

AIR DISTRIBUTION SYMBOLS

	RECTANGULAR DUCT, (FIRST NUMBER IS SIDE SHOWN) DIMENSIONS IN INCHES
	12 INCH ROUND DUCT
	MOTORIZED DAMPER
	FLEXIBLE DUCT
	DUCT FLEXIBLE CONNECTOR (FC)
	DUCT DROPS AND RISES IN DIRECTION OF AIR FLOW
	RETURN DUCT TURNED UP OR DOWN (DASHED)
	SUPPLY DUCT TURNED UP OR DOWN (DASHED)
	EXHAUST DUCT TURNED UP OR DOWN (DASHED)
	ACOUSTICAL LINING (DUCT DIM. FOR NET FREE AREA)
	ROUND DUCT ELBOW DOWN
	ROUND DUCT ELBOW UP
	SQUARE TO ROUND TRANSITION
	CAP (DUCT AND/OR PIPE)
	INDICATES DUCT, PIPING, EQUIPMENT TO BE REMOVED.
	EA EXHAUST AIR
	RA RETURN AIR
	SA SUPPLY AIR
	VOLUME DAMPER
	FIRE DAMPER
	SMOKE DAMPER
	TAG NO.
	COMBINATION SMOKE/FIRE DAMPER
	TAG NO.
	RECTANGULAR ELBOW W/TURNING VANES
	DIRECTION OF AIR FLOW (IN)
	DIRECTION OF AIR FLOW (OUT)
	HUMIDISTAT OR HUMIDITY SENSOR
	THERMOSTAT (T'STAT) OR TEMP. SENSOR
	SMOKE DETECTOR
	DIFFUSER, REGISTER OR GRILLE TAG
	CFM AIR FLOW QUANTITY
	FINNED TUBE TAG
	LENGTH OF FINNED ELEMENT
	DETAIL NO.
	SHEET NO. WHERE DETAIL IS LOCATED
	EQUIPMENT TAG
	EQUIPMENT NO.
	LIMITS OF DEMOLITION
	CONNECT TO EXISTING

PIPING SYMBOLS

	UNION
	FLANGE
	PIPE ANCHOR
	PIPE GUIDE OR SLEEVES
	PIPE ELBOW TURNED DOWN
	PIPE ELBOW TURNED UP
	PIPING TEE-DOWN
	PIPING TEE-UP
	PIPE RISER
	PIPE PITCHES DOWN
	GENERIC VALVE, SEE SPECIFICATIONS FOR TYPE
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE (MANUAL)
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
	BALANCING VALVE (CIRCUIT SETTER)
	CHECK VALVE
	PLUG VALVE
	GLOBE VALVE
	NEEDLE VALVE
	BACK FLOW PREVENTER
	SOLENOID VALVE
	PRESSURE REDUCING OR REGULATING VALVE
	PRESSURE RELIEF VALVE
	STRAINER
	STRAINER W/BLOWDOWN
	MANUAL AIR VENT
	AUTOMATIC AIR VENT
	PRESSURE SWITCH
	FLOW SWITCH
	PRESSURE GAUGE AND COCK
	THERMOMETER AND WELL
	TEMPERATURE & PRESSURE TAP (PETE'S PLUG)
	HOSE END DRAIN VALVE WITH CAP
	ORIFICE FLOWMETER
	FLEXIBLE PIPE CONNECTOR
	EXPANSION JOINT
	STEAM TRAP (FLOAT AND THERMOSTATIC INDICATED T.T. THERMOSTAT, B.T. BUCKET TRAP, T.D. THERMODYNAMIC TRAP)
	CONCENTRIC REDUCER/INCREASER
	ECCENTRIC REDUCER/INCREASER
	DIRECTION OF FLOW
	PUMP
	FINNED TUBE BASEBOARD
	HUMIDIFIER
	DIFFERENTIAL PRESSURE TRANSMITTER

