



NU1030 ERV ROOF MOUNT

CABINET:

- Double wall, 22 Ga galvanized steel outer finish
- Optional .050 prepainted white aluminum finish.

HEAT EXCHANGER CORE:

- **HRV** - polypropylene core with sensible energy transfer
- **ERV** - enthalpic cross flow heat exchange core with the unique ability to *transfer both latent and sensible energy*

BLOWERS: Belt drive performance blowers FC, DWDI

ADDITIONAL FEATURES:

- Temperature activated fan shut down defrost method
- Face and Bypass damper defrost
- Economizer

FILTER:

- STANDARD - 2" pleated filters, 30%-40% ASHRAE dust spot efficiency
- OPTIONS - Electrostatic, charcoal pads

CUSTOMIZATION:

If an application requires a door or ports to be located differently, simply specify the configuration.

WARRANTY:

- Fifteen years on Polypropylene Cores
- Five years on Enthalpy Cores
- Two years on all other components.

	NU1030
DUCT SIZE (L x W)	24 x 12 in. 610 x 305 mm
CORE SIZE (L x W)	17.5 x 17.5 in. 444.5 x 444.5 mm
CABINET SIZE (L x H x D)	91 x 39 x 45 in. 2311x991x1143 mm
BLOWERS (FWD CURVE DIRECT DRIVE) PSC	810
HORSE POWER	Specify
VOLTS	
AMPS	
RPM	1725/1140
WEIGHT	900LBS

NU1030 ERV

NU1030 AIRFLOW PERFORMANCE

CFM	ESP = 0		ESP = 0.2		ESP = 0.4		ESP = 0.5		ESP = 0.6		ESP = 0.8		ESP = 1.0		ESP = 1.2	
	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
1000	0.04	300	0.09	492	0.15	647	0.19	721	0.22	790	0.30	910	0.38	1014	0.46	1107
1100	0.06	324	0.11	505	0.17	648	0.21	720	0.25	788	0.33	908	0.41	1015	0.50	1109
1200	0.07	359	0.13	527	0.20	664	0.23	727	0.27	792	0.36	911	0.45	1018	0.54	1113
1300	0.09	390	0.15	547	0.22	678	0.26	738	0.30	790	0.39	915	0.49	1021	0.59	1117
1400	0.12	422	0.18	569	0.26	695	0.29	751	0.33	806	0.43	917	0.53	1022	0.63	1118
1500	0.14	451	0.22	591	0.29	711	0.33	766	0.37	818	0.46	920	0.57	1023	0.68	1119
1600	0.18	480	0.25	611	0.33	727	0.37	781	0.41	831	0.51	928	0.61	1025	0.72	1119
1700	0.21	508	0.29	633	0.37	745	0.41	796	0.46	835	0.55	939	0.66	1028	0.77	1120
1800	0.25	535	0.33	654	0.41	762	0.46	812	0.51	859	0.60	950	0.71	1035	0.82	1121
1900	0.29	568	0.38	681	0.47	784	0.52	833	0.56	879	0.67	966	0.77	1049	0.89	1128
2000	0.34	599	0.44	707	0.53	807	0.58	853	0.63	898	0.73	983	0.84	1064	0.96	1140
2100	0.40	630	0.50	733	0.59	828	0.64	874	0.69	918	0.80	1001	0.91	1079	1.03	1153
2200	0.45	655	0.56	754	0.66	847	0.71	890	0.76	933	0.87	1013	0.99	1091	1.11	1163
2300	0.52	689	0.63	784	0.73	873	0.79	915	0.84	957	0.96	1035	1.08	1110	1.20	1181
2400	0.59	718	0.70	809	0.81	895	0.87	936	0.92	976	1.04	1053	1.16	1125	1.29	1196
2500	0.66	746	0.78	833	0.90	917	0.96	957	1.01	996	1.13	1071	1.26	1142	1.39	1210
2600	0.75	777	0.87	862	0.99	943	1.05	982	1.11	1019	1.23	1092	1.37	1162	1.50	1228
2700	0.84	805	0.96	886	1.09	964	1.15	1002	1.21	1039	1.34	1110	1.47	1178	1.61	1244
2800	0.93	836	1.07	914	1.20	990	1.26	1026	1.33	1062	1.46	1132	1.59	1198	1.73	1262
2900	1.04	865	1.18	941	1.31	1015	1.38	1051	1.44	1085	1.58	1153	1.71	1218	1.86	1281
3000	1.15	895	1.29	969	1.43	1040	1.50	1075	1.57	1109	1.71	1174	1.85	1239	1.99	1300

