

BFP PERFORMANCE SCHEDULE									
TAG	SIZE	FLOW RATE (GPM)	WPD (PSI)	MAX. WORK'G TEMPERATURE (DEGREES F)	TESTABLE (Y) OR (N)	BASIS OF DESIGN = ZURN-WILKINS			
						MAX. WORK'G PRESSURE (PSI)	BODY STYLE	SERVICE	MODEL
BFP-1	1-1/2"	50.0	15.0	180	Y	175	RPZ	WATER ENTRANCE	975XL
BFP-2	1-1/2"	50.0	15.0	180	Y	175	RPZ	WATER ENTRANCE	975XL
BFP-3	3/4"	30.0	10.0	180	Y	175	RPZ	BOILER FILL	975XL
BFP-4	3/4"	30.0	10.0	180	Y	175	RPZ	LOOP FILL	975XL
BFP-5	3/4"	30.0	10.0	180	Y	175	RPZ	GLYCOL LOOP FILL	975XL

BRAZED PLATE HEAT EXCHANGER PERFORMANCE SCHEDULE																	
TAG	SIDE	FLUID	FLOW RATE (GPM)	WPD (PSI)	EWT (°F)	LWT (°F)	CONN. (IN)	NOMINAL SURFACE (SF)	CAPACITY (MBH)	DESIGN PRESS. (PSIG)	TEST PRESS. (PSIG)	VOLUME (FT³)	LxWxD (IN)	VALVE	NET WT. (LBS)	BASIS OF DESIGN - TACO	
																SERVICE	MODEL
HEX-1	HOT	HWS/R MAIN	22.0	2.3	180.0	146.9	1-1/4"	18.4	356.0	450.0	450.0	0.072	12x4.9x5.1	V-4	19.0	ERV GLYCOL LOOP	TFP5X12-50(1-1/4" MPT)
	COLD	30% PROP GLYCOL	21.0	2.0	124.0	160.0	1-1/4"					0.075					

TEMPERATURE MIXING VALVE PERFORMANCE SCHEDULE									
TAG	FLOW RATE (GPM)	INLET CONNECTION (INCHES)	OUTLET CONNECTION (INCHES)	WPD (PSIG)	SET POINT (DEGREES F)	PROVIDE SPARE CARTRIDGE (Y) OR (N)	BASIS OF DESIGN = SYMMONS		
							SERVICE	ARRANGEMENT	MODEL
TMV-1	50.0	1-1/2"	1-1/2"	7.0	110°F	Y	DOM HW	WALL	5-900-W

ENERGY RECOVERY VENTILATOR PERFORMANCE SCHEDULE																												
TAG	MINIMUM OA (CFM)	MAXIMUM OA (CFM)	FAN	DRIVE	AIRFLOW (CFM)	T.S.P. (INWG)	E.S.P. (INWG)	ELECTRICAL REQUIREMENTS					TAG HEAT RECOV.	TAG HEATING COIL	TAG COOLING COIL	WT. (LBS)	BASIS OF DESIGN - GREENHECK											
								HP	BHP	FREHEAT KW	MCA	MOCP					V/PH/Hz	1	2	3	4	5	6	7	8			
								SERVICE		ARRANGEMENT		MODEL					63	125	250	500	1000	2000	4000	8000				
ERV-1	6000	6000	SUPPLY	BELT	6000	2.34	1.5	6.6	12.3	106.1	110.0	208/3/60	ERV-1	HC-1	-	3000	APARTMENT FLOORS VENTILATION	ERH-55H-15	98	94	89	86	85	84	82	T1		
			EXHAUST	BELT	5600	1.60	1.00	5.0																				
ERV-2	3300	3300	SUPPLY	BELT	3300	1.80	1.25	3.0	2.28	15.5	74.9	208/3/60	ERV-2	HC-2	-	2550	BASEMENT/1ST FLR VENTILATION	ERH-45H-15	94	86	79	T1	T4	T1	T0	62		
			EXHAUST	BELT	2050	1.12	1.00	1.0	0.93																			

