

WATER HEATER SCHEDULE

Table with 8 columns: I.D. TAG, TYPE OF WATER HEATER, TANK CAPACITY (GALLONS), RECOVERY @ 56°F (GPM), POWER INPUT, ELEC. CHAR. (VOLTS/PHASE), BASIS OF DESIGN, REMARKS.

FIXTURE SCHEDULE

Table with 5 columns: DESCRIPTION, SANITARY/WASTE, VENT, CW, HW.

PUMP SCHEDULE

Table with 11 columns: I.D. TAG, FLUID, TYPE OF PUMP, FLOW (GPM), HEAD (FT), MAX. NPSHR (FT.), MAXIMUM RPM, MOTOR HP, VOLTS/PHASE, MINIMUM EFFICIENCY, BASIS OF DESIGN, REMARKS.

ABBREVIATIONS

Table mapping abbreviations to full names: A/C ABOVE CEILING, AD ACCESS DOOR, ADJ ADJUSTABLE, etc.

GENERAL NOTES

- 1. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE TENANT MECHANICAL SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, ACCESSORIES, OPTIONS AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES.

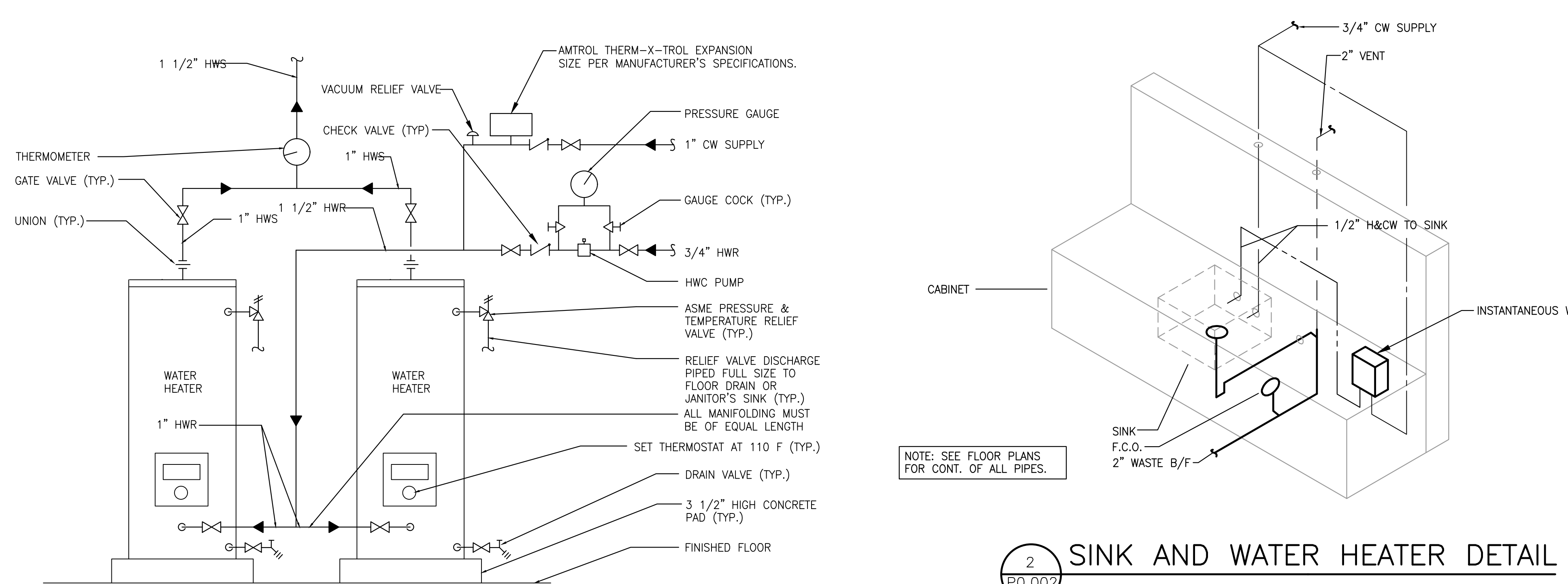
LEGEND table: --- EXISTING WORK, - - - NEW WORK, - - - WORK TO BE REMOVED, etc.

WATER HEATER DETAIL

PO.002 NO SCALE

SINK AND WATER HEATER DETAIL

PO.002 NO SCALE



- C. Pipe hangers selected for supporting horizontal insulated piping shall be sized to fit around the outside of the pipe insulation. Insulated piping shall be supported on galvanized shields. 1. Shields shall be as follows: a. Pipes 2" and smaller: 18 gauge x 12" long.

- C. All exposed piping, valves, stops, P-traps, etc. shall be chrome-plated. Also, all exposed piping penetrations through walls, floors or ceilings shall be provided with chrome-plated cast brass escutcheons. D. All P-traps shall be minimum 17-gauge brass.