** Table values above are for Polypropylene Core ONLY. Consult factory for Enthalpy Core data. **

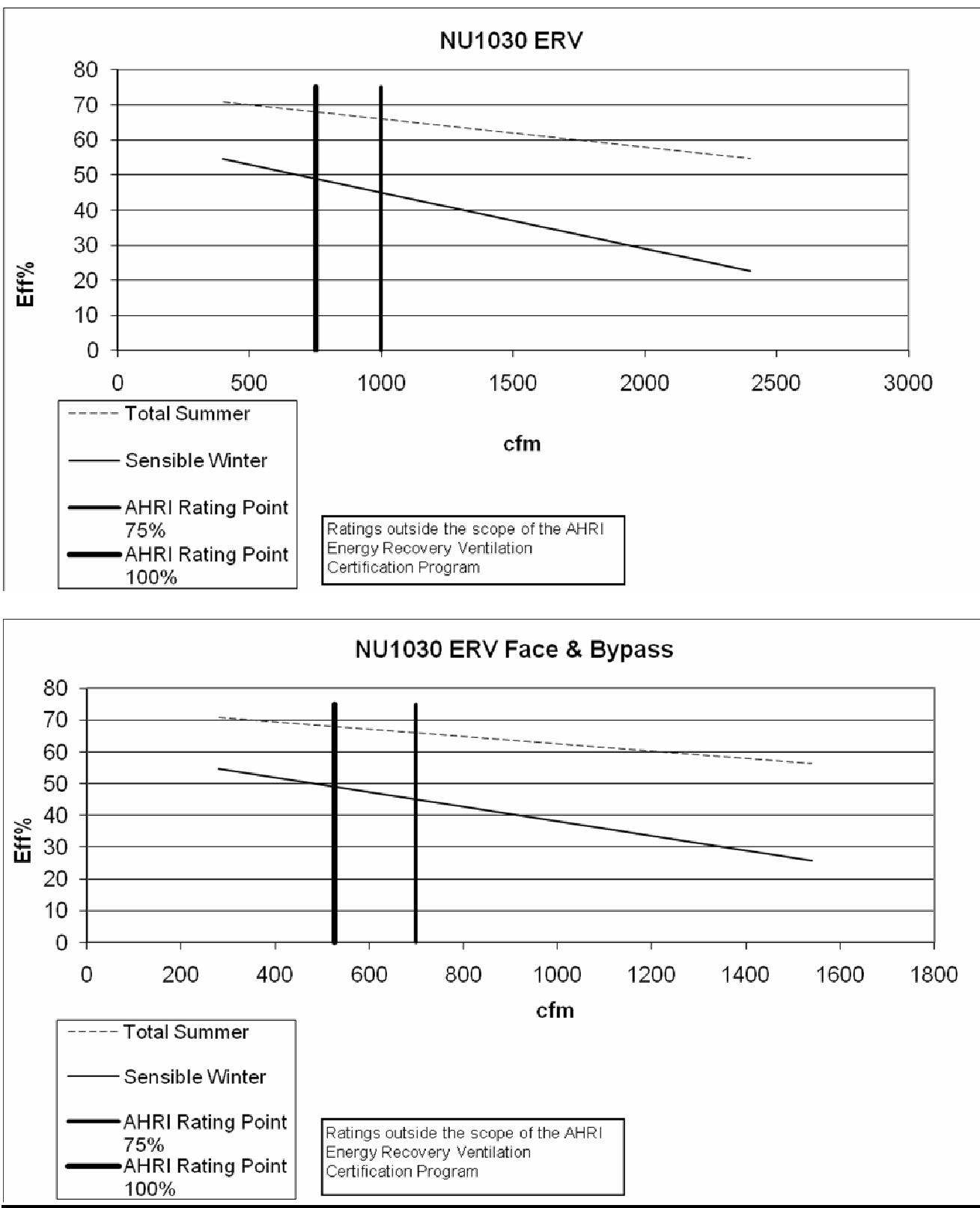
Model no.	EXC-17S-20H-250
Type	Plate
Nominal Air Flow (scfm)	550
Pressure drop (inches)	0.35

