	MEP ABBREVIATIONS
ABV. AC	ABOVE ALTERNATING CURRENT
A/C AFC	AIR CONDITIONER ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG AG	ABOVE FINISHED GRADE ABOVE GRADE AND GFI
AHAP AHU	AS HIGH AS POSSIBLE AIR HANDLING UNIT
ALT.	ALTERNATE
AMB. AMP.	AMBIENT TEMPERATURE ('F) AMPERE
APPROX.	APPROXIMATELY ARCHITECTURAL
AVG.	AVERAGE
B B.G.	BOILER BELOW GRADE
BMS BRD	BUILDING MANAGEMENT SYSTEM BAROMETRIC RELIEF DAMPER
BTU	BRITISH THERMAL UNIT
CD CFH	CONSTRUCTION DOCUMENTS CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CH. CHEM.	CHILLER
CHP CKT.	CHILLED WATER PUMP
CLG.	CEILING
CMPR. CT	COMPRESSOR COOLING TOWER
CWP	CONDENSER WATER PUMP CONDENSING UNIT
DB	DRY BULB
DEFL. DEG. F	DEFLECTION DEGREES FAHRENHEIT
DET.	DETAIL
DD DIA.	DESIGN DEVELOPMENT DIAMETER
DISC.	DISCONNECT SWITCH DIMENSION
DIM. EA	EXHAUST AIR
EDB EF	ENTERING DRY BULB EXHAUST FAN
ELEC.	ELECTRICAL
ELEV. EMCS.	ELEVATION ENERGY MGMT. CONTROL SYSTEM
E.S.P. EWB	EXTERNAL STATIC PRESS. (IN. W.G.) ENTERING WET BULB
EMT	ENTERING WATER TEMPERATURE
EXH. EXIST.	EXHAUST EXISTING
F/A	FREE AREA OPENING (SQ. FT.) FAN COIL UNIT
FCU FHP	FRACTIONAL HORSE POWER
FLR. FPI	FLOOR COIL FINS PER INCH.
FPM	FEET PER MINUTE
FPS FT.	FEET PER SECOND FOOT OR FEET
GFI GPM	GROUND FAULT INTERRUPTER GALLONS PER MINUTE
HD.	HEAD
HOA HP	HANDS/OFF/AUTO. MOTOR STARTER HORSE POWER
HPU	HEAT PUMP UNIT
HR. HT.	HOUR(S) HEIGHT
HTG. HTR.	HEATING HEATER
HVAC	HEAT, VENT AND AIR CONDITIONING
HWP HX	HOT WATER PUMP HEAT EXCHANGER
HZ.	FREQUENCY (HERTZ) INSIDE DIAMETER OR DIMENSION
ID IN.	INCHES
KMH KM	KILOWATT HOUR
LAT	KILOWATT HOUR LEAVING AIR TEMPERATURE
LWT MAX.	LEAVING WATER TEMPERATURE MAXIMUM
MCA MOCP	MINIMUM CURRENT AMPS. MAX, OVER CURRENT PROTECTION
MBH	1000 BTU PER HOUR
MECH. MFR.	MECHANICAL MANUFACTURER
MIN.	MINIMUM
MVD N/A	MANUAL VOLUME DAMPER NOT APPLICABLE
NC NIC	NOISE CRITERIA NOT IN CONSTRUCTION
NK	NECK DIMENSION
NO. OA	NUMBER OUTSIDE AIR
OAR	OWNERS AUTHORIZED REPRESENTATIVE
OBD OD	OPPOSED BLADE DAMPER OUTSIDE DIAMETER
ORIG. P.D.	ORIGINAL PRESSURE DROP (FT)
PH.	PHASE
PMB PLBG.	POWERED MIXING BOX PLUMBING
PNL. PRESS.	PANEL PRESSURE
RA	RETURN AIR
RAG RD.	RETURN AIR GRILLE
RE. RPM	REFERENCE REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
5/5 5/5/5	SINGLE SPEED MOTOR START/STOP/STATUS
SA	SUPPLY AIR
SAG SDC	SUPPLY AIR GRILLE STAND ALONE DIGITAL CONTROLLER
SEER SENS.	SEASON ENERGY EFFICIENCY RATIO SENSIBLE
SP	STATIC PRESSURE
SQ. STR.	SQUARE MOTOR STARTER
TEMP.	TEMPERATURE
T.S.P.	TOTAL STATIC PRESSURE (IN. W.G.) UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
V VAV	VOLT VARIABLE AIR VALVE
VEL.	VELOCITY
W/	WITH
W/O W.G.	WITHOUT WATER GUAGE
WB	WET BULB
WP.	WEATHERPROOF WATER PRESSURE DROP
WPG XFMR.	WEATHERPROOF GFI
VE	TRANSFORMER

	ECTRICAL SYMBOLS
_A O ₃	RECESSED OR SURFACE, TYPE 'A' DOWNLIGHT FIXTURE ON CIRCUIT #3.
А 3	RECESSED OR SURFACE, TYPE 'A' LIGHTING TROFFER FIXTURE ON CIRCUIT #3.
