



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

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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 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:

Instructions: If the proposal is for a new section, indicate (new), otherwise enter applicable code section.

Proposal:

Instructions: Show the proposal using ~~strikeout~~, underline format.

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

Revise R403.1.4.1 exceptions as follows:

R403.1.4.1 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended below the frost line specified in Table R301.2.
2. Constructed in accordance with Section R403.3.
3. Constructed in accordance with ASCE 32.
4. Erected on solid rock.

Footings shall not bear on frozen soil unless the frozen condition is permanent.

Exceptions:

1. Protection of free-standing *accessory structures* with an area of 600 square feet (56 m2) or less, of light-frame construction, with a wall ~~an eave~~ height of 10 feet (3048 mm) or less, measured from grade plane to the top of the wall’s top plate, shall not be required. Each individual accessory structure shall be structurally independent and free of support or attachment to other structures.
2. Protection of free-standing *accessory structures* with an area of 400 square feet (37 m2) or less, of other than light-frame construction, with a wall ~~an eave~~ height of 10 feet (3048 mm) or less, measured from grade plane to the top of the concrete or masonry walls, shall not be required. Each individual accessory structure shall be structurally independent and free of support or attachment to other structures.

Supporting Information (Required):

- Purpose: What does your proposal achieve?

This proposal clarifies the height measurement for free-standing accessory structures that meet the exception. This proposal also clarifies when accessory structures will be considered one versus two structures in terms of applying this exception.

- Reason: Why is your proposal necessary?

This proposal provides the necessary clarification that is needed to apply this code section. Denver’s reviewers often field the following questions:

1. How is eave height measured?
2. Can we consider duplex garages with a common wall two separate structures?

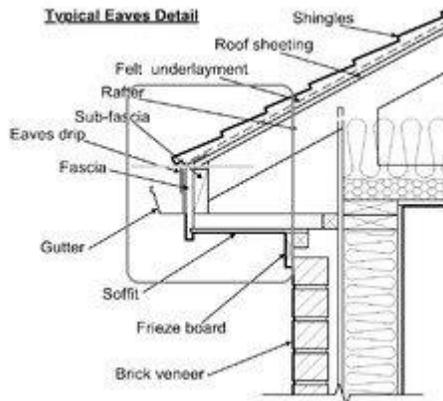
The clarifying language answers the questions above, which will make it easier for applicants to design to the code section, and for reviewers to apply and explain the code section.

- Substantiation: Why is your proposal valid? (i.e. technical justification)

Justification for Measurement of Height:

The 10 feet eave height exception for frost protection first appeared in the 1978 BOCA Basic Building Code. In that code, “height” is defined as measured from grade. In later editions of the BOCA they italicized “height” so it is clear they meant for the definition to apply. This research suggest that height should be measured from grade (or grade plane as defined in the IRC) and not from the top of foundation or interior floor.

It is unclear where an applicant would measure eave height to. Would you measure to the soffit, to the top of the rafter at the intersection of the exterior wall, to the top of the eave, to the bottom of the eave, etc? This code proposal clarifies that the height of the wall is what is important for determining whether an applicant meets the exception. The top of the structural wall is defined at the top of the wall’s top plate. Since there can be so many different roof/ceiling assemblies, this establishes a consistent approach to measuring wall height.



Justification for “Each individual accessory structure shall be structurally independent and free of support or attachment to other structures.”

Similar to duplexes, an accessory structure with a common wall (e.g. duplex garage) is considered one building per the following definitions in IRC Section R202.

Accessory structure: A structure that is accessory to and incidental to that of a dwelling(s) and that is located on the same lot.

Building: Any one- or two- family dwelling or portion thereof, including townhouses, used or intended to be used for human habitation, for living sleeping, cooking or eating purposes, or any combination thereof, or any accessory structure.

Dwelling: Any building that contains one or two dwelling units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

Structure: That which is built or constructed.

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

Typical Eaves Detail Image

<https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.houzz.com%2Fdiscussions%2F5715676%2Fdefinition-of-eaves&psig=AOvVaw37lffisgyotm3d4vGJdgtM&ust=1634661222099000&source=images&cd=vfe&ved=0CAgQjRxqFwoTCOiJ442z1PMCFOAAAAAdAAAAABAD>

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: ___ 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.