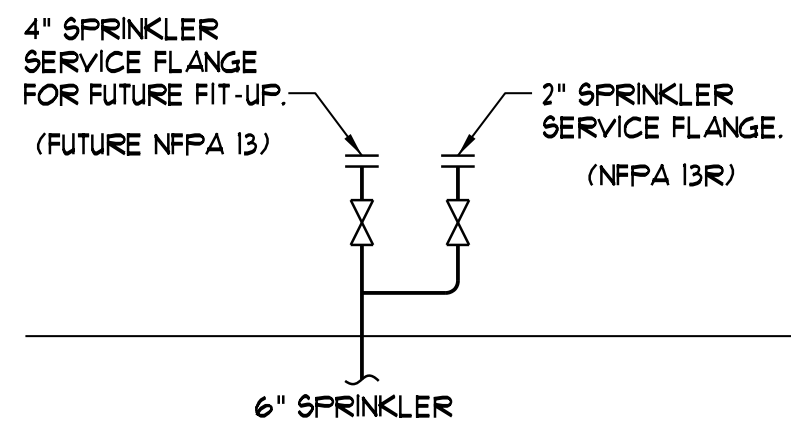


DISPOSAL DRAIN DETAIL
NTS



SPRINKLER ENTRANCE DETAIL
NTS

PLUMBING FIXTURE CONNECTION SCHEDULE

TAG	DESCRIPTION	SAN	VENT	CW	HW
P-1	FLOOR MOUNTED TT UC	3"	2"	1/2"	-
P-2	COUNTERTOP LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"
P-3A	36" STALL SHOWER	2"	2"	1/2"	1/2"
P-3B	48" STALL SHOWER	2"	2"	1/2"	1/2"
P-3B	60" TUB/SHOWER	2"	2"	1/2"	1/2"
P-4	DOUBLE BOWL SS KITCHEN SINK	1-1/2"	1-1/2"	1/2"	1/2"
P-5	WASHING MACHINE HOOK-UP	2"	1-1/2"	1/2"	1/2"
P-6	ICE MAKER HOOK-UP	-	-	1/2"	-
FD	FLOOR DRAIN (W/ TRAP PRIMER)	2"	1-1/2"	1/2"	-

MINIMUM SIZE OF BELOW SLAB SANITARY & VENT PIPING SHALL BE 2".
PROVIDE TRAP PRIMERS ON FLOOR DRAINS, CONNECT TO NEAREST FIXTURE.
** PROVIDE DISHWASHER CONNECTIONS, PIPING AND CONNECT TO DISHWASHER

PUMP PERFORMANCE SCHEDULE

TAG	FLOW RATE (GPM)	HEAD (FT.WG)	IMPEL. SIZE	RPM	EFF %	ELECTRICAL REQUIREMENTS				BASIS OF DESIGN - TACO			
						HP	BHP	WATTS	AMPS	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
CP-1	2.0	15.0	-	3250	-	1/40	-	-	0.52	120/1/60	ZONE 1	INLINE CART	008
CP-2	2.0	15.0	-	3250	-	1/40	-	-	0.52	120/1/60	ZONE 2	INLINE CART	008

GAS BOILER PERFORMANCE SCHEDULE

TAG	HEATING INPUT (MBH)	HEATING OUTPUT (MBH)	MIN. HTG. CAPACITY (MBH)	FUEL	A.F.U.E. (%)	1st HOUR 60°F RISE (GPH)	INTAKE/VENT DIA.(IN)	ELECTRICAL REQUIREMENTS			BASIS OF DESIGN - TRIANGLE TUBE		
								HP	AMPS	V/PH/Hz	SERVICE	ARRANGEMENT	MODEL
B-1	1100	990	300	NG	95.0	210	3" x 3"	-	5.0	120/1/60	HWS/R	WALL	EXCELLENCE 110

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 - LEONARD		
							SERVICE	ARRANGEMENT	MODEL
TMV-1	6.0	3/4"	3/4"	10.0	120°F	Y	DOM HW	WALL	310

EXPANSION TANK PERFORMANCE SCHEDULE

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)	BASIS OF DESIGN - AMTROL		
							MOUNTING	SERVICE	MODEL
ET-1	7.6	2.5	2.3	240	100	18	INLINE	HWS/R	III-P/1-1/4

ET-1 - FILL-TROL PACKAGED EXPANSION TANK WITH AIR SEPARATOR AND VENT.

