

LCH-12H

Light Commercial Heat Recovery Ventilators

Product #: 463302



The LCH-12H light commercial Heat Recovery Ventilation system (HRV) complements today's tight buildings. Greentek Heat Recovery Ventilators (HRV) are designed to supply air into a building while exhausting an equal amount of contaminated air to the outside. The aluminium heat exchanger core transfers sensible energy between air streams resulting in tempering of the supply air and reduced loads on the HVAC system.

Feature

- Push-pull configuration
- Removable screw terminal for easy connection
- Dual service doors & reversible electrical box
- External three position switch (Low (MIN) / Standby (AUTO) / High (MAX))
- Weighs 240 lbs (109 Kg)

Applications

- Class Room
- Offices
- Retail Shops
- Clinics
- Hair Salon
- Animal Shelters
- Bars & Restaurants
- Larger Homes

Specifications

- Voltage/Phase – 120/1
- Power rated – 1340 W
- Amp – 11.17 A
- Average airflow – 1219 CFM (575 L/s)
@ 0.4 in. wg (100Pa)

Fans

Four (4) factory balanced fans with backward curved blades. Motors come with permanently lubricated sealed ball bearings, (TOP) thermal overload protected and maintenance-free operation.

Heat recovery core

Three (3) heat exchangers engineered with a turbulence inducing geometry in order to maximize heat transfer while allowing an effective evacuation of condensate. The plates are hemmed and sealed to ensure no cross-contamination of airstreams. The aluminum core had a plastic handle for easy removal. The LCH-12H features three cores, each 12" x 12" (305 mm x 305 mm) with a 15" (380 mm) depth.

Requirements and standards

- Complies with the UL 1812 requirements regulating the construction and installation of Heat Recovery Ventilators
- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- AHRI certifies the published performance ratings of the COMPONENT used in this product in accordance with AHRI 1060. AHRI Certified Reference Number: 3629105, model number TE-HRC 305H. Note that only the COMPONENT is AHRI 1060 certified and not the product itself.

Defrost

A preset frost control sequence is initiated if the outdoor temperature falls below the set point of 23°F (-5°C). During the initial stage, the supply blower shuts down & the exhaust blower switches into high speed to eliminate frost build-up in the core. The unit then returns to normal operation for the final stage of the frost control sequence at which time the sequence is repeated if the outdoor air temperatures is still below the set point.

Serviceability

Cores, filters and drain pan can be accessed easily from both sides of the HRV from hinged access panels. Cores conveniently slide out with only 15" (380 mm) clearance. Blowers can be accessed from both side of the HRV from fastened access panels. Blowers are easily removed by taking off the access panel and sliding the motor plates out of the HRV. A quick connect allows for fast inspection of blowers.

Cabinet

22 gauge galvanized steel. Baked powder coated paint. Insulated with 1 in. (25 mm) fiberglass with FSK facing for condensation control.

Filters

The exhaust and fresh air streams are protected by MERV 3 washable filters constructed to meet UL 900. Optional MERV 6, MERV 8, or MERV 13 filters are direct replacement to the MERV 3. Use of MERV 6 filters will add an additional system pressure of 0.76 in.wg (190 Pa) at 1200 cfm (566 l/s). Additional MERV Rated filters available upon request.

Controls

External three (3) position (Low (MIN) / Standby (AUTO) / High (MAX)) rocker switch that will offer continuous ventilation. Compatible with all Greentek HRV controls.

Mounting

Unit may be suspended by using threaded rod, not supplied, or placed on a platform. Unit shall be adaptable for easy service of electrical components.

