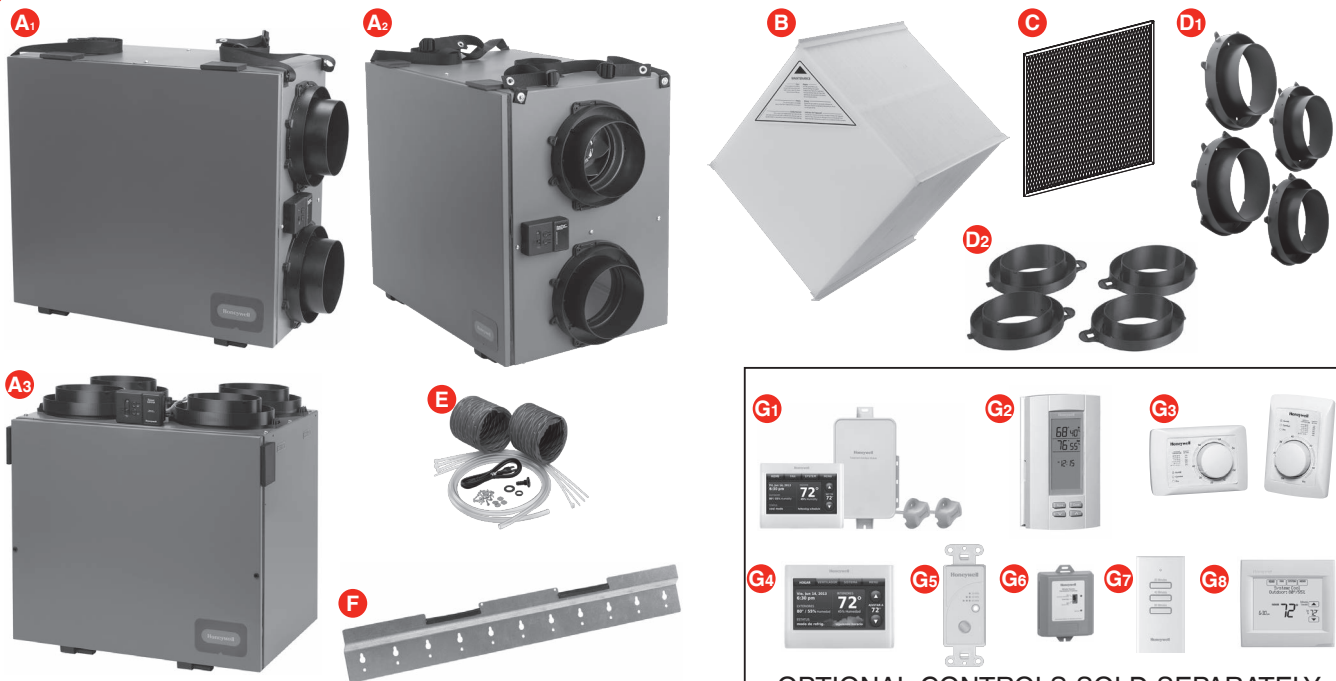


TrueFRESH™ ERV/HRV Ventilation Systems Systèmes de ventilation VRÉ/VRC TrueFRESH™

PROFESSIONAL INSTALLATION GUIDE GUIDE D'INSTALLATION PROFESSIONNELLE

INCLUDED IN THIS BOX



Tools required to install ERV/HRV

- Aluminum foil tape (UL181B)
- Standard screwdriver
- Crescent wrench
- Hex driver (1/4 in.)

Accessories (not included)

- 6 in. Dia. insulated duct (VNT5150, VNT5200, VNT6150 & VNT6200)
- 6 in. Dia. duct (VNT5150, VNT5200)
- Two 6 in. Dia. weather hoods (VNT5150, VNT5200, VNT6150 & VNT6200)
- 5 in. Dia. insulated flex duct (VNT5070)
- 5 in. Dia. flex duct (VNT5070)
- 6 in. Dia. matrix hood, 50063805-009 (VNT5070)*

* 6 in. to 5 in. reducer required

- A₁** ERV/HRV VNT5150H1000, VNT5150E1000 or VNT6150H1000
- A₂** ERV/HRV VNT5200H1000, VNT5200E1000 or VNT6200H1000
- A₃** ERV/HRV VNT5070H1000 or VNT5070E1000
- B** Heat/Energy Recovery Core (1)
- C** Filter (2)
- D₁** Round Duct Collars (4) (VNT5150 and VNT5200, VNT6150 & VNT6200)
- D₂** Oval Duct Collars (VNT5070)
- E** Installation Kit (flex included with 5150 and 5200, VNT6150 & VNT6200)
- F** Wall Mount Bracket (VNT5070)
- G** Optional Controls: **1** - Prestige IAQ Kit, **2** - True IAQ, **3** - Dehumidistat H8908D, **4** - Prestige IAQ, **5** - 20/40/60 Minute Boost Control, **6** - W8150 Ventilation Control, **7** - Vent Boost Remote, **8** - VisionPRO Wi-Fi



Installation Checklist

Included in This Box

- A1 ERV/HRV VNT5150H1000, VNT5150E1000 or VNT6150H1000
- A2 ERV/HRV VNT5200H1000, VNT5200E1000 or VNT6200H1000
- A3 ERV/HRV VNT5070H1000 or VNT5070E1000
- B Heat/Energy Recovery Core
- C Filter (2)
- D1 Round Duct Collars (4) [VNT5150, VNT5200, VNT6150, VNT6200]
- D2 Oval Duct Collars (VNT5070)
- E Installation Kit
- F Wall Mount Bracket (VNT5070)
- G Optional controls (sold separately)

Control Options (Sold separately)

- G1 - Prestige IAQ Kit
- G2 - True IAQ
- G3 - Dehumidistat H8908D
- G4 - Prestige IAQ
- G5 - 20/40/60 Minute Boost Control
- G6 - W8150 Ventilation Control
- G7 - Vent Boost Remote
- G8 - VisionPRO Wi-Fi

Tools Required (not supplied)

- Aluminum foil tape (UL1818)
- Standard screwdriver
- Crescent wrench
- Hex driver (1/4 in.)

Accessories (not included)

- 6 in. Dia. insulated duct (VNT5150, VNT5200, VNT6150, VNT6200)
- 6 in. Dia. duct (VNT5150, VNT5200, VNT6150, VNT6200)
- Two 6 in. Dia. weather hoods (VNT5150, VNT5200, VNT6150, VNT6200)
- 5 in. Dia. insulated flex duct (VNT5070)
- 5 in. Dia. flex duct (VNT5070)
- 6 in. Dia. matrix hood, 50063805-009 (VNT5070)*
* 6 in. to 5 in. reducer required



Warning: Installation must be performed by a qualified service technician and must comply with local codes. Remove power to the device before installing or servicing the device. Failure to connect the device according to these instructions may result in damage to the device or the controls.

INSTALLATION INSTRUCTIONS BEGIN ON PAGE 1

Liste de vérification pour l'installation

Contenu

- A1 VRE/VRC VNT5150H1000, VNT5150E1000 ou VNT6150H1000
- A2 VRE/VRC VNT5200H1000, VNT5200E1000 ou VNT6200H1000
- A3 ERV/HRV VNT5070H1000 ou VNT5070E1000
- B Noyau de récupération de chaleur et d'énergie
- C Filtre (2)
- D1 Colliers de conduit ronds (4) (VNT5150, VNT5200, VNT6150, VNT6200)
- D2 Colliers de conduit ovales (VNT5070)
- E Nécessaire d'installation (flexible inclus avec le 5150 et le 5200)
- F Support de montage mural (VNT5070)
- G Commandes en option (vendues séparément)

Commandes en option (vendues séparément)

- G1 - **Nécessaire Prestige IAQ**
- G2 - True IAQ
- G3 - Déshumidistat H8908D
- G4 - Prestige IAQ
- G5 - Minuteur de ventilation à haute vitesse (20, 40 ou 60 minutes)
- G6 - Régulateur de ventilation W8150
- G7 - Commande à distance de surventilation
- G8 - **VisionPRO Wi-Fi**

Outils nécessaires (non fournis)

- Ruban d'aluminium (UL1818)
- Tournevis standard
- Clé à molette
- Tournevis à tête hexagonale (1/4 po)

Accessoires (non inclus)

- Conduit isolé de 6 po de diamètre (VNT5150, VNT5200, VNT6150, VNT6200)
- Conduit de 6 po de diamètre (VNT5150, VNT5200, VNT6150, VNT6200)
- Hottes anti-intempéries de 6 po (VNT5150, VNT5200, VNT6150, VNT6200)
- Conduit flexible isolé de 5 po de dia. (VNT5070)
- Conduit flexible de 5 po de dia. (VNT5070)
- Hotte à matrice de 6 po de dia. (VNT5070)*
* Réducteur de 6 po à 5 po requis



Avertissement : L'installation doit être effectuée par un technicien qualifié et être conforme aux règlements locaux. Débranchez l'appareil avant de l'installer ou d'en effectuer l'entretien. Un branchement de l'appareil non conforme aux présentes instructions pourrait entraîner des dommages à l'appareil lui-même ou aux commandes.

INSTRUCTIONS POUR L'INSTALLATION COMMENCENT À LA page 44.

TrueFRESH™ ERV/HRV Balanced Ventilation Systems

ABOUT THE ERV/HRV VENTILATION SYSTEM

Benefits.....	2
Determining Your Ventilation Needs.....	3
Specifications	4
External Control Options	13

INSTALLATION

Install to Fit Your Application.....	14
Installation Steps	17
Automated Defrost.....	24
Wiring	24
Terminal Description.....	24
Wiring with Remote Controls.....	25
Controls Wiring.....	25
Control Panel.....	29
Balancing Steps.....	30
Speed Control used as a Mode Control	30
Speed Control used as a Balancing Control	31
Speed Control used as a Motor Control	31
Balancing Reset	32
Checkout	32

MAINTENANCE

Maintenance	34
Cleaning Steps	35
Troubleshooting	36
Honeywell OS and Parts List.....	39
Parts Illustration: VNT5150, VNT5200, VNT6150 & VNT6200	40
Parts Illustration: VNT5070	41

WARRANTY

5-Year Limited Warranty	42
-------------------------------	----

- Prior to installing, serious consideration must be taken to ensure this ventilation system will operate properly if integrated to any other type of mechanical system, i.e. a forced air system, or an air handling unit. To ensure proper operation and compatibility of both systems, it is required that the unit's airflows (intake and exhaust) be balanced, by following the procedures found in this manual
- Install the unit with space to access the front panel controls and the side access panel for maintenance and service.
- To ensure quiet operation, do not place the device directly on the structural supports of the home.
- The product is for residential applications only. Must be installed in accordance with all national and local regulations, building and safety codes



NEED HELP? For assistance with this product please visit <http://yourhome.honeywell.com> or call Honeywell Customer Care toll-free at 1-800-468-1502.

Read and save these instructions.

About the ERV/HRV Ventilation System

The Honeywell TrueFRESH™ ERV/HRV Balanced Ventilation System provides improved indoor air quality through its high performance and efficiency.

Benefits

- Ventilation with sensible heat recovery (ERV and HRV)
- Ventilation with latent heat recovery (ERV only)
- Simplified mounting (hanging)
- Optional hanging with included straps.
- Removable duct collars for easy ducting to the unit
- Intuitive balancing via two variable speed motors and a speed control
- Fits in tight spaces (VNT5070)



CAUTION: Electrical shock and fire hazard. Can cause personal and equipment damage.

- Before servicing or cleaning the system, always remove the power cord from the AC wall outlet.
- Wear protective clothing and safety glasses when installing ventilator and working with sheet metal.
- To reduce the hazards of electric shock or fire, do not perform any service to the system other than those stated in the operating manual instructions.
- To reduce the risk of electric shock, this ventilation system comes equipped with a 3-prong plug-in. This plug will fit in a polarized outlet only one way.
- Do not use ventilation system for outdoor application.
- Do not pull or twist power cord when disconnecting it from the ventilation system. Grasp the plug firmly, not the cord.
- Do not modify the power plug in any way; if modified, risk of electric shock, fire, or even damage to the unit may occur.
- Do not use the ventilation system for removal of flammable fumes, gases or connect directly to any appliances.
- Use a 120 VAC outlet only.
- Do not use an extension cord.
- Do not obstruct or cover the air intake or air outlet of the ventilation system.
- Do not modify, repair or disassemble this system. These tasks are to be performed by authorized serviced personnel only. Fire, electrical shock and/or bodily injury may occur if these warnings are not followed.
- To prevent injuries, do not operate the ventilation system, while servicing or maintaining. There are impeller wheels turning at a very high speed that must fully stop rotating prior to accessing the inside of the unit.
- Always assess how the operation of the ventilation system may interact with vented combustion equipment (i.e. Gas Furnace, Oil Furnace, Combustion, Appliances, etc.)
- Ensure unit is properly installed and suspended to prevent falling or dropping injuries.

Determining Your Ventilation Needs

How much fresh air do you need?

Good air quality is based in part on the capacity of the home's ventilation system. Usually, the unit's capacity is measured in CFM (Cubic Feet per Minute) or L/s (Liters per second) of fresh air being distributed in the living space. Use the ASHRAE 62.2 Ventilation Standard, the Room Count Calculation Method, or the Air Change Per Hour (ACH) Method to determine your ventilation needs.

ASHRAE 62.2 Ventilation Standard

ASHRAE 62.2 CFM Sizing Chart					
Floor Area (ft ²)	Number of Bedrooms / CFM				
	0-1	2-3	4-5	6-7	>7
< 1500	30	45	60	75	90
1501 - 3000	45	60	75	90	105
3001 - 4500	60	75	90	105	120
4501 - 6000	75	90	105	120	135
6001 - 7500	90	105	120	135	150
> 7500	105	120	135	150	165
ANSI/ASHRAE STANDARD 62.2-2010 - Ventilation Air Requirements; values in cfm					

The above chart outlines the minimum requirements for continuous ventilation.

