# Solace 1.5H-EC

# Fresh Air Appliance (FAA/HRV)

Product #: 463315



Greentek's most efficient series yet! The Solace 1.5H-EC is ideal for highrise apartment applications, condominiums, single and multi family homes. With a completely new design, the Solace 1.5H-EC features a Counterflow core, round metal collars, and a high efficiency rating!

EC motors use intelligent technology with integral electronic controls to ensure energy savings no matter what the airflow demands. Reduced energy usage results in lower operating costs. The motors develop less heat so significantly less maintenance is needed and the lifetime of the motor is increased.

#### **Features**

- Electronically commutated motors (ECM)
- TurboTouch function boosts exhaust capacity
- 6" (152mm) round metal duct connections with rubberized duct seals
- Removable screw terminal for easy connection with external access
- Top port design fits in tight spaces
- Includes wall mounting speed bracket
- Counterflow heat recovery core
- Multiple speed operation
- Internal recirculation defrost
- Optional MERV-8 Filter
- 50.9 lbs (23.1kg) including core

# **Optional Controls:**

- STS 2.0 (461580) Programmable touch screen wall control
- EHC 2.5 (415518) Electronic multi-function dehumidistat
- EHC 2.0 (415520) Multi-function controller
- T4 (415519) Wired digital timer 20/40/60 minutes
- T5 (463915) Pushbutton timer 20/40/60 minutes
- RD-1 (463020) Dehumidistat

### **Specifications**

• Duct size – 6" (152mm) round

Voltage/Phase
Power rated
Amp
120/1
110 W
3.0 A

• Average airflow – 174 cfm (82 L/s)

@ 0.4" P<sub>2</sub> (100 Pa)







#### Fans

Two (2) electronically commutated motors. The EC fans operate at high efficiency levels and offer a great energy-saving potential not only at full load, but especially at part-load. When operating at part-load, the energy used is much lower than with an AC motor of equivalent output. Reduced energy usage guarantees a drop in operating costs.

#### **Heat Recovery Core**

Counterflow heat recovery exchanger built from thermoformed polymer plates covered by a limited lifetime warranty. Core dimensions are 14.4" x 14.4" (366 x 366 mm) with a 12" (305 mm) depth. Our heat exchangers are designed and manufactured to withstand extreme temperature variations.

#### Winterguard™ Defrost

The unit incorporates a unique and quiet internal recirculation defrost that does not depressurize the home during the defrost cycle. A preset defrost sequence is activated when the outdoor temperature falls below  $23^{\circ}$  F (-5° C) and automatically adjusts itself based on operating conditions. The fan speed is also adjusted automatically to provide a smooth and quiet transition between Ventilation & Defrost mode.

#### Serviceability

Core, filters, fans and electronic panel can be accesses easily from the access panel. Core conveniently slides out with only 14" (355 mm) clearance.

#### **Duct Connections**

6" (152mm) round metal duct connections with rubberrized seal.

#### Case

22 gauge galvanized pre-painted steel corrosion resistant

#### Insulation

Cabinet is fully insulated with 3/4" (20 mm) high density expanded polystyrene.

#### **Filters**

Two (2) washable electrostatic panel type air filters 7.87" (200mm) x 11.81" (300mm) x 0.125" (3mm). A MERV-8 supply filter is provided with the unit. The MERV8 supply filter is intended for areas that it is required. In most cases the MERV8 supply filter is not required and it becomes optional at the home owner's discretion. MERV-8 dimensions 5.77" x 12.09" x 1.75" (146.5mm x 307mm x 44.5mm).

# **Balancing and commissioning**

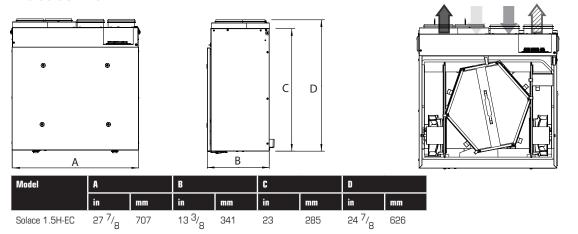
Balancing must be completed using the Greentek STS 2.0 Programmable Touch Screen Wall Control

# Warrantv

Limited lifetime on counterflow exchanger, 7 year on motors, and 5 year on parts.



# **Dimensions & Airflow**



Clearance of 14" (355mm) in front of the unit is recommended for removal of core.

#### **Ventilation Performance**

in. wg. (Pa)	0.2 (50)	0.3 (75)	0.4 (100)	0.5 (125)	0.6 (150)	0.7 (175)	0.8 (200)	0.9 (225)	1.0 (250)
	cfm (L/s)								
Net supply airflow	189 (89)	180 (85)	172 (81)	163 (77)	153 (72)	142 (67)	131 (62)	119 (57)	106 (50)
Net supply airflow with MERV8 filter	171 (88)	164 (77)	156 (73)	147 (69)	137 (65)	126 (59)	115 (54)	103 (49)	90 (42)
Gross supply airflow	193 (91)	184 (87)	174 (82)	165 (78)	155 (73)	144 (68)	133 (63)	121 (57)	108 (51)
Gross exhaust airflow	201 (95)	191 (90)	180 (85)	170 (80)	159 (75)	148 (70)	136 (64)	121 (57)	106 (50)

\*Turbo Mode is an intermittent mode only. It can be activated with the RTS2, RTS5 and the ECO-Touch for up to 60 minutes.

\*\* - Balancing Range : 90 cfm (42 L/s) to 210 cfm (99 L/s)

- If a balanced flow outside the above range is required, please revisit our product offerings to ensure a properly sized unit is selected

#### Airflow [l/s] 118 250 (5) Turbo Static Pressure lin.wg. 200 🖫 100 Static Pressure [ 0.6 0.2 50 0.0 **\_\_** 0 50 100 150 200 Airflow [cfm]

fresh air to inside fresh air

from outside stale air from inside stale air to outside

#### **Energy performance**

Heating	Supply temperature		Net airflow		Consumed power	Sensible recovery efficiency		• • •	Latent recovery/moisture transfer
	٥F	°C	cfm	L/s	w	%	%	%	-
	32	0	70	33	22	84	86	89	0.00
	32	0	106	50	36	80	83	85	0.00
	32	0	158	75	88	77	81	82	0.00
	-13	-25	68	32	47	68	69	90	0.14

<sup>1 -</sup> Not a HVI certified value

## **Requirements and standards**

- · Complies with the UL 1812 requirements regulating the construction and installation of Heat Recovery Ventilators
- $\bullet\,$  Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- · Complies with the CSA F326 requirements regulating the installation of Heat Recovery Ventilators
- Technical data was obtained from published results of test relating to CSA C439 Standards. This data was optained without the use of the MERV8 supply filter.
- HVI certified and ENERGY STAR® qualified\*

\* This product earned the ENERGY STAR® by meeting strict efficiency guidelines set by Natural Resources Canada and the US EPA. It meets ENERGY STAR® requirements only when used in Canada.

# Contacts

Submitted by:		Date:
Quantity:	Model:	Project #:
Comments:		
Location:		
Architect:		
Engineer:		Contractor:

# Distributed by:





<sup>-</sup> Energy performance results were obtained without the MERV-8 filter installed.