RESOURCES & DOWNLOADS

American Society of Sanitary Engineering International White Papers

- Recommended Installation Practices for Residential Tankless Water Heaters to Reduce the Danger of Scalding. https://www.iapmo.org/media/23753/asse_tankless_water_heaters_white_paper.pdf
- Recommended Installation Practices for Residential Storage Type Water Heaters to Reduce the Danger of Scalds.

https://www.iapmo.org/media/20167/residential storage type water heaters white paper.pdf

- Guidelines for Temperature Control Devices in Domestic Hot Water Systems.
 https://www.iapmo.org/media/5216/asse guidelines for temp control devices.pdf
- Adjustments of Automatic Compensating Valves to Prevent Potential Scald Hazard. https://www.iapmo.org/media/5215/asse compensating valves.pdf
- Understanding Potential Water Heater Scald Hazards.
 https://www.iapmo.org/media/5213/asse water heater scald hazards.pdf
- Scald Hazards Associated with Low-Flow Showerheads. https://www.iapmo.org/media/5214/asse_low_flow_showerheads.pdf
- ASSE 1055 Chemical Dispensers: Use, Installation, and Design. https://www.iapmo.org/media/1391/asse1055_whitepaper.pdf

Consumer Tool for Identifying POU(Point of Use) Drinking Water Filters Certified to Reduce Lead

Point of use, or POU, drinking water filters are used to remove impurities from water at the point that it is actually being used. Although there are others, the POU filters covered in this document are those used in filtration systems that are attached directly to water faucets, inserted into refrigerators for water dispensers and ice makers, or inserted into water pitchers and bottles. There is no mandatory federal requirement for the use of POU drinking water filters or for testing or third-party certification under the Safe Drinking Water Act. However, consumers can increase their level of confidence by purchasing filters that have been tested by an accredited third-party certification body or bodies for lead reduction and particulate reduction (Class I) capabilities against both NSF/ANSI Standards 42 and 53. This tool provides the certification bodies' approved marks and the text that indicates a filter has been certified for lead reduction capabilities.

Consumer Tool for Identifying Point of Use (POU) Drinking Water Filters Certified to Reduce Lead (pdf) https://www.epa.gov/sites/default/files/2018-12/documents/consumer tool for identifying drinking water filters certified to reduce lead.pdf

AMERICAN SOCIETY OF SANITARY ENGINEERING ILLINOIS CHICAGO CHAPTER SANITATION NEWS LETTER

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DECEMBER 2022

PUBLISHED BY: GARY W. HOWARD

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AMERICAN SOCIETY OF SANITARY ENGINEERING ILLINOIS CHAPTER

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Published in cooperation with the Board of Directors and Officers of ASSE Illinois Chapter, Editor: Gary W. Howard

MERRY CHRISTMAS TO ALL THE ASSE/IADMO FAMILIES



It is with great sadness and sorrow that I have to inform our membership of the passing of Louise L. Scherer, Michael Scherer's Mother, Aug.15,1929-Nov. 26,2022. Michael has been our Treasurer for many, many years. Michael you and your family have our blessings.

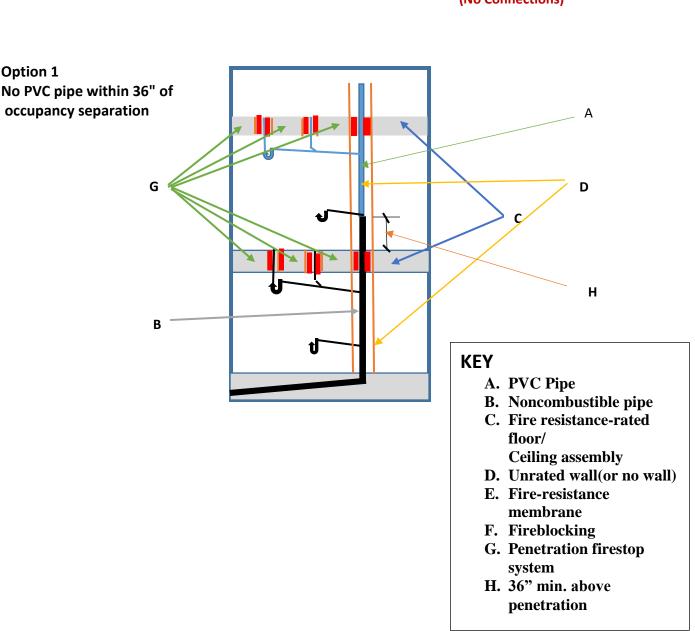
On another note the membership are wishing a fast recovery for John Flader after having spinal surgery. John has also been a member for a long period and serving on the International Board.

