

	SUPPLY AIR DIFFUSER		ABOVE FINISH FLOOR
	RETURN AIR GRILLE		AIR HANDLING UNIT
	EXHAUST AIR GRILLE		BOTTOM OF DUCT
	PERFORATED RETURN AIR PANEL		BRITISH HORSEPOWER
	DIRECTIONAL AIR FLOW		BRITISH THERMAL UNITS
	MANUAL VOLUME DAMPER		CUBIC FEET PER MINUTE
	SUPPLY AIR OR OUTSIDE AIR DUCT UP & DOWN		CONNECTION
	RETURN AIR DUCT UP & DOWN		CONTINUATION
	EXHAUST AIR DUCT UP & DOWN		DOMESTIC COLD WATER
	SUPPLY AIR OR OUTSIDE AIR DUCT UP & DOWN		DRY BULB
	RETURN AIR DUCT UP & DOWN		DIAMETER
	EXHAUST AIR DUCT UP & DOWN		DISTRIBUTION
	SUPPLY AIR OR OUTSIDE AIR DUCT UP & DOWN		EXHAUST AIR
	RETURN AIR DUCT UP & DOWN		ENTERING DRY BULB TEMPERATURE
	EXHAUST AIR DUCT UP & DOWN		ENTERING WET BULB TEMPERATURE
	(E) EXISTING		FINISH FLOOR
	(N) NEW		FIXTURE
	(D) DEMOLISH		FEET PER MINUTE
	(R) REPLACE		FEET PER SECOND
	CONNECT TO EXISTING		FEET / FOOT
	① AC-4 THERMOSTAT OR TEMP. SENSOR		GAUGE
	NOTE		GALLONS PER MINUTE
	EQUIPMENT DESIGNATOR		HEIGHT
	BALL VALVE		HORSEPOWER
	GATE VALVE		INSIDE DIAMETER
	CHECK VALVE		INCHES
	BALANCING VALVE		LENGTH
	THERMOMETER		POUNDS
	DIRECTION OF FLOW		LEAVING DRY BULB
	PUMP		LEAVING WET BULB
	STRAINER		LEAVING WATER TEMPERATURE
	PRESSURE GAUGE		MAXIMUM
	PETE'S PLUG		THOUSANDS OF BTUs PER HOUR
	VACUUM BREAKER		MINIMUM
	DOUBLE CHECK ASSEMBLY		NOISE CRITERIA
	PRESSURE REDUCING VALVE		NORMALLY CLOSED
	UNION		NOT IN MECHANICAL
	2-WAY CONTROL VALVE		NUMBER
	3-WAY CONTROL VALVE		NORMALLY OPEN
	CAP		OUTSIDE AIR
	SMOKE DETECTOR		OUTSIDE AIR
	MOTORIZED DAMPER		PERSON
	FIRE DAMPER		POUNDS PER SQUARE INCH
	FIRE / SMOKE DAMPER		PRESSURE / TEMPERATURE
	SMOKE DAMPER		RETURN AIR
	PIPE SLOPE DIRECTION		RELIEF AIR
	CO2 SENSOR		RECTANGULAR
	DIFFERENTIAL PRESSURE TRANSMITTER		REQUIRED
	BACKDRAFT DAMPER		SUPPLY AIR
	MOTORIZED DAMPER		STATIC PRESSURE
			SQUARE
			TEMPERATURE
			TYPICAL
			VARIABLE AIR VOLUME
			WIDTH
			WET BULB
			WATER PRESSURE DROP
			DIAMETER
		_____ (E) EXISTING	
		----- (D) DEMOLISH	
		_____ NEW WORK	
		— G — (G) NATURAL GAS	
		— CD — (CD) CONDENSATE DRAIN	
		— RF — (RF) TWO OR THREE REFRIGERANT LINES	
		— HWS — EXISTING HOT WATER SUPPLY	
		— HWR — EXISTING HOT WATER RETURN	
		— HWS — NEW HOT WATER SUPPLY	
		— HWR — NEW HOT WATER RETURN	
			EQUIPMENT MAINTENANCE CLEARANCE AND ACCESS

DOUBLE LINE	SINGLE LINE	NAME
		CONCENTRIC TRANSITION
		SQUARE TO ROUND TRANSITION
		FLEXIBLE DUCT 4 FT. MAX.
		MITER TEE
		MITERED OFFSET
		SMOOTH RADIUS OFFSET NO VANES R/W = 1.0
		SMOOTH RADIUS OFFSET NO VANES, R/W = 1.0
		SQUARE ELBOW
		RADIUS ELBOW
		TAKE OFF
		SPIN-IN TAKE OFF
		ROUND OR RECTANGULAR DUCT WITH CONICAL FITTING
		DUCT CAP
		SHEET METAL DUCTWORK. SIZE AS SHOWN. FIRST DIMENSION IS SIDE SEEN.
		INTERNALLY LINED DUCTWORK. DUCT SIZES ON PLANS SHOW NET INSIDE DUCT DIMENSIONS.
		DUCT CROSSING
		MITER TEE
		90 DEG TAKE OFF WITH SPLITTER DAMPER
		BELLMOUTH FITTING
		45 DEGREES LATERAL FITTING

