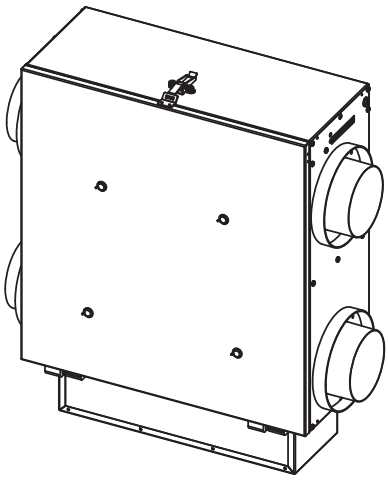
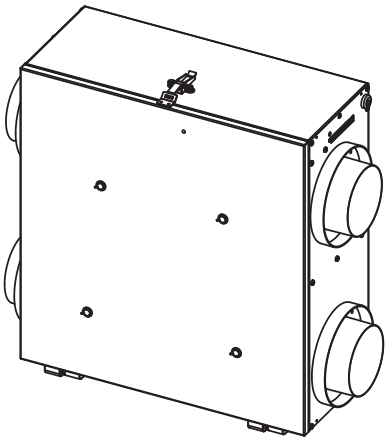
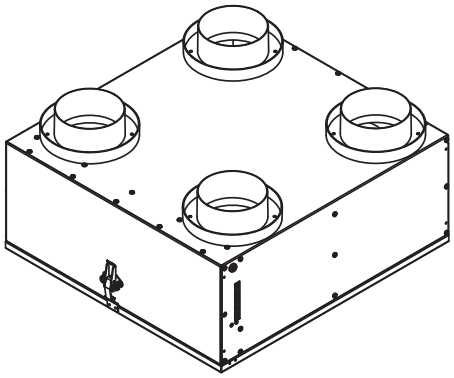
USER MANUAL

ERV
ENERGY RECOVERY VENTILATOR







Model #				
OSALE115 OSALE150 OSAME115R* OSAME230R	GSAME115R* GSAME230R	ISALE115 ISALE150 ISAME115R* ISAME230R	SSALE115 SSALE150 SSAME115R* SSAME230R	S15 / S16 S15+ / S16+ S15R* S20 / S20R

*Products marked with an asterisk (*) are ENERGY STAR® certified, as they meet the strict energy efficiency guidelines set by Natural Resources Canada and US EPA. These products meet ENERGY STAR requirements only when used in Canada.

READ AND SAVE THESE INSTRUCTIONS

Designed and manufactured in Canada.

324-A00013_2026-09_02

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CONGRATULATIONS

Congratulations on your purchase of an Energy Recovery Ventilator.

Your new system will improve the quality of the air in your home for many years to come.

SAFETY PRECAUTIONS

WARNING: TO REDUCE THE RISK OF FIRE,ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Unplug the unit before servicing, cleaning, installing or replacing filters.
- Do not operate any fan with a damaged cord or plug. Discard fans or return to an authorized service facility for examination and/or repair.
- Do not run cords under carpeting. Do not cover the cord with throw rugs, runners, or similar coverings. Do not route cords under furniture or appliances. Arrange cord away from traffic areas and where it will not be tripped over.
- Do not damage, pull, twist, bend or place heavy objects on the cord.
- Never handle the electrical cord with wet hands.
- Do not alter the plug in any way.
- Do not use with extension cords.
- Never tug on the electrical cord to unplug the unit from the outlet.
- Do not place fingers or foreign objects into the airflow openings of the unit.
- Operate the unit in a well-ventilated area.
- Do not operate the unit outdoors.
- Do not operate near flammable gases.
- Do not operate the unit in humid or wet places such as a bathroom.
- Do not use chemical sprays near the unit, they will accumulate on the filter and potentially cause harmful fumes.
- Do not operate the unit in an area with high oil content, such as mechanical oil or cooking oil, over time it will deteriorate the filter.
- Make sure all filters are correctly installed before running the unit.
- This is not a toy and is not intended for use by children.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THIS FAN WITH ANY SOLID-STATE SPEED CONTROL DEVICE (DIMMER).

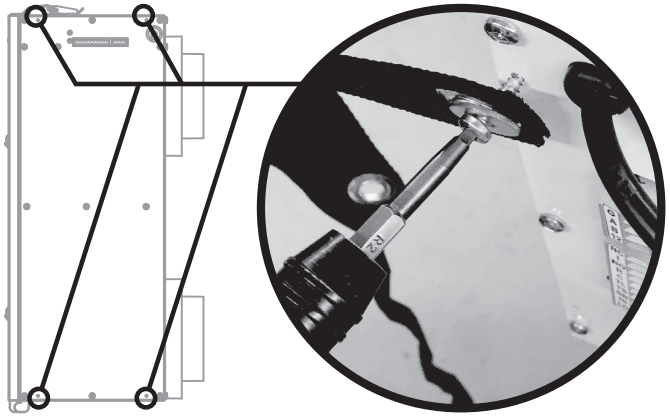
THE QUALITY OF THE AIR IN HOMES TODAY

Homes today are built to be as energy efficient as possible. To prevent heat loss, newer homes are more airtight. This reduces the cost to heat a house but in effect, it lowers indoor air quality. Regardless, in any home, new or old, indoor air quality is typically 2 to 5 times more polluted than outdoor air.

The ERV system is specifically designed to bring fresh air while recuperating the energy and moisture from the airflow going out of your home.

TETHER STRAPS FASTENING

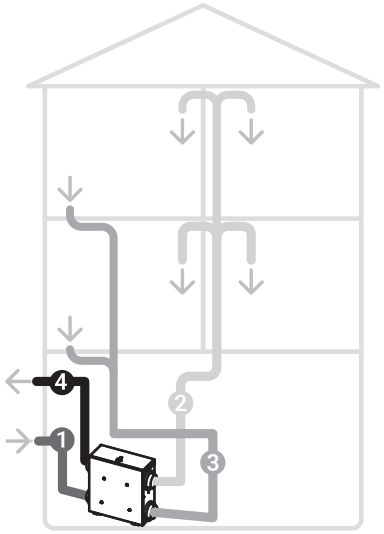
Depending on the orientation and the space available, you have several choices to screw on the tether straps. Use a machine screw and washer and screw into one of the pre-drilled holes located on each side of the unit at the locations shown in the diagram. Level the machine once in place in its final position.



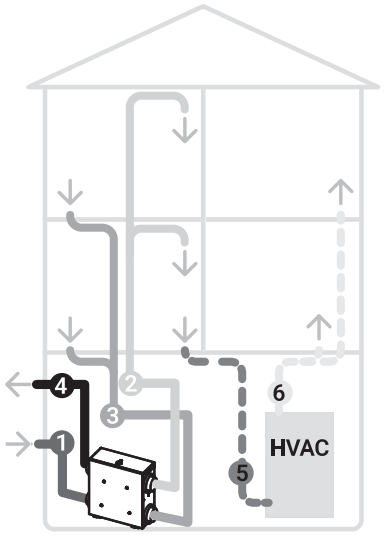
VENTILATION SYSTEM CONFIGURATION

For configurations where the HRV/ERV and HVAC systems are integrated, use the synchronization diagrams with a furnace on page 8.

