

# General Plumbing Plan Review Application



**E-PLAN**  
EXAM

## Project Information:

Building or Tenant Name:	
Previous Tenant Name:	
Project Street Address:	
City/State/ZIP Code:	
Project Scope:	

## Designer Information:

Designer Name:	
License Number:	
Email:	
Phone number:	
Company:	
Address:	
City/State/ZIP Code:	

## Type of Submittal - Check all that apply:

<input type="checkbox"/> New Construction <input type="checkbox"/> Addition <input type="checkbox"/> Alteration <input type="checkbox"/> Revision to previously approved Plans	<input type="checkbox"/> Permission to Start (verify eligibility on page 2) <input type="checkbox"/> Extension to a previously approved plan <input type="checkbox"/> Multiple identical buildings Number of Buildings: _____
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## Project Specific Information – Fill in all known information:

Indicate the total number of interior fixtures <sup>1</sup> , including roof drains and hose bibs included in this submittal:		Total Fixtures <sup>1</sup>
Building area (New Construction & Addition projects only):		Sq. Ft.
Storm Area drained to a plumbing system:		Acres
Combined size in inches of supply and sanitary lateral(s) serving structure:		inches

<sup>1</sup>“Plumbing fixture” means a receptacle or device which meets at least one of the following:

- Is either permanently or temporarily connected to the water supply system of the premises and demands a supply of water from the system.
- Discharges wastewater or waste materials either directly or indirectly to the drain system of the premises.
- Requires both a water supply connection and a discharge to the drain system of the premises.

## Plan Review

The department (DSPS) designates, to an approved municipality, the authority to review and approve plumbing plans and specifications for the following plumbing installations:

### Types of Installations required to be reviewed by an Agent Municipality - Check all that apply:

<input type="checkbox"/> Building Drain & Vent, Sanitary <sup>1</sup> <input type="checkbox"/> Building Drain & Vent, Storm <sup>1</sup> <input type="checkbox"/> Building Sewer, Sanitary <sup>1</sup> <input type="checkbox"/> Building Sewer, Storm <sup>1</sup> <input type="checkbox"/> Car Wash Interceptor <input type="checkbox"/> Controlled Roof Drain Engineered System <input type="checkbox"/> Drainage System, Storm <input type="checkbox"/> Exterior Containment Tank <input type="checkbox"/> Exterior Grease Interceptor <input type="checkbox"/> Exterior Mixed Wastewater Treatment Device <input type="checkbox"/> Exterior Non-Potable Water System <input type="checkbox"/> Exterior Oil Interceptor <input type="checkbox"/> Exterior Potable Water Tank	<input type="checkbox"/> Exterior Wastewater Treatment Device, Storm <input type="checkbox"/> Garage Catch Basin <input type="checkbox"/> IAPMO Water Demand Calculator <input type="checkbox"/> Interior Containment Tank <input type="checkbox"/> Interior Grease Interceptor <input type="checkbox"/> Interior Mixed Wastewater Treatment Device <input type="checkbox"/> Interior Non-Potable Water System <input type="checkbox"/> Interior Oil Interceptor <input type="checkbox"/> Interior Potable Water Tank <input type="checkbox"/> Interior Wastewater Treatment Device <input type="checkbox"/> Manufactured Home Community Water Supply System	<input type="checkbox"/> Multipurpose Piping System <input type="checkbox"/> Private Interceptor Main Sewer, Sanitary <sup>1</sup> <input type="checkbox"/> Private Interceptor Main Sewer, Storm <sup>1</sup> <input type="checkbox"/> Private Water Main <sup>1</sup> <input type="checkbox"/> Pure Water System (RO) <input type="checkbox"/> Sanitary Dump Station <input type="checkbox"/> Siphonic Roof Drain Engineered System <input type="checkbox"/> Storm Detention System <input type="checkbox"/> Water Distribution System <sup>1</sup> <input type="checkbox"/> Water Service <sup>1</sup> <input type="checkbox"/> Vacuum Waste System
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<sup>1</sup> Permission to Start can be applied for.

Plumbing plans and specifications for the types of plumbing installations listed below, except direct plumbing fixture replacements, shall be submitted to the department (DSPS) for review. These installations are not included in the delegated authority granted by the department to agent municipalities.