PUMP PERFORMANCE SCHEDULE													
TAG	FLOW RATE (GPM)	HEAD (FT/WT)	IMPEL. SIZE	RPM	EFF %	ELECTRICAL REQUIREMENTS					BASIS OF DESIGN = TACO		
						HP	BHP	VFD	AMPS	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
CP-1	46.0	30.0	6.03	1750	55.0	3/4	0.64	N	-	208/3/60	B-1	INLINE	1615
CP-2	46.0	30.0	6.03	1750	55.0	3/4	0.64	N	-	208/3/60	B-2	INLINE	1615
CP-3	158.0	40.0	1.21	1750	66.0	3.0	2.43	Y	-	208/3/60	HWS/R	INLINE	1641
CP-4	158.0	40.0	1.21	1750	66.0	3.0	2.43	Y	-	208/3/60	HWS/R	INLINE	1641
CP-5	41.0	50.0	1.24	1750	50.0	2.0	1.08	Y	-	208/3/60	GSHP LOOP (LWS/R)	INLINE	1619
CP-6	41.0	50.0	1.24	1750	50.0	2.0	1.08	Y	-	208/3/60	GSHP LOOP (LWS/R)	INLINE	1619
CP-7	28.0	20.0	-	3450	-	1/3	-	N	3.2	120/1/60	IRUH-1	INLINE	1400-45
CP-8	28.0	20.0	-	3450	-	1/3	-	N	3.2	120/1/60	IRUH-2	INLINE	1400-45
CP-9	21.0	20.0	-	3450	-	1/6	-	N	2.0	120/1/60	ERV GLYCOL LOOP	INLINE	1400-30
CP-10	10.0	15.0	-	3250	-	1/8	-	N	-	120/1/60	RECIRC. HW	INLINE	0014B

CP-10 SHALL BE ALL BRONZE CONSTRUCTION.

FAN PERFORMANCE SCHEDULE													
TAG	AIRFLOW (CFM)	T.S.P. (INWG)	NOISE (SONES)	RPM	DRIVE	ELECTRICAL REQUIREMENTS					BASIS OF DESIGN = GREENHECK		
						HP	BHP	WATTS	AMPS	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
EF-1	525	102	10.8	1915	BELT	1/4	0.22	-	-	120/1/60	KH-1	UPBLAST	CUBE-10HP
EF-2	1500	100	13.6	1554	BELT	1/2	0.44	-	-	120/1/60	COMMERCIAL KITCHEN HOOD	UPBLAST	CUBE-131-5

KITCHEN HOOD PERFORMANCE SCHEDULE													
TAG	SIZE (IN) LxDxH	EXHAUST CONNECTIONS				FILTER HEIGHT	FILTER QTY & SIZE	FILTER FACE VEL (FFM)	WEIGHT (LBS)	EXHAUST FAN	MAKEUP AIR UNIT	SERVICE	MODEL
		CFM	S.P.	QTY	SIZE								
KH-1	42x39x24	525	0.12	1	6x1	1000	20	2 - 20"	110	EF-1	N/A	ELECTRIC RANGE	GHEW-T

PROVIDE HOOD WITH ANSUL OR KIDDE FIRE SUPPRESSION SYSTEM AND THERMOSTATICALLY CONTROLLED FIRE DAMPER.

HEAT PUMP SCHEDULE - WATER SOURCE																			
TAG	TYPE	CFM	ESP IN WC	GPM	WPD FT. WC.	COOLING EAT (°F) DEW/B	COOLING EUT (°F)	COOLING TMBH/ S/MBH	COOLING EER	HEATING EAT (°F)	HEATING EUT (°F)	HEATING MBH	HEATING COP	ELECTRICAL DATA				UNIT WEIGHT (LBS)	CLIMATE MASTER MODEL NO.
														FLA	MCA	MAX FUSE	V/PH/Hz		
HP-1	HORIZ	600	0.50	6.0	10.3	79.4/64.9	75.0	245/16.2	10.9	65.0	30.0	17.1	3.18	12.3	14.3	20.0	208/3/60	280	T5024-ECH
HP-2	HORIZ	1350	0.50	10.5	11.9	71.2/63.1	75.0	382/32.8	10.0	65.0	30.0	28.1	3.18	15.8	18.1	30.0	208/3/60	430	T5042-ECH
HP-3	HORIZ	1450	0.75	12.0	14.9	78.3/65.4	75.0	49.9/35.9	11.3	65.0	30.0	36.1	3.50	25.3	25.3	35.0	208/3/60	430	T5048-ECH
HP-4	HORIZ	800	0.50	7.5	15.3	71.3/64.2	75.0	295/20.1	11.3	65.0	30.0	21.9	3.51	12.6	14.1	20.0	208/3/60	280	T5030-ECH
HP-5	HORIZ	450	0.50	5.0	10.0	71.5/63.8	75.0	18.5/13.5	16.9	65.0	30.0	13.2	3.18	13.3	15.6	20.0	208/3/60	210	T5018-ECH

