

Code Amendment Proposal Form

For public amendments proposed to the 2021 editions of the International Codes



Instructions: Upload this form and all accompanying documentation. If you are submitting your proposal on a separate sheet, make sure it includes all information requested below.

All proposals must be received by **July 23, 2021**.

CONTACT INFORMATION

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Signature:

AMENDMENT PROPOSAL

Please use a separate form for each proposal.

- 1) Code(s) associated with this proposal. Please use acronym: DGC
If you submitted a separate coordination change to another code, please indicate which code: _____

<u>Acronym</u>	<u>Code Name</u>	<u>Acronym</u>	<u>Code Name</u>
DBC-AP	Denver Building Code—Administrative Provisions	IFC	International Fire Code
DBC-xxx	Denver Building Code—xxx (code) amendments (e.g., DBC-IBC, DBC-IEBC)	IFGC	International Fuel Gas Code
IBC	International Building Code	IRC	International Residential Code
IEBC	International Existing Building Code	IMC	International Mechanical Code
IECC	International Energy Conservation Code	IPC	International Plumbing Code
		DGC	Denver Green Code

- 2) Please check here if a separate graphic file is provided:
Graphics may also be embedded within your proposal below.
- 3) Use this template to submit your proposal or attach a separate file, but please include all items requested below in your proposal. The only formatting needed is **BOLDING**, ~~STRIKEOUT~~ AND UNDERLINING. Please do not provide additional formatting such as tabs, columns, etc., as this will be done by CPD.

Code Sections/Tables/Figures Proposed for Revision:

- DGC 2019 - Chapter 6 – Water Use Efficiency
 - 601.3.4 (6.3.4.1) Water Consumption Measurement
 - Table 601.3.4.1B (Table 6.3.4.1B) SUBSYSTEM WATER MEASUREMENT THRESHOLDS

Proposal:

Place an “X” next to the choice that best defines your proposal: X Revision New Text _ Delete/Substitute __ Deletion

601.3.4 (6.3.4.1) Water Consumption Measurement (~~Project Elective~~) (Mandatory)

601.3.4.1 (6.3.4.1) Consumption Management. Measurement devices with remote communication capability shall be provided to collect water consumption data for the domestic water supply to the building and on all water sources used in tenant spaces and any individual water end uses that represents 10% or more the total annual consumption of the tenant space. Both potable and *reclaimed water* entering the *building project* shall be monitored or submetered. In addition, for individual leased, rented, or other tenant or sub-tenant *space* within any building totaling in excess of 50,000 ft² (5000 m²), separate submeters shall be provided. For subsystems with multiple similar units, such as multicell cooling towers, only one measurement device is required for the subsystem. Any project or building, or tenant or subtenant *space* within a project or building, such as a commercial car wash or aquarium, shall be submetered where consumption is projected to exceed 1000 gal/day (3800 L/day).

Measurement devices with remote capability shall be provided to collect water use data for each water supply source (**Informative Note:** e.g., *potable water, reclaimed water, rainwater*) to the *building project* that exceeds the thresholds listed in Table 601.3.4.1A (6.3.4.1A). Utility company service entrance/interval meters are allowed to be used.

Provide submetering with remote communication measurement to collect water use data for each of the building subsystems if such subsystems are sized above the threshold levels listed in Table 601.3.4.1B (6.3.4.1B).

**TABLE 601.3.4.1A (TABLE 6.3.4.1A)
WATER SUPPLY SOURCE MEASUREMENT THRESHOLDS**

WATER SOURCE	MAIN MEASUREMENT THRESHOLD
Potable water	1000 gal/day (3800 L/day)
Municipally <i>reclaimed water</i>	1000 gal/day (3800 L/day)
Alternate sources of water	500 gal/day (1900 L/day)

**TABLE 601.3.4.1B (TABLE 6.3.4.1B)
SUBSYSTEM WATER MEASUREMENT THRESHOLDS**

Subsystem	Submetering Threshold
Cooling towers (meter or makeup water and blowdown)	Cooling tower flow through tower > 500 gpm (30 L/s)
Evaporative coolers	Makeup water > 0.6 gpm (0.04 L/s)
Steam and hot-water boilers	>500,000 Btu/h (150 kW) input
Total irrigated landscape area with controllers	>25,000ft ² (2500m ²) >10,000 ft ² (929m ²)
Separate campus or project buildings	Consumption > 1000 gal/day (3800 L/day)
Separately leased or rental space	Consumption > 1000 gal/day (3800 L/day)
Any large water-using process	Consumption > 10% of the total annual consumption of the space

Supporting Information:

Purpose: The purpose of the proposed amendment is to encourage water efficiency in new development and redevelopment in Denver by instituting best management practices for indoor, outdoor, and onsite reuse practices. By reducing per capita water consumption, Denver can build water system resilience in the face of population growth and climate change.

Reasons: The Colorado River Basin is in the midst of an unprecedented drought and these conditions will only be exacerbated in the future by climate change and population growth. In the Front Range, water conservation is our most affordable and most reliable water supply option. Smart, integrated water and land use planning efforts today will help build water resource resiliency in Denver in the future.

Substantiation & Works Cited: Other local entities with similar language say all nonresidential or irrigated areas above 5000 sqft should meet these requirements. This has shown to work and not be too hard to implement so DGC should become more stringent. See below for examples.

- <http://southmetrowater.org/education/resources/model-landscape-irrigation-ordinance>
- City of Aspen Water Efficient Landscape Standards: <https://www.cityofaspen.com/199/Landscape-Ordinance>

Referenced Standards:

Note: List any new referenced standards that are proposed to be referenced in the code.

Impact:

Some of the proposed amendments listed above may result in modest increases in price for construction and design such as increased fixture/appliance costs, and increased costs of native, drought tolerant landscape design and installation. However, as noted above, these modest increases are far outweighed by the environmental and social benefits of water efficient new development.

Note: Discuss the impact of this proposal in this section AND indicate the impact of this amendment proposal for each of the following:

- The effect of the proposal on the cost of construction: Increase Reduce No Effect
- The effect of the proposal on the cost of design: Increase Reduce No Effect
- Is the proposal more or less restrictive than the I-codes: More Less Same

Departmental Impact: (To be filled out by CPD staff)

Note: CITY STAFF ONLY. Discuss the impact of this proposal in this section AND indicate the impact of this amendment proposal for each of the following:

- The effect of the proposal on the cost of review: Increase Reduce No Effect
- The effect of the proposal on the cost of enforcement/inspection: Increase Reduce No Effect