"GET WELL SOON JOHN"

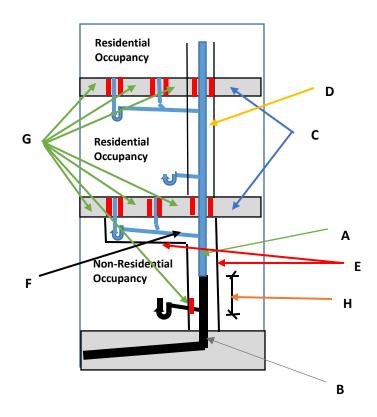
Step 2 Residential Occupancy

18-29-702.1.1 Mixed-occupancy buildings. Where the plumbing system in a mixed-occupancy building uses both combustible and noncombustible drainage and vent pipe materials . . . the noncombustible pipe material shall extend as least **4 inches** beyond the fire-resistance-rated assembly separating the residential occupancy from other areas of the building that are not eligible to use combustible pipe materials.





Option 2 PVC pipe protected with fire-resistance-rated construction equivalent to occupancy separation



Key

- A. PVC Pipe
- **B.** Noncombustible Pipe
- C. Fire-resistance-rated floor/ceiling assembly
- D. Unrated wall (or no wall)
- E. Fire resistance-rated membrane
- F. Fire blocking
- G. Penetration firestop system
- H. 36" min. above penetration

Step 3 Recognized Materials

Materials	Standards
Cast-iron-pipe hub and spigot <u>a.</u> Cast-iron-pipe, hub and spigot <u>b.</u> Cast-iron pipe hubless a.	ASTM A74; ASTM A888; CSPI 301
Copper or copper alloy pipe	ASTM B42; ASTMB43; ASTM B302
Copper or copper-alloy tubing (Type K, L, or M Copper or copper alloy tubing (type DWV) a	ASTM B75; ASTM B88; ASTM B251; ASTM B306
Galvanized Steel pipe	ASTM A53
Polyvinyl chloride (PVC) plastic pipe in IPS diameters Including Schedule 40, DR 22 (PS 200) and DR24 (PS 140), with a solid wall <u>a.</u>	ASTM D2665; CSA B181.2
Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D. and a solid wall <u>a.</u>	ASTM D2949
Stainless steel drainage systems, Type 304 and 316L	ASME A112.3.1

For SI: 1 inch=25.4 mm

- a. Limited to areas of residential occupancy in buildings with a building height not exceeding 60 feet (18.3 m).
- b. Lead and oakum joints only.

Note: All bold terms contained in this document are defined terms in the WMO. Refer to Appendix A of the WMO or the TGM for the definition of each bold term. WMO (WASTE MANAGEMENT ORDINANCE) TGM (TECHNICAL GUIDANCE MANUAL)

MWRD; CONTINUED FROM NOVEMBER NEWSLETTER

The following items are required for a proposed force main: • A plan and profile drawing are required identifying high and low points and point of discharge; • For a public force main the minimum diameter is four inches or a pipe size that provides a self-scouring velocity of 2 feet per second; • Thrust blocks are required for open cut installations; • Air relief valves are required on the high points; • Blow off valves are recommended on the low points; • Submit calculations addressing items 2, 4, 5, 6 of Schedule E; • Submit service area map with present and future population equivalents (PE); and • Submit pump curves and systems curves.

The lift station shall be designed and operated so that only one pump is in operation at a time. The second pump should have the capacity for the service area, and will serve as a backup to be placed in operation only when the first pump is not in operation. Simultaneous operation of both pumps is prohibited. If the pump station has three or more pumps, multiple pumps may operate simultaneously; however, the maximum discharge rate may not be exceeded at any time.

PLC control logic electrical schematic diagrams must be submitted as part of the plan set. The control logic must demonstrate that the pumps cannot be operated simultaneously.

In addition, the applicant must also:

- Verify the size of the force main is not less than 4 inches for public systems;
- Provide wet well size calculations;
- Verify the detention/retention time in the wet well is calculated and provided between 10 and 30 minutes. The cycle time of the pumps should not be more than six times per hour;
- Verify that air relief valves are provided on the high points of the force main;
- Include information or calculations for future growth (PE and pump curves);
- Identify Pump Horsepower and Impeller type and which system curve is applicable;
- Verify that the operating head is not too close to the shutoff head.

If an existing lift station is being replaced, any increase in the pump capacity must be justified, such as by service population increase (and a map showing this must be provided to support this). The **District** does not allow increased pump capacity to accommodate excessive Infiltration and Inflow (I&I) conveyed by **sanitary sewers** upstream of the Lift Station. In addition, force main to force main connections are discouraged.

For private lift stations, the engineer must provide the force main profile and Special Conditions will be attached to the permit. A private lift station serves a sole property even if that property is publicly owned. A separate inspection manhole shall be provided upstream of the wet well for any **non-residential** facilities tributary to the private lift station.

For **stormwater** lift stations, check downstream conditions that may limit or constrict flow such as culverts under a roadway.

F. District Interceptor, TARP and other Direct Connections to District Facilities

- Procure applicable **District record drawings**, design standards, and specifications relevant to the proposed connection.
- Provide a map of the service area for the proposed sewer.
- Provide a detail of the connection to the **District** facility including size, pipe material, details of **District structure**, and proposed **structure**.
- Provide an auxiliary manhole upstream of the proposed connection.
- Before construction commences, provide calculations prepared and sealed by a Structural Engineer licensed in the State of Illinois for excavation support systems that may be required.
- Provide a bypass pumping plan, if required.

