

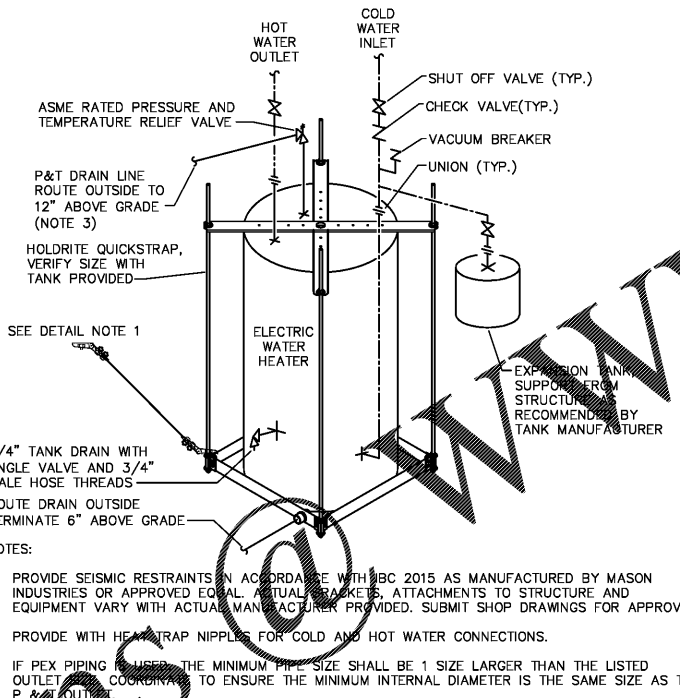
NOTES:

- PROVIDE ALL MATERIALS AND LABOR NECESSARY FOR COMPLETE AND PROPERLY FUNCTIONING PLUMBING SYSTEMS.
- WORK SHALL CONFORM TO OR MEET THE REQUIREMENTS OF THE MOST CURRENT EDITION OF:
 - INTERNATIONAL PLUMBING CODE -- 2015
 - ALL FEDERAL, STATE AND LOCAL CODES AND ORDINANCES WHICH APPLY TO THIS WORK.
- DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO BE SCALED FOR DIMENSIONS.
- ALL MATERIALS SHALL MEET THE REQUIREMENTS OF UL WHERE UL STANDARDS ARE ESTABLISHED FOR THOSE ITEMS. ALL ITEMS SHALL BE CLASSIFIED BY UL AS SUITABLE FOR THE PURPOSE USED.
- ALL ITEMS SHALL BE NEW AND ALL MATERIALS/EQUIPMENT/DEVICES SHALL BE CURRENT PRODUCTS BY MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH PRODUCTS.
- COORDINATE LOCATION OF PLUMBING WORK WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
- COORDINATE AND OBTAIN PERMITS AND INSPECTIONS FROM AUTHORITY HAVING JURISDICTION.
- PROVIDE OWNER WITH CERTIFICATE OF FINAL INSPECTION AND ACCEPTANCE FROM AUTHORITY HAVING JURISDICTION.
- WHERE PIPES PENETRATE FIRE RATED WALLS, FLOORS OR CEILING, SEAL OPENING AROUND PIPES WITH U.L. LISTED FIRE STOPPING MATERIAL TO MAINTAIN THE FIRE RATING OF THE WALL, FLOOR OR CEILING IN ACCORDANCE WITH U.L. LISTED DESIGN. SUBMIT U.L. DESIGN FOR FIRE RATED PENETRATIONS SEALS TO ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO START OF WORK.
- CLEANOUTS SHALL BE LINE SIZE UNLESS NOTED OTHERWISE.
- FLOOR DRAINS SHALL BE LINE SIZE UNLESS NOTED OTHERWISE.
- VALVES SHALL BE LINE SIZE UNLESS NOTED OTHERWISE.
- ABOVE GROUND WATER PIPING SHALL BE TYPE L COPPER. UNDERGROUND WATER PIPING SHALL BE TYPE K COPPER.
- PROVIDE SEISMIC RESTRAINTS IN ACCORDANCE WITH IBC 2015. SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL.
- WASTE, DRAIN, AND VENT PIPING BELOW GRADE SHALL BE STANDARD WEIGHT, TYPE 1, PVC. WASTE, DRAIN, AND VENT PIPING ABOVE GRADE SHALL BE SERVICE WEIGHT, TAR-COATED, HUBLESS, CAST IRON SOIL PIPE WITH HUBLESS FITTINGS. PROVIDE WITH ASTM C564 NEOPRENE SEALING SLEEVE AND STAINLESS STEEL CLAMP ASSEMBLY.
- COLD WATER PIPING SHALL BE INSULATED WITH 1"-THICK GLASS FIBER ('K' OF 0.24 AT 75F) WITH VAPOR BARRIER.
- HOT WATER PIPING SHALL BE INSULATED WITH GLASS FIBER ('K' OF 0.24 AT 75F) WITHOUT VAPOR BARRIER. PIPE INSULATION SHALL BE 1-1/2"-THICK FOR PIPES LESS THAN OR EQUAL TO 1 1/2". PIPE INSULATION SHALL BE 2"-THICK FOR PIPES GREATER THAN 1 1/2".
- ALL BUILDING PENETRATIONS SHALL BE COORDINATED WITH ARCHITECT. SEE ARCHITECTURAL DRAWINGS FOR PENETRATION DETAILS.
- VERIFY ALL EXISTING PIPE SIZES. NOTIFY ENGINEER IF EXISTING AS BUILT PIPE SIZES VARY.
- COLD AND HOT WATER PIPING WITHIN 8 FEET OF WATER HEATER SHALL BE INSULATED WITH 1/2"-THICK CLOSED CELL EPDM ELASTOMERIC TUBE INSULATION AS MANUFACTURED BY AEROCCEL.
- COORDINATE WITH GENERAL CONTRACTOR TO ENSURE FLOORS ARE SLOPED DOWN TO FLOOR DRAINS.
- POTABLE WATER PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE 2015.
- ALL MATERIALS LOCATED WITHIN THE RETURN AIR PLENUM SHALL BE PLENUM RATED.
- ABOVE GRADE GAS PIPING SHALL BE STANDARD WEIGHT (SCHEDULE 40), BUTT WELD, BLACK STEEL, ENDS THREADED AND COMPLY WITH ASTM A53. FITTING SHALL BE 150 POUND, BLACK MALLEABLE IRON, THREADED JOINT AND COMPLY WITH ASTM A47/ANSI B16.3.
- PLUMBING CONTRACTOR TO PROVIDE AND INSTALL SEISMIC GAS PIPING ROOF SUPPORTS BY KINETICS NOISE CONTROL, MODEL KSPS, OR APPROVED EQUAL. SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW. SHOP DRAWINGS WILL INCLUDE SUPPORT SUBMITTALS AND DRAWINGS SHOWING LOCATIONS AND INSTALLATION REQUIREMENTS.
- PLUMBING CONTRACTOR TO PROVIDE AND INSTALL GAS PIPING ROOF SUPPORTS BY RTS, MODEL RTSPUES, FASTER, FASTER, FASTER SUPPORT INTERVAL TABLE ON DRAWING P001 FOR SPACING REQUIREMENTS.

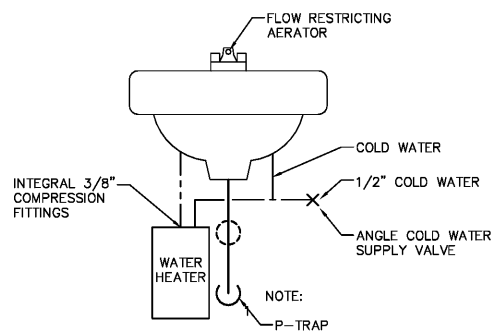
GAS PIPING SUPPORT INTERVALS			
STEEL PIPE, NOMINAL SIZE OF PIPE (INCHES)	SPACING OF SUPPORTS (FEET)	NOMINAL SIZE OF TUBING (SMOOTH-WALL) (INCH O.D.)	SPACING OF SUPPORTS (FEET)
1/2	6	1/2	4
3/4 OR 1	8	5/8 OR 3/4	6
1-1/4 OR LARGER (HORIZONTAL)	10	7/8 OR 1 (HORIZONTAL)	8
1-1/4 OR LARGER (VERTICAL)	EVERY FLOOR	1 OR LARGER (VERTICAL)	EVERY FLOOR