Room Count Calculation Method

Living Space	Number of Rooms	x CFM (or L/s)	=	CFM Required
Master Bedroom		x 20 cfm (or 10 L/s)	=	
Basement		x 20 cfm (or 10 L/s)	=	
Single bedroom		x 10 cfm (or 5 L/s)	=	
Living Room		x 10 cfm (or 5 L/s)	=	
Dining Room		x 10 cfm (or 5 L/s)	=	
Family Room		x 10 cfm (or 5 L/s)	=	
Recreation Room		x 10 cfm (or 5 L/s)	=	
Other		x 10 cfm (or 5 L/s)	=	
Kitchen		x 10 cfm (or 5 L/s)	=	
Bathroom		x 10 cfm (or 5 L/s)	=	
Laundry Room		x 10 cfm (or 5 L/s)	=	
Utility Room		x 10 cfm (or 5 L/s)	=	
Total Ventilation Requirement			=	

Air Change Per Hour (ACH) Method

TOTAL cubic feet X 0.35 per hour = total cubic feet per hour

Take total and divide by 60 to get cubic feet per minute (CFM)

Example: A 25 ft. x 40 ft. (1,000 sq. ft.) house with basement

1,000 sq. ft. x 8 ft. high x 2 (1st floor + basement) = 16,000 cu. ft.

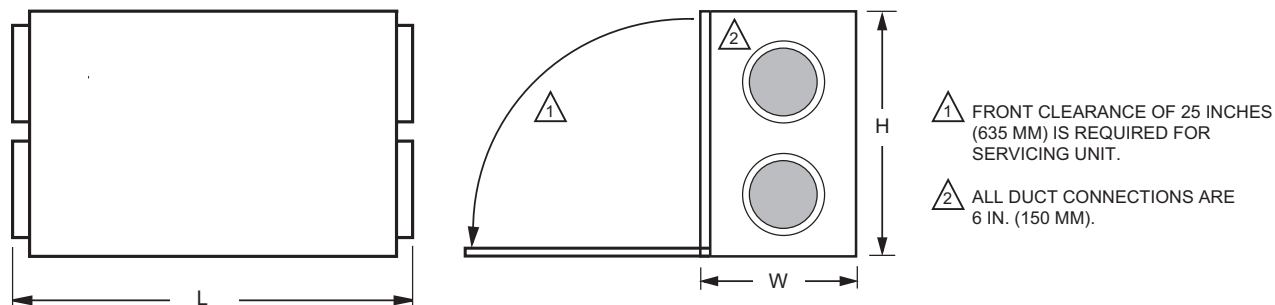
16,000 cu. ft. x 0.35 ACH = 5,600 cubic feet per hour

5,600 cu. ft. / 60 Minutes = 93 cubic feet per minute (CFM)

93 CFM is your ventilation need

Specifications

Dimensions in inches (mm) of VNT5150, VNT5200, VNT6150 and VNT6200

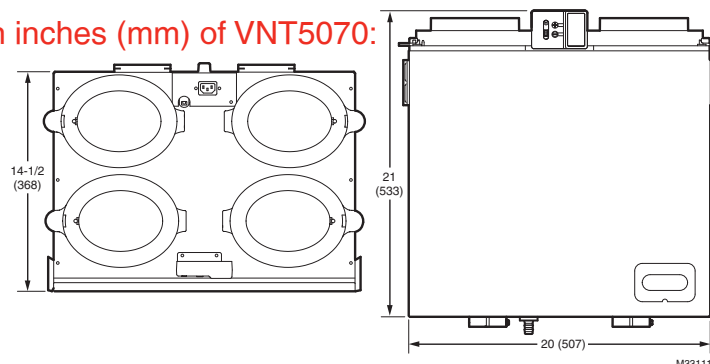


VNT5150H1000, VNT5150E1000 or VNT6150H1000: H = 22 1/2 in. (572 mm), W = 11 1/2 in. (295 mm), L = 29 1/2 in. (749 mm)

VNT5200H1000, VNT5200E1000 or VNT6200H1000: H = 22 1/2 in. (572 mm), W = 16 1/2 in. (422 mm), L = 29 1/2 in. (749 mm)

M28919A

Dimensions in inches (mm) of VNT5070:



Physical Specifications:

Model	Product Weight	Shipping Weight	Heat/Energy Core Dimensions	Filter Dimensions
VNT5150H1000 VNT5150E1000	42 lbs. (19.0 kg)	47.5 lbs. (21.55 kg)	12"x10"x12" 305x254x305 mm	10"x12" 254x305 mm
VNT5200H1000 VNT5200E1000	50 lbs. (22.68 kg)	57.5 lbs. (26.08 kg)	12"x15"x12" 305x381x305 mm	15"x12" 381x305 mm
VNT5070H1000 VNT5070E1000	33 lbs. (15.0 kg)	40.5 lbs. (18.4 kg)	10"x10"x9" 254x254x228.6 mm	9"x9.75" 228.6x247.6 mm
VNT6150H1000	43.5 lbs. (19.7 kg)	50 lbs. (22.7 kg)	12"x10"x12" 305x254x305 mm	10"x12" 254x305 mm
VNT6200H1000	51.5 lbs. (23.4 kg)	61.5 lbs. (27.9kg)	12"x15"x12" 305x381x305 mm	15"x12" 381x305 mm

Operating Ranges:

Ambient Temperature: 34 to 140 °F (1 to 60 °C)

Humidity: 0-95% RH

- **Drain tubing diameter:** 1/2 in. (12.7 mm)
- **Cabinet:** 20 gauge galvanized steel

Electrical Ratings:

Input Voltage: 120 VAC, 60 Hz

Input Current: 1.5 A (VNT5150, VNT5200, VNT6150 & VNT6200), 0.85 A (VNT5070)

Output Power to Terminals: 5 VDC, 1.0 A maximum

- **Flexible Duct (2):** VNT5150, VNT5200, VNT6150 & VNT6200: 6 in. round for inlet and outlet. Flexible vinyl, compatible for connection to rigid or flexible ducting with sheet metal screws and/or tape. VNT5070: 5 in. oval for inlet and outlet. Flexible vinyl, compatible for connection to flexible ducting with sheet metal screw and/or tape.

Standards and Certifications:

CSA-22.2 #113-10, CSA 439 Standard

UL Standard 1812

RoHS Compliant

HVI Certified

FCC Part 15, Class B

ENERGY STAR (VNT6150H1000 & VNT6200H1000)



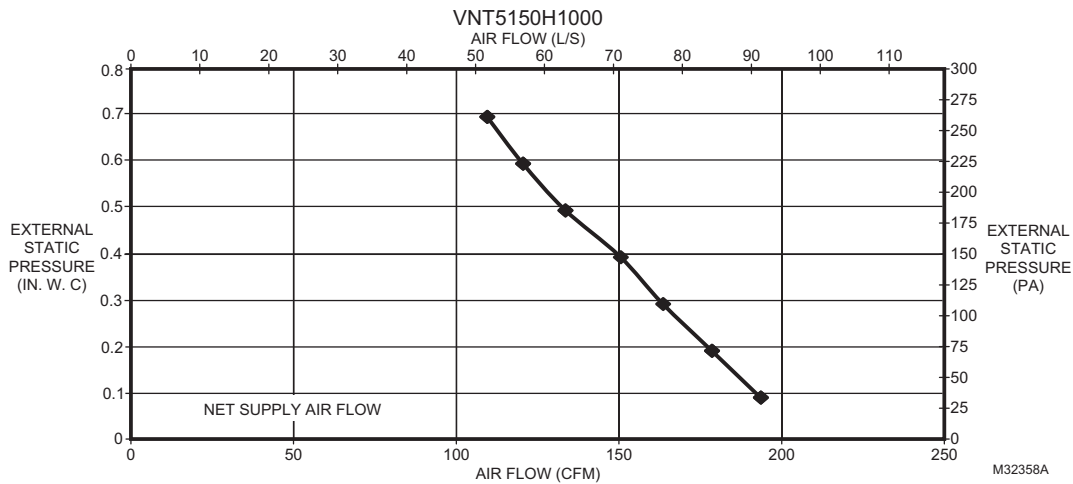
Install the ERV/HRV Ventilation System according to national and local regulations, building, and safety codes.

TrueFRESH™ ERV/HRV Ventilation Systems 69-2480EF—17

Specifications (continued)

VNT5150H1000 Ventilation Performance

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
				Supply		Exhaust	
Pa	in. W.C.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	91	193	91	194	103	217
50	0.2	84	178	85	179	95	201
75	0.3	77	163	77	163	86	183
100	0.4	71	150	71	151	80	169
125	0.5	63	133	63	134	71	152
150	0.6	57	120	57	121	66	138
175	0.7	51	109	51	109	57	121
200	0.8	46	96	46	96	50	106
225	0.9	40	85	40	86	43	91
250	1	35	75	36	75	39	82



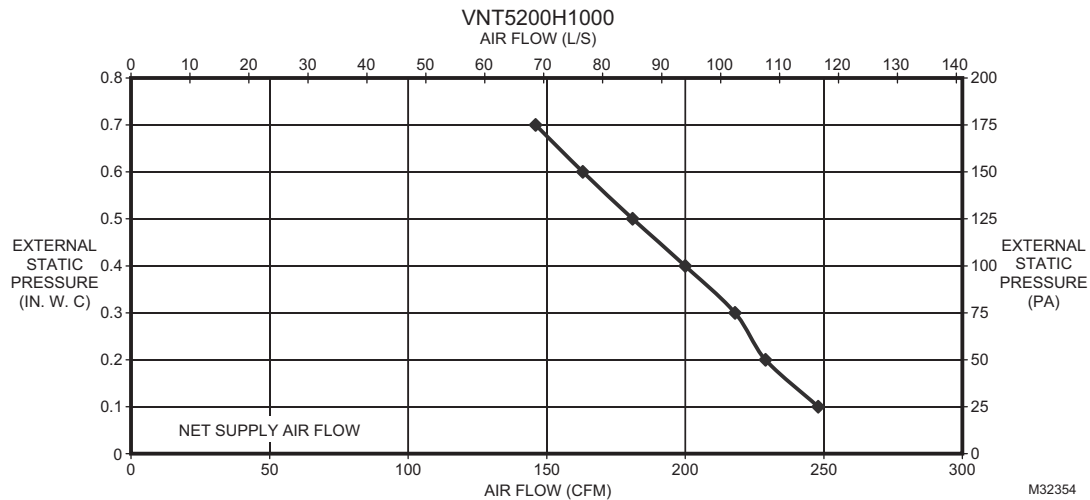
VNT5150H1000 Energy Performance

	Supply Temperature		Net Supply Air Flow		Average Power	Sensible Recovery	Apparent Sensible
	°C	°F	L/s	CFM	Watts	Efficiency %	Effectiveness %
	0	32	31	65	72	66	75
	0	32	39	83	80	63	72
	0	32	50	107	94	60	67
Heating	-25	-13	36	76	72	56	73

Specifications (continued)

VNT5200H1000 Ventilation Performance

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
				Supply		Exhaust	
Pa	in. W.C.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	117	248	118	250	130	277
50	0.2	108	229	109	231	119	253
75	0.3	102	218	103	220	110	234
100	0.4	94	200	95	202	101	216
125	0.5	85	181	86	183	92	197
150	0.6	77	163	78	165	82	175
175	0.7	69	146	70	148	71	151
200	0.8	61	129	61	131	60	128
225	0.9	52	110	52	111	49	104
250	1	45	96	46	97	40	86



VNT5200H1000 Energy Performance

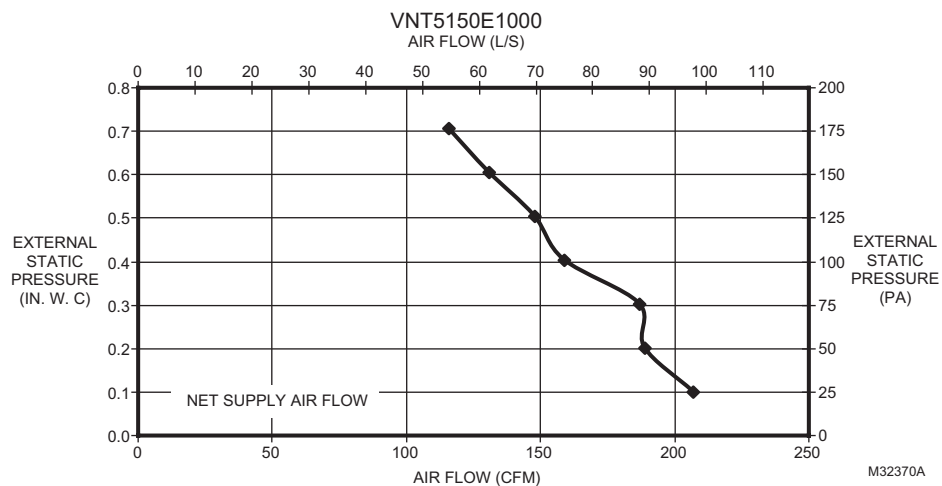
		Supply Temperature		Net Supply Air Flow		Average Power	Sensible Recovery	Apparent Sensible
		°C	°F	L/s	CFM	Watts	Efficiency %	Effectiveness %
Heating		0	32	55	118	106	61	71
		0	32	75	160	132	58	65
		0	32	87	185	150	55	62
		-25	-13	57	120	105	58	72

Total Recovery Efficiency = 48%

Specifications (continued)

