

Plumbing Plan Review Minimum Submittal Requirements

Minimum submittal requirements created in association with
Seattle Chapter of American Society of Plumbing Engineers (ASPE)

Phase 1:

Required as of September 13, 2017

Minimum Criteria Required on Plumbing Plans

**PLUMBING PLAN REVIEW REQUIREMENTS
(3) STORIES AND GREATER**

Plumbing permits can be issued for;

- (1) underground only,
- (2) rough-in/final,
- (3) underground, rough-in and final.

Note: projects with more than one permit for a plumbing system must be reviewed as a whole, and any portion of the system found to not meet code must be corrected.

Current policy requires new structures three stories and more must submit for plumbing plan review.

Over the counter permits and our online portal is currently applicable for all other plumbing systems.

***Exceptions:**

1. **Industrial** – i.e., research laboratories, marijuana-processing facilities, fuel dispensing facility, etc.
2. **Commercial** – i.e., breweries, embalming facilities, food-processing facilities, large complex projects, motor vehicle repair garage, commercial laundries, etc.

****These Industrial and Commercial examples require plumbing plan review and is not limited to these examples.***

It is important to recognize the plumbing plan review process is in its infancy. This program will grow to include every project that has plumbing.

Exception:

1. Single-family homes
2. Plumbing systems that are limited in scope.

Note: definition for limited has not been defined

**Phase 2: To be announced
Development Standards for
Commercial Projects
and
Minimum Criteria Required
on Plumbing Plans for Commercial Kitchens**

Includes all commercial restaurants, commissaries, restaurant take-out only facilities, and restaurant facilities in general.

Phase 3: To be announced

Minimum Criteria Required on plans for Medical Gas Pipe Systems

Medical gas permits are not part of a plumbing permit. Medical gas permits must be purchased separately. Category 1 and 2 medical gas systems require plumbing plan review.

Current engagement with DOH may require all medical gas systems be routed through DOH, potentially including Category 3.

Phase 4: To be announced

**Minimum Criteria Required
on Rainwater Harvesting Plans**

Phase 1:

Minimum Criteria Required on Plumbing Plans

Additional requirements may be requested, although not listed.

Minimum criteria as of today September 13, 2017 shall be as follows; (incomplete submissions will not be accepted):

Minimum criteria as of today, September 13, 2017 shall be as follows; (incomplete submissions will not be accepted):

- 1.** Riser diagrams detailing all plumbing systems; natural gas, pressure pipe, waste-n-vent, storm drain(s), water pipe, garage drains, sumps (oil/water, sewage ejector, elevator (when applicable), area drains, etc.

- Formula, method, and calculation data is required that supports each riser diagram design
- Data must be shown on riser diagrams so pipe systems can easily be tracked for system sizing and loading

Note: riser diagrams are required regardless of unit loading or sizing shown on plans and must show entire system to point of connection, especially DWV to determine if backwater valves are needed.

- Domestic water loads should be expressed in WSFUs (or GPM in the case of continuous demands), sanitary drainage and venting loads should be expressed in DFUs (or GPM in the case of continuous demands) and storm drainage loads expressed in equivalent square footage (or GPM in the case of continuous demands) with applicable rainfall intensity indicated. Sizes should be clearly indicated.

Note: subsoil drains may be added in the future to the list of plumbing systems based on Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA) with the City of Seattle.

2. General notes that list plumbing/piping (cover page) – abbreviations, legend, general notes, symbols, index sheet, etc.

Note: in house abbreviations must be noted to help expedite review time and referencing Subdivision 22 is not allowed

3. The following schedules listed are required but is not limited to;

- **Plumbing Drain Connection**
- **Sump Pump(s) / Sewage ejectors**
- **Plumbing Fixture Connection**
- **Expansion Tank**
- **Fixture Unit Loading Matrix– Totals-WSFU & DFU**

- **Hot Water Circulation Pump**
- **Water Pressure Reducing Valve**
- **Piping Material Used**
- **Electric Water Heater**
- **Natural Gas Water Heater**
- **Water Booster Pump(s)**

➤ **Storage Tank(s)**

➤ **ADA Schedule**

Fixture callouts (nomenclature) and the accompanying schedule or specification shall clearly indicate location of accessible fixtures and reflect accurately the architect's selected locations.

➤ **Concrete Vault and Design**

Pre-cast structures only

➤ **Interceptors**

sand, oil, sand/oil, grease, flammable liquid

- **Backflow Device**
- **Mixing Valve(s)**
- **Gas Pressure Regulator (MP)**
- **Gas Appliance Fixture(s)**
- **Plumbing Fixtures**
- **Domestic Water Service – Pressure loss matrix**
- **Insulation – Washington State Energy Code**

Note: The City of Seattle and Unincorporated King County do not use Chapter 12 of the Uniform Plumbing Code to regulate natural gas pipe systems.

The City of Seattle and Unincorporated King County use the 2015 International Fuel Gas Code for commercial projects and the 2015 International Residential Code Chapter 24, which is a full excerpt of the 2015 International Fuel Gas Code for residential projects.