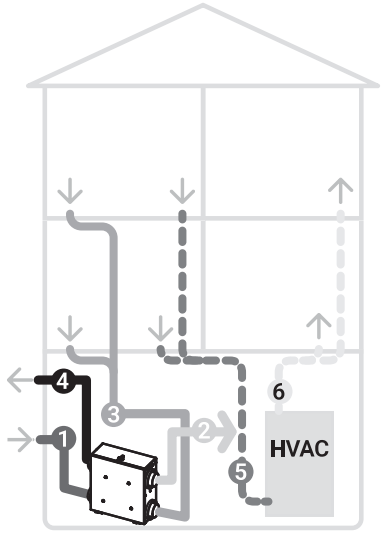
HRV/ERV alone



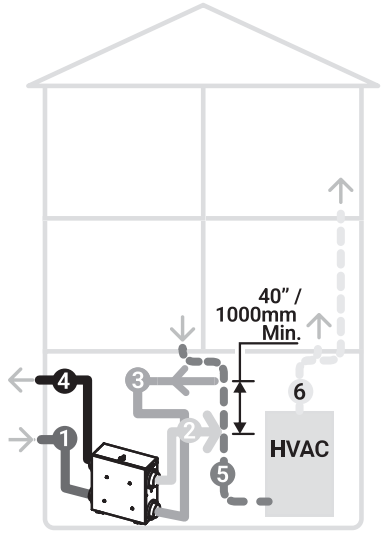
HRV/ERV and HVAC indirectly ducted



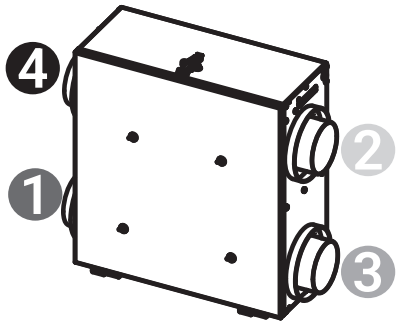
HRV/ERV and HVAC partially ducted



HRV/ERV and HVAC fully ducted



Legend



- ❶ **Outdoor Fresh Air Intake**
- ❷ **Indoor Fresh Air Supply**
- ❸ **Indoor Stale Air Intake**
- ❹ **Outdoor Stale Air Exhaust**
- ❺ **HVAC Stale Air***
- 6 **HVAC Fresh Air***

***If applicable**

CONNECTING THE AIR EXCHANGER

IMPORTANT

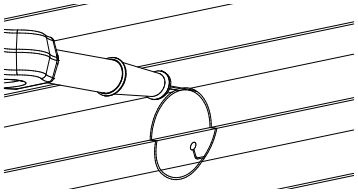
For models xSALE115, xSAME115R, xSALE150, S15, S15+, S16, S16+, and S15R: Use 5-in. diameter ducts.

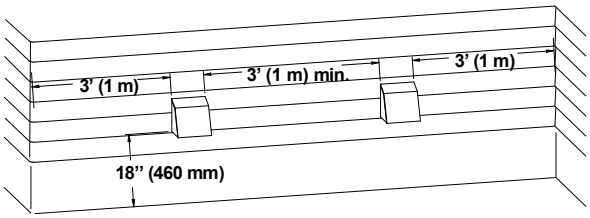
For models xSAME230R, S20 and S20R: Use 6-in. diameter ducts.

Ducting has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated air flow.

1. INSTALLATION AND CONNECTION OF EXTERIOR VENTS

1.1 Cut the two openings between the exterior wall studs



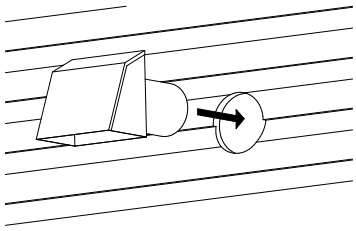


The air inlet vent must be located upstream of the prevailing winds from any other exhaust vent.

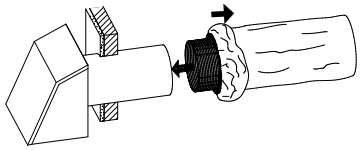
Minimum distance of 3 ft. (1 m) from dryer vents and boiler exhaust (medium or high efficiency boilers), inlets, oil fill pipes, gas meters and trash cans.

Do not place them in a garage, attic, crawl space or under a terrace.

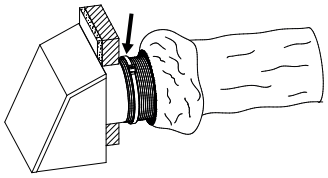
1.2 Insert the vents into the openings. A vent with a non-return damper must be used for the stale air outlet.



1.3 For each conduit connecting the outside to the inside, use insulated flexible duct. Pull back the insulation to expose the flexible duct.



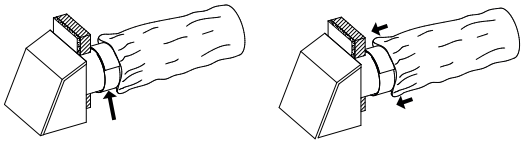
1.4 Secure the flexible conduit using a nylon tie-wrap. The pipe should be attached as close to the wall as possible.



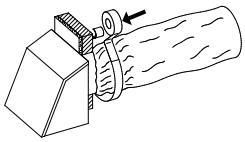
1.5 Pull the insulation over the flexible conduit. Pull the vapor barrier over the insulation:

The insulation must remain intact, not be compressed in any way and not be damaged

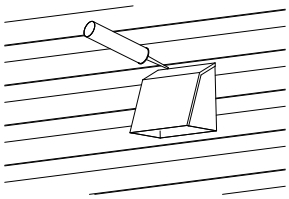
The exterior covering of the insulation, which acts as a vapor barrier, must be sealed to the exterior wall with exterior caulk (ideally soundproof) or ventilation adhesive tape.



1.6 Gently cover the joint with ventilation adhesive tape until completely sealed.

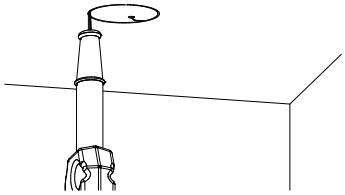


1.7 Seal the vents using exterior caulk.



2. INSTALLATION OF INTERIOR DIFFUSERS

2.1 Cut openings in the ceiling or at the top of the walls.



2.2 Location of exhaust grilles

Exhaust stale air from areas where the worst air quality problems occur: the bathroom, kitchen and laundry room.

Additional return air ducts from strategic locations can also be installed

2.3 Location of supply grilles

Fresh air should be supplied to all habitable rooms from high locations on the wall or ceiling.

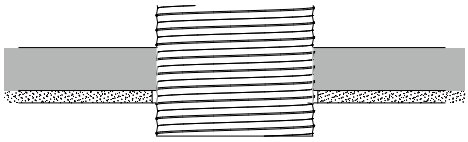
SAFETY PRECAUTIONS

⚠ In accordance with building codes and installation requirements for combustion appliances: return air ducts, or openings for return air, must not be located in enclosed areas containing combustion appliances that may leak.

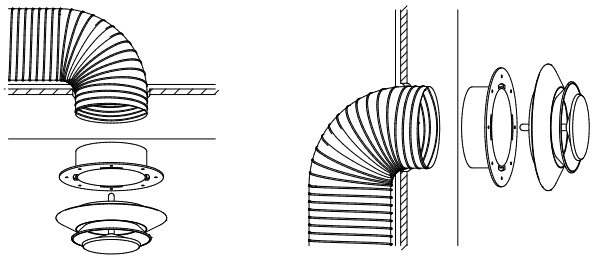
2.4 Use non-insulated flexible conduits to connect the indoor fresh air supply as well as the stale air intake from the house:

The conduits must be as short as possible and have as few folds and curvatures as possible.

