



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:** Robby Schwarz **Date:** 6/11/2021
Email: robby@btankinc.com **Representing (organization or self):** Denver

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

Please provide all the following items in your amendment proposal.

<p><u>Code Sections/Tables/Figures Proposed for Revision:</u> Instructions: If the proposal is for a new section, indicate (new), otherwise enter applicable code section.</p> <p>NEW Section Drain water heat recovery units</p>
<p><u>Proposal:</u> Instructions: Show the proposal using <u>strikeout</u>, <u>underline</u> format. Place an "X" next to the choice that best defines your proposal: ___ Revision _x_ New Text _ Delete/Substitute ___ Deletion</p> <p><u>Add new section as follows:</u></p> <p><u>401.7 Drain water heat recovery units.</u> A drain water heat recovery system shall be installed in dwelling units that have two or more full bathrooms with showers that drain to a location where the system can recover heat from the water leaving the bathrooms. The drain waste heat recovery system shall be installed in accordance with manufacture instructions after all cold water take off branches and before delivery to the hot water heater. Drain water heat recovery units shall comply with CSA B55.2. Drain water heat recovery units shall be tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units shall be less than 3 psi (20.7 kPa) for individual units connected to two showers. Potable water-side pressure loss of drain water heat recovery units shall be less than 2 psi 13.8 kPa) for individual units connected to three or more showers.</p>
<p><u>Supporting Information:</u></p> <p>- Purpose: Increase water heating efficiency</p>

- Reason: Drain water heat recovery is a proven technology that has requirements for installation already incorporated into the IECC. This proposal changes the charging language to require the technologies installation in the DGC for homes that have two or more showers that drain to a central location where a DWH unit could be effectively installed.
- Substantiation
 - o Note: CSA B55.1 is listed in the Reference standards in Chapter 6 of the 2021 IECC.

Hot water energy justification for inclusion in the RESNET HERS Energy Rating Index score ANSI 301 standard

<https://www.resnet.us/wp-content/uploads/Domestic-Hot-Water-Amendment-Justification-and-Background.pdf>

Other Regulations Proposed to be Affected

***For proposals to delete content from the 2019 Denver Green Code in conjunction with adding it to other mandatory Denver codes and/or regulations, only.**

Please identify which other mandatory codes or regulations are suggested to be updated (if any) to accept relocated content.

Referenced Standards:

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

Impact:

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

Cost of construction:	<input checked="" type="checkbox"/> Increase	<input type="checkbox"/> Decrease	<input type="checkbox"/> No Impact
Cost of design:	<input checked="" type="checkbox"/> Increase	<input type="checkbox"/> Decrease	<input type="checkbox"/> No Impact
Restrictiveness:	<input checked="" type="checkbox"/> Increase	<input type="checkbox"/> Decrease	<input type="checkbox"/> No Impact