit, which will result in premature failing. Venmar Ventilation ULC also recommends to contact a Venmar Ventilation ULC certified service depot for all replacement parts and repair.

BILL OF PURCHASE

No replacement or repair covered by the warranty will be carried out unless the unit is accompanied by a copy of the original bill of purchase. Please retain your original.

MISCELLANEOUS COSTS

In each case, the labor costs for the removal of a defective part and/or installation of a compliant part will not be covered by Venmar Ventilation ULC.

CONDITIONS AND LIMITATIONS

These units are created for **residential use** only and must be used in a building as defined below:

Building: All structures zoned and/or erected for the act, process or art of human or animal habitation and/or the storage or warehousing of goods.

Residential use: Dwelling, lodging, suite: Building, or part of a building, intended to act as either the domicile to one or several people which can include general sanitary, food consumption and rest facilities. Buildings of only one room or a group of rooms including those occupied by a tenant or owner; comprise the lodgings, the individual rooms of the motels, hotels, rooming/lodging houses, boarding/half-way/foster homes, dormitories, and suites, as well as the stores and the business establishments constituted by only one room in a dwelling.

Commercial use: Agricultural establishment, commercial establishment for assembly, care, or detention: Building or part of a building that does not contain a dwelling, situated on land dedicated to agriculture or farming and used primarily to shelter animals, or for the production, the storage or the treatment of agricultural or horticultural products or animal food. Building or part of a building, used for the display or retail of goods, professional or personal services, or commodities. Building, or part of a building used by persons gathering for civic activities, religious or political assembly, tourism, educational/vocational training, recreation or the consumption of food or drink. Building, or part of a building used to shelter persons of impaired physical or psychological states, persons requiring palliative care or medical treatments, or persons for reasons out of their control, cannot escape harm or threat of danger autonomously.

Industrial use: Building, or part of a building, used for the assembly, the manufacture, the creation, the treatment, the repair or the storage of products and combustible materials and that contain fuels that when ignited or exploded in sufficient quantity may constitute a risk of fire.

The above warranty applies to all cases where the damage is not a result of poor installation, improper use, mistreatment or negligence, acts of God, or any other circumstances beyond the control of Venmar Ventilation ULC.

Furthermore, Venmar Ventilation ULC will not be held responsible for any bodily injury or damage to personal property or real estate, whether caused directly or indirectly by the Venmar unit. This warranty supersedes all prior warranties.

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PRODUCT REGISTRATION CARD - FICHE D'ENREGISTREMENT DU PRODUIT

IMPORTANT: Please complete and return this questionnaire within 10 days of your purchase to the address below. Note that only the questions on this side of the page are mandatory. Your answers will be used for market research studies and reports, and will help us to better serve you in the future. **IMPORTANT:** Veuillez remplir ce questionnaire et nous le retourner dans les 10 jours suivant votre achat à l'adresse inscrite en bas de la page. Veuillez noter que seules les questions de ce côté-ci de la page sont obligatoires. Vos réponses serviront à des études de marché et nous aideront à mieux vous servir dans l'avenir.

First name - Prénom

Last name - Nom de famille

Address - Adresse

Apt. no. - App.

City - Ville

Province

Postal code - Code postal

Country - Pays

E-mail address - Courriel

Language preferred - Langue de correspondance

Telephone no. (day) - N° de téléphone (jour)

Telephone no. (evening) - N° de téléphone (soir)

Date of purchase - Date d'achat

Model no. - N° de modèle

Serial no. - N° de série

Centre d'enregistrement de produit - Product registration center, 550 boulevard Lemire, Drummondville, Québec Canada J2C 7W9

BACK / VERSO >



Would you like to receive occasional informational e-mail offers including product updates and special promotions from us? **Yes/No**

What problem were you trying to solve with your purchase? (Check each one that applies to you.)

- Bad odors
- Respiratory problems
- Excess of humidity
- Temperature standardization
- Lack of fresh air
- Dust
- Mildew
- Allergies
- No specific problems
- Others

Please read the following list of criteria carefully. Indicate the importance of your purchase decision on a scale of 1 (less important) to 5 (most important).

- Price _____
- Warranty _____
- Product design _____
- Ventilation capacity _____
- Filter maintenance indicator _____
- Filtration quality _____
- Recirculation _____
- Heat recovery _____
- Controls _____
- Ease of cleaning _____
- Manufacturers' reputation _____
- Ease of use _____
- Noise level _____
- Other _____

Who installed your unit?

- Home builder
- Recommended installer
- Friend / Family
- Contractor
- Yourself

Are you connected? Please do not hesitate to complete the product registration card via our Web site at www.bnhv.ca

Aimeriez-vous recevoir plus de détails sur nos promotions, offres de rabais et mises à jour de nos produits? **Oui/Non**

Quels problèmes essayez-vous de résoudre par cet achat? (Cochez toutes les cases pertinentes)

- Mauvaises odeurs
- Problèmes respiratoires
- Excès d'humidité
- Uniformisation de la température
- Manque d'air frais
- Poussières
- Moisissures
- Allergies
- Pas de problèmes spécifiques
- Autres (Précisez SVP)

Veuillez lire la liste des critères de sélection ci-dessous. Sur une échelle de 1 (étant le moins important) à 5 (étant le plus important), veuillez indiquer l'importance de chacun d'eux dans votre décision d'achat.

- Prix _____
- Garantie _____
- Design du produit _____
- Débit de ventilation _____
- Indicateur d'entretien du filtre _____
- Qualité de filtration _____
- Recirculation _____
- Récupération de chaleur _____
- Récupération d'énergie _____
- Fonctions de nettoyage _____
- Réputation du fabricant _____
- Simplicité d'utilisation _____
- Niveau de bruit _____
- Autres (Précisez SVP) _____

Qui a installé l'appareil?

- Constructeur de la maison
- Installateur recommandé
- Ami/membre de la famille
- Entrepreneur
- Vous-même

Enregistrez-vous en ligne! N'hésitez pas à remplir la fiche de demregistrement du produit sur notre site Internet au www.bnhv.ca