

A
 A.....AIR
 A/C.....AIR CONDITIONING
 ABV.....ABOVE
 AE/A.....ANESTHESIA EXHAUST AIR
 ADJ.....ADJUSTABLE
 AF.....AIRFOIL
 AFF.....ABOVE FINISHED FLOOR
 AHU.....AIR HANDLING UNIT
 AL.....ALUMINUM
 ALT.....ALTERNATE
 AMP.....AMPERE
 APPD.....APPROVED
 APPROX.....APPROXIMATE
 ARCH.....ARCHITECT, ARCHITECTURAL
 ASSY.....ASSEMBLY
 AUTO.....AUTOMATIC
 AVG.....AVERAGE

B
 BFPD.....BACK FLOW PREVENTION DEVICE
 BI.....BACKWARD INCLINED
 BL.....BUILDING LINE
 BLW.....BELOW
 BLDG.....BUILDING
 B/M.....BILL OF MATERIALS
 BOD.....BOTTOM OF DUCT
 BOT.....BOTTOM
 BP.....BOTTOM OF PIPE
 BRKT.....BRACKET
 BSMT.....BASEMENT
 BTU.....BRITISH THERMAL UNIT
 BTUH.....BTU/HOUR
 BFG.....BELOW FINISH GRADE

C
 CA.....COMPRESSED AIR
 CAB.....CABINET
 CD.....CONDENSATE DRAIN
 CFM.....CUBIC FEET PER MINUTE
 CI.....CAST IRON
 CIR.....CIRCLE, CIRCULAR
 CL.....CENTER LINE
 CLG.....CEILING
 CO.....CLEAN OUT
 COL.....COLUMN
 COMPR.....COMPRESSOR
 CONC.....CONCRETE
 CONN.....CONNECTION
 CONST.....CONSTRUCTION
 CONT.....CONTINUE, CONTINUOUS
 CONTR.....CONTRACT
 CONTR.....CONTRACTOR
 CS OR C STL.....CARBON STEEL
 C TO C.....CENTER TO CENTER
 CTR.....CENTER
 CU.....CUBIC
 CU FT.....CUBIC FOOT
 CU IN.....CUBIC INCH
 CW.....COLD WATER

D
 DB.....DECIBEL
 DEG.....DEGREE
 DEMO.....DEMOLITION
 DEPT.....DEPARTMENT
 DET.....DETAIL
 DF.....DRINKING FOUNTAIN
 DIA.....DIAMETER
 DIAG.....DIAGRAM
 DIAG.....DIAGRAMMATIC
 DIAG.....DIAGONAL
 DIM.....DIMENSION
 DISC.....DISCONNECT
 DN.....DOWN
 DP.....DEW POINT
 DR.....DRAIN
 DWG.....DRAWING

E
 EA.....EACH
 E/A.....EXHAUST AIR
 EF.....EXHAUST FAN
 EL.....ELEVATION
 ELEC.....ELECTRIC
 ELL.....ELBOW
 ENGR.....ENGINEER
 EQUIP.....EQUIPMENT
 EQUIV.....EQUIVALENT
 ESP.....EXTERNAL STATIC PRESS
 EST.....ESTIMATE
 EWC.....ELECTRIC WATER COOLER
 EWT.....ENTERING WATER TEMP
 EXIST.....EXISTING
 EXP.....EXPANSION
 EXT.....EXTERIOR
 EXT.....EXTERNAL

F
 F.....FAHRENHEIT
 FAB.....FABRICATE
 FAB.....FABRICATED
 FC.....FORWARD CURVED
 FD.....FIRE DAMPER
 FD.....FLOOR DRAIN
 FF.....FINISH FLOOR
 FIG.....FIGURE
 FIN.....FINISH
 FL.....FLOOR
 FL.....FLOW LINE
 FL MTD.....FLOOR MOUNTED
 FP.....FIRE PROTECTION
 FPM.....FEET PER MINUTE
 FPS.....FEET PER SECOND
 FT.....FOOT, FEET
 FTG.....FITTING
 FTG.....FOOTING
 FURN.....FURNISH, FURNISHED

G
 G.....GAS
 GA.....GAUGE
 GAL.....GALLON
 GALV.....GALVANIZED
 GPH.....GALLON PER HOUR
 GPM.....GALLON PER MINUTE
 H
 HB.....HOSE BIBB
 HD.....HEAD
 HGT.....HEIGHT
 HG.....HOT GAS
 HORIZ.....HORIZONTAL
 HP.....HORSEPOWER
 HR.....HOUR
 HTR.....HEATER
 HVY.....HEAVY
 HW.....HOT WATER
 HWR.....HOT WATER RECIRCULATION

I
 ID.....INSIDE DIAMETER
 IE.....INVERT ELEVATION
 IH.....INTAKE HOOD
 IN.....INCHES
 INS.....INSULATE
 INS.....INSULATION
 INT.....INTERIOR, INTERNAL