VNT5150E1000 Ventilation Performance

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
				Supply		Exhaust	
Pa	in. W.C.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	97	207	99	210	99	211
50	0.2	89	189	91	193	91	193
75	0.3	88	187	84	179	84	178
100	0.4	75	159	76	162	76	162
125	0.5	70	148	71	150	69	147
150	0.6	62	131	63	133	62	131
175	0.7	55	116	55	118	55	117
200	0.8	49	104	50	106	48	102
225	0.9	42	90	43	91	43	92
250	1.0	36	77	37	78	40	86
275	1.1	32	68	32	69	32	69



VNT5150E1000 Energy Performance

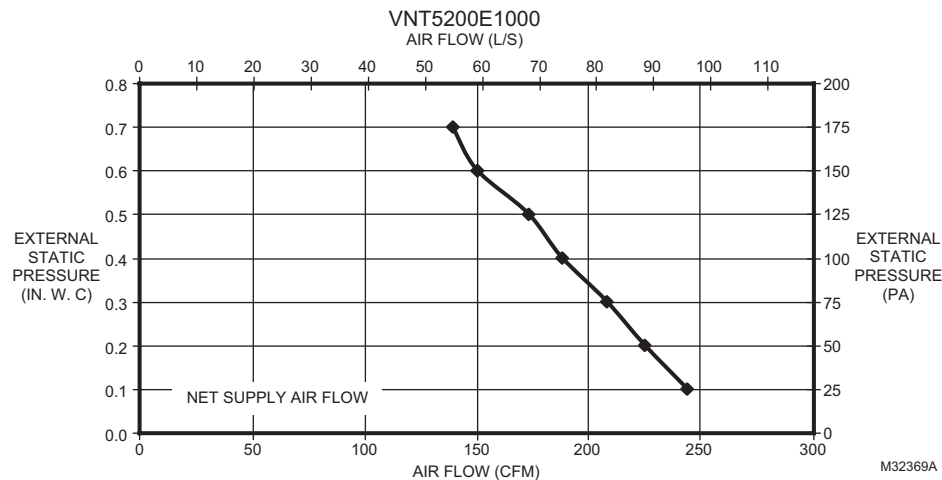
Heating	Supply Temperature		Net Supply Air Flow		Average Power	Sensible Recovery	Apparent Sensible
	°C	°F	L/s	CFM	Watts	Efficiency %	Effectiveness %
	0	32	24	51	58	65	76
	0	32	38	80	76	65	73
	0	32	56	118	96	62	70
	-15	5	26	55	59	52	78
	35	95	30	64	66		

Total Recovery Efficiency = 34%

Specifications (continued)

VNT5200E1000 Ventilation Performance

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
				Supply		Exhaust	
Pa	in. W.C.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	115	244	116	247	108	230
50	0.2	106	225	107	228	101	215
75	0.3	98	208	99	210	95	202
100	0.4	88	188	89	190	83	177
125	0.5	81	173	82	175	74	157
150	0.6	71	150	71	152	67	142
175	0.7	65	139	66	140	60	127
200	0.8	57	122	58	124	52	110
225	0.9	49	105	50	106	42	89
250	1	40	86	41	87	37	79
275	1.1	34	72	34	73	30	63



VNT5200E1000 Energy Performance

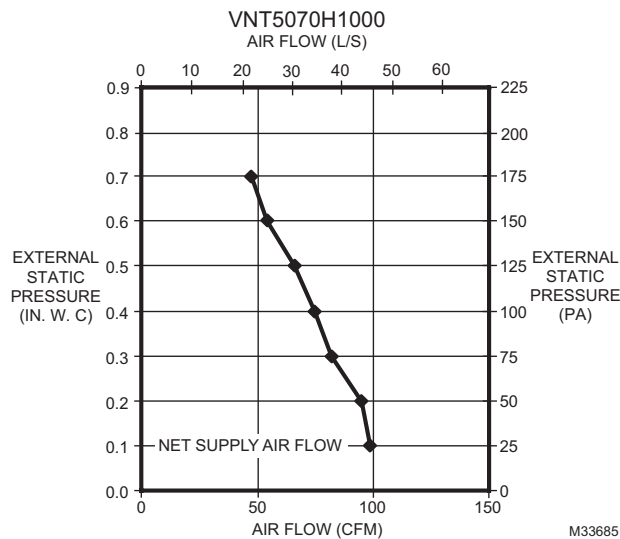
Heating	Supply Temperature		Net Supply Air Flow		Average Power	Sensible Recovery	Apparent Sensible
	°C	°F	L/s	CFM	Watts	Efficiency %	Effectiveness %
	0	32	37	78	74	71	81
	0	32	50	107	80	72	79
	0	32	71	150	102	69	77
	-15	5	36	75	65	58	82
	35	95	35	75	72		

Total Recovery Efficiency = 48%

Specifications (continued)

VNT5070H1000 Ventilation Performance

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
				Supply		Exhaust	
Pa	in. W.C.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	47	99	48	100	48	102
50	0.2	44	93	45	94	43	92
75	0.3	39	83	40	84	38	80
100	0.4	35	75	35	75	36	78
125	0.5	30	65	30	66	32	68
150	0.6	27	56	27	57	25	52
175	0.7	22	46	22	47	19	41



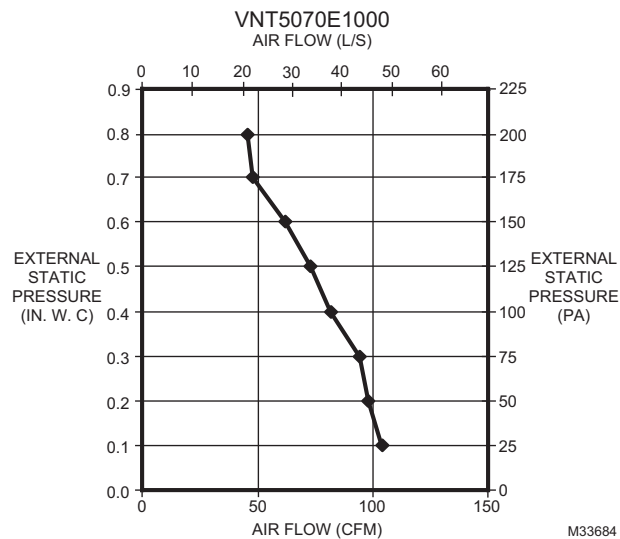
VNT5070H1000 Energy Performance

Heating	Supply Temperature		Net Supply Air Flow		Average Power	Sensible Recovery	Apparent Sensible
	°C	°F	L/s	CFM	Watts	Efficiency %	Effectiveness %
	0	32	19	40	28	64	72
	0	32	30	65	40	59	66
	-25	-13	18	37	30	55	73
	35	95					

Specifications (continued)

VNT5070E1000 Ventilation Performance

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
				Supply		Exhaust	
Pa	in. W.C.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	49	105	49	105	46	97
50	0.2	46	97	47	99	41	86
75	0.3	44	92	44	93	41	86
100	0.4	37	80	38	81	34	73
125	0.5	34	73	35	74	29	63
150	0.6	29	62	29	63	25	52
175	0.7	23	48	23	49	18	37
200	0.8	22	46	22	47	10	20



VNT5070E1000 Energy Performance

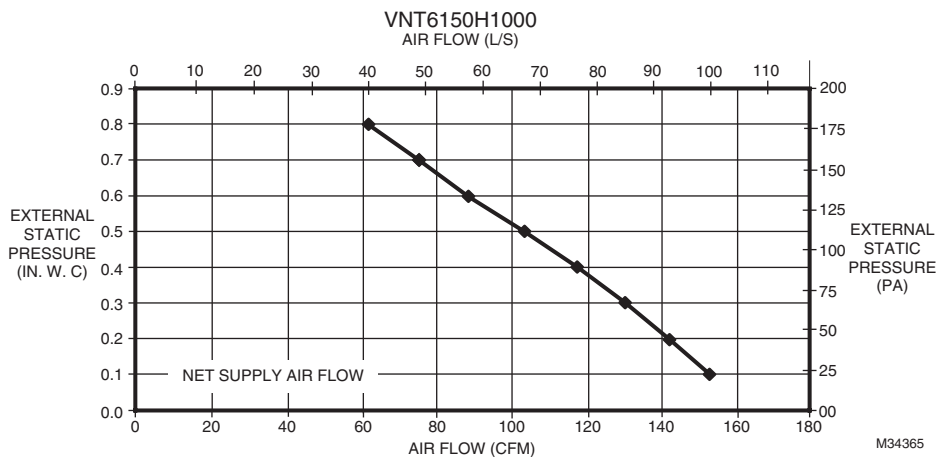
Heating	Supply Temperature		Net Supply Air Flow		Average Power	Sensible Recovery	Apparent Sensible
	°C	°F	L/s	CFM	Watts	Efficiency %	Effectiveness %
	0	32	20	41	30	65	74
	0	32	30	64	36	64	71
	-15	5	16	35	27	54	80
	35	95	19	41	30		
	35	95					

Total Recovery Efficiency = 43%

Specifications (continued)

VNT6150H1000 Ventilation Performance

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
				Supply		Exhaust	
Pa	in. W.C.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	72	153	72	153	67	142
50	0.2	67	142	68	143	61	129
75	0.3	61	130	62	130	55	116
100	0.4	55	117	55	118	47	101
125	0.5	49	103	49	103	41	87
150	0.6	42	88	42	89	34	73
175	0.7	35	75	35	75	27	59
200	0.8	28	61	28	61	22	46



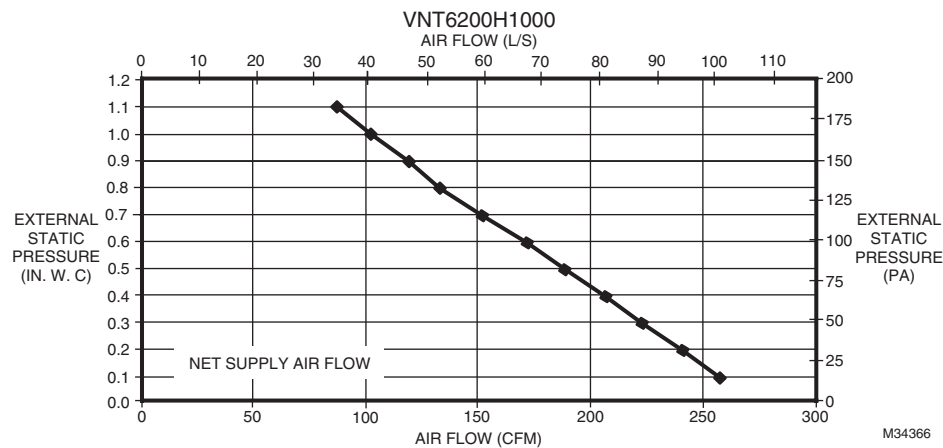
VNT6150H1000 Energy Performance

Heating	Supply Temperature		Net Supply Air Flow		Average Power	Sensible Recovery	Apparent Sensible
	°C	°F	L/s	CFM	Watts	Efficiency %	Effectiveness %
	0	32	31	66	52	75	84
	0	32	40	84	64	73	80
	0	32	50	106	74	70	77
	-25	-13	32	68	49	62	81

Specifications (continued)

VNT6200H1000 Ventilation Performance

External Static Pressure		Net Supply Air Flow		Gross Air Flow			
				Supply		Exhaust	
Pa	in. W.C.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	122	258	126	260	120	254
50	0.2	114	241	115	242	111	235
75	0.3	105	223	106	225	103	218
100	0.4	98	207	99	209	94	199
125	0.5	89	189	90	190	85	180
150	0.6	81	172	82	174	76	161
175	0.7	72	152	73	154	67	142
200	0.8	63	133	64	135	58	123
225	0.9	56	119	57	121	50	106
250	1.0	48	102	48	102	42	89
275	1.1	41	87	42	88	35	74



VNT6200H1000 Energy Performance

Heating	Supply Temperature		Net Supply Air Flow		Average Power	Sensible Recovery	Apparent Sensible
	°C	°F	L/s	CFM	Watts	Efficiency %	Effectiveness %
	0	32	29	61	62	78	90
	0	32	43	91	74	76	85
	0	32	60	127	92	73	80
	-25	-13	31	66	59	66	88

External Control Options

The ERV/HRV unit may be used with one of the following external controls:



Prestige™ IAQ Kit

- Controls both heating/cooling and ventilation.
- Wireless sensor for displaying outdoor temperature and humidity.
- Advanced ventilation programming includes economizing and extreme condition shutdown.
- Maintenance and service reminders.
- High definition color display.
- RedLINK™ Wireless technology



TrueIAQ Digital Control

- Automatic adjustments maintain fresh air in home.
- Sensor for displaying outdoor temperature and humidity.
- Advanced ventilation programming includes economizing and extreme condition shutdown.
- Maintenance and service reminders.
- Controls other indoor air quality equipment.



VisionPRO™ or Prestige™

- Controls both heating/cooling and ventilation.
- Wireless sensor for displaying outdoor temperature and humidity.
- Ventilation programming for time of day or Ashrae standards.
- Optional ventilation lockouts for high/low temp or humidity conditions when C7089R1013 wireless outdoor sensor is used.
- Wi-Fi™ or RedLINK™ Wireless technology



Manual Dehumidistat and Automatic Ventilation Controls

- Manual humidity control with intuitive comfort settings.
- Automatic W8150 ventilation control to ASHRAE standard, or for continuous operation.



Boost Control Digital Timer

- Ventilation boost control for 20/40/60 minutes.