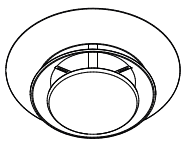
2.5 Pass the flexible ducts through the walls and/ or floors to where the diffusers are located.



2.6 Secure the flexible pipe to the diffuser collar using a nylon tie-wrap. Cover the joint with ventilation tape to ensure a tight seal.



2.7 Push the pipe completely back into the structure and attach the collar to the ceiling or wall. Then attach the diffuser to its collar.



3. CONNECTING THE PIPES TO THE AIR EXCHANGER

3.1 Use the same techniques as above for connecting insulated and non-insulated pipes to the air exchanger.

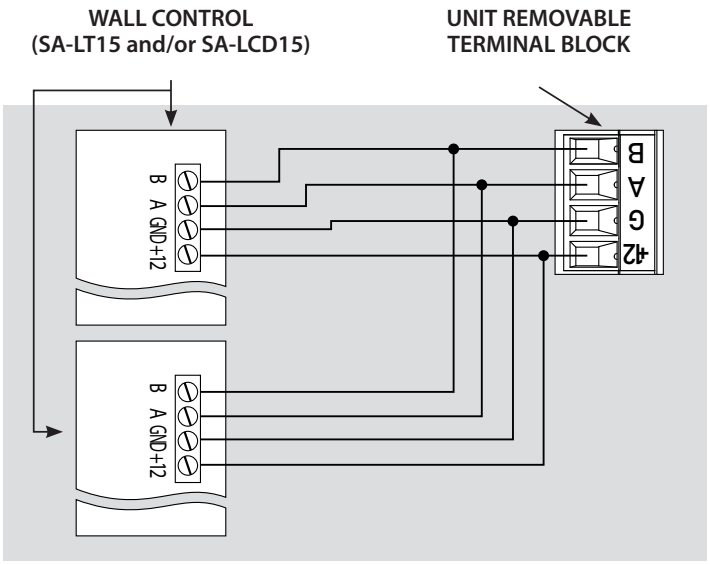
3.2 Pay attention to the identification of the ports, directly on the air exchanger

Connection to exterior vents using insulated pipes:

- Fresh air IN: connect to vent with grille
- Stale air OUTLET: connect to vent with non-return valve

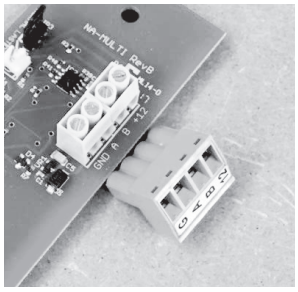
Connection to interior diffusers using non-insulated pipes:

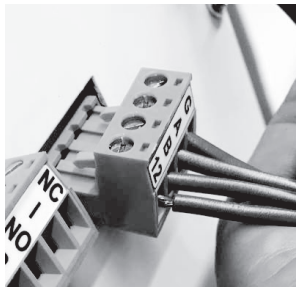
- FRESH air out
- STALE air in



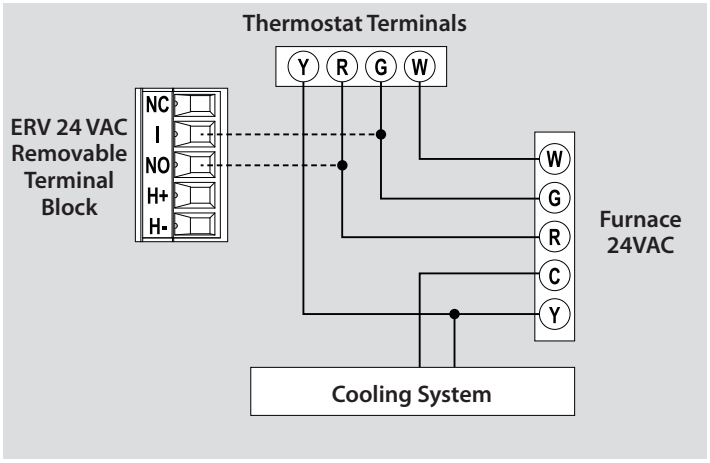
CONTROL(S) CONNECTION

A 4-conductor wire (12 V) is required to connect the controls. They can be connected either in series or in parallel. Preferably parallel since it is easier to diagnose should a problem arise.



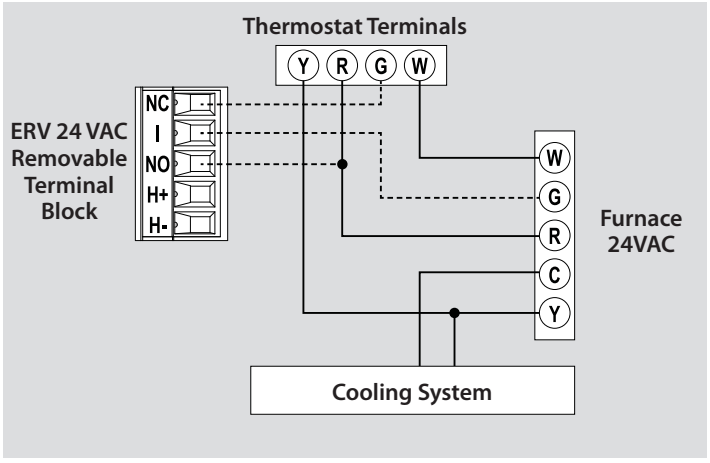


Standard Furnace Interlock



Alternate Furnace Interlock

If the standard interlocking method has the unwanted effect of bringing on the AC, i.e. thermostats that do not isolate "G" from "Y", use the alternate method shown below.



INITIAL BALANCING PROCEDURE

Please note that this unit is factory balanced. The steps below are provided to adjust the airflow rates on-site, if required, to meet the specific installation requirements.

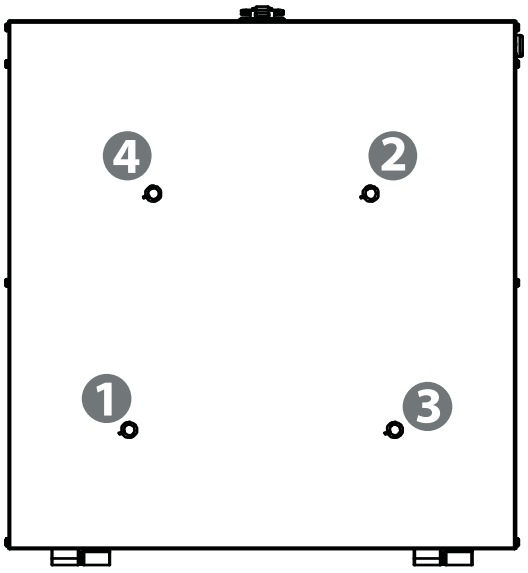
IMPORTANT

You will need a pressure meter with a range of 0 - 1 inches of water gauge.

Begin with the Fresh Air Ports (1-2)

1. In the table corresponding to your unit, locate the desired airflow values.
2. Remove filters.
3. Plug the pressure meter probes in the appropriate ports.