	WALL MOUNTED OR BRACKET MOUNTED LIGHTING
나 오	FIXTURE. RECESSED OR SURFACE, TYPE 'A' WALL WASHER
A [⊕] 3	FIXTURE ON CIRCUIT #3,
/////// Ø	HATCHED FIXTURE INDICATING A NIGHT LIGHT OR AN EMERGENCY LIGHTING FIXTURE.
<u>∞∞∞</u>	CEILING MOUNTED EXIT SIGN AND WALL MOUNTED
<u> </u>	EXIT SIGN. UNITARY EMERGENCY LIGHTING FIXTURE
$\overline{\bigcirc}$	
<u> </u>	JUNCTION BOX, SIZED BY E.C. PER NEC. GRID SYSTEM JUNCTION BOXES, SIZED BY E.C.
0 0	PER NEC.
Ф	DUPLEX RECEPTACLE, 20A, 125V, GROUNDED.
Ф	DUPLEX RECEPTACLE, 20A, 125V, ISOLATED GROUND.
Ф	DUPLEX RECEPTACLE, 20A, 125V, GROUND, HALF
	SWITCHED.
Ф	SIMPLEX RECEPTACLE, 20A (U.N.O.), 125V, GROUNDED.
Ф зо	POWER RECEPTACLE, 2 POLE, 250V SINGLE PHASE AMPS GREATER THAN 20A TO BE NOTED.
₩ 50	QUADPLEX RECEPTACLE, 20A, 125V, GROUNDED.
. Ψ	3 PHASE RECEPTACLE, AMPS GREATER THAN 20A
Φ30	TO BE NOTED.
\blacksquare	TELEPHONE OUTLET, DATA OUTLET, COMBINATION TELEPHONE/DATA OUTLET.
甲	TELEVISION OUTLET.
Θ $\overline{\forall}$	CEILING MOUNTED SPEAKER, WALL MOUNTED SPEAKER.
<u> </u>	MICROPHONE OUTLETS.
<u> </u>	FLOOR BOX WITH DUPLEX RECEPTACLE.
	FLOOR BOX WITH TELEPHONE OUTLET, FLOOR BOX
	WITH DATA.
	MULTI-USE FLOOR BOXES.
	MULTI-OUTLET STRIP.
	BUZZER, BELL.
<u>©</u>	SINGLE FACE CLOCK, DOUBLE FACE CLOCK.
	FIRE ALARM HORN, FIRE ALARM HORN AND STROBE ASSEMBLY, FIRE ALARM STROBE.
	FIRE ALARM HORN AND STROBE ASSEMBLY WITH
	MANUAL PULL STATION, MANUAL PULL STATION. FIRE ALARM WATER FLOW SWITCH, TAMPER
S T	SWITCH.
Р	FIRE ALARM CEILING MOUNTED SMOKE DETECTOR, DUCT MOUNTED SMOKE DETECTOR.
H	FIRE ALARM HEAT DETECTOR.
5	SINGLE POLE SWITCH.
53	THREE WAY SWITCH.
54	FOUR WAY SWITCH.
SD	DIMMER SWITCH.
SK	KEY OPERATED SWITCH.
5 ^K 3	KEY OPERATED THREE WAY SWITCH.
2 2	MOMENTARY CONTACT SWITCH.
<u> </u>	PUSH BUTTON SWITCH.
•••	START - STOP PUSH BUTTON SWITCH
[]	H.O.A. PUSH BUTTON SWITCH.
5M	SINGLE THROW THERMAL SWITCH.
<u></u>	PUSH BUTTON START / STOP SWITCH.
	MAGNETIC MOTOR STARTER.
→┴□┼⊠	FUSED SWITCH.
	DISCONNECT SWITCH.
E ¹	FUSED DISCONNECT SWITCH.
₩ W	
181	MOTOR.
	WIRING SYMBOLS: NEUTRAL, HOT, SWITCH, GROUND.
	CONDUIT CONCEALED IN OR BELOW FLOOR.
	PANELBOARD (250 VOLT OR BELOW).
	PANELBOARD (480 VOLT OR 600 VOLT).
	DRY TYPE TRANSFORMER.
	. Company of the comp
<u>///</u>	GROUNDING BUS BAR
@	GROUNDING BUS BAR TELEPHONE CABINET OR BACKBOARD
©	GROUNDING BUS BAR TELEPHONE CABINET OR BACKBOARD ABOVE COUNTER, GFCI RECEPTACLE, ABOVE

	HVAC LEGEND		
SINGLE LINE	DESCRIPTION	DOUBLE LINE	
	90% ELBOW DOWN		
<u> </u>	90% ELBOW UP	€@	
,	OFFSET TO CHANGE ELEVATION (AT 30% WHEN POSSIBLE ARROW SLOPES DN.)	ണ	
	ROUND RADIUS ELBOW	<u>ED</u>	
	45% ELBON		
ŀ	90% STRAIGHT TEE	n n	
<u> </u>	90% CONICAL TEE	و ا	
		<u> </u>	
	45% BRANCH	والم	
	45% CONICAL TEE	2	
	SIZE TRANSITION		
	SHAPE TRANSITION		
	ROUND FLEXIBLE DUCT	6	
 ⊠	90% ELBOW DOWN W/ TURNING VANES (U.N.O.)	 	