G. Outfall Connection

For proposed **outfall** connections, the following must be provided:

- Provide a map of the service area for the proposed outfall.
- Provide a natural or mechanical flow-through device (see Lake Michigan Outfall Water Quality Structure Typical Detail).
- Provide a headwall for the **outfall**, a precast flared end Section may be provided for **outfalls** that are 15 inches or less in diameter such as **IDOT** Standard 542301. For larger outfalls, a cast in place headwall must be provided such as IDOT Standard 542101 or be part of the permanent dock wall.

In the spirit of friendship and cooperation, the Illinois Chapter of the American Society of Sanitary Engineering (ASSE) and the Plumbing Contractors Association of Greater Chicago (PCA) are both proud to represent and serve the skilled and dedicated professionals in our industry. To make up for a few advertisements that were missed in recent issues due to an unintentional oversight, our ASSE Chapter is pleased to run this expanded version of the PCA's ad.







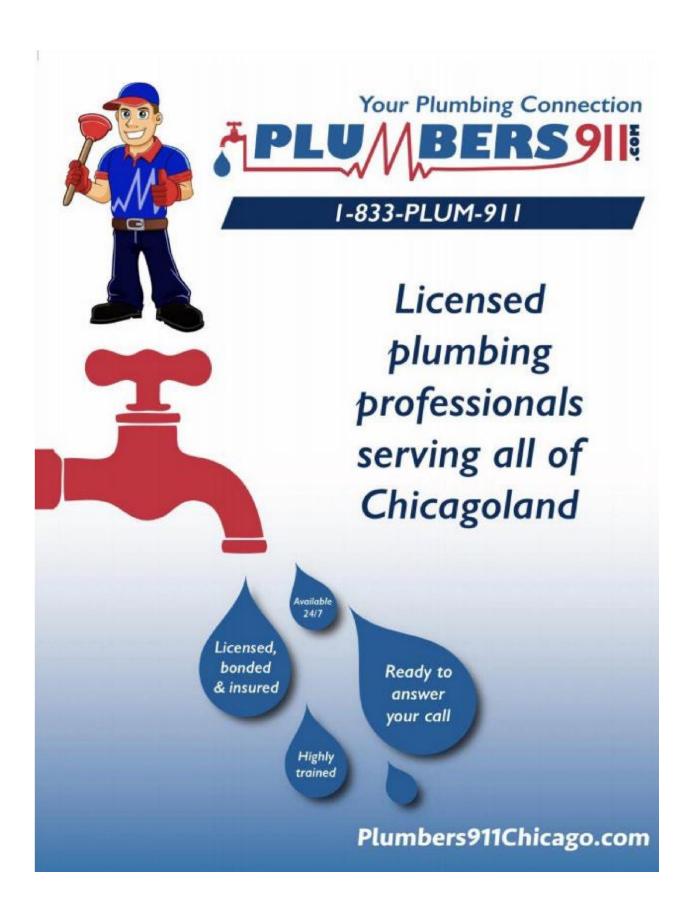
PCA of Greater Chicago

Advocacy and support you can count on.

The *Plumbing Contractors Association* (PCA) represents and serves UA Local 130 signatory plumbing contractors in Chicago and Northern Illinois (17 counties) with quality resources, education, advocacy, safety, networking, and much more – led by a dedicated volunteer contractor board and a full-time staff.

The PCA (and *Plumbing Council*) provides our members with an array of practical services and benefits, so contractors can focus on best serving their customers. Since 1882, the PCA has shown that "none of us is as strong as all of us." As the only local plumbing contractors' association affiliated with and active in the National and State PHCC; MCAA; IMSCA; CISCO; and UAC, the PCA is a united voice for our industry.

Contactors and consumers (for "Find a Plumber" referrals) may visit: www.pcaofchicago.com; phone 312-563-9526; or email: si@pcaofchicago.com. PCA: 603 Rogers Street, Suite 2, Downers Grove IL 60515



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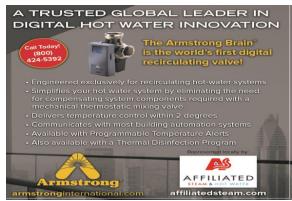
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Ames: 7010046 – 2 ½"-10" Total Relief Valve Kit for a C/M 400/C500

Kit Includes: Complete RV with 36" Hose,



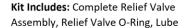
RV O-Ring and Lube



Ames 7010097 – First Check Assembly 2 ½"-4" for Ames 2000/3000SS

Kit Includes: 1st Check Assembly, O-Ring and Lube

Ames 7010114 – Relief Valve Kit 2 ½" -10" for 4000SS RP and 5000SS RPDA







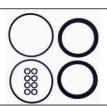
Watts: 0794090 – Complete Total Rubber Kit 4" for 909 RP; *Lead Free* (Previously 0887751)

Kit Includes: Check Disc, Cover O-Ring, Sleeve O-Ring, Piston O-Ring, RV Disc Assembly, Diaphragm, Piston

RK 4-350

4" 350AST, 4" 375AST







Apollo-Conbraco: 40-004-A1 – ¾"-1" Major Repair Kit for 40-200 RP

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