

MODEL HRV100H HEAT RECOVERY VENTILATOR

FEATURES

BLOWER:

- Fresh and stale air streams are isolated from each other to prevent mixing of stale air with fresh air
- High pressure, centrifugal blower accommodates many ducting configurations
- Balanced centrifugal blower wheels for quiet operation and long motor life
- Built-in dampers for balancing air streams and adjusting air flow
- Permanently lubricated, 120 VAC, 60 Hz, Permanent Split Capacitor (PSC) motor designed for continuous operation
- HVI certified to assure consistent operating performance
- UL listed and CSA certified

HOUSING:

- Rugged steel housing with corrosion-resistant finish
- Installed suspended from ceiling joists
- Built-in no negative pressure defrost mechanism prevents freeze-ups
- Every part is removable in less than five minutes
- 6" round inlets and outlets for easy duct connections
- Flanges on outdoor air stream connections allow for taping insulated ductwork
- All inside surfaces covered with foil-faced thermal/acoustic insulation
- Easily removable, washable air filters
- Built-in 3 foot power cord (2- wire plus ground, NEMA type 15)
- Suspension chains with springs provided to ensure quiet operation
- Built-in drain tube connection

CONTROLS:

- Off/Low/High switch on side of unit
- Optional Basic VT1W may be used
- Provisions for 24 volt low voltage high speed boost control
- Fully enclosed, modular controls mounted to outside of cabinet for improved reliability and easy servicing

CORE:

- Non-enthalpic core transfers energy without moisture vapor transfer. Use to control excess moisture in heating season
- Easily removable for cleaning and replacement - no tools required
- Material is U.L. flammability classified 94 HB.

TYPICAL SPECIFICATIONS

The Heat Recovery Ventilator shall be Broan-NuTone Model HRV100H.

Rated air flow shall be 135 cfm at 0.4 in. wg.

Unit to include easily-removable energy recovery core - no tools should be required to remove.

Fresh air and stale air streams to be isolated from each other to prevent mixing of stale air with fresh air.

Built-in dampers to be provided for balancing air streams and adjusting air flow.

Built-in no negative pressure defrost mechanism to be provided to prevent freeze-ups.

Provisions for mounting the unit to the ceiling joists to be provided.

Every part shall be removable in less than five minutes.

All interior surfaces to be covered with foil-faced thermal/acoustic insulation.

Unit shall include easily removable, washable air filters. No tools are to be required for filter cleaning/replacement.

Unit to include a 3 foot built-in power cord.

The controls are to be mounted outside of the unit and include an off/low/high switch and provisions for low voltage controls.

Unit to accommodate 6" round, insulated duct. Taping flanges on outdoor air stream connections shall be provided.

Blower shall be designed for continuous operation using a plug-in, permanently lubricated, PSC (Permanent Split Capacitor) motor and balanced centrifugal blower wheels.

Unit to be UL listed, CSA certified, and HVI certified.



Broan-NuTone LLC, A Nortek Company, Hartford, Wisconsin 53027

| REFERENCE | QTY. | REMARKS | Project |
|-----------|------|---------|--------------|
| | | | Location |
| | | | Architect |
| | | | Engineer |
| | | | Contractor |
| | | | Submitted by |
| | | | Date |

PERFORMANCE RATINGS

MODEL HRV100H HEAT RECOVERY VENTILATOR

Option Installed: Defrost

Electrical Requirements:

120 Volts 1.3 Amps

Exhaust Air Transfer Ratio:

0.05 @ 50 Pa/0.2 in. wg

Low Temp. Vent Reduction Factor:

9% Supply 22% Exhaust

Low Temp. Imbalance Factor: 1.0

| VENTILATION PERFORMANCE | | | | | | | |
|--------------------------|--------|---------------------|-----|----------------|-----|---------|-----|
| External Static Pressure | | Net Supply Air Flow | | Gross Air Flow | | | |
| | | | | Supply | | Exhaust | |
| Pa | in. wg | L/s | cfm | L/s | cfm | L/s | cfm |
| 25 | 0.1 | 78 | 164 | 81 | 172 | 83 | 176 |
| 50 | 0.2 | 74 | 156 | 78 | 165 | 80 | 168 |
| 75 | 0.3 | 71 | 151 | 75 | 158 | 75 | 158 |
| 100 | 0.4 | 64 | 135 | 67 | 142 | 70 | 149 |
| 125 | 0.5 | 56 | 120 | 60 | 127 | 61 | 129 |
| 150 | 0.6 | 43 | 91 | 45 | 95 | 48 | 102 |
| 175 | 0.7 | 35 | 75 | 37 | 79 | 29 | 62 |

| ENERGY PERFORMANCE | | | | | | | | |
|--------------------|--------------------|-----|--------------|-----|------------------------|----------------------------------|-------------------------------------|-----------------------------------|
| | Supply Temperature | | Net Air Flow | | Power Consumed (Watts) | Sensible Recovery Efficiency (%) | Apparent Sensible Effectiveness (%) | Latent Recovery Moisture Transfer |
| | °C | °F | L/s | cfm | | | | |
| | 0 | 32 | 30 | 64 | 54 | 72 | 80 | 0.03 |
| Heating | 0 | 32 | 46 | 97 | 78 | 65 | 72 | 0.01 |
| | 0 | 32 | 65 | 138 | 124 | 62 | 70 | 0.02 |
| | -25 | -13 | 26 | 55 | 62 | 65 | 87 | 0.05 |