FINTUBE PERFORMANCE SCHEDULE

TAG	OUTPUT (MBH/FT)	FLOW RATE (GPM)	MOUNT'G. HEIGHT (IN)	ENCLOSURE HEIGHT (IN)	ELEMENT LENGTH (FT)	ENCLOSURE LENGTH (FT)	BASIS OF DESIGN - STERLING			
							TUBE SIZE (IN)	FINS/FOOT	VALVE TAG	MODEL
FTR-1	0.56	2.0	0	9-13/16"	-	-	3/4"	55	N/A	SENIOR

** ELEMENT LENGTH SHALL BE AS REQUIRED TO MEET LOAD INDICATED ON DRAWINGS.
** ENCLOSURE LENGTH SHALL BE ELEMENT LENGTH PLUS 12" OR WALL TO WALL.

BFP PERFORMANCE SCHEDULE

TAG	SIZE	FLOW RATE (GPM)	W.P.D (PSI)	MAX. WORK'G. TEMPERATURE (DEGREES F)	MAX. WORK'G. PRESSURE (PSI)	TESTABLE (Y) OR (N)	BASIS OF DESIGN - WATTS		
							BODY STYLE	SERVICE	MODEL
BFP-1	3/4"	20.0	13.0	180.0	175	Y	DC	WATER ENTRANCE	950XL
BFP-2	1/2"	10.0	15.0	180.0	175	Y	DC	BOILER FILL	950XL

** BODY STYLE DESIGNATIONS REFERENCED ARE AS FOLLOWS (DC) = DOUBLE CHECK (DDC) = DOUBLE DETECTION CHECK, (DCA) = DOUBLE CHECK WITH ATMOSPHERIC VENT, (RPZ) = DOUBLE CHECK W/ REDUCED PRESSURE ZONE RELIEF VALVE.

