

## LIGHT COMMERCIAL HEAT RECOVERY VENTILATOR



Solutions worthy of nature...™



### German Engineered motors

All products are designed with high-performance and reliable motors for your comfort and peace of mind. Factory sealed and dynamically balanced, our motors are maintenance-free for years to come.



### DuoTrol™ balancing system (Patent Pending)

Silent and economical... By reducing motor speed to balance the unit, you avoid the noise that would be produced by balancing dampers. In addition, with this technology the unit will consume less energy.



### Proportional Defrost operation system

The defrost energy is controlled by the outdoor air temperature. The motor speed essentially increases as outdoor temperature drops to provide increased defrost capacity. For instance, at -5°C/23°F the defrost mode will function at low speed. This technology reduces energy usage by eliminating unnecessary defrost energy during milder days and offers a more silent operation.

## model *LCH 70.1200-A*™

LIGHT COMMERCIAL (700 to 1200 cfm)



**WARRANTY** Limited 2 year on all components  
Limited 15 year on the aluminum core

### SPECIFICATIONS

- 20 gauge pre-painted galvanized steel casing.
- Thermal 1" foil faced insulation.
- DuoTrol™ balancing system (patented)
- Two german-engineered variable speed motorized impellers thermally protected maintenance-free.
- Fan shut down defrost sequence (-5°C/23°F).
- Integrated 24V interlok connection, 24V/40A transformer, 24 VAC, 10-15A; UL/CSA relay.
- Synthetic cleanable filters (6).
- Dual removable access door.
- Integrated U channels that can be hung by threaded rod or curb mounting install.  
**Note:** rods and vibration isolators not included.
- Modular (3 section) cross-flow core.
- Duct connections: (4) 8" x 20" (203 mm x 508 mm)

### OPTIONS

#### Cores

- Polypropylene cross-flow core (3) (HRV) with limited 15 year warranty (residential application only)
- Enthalpy cross-flow core (3) (ERV) with limited 3 year warranty (Ideal for warm humid climates)

#### Controls

*For optimal performance of your HRV/ERV system.*

The entire range of "GreenThinker model™" controls is offered with features making your ventilation system simple, easy to operate and backed by a 2-year limited warranty.

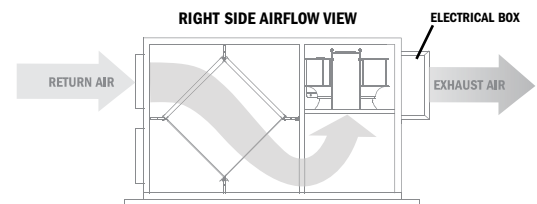
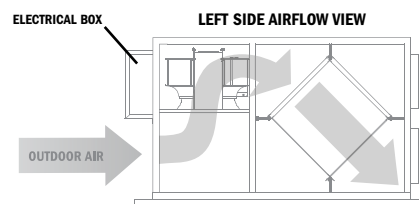
- RD-1 dehumidistat remotely installed (2 wires)
- RD-2, RD-3P, RD-4P multi-function wall control remotely installed (4 wires)
- T-3 (20/40/60 minutes) remotely installed timer (3 wires)

**GreenThinker model™**

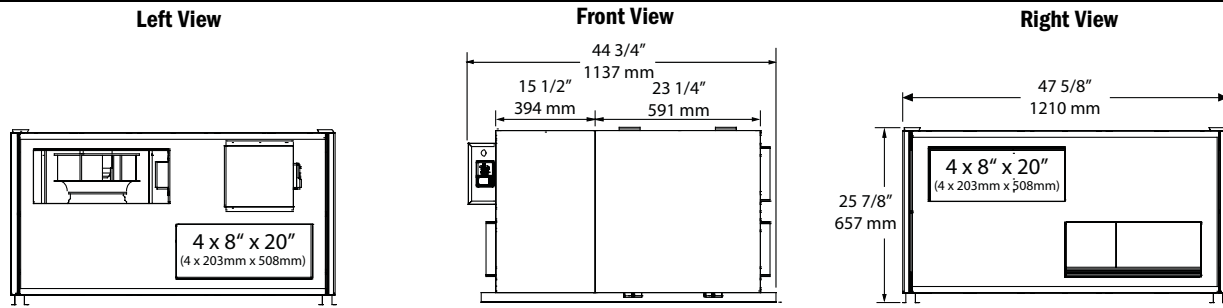


**USER-FRIENDLY CONTROLS**  
RD-4P and T-3 models shown above

## Push-Pull Airflow Design



## DIMENSIONS LCH 70.1200 Series



## SPECIFICATIONS & VENTILATION PERFORMANCE LCH 70.1200-A

Model	LCH 70.1200 Series
<b>CFM: Rated Air flow</b>	
- Low Speed	700
- Medium Speed	800
- High Speed	1200
<b>SHIPPING WEIGHT</b>	
- LCH70.1200-A	306 lbs / 139 kg
- LCH70.1200-B	292 lbs / 132 kg
- LCH70.1200-C	308 lbs / 140 kg
<b>ELECTRICAL</b>	120 V/60Hz / 5A
Filter Size	10" x 15" (6)
Outer Casing	20 gauge pre-painted galv.
Heat Exchange Matrix	Cross-flow (3)
Core Surface Area	342ft <sup>2</sup>
Motor Type	German Engineered
Defrost Sequence	Evacuation

