CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.

light gray | dark gray | black

STANDARD MECHANICAL ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR
APD	AIR PRESSURE DROP
APPROX	APPROXIMATELY
ARCH	ARCHITECT(URAL)
AUTO	AUTOMATIC
BDD	BACKDRAFT DAMPER
BF	BOOSTER FAN
BI	BACKWARD INCLINED
BLDG	BUILDING
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CLG	CEILING OR COOLING
CONC	CONCRETE
CONN	CONNECT(ION)
CONT	CONTINUE(ED)(UATION)
CL	CENTERLINE
DDC	DIRECT DIGITAL CONTROL
DEFL	DEFLECTION
DIA	DIAMETER
DN	DOWN
DP	DEW POINT
DWG	DRAWING
EA	EXHAUST AIR
EAD	EXHAUST AIR DAMPER
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB
EFF	EFFICIENCY
EFT	ENTERING FLUID TEMPERATURE
ELEC	ELECTRIC(AL)
ELEV	ELEVATION
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
EX	EXTRACTOR
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
F	DEGREES FAHRENHEIT
FC	FORWARD CURVED
FD	FIRE DAMPER
FIG	FIGURE
FILT	FILTER
FLEX	FLEXIBLE
FPD	FLUID PRESSURE DROP
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET/FOOT
FTR	FINNED TUBE RADIATOR
FU	FIXTURE UNIT
FUT	FUTURE
FV	FACE VELOCITY
GA	GAGE/GAUGE
GAL	GALLON
GALV	GALVANIZED
GE	GREASE EXHAUST
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HEIGHT
HORIZ	HORIZONTAL
HP	HORSEPOWER
HTG	HEATING
ID	INSIDE(DIAMETER/DIMENSION)
IE	INVERT ELEVATION
IN	INCH(ES)
INSUL	INSULATION
ISOL	ISOLAT(OR)(ION)
KW	KILOWATT
KWH	KILOWATT HOUR
L	LENGTH
LAT	LEAVING AIR TEMP
LB	POUND
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LFT	LEAVING FLUID TEMPERATURE
LVG	LEAVING
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MA	MAKEUP AIR
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MTD	MOUNTED
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OAD	OUTSIDE AIR DAMPER
OC	ON CENTER DISTANCE
OSA	OUTSIDE AIR
OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
PC	PUMPED CONDENSATE
PH	PHASE
PI	PRESSURE INDEPENDENT
PSI	POUNDS PER SQUARE INCH
R (RAD)	RADIUS
RA	RETURN AIR
RAD	RETURN AIR DAMPER
REV	REVISION
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SCFM	STANDARD CUBIC FEET PER MINUTE
SD	SMOKE DAMPER
SECT	SECTION
SENS	SENSIBLE
SIM	SIMILAR
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SQ	SQUARE
SF	SQUARE FOOT(FEET)
SQ IN	SQUARE INCH(ES)
SS	STAINLESS STEEL
STL	STEEL
STRU	STRUCTUR(E)(AL)
SWP	SINGLE WALL PLENUM
TA	TRANSFER AIR
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TYP.	TYPICAL
V	VOLTS
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THROUGH ROOF
W	WIDTH
WG	WATER GAUGE
WPD	WATER PRESSURE DROP
WTD	WATER TEMPERATURE DROP
WTR	WATER TEMPERATURE RISE
W/	WITH
W/O	WITHOUT

NOTES:

1. THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.
2. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT ATTEMPT TO SHOW ALL REQUIRED OFFSETS, BENDS, OR ELBOWS NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. COORDINATE WITH OTHER TRADES AND PROVIDE NECESSARY FITTINGS FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

HVAC PIPING:

D	DRAIN (CONDENSATE/INDIRECT)
ICW	INDUSTRIAL COLD WATER (MAKE-UP)
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
RS	REFRIGERANT SUCTION
RL	REFRIGERANT LIQUID
GLS	GLYCOL SUPPLY
GLR	GLYCOL RETURN

CONTROL SYMBOLS:

	DAMPER WITH OPERATOR
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
DO	DIGITAL OUTPUT FROM DDC PANEL
DI	DIGITAL INPUT TO DDC PANEL
AO	ANALOG OUTPUT FROM DDC PANEL
AI	ANALOG INPUT TO DDC PANEL
DP	DIFFERENTIAL PRESSURE SWITCH
VP	VELOCITY PRESSURE TRANSMITTER
ES	DAMPER END SWITCH
AMS	AIR MONITORING STATION
VPP	VELOCITY PRESSURE PROBE
SMK	DUCT SMOKE DETECTOR
FM	WATER FLOW METER WITH ELECTRONIC TRANSMITTER
PB	PUSH BUTTON SWITCH
DP	DIFFERENTIAL PRESSURE SENSOR/TRANSMITTER
PT	PRESSURE TRANSMITTER
H	ELECTRONIC HUMIDITY TRANSMITTER
HL	DUCT MOUNTED HIGH LIMIT HUMIDISTAT
T	ELECTRONIC TEMPERATURE SENSOR
FS	FLOW SWITCH
T	ELECTRONIC SENSOR WITH AVERAGING
SP	DUCT STATIC PRESSURE SENSOR/TRANSMITTER
CO_2	CARBON DIOXIDE SENSOR

MISCELLANEOUS SYMBOLS:

A	ACCESS PANEL	K	CAP EXISTING / CAP FOR FUTURE
C	CONNECT TO EXISTING	R	REPLACE
D	ABANDON IN PLACE	X	REMOVE EXISTING
E	EXISTING TO REMAIN	1	KEY NOTE
RE	RELOCATE EXISTING		

