

1 PLUMBING NOTES

- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF ALL PLUMBING FIXTURES.
- PLUMBING PIPING SHALL NOT BE INSTALLED IN ELECTRICAL ROOMS, CLOSETS, TELEPHONE ROOMS, OR ELEVATOR EQUIPMENT ROOMS EXCEPT PIPING SERVING THAT SPECIFIC ROOM.
- HOT AND COLD WATER PIPING DOWN STREAM OF THE SERVICE ENTRY VALVE AND HRR AND HPS PIPING SHALL BE CPVC (CTS) PER ASTM-D-2846 STANDARDS WITH SOLVENT WELD JOINTS AND CPVC (CTS) FITTINGS (SUITABLE FOR WORKING PRESSURES OF 100 PSIG AT 180 DEGREES F.)
- DOMESTIC WATER SHUT-OFF VALVES SHALL BE TWO-PIECE, FULL-PORT, BRONZE BODY, BRASS BALL TYPE FOR SIZES 2" AND SMALLER. VALVES 2-1/2" AND LARGER SHALL BE BUTTERFLY VALVES, LUG-PATTERN, DUCTILE IRON BODY, AND ALUMINUM-BRONZE DISC. PROVIDE 10-POSITION LEVER HANDLE FOR VALVES 2-1/2" TO 6", AND GEAR-OPERATED TYPE FOR 8" AND LARGER.
- SANITARY WASTE & VENT, AND STORM DRAIN PIPING ABOVE GROUND SHALL SCHEDULE 40 DWV PVC WITH SOLVENT WELD JOINTS WHERE ACCEPTABLE BY LOCAL AUTHORITY HAVING JURISDICTION. WHERE PVC DRAINAGE PIPING IS NOT ACCEPTABLE, PIPE SHALL BE NO-HUB CAST-IRON WITH NEOPRENE BANDED JOINTS WITH STAINLESS STEEL CLAMPS. PROVIDE HEAVY-DUTY CLAMPS AT BASE OF STACKS AND AT VERTICAL TO HORIZONTAL OFFSETS ON ALL SANITARY WASTE, AND STORM DRAINAGE SYSTEMS. PVC PIPING SHALL NOT BE LOCATED IN RETURN AIR PLENUM SPACES.
- ALL PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE LATEST CODE OF MAINE REGULATIONS CODE AND ALL APPLICABLE LOCAL CODES AND ORDINANCES.
- ALL CONDENSATE DRAINAGE, SANITARY, RAINWATER, AND WATER PIPING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL PLUMBING EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL WATER PIPING SHALL BE ROUTED WITHIN CONDITIONED AREAS TO PREVENT FREEZING. WATER PIPING ROUTED ABOVE CEILING AND IN EXTERIOR WALLS SHALL BE ROUTED ON HEATED SIDE (UNDERSIDE) OF CEILING INSULATION, AND HEATED SIDE (INSIDE) OF WALL INSULATION.
- ALL P-TRAPS, CONDENSATE DRAINAGE PIPING, DOMESTIC WATER PIPING, RAINWATER PIPING, AND SANITARY PIPING INSTALLED IN AREAS SUBJECT TO FREEZING SHALL BE HEAT TRACED AND INSULATED.
- ALL PIPING PENETRATING CEILINGS AND WALLS BELOW CEILINGS SHALL BE INSTALLED WITH CHROME-PLATED ESCUTCHEONS AT THE PENETRATION. ALL PIPING PENETRATING EXTERIOR WALLS AND ROOFS SHALL BE FLASHED IN AN APPROVED MANNER AND SHALL BE PROTECTED AS REQUIRED BY LOCAL CODE AUTHORITY HAVING JURISDICTION.
- PROVIDE MANUFACTURED EXPANSION DEVICE OR FABRICATED EXPANSION LOOP ON ALL PIPING SYSTEMS CROSSING BUILDING EXPANSION JOINTS.
- ALL PLUMBING PIPING, EQUIPMENT, INSULATION, ETC., INSTALLED IN HVAC PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND COMBUSTIBILITY.
- PROVIDE A BASE CLEANOUT AT THE LOWEST LEVEL OF ALL SANITARY AND VENT STACKS.
- ALL PENETRATIONS OF RATED ASSEMBLIES SHALL BE FIRE STOPPED TO MAINTAIN THEIR RATING. FIRE STOP PRODUCTS SHALL BE AS THOSE MANUFACTURED BY HILTI, 3M, OR APPROVED EQUAL.
- TRAP PRIMERS SHALL BE PROVIDED ON ALL FLOOR DRAINS AND HUB DRAINS THAT DO NOT RECEIVE A CONTINUOUS DISCHARGE. TYPE "L" LAVATORY WASTE TRAP PRIMERS SHALL BE PROVIDED ON DRAINS IN PUBLIC RESTROOMS AND OTHER AREAS WITH DRAINS ADJACENT TO LAVATORIES. TYPE "A" TRAP PRIMERS SHALL BE PROVIDED IN ALL OTHER REQUIRED LOCATIONS.
- PROVIDE REDUCED PRESSURE BACKFLOW PREVENTERS AT ALL DOMESTIC WATER CONNECTIONS TO MECHANICAL EQUIPMENT, POOL AND IRRIGATION CONNECTIONS, KITCHEN, LAUNDRY AND VENDING EQUIPMENT CONNECTIONS.
- ALL PIPING ABOVE GRADE SHALL BE PROPERLY SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR CEILING STRUCTURE.
- SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER PRIOR TO ORDERING, PURCHASING, OR FABRICATING ANY PLUMBING EQUIPMENT. SHOP DRAWINGS SHALL INCLUDE: ALL EQUIPMENT SCHEDULED ON THE DRAWINGS; PLUMBING FIXTURES AND TRIM; WATER HEATERS AND ACCESSORIES; PIPE, VALVES, AND FITTINGS; SANITARY AND WATER RISER DIAGRAMS; INSULATION.
- CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES, INCLUDING ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL PLUMBING EQUIPMENT WITH THE ELECTRICAL DRAWINGS AND THE ELECTRICAL CONTRACTOR, AND SHALL FURNISH EQUIPMENT WIRED FOR THE VOLTAGES SHOWN THEREIN.
- REFER TO ALL CONSULTANT'S DOCUMENTS FOR EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITY SUPPLIES, DRAINS, FLOOR DRAINS, FLOOR SINKS, ETC.
- ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE OWNER TO SUIT HIS OPERATING CONDITIONS.
- ALL PLUMBING EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH DISCONNECT SWITCHES AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE (FUSED OR NON-FUSED) WITH ELECTRICAL DRAWINGS.
- ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE BY THE OWNER.
- PROVIDE SHOCK ABSORBERS SIZED PER PDI SPECIFICATIONS ON ALL DOMESTIC WATER LINES SERVING FLUSH VALVE FIXTURES, WASHING MACHINES SUPPLIES, PRV STATIONS AND OTHER INSTALLATIONS WITH QUICK CLOSING VALVES.