J
 JB.....JUNCTION BOX
 JT.....JOINT

K
 K.....THOUSAND
 KW.....KILOWATT
 KWH.....KILOWATT HOUR

L
 LAT.....LATITUDE
 LB.....POUNDS
 LG.....LONG
 LH.....LEFT HAND
 LIN FT.....LINEAR FEET
 LP.....LOW POINT
 (L).....ACOUSTICALLY LINED DUCT

M
 M.....THOUSAND
 M/A.....MAKE-UP AIR
 MACH RM.....MACHINE ROOM
 MATL.....MATERIAL
 MAX.....MAXIMUM
 MBH.....THOUSAND BTU PER HOUR
 MECH.....MECHANICAL
 MED.....MEDIUM
 MET.....METAL
 MFG.....MANUFACTURED
 MFR.....MANUFACTURER
 MH.....MANHOLE
 MIN.....MINIMUM
 MIN.....MINUTE
 MISC.....MISCELLANEOUS
 MK.....MARK
 MOD.....MODEL
 MTG.....MOUNTING
 N
 N.....NORTH
 NC.....NORMALLY CLOSED
 NO.....NUMBER
 NTS.....NOT TO SCALE

O
 O/A.....OUTSIDE AIR
 OC.....ON CENTER
 OD.....OUTSIDE DIAMETER
 OFF.....OFFICE
 OPP.....OPPOSITE
 ORIG.....ORIGINAL
 OZ.....OUNCE

P
 PAR.....PARALLEL
 PD.....PRESSURE DROP
 PH.....PHASE
 PL.....PLATE
 PLBG.....PLUMBING
 PPH.....POUNDS PER HOUR
 PPM.....PARTS PER MILLION
 PRESS.....PRESSURE
 PRV.....PRESSURE REDUCING VALVE
 PSI.....POUNDS PER SQUARE INCH
 PSIA.....POUNDS PER SQ. IN. ABSOLUTE
 PSIG.....POUNDS PER SQ. IN. GAGE
 PVC.....POLYVINYL CHLORIDE

Q
 QTY.....QUANTITY

R
 R.....RADIUS
 R/A.....RETURN AIR
 RD.....ROUND
 RE.....REFER, REFERENCE
 RED.....REDUCER
 RECT.....RECTANGLE
 REG.....REGISTER
 REQD.....REQUIRED
 REV.....REVISE, REVISION
 RG.....REFRIGERANT GAS
 RH.....RELATIVE HUMIDITY
 RL.....REFRIGERANT LIQUID
 RL/A.....RELIEF AIR
 RM.....ROOM
 RPM.....REVOLUTIONS PER MINUTE
 RPS.....REVOLUTIONS PER SECOND
 RS.....REFRIGERANT SUCTION

S
 S/A.....SUPPLY AIR
 SAN.....SANITARY
 SC.....SELF CLOSING
 SCH.....SCHEDULE, SCHEDULED
 SECT.....SECTION
 SERV.....SERVICE
 SF.....SUPPLY FAN
 SF.....SQUARE FOOT
 SIM.....SIMILAR
 SP.....SPRINKLER
 SP.....STATIC PRESSURE
 SPEC.....SPECIFICATIONS
 SQ.....SQUARE
 SQ IN.....SQUARE INCH
 SQ FT.....SQUARE FOOT
 SS.....SANITARY SEWER
 SS.....STAINLESS STEEL
 STD.....STANDARD
 STRUCT.....STRUCTURAL
 SUP.....SUPPLY

T
 TD.....TEMP DIFFERENCE
 TD.....TRENCH DRAIN
 TEMP.....TEMPERATURE
 THD.....THREAD
 THK.....THICK, THICKNESS
 THRU.....THROUGH
 TP.....TOP OF PIPE
 TRANS.....TRANSFORMER
 T STAT.....THERMOSTAT
 TYP.....TYPICAL

U
 UH.....UNIT HEATER
 UL.....UNDERWRITERS LABORATORIES
 UNO.....UNLESS NOTED OTHERWISE

V
 V.....VENT
 V.....VOLT
 VENT.....VENTILATE, VENTILATION
 VERT.....VERTICAL
 VFD.....VARIABLE FREQUENCY DRIVE
 VOL.....VOLUME
 VTR.....VENT THRU ROOF