ABBREVIATIONS

AAV	AUTOMATIC AIR VENT	ENC	ENCLOSURE	PSE	PROCESS SOLVENT EXHAUST
ACC	AIR COOLED CONDENSER	ER	EXHAUST REGISTER	PP	POLY-PROPYLENE
ACU	AIR CONDITIONING UNIT	(E)	EXISTING	PPE	PRE PURCHASED EQUIPMENT
ACV	AUTOMATIC CONTROL VALVE	EXIST.	EXISTING	PRS	PRESSURE REDUCING STATION
AD	ACCESS DOOR	FBO	FURNISHED BY OWNER	PRV	PRESSURE REDUCING VALVE
AE	ACID EXHAUST	FBP	FACE AND BYPASS	PVD	PNEUMATIC VOLUME DAMPER
AFF	ABOVE FINISHED FLOOR	FC	FLEXIBLE CONNECTION	(R)	REMOVE
AFMS	AIR FLOW MEASURING STATION	FD	FIRE DAMPER	RA	RETURN AIR
AHU	AIR HANDLING UNIT	FG	FIBERGLASS	(REL.)	RELOCATED
ATC	AUTOMATIC TEMPERATURE CONTROL	F & T	FLOAT AND THERMOSTATIC	RF	RETURN FAN
AV	AIR VENT	FO	FLAT OVAL	RG	RETURN GRILLE
BB	BASEBOARD	FTR	FINNED TUBE RADIATION	RHC	REHEAT COIL
BDD	BACKDRAFT DAMPER	FS	FLOW SWITCH	RM	ROOM
BG	BLAST GATE	GC	GENERAL CONTRACTOR	RR	RETURN REGISTER
BLDG	BUILDING	GPM	GALLONS PER MINUTE	RV	RELIEF VALVE
BOD	BOTTOM OF DUCT	H	HUMIDIFIER	SA	SUPPLY AIR
BOP	BOTTOM OF PIPE	HB	HOSE BIB	SCV	SELF CONTAINED VALVE
BTU	BRITISH THERMAL UNIT	HRU	HEAT RECOVERY UNIT	SD	SMOKE DETECTOR
CBD	COUNTER BALANCED DAMPER	HTR	HEATER	SF	SUPPLY FAN
CD	CEILING DIFFUSER	H & V	HEATING AND VENTILATION	SG	SUPPLY GRILLE
CFF	CAPPED FOR FUTURE	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	SR	SUPPLY REGISTER
CFM	CUBIC FEET PER MINUTE	HW	HOT WATER	SS	STAINLESS STEEL
CLG	CEILING	HX	HEAT EXCHANGER	TE	TEMPERATURIZED ELEMENT (SENSOR)
CONT	CONTINUATION	IN WG	INCHES WATER GAUGE	TG	TRANSFER GRILLE
COORD	COORDINATE	LD	LINED DUCT	TOD	TOP OF DUCT
CP	CONDENSATE PUMP & RECEIVER	MAU	MAKE UP AIR UNIT	TOP	TOP OF PIPE
CT	COOLING TOWER	MAX	MAXIMUM	TTS	TIGHT TO STEEL
CTE	CONNECT TO EXISTING	MBH	1000 BTU/HR.	TV	TURNING VANE(S)
CU	COPPER	ME	MECHANICAL ENGINEER	TYP	TYPICAL
CUH	CABINET UNIT HEATER	MFR	MANUFACTURER	UH	UNIT HEATER
CV	CONTROL VALVE	MIN	MINIMUM	UIC	UP IN CHASE
CW	COLD WATER	MD	MOTOR OPERATED DAMPER	UIW	UP IN WALL
DC	DOUBLE CONTAINED	MPV	MULTI-PURPOSE VALVE	UV	UNIT VENTILATOR
DDC	DIRECT DIGITAL CONTROL	MTD	MOUNTED	VAV	VARIABLE AIR VOLUME BOX
DIA	DIAMETER	MUA	MAKE UP AIR	VB	VACUUM BREAKER
DIC	DOWN IN CHASE	NPW	NON-POTABLE WATER	VTR	VENT THRU ROOF
DIW	DOWN IN WALL	NTS	NOT TO SCALE	VD	MANUAL VOLUME DAMPER
DN	DOWN	OA	OUTSIDE AIR	VCFF	VALVED AND CAPPED FOR FUTURE
DT	DROP AND TRANSITION	OBD	OPPOSED BLADE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
DWG	DRAWING	OED	OPEN ENDED DUCT	VOC	VOLATILE ORGANIC COMPOUNDS
DWH	DOMESTIC WATER HEATER	PAE	PROCESS ACID EXHAUST	W/	WITH
EA	EXHAUST AIR	PHE	PROCESS HEAT EXHAUST		
EF	EXHAUST FAN				

PIPING SYSTEMS

CD	CONDENSATE DRAIN	HG	HOT GAS	RL	REFRIGERANT LIQUID
CHWS	CHILLED WATER SUPPLY	HPS	HIGH PRESSURE STEAM	RS	REFRIGERANT SUCTION
CHWR	CHILLED WATER RETURN	HPR	HIGH PRESSURE CONDENSATE RETURN	TWS	TEMPERED CHILLED WATER SUPPLY
CWS	CONDENSER WATER SUPPLY	HWS	HOT WATER SUPPLY	TWR	TEMPERED CHILLED WATER RETURN
CWR	CONDENSER WATER RETURN	HWR	HOT WATER RETURN	ZB	ZONE VALVE BOX
DB	DISTRIBUTION VALVE BOX	LPS	LOW PRESSURE STEAM		
FCS	FREE COOLING SUPPLY	LPR	LOW PRESSURE RETURN		
FCR	FREE COOLING RETURN	MPS	MEDIUM PRESSURE STEAM		
FOS	FUEL OIL SUPPLY	MPR	MEDIUM PRESSURE RETURN		
FOR	FUEL OIL RETURN	NPW	NON POTABLE COLD WATER		
FOV	FUEL OIL VENT	PCWR	PROCESS COOLING WATER RETURN		
GCR	GRAVITY STEAM CONDENSATE RETURN	PC	PUMPED STEAM CONDENSATE		
GLY	GLYCOL	PD	PUMPED DISCHARGE		
HCR	HOT/ CHILLED WATER RETURN	PW	POTABLE WATER		
HCS	HOT/ CHILLED WATER SUPPLY	R	RELIEF LINE		

GENERAL NOTE

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

1	CONFORMED SET	4-21-15
0	ISSUED FOR CONSTRUCTION	3-3-15
REV.	DESCRIPTION	DATE
CURRENT ISSUE STATUS:		
CONFORMED SET 4-21-15		
ARCHITECTURE ENGINEERING PLANNING INTERIOR DESIGN COMMISSIONING		
L.L. BEAN CHESHIRE BUILDING RENOVATIONS PORTLAND, MAINE		
HVAC LEGEND AND ABBREVIATIONS		
SCALE: NOT TO SCALE DATE: 3-3-15		
PROJECT MANAGER: CMH/KPB		
JOB CAP/DRAWN: CMH/KPB		
A/E OF RECORD: CMH		
SMRT CAD FILE: M-001-14199		
PROJECT No. 14199-00		
M-001		