CALL OUT SYMBOLS

WALL MOUNTED
PENDANT MOUNTED

T	TEMPERATURE	CO	CARBON MONOXIDE
H	HUMIDITY	CO_2	CARBON DIOXIDE
OCC	OCCUPANCY	NOX	NITROGEN OXIDE

ROOM SENSORS

DUCT LEGEND:

CFM / TYPE — FLOW DIRECTION (NONE SHOWN IF 4-WAY)

RETURN EXHAUST SUPPLY

SEE SPEC FOR TYPE
SEE SCHEDULE FOR SIZE

TYPE REFERENCE
H = 6" BELOW CEILING
L = 6" ABOVE FLOOR
F = FLOOR
S = SLOT DIFFUSER
C = CEILING
T = DOOR TRANSFER

CEILING DIFFUSERS & GRILLES: SUPPLY AIR, RETURN AIR, EXHAUST AIR, OUTSIDE AIR

SIDEWALL, SLOT & FLOOR GRILLES

DUCT SECTIONS: RETURN OR EXHAUST AIR FLOW; SUPPLY OR OUTSIDE AIR FLOW

DAMPERS: FSD, FD, SD; COMBINATION FIRE/SMOKE; SMOKE; FIRE; AUTOMATIC VOLUME

UC 1/2" UNDERCUT DOOR

MEDIUM PRESSURE DUCTWORK

CONICAL TEE, LOW LOSS, LATERAL TEE, CONICAL LATERAL

BRANCH FITTINGS

R=1-1/2D — ELBOW; Y-BRANCH

R=.2D — BELL MOUTH (D, R)

L=D1-D2 — REDUCER (L, D1, D2)

MISC. VALVES & COCKS:

	SHUT-OFF VALVE
	GLOBE VALVE
S	SHUT-OFF VALVE W/ TAMPER SWITCH
	TRIPLE DUTY VALVE
	CHECK VALVE
	2-WAY PRESSURE INDEPENDENT CONTROL VALVE (UNLESS INDICATED OTHERWISE)
BV	2-WAY BUTTERFLY CONTROL VALVE
	3-WAY CONTROL VALVE
	BALANCING VALVE
FC	FLOW CONTROL VALVE
	PRESSURE REDUCING VALVE
MAV AAV	AIR VENT (MANUAL/AUTOMATIC)
	RELIEF VALVE
	STRAINER
	STRAINER W/ BLOWDOWN
DV	DRAIN VALVE
HB	HOSE BIBB
	PRESSURE GAUGE
	PRESSURE/TEMPERATURE TEST PLUG
	THERMOMETER
F	FLOW SWITCH
WFM	WATER FLOW METER

STANDARD CONTROL SYSTEM LEGEND

POINT TYPE

AI	ANALOG INPUT
AO	ANALOG OUTPUT
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
BV	BINARY VARIABLE
AV	ANALOG VARIABLE

ALARM TRIGGERS

HL	HIGH LEVEL/LIMIT
LL	LOW LEVEL/LIMIT
S	STATUS
SP	OUT OF SETPOINT

ALARM TYPE

E	EMAIL
T	TEXT
W	WORKSTATION

EQUIPMENT LEGEND:

EQUIPMENT

EQUIPMENT TYPE
AREA OF AIRPORT
ROOM
EQUIPMENT NUMBER

AHU-X-Y-ZZ

AREA OF AIRPORT

A	CONCOURSE A
B	CONCOURSE B
C	CONCOURSE C
D	CONCOURSE D
E	CONCOURSE E
T	TERMINAL
RCC	RENTAL CAR
P3	PARKING GARAGE 3

LEVEL

0	TUNNEL LEVEL
1	DEPLANING LEVEL
2	ENPLANING LEVEL
3	MEZZANINE LEVEL/ROOF
4	PENTHOUSE/ROOF
5	ROOF

DEMO, NEW, AND EXISTING WORK:

REMOVE EXISTING DUCT | EXISTING DUCT WORK | NEW DUCT WORK

REMOVE EXISTING PIPING | EXISTING PIPING | NEW PIPING

NEW EQUIPMENT CLEARANCES

MISC. FITTINGS & SYMBOLS:

	DIRECTION OF FLOW
	DIRECTION OF SLOPE
	PIPE SLEEVE
	REDUCER
	ANCHOR
	ELBOW (90°)
	ELBOW (45°)
	TEE
	CROSS
	PIPING CONNECTIONS
	JOINT OR COUPLING POINT
	UNION
	FLANGED CONNECTION
	CAP
	PLUG OR BLIND FLANGE
	RISER
	ELBOW UP
	ELBOW DOWN
	TEE UP
	TEE DOWN
	HORIZONTAL TEE
	FLEXIBLE CONNECTION
MC	MECHANICAL COUPLING

DRAWING SCALE IS REDUCED 50% WHEN SHEET SIZE IS 11" x 17". 0 1" 1/4" 1/2" 2" GRAPHIC SCALE FOR REFERENCE ONLY

NO.	DATE	BY	REVISIONS	APP

NO.	DATE	BY	REVISIONS	APP

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REGISTERED PROFESSIONAL ENGINEER 76752PE OREGON MAR. 08, 2005 NED M. GREENE
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PORTLAND INTERNATIONAL AIRPORT
TERMINAL RESTROOM REHABILITATION 2026
SYMBOLS, LEGENDS, & ABBREVIATIONS - MECHANICAL

SUBMITTED BY	BRIAN FRANCIS
DESIGNED BY	M. GIOVAGNOLI
DRAWN BY	S. CARTER
CHECKED BY	M. BRUNE
DATE	JULY 2026
SHEET NO.	60
TYPE	CD
DRAWING NO.	PDX 2026-510
DISC. SHT. NO.	M0.01