

	PIPE ELBOW TURNED DN		GLOBE VALVE		STEAM TRAP (FLOAT & THERMOSTATIC INDICATED T.T. = THERMOSTATIC TRAP, B.T. = BUCKET TRAP)		EXPANSION LOOP		CHANGE IN ELEVATION (UP/DOWN, RISE OR DROP)		MOTORIZED DAMPER	REGISTER, GRILLE & DIFFUSER TAG REGISTER, GRILLE OR GRILLE No. DIFFUSER, REGISTER OR GRILLE No. QUANTITY CFM AIR FLOW FINTUBE TAG FINTUBE No. LENGTH GPM VAV TAG VAV No. MINIMUM CFM MAXIMUM CFM GPM EQUIPMENT TAG TYPE DESIGNATOR NUMBER EQUIPMENT TAG (ON FLOOR/ROOF ABOVE) TYPE DESIGNATOR NUMBER DETAIL REFERENCE SYMBOL DETAIL No. SHEET DETAIL LOCATED ON SECTION REFERENCE SYMBOL SECTION No. SHEET SECTION LOCATED ON
	PIPE ELBOW TURNED UP		LOCKABLE BALL VALVE		PUMP - POINT OF TRIANGLE INDICATES DIRECTION OF FLOW		FLOOR DRAIN		SUPPLY DUCT TURNED UP/DN		FLEXIBLE CONNECTION	
	PIPING TEE DOWN		PLUG VALVE		GAS SHUT-OFF VALVE		SHOCK ABSORBER (WATER HAMMER ARRESTER)		RETURN DUCT TURNED UP/DN		TEMPERATURE SENSOR OR THERMOSTAT (AS SPECIFIED)	

