

HEAT PUMP AIR HANDLER PERFORMANCE SCHEDULE

TAG	TOTAL COOLING (MBH)**	SENS. COOLING (MBH)**	TOTAL HEATING (MBH)**	AIRFLOW (CFM)	COND. DRAIN (IN)	SOUND RATING (DB)	WEIGHT (LBS)	REFRIGERANT PIPE SIZE (IN)			ELECTRICAL REQUIREMENTS			CU SYSTEM TAG	BASIS OF DESIGN - MITSUBISHI		
								LIQUID	GAS	MCA	MAX FUSE	V/PH/Hz	SERVICE		ARRANGEMENT	MODEL	
SAC-1	12.0	-	-	425	5/8"	48	29	1/4"	1/2"	1.0	-	230/1/60	SCU-1	IT CLOSET	WALL MTD	PKA-A1ZHA6	
SAC-2	24.0	-	18.0	715	5/8"	45	46	3/8"	5/8"	1.0	-	230/1/60	SCU-2	ATM LOBBY	WALL MTD	PKA-A24KA6	
SAC-3	9.0	-	10.9	399	5/8"	43	22	1/4"	1/2"	1.0	-	230/1/60	SCU-3	CARRIAGE HOUSE OFFICES	WALL MTD	MSZ-GE09NA	

HEAT PUMP CONDENSING UNIT PERFORMANCE SCHEDULE

TAG	TOTAL COOLING (MBH)**	TOTAL HEATING (MBH)**	REFRIGERANT	APPROX. REFRIG. CHARGE	MINIMUM AMBIENT TEMP (F)	DIMENSION (INCHES) (HxWxD)	OPERATING WEIGHT (LBS)	ELECTRICAL REQUIREMENTS			BASIS OF DESIGN - MITSUBISHI			
								MCA	MAX FUSE	V/PH/Hz	COMP. STAGING	SOUND (BEL)	SERVICE	MODEL
SCU-1	12.0	-	R-410A	-	-20°F	24x31x12	82	13	15	230/1/60	50%-100%	-	IT CLOSET	FUJ-A1ZNA46
SCU-2	24.0	18.0	R-410A	-	-12°F	38x38x13	165	18	30	230/1/60	51%-100%	-	ATM LOBBY	FUJ-A24NA46
SCU-3	20.0	22.0	R-410A	-	-13°F	42x38x13	190	29	40	230/1/60	29%-100%	-	CH OFFICES	MXZ-2C20NA*

* - UNIT SHALL PROVIDE 100% OF RATED HEATING CAPACITY TO 5°F AND 80% OF RATED HEATING CAPACITY TO -13°F

FAN PERFORMANCE SCHEDULE

TAG	AIRFLOW (CFM)	T.S.P. (INWG)	NOISE (SONES)	RPM	DRIVE	ELECTRICAL REQUIREMENTS					BASIS OF DESIGN - PANASONIC		
						HP	BHP	WATTS	AMPS	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
EF-1	110/30	0.25	0.4	-	DIRECT	-	-	9.8	0.2	120/1/60	BATHROOMS (MULTIPLE)	CEILING	FV-05-11VKLI

* - PROVIDE WITH FV-V5BVKI MODULE

ELECTRIC WATER HEATER PERFORMANCE SCHEDULE

TAG	STORAGE (GAL)	1/4 HR RATE (GAL)	REC'VRY @ 90°F RISE	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN - AO SMITH	
				WATTS	V/PH/Hz	SERVICE	MODEL
EUH-1	30	40	20	4500/4500	208/1/60	DOM. HW	DEL-30
EUH-2	25	40	20	1500	208/1/60	DOM. HW	EJC-2

* - WIRED FOR NON-SIMULTANEOUS OPERATION

TEMPERATURE MIXING VALVE PERFORMANCE SCHEDULE

TAG	FLOW RATE (GPM)	INLET CONNECTION (INCHES)	OUTLET CONNECTION (INCHES)	W.P.D. (PSIG)	SET POINT (DEGREES F)	PROVIDE SPARE CARTRIDGE (Y) OR (N)	BASIS OF DESIGN - SYMMONS		
							SERVICE	ARRANGEMENT	MODEL
TMV-1	10	1/2"	1/2"	6.0	110°F	Y	DOM HW (EUH-1)	WALL	7-102-W