ENERGY RECOVERY WHEEL PERFORMANCE SCHEDULE																			
TAG	AIR STREAM	AIRFLOW (CFM)	S.P. (INWG)	WINTER OPERATION					SUMMER OPERATION					WEIGHT (LBS)	TAG AHU				
				E.D.B.(°F)	E.W.B.(°F)	R.H.(%)	L.D.B.(°F)	L.W.B.(°F)	RPM	EFF.(%)	E.D.B.(°F)	E.W.B.(°F)	R.H.(%)			L.D.B.(°F)	L.W.B.(°F)	RPM	EFF.(%)
ERV-1	OUTSIDE AIR	3500	-	-8.6*	-9.9*	-	43.3	35.9	-	64.3	81.0	74.0	-	79.3	67.0	-	64.3	-	ERV-1
	EXHAUST AIR	2700	-	-7.0	-	25.0	16.5	15.3	-	75.0	-	50.0	83.3	70.1	-	-	-	-	ERV-1
ERV-2	OUTSIDE AIR	3300	-	-0.1*	-2.6*	-	40.3	33.0	-	56.1	81.0	74.0	-	80.3	67.9	-	56.1	-	ERV-2
	EXHAUST AIR	2050	-	-7.0	-	25.0	6.8	4.8	-	75.0	-	50.0	85.8	73.0	-	-	-	-	ERV-2

HEATING COIL PERFORMANCE SCHEDULE																		
TAG	OUTPUT (MBH)	COIL AREA (SQ. FT.)	FLOW RATE (GPM)	WPD (FT/WT)	WATER VELOCITY (FPS)	E.W.T. (°F)	L.W.T. (°F)	R.O.U.S.	TUBES (Y/N)	HTG. AIR FLOW (CFM)	APD (INWG)	EAT. (°F)	L.A.T. (°F)	FIN TYPE	FFF	BASIS OF DESIGN = GREENHECK		
																MODEL	VALVE	SERVICE
HC-1	247.0	110.8	13.0	15	-	160.0	120.0	2	N	6000	0.20	43.0	80.0	-	120	5UQ1002B	V-2	ERV-1
HC-2	108.8	8.5	8.0	0.4	-	160.0	130.0	1	N	3300	0.09	40.0	71.0	-	120	5UQ101B	V-3	ERV-2

### MECHANICAL AND PLUMBING SYMBOLS AND ABBREVIATIONS LEGEND

NOTE - USE SYMBOLS AND ABBREVIATIONS AS APPLICABLE FOR THIS MECHANICAL DRAWING SET. SOME SYMBOLS AND ABBREVIATIONS IN THIS LEGEND MAY NOT APPLY.

