



**Model: ES160H (HRV)**

VENTILATION PERFORMANCE			
EXT. STATIC	NET SUPPLY	GROSS AIR FLOW	
PRESSURE	AIR FLOW	SUPPLY	EXHAUST
in wg (Pa)	cfm (l/s)	cfm (l/s)	cfm (l/s)
0.2 (50)	158 (75)	165 (78)	186 (88)
0.3 (75)	148 (70)	152 (72)	171 (81)
0.4 (100)	133 (63)	140 (66)	154 (73)
0.5 (125)	120 (57)	127 (60)	139 (66)
0.6 (150)	108 (51)	114 (54)	125 (59)
0.7 (175)	95 (45)	99 (47)	108 (51)

ENERGY PERFORMANCE				
SUPPLY TEMP.	NET AIR FLOW	POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	ADJUSTED SENSIBLE RECOVERY EFF.
°F (°C)	cfm (l/s)	Watts		
+32 (0)	61 (29)	60	66	73
+32 (0)	86 (41)	70	63	68
+32 (0)	110 (52)	95	58	63



**CABINET/CORE:** Collar size: 6-inch (152.4 mm). The case is constructed of 0.032 painted aluminum with a white enamel finish. The cabinet is fully insulated with 1-inch (CFC-free) polystyrene. The unit is equipped with a polypropylene cross-flow heat exchange core.

**CERTIFICATION:** cCSAus, CSA C22.2, ASHRAE 62.2, HVI

**ELECTRICAL:** 120V/1/60 Hz. 128W, 1.1A

**BLOWERS:** Two backward curve impellers using PSC motors and permanently sealed bearings.

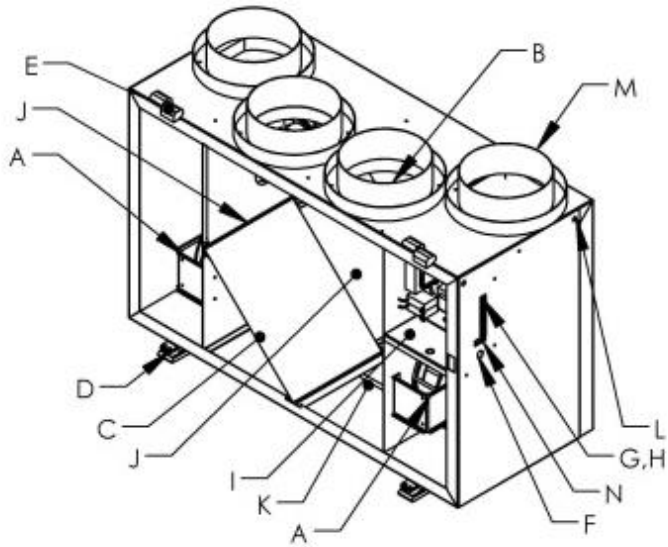
**ADDITIONAL FEATURES:**

- Furnace interlock options: commands furnace blower when HRV is on or only when HRV is on high speed
- Intelligent Defrost: duration and interval adjust to outdoor conditions below -5° C (23° F)
- In defrost and recirculation modes, this unit will not induce negative pressure
- Balancing: door-mounted differential pressure ports allow air measurements without the need for flow grid in ductwork. Independent speed adjustment of either supply or exhaust motor in BOTH high and low speed
- 24 V circuit protection with self resetting fuse
- Drain, hanger kit, polyester air filters included
- 12 VDC **AND/OR** 24 V remote control options with the following Nu-Air controls:

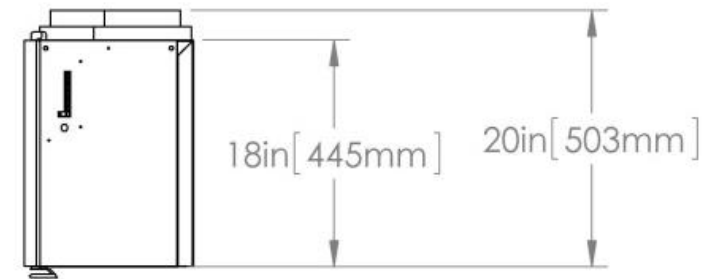
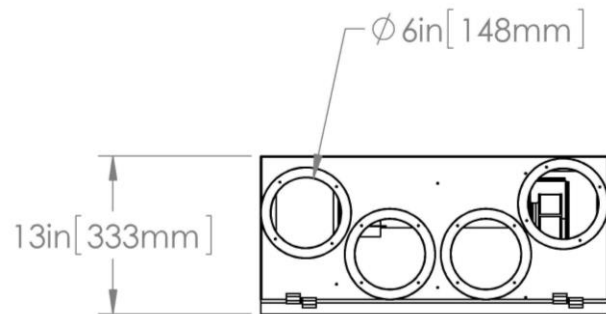
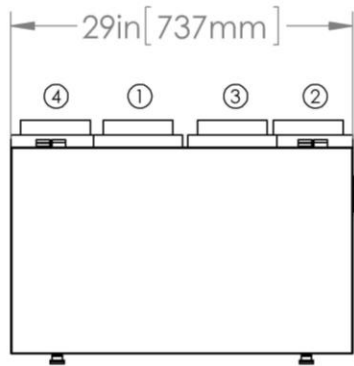
12 VDC	24 VAC
<b>Lumina (NAV-561):</b> Low speed, high speed, intermittent, 20/40 standby, 20-40-60 minute timer, filter service alert (clock)  <b>Legacy Controls (retrofit/replacement applications)</b> <b>ES-M1, ES-M2</b> <b>ES-T1:</b> 20-40-60-minute high speed timer	<b>*NAV-460:</b> 20-40-60 minute high speed timer (up to 5) <b>DSTAT-1:</b> Humidity control <b>Win-1:</b> Humidity control/ OFF/ STBY/ Continuous/ Intermittent/ Full-time high speed <b>WIN-20:</b> 20-minute high speed timer (up to 6) <b>Also: 24 VAC, dry contacts for 3<sup>rd</sup> party switches</b> <b>*NAV-460 not compatible with ES-T1, WIN-20 timers</b>

**Defrost:** When outdoor temperature falls to -5° C (23° F) and colder, an automatic, timed defrost cycle is initiated. The exhaust air and the fresh air fans operate at reduced speed. An internal damper will shut off the cold exhaust port, directing return air through the core for defrosting. Normal operation resumes for a fixed duration, then the processor will read outdoor temperature and initiate defrost as necessary.

**Warranty:** There is a 5-year warranty on all internal components. The heat recovery core has a 15-year warranty.



NOTES	
A	BACKWARD CURVE, DUAL INLET IMPELLER (2)
B	PROPORTIONAL DEFROST
C	HEAT EXCHANGE CORE - POLYPROPYLENE
D	LATCH (2)
E	HINGE (2)
F	ELECTRICAL CONNECTION – CORD
G	REMOVABLE CONTROL TERMINALS
H	FURNACE INTERLOCK
I	ELECTRICAL BOX
J	FILTERS (2)
K	5/8" DRAIN (1)
L	HANGER MOUNTS (4)
M	DUCT COLLARS 6"
N	INDEPENDENT ELECTRONIC SPEED CONTROL HIGH AND LOW



PORT DESIGNATIONS	
1	OUTSIDE AIR / FRESH AIR FROM OUTSIDE
2	SUPPLY AIR / FRESH AIR TO SPACE
3	RETURN AIR / EXHAUST AIR FROM SPACE
4	EXHAUST AIR / EXHAUST AIR TO OUTSIDE