

HRVs & ERVs

OBC QUALIFIED UNITS

Model	Defrost Type	Dimensions H x W x D (in.)	Airflow CFM (L/s)			Sensible Recovery Efficiency (SRE) @ 0°C	Sensible Recovery Efficiency (SRE) @ -25°C	Number of Ports (Location)	Energy Star
			.2 (50 PA)	.3 (75 PA)	.4 (100 PA)				
MAX SERIES									
155 MAX 2019*	Recirculating Defrost	18.7 x 33.6 x 14.75	159 (75)	148 (70)	140 (65)	75% (@ 30 L/s)	70% (@ 32 L/s)	6" round collars 2 top mounted 2 side mounted	
205 MAX	Recirculating Defrost	18.75 x 33.6 x 15	193 (91)	182 (86)	170 (80)	76% (@ 30 L/s)	70% (@ 48 L/s)	5" oval collars 4 top mounted	NO
267 MAX	Recirculating Defrost	18.75 x 33.6 x 15	271 (128)	267 (126)	261 (123)	75% (@ 30 L/s)	70% (@ 33 L/s)	6" oval collars 4 top mounted	NO
195 DCS	Damper Defrost	18.75 x 49 x 14.75	210 (99)	193 (91)	176 (83)	80% (@ 30 L/s)	68% (@ 52 L/s)	6" round collars 4 side mounted	NO
RNC SERIES									
RNC6-HEX-TPD	Recirculating Defrost	18.75 x 29.25 x 15	104 (49)	97 (45)	89 (42)	75% (@ 30 L/s)	65% (@ 31 L/s)	5" oval collars 4 top mounted	
RNC5-HEX-TPF	Fan Defrost	18.75 x 29.25 x 15	108 (51)	102 (48)	93 (44)	76% (@ 30 L/s)	66% (@ 31 L/s)	5" oval collars 4 top mounted	NO
RNC 155 2019*	Recirculating Defrost	18.7 x 33.6 x 14.75	159 (75)	148 (70)	140 (65)	75% (@ 30 L/s)	70% (@ 32 L/s)	6" round collars 2 top mounted 2 side mounted	
RNC 205	Recirculating Defrost	18.7 x 33.6 x 15	193 (91)	182 (86)	170 (80)	76% (@ 30 L/s)	70% (@ 48 L/s)	6" oval collars 4 top mounted	NO
ERV SERIES - Cold weather certified, no drains required.									
130 ERVD	Recirculating Defrost	17.25 x 22.75 x 14	163 (76)	153 (72)	144 (68)	75% (@ 42 L/s)	65% (@ 37 L/s)	5" oval collars 4 top mounted	NO
170 ERVD	Recirculating Defrost	18.75 x 33.6 x 15	182 (86)	172 (81)	161 (76)	75% (@ 31 L/s)	62% (@ 32 L/s)	6" oval collars 4 top mounted	
180 ERVD	Recirculating Defrost	17.125 x 23.1 x 14.1	186 (88)	178 (84)	172 (81)	77% (@ 32 L/s)	60% (@ 31 L/s)	5" oval collars 4 top mounted	
METRO XTR	Fan Defrost	22 x 26 x 10	150 (71)	140 (66)	127 (60)	77% (@ 30 L/s)	63% (@ 33 L/s)	6" round collars 4 side mounted	NO
MAX XTR	Fan Defrost	22 x 26 x 10	191 (90)	184 (87)	176 (83)	84% (@ 30 L/s)	62% (@ 34 L/s)	6" round collars 4 side mounted	NO
267 MAX ERV	Damper Defrost	18.75 x 33.6 x 15	286 (135)	278 (131)	271 (128)	77% (@ 30 L/s)	56% (@ 25 L/s)	6" oval collars 4 top mounted	NO

*2019 denotes Energy Star certification, not manufacture date.



UNDERSTANDING THE DIFFERENCES

Heat recovery ventilators (HRV's) are designed to bring fresh outdoor air in while exhausting an equal amount of stale air to the outside. They feature a heat-exchange core that transfers heat from the outgoing stale air to the incoming fresh air in the winter and precools the incoming hot air in the summer. Your home receives a constant supply of fresh preconditioned air year-round.

Energy Recovery Ventilators (ERV's) possess the same heat transfer capabilities as HRVs and also have the ability to transfer moisture from one airstream to the other. In the summer a significant percentage of the incoming humidity is redirected back outside. This lowers the load on the A/C system. In the winter, the ERV controls the indoor humidity levels by exhausting a portion of the outgoing moisture. This can potentially lower the demand for humidification while maintaining a comfortable indoor environment. Lifebreath ERVs in this guide are cold weather certified for year-round use in Ontario. In most instances ERVs do not require a condensate drain.

ONTARIO BUILDING CODE (OBC)

The new OBC for mechanical ventilation (section 9.32.3) requires the installation of an HRV or ERV in Ontario. The mandatory installation of one of these units must meet specific requirements. This reference guide can help you make the right choice for specific projects depending on zone, size, performance, and efficiency.

Principal Ventilation Capacity

For simplified systems with bathroom fans.

Calculation method:

- Primary bedroom at 15 L/s (32 cfm)
- Add 7 1/2 L/s (16 cfm) for each additional bedroom.

Total Ventilation Capacity

For a partially dedicated system with no bathroom fans

Calculation method:

- Add 5 L/s (10.6 cfm) per habitable room (do not count closets and mechanical rooms)
- Add 10 L/s (21.2 cfm) for primary bedroom and unfinished basement.

TOTAL VENTILATION CAPACITY (TVC)	
F326 TVC	Minimum Ventilation Capacity L/s (CFM)
Primary bedroom	10 L/s (21.2 cfm)
Basement	10 L/s (21.2 cfm)
Single bedroom	5 L/s (10.6 cfm)
Living room	5 L/s (10.6 cfm)
Dining room	5 L/s (10.6 cfm)
Family room	5 L/s (10.6 cfm)
Recreation room	5 L/s (10.6 cfm)
Other habitable rooms	5 L/s (10.6 cfm)
Kitchen	5 L/s (10.6 cfm)
Bathroom	5 L/s (10.6 cfm)
Laundry room	5 L/s (10.6 cfm)
Utility room	5 L/s (10.6 cfm)