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
	COMPRESSED AIR PIPING (CA)		BACKFLOW PREVENTER (BFP)		PRESSURE GAGE WITH GAGE COCK	AAV	AUTOMATIC AIR VENT	EDB	ENTERING DRY BULB	I-B-R	INSTITUTE OF BOILER AND RADIATOR MANUFACTURERS	RLA	RUNNING LOAD AMPS
	CONDENSATE DRAIN PIPING (C)		BALANCING VALVE (ADJUSTABLE)		ACCESS DOOR	AD	ACCESS DOOR	EDC	ELECTRIC DUCT COIL TAG	RFM	REVOLUTIONS PER MINUTE	RFM	REVOLUTIONS PER MINUTE
	COOLING TOWER RETURN PIPING (CTR)		AUTOMATIC FLOW CONTROL VALVE		ABOVE FINISHED FLOOR	AFF	ABOVE FINISHED FLOOR	EER	ENERGY EFFICIENCY RATIO	RFZ	REDUCED PRESSURE ZONE	RFZ	REDUCED PRESSURE ZONE
	COOLING TOWER SUPPLY PIPING (CTS)		RELIEF VALVE (RV)		AIR HANDLING UNIT TAG	AHU	AIR HANDLING UNIT TAG	EF	EXHAUST FAN TAG	RR	RETURN REGISTER TAG	RR	RETURN REGISTER TAG
	CHILLED WATER RETURN PIPING (CUR)		BALL VALVE		AIRFLOW MONITORING STATION	AMS	AIRFLOW MONITORING STATION	EFF	EFFICIENCY	IV	INTAKE VENT TAG	IV	INTAKE VENT TAG
	CHILLED WATER SUPPLY PIPING (CUS)		3/4" BALL VALVE WITH 3/4" HOSE END		AMPERES	AMPS	AMPERES	EG	EXHAUST GRILLE TAG	L	LOUVER TAG	L	LOUVER TAG
	FUEL OIL RETURN PIPING (FOR)		GATE VALVE		ACCESS PANEL	AP	ACCESS PANEL	ER	EXHAUST REGISTER TAG	LAT	LEAVING AIR TEMPERATURE	LAT	LEAVING AIR TEMPERATURE
	FUEL OIL SUPPLY PIPING (FOS)		PRESSURE REDUCING VALVE		AIR PRESSURE DROP	APD	AIR PRESSURE DROP	ESP	EXTERNAL STATIC PRESSURE	LB	POUNDS	LB	POUNDS
	GAS PIPING (G)		FUSIBLE VALVE		AIR SEPARATOR TAG	AS	AIR SEPARATOR TAG	ET	EXPANSION TANK TAG	LD	LINEAR DIFFUSER TAG	LD	LINEAR DIFFUSER TAG
	HOT WATER RETURN PIPING (HWR)		STRAINER W/ BLOWDOWN BALL VALVE		AUTOMATIC TEMPERATURE CONTROL	ATC	AUTOMATIC TEMPERATURE CONTROL	EUB	ENTERING WET BULB	LWS/R	LOOP WATER SUPPLY/RETURN	LWS/R	LOOP WATER SUPPLY/RETURN
	HOT WATER SUPPLY PIPING (HWS)		2-WAY CONTROL VALVE		BOILER TAG	B	BOILER TAG	EWH	ELECTRIC WATER HEATER TAG	LRA	LOCKED ROTOR AMPS	LRA	LOCKED ROTOR AMPS
	REFRIGERANT LIQUID PIPING (RL)		3-WAY CONTROL VALVE		BYPASS DAMPER TAG	BD	BYPASS DAMPER TAG	EWT	ENTERING WATER TEMPERATURE	LWC	LOW WATER CUTOUT	LWC	LOW WATER CUTOUT
	REFRIGERANT GAS PIPING (RG)		2-WAY CONTROL VALVE (TOP VIEW)		EXISTING	EXG	EXISTING	EXH	EXHAUST	LWT	LEAVING WATER TEMPERATURE	LWT	LEAVING WATER TEMPERATURE
	SANITARY PIPING BELOW FLOOR (SAN)		3-WAY CONTROL VALVE (TOP VIEW)		EXHAUST	EXH	EXHAUST	FC	FLEXIBLE CONNECTION	MAX	MAXIMUM	MAX	MAXIMUM
	SANITARY PIPING ABOVE FLOOR (SAN)		4-WAY CONTROL VALVE (TOP VIEW)		BRITISH THERMAL UNITS PER HOUR	BTUH	BRITISH THERMAL UNITS PER HOUR	FD	FIRE DAMPER	MEH	THOUSANDS OF BTU PER HOUR	MEH	THOUSANDS OF BTU PER HOUR
	SANITARY VENT PIPING		2 BUTTERFLY VALVES W/ SINGLE ACTUATOR		COUNTER BALANCED DAMPER	CBD	COUNTER BALANCED DAMPER	FCO	FLOOR CLEANOUT	MCA	MINIMUM CIRCUIT AMPACITY	MCA	MINIMUM CIRCUIT AMPACITY
	RAINWATER LEADER ABOVE SLAB (RUL)		LAGGED DUCT		COOLING COIL TAG	CC	COOLING COIL TAG	FD	FIRE DAMPER	MIN	MINIMUM	MIN	MINIMUM
	COLD WATER PIPING (CW)		DUCT W/ ACOUSTIC LINING		FIRE DAMPER TAG	CHLR	CHILLER TAG	FD	FIRE DAMPER	NC	NOISE CRITERION	NC	NOISE CRITERION
	HOT WATER PIPING (HW)		DUCT W/ SQUARE-TO-ROUND TRANSITION		CUBIC FEET PER MINUTE	CFM	CUBIC FEET PER MIN						