

GAS BOILER PERFORMANCE SCHEDULE										* BASED ON D.O.E. (DEPT. OF ENERGY) TEST PROCEDURE		
TAG	INPUT (MBH)	HEATING CAPACITY (MBH)	FRESH DROP (FT HD)	FUEL	EFF. (%)	INTAKE/ VENT(IN)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = HEAT TRANSFER PRODUCTS			
							AMP	WATTS	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
B-1	5000	4100	110	NAT GAS	94.0	4" x 4"	100	-	120/1160	HUS/R		MODCON-500
B-2	5000	4100	110	NAT GAS	94.0	4" x 4"	100	-	120/1160	HUS/R		MODCON-500

UNIT HEATER PERFORMANCE SCHEDULE										HEATING PERFORMANCE BASED ON 180°F ENTERING WATER & 60°F ENTERING AIR TEMPERATURE		
TAG	OUTPUT (MBH)	FLOW RATE (GPM)	W/P D (FT/UG)	AIRFLOW (CFM)	THROW	MTGHT. (FEET)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = STERLING			
							HP	AMPS	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
UH-1	240	20	0.24	900	-	-	1/20	2.0	120/1160	UTILITY RM 108	HORIZONTAL	HS-84

CABINET UNIT HEATER PERFORMANCE SCHEDULE										HEATING PERFORMANCE BASED ON 180°F ENTERING WATER & 60°F ENTERING AIR TEMPERATURE		
TAG	OUTPUT (MBH)	FLOW RATE (GPM)	W/P D (FT/UG)	AIRFLOW (CFM)	THROW	MTGHT. (FEET)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = STERLING			
							HP	AMPS	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
CUH-1	222	20	0.44	420	-	-	1/10	1.6	120/1160	STAIRS	INV. REC.	RI-110-04

\* REFER TO ARCHITECTURAL DRAWINGS, TYP. 6" AFF. PROVIDE EACH UNIT W/ DISCONNECT SWITCH AND FILTERS.

TEMPERATURE MIXING VALVE PERFORMANCE SCHEDULE										BASIS OF DESIGN = SYMONS		
TAG	FLOW RATE (GPM)	INLET CONNECTION (INCHES)	OUTLET CONNECTION (INCHES)	W/P D (PSIG)	SET POINT (DEGREES F)	PROVIDE SPARE CARTRIDGE (Y) OR (N)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = SYMONS			
							SERVICE	ARRANGEMENT	MODEL			
TMV-1	280	1-1/2"	1-1/2"	4.0	115°F	Y	DOM HU	WALL				5-300-W

AIR DEVICE PERFORMANCE SCHEDULE										BASIS OF DESIGN = METALAIR			
TAG	PANEL SIZE (IN)	NECK SIZE (IN)	AIRFLOW (CFM)	SPLOSS (INUG)	THROU(L)	THROU(S)	Nc	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = METALAIR			
								DUCT CONN(IN)	PATTERN	MODEL			
(A)	-	10x6	75	0.05	-	-	20	-	1/2", 0"	4000D			
(B)	-	12x12	400	0.05	-	-	20	-	1/2", 0"	4000D			
(C)	-	12x12	100	0.05	-	-	20	-	-	5000D			
(D)	-	16x12	450	0.05	-	-	20	-	1/2", 0"	4000D			
(AA)	-	10x6	75	0.05	-	-	25	-	1/2", 35"	RHD			
(BB)	-	12x12	400	0.05	-	-	25	-	1/2", 35"	RHD			
(CC)	-	12x12	100	0.05	-	-	25	-	1/2", 35"	RHD			

SPLIT-SYSTEM CONDENSING UNIT PERFORMANCE SCHEDULE										* - AT ARI CONDITIONS OF 85°F AMBIENT/61°F SAT. INDOOR WB			
TAG	TOTAL COOLING (MBH)	REFRIGERANT	CONDENSER AIRFLOW (CFM)	MINIMUM AMBIENT TEMP(°F)	FOOTPRINT DIMENSION (INCHES)	OPERATING WEIGHT (LBS)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = MITSUBISHI				
							MCA	MAX FUSE	V/PH/Hz	COMP. STAGING	SOUND (BEL)	SERVICE	MODEL
SCU-1	6.0-12.0	R-410A	-	0°	32x14	90	13.0	15.0	208/1160	-	50	SAC-1	FLY-A12

PROVIDE W/LOW AMBIENT CONTROLS.