- F. Fixtures on steel stud walls shall have a 1/4" x 4" wide steel backplate wired with 1/16" steel wire to the studs. Bolts not less than 3/8" shall secure the fixtures through the fixture hanger and the backplate. G. All mounting holes provided in fixtures shall be used for support.

3.0 EXECUTION

- 3.01 ARRANGEMENT A. Follow the general piping layout, arrangement, schematics and details. Provide all offsets, vents, drains and connections necessary to accomplish the installation.

1.02 INTENT

- A. It is the intent of this Section of the specifications to provide complete, operable, adjusted, clean plumbing fixtures as shown and specified, which are free of leaks, noise, air, vibration and waterflow fluctuations.

1.03 BASIS OF DESIGN

- A. The basis of design is as outlined for each fixture in the 2.0 PRODUCTS subsection. Any proposed substitutions shall be proven equal in all respects to the equipment specified as the basis of design.

1.04 ACCEPTABLE MANUFACTURERS

- A. Acceptable fixture manufacturers are American Standard, Eljer and Kohler provided that their units are equal in all respects for this specific project. Faucets and trim may be equal products as manufactured by Chicago, Delany, Zurn, T&S Bronze, Brass Works or Speakman.

2.0 PRODUCTS

2.01 WATER CLOSETS

- A. Provide solid plastic white toilet seats with each water closet, selected to match the water closet noted. Toilet seats shall be elongated style with open front and check hinge; Beneko or approved equal. B. Fixtures P-1 shall be elongated style, 15" high, 1.6 gallon flush, siphon jet, American Standard "Madera" #3451160, bottom outlet style with flush valve, bowl and supply stop. Flush valve shall be Sloan Model 52-B11 battery operated automatic flush. Fixtures P-1 shall be similar; 17" high handicapped style; American Standard "Madera" #3043102, except that they shall be mounted in accordance with the handicap code.

2.02 LAVATORIES

- C. Fixtures P-1A shall be American Standard "Afwall" #2257103, EL1.6 vitreous china, wall hung, siphon jet action, elongated closet bowl with 1 1/2" top spud complete with carriers selected to match the chase size indicated. Flush valves shall be Sloan "Royal" 111-ADA. Fixtures P-1AA shall be similar, except that they shall be mounted in accordance with the handicap code.

2.03 SINKS

- A. Fixtures P-2 shall be American Standard "Ovalyn" #0497-221, 21" x 17" vitreous china, undercounter, oval lavatory complete with front overflow and 1 1/4" drain. Fixtures shall include a deck mounted battery operated Sloan No. EAF-250 faucet with sensor, chrome-plated finish, aerator, chrome-plated tailpieces, strainers, P-trap, supply stops, anchoring clips and all other trim. Wall supply stops, drains and tailpieces shall be offset wheelchair type. B. Fixtures P-2A shall be American Standard "Lucerne" #0356015, vitreous china, wall hung lavatories with concealed carrier and anchoring screws; 8" centers faucet punching and 1 1/4" drain. Fixtures shall include a deck mounted battery operated Sloan No. EAF-250 faucet with sensor, chrome-plated finish, aerator, chrome-plated tailpieces, strainers, P-trap, supply stops, anchoring clips and all other trim. Wall supply stops, drains and tailpieces shall be offset wheelchair type.

2.04 URINALS

- A. Fixtures P-3 shall be single compartment, 20 gauge stainless steel with sound-deadening, 19" x 17" outside dimensions, 16" x 11 1/2" inside dimensions, 6" deep; Elkay Model No. PSLVR-1917. Faucet punching shall be 3 hole D.C. Faucet set shall match the 3 hole punching and shall be deck-mounted, lever-style chrome-plated, all brass, goose-neck faucet with aerator; Chicago No. 786-E3-GN-8B and a stainless steel drain, cup strainer and rubber stopper. Provide complete trim such as service stops, tailpieces and P-trap.

2.05 SHOWERS

- A. Fixtures P-5 shall be American Standard "Allbrook" #6541132, vitreous china, 1.0 gallon flush, wall hung siphon jet urinal with integral flushing rim and top spud. Flush valve shall be selected Sloan "Royal" #186-1 or approved equal. B. Fixtures P-6 shall be Lasco Model#036BFSC, ADA compliant, pre-molded shower. Provide with the following manufacturers accessory options: white finish, soap dish, center drain location, slip resistant textured bottom. Provide chrome finish curtain rod to accommodate standard shower curtain. Provide factory installed "U" shaped grab bar. Shower curtain shall be by others. Provide shower fittings by American Standard #162.601 anti-scaid, polish chrome balanced shower, wall supply, side bar, vacuum breaker and volume control.