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	EER	ENERGY EFFICIENCY RATIO	R	RADIATOR MANUFACTURERS	RPM	REVOLUTIONS PER MINUTE
G	GAS PIPING (G)	⊙	BALANCING VALVE (ADJUSTABLE)	⊗	WATER FLOW SWITCH	AFF	ABOVE FINISHED FLOOR	EF*	EXHAUST FAN TAG	IFUH*	INDIRECT FIRED WATER HEATER TAG	RPZ	REDUCED PRESSURE ZONE
HUR	HOT WATER RETURN PIPING (HUR)	⊕	AUTOMATIC FLOW CONTROL VALVE	⊖	PRESSURE SWITCH OR SENSOR	AMPS	AMPERES	EFF	EFFICIENCY	IN	INCHES	RTU	ROOM TEMPERATURE SENSOR
HWS	HOT WATER SUPPLY PIPING (HWS)	⊙	RELIEF VALVE (RV)	⊕	ENURSION TEMPERATURE SENSOR	AP	ACCESS PANEL	ESP	EXTERNAL STATIC PRESSURE	L*	LOUVER TAG	RV	RELIEF VALVE
RL	REFRIGERANT LIQUID PIPING (RL)	⊙	BALL VALVE	⊖	DUCT MOUNTED SMOKE DETECTOR	APD	AIR PRESSURE DROP	ET*	EXPANSION TANK TAG	LAT	LEAVING AIR TEMPERATURE	RUL	RAINWATER LEADER
RG	REFRIGERANT GAS PIPING (RG)	⊙	BALL VALVE	⊖	ROOM TEMPERATURE SENSOR	AS*	AIR SEPARATOR TAG	EWB	ENTERING WET BULB	LB	POUNDS	SA	SUPPLY AIR
---	SANITARY PIPING BELOW FLOOR (SAN)	⊙	3/4" BALL VALVE WITH 3/4" HOSE END GATE VALVE	⊖	THERMOSTAT OR SENSOR ON WALL	ATC	AUTOMATIC TEMPERATURE CONTROL	EWT	ENTERING WATER TEMPERATURE	LRA	LOCKED ROTOR AMPS	SAN	SANITARY (DRAIN & WASTE)
---	SANITARY PIPING ABOVE FLOOR (SAN)	⊙	PRESSURE REDUCING VALVE	⊖	TSTAT OR SENSOR W/ TAMPERPROOF GUARD	B*	BOILER TAG	EXG	EXISTING	LUWC	LOW WATER CUTOUT	SP	STATIC PRESSURE
---	SANITARY VENT PIPING	⊙	FUSIBLE VALVE	⊖	MANUAL AIR VENT	BFP*	BACKFLOW PREVENTER TAG	EXH	EXHAUST	LUT	LEAVING WATER TEMPERATURE	SQFT	SQUARE FEET
RUL	RAINWATER LEADER ABOVE SLAB (RUL)	⊙	STRAINER W/BLOWDOWN BALL VALVE	⊖	NOTE TAG (NUMBER)	BHP	BRAKE HORSEPOWER	FC	FLEXIBLE CONNECTION	MAX	MAXIMUM	ΔT	TEMPERATURE DIFFERENTIAL
---	COLD WATER PIPING (CW)	⊙	2-WAY CONTROL VALVE	⊖	AIR DEVICE TAG (LETTER) WITH CFM	BTUH	BRITISH THERMAL UNITS PER HOUR	FCO	FLOOR CLEANOUT	MBH	THOUSANDS OF BTU PER HOUR	TEMP.	TEMPERATURE
---	HOT WATER PIPING (HW)	⊙	SOLENOID VALVE	⊖	ROOM NUMBER	CFM	CUBIC FEET PER MINUTE	FD	FIRE DAMPER	MCA	MINIMUM CIRCUIT AMPACITY	TCP	TEMPERATURE CONTROL PANEL
---	RECIRCULATED HOT WATER PIPING (RHW)	⊙	3-WAY CONTROL VALVE	⊖	TURNING VANES	CO	CLEANOUT	FD*	FLOOR DRAIN TAG	MIN	MINIMUM	TMV*	THERMOSTATIC MIXING VALVE TAG
---	PIPE CAP	⊙	3-WAY CONTROL VALVE (TOP VIEW)	⊖	DUCT W/MANUAL DAMPER	CUH*	CABINET UNIT HEATER TAG	FLA	FULL LOAD AMPS	NC	NOISE CRITERION	TSP	TOTAL STATIC PRESSURE
→	DIRECTION OF FLUID FLOW	⊙	TRIPLE-DUTY VALVE	⊖	DUCT W/SQUARE-TO-ROUND TRANSITION	CF*	CIRCULATING PUMP TAG	FPHB	FROST PROOF HOSE BIBB	NIC	NOT IN CONTRACT	TYP	TYPICAL
⊕	ELBOW UP	⊙	UNION	⊖	MOTOR OPERATED DAMPER	Cv	VALVE COEFFICIENT	FFM	FROST PROOF MINUTE	NTS	NOT TO SCALE	VB	VACUUM BREAKER
⊖	ELBOW DOWN	⊙	PIPE FLANGE	⊖	AIRFLOW OUT	CW	COLD WATER	FFYH	FROST PROOF YARD HYDRANT	OA	OUTSIDE AIR	VFD	VARIABLE FREQUENCY INVERTER DRIVE
⊕	PIPE TEE UP	⊙	PUMP WITH FLANGES	⊖	AIRFLOW IN	DB	DRY BULB	FT	FEET	OD	OUTSIDE DIAMETER	VTR	VENT THRU ROOF
⊖	PIPE TEE DOWN	⊙	CARTRIDGE TYPE INLINE PUMP	⊖	DIAMETER OR FLAT OVAL	DC	DOUBLE CHECK	FTR*	FINTUBE RADIATION TAG	OPD	OVERCURRENT PROTECTIVE DEVICE	V/PH/Hz	VOLTS/PHASES/HERTZ
⊕	PIPE REDUCER	⊙	FLEXIBLE INLINE PUMP	⊖	ROUND OR FLAT OVAL DUCT DOWN	DCA	DOUBLE CHECK ATMOSPHERIC	GA	GAGE	P*	PLUMBING FIXTURE TAG	WB	WET BULB
⊕	PIPE WITH GUIDE	⊙	VERTICAL INLINE PUMP	⊖	ROUND OR FLAT OVAL DUCT UP	DEG F	DEGREES FAHRENHEIT	GAL	GALLONS	PSIA	POUNDS PER SQUARE INCH ABSOLUTE	UCO	WALL CLEANOUT
⊕	PIPE WITH ANCHOR	⊙	FLEXIBLE PIPE CONNECTION (FC)	⊖	SUPPLY DIFFUSER	DIA	DIAMETER	GFM	GALLONS PER MINUTE	PSIG	POUNDS PER SQUARE INCH GAGE	WG	WATER GAGE
⊕	BUTTERFLY VALVE	⊙	PITCH DOWN	⊖	RETURN GRILLE	DIW	DOWN IN WALL	HC*	HEATING COIL TAG	PVC	POLYVINYL CHLORIDE (PIPE)	UPD	WATER PRESSURE DROP
⊕	OS & Y GATE VALVE	⊙	PETCOCK	⊖	WATER HAMMER ARRESTOR	DN	DOWN	HP	HORSEPOWER	RD	RETURN AIR	USA	WIRE SIZING AMPS
		⊙		⊖		EA	EXHAUST AIR	HU	HOT WATER	RA	ROOF DRAIN	UTD	WATER TEMPERATURE DROP
		⊙		⊖		EAT	ENTERING AIR TEMPERATURE	HWS/R	HOT WATER SUPPLY AND RETURN	RHW	RECIRCULATED HOT WATER	W/	WITH

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Drawing Title
MECH. SCHEDULES & LEGEND

Drawing Number

M3