Wireless Vent Boost Remote

- 20/40/60 minute ventilation timer
- Works with RedLINK 2.0 thermostats

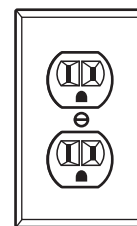
Install to Fit Your Application

NOTE: Prior to installing, serious consideration must be taken to insure this ventilation system will operate properly if integrated with any other type of mechanical system, i.e. a forced air system, or an air handling unit. To insure proper operation & compatibilities of both system, it is required that the airflows of ventilation systems be balanced, by following the procedures found in this manual.

Limitations: The product is for residential applications only. Must be installed in accordance with all national and local regulations, building and safety codes. Flex duct is recommended for connecting to the ERV/HRV collars to reduce vibration noise.

Electrical Requirements:

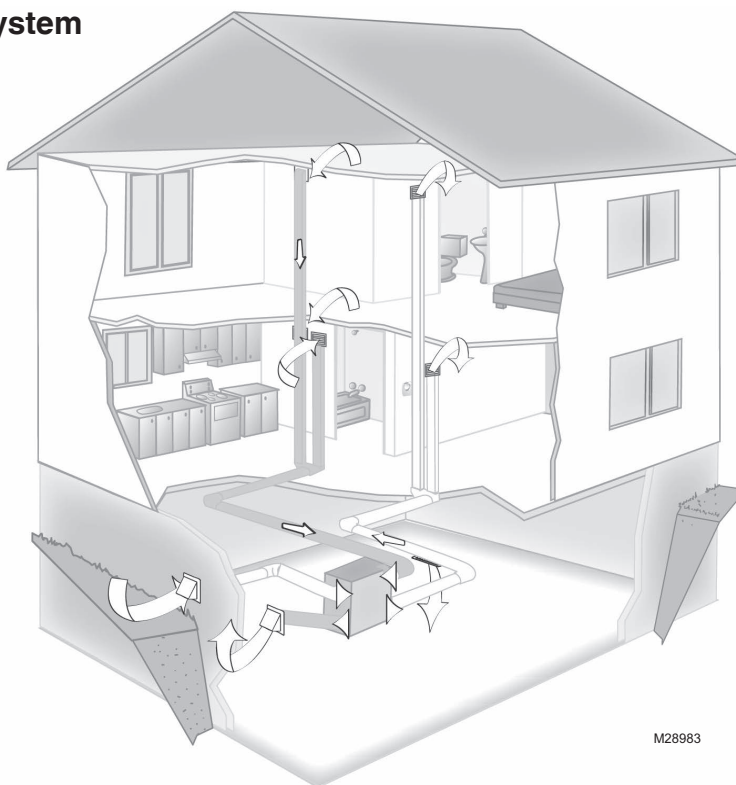
120 VAC outlet. Ground fault interrupter (GFI) and dedicated circuit recommended.



M24745



Independent System



M28983

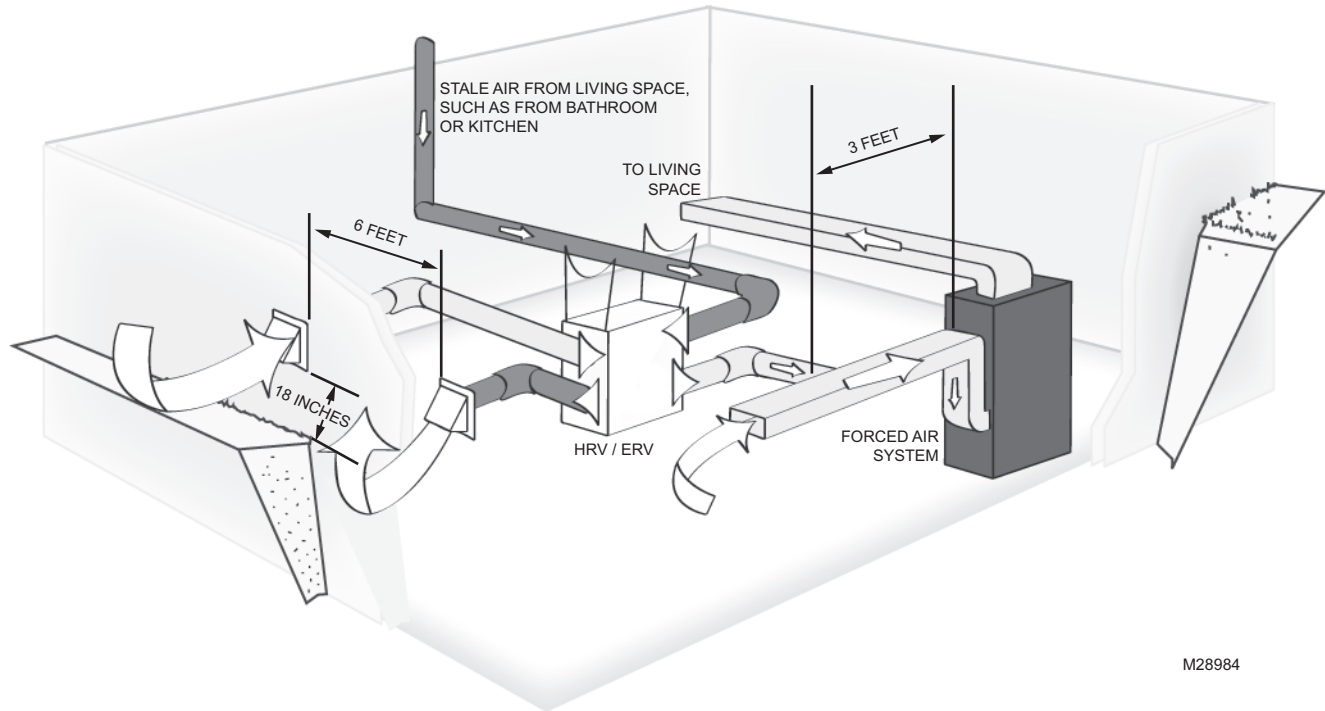
This application uses a devoted duct system for the supply and the exhausting of stale air accumulated in the home.

Honeywell recommends installing fresh air grilles in all bedrooms and living areas and to exhaust the stale air from the bathroom, kitchen, and laundry room.

Install to Fit Your Application (continued)

B

Exhaust at the Source and Supply in the Return



M28984

This application uses a devoted duct system for the exhausting of stale air accumulated in the home. The fresh air is introduced into the return air duct and is distributed through the home by the existing supply air ductwork of the forced air system.

Make sure when using this application that your fresh air duct connection to the forced air system return air duct is at least 3 feet from the forced air system. You should check with your local code or the forced air system's manufacturer.

The forced air system's blower does not have to run when the unit is operating, but is recommended for maximum effectiveness.

NOTE: For the minimum distance between the fresh air connection and the forced air system, check with your local building codes and forced air system manufacturer.

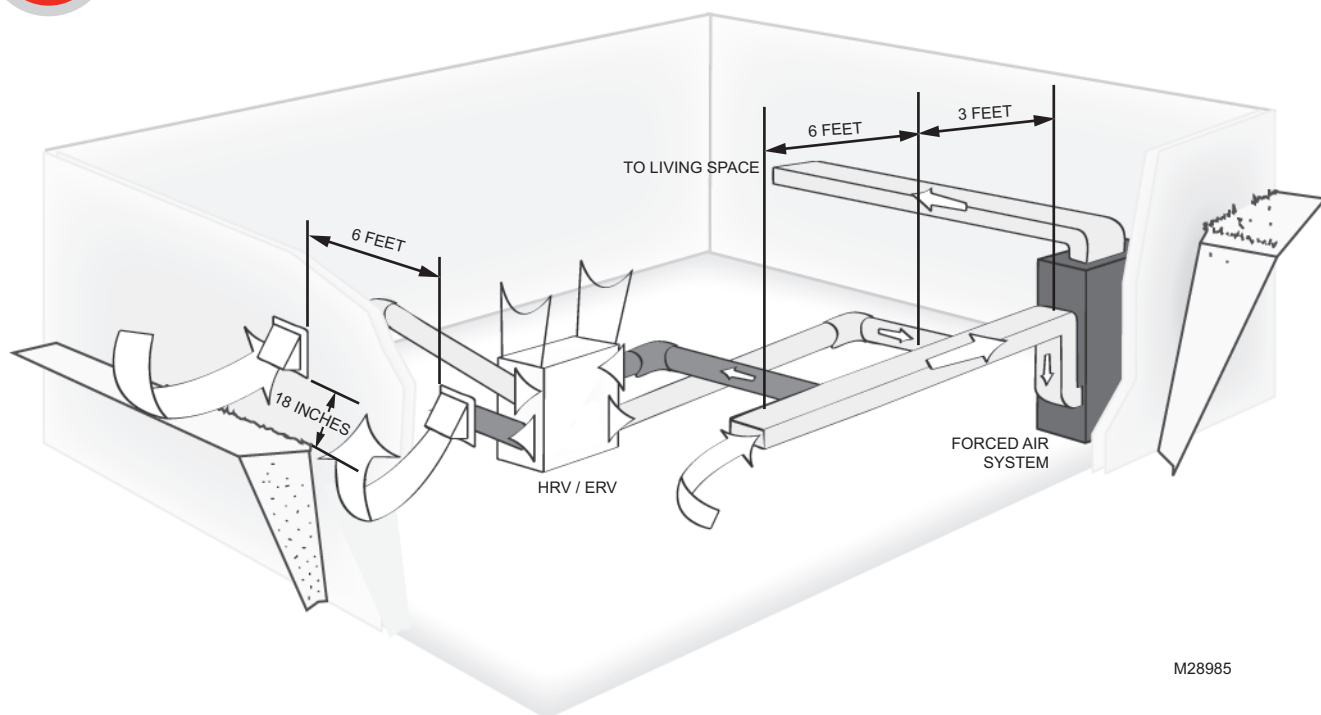
NOTE: For dwellings with multiple forced air systems, Honeywell recommends one ERV/HRV unit per system.

NOTE: Refer to the Wiring section (beginning on page 24) for instructions to connect the unit to operate the forced air system with the ERV/HRV unit.

Install to Fit Your Application (continued)



Exhaust and Supply in the Return



M28985

When using this application make sure that there is a minimum of 6 feet between the fresh air and exhaust air connections of the ERV/HRV unit in the return air duct. Supply air from the ERV/HRV unit must be at least 3 feet from the forced air system. These distances can be different from one region to another; you should check with your local code or the forced air system's manufacturer.

NOTE: For minimum distance between return and forced air system, check with your local building codes and forced air system manufacturer.

NOTE: Fresh air must always be down-stream from the exhaust air in the return air duct of the forced air system.

NOTE: Furnace blower is required to operate when ventilation is required. Set the furnace blower to run continuously, or interlock electrically (low voltage).

Installation Steps

1

Installation Kit

Ensure that you have all of the following installation items:

4 Round Duct Collars (VNT5150, VNT5200, VNT6150 & VNT6200)



4 Oval Duct Collars (VNT5070)



Installation Kit:

- 2 Flexible 6 in. Vinyl Ducts (VNT5150, VNT5200, VNT6150, VNT6200)
- 1 Condensation Drain Line (10 in.)
- 1 Drain Adapter with Nut
- 4 Tie Wraps (30 in.)
- 16 Hex-head screws (1/4 x 5/8 in.)
- 4 Hex-head screws (1/4 x 1 in.)
- 4 Washers
- 1 Drain cap (VNT5070E1000, VNT5150E1000 and VNT5200E1000 only)
- 1 power cord, 120 Vac (not shown)



2

Installation Area

The ERV/HRV unit should be installed in a mechanical room or as close to an outside wall as possible.

The ERV/HRV unit must always be installed in an area where the air is conditioned to avoid freezing the condensate line.

The contractor should install the unit in an area that allows the homeowner easy access for maintenance. It is very important to install an electric receptacle (120 Vac) near the unit, a separate circuit breaker is also recommended. It is best to have access to a condensate drain near the ERV/HRV unit to avoid having to use a condensate pump.

NOTE: Installation is not recommended in unconditioned areas such as an attic or crawl space where the temperature can fall below 32 °F (0 °C).

NOTE: Ducting in unconditioned areas must be fully sealed and insulated.

Installation Steps (continued)

3a

Hanging the VNT5150, VNT5200, VNT6150 or VNT6200

The ERV/HRV unit enables you to save time and effort by offering a simplified hanging system.

TIP: Removing the core unit makes installation easier since the unit weighs less without the core inside.



1. Attach straps to joist using the supplied washers and four 1 in. hex-head hanging screws.



2. Pull on middle of strap while gently lifting unit upward to raise the unit.



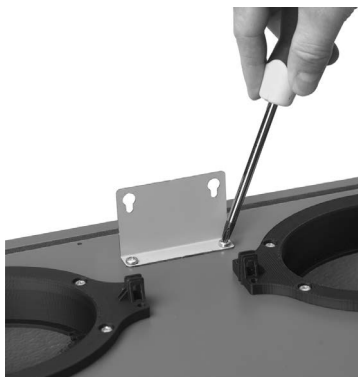
3. Make final adjustments to ensure that the HRV/ERV is level.

NOTE: If the unit is not level, improper drainage will occur and could lead to moisture and leakage problems.

Installation Steps (continued)

3b

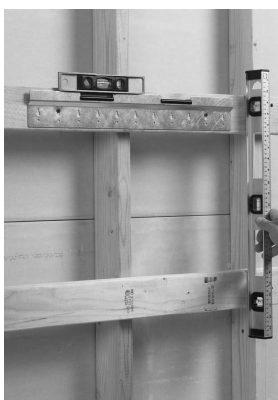
Mounting the VNT5070



1. Fix the control module bracket to the top of the VNT5070 using the supplied mounting screws.



2. Slide the control module onto the bracket using the key holes.



3. Fix the wall mount bracket to two 2x4s or to a precut sheet of plywood using the supplied mounting screws.



4. Hang the unit on the bracket.



5. Secure with two sheet metal screws.



NOTE: When these mounting steps are complete, resume normal installation procedures beginning on page 20, "Installing the flex duct to the ERV/HRV."