2.06 DRINKING FOUNTAINS AND WATER COOLERS

- A. Fixtures P-7 shall be barrier free split level surface mounted electric water cooler with bottle filler; each complete with P-trap and supply service stops. Electric water cooler shall deliver 8.0 GPH of 50 degrees F. water at 90 degrees F. ambient and 80 degrees F. inlet water. Cooler shall have horizontal stainless steel top. Bubbler shall have flexible guard and operate between 20 and 120 psi. Separate valve and diaphragm-type automatic stream regulator shall be mounted with cabinet. Refrigeration system shall employ high efficiency, positive start compressor, non-pressurized counter-flow cooling coil with totally encapsulated insulation and shall be controlled by an integral, adjustable thermostat. Coolers shall have front pusher water controls with raised lettering for the visually impaired. Coolers shall comply with ANSI 117.1 for both visual and motion disabilities and ADA. Cabinet shall have removable front panels and be finished in a neutral-grey baked enamel. Coolers shall be certified by ARI to meet Standard 1010. Coolers shall be Elkay LZSL8WSSP.

3.0 EXECUTION

- 3.01 INSTALLATION A. Units shall be installed as indicated and in conformance with the manufacturer's recommendations. Coordinate the actual units to be provided with all trades. B. All plumbing fixtures shall be free of leaks, provided completely finished, trimmed, adjusted, cleaned and ready for use. They shall be properly secured to the structure by the use of thru-bolting, backplates, carriers, expansion shields (for floor mounting only) or toggle bolts. C. Wall hung fixtures supported on chair carriers shall be bolted to the floor slab. Carefully coordinate space requirements and fixture mounting height requirements with supports being furnished. D. Fixtures supported with wall hangers on masonry chase walls shall be fastened to the wall with not less than 3/8" bolts which shall pass through the wall and through a 1/4" x 4" wide steel backplate on the unfinished chase wall side. E. Where fixtures are hung on a single masonry walls without a pipe chase behind, they shall be mounted with 3/8" toggle bolts.

SECTION 2242-4 WATER HEATERS AND ACCESSORIES

1.0 GENERAL

- 1.01 DESCRIPTION A. All work specified in this Section is governed by the Plumbing General Section 22010. B. This Section 22424 and the accompanying drawings cover the provisions of all labor, equipment, appliances, and materials and performing all operations in connection with the construction of the water heating systems as specified herein and as shown. These systems include, but are not limited to, the following: 1. Water heaters 2. Hot water circulator

2.0 PRODUCTS

- 2.02 INSTANTANEOUS WATER HEATER A. The instantaneous water heaters shall be electric instantaneous type, with an electrical rating as shown in the schedule, and shall be wall mounted. The heat exchanger shall be of brass and Lexan 140 construction. B. The heater shall be fitted with an electronic, solid state temperature control system adjustable from 100 degrees F. to 140 degrees F., set at 105 degrees F. C. The heating and control system shall be enclosed in an impact resistant and shock proof case of Cycloac K/W flame-retardant thermoplastic. D. The water heaters shall be U.L. approved and labeled without the need for a 1&P relief valve.

3.0 EXECUTION

- 3.01 INSTALLATION A. The water heaters and accessories shall be installed in strict accordance with the manufacturer's recommendations and the Contract Documents. B. All temperature and pressure relief valves shall be piped full size to an indirect waste such as the nearest floor drain, service sink, sink tailpiece, etc.

SECTION 2245-0 PLUMBING FIXTURES AND TRIM

1.0 GENERAL

- 1.01 DESCRIPTION A. All work specified in this section is governed by the Mechanical General Section 22010. B. This Section 22450 and the accompanying drawings cover the provisions of all labor, fixtures, equipment, appliances and materials, and performing all operations in connection with the construction and installation of the plumbing fixtures and trim as specified herein and as shown.



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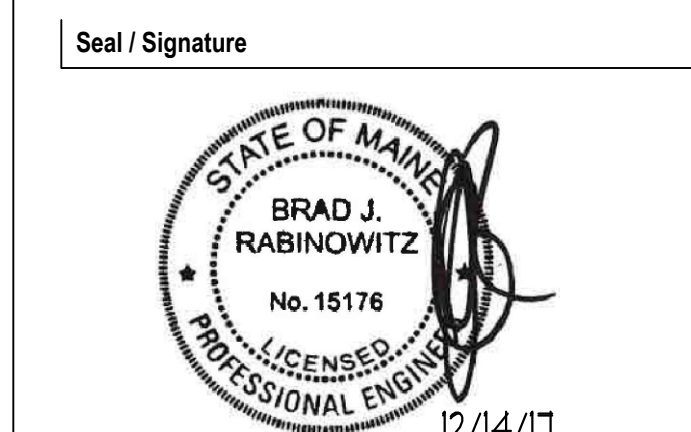


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Project Name Unum Workplace Transformation - Phase 2 & 3 (HO2 & HO3)

Project Number 59.6481.003

Description SPECIFICATIONS, NOTES AND DETAILS - PLUMBING

Scale

P0.002