### Types of Installations required to be reviewed by the department (DSPS)

<ol style="list-style-type: none"> <li>1. All plumbing, regardless of the number of plumbing fixtures involved, serving Hospitals, Nursing Homes, Ambulatory Surgery Centers, Renal Dialysis Centers, Community-Based Residential Facilities (CBRF), and Inpatient Hospice.</li> <li>2. Plumbing installations involving 16 or more plumbing fixtures, serving buildings owned by a metropolitan or sanitary sewer district.</li> <li>3. Plumbing installations involving 16 or more plumbing fixtures, serving buildings owned by the state.</li> <li>4. Alternate &amp; Experimental Systems (i.e. Provent or Sovent)</li> <li>5. Reduced pressure principle backflow preventers, double check backflow prevention assemblies, pressure vacuum breaker assemblies, and spill resistant vacuum breakers serving health care facilities.</li> </ol>	<ol style="list-style-type: none"> <li>6. Stormwater and clearwater detention, treatment, and infiltration plumbing systems serving a public building or facility.</li> <li>7. Onsite residential and commercial water reuse treatment systems, designed to treat water for compliance with Table 382.70-1.</li> <li>8. Potable water storage systems.</li> <li>9. Potable water treatment by use of injection of a solution into the water supply system.</li> <li>10. Medical or high purity water.</li> <li>11. Mixed wastewater holding device.</li> <li>12. Multipurpose piping systems (MPP).</li> <li>13. Water supply systems and drain systems to be installed for manufactured home communities and campgrounds.</li> <li>14. Chemical waste systems regardless of the number of plumbing fixtures.</li> </ol>
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**Note:** The installation of each reduced pressure principle backflow preventer, spill resistant vacuum breaker, double check backflow prevention assembly, or pressure vacuum breaker shall be registered with the department no later than 7 days after installation of the assembly [SPS 382.20(1)(c)].

**Attestation:**

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The Master Plumber acknowledges that the submittal is complete and accurate, and that any additional application or submittal information requested must be received within five (5) business days or the plan is subject to denial. The applicant further acknowledges that any additional plan review information requested must be received within fifteen (15) business days or the plan is subject to denial.

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Master Plumber / Designer Signature:

License Number

Date:

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Master Plumber / Designer - Printed:

Phone Number:

**Optional - Permission to Start Request:**

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The request for an early Permission to Start is optional and an additional fee will be applied. As specified within the [Alternate Approval](#), a submittal of a complete set of plans is required to utilize the permission to start. Scope of installations are limited to below grade only and a maximum of 18-inches above floor.

As the building owner, I request to begin plumbing installations prior to plan review approval I agree to make any changes required after plans have been reviewed, and to remove or replace any non-code complying construction and make revisions to plans on any changes. I will not permit any installation to exceed 18 inches above the unexcavated floor.

Request is for the following specific plumbing installations:

- |   |  |
|---|--|
| <input type="checkbox"/> Building drain & vent, sanitary          | <input type="checkbox"/> Private interceptor main sewer, storm |
| <input type="checkbox"/> Building drain & vent, storm             | <input type="checkbox"/> Private water main                    |
| <input type="checkbox"/> Building sewer, sanitary                 | <input type="checkbox"/> Water distribution system             |
| <input type="checkbox"/> Building sewer, storm                    | <input type="checkbox"/> Water service                         |
| <input type="checkbox"/> Private interceptor main sewer, sanitary |  |

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Owner's Signature:

Date:

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Owner's Name - Printed:

Phone Number:

## E-Plan Exam - Plumbing Plan Review Checklist

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### Site Specific Requirements:

- Plot plan showing the locations, sizes, and slopes of all sanitary sewers, storm sewers (including the roof drain system), and water service piping within the property lines.
- Each segment of piping shall have GPM flow rates, the maximum capacity next to each pipe size and the slope. Include all pipe sizes and discharge rates. Include piping profiles where applicable.
  - Site grade run off plans and contour lines showing what is drained to the plumbing system.
  - Geotechnical reports must not be included in the Site-Specific Plan.
- Stormwater and Clearwater Disposal Systems plans shall include:
  - Roof drainage, site grade run off, and contour lines showing the entire drainage area.
  - Show all pipe sizes and discharge rates after each inlet.
  - Complete Storm Drain sizing calculations as required by [SPS 382.36\(5\)](#).
  - Complete Storm System design calculations as required [SPS 382.36\(6\)](#).
  - Cross section of ponds, swales, etc.