Installation Steps (continued)

4

Installing the flex duct to the ERV/HRV

TIP: Honeywell recommends using approximately 16 inches of flexible duct (supplied in kit with VNT5150, VNT5200, VNT6150 and VNT6200) between the unit and the rigid duct for noise dampening. The flex duct is mounted to the unit the same way as the insulated flex.



1. Insert the vinyl duct over the hooks on the duct collar and seal with a supplied 30 inch tie wrap.



2. Insert insulation inside the outer ring of the duct collar.



3. Finish by taping the duct on the collar.

TIP: For the VNT5070 unit, balancing should be done before taping the insulation onto the collar. See balancing steps on page 30.



- 4a. Slide collar onto unit (VNT5150, VNT5200, VNT6150 and VNT6200)



- 4b. Attach collar onto unit (VNT5070)

IMPORTANT: Always fix and secure each collar using four of the 5/8 in. screws supplied. This step is critical in order to prevent condensation accumulation.



5. Secure collar with the supplied 5/8 in. hex-head screws.

TIP: Attach the flex duct to the collar first, and then attach the collar to the unit.

Installation Steps (continued)

5

Installing the condensation drain line

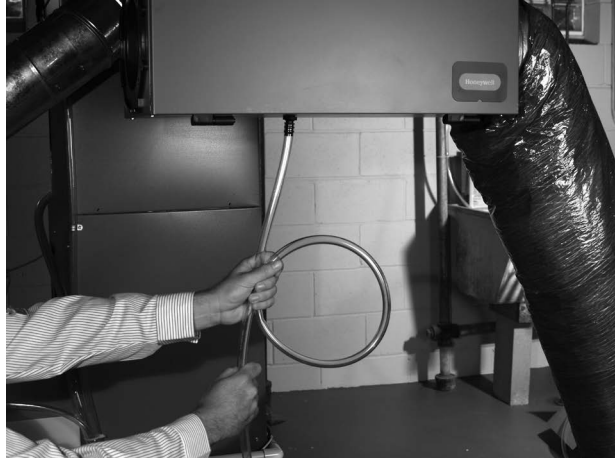
Insert the threaded drain adapter through the bottom of the unit and hand tighten the plastic nut supplied with the drain kit.

Use a wrench to tighten the nut another half turn to ensure a complete seal.

Install the condensate tubing by pushing the clear plastic tubing over the drain adapter.

Make a condensate trap by looping the clear plastic tubing. This loop will prevent foul odors from entering the unit.

Use a condensate pump if you don't have access to the floor drain.



Drainless Application

NOTE: If installing an ERV unit (VNT5150E1000, VNT5200E1000, VNT5070E1000) in a region where the outdoor temperature does not drop below freezing, the condensate drain line does not need to be installed and the unit may be installed as a drainless application.

1. Insert the threaded drain adapter through the bottom of the ERV with the drain connection inside of the unit as shown in the figure.
2. Fit the rubber washer over the drain adapter and then attach the plastic nut.
3. Hand tighten the plastic nut supplied with the drain kit.
4. Use a wrench to tighten the nut another half turn to ensure a complete seal.
5. Attach the drain cap to the drain adapter inside the unit.



Installation Steps (continued)

6

Connecting the power cord

ERV/HRV Power Cord

Insert the power cord on top of the unit. Press firmly to make sure the power cord is secure.

IMPORTANT: Do not plug the power cord into the wall receptacle at this time.

Electric Wall Outlet

Honeywell recommends that the unit has a dedicated receptacle with 120 VAC.

Avoid connecting the unit to the wall receptacle with an extension cord.

Honeywell does not recommend the use of an extension cord.

Ensure that the receptacle's polarization is correct.



NOTE: If the LED light on the ERV/HRV control panel remains green, the motors do not energize, and the controls do not operate; this can indicate that the polarization in the main AC outlet is inverted.

IMPORTANT: Always consult a qualified technician to ensure proper installation of main power.

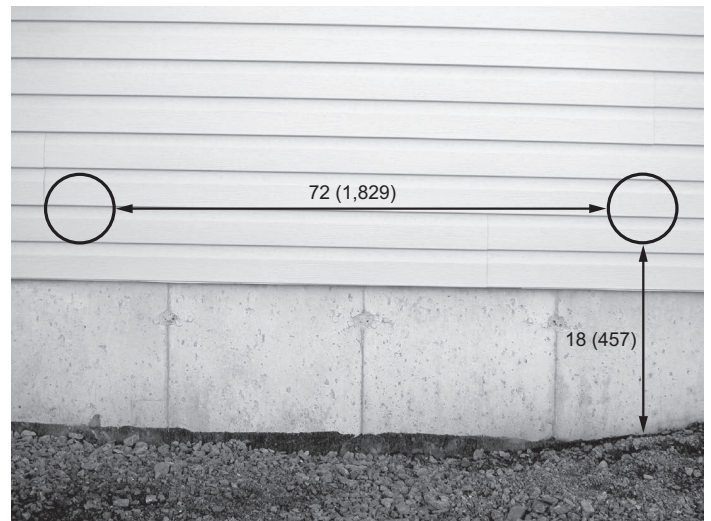
7a

Installing outside hoods for the fresh air and the exhaust

Locate the outside hoods at least 18 inches (0.46 m) above grade and at least 72 inches (1.83 m) apart.

NOTE: Do not locate the fresh air vent hood close to known sources of pollutants such as dryer vents.

IMPORTANT: Always consult your local code for spacing requirements in your area.



M32372

Installation Steps (continued)

7b

Optional Matrix hood (50063805-009) installation for fresh air and exhaust air

NOTE: Only for applications up to 115 CFM maximum speed. Higher airflow rates are limited by higher static pressures and the potential of cross-contamination between the supply and exhaust air streams. The Matrix hood design is suitable for smaller spaces commonly found in town homes and condominiums which require less airflow rates.

NOTE: A 6 in. to 5 in. reducer is required if you are installing the matrix hood (50063805-009) with the VNT5070.



See Matrix hood literature for step-by-step instructions.

Automated Defrost

The ERV and HRV units are equipped with an automatic defrost feature to eliminate any ice build up on the core.

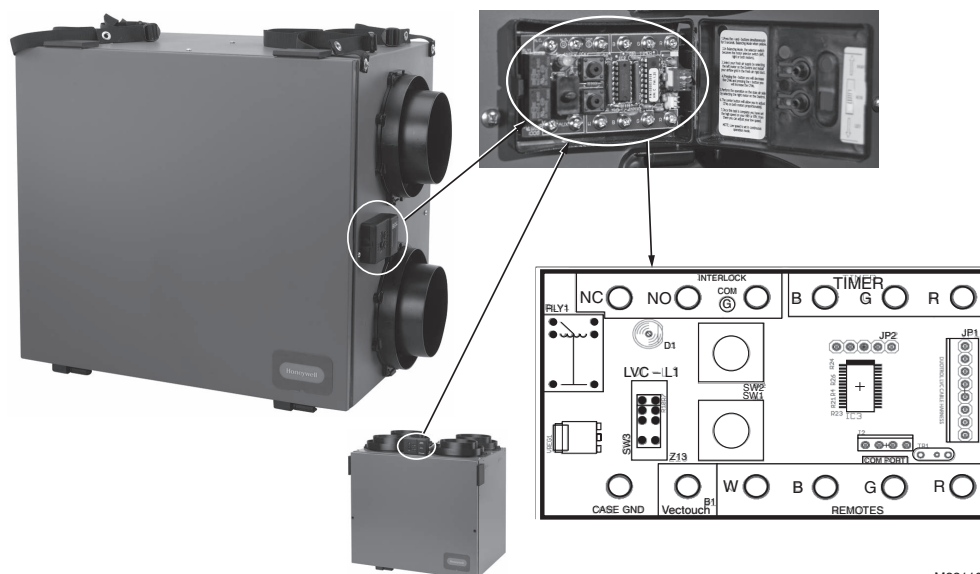
- Automatic defrost is initiated once every hour when the fresh air supply temperature drops to 23°F (-5°C) or colder.
- The defrost cycle operates by turning off the supply fan while continuing to operate the exhaust fan.
- The exhaust fan speed is adjusted proportionally based on the outdoor temperature, initially operating at low speed.
- As the outdoor temperature continues to drop, the exhaust fan speed will increase, and will operate at maximum speed when the outdoor temperature is -4°F (-20°C) or less.
- The VNT5070 Series HRV/ERV defrost cycle runs for 5 minutes with the supply fan off followed by 35 minutes of continuous normal operation.
- The VNT5150 Series HRV/ERV defrost cycle runs for 5 minutes with the supply fan off followed by 35 minutes of continuous normal operation.
- The VNT5200 Series HRV/ERV defrost cycle runs for 4 minutes with the supply fan off followed by 40 minutes of continuous normal operation.
- VNT6150H1000 and 6200H1000 HRV cycle runs for 8 minutes with the supply fan off followed by 32 minutes of continuous normal operation.
- Defrost cycles will continue to repeat as long as the temperature is 23°F (-5°C) or less.

Wiring



CAUTION: Voltage hazard.
Can cause equipment damage.
Disconnect power from the unit before beginning installation.

Terminal Description



M33110

The wiring terminal block is located behind the control module door on the side of the unit.

To access the terminal block, open the control panel door by swinging it open and to the right as shown above.

Wiring (continued)

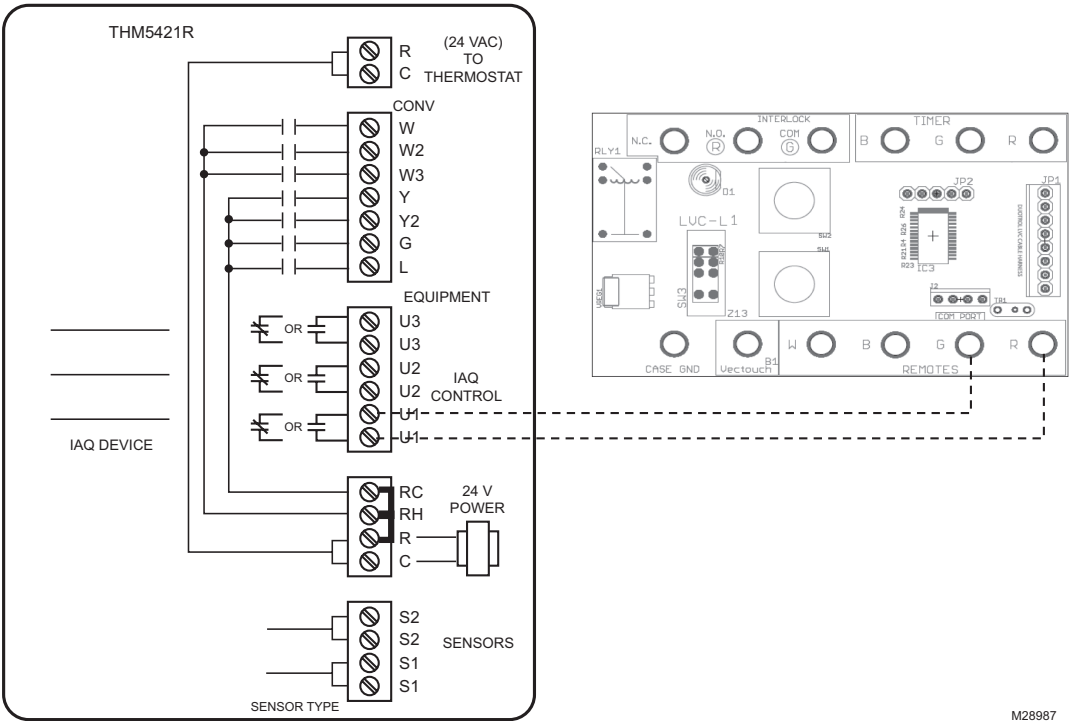
Wiring with Remote Controls

CONT mode - Ventilator runs continuously on low speed. A ventilation call from a control boosts the ventilator into high speed.

INT mode - The ventilator is OFF until a ventilation call from a wall control turns it on in high speed..

Controls Wiring

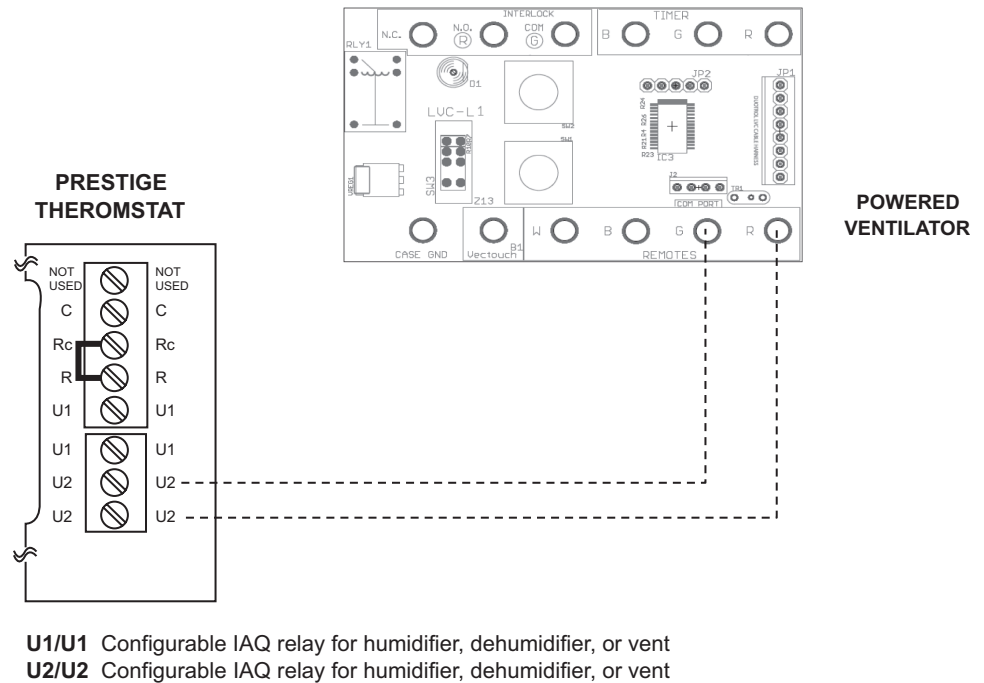
Follow this diagram if using a Prestige™ 2-wire IAQ and RF EIM.