PLUMBING MATERIALS

- COLD AND HOT WATER PIPING ABOVE GRADE SHALL BE TYPE L HARD DRAWN COPPER TUBING CONFORMING TO ASTM B-88 WITH SWEAT JOINTS AND CAST OR WROUGHT FITTINGS. ALL JOINTS SHALL BE MADE WITH LEAD FREE SOLDER. CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE/TUBE AND FITTINGS MAY BE USED IF APPROVED BY LOCAL CODE OFFICIALS.
- SANITARY WASTE & VENT PIPING ABOVE GROUND SHALL BE SOLID CORE SCHEDULE 40 PVC-DWV WITH SOLVENT JOINTS. PVC PIPING SHALL NOT BE LOCATED IN RETURN AIR PLENUM SPACES. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.
- ALL ABOVE GRADE DOMESTIC WATER SHALL BE INSULATED EXCEPT AT HORIZONTAL CHASE BRANCH PIPING TO INDIVIDUAL PLUMBING FIXTURES AND ON VERTICAL RISERS WITHIN SEALED CHASES. ALL HOT WATER PIPING ABOVE GRADE SHALL BE INSULATED WITH 1 INCH NOMINAL THICKNESS PIPE INSULATION WITH VAPOR BARRIER JACKET. ALL COLD WATER PIPING ABOVE GRADE SHALL BE INSULATED WITH 1/2 INCH THICKNESS INSULATION ON PIPING 2" AND SMALLER. MATERIALS AS MANUFACTURED BY ARMSTRONG, CERTAINTED, KNAUF OR EQUAL.