E1 SYMBOLS LEGEND

NONE		NONE		NONE		NONE		NONE		NONE	
AW	ACID WASTE	LPR	LOW-PRESSURE CONDENSATE	AAV	AUTOMATIC AIR VENT	DN	DOWN	LP	LIQUID PETROLEUM GAS	TOD	TOP OF DUCT
ATV	AIR RELIEF	LPS	LOW-PRESSURE STEAM	AC	ABOVE CEILING	DS	DOWNSPOUT	LPR	LOW PRESSURE STEAM RETURN	TP	TRAP PRIMER
BBD	BOILER BLOWDOWN	MA	MEDICAL AIR	ACC	AIR COOLED CONDENSER	DT	DROP AND TRANSITION	LPS	LOW PRESSURE STEAM SUPPLY	TSP	TOTAL STATIC PRESSURE
C	CONDENSATE (HVAC DRAIN PAN)	MPR	MEDIUM-PRESSURE CONDENSATE	ACU	AIR CONDITIONING UNIT	DV	DRAIN VALVE	MAX	MAXIMUM	TTS	TIGHT TO STEEL
C	CONDENSATE (HVAC DRAIN PAN - BELOW FLOOR)	MPS	MEDIUM-PRESSURE STEAM	ADA	AMERICANS WITH DISABILITIES ACT	DWG	DRAWING	MBH	1000 BTU/HR.	TV	TURNING VANE
CA	COMPRESSED AIR	MU	MAKEUP WATER	AD	ACCESS DOOR	EA	EXHAUST AIR	MFR	MANUFACTURER	TW	TEMPERED WATER
CHWR	CHILLED WATER RETURN	N2	NITROGEN	AE	ACID EXHAUST	EF	EXHAUST FAN	MIN	MINIMUM	TYP	TYPICAL
CHWS	CHILLED WATER SUPPLY	NCW	NON-POTABLE COLD WATER	AW	ACID WASTE	EG	EXHAUST GRILLE	MOD	MOTOR OPERATED DAMPER	UH	UNIT HEATER
CWS	CONDENSER WATER SUPPLY	NG	NATURAL GAS	AFF; A.F.F.	ABOVE FINISHED FLOOR	ELEV	ELEVATION	MPG	MEDIUM PRESSURE GAS	UIC	UP IN CHASE
CWR	CONDENSER WATER RETURN	NHWP	NON-POTABLE HOT WATER	AHJ	AIR HANDLING UNIT	ELONG	ELONGATE	MPV	MULTI-PURPOSE VALVE	UIW	UP IN WALL
DCW	DOMESTIC COLD WATER (DCW)	NO	NITROUS OXIDE	AP	ACCESS PANEL	ENC	ENCLOSURE	MTD	MOUNTED	UV	UNIT VENTILATOR
DHW	DOMESTIC HOT WATER (DHW)	OX	OXYGEN	APPROX	APPROXIMATE; APPROXIMATELY	ER	EXHAUST REGISTER	MTG	MOUNTING	V	VENT
DHWR	DOMESTIC WATER RECIRC. (DHWR)	PC	PUMPED CONDENSATE	APMR	AS PER MFR'S RECOMMENDATIONS	ESP	EXTERNAL STATIC PRESSURE	MUA	MAKE UP AIR	VAC	VACUUM
D	DRAIN	PCWR	PROCESSED COLD WATER RETURN	ATC	AUTOMATIC TEMPERATURE CONTROL	ET	EXPANSION TANK	N.C.	NORMALLY CLOSED	VAC	VACUUM
FM	PUMP FORCE MAIN	PWWS	PROCESSED COLD WATER SUPPLY	AV	AIR VENT	(E)	EXISTING	N.O.	NORMALLY OPEN	VB	VACUUM BREAKER
FOF	FUEL OIL FILL	RD	REFRIGERANT DISCHARGE	BC	BALANCING COCK	F & T	FLOAT AND THERMOSTATIC	NIC	NOT IN CONTRACT	VCCFF	VALVE & CAP FOR FUTURE
FOR	FUEL OIL RETURN	RL	REFRIGERANT LIQUID	BDD	BACKDRAFT DAMPER	FBO	FURNISHED BY OTHERS	NPT	NATIONAL PIPE THREAD	VD	VOLUME DAMPER - MANUAL
FOS	FUEL OIL SUPPLY	RG	REFRIGERANT SUCTION	BG	BLAST GATE	FBP	FACE AND BYPASS	NTS	NOT TO SCALE	VLV	VALVE
FOV	FUEL OIL TANK VENT	RS	REFRIGERANT SUCTION	BF	BARRIER FREE	FC	FLEXIBLE CONNECTION	OA	OUTSIDE AIR	VS	VENT STACK
FW	FEEDWATER	SP	SPRINKLER MAIN PIPING	BFP	BACKFLOW PREVENTER	FD	FLOOR CLEANOUT	OD	OPPOSED BLADE DAMPER	VTR	VENT THROUGH ROOF
GR	GLYCOL RETURN	SWR	SOLAR WATER RETURN	BHP	BRAKE HORSEPOWER	FD#	FLOOR DRAIN TAG	OED	OPEN ENDED DUCT	W	WASTE
GS	GLYCOL SUPPLY	SWS	SOLAR WATER SUPPLY	BLDG	BUILDING	FIN	FIRE DAMPER	P#	PLUMBING FIXTURE TAG	W	WASTE
H	HUMIDIFICATION LINE	TP	TRAP PRIMER PIPING ABOVE GRADE	BOD	BOTTOM OF DUCT	FL	FLOOR	PD	PUMPED DISCHARGE	WB	WET BULB TEMPERATURE, °F
H2	HYDROGEN GAS	TR	TRAP PRIMER PIPING BELOW GRADE	B.T.U.	BRITISH THERMAL UNIT	FTG	FOOTING	PRS	PRESSURE REDUCING STATION	WCO	WALL CLEANOUT
HPWR	HEAT PUMP WATER RETURN	TWR	TEMPERED RETURN WATER	C, CONV.	CONVECTOR	FTR	FINNED TUBE RADIATION	PRV	PRESSURE REDUCING VALVE	WH	WATER HEATER
HPWS	HEAT PUMP WATER SUPPLY	TWS	TEMPERED SUPPLY WATER	CCW	COUNTER CLOCKWISE	FS	FLOW SWITCH	RA	RETURN AIR	WHYD	WALL HYDRANT