TIP: Combine Prestige IAQ Comfort System thermostat with wireless vent boost remote to provide ventilation boost control from anywhere in the home.

Wiring (continued)

Follow this diagram if using a **Prestige™ Thermostat** (Interlock not shown).

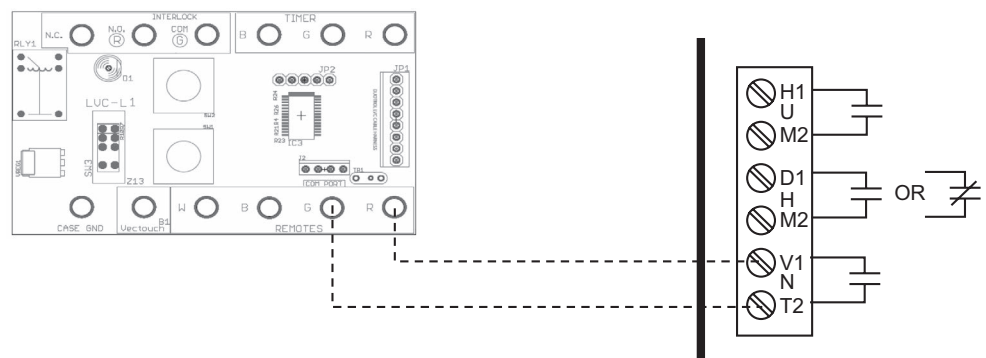


M28988

TIP: Combine Prestige IAQ Comfort System thermostat with wireless vent boost remote to provide ventilation boost control from anywhere in the home.

VisionPRO IAQ Equipment Interface Module

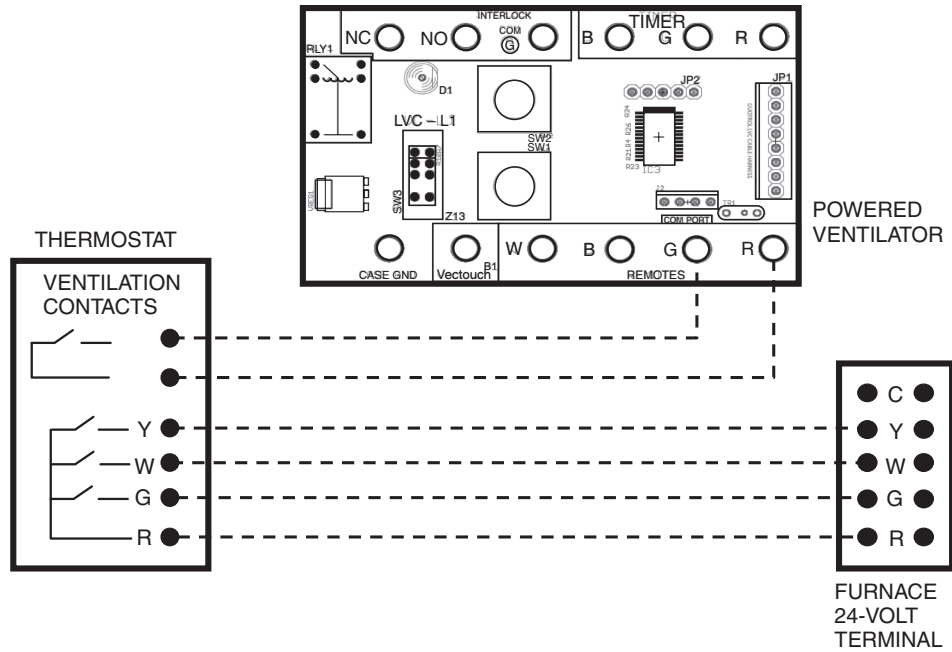
Follow this diagram if using a **VisionPRO IAQ**.



M28989

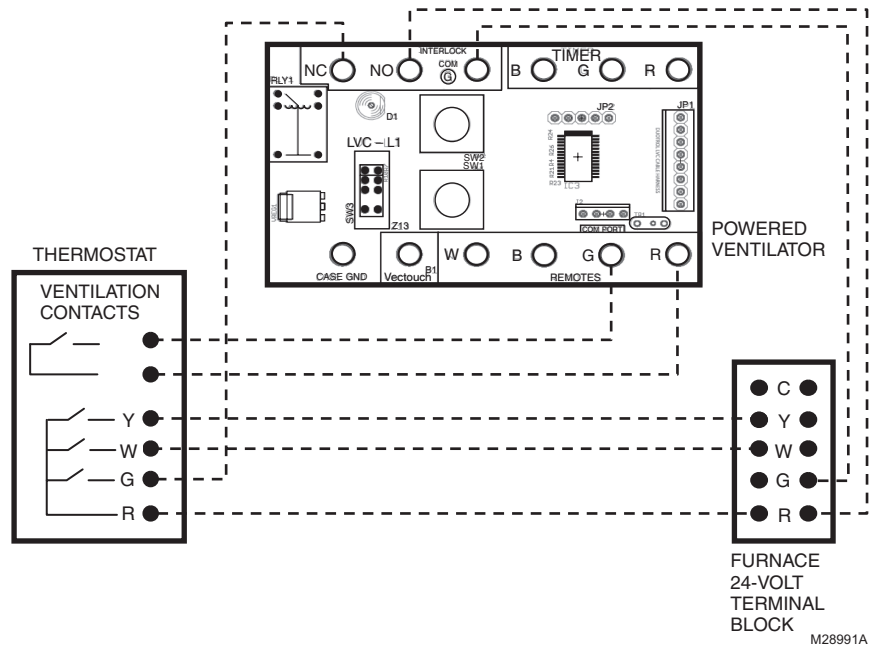
Wiring (continued)

Follow this diagram
for **General Ventilator
Wiring (not interlocked
with equipment fan)**



ERV/HRV is used in conjunction with a conventional HEAT/COOL thermostat or other wall control.

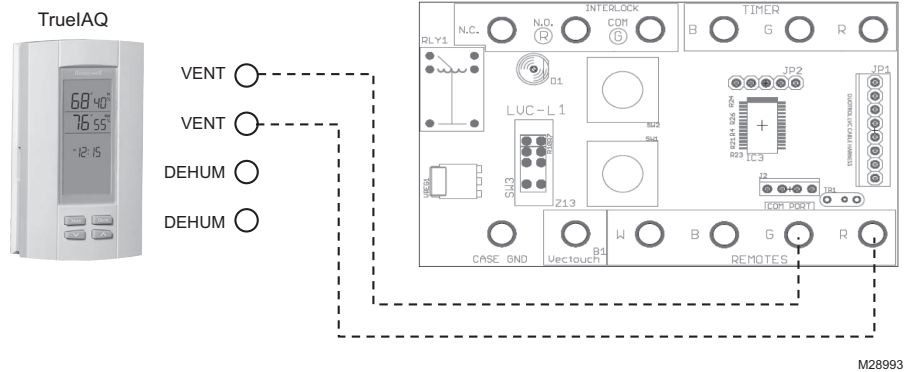
Follow this diagram for
**General Ventilator Wiring
Interlock Wiring with
Equipment Fan**



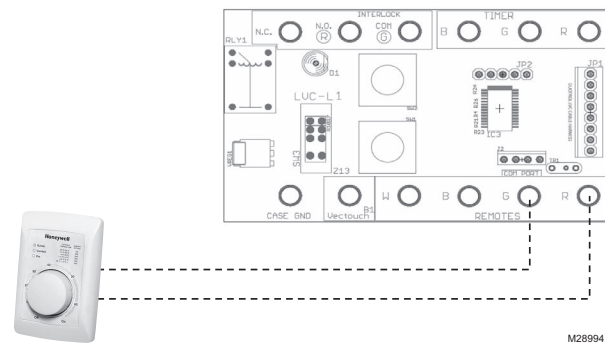
ERV/HRV is interlocked with the forced air system and is used in conjunction with a conventional HEAT/COOL thermostat with ventilation contacts or other wall control.

Wiring (continued)

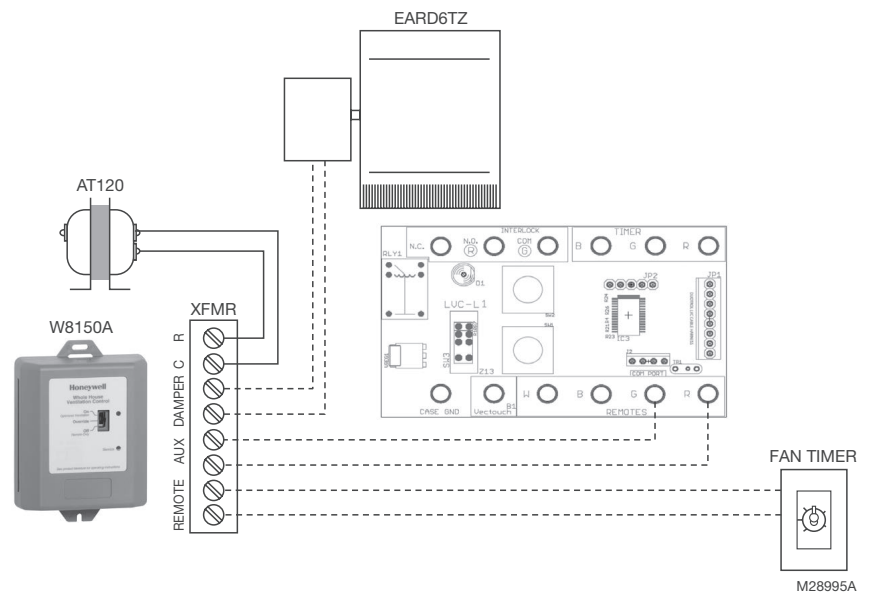
Follow this diagram if using a **TrueIAQ**.



Follow this diagram if using a **Dehumidistat**.



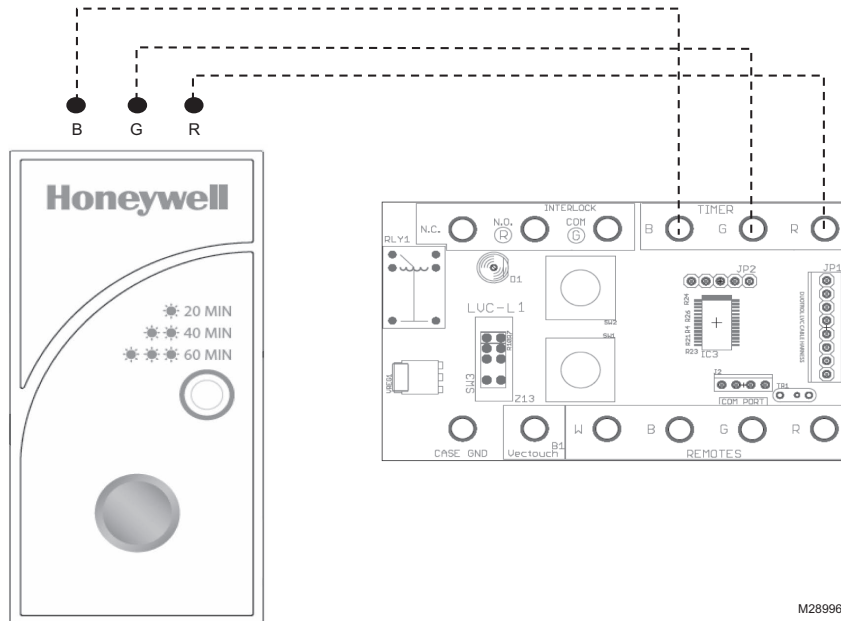
Follow this diagram if using a **W8150 Ventilation Control**.



Wiring (continued)

Follow this diagram if using the **Honeywell 20/40/60 Minute Boost Control Timer**.

Note: Multiple timers can be wired in parallel.

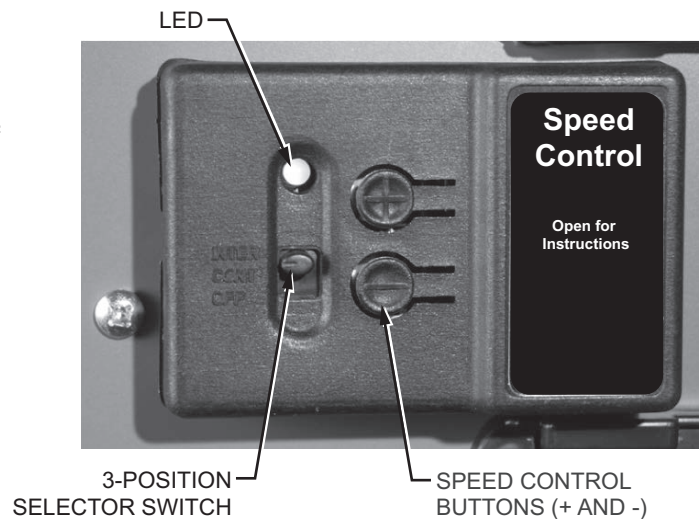


M28996

Control Panel

The control panel has a 3-position selector switch and “+” and “-” buttons for speed control. The color of the LED indicator indicates the current function of the selector switch.