PLUMBING FIXTURE CONNECTION SCHEDULE					
TAG	DESCRIPTION	SAN	VENT	CW	HU
P-1	FLOOR MOUNTED TT WC	3"	2"	1/2"	-
P-1A	ADA FLOOR MOUNTED TT WC	3"	2"	1/2"	-
P-1B	ADA FLOOR MOUNTED TT WC	3"	2"	1/2"	-
P-2	WALL HUNG LAVATORY	2"	2"	1/2"	1/2"
P-2A	ADA WALL HUNG LAVATORY	2"	2"	1/2"	1/2"
P-2B	ADA WALL HUNG LAVATORY	2"	2"	1/2"	1/2"
P-2C	VANITY TOP	2"	2"	1/2"	1/2"
P-3	TUB / SHOWER	2"	2"	1/2"	1/2"
P-3A	ADA ROLL-IN SHOWER (60")	2"	2"	1/2"	1/2"
P-3B	ADA TUB/SHOWER	2"	2"	1/2"	1/2"
P-4	SINGLE BOWL SS KITCHEN SINK	1-1/2"	1-1/2"	1/2"	1/2"
P-4A	ADA SINGLE BOWL SS KITCHEN SINK	1-1/2"	1-1/2"	1/2"	1/2"
P-4B	ADA DOUBLE BOWL SS KITCHEN SINK	1-1/2"	1-1/2"	1/2"	1/2"
P-5	MOP BASIN	3"	2"	3/4"	3/4"
P-5A	LAUNDRY TUB	3"	2"	3/4"	3/4"
P-6	WASHING MACHINE HOOK-UP	2"	1-1/2"	1/2"	1/2"
HB	HOSE BIBB	-	-	3/4"	-
FFHB	FREEZE PROOF HOSE BIBB	-	-	3/4"	-
FD	FLOOR DRAIN (W/ TRAP PRIMER)	3"	2"	1/2"	-

MINIMUM SIZE OF BELOW SLAB SANITARY & VENT PIPING SHALL BE 2". TRAP PRIMERS ON FLOOR DRAINS SHALL BE CONNECTED TO NEAREST FIXTURE.

CONTROL VALVE SCHEDULE					
TAG	FLOW RATE (GPM)	Cv	VALVE SIZE (IN)	TYPE	SERVICE
V-1	20	13	1/2"	2-WAY, 2-POSITION	FTR
V-2	10, 15	20	1/2"	3-WAY, MIXING	HC-1, 2 & 3

FAN PERFORMANCE SCHEDULE										BASIS OF DESIGN = (P) PANASONIC, (G) GREENHECK, (B) BROAN, (F) FANTECH			
TAG	AIRFLOW LOW/HIGH (CFM)	T.S.P (INUG)	NOISE (SONES)	RPM	DRIVE	ELECTRICAL REQUIREMENTS				SERVICE	ARRANGEMENT	MODEL	
						HP	BHP	WATTS	AMPS	V/PH/Hz			
EF-1	50/82	0.25	0.3	926	DIRECT	-	-	16.2	0.11	120/1160	VENTILATION & BATHROOM EXH	CEILING	(P) FV-08VKM2
EF-2	95	0.25	1.0	1011	DIRECT	-	-	35.6	-	120/1160	BATHROOM FAN / LIGHT	CEILING	(P) FV-11VQL4
EF-3	348	0.25	3.0	823	DIRECT	-	-	110	-	120/1160	TRASH RM VENTILATION / EXH	CEILING	(P) FV-40VQ3
EF-4	150	0.35	3.8	1050	DIRECT	-	-	129	-	120/1160	STORAGE EXHAUST	CEILING	(G) SP-B150
KF-1	180	0.15	6.5	1975	DIRECT	-	-	-	1.7	120/1160	KITCHEN EXHAUST	CEILING	(B) 505
SF-1	500	0.15	5.2	1650	DIRECT	1/30	0.04	-	-	120/1160	BOILER ROOM VENTILATION	DUCT	(G) 861-10-428-P
BF-1	150	0.2	-	-	DIRECT	-	-	83	0.13	120/1160	DRYER BOOSTER	DUCT	(F) DBF4XL1

EF-1 PROVIDED W/ MOTION SENSOR FOR HIGH SPEED ACTIVATION.  
EF-4 PROVIDED W/CEILING RADIATION DAMPER  
KF-1 PROVIDED W/ ALUMINUM WASHABLE FILTER

