



DENVER AMENDMENT PROPOSAL FORM FOR PROPOSALS TO THE 2019 DENVER BUILDING CODE AMENDMENTS AND THE 2021 INTERNATIONAL CODES

DENVER
THE MILE HIGH CITY

2021 CODE DEVELOPMENT CYCLE

1) **Name: Kristen Salinas** **Date: 11/01/2021**
Email: ksalinas@noresco.com **Representing (organization or self): Denver**
City Staff Proposal (check box):

2) One proposal per this document is to be provided with clear and concise information.

Is a separate graphic file provided ("X" to answer): ___ Yes or x No

3) Highlight the code and acronym that applies to the proposal

<u>Acronym</u>	<u>Code Name</u>	<u>Acronym</u>	<u>Code Name</u>
DBC-AP	Denver Building Code–Administrative Provisions	IPC	International Plumbing Code
IBC	International Building Code	IRC	International Residential Code
IECC	International Energy Conservation Code	IFGC	International Fuel Gas Code
IEBC	International Existing Building Code	IMC	International Mechanical Code
IFC	International Fire Code	DGC	Denver Green Code

AMENDMENT PROPOSAL

Please provide all the following items in your amendment proposal.

Code Sections/Tables/Figures Proposed for Revision:
601.3.7
601.3.7.1 (new)

Proposal:
 ___ Revision **X** New Text ___ Delete/Substitute ___ Deletion

Modify existing wording in 601.3.7 to correct spelling:
 601.3.7 (6.3.7) On-Site Reclaimed Water Treatment Systems (Project Elective). On-site reclaimed water treatment systems, including ~~grey water~~ graywater reuse treatment systems and waste water treatment systems, shall be used to produce *nonpotable water* for use in water closet and urinal flushing, surface irrigation, and similar applications. On-site reclaimed water treatment systems shall be listed and labeled in accordance with NSF 350.

Add new subsection as follows:
601.3.7.1 (6.3.7.1) Graywater reuse treatment systems. Where utilized, graywater systems shall comply with State of Colorado, Department of Public Health and Environment, Code of Colorado Regulations, Regulation 86- Graywater Control Regulations. Within Regulation 86, the commission authorizes two uses for graywater – subsurface irrigation and indoor toilet/urinal flushing. These shall be considered separate provisions within this Code when choosing project electives in accordance with Section 101.4.1 (4.1), #3.

Supporting Information (Required):

The purpose of including these graywater provisions into this Chapter in the DGC is to enhance the design and construction of buildings through the use of building concepts having a positive environmental impact and encourage sustainable construction practices, allowing efficiency and conservation of water, and to promote resource efficiency.

Climate change is an established phenomenon affecting the environment globally and it is recognized that buildings and the built environment play a vital role in the process, impacting on the natural environment and the quality of life. Sustainable development concepts and approaches applied to the design, construction, and operation of buildings or to any built environment can enhance both the economic and environmental benefits of the community in Denver and around the world. Sustainability is not an individual issue rather an integrated and inseparable part of the building design and construction process. The benefits of sustainable design principles include resource efficiency, energy efficiency, healthy buildings and materials, ecologically and socially sensitive land use and strengthened local economics and associated communities, objectives vital for future development of Denver.

The State of Colorado has specific regulations regarding graywater systems and the City and County of Denver does not wish to override, amend, or detract from those regulations whatsoever so this proposal points directly to Regulation 86 to find all of the requirements for the system design, control, and installation. The State regulations and the Denver Green Code are not maintained on the same cycle so to keep from having regulations that could differ too much over time, we felt it best to just point to the state requirements instead of building a completely separate set of requirements.

In alignment with the 2018 Denver policy addressing graywater systems, all of the State level possible options are accepted in Denver, so we wish to include them in full under the DGC provisions, making sure that it is clear that each option is considered a separate provision when choosing electives in accordance with Section 101.4.1., #3.

Section 601.3.7 (6.3.7) is already an existing Section within the DGC, mentioning the elective of using graywater. We only proposed changing the spelling of graywater in this paragraph to keep consistent with State Regulation 86. We then added a new subsection to point the user to the State requirements and to clarify options considered separate electives.

Because these requirements are an option, and not mandatory, the cost of construction, design and the restrictiveness is marked as “no Impact” below. It is reasonable to anticipate that added graywater systems would add to initial design and construction costs while reducing annual water costs over time.

Water is a critical resources in Denver and the West. Denver as a community is uniquely positioned to provide exemplary leadership to communities throughout the Colorado River Basin. Initiatives tied to reducing Denver community demand on critically strained eastern snowpack and Colorado River source water are of high value both to Denver’s citizens in the short term, and to regional residents in the future. Any water not drawn from the Colorado River is highly valuable water offered to struggling communities, farms, and ecosystems downstream. Onsite graywater reuse is one in a suite of strategies to enhance responsible water use and more strongly reconnect our community consciousness to this critical, life giving, and increasingly stressed resource.

Bibliography and Access to Materials (as needed when substantiating material is associated with the amendment proposal):

<https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=6527&fileName=5%20CCR%201002-86>

Other Regulations Proposed to be Affected

N/A

Referenced Standards:

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

State regulation 86: <https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Public-Health-Environment/Environmental-Quality/Graywater>

Impact:

How will this proposal impact cost and restrictiveness of code? ("X" answer for each item below)

Cost of construction: ___ Increase ___ Decrease x No Impact
Cost of design: ___ Increase ___ Decrease x No Impact
Restrictiveness: ___ Increase ___ Decrease x No Impact

Departmental Impact (City use only):

This amendment proposal increases/decreases/is neutral to the cost of plans review.

This amendment increases/decreases/is neutral to the cost of inspections.