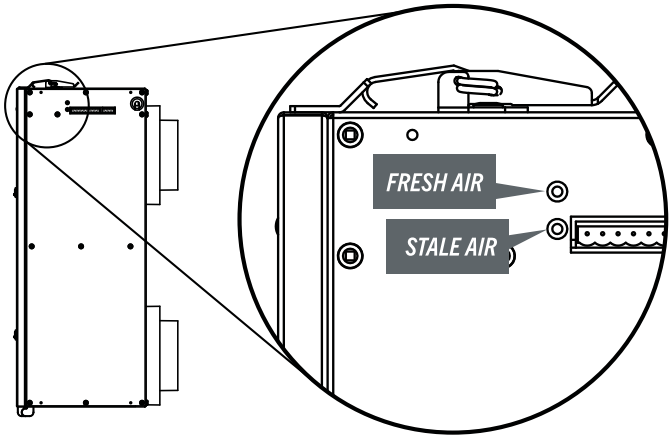
Pressure Ports Location



This illustration represents the standard model

4. Unplug and re-plug the device. It should start at low speed.
5. Hold both FRESH (UP) and STALE (DOWN) buttons for 3 seconds to activate LOW SPEED BALANCING mode. To enter HIGH SPEED BALANCING mode (and vice versa), press and hold both FRESH (UP) and STALE (DOWN) buttons for 3 seconds.

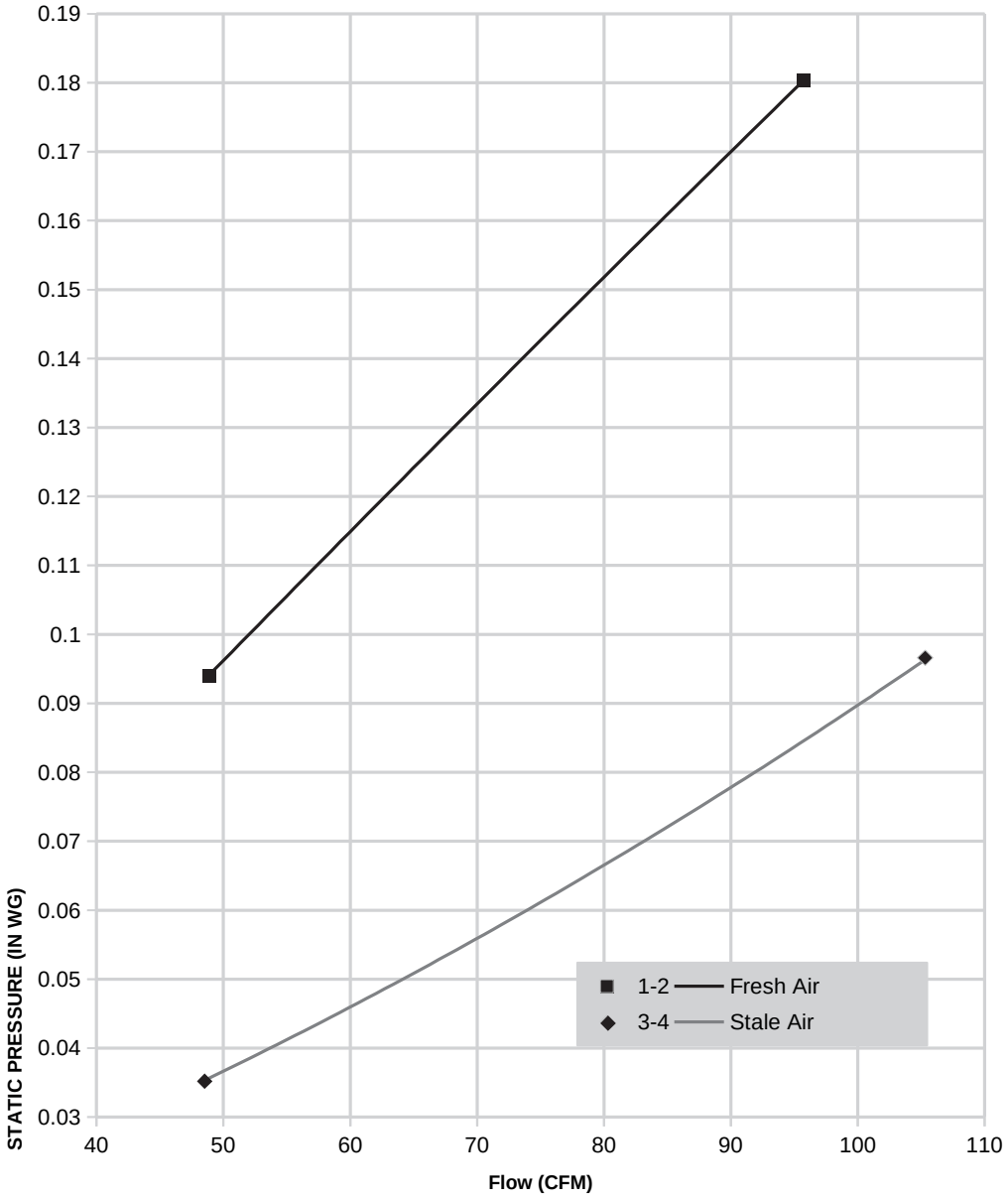
Adjustement Buttons Location

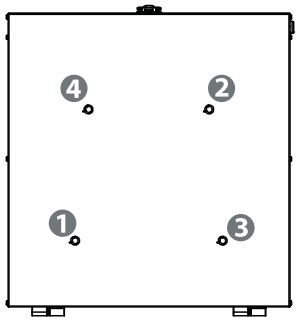


6. Press the FRESH air (UP) and EXHAUST air (DOWN) buttons to set the desired motor. Each press of a button will reduce the motor speed until the minimum is reached, if any more pressure the motor will return to its maximum speed. You will need to press the tuning button about 30 times before reaching minimum speed. When you reach the lowest speed (0%) additional pressure will restart the cycle at 100%. The device will return to normal mode when you stop pressing one or more adjustment buttons for more than 10 seconds.
7. To exit BALANCING mode, stop pressing the buttons for 10 seconds. The device will store the new speeds in the memory of the circuit board.
8. Repeat steps 3 to 7 for balancing the exhaust.
9. Reinstall the filters.

BALANCING
ERV 112 CFM

Works with models xSALE115, xSAME115R, S15, S16, and S15R.





Flow (CFM)	Pressure (in wg)	
	1-2 Fresh	3-4 Stale
48	0.092	0.036
50	0.096	0.038
52	0.100	0.040
54	0.104	0.042
56	0.107	0.044
58	0.111	0.046
60	0.115	0.048
62	0.119	0.050
64	0.122	0.052
66	0.126	0.054
68	0.130	0.056
70	0.133	0.059
72	0.137	0.061
74	0.141	0.063
76	0.144	0.065
78	0.148	0.068
80	0.152	0.070
82	0.155	0.073
84	0.159	0.075
86	0.163	0.077
88	0.166	0.080
90	0.170	0.082
92	0.174	0.085
94	0.177	0.088
96	0.181	0.090
98	0.184	0.093
100	0.188	0.095