WATER HEATER SCHEDULE (ELECTRIC)				
MARK	WH-1	WH-2	WH-3	WH-4
STORAGE (GAL)	20	20	INSTANTANEOUS	INSTANTANEOUS
RECOVERY (GPH @ ΔT)	17 @ 60F	17 @ 60F	0.5 GPM @ 65F	0.5 GPM @ 65F
TOTAL KW	2.5	2.5	1 @ 4.1	1 @ 7.5
# OF ELEMENTS	1	1	1	1
KW OF EACH ELEMENT	2.5	2.5	4.1	7.5
ELECTRICAL V/φ/Hz	120/1/60	120/1/60	208/1/60	208-240/1/60
MANUFACTURER	A.O. SMITH	A.O. SMITH	EEMAX	EEMAX
MODEL NO.	EJCT-20	EJCT-20	SP4208	SP75
ENERGY FACTOR	N/A	N/A	N/A	N/A
NOTES:	1,2	1,2	4	4

NOTES:
 1. MOUNT UNIT ABOVE DROP CEILING. PROVIDE SUPPORTS AS REQUIRED.
 2. PROVIDE SEISMIC RESTRAINTS.
 3. ELECTRIC HEAT ELEMENTS SHALL NOT OPERATE SIMULTANEOUSLY.
 4. COORDINATE ELECTRICAL CONNECTION WITH ELECTRICAL CONTRACTOR.