INDIRECT-FIRED WATER HEATER PERFORMANCE SCHEDULE										BASIS OF DESIGN = SUPERSTOR ULTRA COMMERCIAL			
TAG	STORAGE (GALS)	INPUT (GPM)	W/P D (FT/UG)	1ST HOUR 90°F RISE (GPH)	WORKING PRESSURE (PSIG)	INLET CW TEMP (DEG F)	INLET HW TEMP (DEG F)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = SUPERSTOR ULTRA COMMERCIAL			
								HP	WATTS	V/PH/Hz	SERVICE	FUEL	MODEL
IFUH-1	119.0	12.1	12.1	6310	150.0	50.0	180.0	-	-	-	BUILDING HU	HUS/R	SSU-19C
IFUH-2	119.0	12.1	12.1	6310	150.0	50.0	180.0	-	-	-	BUILDING HU	HUS/R	SSU-19C

PUMP PERFORMANCE SCHEDULE										BASIS OF DESIGN = TACO			
TAG	FLOW RATE (GPM)	HEAD (FT/UG)	IMPEL. SIZE	RPM	EFF %	ELECTRICAL REQUIREMENTS				SERVICE	ARRANGEMENT	MODEL	
						HP	BHP	VFD	AMPS	V/PH/Hz			
CP-1A	45.0	16.0	-	3450	-	1/2	-	N	5.0	120/1160	B-1	INLINE	1400-50
CP-1B	28.0	20.0	-	3450	-	1/6	-	N	-	120/1160	IFUH-1	INLINE	1400-30
CP-2A	45.0	16.0	-	3450	-	1/2	-	N	5.0	120/1160	B-2	INLINE	1400-50
CP-2B	28.0	20.0	-	3450	-	1/6	-	N	-	120/1160	IFUH-2	INLINE	1400-30
CP-3	12.0	40.0	1.3	1760	52	2	155	Y	-	208/3160	HUS/R	INLINE	KV1501
CP-4	12.0	40.0	1.3	1760	52	2	155	Y	-	208/3160	HUS/R	INLINE	KV1501
CP-5	8.0	20.0	-	3250	-	1/8	176	N	-	120/1160	RECIRC. HU	INLINE	0011-B
CP-6	8.0	8.0	-	3250	-	1/25	0.1	N	-	120/1160	DHW STORAGE	INLINE	001-B

CP-5 & CP-6 SHALL BE ALL BRONZE CONSTRUCTION.

EXPANSION TANK PERFORMANCE SCHEDULE										BASIS OF DESIGN = AMTROL		
TAG	TANK VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	MIN REQ'D ACCEPT VOL. (GAL)	MAX WORK'G TEMPERATURE (DEG F)	MAX WORK'G PRESSURE (PSI)	WEIGHT (LBS)	ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = AMTROL			
							MOUNTING	SERVICE	MODEL			
ET-1	44.4	22.6	20.0	240	125	600	FLOOR	HUS/R				AX-80V
ET-2	14.0	-	-	120	150	200	FLOOR	DOM. HU				ST-30V-C

SPLIT-SYSTEM AIR CONDITIONER PERFORMANCE SCHEDULE										* - AT ARI CONDITIONS OF 85°F AMBIENT/65°F INDOOR WB					
TAG	TOTAL COOLING (MBH)	AIRFLOW (CFM)	MOISTURE REMOVAL (PINTS/HR)	COND. DRAIN (IN)	EER (BTU/H/WATT)	SOUND RATING (DB)	WEIGHT (LBS)	REFRIGERANT PIPE SIZE (IN)		ELECTRICAL REQUIREMENTS		BASIS OF DESIGN = MITSUBISHI			
								LIQUID	GAS	MCA	MAX FUSE	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
SAC-1	6.0-12.0	390	3.8	3/4"	13.8	41	37	1/4"	1/2"	10	15.0	208/1160	EMR	WALL	FKA-A12

PROVIDE W/LOW AMBIENT CONTROLS.