W
 W.....WATT
 W/.....WITH
 W/O.....WITHOUT
 WC.....WATER COLUMN
 WH.....WATER HEATER
 WT.....WEIGHT

X
 XFMR.....TRANSFORMER

Y
 YD.....YARD

Z
 ANGLE.....ANGLE
 DEG.....DEGREE
 DIA.....DIAMETER
 PHASE.....PHASE
 ROUND.....ROUND
 PERCENT.....PERCENT

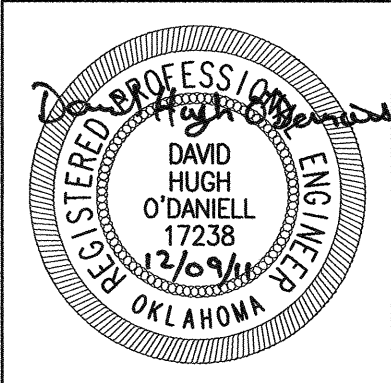
SYMBOLS

SYMBOL	DESCRIPTION
— CW —	DOMESTIC COLD WATER
— HW —	DOMESTIC HOT WATER
— HWR —	DOMESTIC HOT WATER
—	SOIL OR WASTE VENT
—	SOIL OR WASTE
— CHS —	CHILLED WATER SUPPLY
— CHR —	CHILLED WATER RETURN
— HS —	HEATING WATER SUPPLY
— HR —	HEATING WATER RETURN
— RD —	ROOF DRAIN
— G —	NATURAL GAS, LOW PRESSURE
— FP —	FIRE PROTECTION WATER
— GL —	GEOTHERMAL GROUND LOOP WATER
—	RISER DOWN (ELBOW)
—	RISER UP (ELBOW)
—	RISE OR DROP
—	TEE DOWN
—	TEE UP
—	TOP CONNECTION
—	BOTTOM CONNECTION
—	SIDE CONNECTION
—	GATE VALVE
—	CHECK VALVE
—	GLOBE VALVE
—	BALL VALVE
—	PRESSURE REDUCING VALVE
—	BALANCING VALVE W/TEST PORTS
—	PRESSURE AND TEMPERATURE RELIEF REDUCER, ECCENTRIC
—	REDUCER, CONCENTRIC
—	INSTRUMENTATION (P & T) PLUG
—	CLEANOUT PLUG
— CO	CLEANOUT, FLOOR
— CO	CLEANOUT, WALL
—	WATER HAMMER ARRESTOR
—	STRAINER, "Y" TYPE
—	BACKFLOW PREVENTION DEVICE
— HB	HOSE BIBB
— WH	WALL HYDRANT
—	AIR VENT, MANUAL
—	AIR VENT, AUTOMATIC
—	FLOW IN DIRECTION OF ARROW
—	THERMOMETER
—	LUBRICATED PLUG VALVE
—	UNION
—	PIPE ROUTED TO FLOOR DRAIN
— FD	FLOOR DRAIN

SYMBOL	DESCRIPTION
AIR DISTRIBUTION DEVICE CALLOUTS ARE DENOTED AS ILLUSTRATED BELOW:	
DIFFUSERS:	
4 - 8ø - 170 - A	DEVICE TYPE, REFER SCHEDULE
—	DEVICE CFM
—	DEVICE INLET DUCT SIZE
—	NUMBER OF IDENTICAL DEVICES (OMITTED FOR SINGLE DEVICE)
GRILLES AND REGISTERS:	
4 - 24x8 - 170 - C	DEVICE TYPE, REFER SCHEDULE
—	DEVICE CFM
—	NECK SIZE IN INCHES
—	NUMBER OF IDENTICAL DEVICES (OMITTED FOR SINGLE DEVICE)
—	DUCT SECTION, SUPPLY
—	DUCT SECTION, EXHAUST OR RETURN
—	DAMPER
—	ACCESS
—	MD
—	OBD = OPPOSED BLADE DAMPER
—	BLANK OR M.D. = MANUAL DAMPER
—	MD = MOTORIZED DAMPER
ONE LINE SYMBOL	TWO LINE DETAIL
—	DESCRIPTION
—	90 DEGREE RECTANGULAR ELBOW UP WITH TURNING VANES
—	90 DEG. ELBOW UP
—	90 DEGREE RECTANGULAR ELBOW DOWN WITH TURNING VANES
—	90 DEG. ELBOW DOWN
—	90 DEG. RECTANGULAR ELBOW HORIZ. WITH TURNING VANES
—	90 DEGREE ROUND ELBOW, HORIZONTAL
—	45 DEG. RECTANGULAR BEND
—	45 DEG. RECTANGULAR BEND, 1-1/2 RADIUS
—	45 DEG. ROUND BEND, 1-1/2 RADIUS
—	ACOUSTICALLY LINED DUCT ALSO DESIGNATED AS (L)
—	RISE IN DUCT ELEVATION IN DIRECTION OF AIRFLOW
—	FALL OR DROP IN DUCT ELEVATION IN DIRECTION OF AIRFLOW
— T	TEMPERATURE SENSOR
— ST	MOTOR STARTER
— FS	FREEZSTAT
— SD	SMOKE DETECTOR
— DPS	DIFFERENTIAL PRESSURE SWITCH
— T	SPACE TEMPERATURE SENSOR / THERMOSTAT
— H	SPACE HUMIDISTAT
— C	CO SENSOR

NOTE: NOT ALL ABBREVIATIONS ARE USED ON THIS PROJECT.

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CLAREMORE CIVIC EXPO CENTER
 SHOP REPLACEMENT
 CLAREMORE, OKLAHOMA

MECHANICAL LEGEND & ABBREVIATIONS

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