2 PLUMBING LEGEND

| SYMBOL | ABBREVIATION | DESCRIPTION |
|---------|--------------|---------------------------------------|
| —AC— | AC | ABOVE CEILING |
| —AD— | AD | AREA DRAIN |
| —AF— | AF | ABOVE FLOOR |
| —AFF— | AFF | ABOVE FINISHED FLOOR |
| —AFG— | AFG | ABOVE FINISHED GRADE |
| —AP— | AP | ACCESS PANEL |
| —BC— | BC | BELOW COUNTER |
| —BF— | BF | BELOW FLOOR |
| —BIG— | BIG | BELOW GRADE |
| —BV— | BV | HOT WATER RETURN BALANCING VALVE |
| —FAV— | FAV | FRESH AIR AUXILIARY VENT |
| —CA— | CA | COMPRESSED AIR |
| —CD— | CD | CONDENSATE DRAIN |
| —CV— | CV | CHECK VALVE |
| —CW— | CW | COLD WATER PIPING |
| —CWV— | CWV | COMBINATION WASTE & VENT |
| —DN— | DN | PIPING TURNING DOWN |
| —ERD— | ERD | EMERGENCY ROOF DRAIN |
| —ERL— | ERL | EMERGENCY RAIN LEADER |
| —FL— | FL | FLOOR CLEANOUT |
| —FD— | FD | FLOOR DRAIN |
| —FS— | FS | FLOOR SINK |
| —G— | G | GAS PIPING |
| —GW— | GW | GREASE WASTE PIPING |
| —GV— | GV | GATEBALL VALVE |
| —HBNFH— | HBNFH | HOSE BIBB/NON-FREEZE HOSE BIBB |
| —H.C.— | H.C. | HANDICAPPED |
| —HD— | HD | HUB DRAIN |
| —HT— | HT | HEAT TRACED PIPING |
| —HW— | HW | HOT WATER PIPING |
| —HWR— | HWR | HOT WATER RETURN PIPING |
| —HZ— | HZ | HIGH ZONE (BOOSTED) COLD WATER |
| —LZ— | LZ | LOW ZONE COLD WATER (STREET PRESSURE) |
| —OH— | OH | OVER HEAD |
| —POC— | POC | POINT OF CONNECTION NEW TO EXISTING |
| —PD— | PD | PUMPED DISCHARGE |
| —P— | P | P-TRAP |
| —PRV— | PRV | PRESSURE REDUCING VALVE |
| —RD— | RD | ROOF DRAIN |
| —RBPB— | RBPB | REDUCED PRESSURE BACKFLOW PREVENTOR |
| —S— | S | SOIL WASTE PIPING |
| —SA— | SA | SHOCK ABSORBER |
| —ST— | ST | STORM DRAINAGE PIPING |
| —TP— | TP | TRAP PRIMER |
| —U— | U | UNION |
| —UP— | UP | PIPING TURNING UP |
| —V— | V | VENT PIPING |
| —VTR— | VTR | VENT THRU ROOF |
| —WCO— | WCO | WALL CLEANOUT |
| —WHNFH— | WHNFH | WALL HYDRANT/NON-FREEZE WALL HYDRANT |
| —YCO— | YCO | YARD CLEANOUT |

4 PLUMBING FIXTURE SPECIFICATIONS AND CONNECTION SCHEDULE

| MARK | FIXTURE | TYPE | MANUFACTURER | MODEL NO. | MATERIAL | STYLE | FAUCET/VALVE | | | | DRAIN | | PIPE SIZES | | | | MOUNTING | REMARKS | |
|------|------------------|---------------------|----------------------|-------------------------------------|--------------------------|---------------|----------------------------------|-----------|----------------------|---------|--------------------|-----------------------------|-------------------------|------|------|------|--------------|--|---|
| | | | | | | | MANUFACT. MODEL NO. | GAL.FLUSH | HANDLES | CENTERS | TYPE | SIZE | WASTE | VENT | CW | HW | | | |
| P1 | BREAK ROOM SINK | TOP COUNTER MOUNTED | ELKAY "LUSTERTONE" | LRAD0312804 31" L X 22" W X 6" D | 18 GAUGE STAINLESS STEEL | ADA COMPLIANT | ELKAY LK1001CR WITH SIDE SPRAYER | - | SINGLE HANDLE FAUCET | - | CRUMB CUP STRAINER | 1-1/2" | MCQUIRE 175 WITH PWZ150 | 2" | 2" | 1/2" | 1/2" | TOP COUNTER MOUNTED | PROVIDE ELKAY LKAD35 DRAIN FITTING WITH STAINLESS STEEL BODY, STRAINER BASKET AND OFFSET TAIL PIECE. PROVIDE MCQUIRE P-TRAP WITH CAST BRASS NUTS AND CLEANOUT PLUG. PROVIDE TRUESRO PIPE INSULATION KIT. PROVIDE 1.5 GPM MAXIMUM AERATOR. SET WATER HEATER TEMP. AT 110 DEGREES F. MAXIMUM. INSTALLATION SHALL BE A.D.A. COMPLIANT. |
| P2 | ICE MAKER SUPPLY | - | GUY GRAY "WATERITTE" | LRAD0312804 31" L X 22" W X 6" D | 18 GAUGE STAINLESS STEEL | - | - | - | - | - | - | QUARTER TURN SHUT-OFF VALVE | - | - | 1/2" | - | WALL MOUNTED | MOUNT APPROXIMATELY 42" ABOVE FINISH FLOOR. MODEL NUMBER INCLUDES INTEGRAL SHOCK ARRESTOR. PROVIDE GUY GRAY MODEL FRIB124BSHA FIRE RATED ICE MAKER BOX WITH SHOCK ARRESTOR IN FIRE RATED WALL. | |