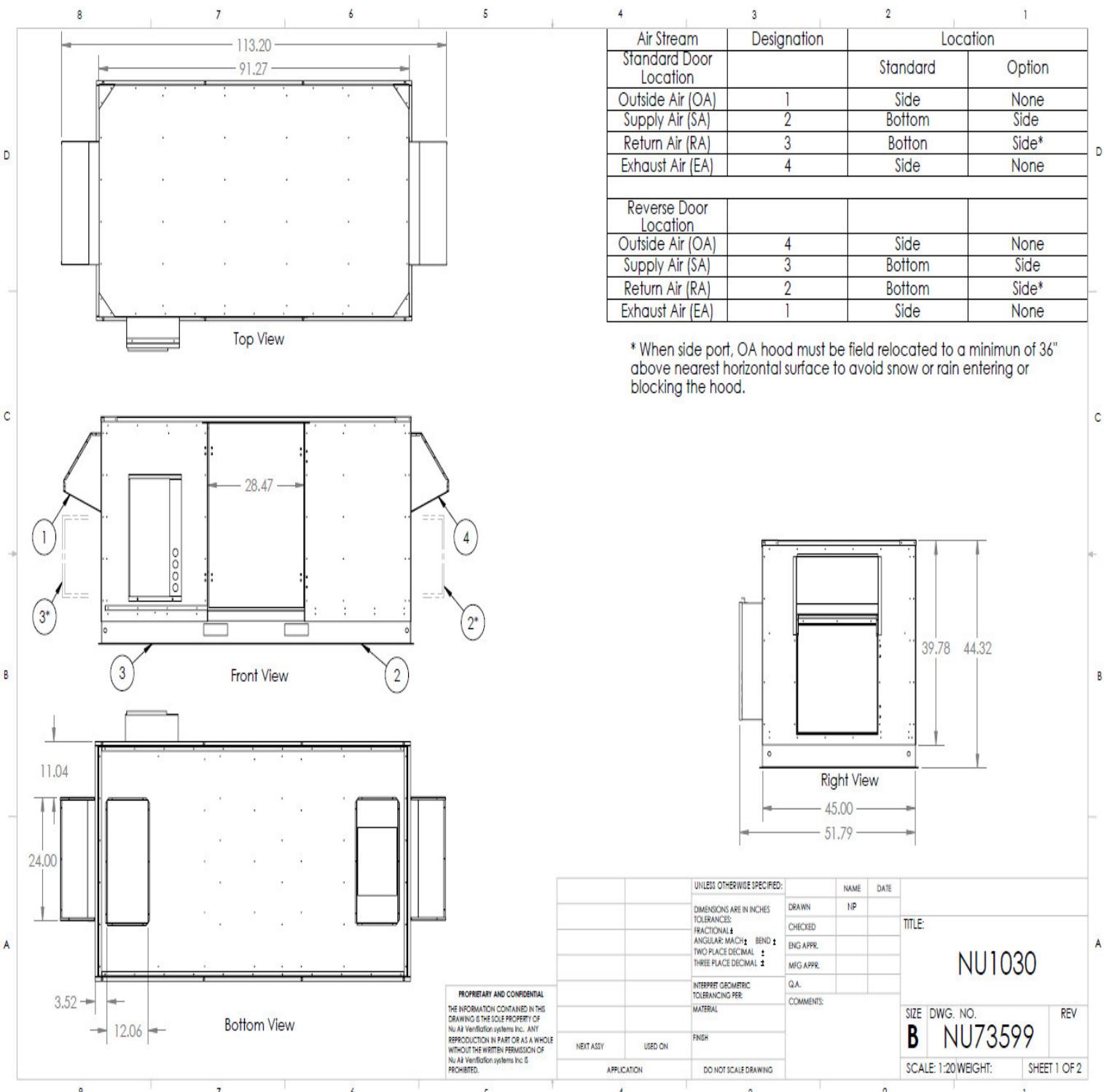


Energy recovery component is certified by AHRI to AHRI Standard 1060. Actual performance in packaged equipment may vary.