PLUMBING FIXTURE CONNECTION SCHEDULE

TAG	DESCRIPTION	SAN	VENT	CW	HW
P-1	TANK TYPE WATER CLOSET	3"	2"	1/2"	-
P-1A	ADA TANK TYPE WATER CLOSET	3"	2"	1/2"	-
P-2	COUNTERTOP LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"
P-2A	ADA WALL HUNG LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"
P-3	ADA SINGLE BOWL SS SINK	1-1/2"	1-1/2"	1/2"	1/2"

ELECTRIC BASEBOARD HEATER PERFORMANCE SCHEDULE

TAG	OUTPUT (MBH)	LENGTH (FT-IN)	MTG.HT. AFF (IN)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN - RUNTAL	
				KW	V/PH/Hz	SERVICE	MODEL
EBB-1	5.0	10'-0"	*	15	208/1/60	MULTIPLE	EB3-208D
EBB-2	5.0	10'-0"	*	15	208/1/60	MULTIPLE	EB3-208D
EBB-3	2.0	4'-0"	*	0.6	208/1/60	MULTIPLE	EB3-208D

* - MOUNTING HEIGHT SHALL BE PER MANUFACTURER'S RECOMMENDATIONS

ELECTRIC WALL HEATER PERFORMANCE SCHEDULE

TAG	OUTPUT (MBH)	AIRFLOW (CFM)	MTG.HT. AFF (IN)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN - BERKO	
				KW	V/PH/Hz	SERVICE	MODEL
WH-1	10.2	100	12"	3.0	208/1/60	MULTIPLE	FRA4024F

AIR DEVICE PERFORMANCE SCHEDULE

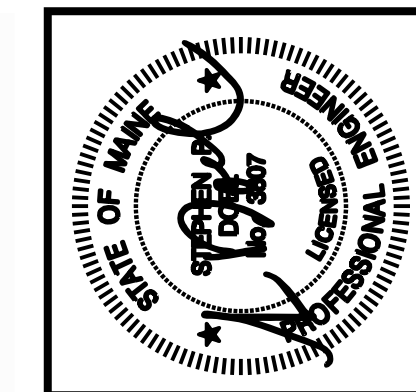
TAG	PANEL SIZE (IN)	NECK SIZE (IN)	AIRFLOW (CFM)	SPLOSS (INWG)	THROU(L)	Nc	BASIS OF DESIGN - METALAIR		
							DUCT CONN(IN)	PATTERN	MODEL
(A)	24x24	6"	100	0.05	-	25	SEE DWGS	SEE DWGS	MSE-HC*
(B)	24x24	8"	250	0.05	-	25	SEE DWGS	SEE DWGS	MSE-HC*
(C)	24x24	12x12	400	0.05	-	25	SEE DWGS	SEE DWGS	5000D
(D)	-	16x8	300	0.05	-	25	SEE DWGS	SEE DWGS	2115
(E)	-	12x4	150	0.05	-	25	SEE DWGS	SEE DWGS	2215
(F)	-	12x12	300	0.05	-	25	SEE DWGS	SEE DWGS	2115
(AA)	-	20x20	900	0.05	-	25	SEE DWGS	1/2", 45"	R4D
(BB)	-	16x16	750	0.05	-	25	SEE DWGS	1/2", 45"	R4D

* - SET MINIMUM TO 50% OF MAXIMUM
** - MATCH SIZE OF EXISTING SUPPLY GRILLE (FIELD VERIFY)