- C. THE DRAWINGS ARE DIAGRAMMATIC. PROVIDE ALL MATERIAL (NEW AND UNDAMAGED) AND LABOR FOR A COMPLETE AND OPERABLE SYSTEM. VERIFY ALL BUILDING MEASUREMENTS, DIMENSIONS AND EQUIPMENT LOCATIONS BEFORE PROCEEDING WITH ANY OF THE WORK.
- B. REFER TO THE MECHANICAL SPECIFICATIONS FOR MATERIALS, EQUIPMENT, AND ADDITIONAL CONSTRUCTION INSTRUCTIONS NOT COVERED BY THESE PLANS.
- C. ALL INSTALLATIONS SHALL COMPLY WITH APPLICABLE FEDERAL AND STATE CODES INCLUDING, 2014 OREGON STRUCTURAL SPECIALTY CODE (OSSC) INCLUDING APPLICABLE FOR OREGON, 2014 OREGON MECHANICAL SPECIALTY CODE (OMSC), 2014 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEECC), AND NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), WHERE TWO CODES DIFFER THE MORE STRICT OF THE TWO SHALL BE FOLLOWED.
- D. OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED BY THE GOVERNING AGENCIES HAVING JURISDICTION. SUBMIT ALL CERTIFICATES PRIOR TO ACCEPTANCE.
- E. COORDINATE WITH OTHER CRAFTS AS REQUIRED TO COMPLETE WORK IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.
- F. PROVIDE OWNER INSTRUCTION BY QUALIFIED PERSONNEL ON EQUIPMENT AND SYSTEMS AT OWNER'S REQUEST.
- G. AIR BALANCE DIFFUSERS AND GRILLES TO THE CFM INDICATED ON FLOOR PLANS.
- H. PROVIDE MANUAL BALANCING DAMPERS ON BRANCH DUCTS SERVING DIFFUSERS AND GRILLES.
- I. PROVIDE DIFFUSER, REGISTERS, AND GRILLES OF SIZE AND TYPE INDICATED.
- J. INSULATE SUPPLY AIR, OUTSIDE AIR AND RETURN AIR DUCTWORK OR INTERNALLY INSULATE SUPPLY AIR AND RETURN AIR DUCTWORK AS SHOWN ON PLANS AND PER MECHANICAL SPECIFICATIONS.
- K. ALL DUCTWORK SHALL BE GALVANIZED STEEL, UNLESS OTHERWISE INDICATED, CONFORMING TO LATEST SMACNA, ASHRAE, OMSC, NFPA, AND UL STANDARDS.
- L. MANUFACTURERS AND MODEL NUMBERS LISTED IN THE EQUIPMENT SCHEDULES ARE THE BASIS OF DESIGN.
- M. CUT WALLS FOR PREFERRED EQUIPMENT, DUCT OR PIPE INSTALLATION, FILL HOLES WHICH ARE OUT OVERSIZED FOR A TIGHT FIT AROUND OBJECTS PASSING THROUGH. PATCH AND SEAL FINISHES TO MATCH NEW OR EXISTING FINISHES.
- N. INSTALL LABELS ON ALL MECHANICAL EQUIPMENT.
- O. CONTROLS AND WIRING SHALL MEET ALL ELECTRICAL REQUIREMENTS OF APPLICABLE ELECTRICAL CODES AND REQUIREMENTS OF OWNER, BUILDING OFFICIALS AND EQUIPMENT SUPPLIERS OF EQUIPMENT INSTALLED ON PROJECT.
- P. ELECTRIC MOTORS SHALL HAVE BUILT-IN THERMAL OVERLOAD PROTECTION OR BE PROTECTED EXTERNALLY WITH SEPARATE THERMAL OVERLOAD DEVICES, WITH LOW-VOLTAGE RELEASE OR LOCK OUT AS REQUIRED.
- Q. ALL NEW EQUIPMENT, PIPING, CONDUIT, AND DUCTWORK SHALL BE INSTALLED FOR CURRENT SEISMIC CODE.
- R. PROVIDE LOW LEAK AUTOMATIC DAMPERS ON OUTSIDE AIR, EXHAUST AIR AND RELIEF AIR CONTROL DAMPERS WHERE THESE ARE INDICATED.

A. ALL EXISTING/DEMO INFORMATION ON DRAWINGS IS BASED OFF RECORD DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EQUIPMENT, DUCTWORK, PIPING, AND ASSOCIATED SIZE AND LOCATIONS ON SITE PRIOR TO THE NOTED DEMOLITION WORK.

B. REMOVE ALL CONTROL DEVICES AND CONTROL CONDUITS WIRES WHERE EXPOSED BELOW OR IN THE CEILING PLENUM ABOVE IN THE REMODELED AREA REQUIRING NEW CONTROLS.

[illegible]

- [1] PROVIDE NECK SIZE AS SHOWN ON PLANS.
- [2] PROVIDE BLADES PARALLEL TO THE LONG DIMENSION AT SIDEWALL GRILLES.
- [3] PROVIDE BORDER FOR SURFACE MOUNT OR TILE CEILING AS REQUIRED BY CEILINGS.
- [4] NOT USED.
- [5] PROVIDE BLOW CONFIGURATION AS SHOWN ON PLANS. THE INDICATED THROW DISTANCE IS FOR 4 WAY BLOW ONLY