The only exceptions are in the 2015 International Fuel Gas Code, whereby, Washington State Amendment, liquefied petroleum gas is regulated by the National Fire Protection Association (NFPA) 58 (LPG storage, handling, transportation) and NFPA 54 (LPG installation).

Installing gas pipe systems within the City of Seattle limits require a City of Seattle Gas Pipe License (Seattle Municipal Code 6.430).

4. Construction details (1/4" scale) that show the connection of specific fixtures or equipment shall include but is not limited to;

- **Water Heaters –**
mixing valves, booster/circulation pumps, combustion requirements (gas), gas regulators, etc.
- **Cast-in-Place Concrete Vault(s) –**
Structural elements and design shall be the responsibility of the structural E.O.R. and shall be part of the building department review.

- **Medium Pressure Gas Regulator –**
IFGC Section 410.2 Items – 4, 5, 6, 7
- **Sump Pump Connections –**
sand/oil, sewage, storm, elevator, etc.
- **Trash Chute**
- **Roof Drains –**
Primary, Secondary, and Combined
- **Suds Relief**

- **Dog Run**
- **Parking Garage Auto-wash**
- **Complex Mechanical Systems**

5. Plumbing systems outside the 2015 UPC prescriptive body of the code or adopted appendices must submit a PHSKC Alternate, Material, Method or Modification Request Form.

➤ **AAV's more than four (4) branch intervals must use PHSKC Decision No. 04-006, July 18, 2008.**

➤ **Positive Air Pressure Attenuator (P.A.P.A.) System**

➤ **Single-Stack Waste and Vent System**

➤ **DWV Vacuum System**

- **Grey Water Systems – Tier 1, 2 or 3 \ WAC 246-274**
- **Non-Potable Rainwater Harvesting**
- **Alternate Energy Source – Solar, Heat Exchange, etc.**
- **Appendices Not Adopted
by Public Health — Seattle & King County**

6. Plumbing plan review fees are assessed on a project by project basis and can take up to four weeks for first review comments.
- Submit one set of paper plumbing plans.
 - Remit plan intake fee (\$201.00) at time of application and \$201.00 for each hour of plan review until plan is approved.
 - Total permit fee will be required after plumbing plan approval prior to issuance of stamped approved plans.

Note: allowing a percentage of work value as a fee base system will not be considered as a fee structure for plan review

- Document Submittal - Plans and Fees
Chinook Building - Seattle

Environmental Health Services

401 5th Ave, Suite 1100

Seattle, WA 98104

Phone: 206-263-9566 (answered until 4:00 pm)

Fax: 206-296-0189

Inspection request line: 206-205-0935

Permit hours:

Monday, Wednesday, Thursday, Friday: 8:00 am–4:00 pm

Tuesday: 9:00 am – 4:00 pm

- Document Submittal - Plans and Fees
Eastgate - Bellevue (Factoria)

Environmental Health Services

14350 SE Eastgate Way

Bellevue, WA 98007

Phone: 206-477-8050 (answered until 4:00 pm)

Fax: 206-296-9792

Inspection request line: 206-205-0935

Permit hours:

Monday, Tuesday, Wednesday & Friday: 8:00 am–4:00 pm

Thursday: 9:00 am – 4:00 pm

7. When public restrooms are part of a plumbing plan review, corresponding occupant loading from the building plan code-summary must be provided that shows minimum plumbing fixtures required.
- Public Health — Seattle & King County is required by MOU/A with the City of Seattle to administer the minimum plumbing fixture requirements for the City of Seattle and PHSKC. UPC Section 422.0.

8. Gas pipe that is welded within the City of Seattle limits must comply with the City of Seattle Ordinance (SMC) 6.430. Job specific personnel affidavits, welding criterion, and welder certification(s) must be provided prior to issuance of a gas permit.
 - Public Health — Seattle & King County is required to enforce the SMC 6.430 under the MOU/A with the City of Seattle, therefore, welded gas pipe and the installation of gas pipe within the city limits of Seattle fall under the enforcement of Public Health — Seattle & King County.

9. Plan Review not under Public Health-Seattle/King County Plumbing Plans Examiner's authority for the following;

- **Commercial kitchen fixtures required**
(PHSKC Food Program Review)
Exception: Grease Interceptor
- **Backflow device outside a structure under -**
WAC 246-290-490 Table 9 - Seattle Public Utilities

- **Foundation Drains to detention vault**
(inside perimeter or outside of structure)
Geo-Tech or others
Note: this is under review with the City of Seattle
and may be removed from Section 9.
- **Building Sewers –**
two feet outside of structure enforcement stops
- **Firestop Protection**

10. Minimum size plumbing design scale and architectural sheets

➤ Minimum Size Architectural Sheets

“E” – 30” X 42”

➤ 1/4" Scale required

➤ Less than 1/4" Scale allowed when plans cannot feasibly be drawn at 1/4" scale based on project size.

Exception: complex areas require 1/4" Scale

*The information provided in this communication
does not encompass all aspects of plumbing systems
or plumbing requirements anticipated, additional
information may be requested that is not listed.*