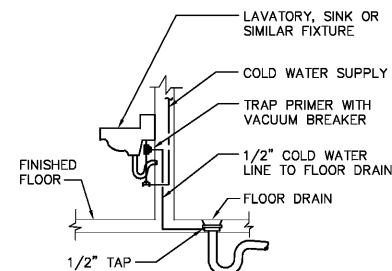
SUSPENDED ELECTRIC WATER HEATER DETAIL (WH-1 & 2)
SCALE: NONE



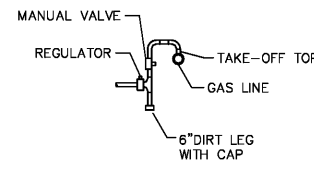
ELECTRIC TANKLESS WATER HEATER DETAIL (WH-2&3)
SCALE: NONE

PLUMBING FIXTURE SCHEDULE					
MARK (NOTES)	DESCRIPTION	CONNECTIONS			
		CW	HW	WASTE	VENT
P-1	WATER CLOSET - FLOOR MOUNTED - FLUSH VALVE (ADA COMPLIANT) SLOAN ST-2029, ELONGATED BOWL, WHITE, VITREOUS CHINA. PROVIDE WITH SLOAN 186-SFSM SENSOR FLUSH VALVE WITH VANDAL-RESISTANT STOP CAP AND SWEAT SOLDER ADAPTER KIT WITH CAST WALL FLANGE WITH SET SCREW. BEMIS MODEL 1955C OPEN FRONT SEAT LESS COVER.	1"	-	4"	2"
P-2 (5)	WALL HUNG URINAL - EXPOSED FLUSH VALVE (ADA COMPLIANT) SLOAN SU-1009. PROVIDE WITH SLOAN 186-SFSM SENSOR FLUSH VALVE WITH VANDAL-RESISTANT STOP CAP. STRAINER: JAY R. SMITH JS04-1819 URINAL WALL ACCESS CLEANOUT. WATTS CA321 CARRIER. MOUNT RIM NO HIGHER THAN 17" A.F.F.	3/4"	-	2"	2"
P-3 (1,2)	COUNTERTOP LAVATORY (ADA COMPLIANT): SLOAN, MODEL SLOAN SS-3002(CHINA), WHITE; DELTA 5811P022 SENSOR FAUCET.	1/2"	1/2"	1 1/2"	1 1/4"
P-4	BI-LEVEL WATER COOLER (ADA COMPLIANT): ELKAY MODEL EZSTL-8C. PROVIDE HEAVY DUTY WALL HANGER AND SUPPLY STOP.	1/2"	-	1 1/2"	1 1/2"
P-5 (3)	COUNTERTOP SINK: ELKAY, MODEL LR-2219 SINGLE COMPARTMENT, 18 GAUGE STAINLESS STEEL. LK-35 STRAINER; DELTA 27C29 HI-ARC TWO HANDLE FAUCET.	1/2"	1/2"	1 1/2"	1 1/2"
P-6 (3)	JANITORS SINK: FIAT, MODEL FL-1, ONE PIECE PLASTIC POLYMER TUB AND BAKED ENAMEL LEGS WITH LEVEL FEET. PROVIDE BRASS PLATED FAUCET WITH SWING OUT AND ANGLE HOSE END. DELTA 27C4344 FAUCET. 4" CENTERS.	1/2"	1/2"	1 1/2"	1 1/4"
IMB	ICE MAKER BRASS WATER-TITE, WITH 1/2" TURN ARRESTER VALVES.	1/2"	-	-	-
FD	FLOOR DRAIN: WATTS MODEL FD-100A WITH ROUND NICKEL BRONZE POLISHED TOP AND DEEP SEALED P-TRAP. PROVIDE 1/2" TRAP PRIMER TAP AS SHOWN ON DRAWINGS.	1/2"	-	LINE SIZE	-
FCO	CAST IRON FLOOR CLEANOUT: WATTS, MODEL CO-200R	-	-	VARIES	-
GCO	CAST IRON CLEANOUT: WATTS MODEL CO-200-RX-4 WITH 12"x12"x6" CONCRETE COLLAR	-	-	VARIES	-

NOTES:
 1. PROVIDE "TRUEBRO" INC, LAV GUARD 2 INSULATION KITS FOR ADA COMPLIANCE.
 2. PROVIDE 17 GAUGE TUBULAR BRASS P-TRAP AND OFFSET TAIL PIECE, ANGLED STOP VALVES WITH RIGID TUBE RISERS AND ESCUTCHEONS. PROVIDE AS MANUFACTURED BY MCGUIRE.
 3. PROVIDE 17 GAUGE TUBULAR BRASS P-TRAP, TAILPIECE, ANGLED STOP VALVES WITH RIGID TUBE RISERS AND ESCUTCHEONS. PROVIDE AS MANUFACTURED BY MCGUIRE.
 4. PROVIDE ANGLED STOP VALVE AND RIGID TUBE RISER.
 #PROVIDE PVC P-TRAP, BRANCH TAILPIECE FOR DISHWASHER CONNECTION, COLD WATER ANGLED STOP VALVE PROVIDE PVC P-TRAP, BRANCH TAILPIECE FOR DISHWASHER CONNECTION, COLD WATER ANGLED STOP VALVE, HOT WATER DUAL OUTLET SHUTOFF VALVE (BRASSCRAFT MODEL KTR1701DV) WITH RIGID TUBE RISERS AND ESCUTCHEONS. COORDINATE EXACT SIZE OF BRANCH TAILPIECE WITH ACTUAL DISHWASHER PROVIDED.



TRAP PRIMER PIPING DETAIL
SCALE: NONE



TYPICAL CONNECTION DETAIL
SCALE: NONE

LEGEND

- WASTE (W)
- - - - VENT (V)
- - - - COLD WATER (CW)
- - - - HOT WATER (HW)
- ⊗ GATE VALVE
- ≡ UNION
- + EXTERIOR HOSE BIBB
- ⊕ WATER HAMMER ARRESTOR (LETTER INDICATES PRESSURE RATING)
- o o o P-TRAP
- DN. DOWN
- CO FLOOR CLEAN OUT
- GCO GRADE CLEAN OUT
- TRAP PRIMER
- TYP. TYPICAL
- VTR VENT THRU ROOF
- WCO WALL CLEAN OUT
- WH WATER HEATER
- Ⓡ REGULATOR