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
—CA—	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
—C—	CONDENSATE DRAIN PIPING (C)		CHECK VALVE		THERMOMETER IN WELL	AD	ACCESS DOOR	EDC*	ELECTRIC DUCT COIL TAG	RFW-H*	INDIRECT FIRED WATER HEATER TAG IN INCHES	RPM	REVOLUTIONS PER MINUTE
—CTR—	COOLING TOWER RETURN PIPING (CTR)		BALANCING VALVE (ADJUSTABLE)		PRESSURE SWITCH OR SENSOR	AFF	ABOVE FINISHED FLOOR	EER	ENERGY EFFICIENCY RATIO	RFZ	REDUCED PRESSURE ZONE	RPS	REVOLUTIONS PER SECOND
—CTS—	COOLING TOWER SUPPLY PIPING (CTS)		AUTOMATIC FLOW CONTROL VALVE		AIR HANDLING UNIT TAG	AHU*	AIR HANDLING UNIT TAG	EF*	EXHAUST FAN TAG	RR*	RETURN REGISTER TAG	RR*	RETURN REGISTER TAG
—CUR—	CHILLED WATER RETURN PIPING (CUR)		RELIEF VALVE (RV)		AIRFLOW MONITORING STATION	AMS	AIRFLOW MONITORING STATION	EG*	EFFICIENCY	L*	LOUVER TAG	RTU	ROOM TEMPERATURE SENSOR
—CWS—	CHILLED WATER SUPPLY PIPING (CWS)		BALL VALVE		DUCT MOUNTED SMOKE DETECTOR	AMPS	AMPERES	ER*	EXHAUST GRILLE TAG	LAT	LEAVING AIR TEMPERATURE	RV	RELIEF VALVE
—FOR—	FUEL OIL RETURN PIPING (FOR)		3/4" BALL VALVE WITH 3/4" HOSE END		ROOM TEMPERATURE SENSOR	AP	ACCESS PANEL	ESP	EXHAUST REGISTER TAG	LB	LOADS	RUL	RAINWATER LEADER
—FOS—	FUEL OIL SUPPLY PIPING (FOS)		GATE VALVE		TSTAT OR SENSOR ON WALL	APD	AIR PRESSURE DROP	ET*	EXTERNAL STATIC PRESSURE	LD*	LINEAR DIFFUSER TAG	SA	SUPPLY AIR
—G—	GAS PIPING (G)		PRESSURE REDUCING VALVE		MANUAL AIR VENT	AS*	AIR SEPARATOR TAG	EUB	ENTERING WET BULB	LTHUS/R	LOW TEMPERATURE HOT WATER	SD	SMOKE DAMPER
—HWR—	HOT WATER RETURN PIPING (HWR)		FUSIBLE VALVE		NOTE TAG (NUMBER)	ATC	AUTOMATIC TEMPERATURE CONTROL	EUH*	ELECTRIC WATER HEATER TAG	LRA	LOCKED ROTOR AMPS	SEER	SEASONAL ENERGY EFFICIENCY RATIO
—HWS—	HOT WATER SUPPLY PIPING (HWS)		STRAINER W/BLOWDOWN BALL VALVE		AIR DEVICE TAG (LETTER) WITH CFM	B*	BOILER TAG	EWI*	ENTERING WATER TEMPERATURE	LUO	LOW WATER CUTOUT	SG	SUPPLY FAN
—RL—	REFRIGERANT LIQUID PIPING (RL)		2-WAY CONTROL VALVE		ROOM NUMBER	BD*	BYPASS DAMPER TAG	EXG	EXISTING	LUT	LEAVING WATER TEMPERATURE	SE*	MAXIMUM
—RG—	REFRIGERANT GAS PIPING (RG)		SOLENOID VALVE		TURNING VANES	BFP*	BACKFLOW PREVENTER TAG	EXH	EXHAUST	MAX	MAXIMUM	MBH	THOUSANDS OF BTU PER HOUR
----	SANITARY PIPING BELOW FLOOR (SAN)		3-WAY CONTROL VALVE		DUCT W/MANUAL DAMPER	BPH	BRAKE HORSEPOWER	FC	FLEXIBLE CONNECTION	MBH	THOUSANDS OF BTU PER HOUR	MCA	MINIMUM CIRCUIT AMPACITY
----	SANITARY PIPING ABOVE FLOOR (SAN)		3-WAY CONTROL VALVE (TOP VIEW)		DUCT W/FLEXIBLE CONNECTION (FC)	BTUH	BRITISH THERMAL UNITS PER HOUR	FCO	FLOOR CLEANOUT	MIN	MINIMUM	FD	FIRE DAMPER
