

Engineering Specifications

Air Handler(s) shall be internally installed, multi-position, ducted units certified to CSA 22.2 No 236 and UL-1995.

Air Handler(s) shall have a nominal output capacity of 50,000 BTU/hr with a water temperature of 140°F, a flow rate of 3 GPM, and 1,200 CFM air flow.

Air Handler(s) shall have a tested TPF value of 0.88 with the RU160i Tankless Water Heater. Air Handler(s) shall have a tested TPF value of 0.89 with the RU199i Tankless Water Heater.

Air Handler(s) shall have blower performance capable of 1,600 CFM up to 0.7 in. W.C. and 1,200 CFM up to 1.2 in. W.C.

Air Handler(s) shall have controls to enable the external pump to activate for 1 minute every 24 hours by default and be able to be user modified for other values. The blower shall have a 5 second delay for activation by default and be able to be user modified for other time delays.

Air Handler(s) shall have 1/2 in. Female Sweat connections for water inlet and outlet piping. There shall be knockouts in the air handler panels for standard conduit sizes. The piping connections shall exit from the top of the air handler. The front panel, when removed, shall provide access for servicing or replacing the hydronic coil, blower motor, and PC Board.

Air handler(s) shall be lined with 1/2 in. foil faced insulation.

The hydronic coil shall be capable of a nominal 3 GPM flow rate. The coil shall be NSF 372 approved for potable water.

Air Handler(s) shall have an external pump available to provide a nominal 3 GPM flow rate.

Air Handler(s) shall be compatible with standard field supplied thermostats.

Air Handler(s) shall be capable of the following output capacities:

Coil Entering Water Temperature (°F)	Flow Rate (GPM)	Heat Fan Ratio (Air Flow)						Coil Pressure Drop (PSI)
		50% (800CFM)	Temperature Differential (°F)	75% (1200 CFM)	Temperature Differential (°F)	100% (1600 CFM)	Temperature Differential (°F)	
120	2	23,100	27	27,500	21	35,400	21	1.42
	3	26,000	30	33,600	26	40,300	23	2.36
	4	28,000	32	37,500	29	43,900	25	4.38
140	2	33,700	39	42,000	32	47,500	28	1.41
	3	37,300	43	48,300	37	56,500	33	2.34
	4	38,400	44	54,000	42	62,700	36	4.38
160	2	43,100	50	54,800	42	62,600	36	1.41
	3	48,000	56	62,100	48	73,100	42	2.34
	4	51,200	59	66,200	51	80,000	46	4.38