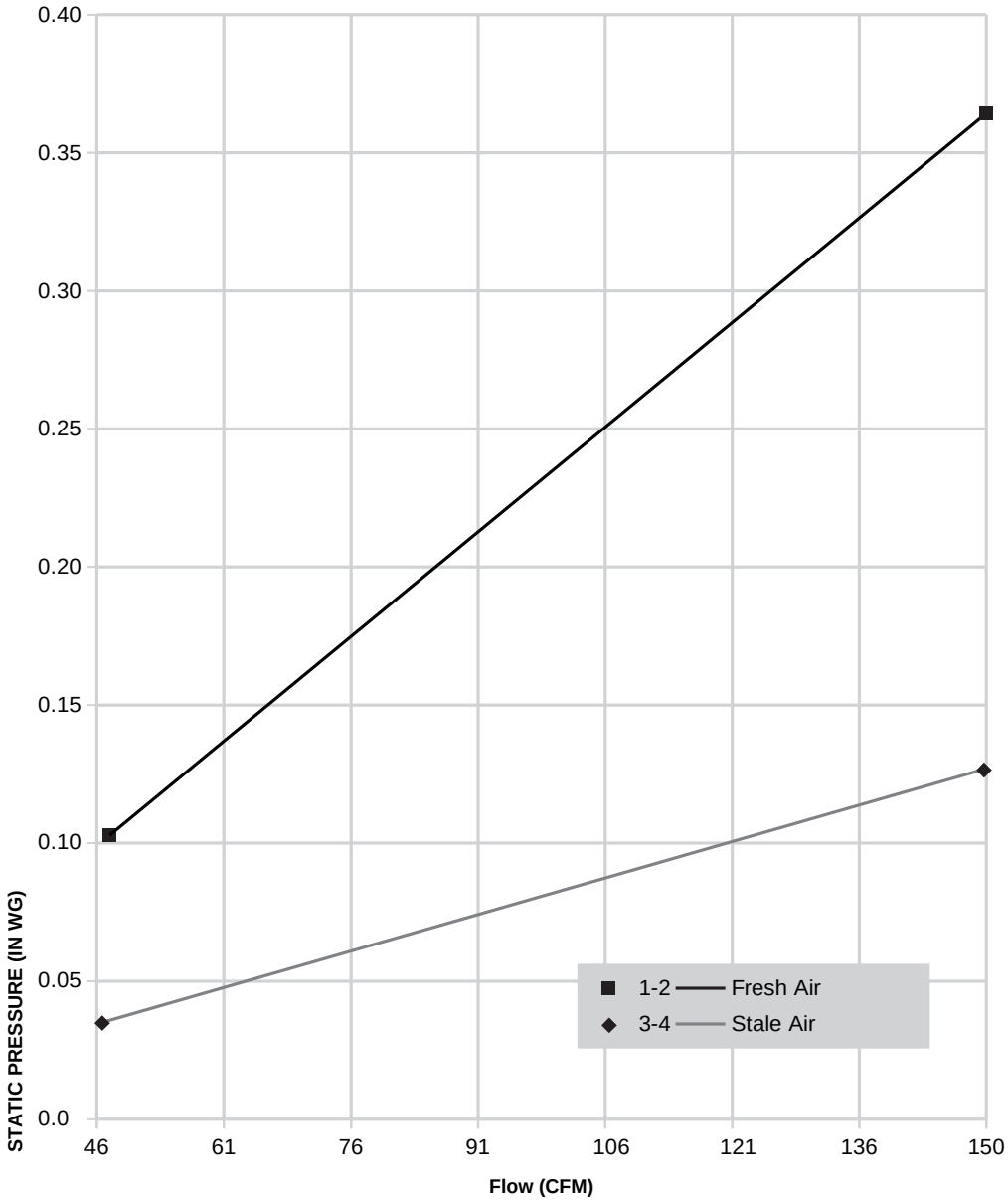
Recommended values at low speed

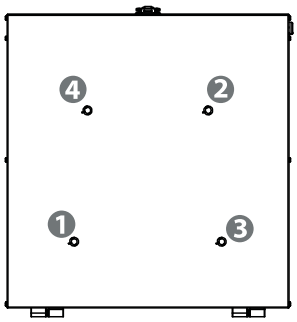
Rooms	Extraction capacity			
	Min. (L/s)	Min. (CFM)	Max. (L/s)	Max. (CFM)
1	16	34	24	51
2	18	38	28	59
3	22	47	32	68
4	26	55	38	81
5	30	64	45	95

Excerpt from Table 9.32.3.3 of the National Building Code of Canada 2010, Volume 2.

BALANCING
ERV 150 CFM

Works with models xSALE150, S15+ & S16+.





Flow (CFM)	Pressure (in wg)	
	1-2 Fresh	3-4 Stale
46	0.101	0.031
50	0.111	0.035
54	0.121	0.038
58	0.131	0.042
62	0.141	0.046
66	0.151	0.049
70	0.161	0.053
74	0.171	0.056
78	0.181	0.060
82	0.191	0.064
86	0.201	0.067
90	0.211	0.071
94	0.221	0.074
98	0.231	0.078
102	0.241	0.082
106	0.251	0.085
110	0.261	0.089
114	0.271	0.092
118	0.281	0.096
122	0.291	0.100
126	0.301	0.103
130	0.311	0.107
134	0.321	0.110
138	0.331	0.114
142	0.341	0.118
146	0.351	0.121
150	0.361	0.125

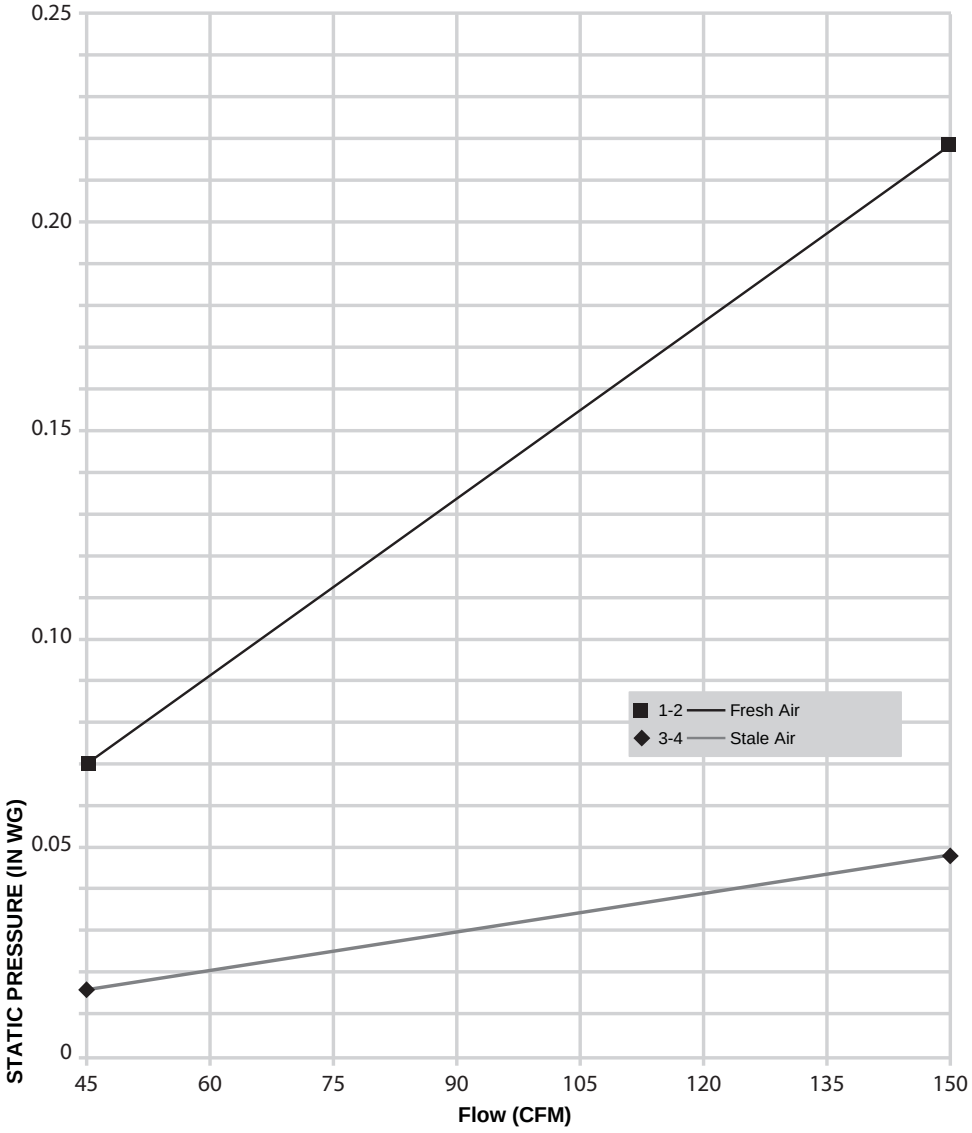
Recommended values at low speed

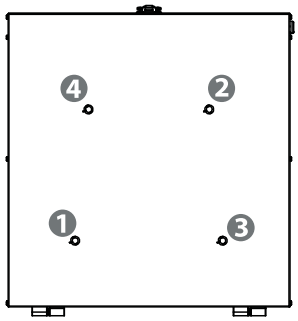
Rooms	Extraction capacity			
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4	26	55	38	81
5	30	64	45	95

Excerpt from Table 9.32.3.3 of the National Building Code of Canada 2010, Volume 2.