HPC	HIGH-PRESSURE CONDENSATE	V	SANITARY SOIL VENT (ABOVE FLOOR)	CCW	COUNTER CLOCKWISE	FM	FORCE MAIN	RD	ROOF DRAIN	NTS	NOT TO SCALE
HPS	HIGH-PRESSURE STEAM	V	SANITARY SOIL VENT (BELOW FLOOR)	CFF	CAPPED FOR FUTURE	GC	GENERAL CONTRACTOR	REC	RECOMMENDATION	Ø	DIAMETER
HTWR	HIGH-TEMP. HOT WATER RETURN	V	SANITARY SOIL VENT (BELOW FLOOR)	CFM	CUBIC FEET PER MINUTE	GPM	GALLONS PER MINUTE	REG	REGULAR	@	AT
HWR	HOT WATER RETURN	V	SANITARY SOIL VENT (BELOW FLOOR)	CLG	CEILING	GV	GRAVITY VENTILATOR	RF	RETURN FAN	&	AND
HWS	HOT WATER SUPPLY	V	SANITARY SOIL VENT (BELOW FLOOR)	CO	CLEANOUT	H	HUMIDIFIER	RG	RETURN GRILLE	%	PERCENT
IND	INDUSTRIAL WASTE	V	SANITARY SOIL VENT (BELOW FLOOR)	CM	CONSTRUCTION MANAGER	HB	HOSE BIB	RHC	REHEAT COIL		
IW	INDIRECT WASTE	V	SANITARY SOIL VENT (BELOW FLOOR)	CNTR	COUNTER; COUNTERTOP	HC; HDC	HANDICAP ACCESS	RM	ROOM		
LN	LIQUID NITROGEN	V	SANITARY SOIL VENT (BELOW FLOOR)	CONN	CONNECT; CONNECTION	HGT, HT.	HEIGHT	RPZ	REDUCED PRESSURE BFP		
LOX	LIQUID OXYGEN	V	SANITARY SOIL VENT (BELOW FLOOR)	CONT	CONTINUE; CONTINUATION	HP	HEAT PUMP	RR	RETURN REGISTER		
LPC	LOW-PRESSURE CONDENSATE	V	SANITARY SOIL VENT (BELOW FLOOR)	COORD	COORDINATE	HTR	HEATER	RV	RELIEF VALVE		
LP	LIQUID PETROLEUM GAS	V	SANITARY SOIL VENT (BELOW FLOOR)	CORR	CORRIDOR	H & V	HEATING AND VENTILATION	RW	RAIN WATER		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CR	CHEMICAL RESISTING	HVAC	HEATING, VENTILATING, & AIR COND.	S	SUPPLY AIR		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CT	COOLING TOWER	HW	HOT WATER	SA-"	SHOCK ABSORBER OF PDI SIZE (" ") AS INDICATED		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CTE	CONNECT TO EXISTING	HWR	HOT WATER RETURN	SCV	SELF CONTAINED VALVE		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CTR	CENTER	HWS	HOT WATER SUPPLY	SD	SMOKE DAMPER		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CTRLN	CENTERLINE	HX	HEAT EXCHANGER	SF	SUPPLY FAN		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CU	COPPER	ID	INSIDE DIAMETER	SG	SUPPLY GRILLE		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CUH	CABINET UNIT HEATER	IN WG	INCHES WATER GAUGE	SGL	SINGLE		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CV	CONTROL VALVE	INCL	INCLUDING	SHT	SHEET		
		V	SANITARY SOIL VENT (BELOW FLOOR)	CW	COLD WATER/CLOCKWISE	INV EL	INVERT ELEVATION	SPLR	SPRINKLER		
		V	SANITARY SOIL VENT (BELOW FLOOR)	DB	DRY BULB TEMPERATURE, °F	IPS	IRON PIPE SIZE	SQ FT; S. F.	SQUARE FEET		
		V	SANITARY SOIL VENT (BELOW FLOOR)	DC	DOUBLE CONTAINED	KE-#	KITCHEN EQUIPMENT NUMBER	SR	SUPPLY REGISTER		
		V	SANITARY SOIL VENT (BELOW FLOOR)	DDC	DIRECT DIGITAL CONTROL	LD	LINEAR DIFFUSER	S/O	SHUT OFF		
		V	SANITARY SOIL VENT (BELOW FLOOR)	DET	DETAIL	LE-#	SCIENCE LAB EQUIPMENT NUMBER	S.S.	STAINLESS STEEL		
		V	SANITARY SOIL VENT (BELOW FLOOR)	DIA	DIAMETER			TD	TRENCH DRAIN		
		V	SANITARY SOIL VENT (BELOW FLOOR)	DIC	DOWN IN CHASE			TG	TRANSFER GRILLE		
		V	SANITARY SOIL VENT (BELOW FLOOR)	DIW	DOWN IN WALL						

NOTE
 ALL GENERAL NOTES, SYMBOL LEGENDS, AND DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL PLUMBING AND HVAC DRAWINGS FOR THIS PROJECT. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION INTO THE DESIGN.

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PLUMBING AND HVAC NOTES, LEGEND AND ABBREVIATIONS

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