- GREEN LED = Mode Control (normal operating mode)
- YELLOW LED = Balancing Control



M32371

Control Panel (continued)

Speed Control used as a Mode Control

When the LED indicator is green, the selector switch functions as a Mode Selector. The selections are:

- **INTER (Intermittent):** When the selector switch is in the intermittent position the unit will run only when there is a call for ventilation by any external control. At that time the unit will run on high speed until the condition is satisfied.
- **CONT (Continuous):** When the selector switch is in the continuous position the unit will run continuously on low speed except when there is a call for override by any control.
- **OFF:** When the selector switch is in the off position the unit will not operate even when there's a call for ventilation by an external control.
- **(+) and (–) buttons:** Used to adjust the continuous speed setting.

Speed Control used as a Balancing Control

In balancing mode the LED indicator is yellow, and the selector switch functions as a Balancing Control to set the high speed of the motors for balancing purposes (Fresh air, Exhaust air, and Both motors). The selections are:

- **INTER:** Selects the exhaust air motor.
- **CONT:** Selects both exhaust and fresh air motors.
- **OFF:** Selects the fresh air motor.

NOTE: Continuous low speed is 50% of the set high speed.

NOTE: See Balancing Steps below.

Speed Control used as a Motor Control

- **+ Button:** Increase the speed of the selected motor.
- **– Button:** Decrease the speed of the selected motor.

NOTE: See Balancing Steps below..

Balancing Steps

NOTE: Perform the balancing steps with the HVAC equipment fan turned ON if the ERV/HRV unit is ducted into an HVAC system.



- a. Ensure that the speed control selector switch is in either the INTER or CONT position.
- b. Press the (+) and (–) buttons simultaneously for 5 seconds until the LED indicator light turns yellow, which indicates that you are in balancing mode.

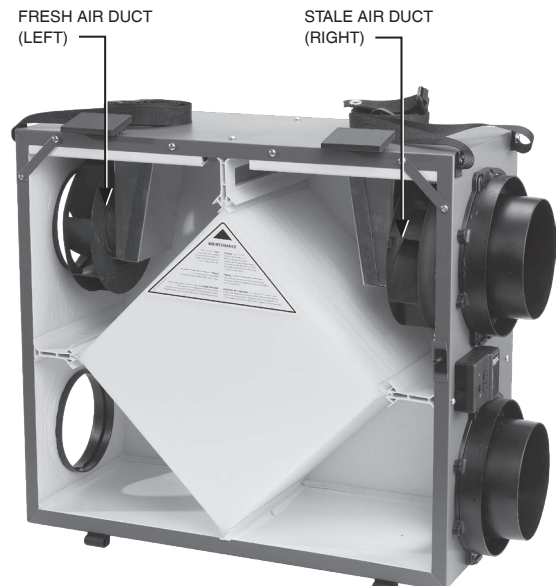
When in balancing mode, the selector switch becomes the motor selector switch. The switch positions become: INTER = Right motor (exhaust air), CONT = Both motors, and OFF = Left motor (fresh air).

Balancing Steps (continued)

2

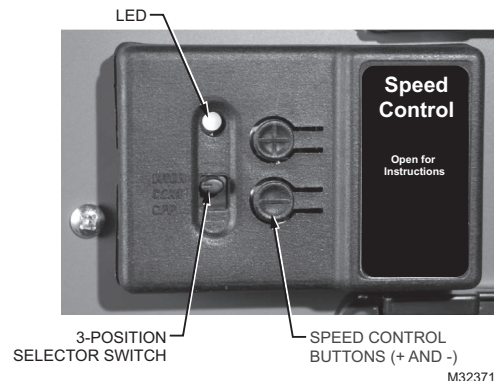
- Use a pitot tube or flow station to measure the air flow in the fresh air duct and exhaust air duct. (For the VNT5070, make airflow measurements by following the procedure on page 30.)
- Move the mode selector switch to adjust the air flow in the duct with the higher reading.
INTER: Exhaust air (right)
OFF: Fresh air (left)
- Press the (+) or (–) buttons to adjust the air flow to the desired high speed setting.
- Move the mode selector switch to the CONT position (to proportionally adjust the speed of both motors at the same time).

NOTE: For airflow measurements on VNT5070, follow the procedure on page 32.



3

- Press the (+) and (–) buttons simultaneously to exit balancing mode .
- Indicator light turns green.
- Continuous speed will be 50% of measured CFM.

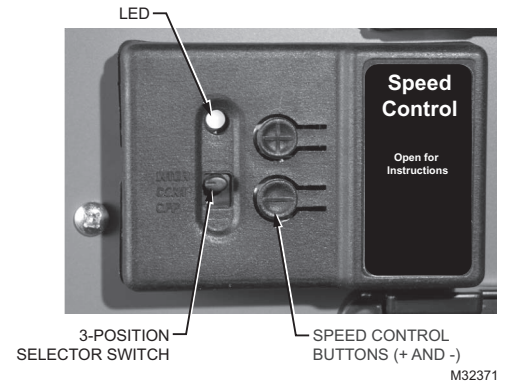


Balancing Reset

NOTE: Once balancing is completed, balancing cannot be changed without resetting the unit.

To reset:

1. Press the (+) and (–) buttons simultaneously for 10 seconds.
2. Indicator light will turn yellow at 5 seconds.
3. Indicator light will turn green at 10 seconds.
4. Release both buttons.
5. Unit has been reset and can be put into balancing mode again.



Checkout

- Apply power to the unit. Move the selector switch to the CONT position to verify that the unit turns on in continuous speed.
- Initiate a ventilation call from each of the external controls. Verify that the ERV/HRV unit turns on in high speed.
- Return the selector switch to the desired position and the external controls to the desired settings.
- Inspect the ducting to ensure that there are no kinks and correct as necessary.

Airflow Measurements - VNT5070 only

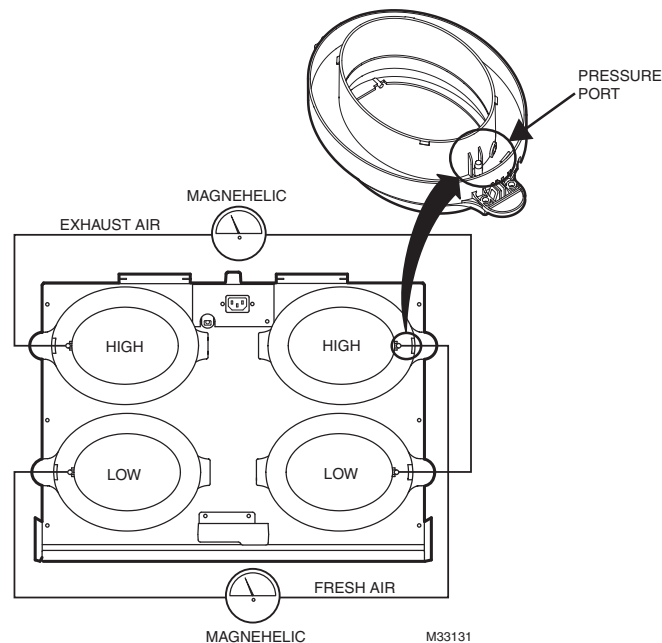
The VNT5070 ventilators are balanced by utilizing pressure ports located on the duct collars and a pressure-airflow correlation table provided as a decal on the side of the unit.

NOTE: The VNT5150, VNT5200, VNT6150 & VNT6200 ventilators are not provided with pressure ports or correlation charts. Instead, they are balanced by using air flow grids or pitot tubes which measure airflow directly in each airstream.

Pressure-airflow correlation table:

Pressure Differential		Fresh Air		Exhaust Air	
Pa	in. W.C.	L/s	CFM	L/s	CFM
50	0.20	44	93	43	90
62	0.25	41	87	40	85
75	0.30	39	83	37	79
87	0.35	37	79	36	77
100	0.40	35	74	36	76
112	0.45	33	69	34	71
125	0.50	30	65	32	67
137	0.55	29	61	28	60
150	0.60	26	56	24	51
162	0.65	24	50	22	47
175	0.70	22	46	19	41
187	0.75	19	41	17	36
199	0.80	17	36	15	31

Airflow Measurements - VNT5070 only (continued)



1

Pre & Post Balancing Steps

- Install the flexible duct inner liner (vapor barrier) over the collar and seal with tape, mastic, etc. Note-flexible insulation should be pulled back and away from the duct collar to allow access to pressure ports.
- Proceed with balancing steps described below.
- Plug the pressure ports.
- Pull flexible duct insulation over duct collar and stuff inside the double collar; seal insulation to duct collar with tape.

2

Balancing Steps

- Measure pressure differential across the EXHAUST air stream high and low ports using a Magnehelic gauge or other pressure gauge.
- Measure pressure differential across the FRESH air stream high and low ports using a Magnehelic gauge or other pressure gauge.
- Look up corresponding air flows from the pressure-airflow correlation table.
- Adjust airflows to a balanced condition by adjusting blower motor speeds.
- Usually the blower with more airflow is adjusted to the lower blower airflow rate.
- Motor adjustments are described in previous section.

Maintenance

Quarterly or as Needed



Filters.

Four times per year or as needed, vacuum the filters. Replace filters as needed.

Annually or as Needed



Inside the Unit.

Once a year or as needed, clean the interior of the unit (walls and drain pan) with a mild and non abrasive soap. It is recommended to use products that are environmentally-friendly.

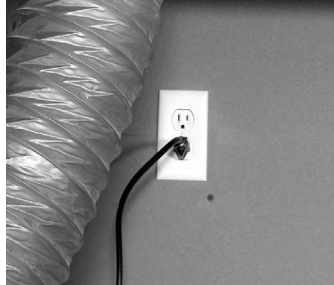


Energy Recovery Core Unit (VNT5070E1000, VNT5150E1000 and VNT5200E1000) and Heat Recovery Core Unit (VNT5070H1000, VNT5150H1000, VNT5200H1000, VNT6150H1000 and VNT6200H1000)

Once a year or as needed, vacuum the four surfaces, let soak in warm water and mild soap for 15 minutes, then spray rinse and let dry.

NOTE: See Cleaning Steps on next page for the above maintenance items.

Cleaning Steps



1. Disconnect the AC power from the unit or the wall.



2. Open the side door panel by opening the two latches on the top of the side panel and lowering the panel to its fully open position. Remove both filters from the top left and right sides of the Core, then vacuum both filters. Slide out the Core, and clean according to the instructions on the previous page.



3. Clean inside of unit with a damp cloth and wipe dry when finished.



4. Replace the Core and the two filters, re-latch the side panel, then reconnect the AC power to the unit.

Troubleshooting



CAUTION: Servicing the ERV/HRV unit with its electrical circuitry can cause personal injury. Always make sure that power to the unit is disconnected prior to making any connections. Failure to disconnect the power could result in electrical shock. Service should only be performed by a qualified service technician.

Problem	Possible Cause or Symptom	Test Procedure	Solution
<ul style="list-style-type: none"> No Power to Unit HRV/ERV does not turn on. Speed Control green LED light does not come on. 	<ul style="list-style-type: none"> Main power is not energized. HRV/ERV power cord not fully inserted. HRV/ERV or wall control in the OFF position. Poor contact between connections on high, low voltage and door switch. 	<ul style="list-style-type: none"> Check power connection, fuses or circuit breakers. Ensure power cord is firmly inserted. Ensure HRV/ERV and or wall controls are in the ON position. Remove all controls connection leading to unit. Continuity test of the units power cord. 	<ul style="list-style-type: none"> Consult certified technician to insure proper installation of main power. Remove and re-insert power cord firmly. Remove door and locate the area were the switch compresses the door sealant. Insert behind door sealant a metal edge or small screw to insure proper contact between door safety switch and access door. Un-plug HRV/ERV, remove access panel from motor mounts and press firmly on all connections. Replace AC power cord.
<ul style="list-style-type: none"> During motor selection on Speed Control while in balancing mode unit (shut off), goes to low speed) or into(INTER mode) once the (+ / -) buttons are pressed. 	<ul style="list-style-type: none"> Speed Control board not responding. Balancing mode has been locked. 	<ul style="list-style-type: none"> Un-plug unit for 30 seconds to re-boot. Reactivate balancing mode and select motor and press (+ / -) buttons. 	<ul style="list-style-type: none"> On the Speed Control press and hold both the (+ / -) buttons for 15 seconds or until you receive a solid green light. This will reset HRV/ERV back to factory default mode. <p>Note: Unit must be re-balanced to ensure maximum performance.</p>

Troubleshooting (continued)

Problem	Possible Cause or Symptom	Test Procedure	Solution
<ul style="list-style-type: none"> • HRV/ERV operating only on high speed, no communication between unit & wall controls. • HRV/ERV supply or exhaust fan runs only on high. 	<ul style="list-style-type: none"> • Dehumidistat of the wall controls activated. • T-3 Timer 20/40/60 mins. activated. • Short circuit between G & R terminals of REMOTES on Speed Control™. • Faulty wire between control and H/ERV. • Faulty wall control. 	<ul style="list-style-type: none"> • Disconnect all wall controls from unit • Ensure all other wall controls are not in override mode. • Inspect the wires to insure not damage. • Remove wall control and verify it at the H/ERV. 	<ul style="list-style-type: none"> • Ensure all wall controls and Speed Control wire connections correspond to their matching letters • Ensure no nails, staples or screws are shorting out the wires. • Replace LVC PCB board, wall control and wires.
<ul style="list-style-type: none"> • Motor not functioning. • Motor failure. 	<ul style="list-style-type: none"> • Failure to the HVC or LVC PCB board. • Wire connection or wire sequence not corresponding to wiring diagram. • Run capacitor failure 	<ul style="list-style-type: none"> • Resistance test: Unplug H/ERV unit and with a multimeter <ul style="list-style-type: none"> – Test the motor resistance (BLUE & BLACK wires) of the motor. The range should be between 33-39 Ohms – Then proceed to measure the resistance (BLUE & BROWN wires) the range should be between 56-64 Ohms • If resistance falls within the above ranges the motor is good. • If capacitor is swollen or disfigured, it is definitely bad. • Check amperage in leads going to capacitor when in operation. If capacitor is open, no amperage will flow. • Remove from circuit and check for short circuits or grounds (use ohmmeter only). 	<ul style="list-style-type: none"> • Replace the HVC or LVC Board • Correct faulty connection or wire sequence to correspond to the wiring diagram. • Replace the run capacitor and/or Motor
<ul style="list-style-type: none"> • Yellow blinking LED on speed controller. 	<ul style="list-style-type: none"> • Defrost Thermister not properly connected to HVC Controller • Defrost Thermister is defective 	<ul style="list-style-type: none"> • Ensure proper connection of thermister. • Remove access panel to expose HVC controller verify defrost thermister is connected to the "T2" terminal on HVC controller. • Unplug defrost thermister from HVC controller & check readings with Ohm meter. 	<ul style="list-style-type: none"> • If defrost thermister is not connected, please plug-in on HVC controller on the terminals marked "TEMP SENSOR". • Connect the Ohm meter to red terminal and if receive no readings 0, replace defrost thermister.