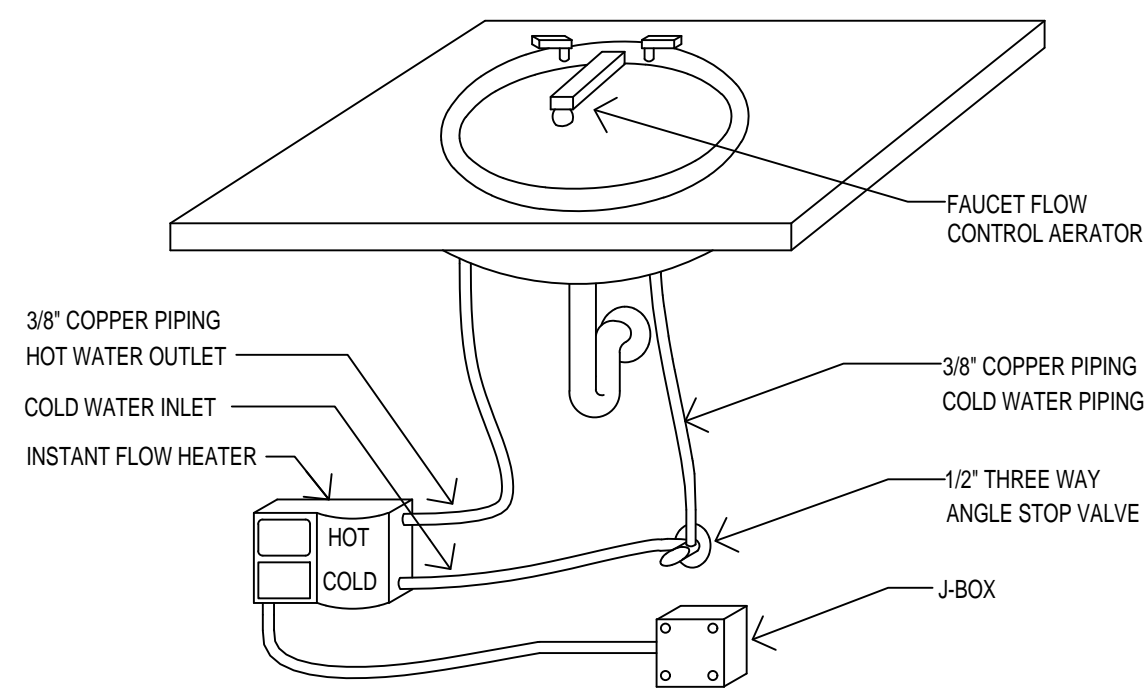
NOTES:
1. CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF FIXTURE DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY FIXTURES. INFORMATION ON ALTERNATE FIXTURES PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADDED/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT FIXTURE (OR THE ALTERNATE PACKAGE AS A WHOLE).

WATER HEATER SCHEDULE

| MARK | MODEL | STORAGE CAPACITY GALLONS | BTU INPUT | KW INPUT | AMPERAGE | FLUE SIZE | GPH REC 80 DEG RISE | TEMP OF WATER TO BE DEL. | ACCESSORIES |
|-------|--------------|--------------------------|-----------|----------|----------|-----------|---------------------|--------------------------|-------------|
| WHE-1 | EEMAX EX100T | 0 | --- | 10.0 | 36.0 | --- | --- | 110° | 2,3,4,5 |

NOTES:
1. ALL UNITS SHALL MEET ASHRAE 90-75 AND ALL LOCAL CODE REQUIREMENTS, AND SHALL BE AGA CERTIFIED.

- ACCESSORIES:
1. PROVIDE EXPANSION TANK.
2. PROVIDE DIELECTRIC FITTINGS ON WATER INLET & OUTLET CONNECTIONS.
3. PROVIDE BALL VALVES AND UNIONS ON WATER INLET AND OUTLET CONNECTIONS.
4. LOCATE WATER HEATER UNDER COUNTER.
5. MOUNT IN LOCATION THAT DOES NOT IMPEDE A.D.A. REQUIREMENTS.
WATER HEATER SELECTION BASED ON EEMAX; EQUALS INCLUDE CHRONOMITE.



1 INSTANTANEOUS UNDERCOUNTER WATER HEATER (SINGLE SINK)

SCALE: NTS