BALANCING
ERV 230 CFM

Works with models xSAME230R, S20 & S20R





Flow (CFM)	Pressure (in wg)	
	1-2 Fresh	3-4 Stale
45	0.081	0.020
48	0.086	0.021
51	0.090	0.022
54	0.095	0.023
57	0.100	0.024
60	0.105	0.025
63	0.109	0.026
66	0.114	0.027
69	0.119	0.028
72	0.124	0.029
75	0.129	0.030
78	0.134	0.031
81	0.139	0.032
84	0.144	0.033
87	0.149	0.034
90	0.154	0.035
93	0.159	0.036
96	0.165	0.037
99	0.170	0.038
102	0.175	0.039
105	0.180	0.039
108	0.186	0.040
111	0.191	0.041
114	0.197	0.042
117	0.202	0.043
120	0.208	0.044
123	0.213	0.045
126	0.219	0.046
129	0.225	0.047
132	0.230	0.048

Recommended values at low speed

Rooms	Extraction capacity			
	Min. (L/s)	Min. (CFM)	Max. (L/s)	Max. (CFM)
1	16	34	24	51
2	18	38	28	59
3	22	47	32	68
4	26	55	38	81
5	30	64	45	95

Excerpt from Table 9.32.3.3 of the National Building Code of Canada 2010, Volume 2.

USE

The ERV was designed to operate 24 hours a day, 7 days a week in intermittent mode (20 minutes ON - 40 minutes OFF). Typically, the system is designed, installed and calibrated by a specialized contractor to be very efficient and quiet.

High levels of indoor relative humidity during the heating season can cause water condensation on windows and less insulated surfaces. It's essential to control water condensation to prevent health problems related to mold growth.

The following table gives the typical maximum indoor relative humidity levels required to prevent condensation at an indoor ambient temperature of 22 °C for a house with average performance windows.

Outdoor Temperature	Maximum Relative Humidity
-5 °C	45 %
-10 °C	40 %
-15 °C	35 %
-20 °C	30 %
-25 °C	25 %
-30 °C	20 %

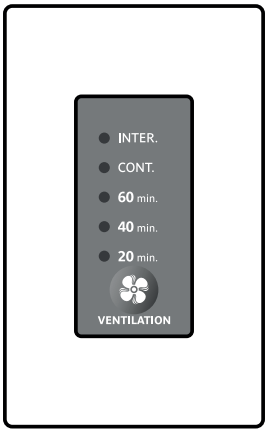
When required you can increase or maintain the air quality by putting the ERV at high speed. Examples: Smokers, bad smell, many people visiting you

CONTROL-TIMER (SA-LT15)

Decora type wall control with timer for residential energy and heat recovery ventilators (ERV and HRV). Offered in a box (SA-LT15-B) for retail sales.

FEATURES

- Designed for standard 2" × 3" electrical boxes.
- Integrated high speed timer 20/40/60 minutes.
- Decora style wall plate included.



OPERATING MODES

- Intermittent - 20 minutes at low speed / 40 minutes standby.
- Continuous - at low speed.
- Timer - 20/40/60 minutes at high speed.
- OFF - does not operate until the unit is restarted by the user.

COMPATIBILITY

Compatible with energy and heat recovery ventilators (ERV and HRV) manufactured as of November 2020.

MODE CHANGE

To alternate between continuous and intermittent modes you need to press and hold the "ventilation" button for 4 seconds. After a power outage the machine will return into intermittent mode.

EXTENDED ABSENCE (MACHINE OFF)

To stop the machine for a long time you must press and hold the "ventilation" button for 10 seconds. In the event of a power failure, the machine returns to extended absence mode.

To exit the mode simply press the "ventilation" button briefly.

DIGITAL WALL CONTROL (SA-LCD15)

Decora type digital wall control for residential energy and heat recovery ventilators (ERV and HRV) with recirculation mode and humidity management. Offered in a boxed version (SA-LCD15-B) for in-store retail sales.

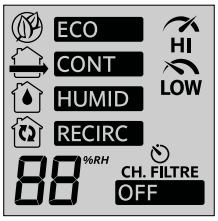
FEATURES

Designed for standard 2" × 3" electrical boxes. Decora style wall plate included.

OPERATING MODES

	ECONOMIC — Intermittent, 20 minutes in LOW speed and 40 minutes OFF. It's recommended to select this mode except during an extended absence from home
	CONTINUOUS — In HIGH speed or LOW speed
	HUMIDITY — Switches to HIGH speed when ambient relative humidity exceeds user-adjustable setpoint
	RECIRCULATION — In HIGH speed or LOW speed
OFF	OFF — Does not operate until restarted by user.



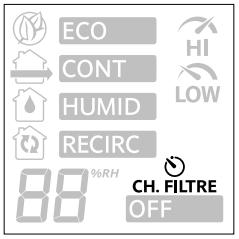


Economic mode
Continuous mode
Humidity mode
Recirculation mode
Humidity %

High speed
Low speed
Change filters
Off

COMPATIBILITY

Compatible with energy-recovery and heat-recovery ventilators (ERV and HRV) manufactured from November 2024 onward.

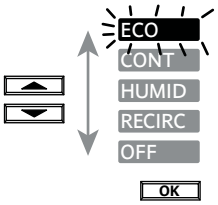


When this indicator light is on, it's time to change the filters.

Scheduled every 6 months

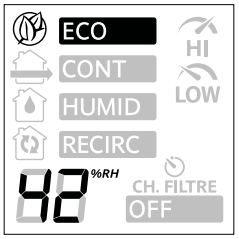
To reset, hold down the OK button for 10 seconds

ECONOMIC MODE



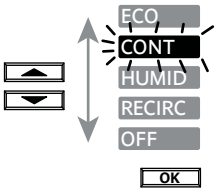
Select the desired mode using the arrows.

By pressing the OK button the current selection will flash. Press OK to confirm selection



Current mode and humidity %.

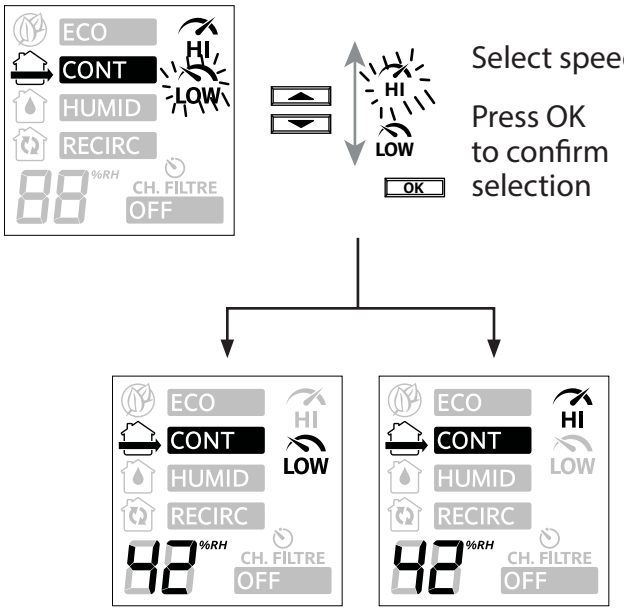
CONTINUOUS MODE



Select the desired mode using the arrows.