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
Pa	in W.C	L/s	CFM	Supply		Exhaust	
25	0.1	544	1153	545	1155	567	1202
50	0.2	518	1097	519	1100	535	1133
75	0.3	491	1041	492	1043	502	1064
100	0.4	465	985	466	987	469	995
125	0.5	439	929	440	932	437	925
150	0.6	412	873	413	875	404	856
175	0.7	386	817	387	820	372	787
200	0.8	359	761	360	763	339	718
225	0.9	333	705	334	708	306	649
250	1.0	306	649	307	651	274	579

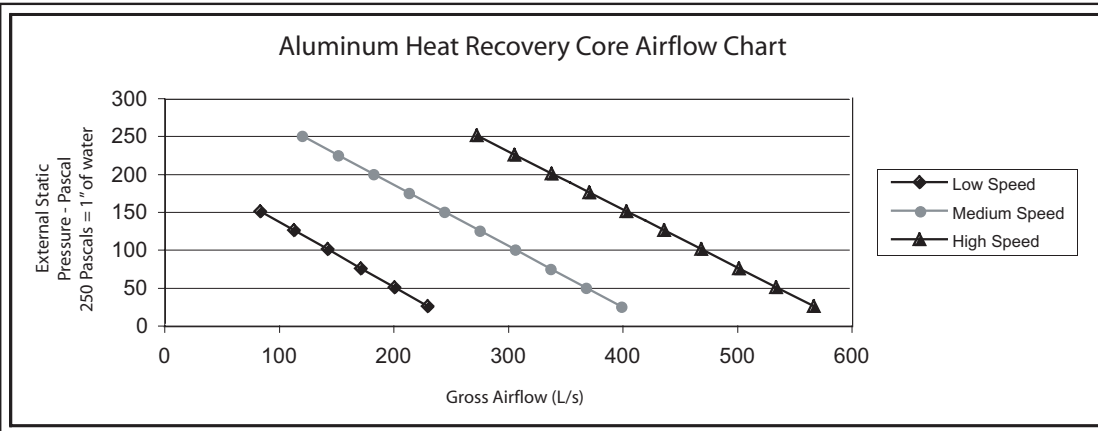
**NOTE** Fan curve was done at HRV maximum speed:  
250 pascals = 1" of water: 0.47 L/s = 1 cfm

### IMPORTANT INFORMATION

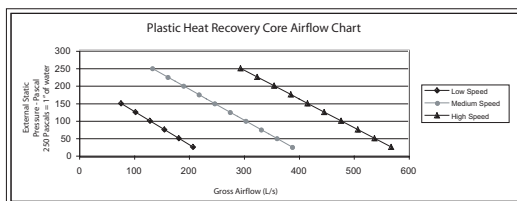
- All LCH HRVs are backed by a 2 year limited warranty.
- Imperial Air Technologies Inc. reserves the right to modify a product, without prior notice, whether in design, colour or specifications, in order to offer at all times a quality product that is highly competitive.
- Please consult local authorities to find out whether the installation of electrical products requires the services of a certified technician or electrician.

Imperial Light Commercial HRVs can be used for different types of application and can meet your specific needs.

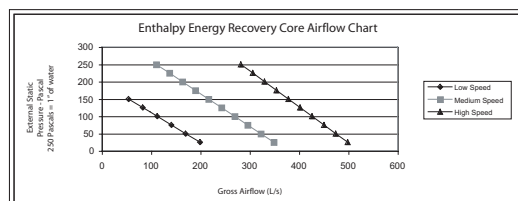
### LCH 70.1200-A Airflow Chart



### LCH 70.1200-B Airflow Chart



### LCH 70.1200-C Airflow Chart



### Types of Applications

- Classrooms
- Locker rooms
- Restrooms
- Large homes
- Conference rooms
- Restaurants, Bar & Grills
- Office buildings

### Specialty Shops

- Beauty salons
- Barber shops
- Floral shops
- Veterinary hospitals
- Pet shops

**Note:** For outdoor air ventilation requirements on the above applications, please refer to the ASHRAE standards 62-1999 when sizing projects.

[www.imperialgroup.ca](http://www.imperialgroup.ca)