### Building Specific Requirements:

- Plan(s) must include complete plumbing floor plans for each floor that show all sizes and locations of horizontal sanitary, storm, and water distribution lines along with the location of fixtures and equipment to be installed.

Note: Remodeling or additions shall include existing loads.

- Provide 30°/60° isometric diagrams of the drain, vent, water distribution, and interior storm systems. Include detailed drawings of specific areas (i.e. mechanical room, water meter room, R.P. valves, etc.) where applicable.
  - Isometric drawings shall include water supply & drainage fixture units and pipe sizes on each segment of piping.
  - Isometric drawings shall include pipe sizes and GPM loads on each segment of storm/clearwater piping.
  - Isometric drawings shall include secondary overflow drain piping.
- Roof Plan showing drainage areas, GPM loads, drains and sizes of scuppers and/or secondary overflow drain systems per IBC 1611.3.
- Complete water calculations in accord with [SPS 382.40\(7\)](#). Water calculations may be located on the plans; however, one copy of the calculations must be submitted separately from the plan documents. Links below for instructions and form.  
<https://dsps.wi.gov/Documents/Programs/Plumbing/SBD6479Instructions.pdf>  
<https://dsps.wi.gov/Documents/Programs/Plumbing/SBD6479.pdf>

### General Requirements for all plans:

- All plans shall be properly signed per [SPS 382.20\(4\)\(c\)](#). The submittal shall be limited to plans pertinent to the plumbing review.
- Specifications/Cut sheets or shop drawings of all plumbing fixtures, appliances, or equipment. This includes all exterior catch basin, inlets, manholes or other storm disposal devices.
- Fixtures requiring water or waste connections may need product approval. Include DSPS product approval letters for those fixtures.
- Complete sizing calculations for all grease interceptors (when included in the design).

## Optional Sizing of Water Supply Piping using IAPMO Water Demand Calculator

As the applicant, I am requesting to use the IAPMO Water Demand Calculator v. 2.1 for sizing the water supply piping in accordance with [SPS 382.40\(7\)](#) outlined in the alternate approval. I understand this alternate standard provides a method for estimating the demand load for the building water supply and principal branches for nonpublic multiple dwellings, as defined by s. [SPS 381.01\(155\)](#) and [\(162\)](#) Wis. Adm. Code, with water conserving plumbing fixtures, fixture fittings and appliances.

The applicant acknowledges the following items:

- Review and include a copy of the DSPS approval [PP-031603529-PTOAA](#) letter with the IAPMO WDC submittal.
- Provide verbiage for a sign or posting with permanent tagging at the building control valve and water heater control valve to identify the specific IAPMO Water Demand Calculator Sizing system.
- Provide IAPMO WDC calculations for each piece of distribution piping using the IAPMO WDC sizing method.
- All piping sized using the IAPMO WDC alternative shall display bold, underlined and italicized GPM loads on the isometric plan sheets.
- WSFUs shall not be combined with WDC GPM's (mains or vertical risers); therefore, provide actual fixture GPMs loads for each non WDC fixture, if adding to the WDC method distribution system. Separate water distribution piping systems may use Wis Code [SPS 382.40\(7\)](#) WSFU's provided they are connected upstream of the beginning of any IAPMO WDC system method sizing piping.
- Water distribution piping ½" or ¾" in diameter serving plumbing fixtures shall not have a load greater than those assessed per pressure available for uniform loss ("A" value) in Tables [SPS 382.40](#) 4-11 Wis. Adm. Code and tables for ASTM D1785 and ASTM F441 in the appendix.
- All fixtures and replacement fixtures shall be at or below the designed fixture flow rates and shall be Energy Star rated for the IAPMO Water Demand Calculator Sizing system. Provide fixture cut sheets with low flow & energy star certification with the IAPMO submittal.
- Water supply piping shall be sized and installed in strict accordance with IAPMO Water Demand Calculator v. 2.1, [Chapters SPS 381-386 Wis. Adm. Code](#) and the alternate approval.