—— M	90% ELBOW UP W/ TURNING VANES (U.N.O.)	≠ IM	
<u>—M</u> —	TEE WITH SPLITTER & TURNING VANES IN VERTICAL	\$IMI\$	
	OFFSET TO CHANGE ELEVATION (AT 30% WHEN POSSIBLE ARROW SLOPES DN.)	扫皿井	
	RECTANGULAR RADIUS ELBOW	1	
	RECTANGULAR ELBOW WITH TURNING VANES	丰稻	
	SPLIT BRANCH TAKE-OFF WITH SQUARE ELBOW AND SPLITTER	一一	
	DAMPER. SPLIT BRANCH TAKE-OFF WITH RADIUS ELBOW AND SPLITTER	<u> </u>	
	DAMPER. BRANCH TAKE-OFF WITHOUT	 	
	AIR BALANCING DAMPER. BRANCH TAKE-OFF WITH AIR	<i>t</i>	
<u> </u>	BALANCING DAMPER. (SCOOP DAMPER)	 	
	TEE WITH SPLITTER DAMPER	<u>卡</u>	
	SPIN-IN TAP WITH DAMPER	= +++++++++++++++++++++++++++++++++++++	
	SQUARE NECK CLG. DIFFUSER 4-WAY DIRECTIONAL THROW UNLESS INDICATED OTHERWISE.	≠ 🖾	
	SQUARE NECK CLG. DIFFUSER 4-WAY DIRECTIONAL THROW UNLESS INDICATED OTHERWISE.	‡ [
	SIDEWALL SUPPLY GRILLE OR REGISTER WITH O.B.D.	 	
	SUPPLY DUCT RISER		
	RETURN, EXHAUST OR OUTSIDE AIR DUCT RISER.		
→ -□	CEILING RETURN AIR GRILLE OR REGISTER	2 -4-	
+[-	DOOR GRILLE		
	VOLUME DAMPER	-	
<u></u>	FIRE DAMPER	<u> </u>	
	MOTORIZED DAMPER	<u> </u>	
1.	GRAVITY BACKDRAFT DAMPER	 	
→		<u>W</u> _	
一十 ⑤	AUTO SMOKE DAMPER	 	
® 	DUCT MOUNTED SMOKE DETECTOR		
	SMOKE/FIRE DAMPERS (CLASS II MIN.)		
Ø	THERMOSTAT OR TEMPERATURE SENSOR	Ð	
@ /@	ROOM HUMIDISTAT / CARBON DIOXIDE SENSORS	H / Ø	

NOTE: NOT ALL SYMBOLS SHOWN ARE NECESSARILY USED.

		SANITARY SEWER (SS)
	. — — —	SANITARY VENT (V)
SD		STORM DRAIN (SD)
		STORM OVERFLOW DRAIN (OD)
GM	1	- GREASE WASTE (GW)
AW		- ACID WASTE (AW)
	-AV	- ACID VENT (AV)
-		- DOMESTIC COLD WATER (CW)
		- DOMESTIC HOT WATER (110'F HW)
	I40°	- DOMESTIC HOT WATER (140°F HW)
		DOMESTIC HOT WATER RETURN (RECIRC)
	40°	- DOMESTIC HOT WATER RETURN (140°F REC
F		- FIRE LINE (F)
G		- NATURAL GAS (G)
A		- COMPRESSED AIR (A)
O2		- OXYGEN
v		- VACUUM
N ₃	la company	- NITROGEN (N)
N ₂	0	NITROUS OXIDE (NO)
C1		RISER DOWN (ELBOW)
O l		RISER UP (ELBOW)
- 1 8		BRANCH-BOTTOM CONNECTION
		BRANCH-TOP CONNECTION
t	 	TEE CONNECTION
+		90° ELBON
		CAP ON END OF PIPE
 		UNION
t 0		FLOOR CLEANOUT
		CLEANOUT PLUG
		BALL VALVE
\$	1	PRESSURE REDUCING VALVE
 \		CHECK VALVE
		FLOW CONTROL VALVE
	 	GAS COCK
湨		TEMPERATURE-PRESSURE RELIEF VALVE
0		THERMOMETER
		PRESSURE GAUGE WITH GAUGE COCK
<u> </u>	-	DIRECTION OF SLOPE
		DIRECTION OF FLOW
	+	OUTLET (SPECIFY TYPE)
⊗c+		COMPRESSED AIR OUTLET
	N.F.W.H.	NON-FREEZE WALL HYDRANT
	H.B.	HOSE BIBB
		FLOOR SINK
]	FLOOR DRAIN
) H.D.	HUB DRAIN
_	R.D.	ROOF DRAIN
	O.D.	OVERFLOW DRAIN
_ -		EXISTING PIPING TO BE REMOVED
Φ		NEW CONNECTION TO EXISTING