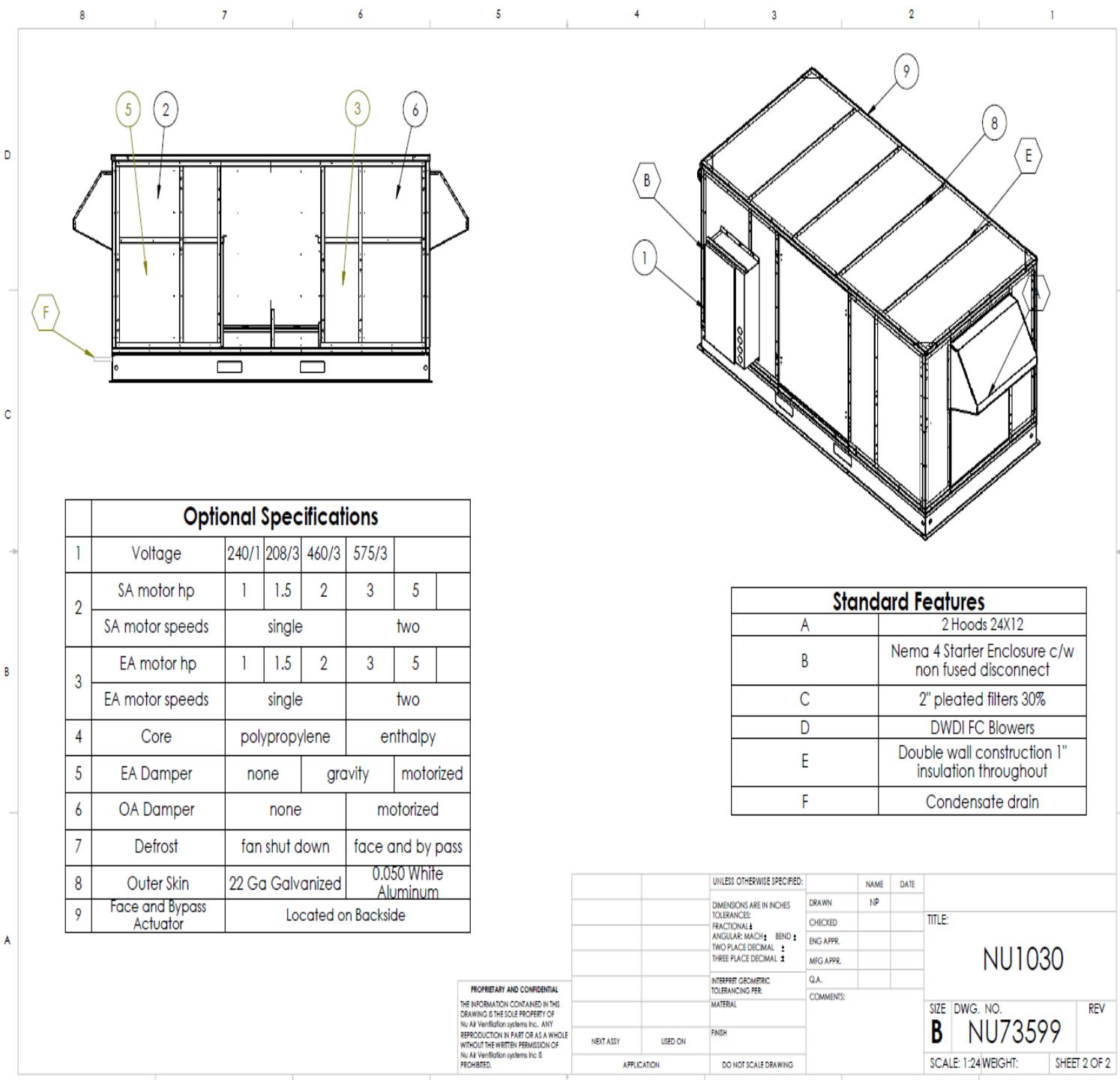
Leakage Ratings	Diff. Pressure	EATR %	OACF
Test 1	-0.5	0.00	1.00
Test 2	0	0.00	1.00
Test 3	0.5	0.00	1.00

Thermal Effectiveness Ratings at 0" Pressure Differential			
	Sensible	Latent	Total
100% air Flow Heating	60	30	54
75% air Flow Heating	68	32	56
100% air Flow cooling	80	24	45
75% air Flow Cooling	82	28	49
	Net Sensible	Net Latent	Net Total
100% air Flow Heating	60	30	54
75% air Flow Heating	68	32	56
100% air Flow cooling	80	24	45
75% air Flow Cooling	82	28	49





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BACKDRAFT DAMPERS



Optional gravity dampers for exhaust air and motorized intake air dampers prevent unwanted outside air from entering the space when the heat recovery unit is not operating. Factory mounted in the collar of the HRV.

DEFROST

1.) Fan Shut Down Defrost

A thermostat monitors the temperature of the exhaust air after the core. When a frost condition is detected the fresh air motor shuts down. The exhaust motor continues to operate. When the exhaust air leaving the core reaches 45F (7C) the supply air motor restarts.

2.) Face/Bypass Defrost Damper

- The FBDD is used to prevent frost build-up in the energy recovery core.
- The FBDD is operated by an actuator controlled by the thermostat located in the exhaust air (after the core) quadrant of the HRV.
- When the thermostat detects a freezing condition the fresh air bypass damper opens and the face damper closes. Warm exhaust air is moved through the core for defrost while outside air bypasses the core to prevent the build up of negative pressure in the building. The normal energy recovery cycle resumes when leaving air reaches 45F (7C).

ECONOMIZER

With the economizer feature, a temperature sensor in the leaving air (before core) quadrant powers the face & by-pass damper actuator. This reverses the normal damper position allowing the HRV to bring cool outside air into the building without any heat transfer for “free” cooling.

SPRING ISOLATORS - NU2035

The NU2035 can be supplied with optional vibration isolators for floor mounted or suspended applications.