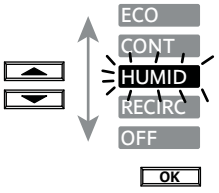
By pressing the OK button

the current selection will flash. Press OK to confirm selection



Current mode, speed and humidity %

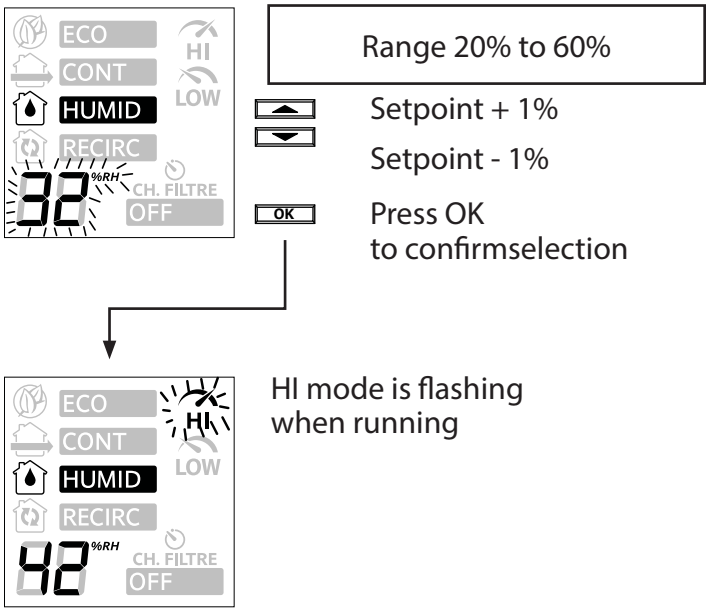
HUMIDITY MODE



Select the desired mode using the arrows.

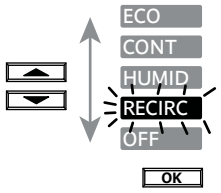
By pressing the OK button
the current selection will flash

Press OK to confirm selection.



Current mode, speed and humidity %

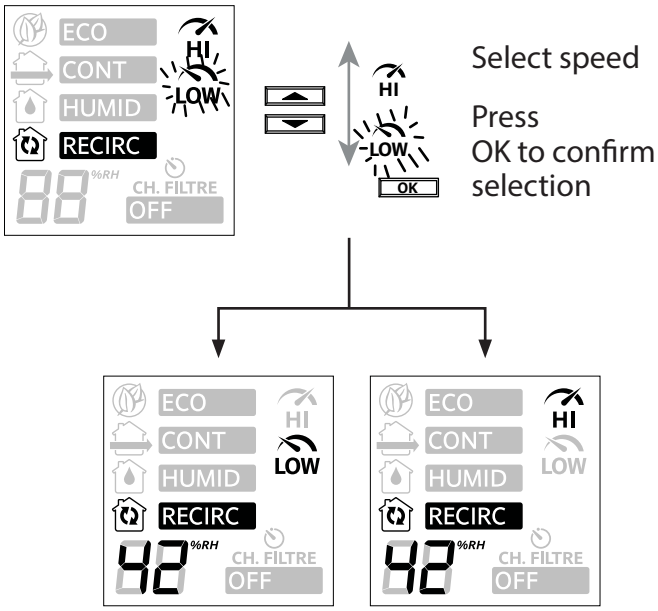
RECIRCULATION MODE



Select the desired mode using the arrows.

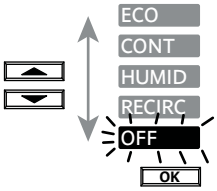
By pressing the OK button
the current selection will flash.

Press OK to confirm selection.



Current mode, speed and humidity %

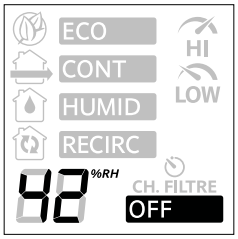
EXTENDED ABSENCE (MACHINE OFF)



Select the desired mode using the arrows.

By pressing the OK button
the current selection will flash.

Press OK to confirm selection.



Current mode, speed and humidity %

MAINTENANCE SCHEDULE

Your ERV is equipped with two carbon filters

Your system is equipped with 2 charcoal filters that protect the energy recovery core. It is recommended to replace these filters every 6 months. It is also very important to keep the recovery core clean. A dirty core would have the effect of decreasing the energy recovery efficiency.

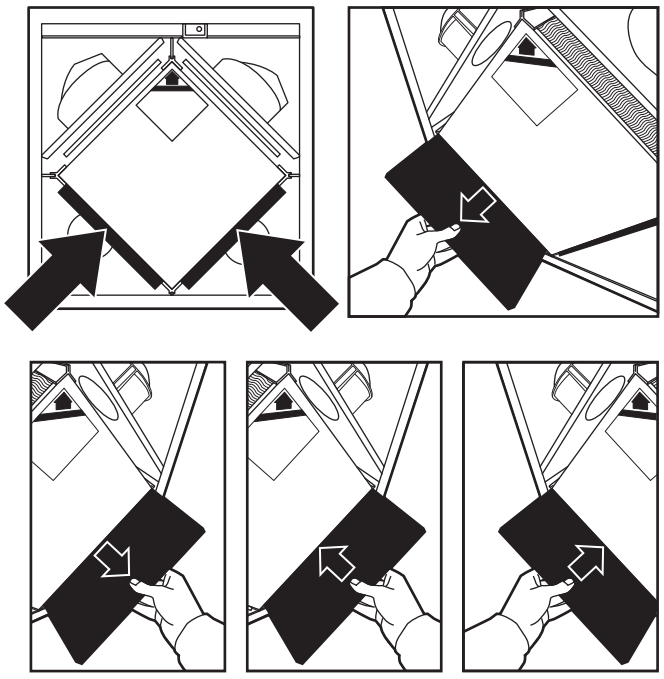
- EVERY 6 MONTHS: Replace both charcoal filters.
- EVERY YEAR: Clean the energy recovery core.

The annual maintenance kit for your ERV has the product number (ANCKITVRC). It contains everything you will need to maintain your device for one year.

To order the annual maintenance kit, go to our website (boutique.epurair.com) or contact our customer service. Fast delivery is included in the price.