Troubleshooting (continued)

Problem	Possible Cause or Symptom	Test Procedure	Solution
<ul style="list-style-type: none"> Exhaust Fan activated Supply Fan off. 	<ul style="list-style-type: none"> Wiring of fans incorrect on HVC Controller Unit is in its automatic defrost sequence when defrost thermister measures temperature of -5°C/23°F 	<ul style="list-style-type: none"> Unplug unit, remove access panel from Exhaust Fan (right motor mount) . Ensure all connections on HVC & LVC board correspond to wiring diagram and that they are securely in place. Wait 5 to 10 minutes to ensure unit has completed the defrost sequence. 	<ul style="list-style-type: none"> Ensure wiring corresponds to wiring diagram. Test the defrost thermister with Ohm meter. Insure unit completes the defrost sequence is temperature are below - 5°C/23°F.
<ul style="list-style-type: none"> T-3 Timers not functioning, the LED remains on with a dim green light. T-3 Timers not functioning, display LED light doesn't appear. 	<ul style="list-style-type: none"> T-3 timer wires connections do not correspond to the Speed Control™. (G & B connections are inverted) HRV/ERV does not operate or respond. 	<ul style="list-style-type: none"> Disconnect all wall controls from unit. Override TIMER (R & G) connections of the Speed Control™. 	<ul style="list-style-type: none"> Ensure all wall controls wire connection correspond to the Speed Control™ connections. (Example: B B / G G / R R) (Ref: Wall Control Section of the Installation Guide.)
Air is too dry	Air is too dry		<ol style="list-style-type: none"> Increase humidity level on the dehumidistat. Switch ventilation mode from continuous to intermittent. Install a humidifier.
Air is too humid	Air is too humid		<ol style="list-style-type: none"> Reduce the humidity level on the controller. Make sure that the clothes dryer is vented to the outdoors. Wait for outside temperature to change. For example, it can be very humid at times in the summer. Verify balancing of the ERV/HRV unit (see Balancing Steps on page 30).

Honeywell OS and Parts List

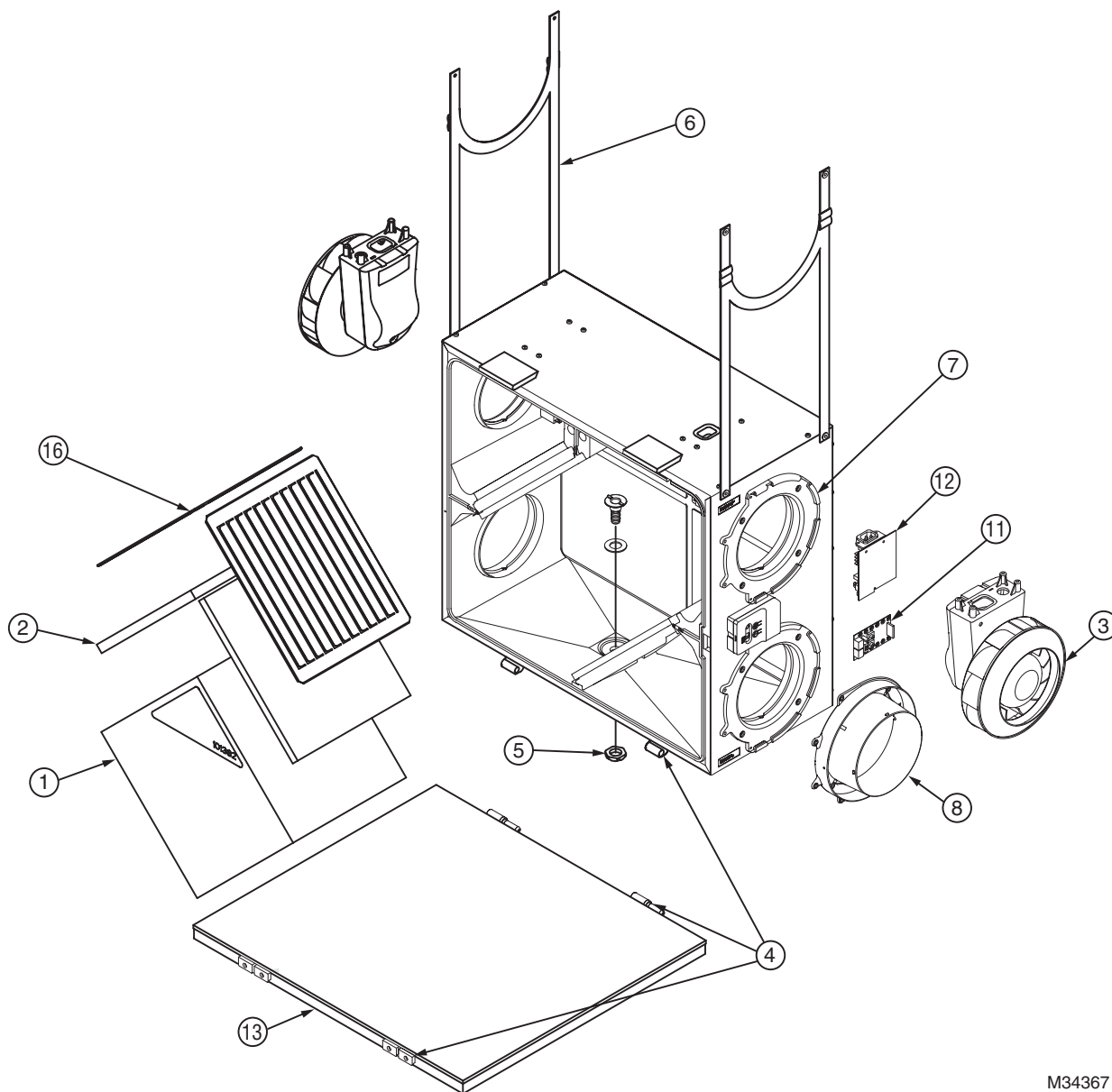
Honeywell OS List		
Honeywell OS Number	Controls	Ventilator Type
VNT5070H1000	No	HRV
VNT5070E1000	No	ERV
VNT5150H1000	No	HRV
VNT5150E1000	No	ERV
VNT5200H1000	No	HRV
VNT5200E1000	No	ERV
VNT6150H1000	No	HRV
VNT6200H1000	No	HRV

Parts List (see illustration on page 40 or page 41 for figure number references)						
Fig. No.	Description	VNT5070	VNT5150	VNT5200	VNT6150	VNT6200
1	Polypropylene HRV Core	50063805-001 9" Core	50053952-001 10" Core	50053952-002 15" Core	50053952-001 10" Core	50053952-002 15" Core
	Enthalpy ERV Core	50063805-002 9" Core	50053952-003 10" Core	50053952-004 15" Core	N/A	
2	Replacement Filter Kit	50063805-003	50053952-005	50053952-006	50053952-005	50053952-006
3	Replacement Motor	50063805-004	50053952-010		VNT6150XIMPEL1	50053952-010
4	Latch & Hinge Kit	N/A				
5	Condensation Drain Fitting Kit	N/A				
6	Adjustable Hanging Strap Set (optional on VNT5070)	N/A				
7	6" diameter Plastic Keeper	N/A				
8	6" diameter Plastic Double Collar	N/A				
9	5" diameter Plastic Keeper	50063805-006	N/A			
10	5" diameter Plastic Collar	50063805-005	N/A			
11	Replacement LVC Electronic Board (Speed Control)	50063805-010	50053952-012		VNT6150XLVCBD1	VNT6200XLVCBD1
12	Replacement HVC Electronic Board	50053952-013				
13	Front Access Door	50063805-007	50053952-015			
14	Mounting Bracket	50063805-008	N/A			
15	Matrix Ventilation Hood	50063805-009	N/A			
16	Aluminum Distribution Plates	N/A			VNT6150XALPLT1	VNT6200XALPLT1

Parts List (not illustrated)	
Honeywell Part Number	Description
50053952-020	20/40/60 Minute Timer (compatible with all HRVs & ERVs)

Parts Illustration (VNT5150, VNT5200, VNT6150 & VNT6200)

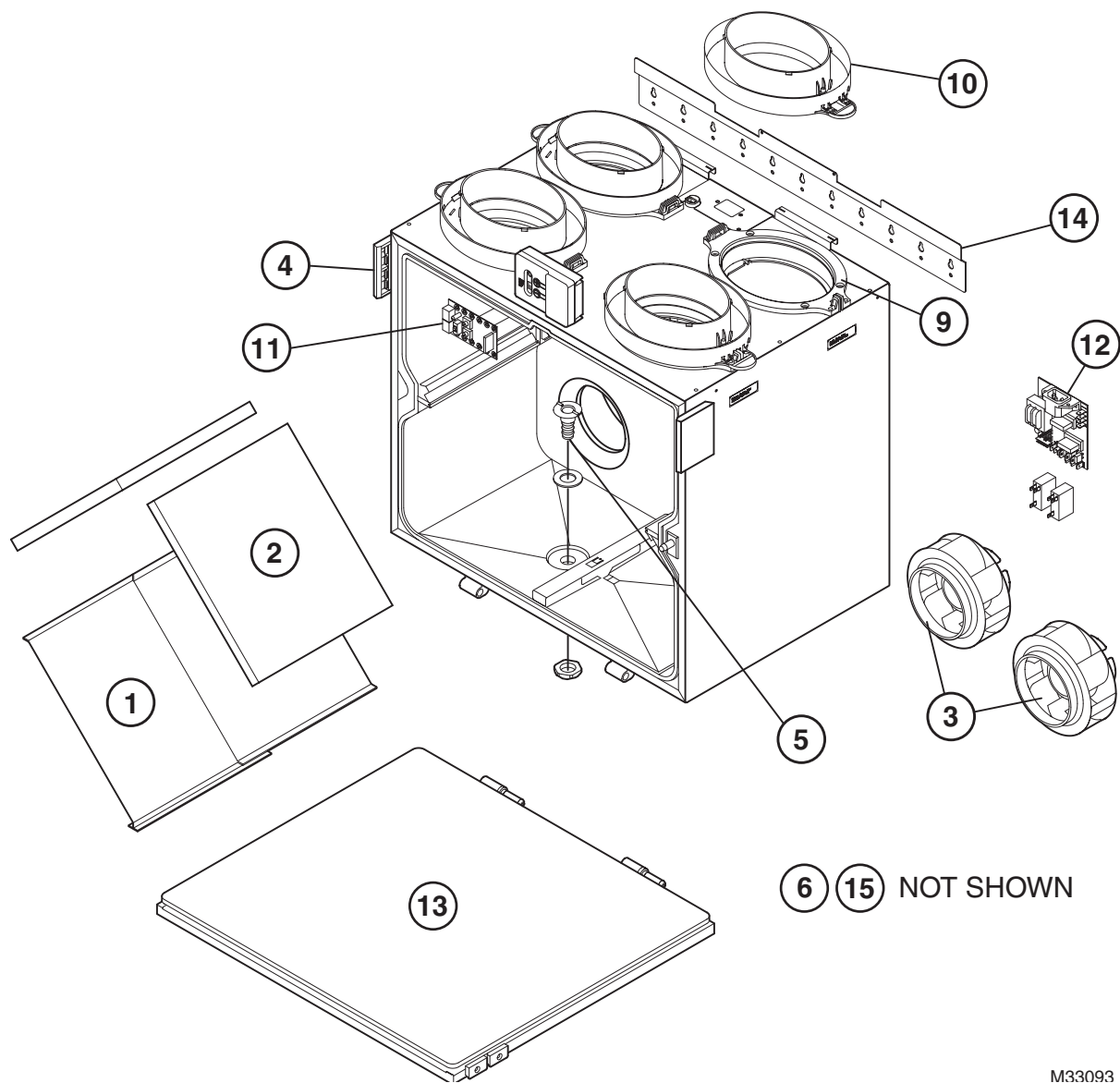
See the Parts List table on page 39 for items referenced by figure numbers 1 through 16 in the exploded illustration below.



M34367

Parts Illustration (VNT5070)

See the Parts List table on page 39 for items referenced by figure numbers 1 through 11 in the exploded illustration below (VNT5150 and VNT5200).



M33093