

**CALIFORNIA BUILDING STANDARDS COMMISSION  
GREEN BUILDING WORKSHOP  
September 26, 2013 - Agenda Item 3e**

**5.303.2 Water Reduction**

- **Statement of specific purpose, problem, rationale and benefits:**

The CBSC is proposing to repeal the performance calculation method for indoor water use. This code change will align with the Department of Housing and Community Development's 2013 code change for similar code provisions. The benefit from the proposed code change will be to add uniformity and consistency between the residential and nonresidential codes and simplify the code by removing code sections and calculation worksheets. Additionally, the current Water Use Baseline Table would have to be revised to show increased flow rates that are no longer allowed by California law for residential occupancies. That could be problematic for nonresidential occupancies.

- **Proposed code language for the 2013 Intervening Cycle**

LEGEND FOR PROPOSED LANGUAGE	
1.	Proposed California language and modified language is <u>underlined</u> .
2.	Repealed text: All such language appears in <del>strikeout</del> .
3.	<i>[Information for the reader is bracketed and in red italics]</i>

**5.303.2 Water reduction.**

Plumbing fixtures shall meet the maximum flow rate values shown in Table 5.303.2.3.

~~**Exception:** Buildings that demonstrate 20-percent overall water use reduction. In this case, a calculation demonstrating a 20-percent reduction in the building "water use baseline," as established in Table 5.303.2.2, shall be provided. *[Repeal the Exception]*~~

**TABLE 5.303.2.2  
WATER USE BASELINE<sup>3</sup>**  
*[Repeal the Table and footnotes]*

FIXTURE TYPE	BASELINE FLOW RATE	DURATION	DAILY USES	OCCUPANTS <sup>2</sup>
Showerheads	2.0 gpm @ 80 psi	5 min.	4	<del>2a X</del>
Lavatory faucets, nonresidential	0.5 gpm @ 60 psi	.25 min.	3	<del>X</del>
Kitchen faucets	2.2 gpm @ 60 psi	4 min.	4	<del>2b X</del>
Replacement aerators	2.2 gpm @ 60 psi			<del>X</del>
Wash fountains	2.2 [rim space (in.)/20 gpm @ 60 psi]			<del>X</del>
Metering faucets	0.25 gallons/cycle	.25 min.	3	<del>X</del>
Metering faucets for wash fountains	.25 [rim space (in.)/20 gpm @ 60 psi]	.25 min.		<del>X</del>
Gravity tank-type water closets	4.28 gallons/flush	1 flush	1 male <sup>4</sup> 3 female	<del>X</del>
Flushometer tank water closets	4.28 gallons/flush	1 flush	1 male <sup>4</sup> 3 female	<del>X</del>
Flushometer valve water closets	4.28 gallons/flush	1 flush	1 male <sup>4</sup> 3 female	<del>X</del>

Electromechanical hydraulic water closets	1.28 gallons/flush	1 flush	1 male <sup>1</sup> 3 female	X
Urinals	0.5 gallons/flush	1 flush	2 male	X

Fixture "Water Use" = Flow rate x Duration x Occupants x Daily uses

1. The daily use number shall be increased to three if urinals are not installed in the room.
2. Refer to Table A, Chapter 4, *California Plumbing Code*, for occupant load factors.
  - a. Shower use by occupants depends on the type of use of a building or portion of a building, e.g., total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
  - b. Nonresidential kitchen faucet use is determined by the occupant load of the area served by the fixture.
3. Use Worksheet WS-1 to calculate baseline water use.

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