----	SANITARY VENT PIPING		4-WAY CONTROL VALVE (TOP VIEW)		DUCT W/ACOUSTIC LINING	CCB	COUNTER BALANCED DAMPER	FD	FLOOR CLEANOUT	NC	NOISE CRITERION	FLA	FLOOR DRAIN TAG
—RUL—	RAINWATER LEADER ABOVE SLAB (RUL)		2 BUTTERFLY VALVES W/SINGLE ACTUATOR		DUCT W/SQUARE-TO-ROUND TRANSITION	CC*	COOLING COIL TAG	FLA	FULL LOAD AMPS	NIC	NOT IN CONTRACT	FLD	FLOOR DRAIN TAG
—CW—	COLD WATER PIPING (CW)		BUTTERFLY VALVE W/ACTUATOR		FLEXIBLE DUCT	CFM	CUBIC FEET PER MINUTE	FOR	FUEL OIL RETURN	NTS	NOT TO SCALE	FO	FLOOR CLEANOUT
—HW—	HOT WATER PIPING (HW)		TRIPLE-DUTY VALVE		MOTOR OPERATED DAMPER	CHLR*	CHILLER TAG	FOS	FUEL OIL SUPPLY	OA	OUTSIDE AIR	FO*	FLOOR CLEANOUT
—RHW—	RECIRCULATED HOT WATER PIPING (RHW)		UNION		AIRFLOW OUT	CONV*	CONVECTOR TAG	FPMB	FROST PROOF HOSE BIBB	OBP	OPPOSED BLADE DAMPER	FT	FEET
—	PIPE CAP		PIPE FLANGE		AIRFLOW IN	CUH*	CABINET UNIT HEATER TAG	FBM	FEET PER MINUTE	OD	OUTSIDE DIAMETER	FT*	FINTUBE RADIATION TAG
—	DIRECTION OF FLUID FLOW		PUMP WITH FLANGES		DIAMETER OR FLAT OVAL	CP*	CIRCULATING PUMP TAG	FS*	FLOOR SINK TAG	OED	OPEN ENDED DUCT	OFUH*	OIL FIRED WATER HEATER TAG
—	ELBOW UP		FIRE DAMPER		ROUND OR FLAT OVAL DUCT DOWN	CT*	COOLING TOWER TAG	FT	FEET	OPD	OVERCURRENT PROTECTIVE DEVICE	P*	PLUMBING FIXTURE TAG
—	ELBOW DOWN		CW/HW/R CHILLED WATER SUPPLY AND RETURN		ROUND OR FLAT OVAL DUCT UP	CV	VALVE COEFFICIENT	GA	GAGE	PENETN	PENETRATION	PENETN	PENETRATION
—	PIPE TEE UP		DRY BULB		SUPPLY DIFFUSER	CHUS/R	CHILLED WATER SUPPLY AND RETURN	GAL	GALLONS	FF*	PADDLE FAN TAG	FF*	PADDLE FAN TAG
—	PIPE TEE DOWN		DECIBELS RELATIVE TO DOUBLE CHECK		RETURN GRILLE	DB	DECIBELS RELATIVE TO DOUBLE CHECK	GAL	GALLONS	PSIA	POUNDS PER SQUARE INCH ABSOLUTE	PSIA	POUNDS PER SQUARE INCH ABSOLUTE
—	PIPE REDUCER		DOUBLE CHECK		STEAM TRAP	DCA	DOUBLE CHECK	GPM	GALLONS PER MINUTE	PSIG	POUNDS PER SQUARE INCH GAGE	PSIG	POUNDS PER SQUARE INCH GAGE
—	PIPE WITH GUIDE		DEGREES FAHRENHEIT		WATER HAMMER ARRESTOR	DEG F	DEGREES FAHRENHEIT	GUH*	GAS UNIT HEATER TAG	PVC	POLYVINYL CHLORIDE (PIPE)	PVC	POLYVINYL CHLORIDE (PIPE)
—	PIPE WITH ANCHOR		DIAMETER			DIA	DIAMETER	HC*	HEATING COIL TAG	RA	RETURN AIR	RA	RETURN AIR
—	BUTTERFLY VALVE		DOWN IN WALL			DNW	DOWN IN WALL	HP	HORSEPOWER	RD	ROOF DRAIN	RD	ROOF DRAIN
—	OS 4 T GATE VALVE		DOWN			DN	DOWN	HRV*	HEAT RECOVERY VENTILATOR TAG	RDE	RECOMMENDED DUAL ELEMENT FUSE AMPS	RDE	RECOMMENDED DUAL ELEMENT FUSE AMPS
			EXHAUST AIR			EA	EXHAUST AIR	HU	HOT WATER	RG*	RETURN GRILLE TAG	RG*	RETURN GRILLE TAG
			ENTERING AIR TEMPERATURE			EAT	ENTERING AIR TEMPERATURE	HUS/R	HOT WATER SUPPLY AND RETURN	RHW	RECIRCULATED HOT WATER	RHW	RECIRCULATED HOT WATER



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