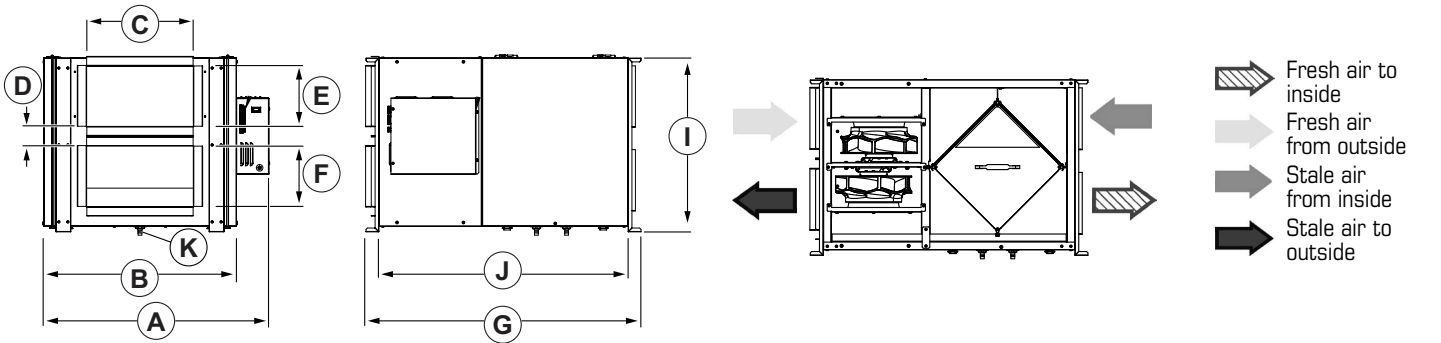
Port configuration

The unit has access doors on the front and back. Also, the main control panel may be moved from front to back allowing for ducting layout.

Warranty

The heat recovery ventilator is warranted to be free from defect in material, workmanship and all parts for a period of 3 years from the purchase date. The heat recovery core is warranted to be free from defects in material and workmanship for a lifetime period under circumstances of normal use.

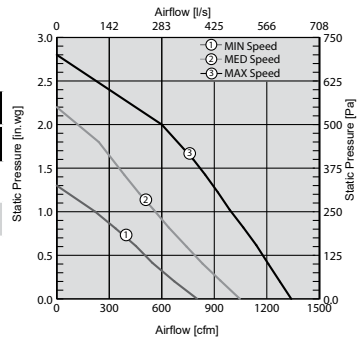
Dimensions & airflow



A		B		C		D		E		F		G		I		J		K	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	m	in	mm	in	mm
51 7/16	1306	47 3/16	1199	20	508	2 7/16	62	8	203	8	203	36 5/16	923	22	559	32 1/2	826	1 1/2	13

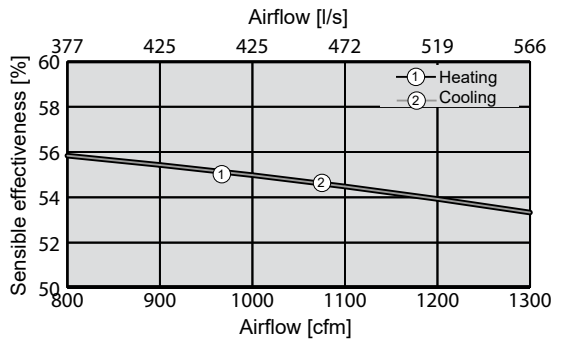
Ventilation Performance

in. wg. (Pa)	0.2 (50)	0.4 (100)	0.6 (150)	0.8 (200)	1.0 (250)	1.4 (350)	1.8 (450)	2.0 (500)
	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)
Supply high	1269 (599)	1219 (575)	1161 (548)	1096 (528)	1023 (483)	855 (404)	656 (310)	545 (257)
Supply med	938 (443)	845 (399)	753 (355)	661 (312)	569 (269)	386 (182)	204 (96)	114 (54)
Supply low	683 (322)	570 (269)	454 (214)	333 (157)	209 (99)	-	-	-



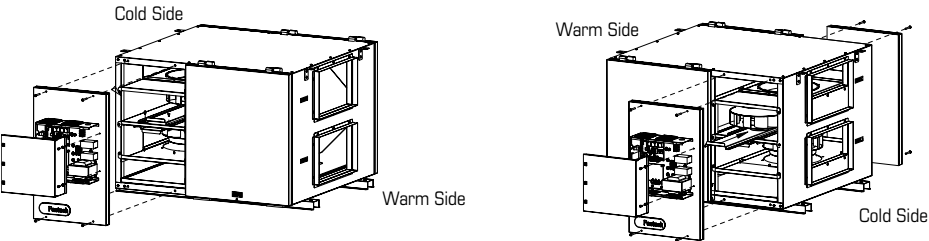
Energy performance

	Supply temperature		Net airflow		Net Effectiveness	
	°F	°C	cfm	L/s	Sensible	Total
					%	%
Heating	35	1.7	1035	488	55	36
	35	1.7	776	366	56	37
Cooling	95	35	1035	488	55	21
	95	35	776	366	56	21



Port configuration

Standard Configuration as shipped from factory



Contacts

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

Distributed by:

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