### 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	ABBREVIATION	DESCRIPTION
CA	COMPRESSED AIR PIPING (CA)	BPP	BACKFLOW PREVENTER (BPP)	PG	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)	CV	CHECK VALVE	TY	THERMOMETER IN WELL	AD	ACCESS DOOR	EDC	ELECTRIC DUCT COIL TAG			RFM	REVOLUTIONS PER MINUTE		
CTR	COOLING TOWER RETURN PIPING (CTR)	AV	AIR VALVE (ADJUSTABLE)	WS	WATER FLOW SWITCH	AFF	ABOVE FINISHED FLOOR	EER	ENERGY EFFICIENCY RATIO	IFUH	INDIRECT FIRED WATER HEATER TAG	RFS	REVOLUTIONS PER SECOND		
CTS	COOLING TOWER SUPPLY PIPING (CTS)	AFV	AUTOMATIC FLOW CONTROL VALVE	PS	PRESSURE SWITCH OR SENSOR	AHU	AIR HANDLING UNIT TAG	EF	EXHAUST FAN TAG	IN	INCHES	RPZ	REDUCED PRESSURE ZONE		
CWR	CHILLED WATER RETURN PIPING (CWR)	ITS	IMMERSION TEMPERATURE SENSOR	MSD	DUCT MOUNTED SMOKE DETECTOR	AMPS	AIRFLOW MONITORING STATION	EFF	EFFICIENCY	IV	INTAKE VENT TAG	RR	RETURN REGISTER TAG		
CWS	CHILLED WATER SUPPLY PIPING (CWS)	BV	BALL VALVE	RTS	ROOM TEMPERATURE SENSOR	AMPERS	AMPERES	EG	EXHAUST GRILLE TAG	L	LOUVER TAG	RTU	ROOM TEMPERATURE SENSOR		
FOR	FUEL OIL RETURN PIPING (FOR)	BBV	BALL VALVE	TS	TSTAT OR SENSOR ON WALL	AP	ACCESS PANEL	ER	EXHAUST REGISTER TAG	LAT	LEAVING AIR TEMPERATURE	RV	RELIEF VALVE		
FOG	FUEL OIL SUPPLY PIPING (FOG)	3/4" BV	3/4" BALL VALVE WITH 3/4" HOSE END	TSAT	TSTAT OR SENSOR W/ TAMPERPROOF GUARD	APD	AIR PRESSURE DROP	ESP	EXTERNAL STATIC PRESSURE	LB	POUNDS	RUL	RAINWATER LEADER		
G	GAS PIPING (G)	GV	GATE VALVE	MANV	MANUAL AIR VENT	AS	AIR SEPARATOR TAG	ET	EXPANSION TANK TAG	LD	LINEAR DIFFUSER TAG	SA	SUPPLY AIR		
HUR	HOT WATER RETURN PIPING (HUR)	FRV	PRESSURE REDUCING VALVE	NT	NOTE TAG (NUMBER)	ATC	AUTOMATIC TEMPERATURE CONTROL	EUB	ENTERING WET BULB	LTHU/R	LOW TEMPERATURE HOT WATER	SAN	SANITARY (DRAIN & WASTE)		
HUS	HOT WATER SUPPLY PIPING (HUS)	FV	FUSIBLE VALVE	ATN	AIR DEVICE TAG (LETTER) WITH CFM	BO	BOILER TAG	EWH	ELECTRIC WATER HEATER TAG	LRA	LOCKED ROTOR AMPS	SD	SMOKE DAMPER		
RL	REFRIGERANT LIQUID PIPING (RL)	SV	STRAINER W/BLOWDOWN BALL VALVE	BD	BYPASS DAMPER TAG	ATC	AUTOMATIC TEMPERATURE CONTROL	EWT	ENTERING WATER TEMPERATURE	LU	LOW WATER CUTOUT	SEER	SEASONAL ENERGY EFFICIENCY RATIO		
RG	REFRIGERANT GAS PIPING (RG)	2-WV	2-WAY CONTROL VALVE	RF	ROOM NUMBER	BP	BACKFLOW PREVENTER TAG	EXG	EXISTING	LUT	LEAVING WATER TEMPERATURE	SF	SUPPLY FAN		
SAN	SANITARY PIPING BELOW FLOOR (SAN)	3-WV	3-WAY CONTROL VALVE	TV	TURNING VANES	BHP	BRAKE HORSEPOWER	EXH	EXHAUST	MAX	MAXIMUM	SG	SUPPLY GRILLE TAG		
SAN	SANITARY PIPING ABOVE FLOOR (SAN)	4-WV	4-WAY CONTROL VALVE (TOP VIEW)	LD	Lagged DUCT	BTUH	BRITISH THERMAL UNITS PER HOUR	FC	FLEXIBLE CONNECTION	MBH	THOUSANDS OF BTU PER HOUR	SP	STATIC PRESSURE		
SAN	SANITARY VENT PIPING	2-WV	2-WAY CONTROL VALVE (TOP VIEW)	LD	Lagged DUCT	CBD	COUNTER BALANCED DAMPER	FCO	FLOOR CLEANOUT	MCA	MINIMUM CIRCUIT AMPACITY	SP	SUMP PUMP TAG		