Identifying Plumbing Fixtures

In order to qualify for free toilet replacement through PREP, your existing toilets must use at least 3.5 gallons per flush (gpf). Eligible toilets are generally installed before 1994. Bathrooms must accommodate installation of new high-efficiency toilets without any plumbing alterations or repairs. Properties with abnormal site conditions (e.g. rotted flooring, atypical plumbing conditions, etc.) will not be eligible for the PREP Program until conditions are improved by owners.

As of July 1, 2020, the SFPUC’s Plumbing Fixture Replacement Program requires new applicants must submit a minimum of two (2) photographs of eligible fixtures with the following criteria:

- Photos including a piece of paper with the date, address (including unit number for multi-unit residences) and water account with the toilet, including toilet manufacturer stamp with make/model and gallon-per-flush rating
- Photos showing interior and exterior of the toilet tank with cover off, close up of underneath the toilet tank cover, close up of toilet shut off valve (angle stop valve at the base), and the surrounding bathroom area where the toilet is located capturing the floor

To assist you in first identifying qualifying fixture types and their efficiency rating, please refer to the information provided below.

**TOILETS**

The two primary types of toilets are tank-style toilets, such as the ones you might find in your bathroom at home, and flushometer-style toilets which can be found in multi-family properties.

![Tank-Style Toilet](image1)

![Flushometer-Style Toilet](image2)

July 2020
How to Determine Your Toilet’s Flush Volume

A marking or label may is typically located near the toilet seat hinge on the bowl that can provide you with that information. Please note that the markings and labels are often in liters as opposed to gallons. Here’s a quick reference to help determine your toilet’s flush volume if it is listed in liters.

Once you have determined the toilet style, you can begin to determine the flush volume. The easiest way to determine the gallons per flush (gpf) is to check for a stamp near the back of the toilet bowl.

Example Photos of Toilet

<table>
<thead>
<tr>
<th>Year</th>
<th>Gallons Per Flush</th>
<th>Efficiency Rating</th>
<th>Replacement Eligible via PREP?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1982</td>
<td>5 - 7</td>
<td>Inefficient</td>
<td>Yes</td>
</tr>
<tr>
<td>1982-1994</td>
<td>3.5</td>
<td>Inefficient</td>
<td>Yes</td>
</tr>
<tr>
<td>1994-2013</td>
<td>1.6</td>
<td>Ultra-Low Flow Toilet (ULFT)</td>
<td>No</td>
</tr>
<tr>
<td>2000-present</td>
<td>1.28</td>
<td>High-Efficiency Toilets (HET)</td>
<td>No</td>
</tr>
</tbody>
</table>

If you are unable to find a flush volume stamp, try to locate the year the toilet was manufactured (for tank-style toilets only). Typically, the year is stamped or impressed on the inside of the porcelain tank. The approximate manufacture dates, flush volumes, and efficiency ratings are below:

Gallons Per Flush Equals This Many Liters Per Flush

<table>
<thead>
<tr>
<th>Gallons Per Flush</th>
<th>Liters Per Flush</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 to 7</td>
<td>18.92 to 26.49</td>
</tr>
<tr>
<td>3.5</td>
<td>13.24</td>
</tr>
<tr>
<td>1.6 to 3.5</td>
<td>6.05 to 13.24</td>
</tr>
<tr>
<td>1.6</td>
<td>6.0 to 6.05</td>
</tr>
<tr>
<td>1.28</td>
<td>4.84</td>
</tr>
</tbody>
</table>
Eligibility indicators on Flushometer-Style Toilet Valves: On the top of the valve if it has an engraved “LC” (low consumption), “HE” (high efficiency) or “HET” (high efficiency toilet), it is already low flow and is not eligible. If there is no “LC”, “HE”, or “HET” then the valve is not low flow and is eligible for the program.
Examples of Eligible (left) and Ineligible (right) Valves

(Note: If your toilet has a large black cylinder inside of it instead of the standard flushing mechanism, your toilet is using 1.6 gallons per flush and does not qualify for this program.) If you cannot locate any markings or labels near the seat hinge, check the underside of the tank lid or the tank’s back inside wall for a date stamped in the porcelain. Still can’t find any markings or labels? Then you can perform an easy test to determine how much water your toilet uses by following these simple steps.

1. Turn the water supply to your toilet off. (Note: if you cannot turn the valve or do not have access to the valve simply prevent the toilet from refilling by holding up the float device in your tank.
2. Measure the length of the tank in inches.
3. Measure the width of the tank in inches.
4. Measure the full water level in the toilet tank in inches (depth 1).
5. Flush the toilet and measure the drop at the lowest level (depth 2).
6. Subtract depth 2 from depth 1. This will give you the “drop” measurement.
7. Multiply the length times the width times the “drop” measurement number you noted for Step No. 6 to determine the volume of cubic inches of water used per flush.
8. Divide the volume by 231 to get the number of gallons per flush.

Here’s an example to use to help you calculate your gallons per flush.
Step 2 – Length: 17.5
Step 3 – Width: 7
Step 4 – Full level: 6
Step 5 – Low level: 3.5
Step 6 – 6 minus 3.5 = 2.5
Step 7 – 17.5 x 7 x 2.5 = 306.25
Step 8 – 306.25 divided by 231 = 1.32

NEED MORE HELP?
For additional assistance identifying plumbing fixtures or questions regarding PREP, please contact the SFPUC Water Conservation Section at waterconservation@sfwater.org. The SFPUC provides free Water-Wise Phone Consultations that can help facilities identify leaks, inefficient plumbing fixtures, and provide information on rebates and free devices. For more information on indoor and outdoor water conservation programs and services, visit www.sfwater.org/conservation.

July 2020