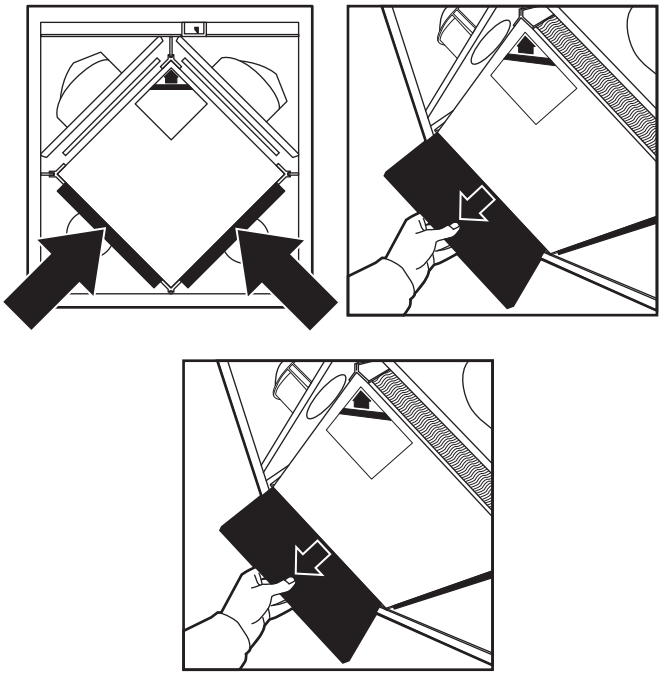
FILTER REPLACEMENT

Remove both filters from the device and replace them with two new filters.

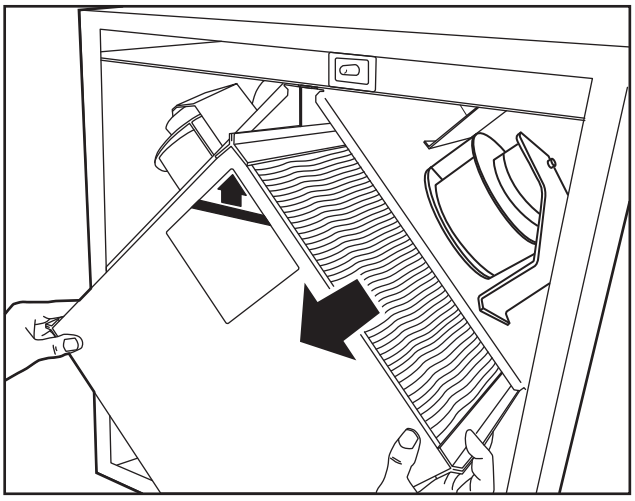


CLEANING OF THE ENERGY RECOVERY CORE

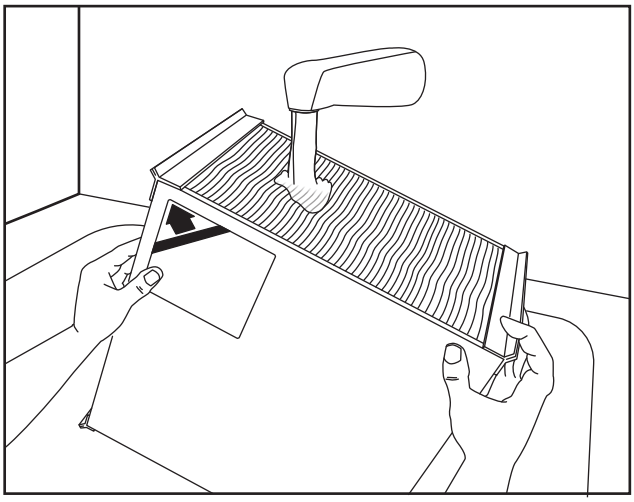
1. Remove both filters as mentioned previously



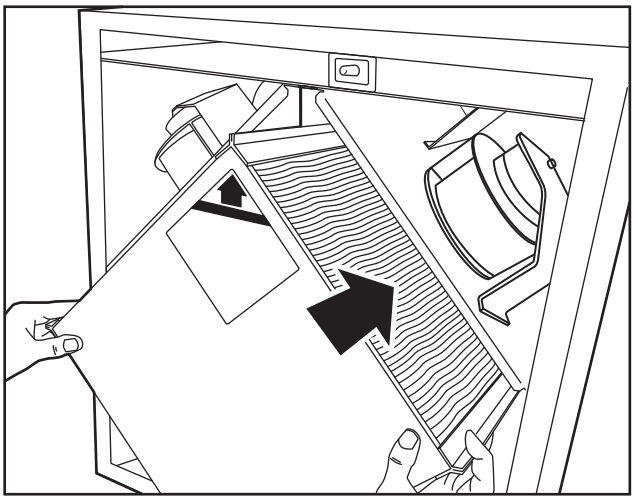
2. Remove the core from its location. It is normal for the core to be difficult to remove. Hold the core firmly and pull it toward you.



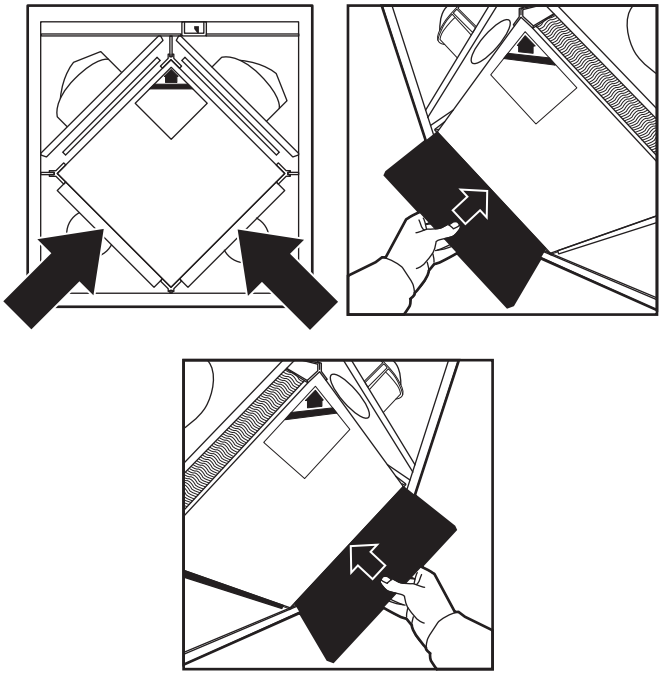
3. Rinse the core with clean water at room temperature (neither cold nor hot). If the core is greasy, you can soak it for 1 minute at room temperature water containing a very small amount of dish soap. Let the core drip for a few minutes before reinstalling it.



4. Reinstall the exchanger core with the label pointing at the top of the machine.



5. Reinstall the two filters.



LIMITED GUARANTEE

The motor inside the Innovair Solutions unit is guaranteed to the original purchaser for the duration of FIVE (5) years from the date of purchase. All other components with the exception of the filters that are guaranteed for ONE (1) year. Innovair Solutions will repair or replace at its choice the component(s) which upon inspection by an authorized Innovair Solutions dealer proves to have failed in normal use due to defects in material or workmanship. Innovair Solutions will at its discretion, replace the unit if necessary. The warranty is void if any attempts have been made by unauthorized personnel to service or modify the unit as well as operating the unit at voltages other than that specified on the unit.

THE CUSTOMER IS RESPONSIBLE FOR ANY DELIVERY CHARGES WHEN SHIPPING THE UNIT TO INNOVAIR SOLUTIONS FOR WARRANTY REPAIRS OR WORK.

EASY!

To order your annual maintenance kit,
visit our website at boutique.epurair.com
or contact our customer service team.

Fast shipping is included in the price.

CUSTOMER SERVICE

IF YOU HAVE ANY QUESTIONS ABOUT THIS PRODUCT, PLEASE CONTACT OUR TECHNICAL SUPPORT TEAM.

OUELLET	Global Commander	innovair®		STELPRO	epurair®
1 800 463-7043	1 800 463-7043	CAN: 1 800 567-2733	US: 305 463-9998	1 800 363-3414 - electricians 1 866 766-6020 - consumers	1 800 205-1108
ouellet.com	globalcommander.ca	dettson.com	innovair.com	stelpro.com	epurair.com