



# 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:** John Alessio **Date:** September 17, 2021  
**Email:** John.alessio@denvergov.org **Representing (organization or self):** Organization

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  |
| <b>IFC</b>     | <b>International Fire Code</b>                 | DGC            | Denver Green Code              |

## AMENDMENT PROPOSAL

Please provide all the following items in your amendment proposal.

**Code Sections/Tables/Figures Proposed for Revision:** DFC 509.3 Access to fire pumps

**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 "X" next to choice that best defines your proposal:** X Revision \_\_\_ New Text \_\_\_ Delete/Substitute \_\_\_ Deletion

**Section 509.3 Location and access to indoor fire pumps is added as follows:**

**509.3 Location and access to indoor fire pumps.** ~~Access to Fire pumps in new buildings shall be both located at grade level with the level having direct access to and accessible directly from outside or located one level below grade. Pump rooms that are located one level below grade shall be placed such that there are no intervening rooms between the stairway door serving that level and the pump room. Door serving the pump room shall be within 25 ft. of the stairway door. The stairway that serves the lower level shall exit directly to outside. Where a dedicated stairway is provided to access the pump room and mechanical rooms, stairway width shall not be less than 36 inches. Location of the fire pump room is subject to approval by the fire code official.~~

**Exceptions:**

1. Fire pump rooms may be located one level below grade, provided that the following requirements are met:
  - 1.1 Maximum total travel distance from exterior access at grade level to the most remote portion of the fire pump room shall not exceed 60 feet.
  - 1.2 Stairways providing access shall comply with Section 1011 of the *International Building Code* and shall terminate at an exit discharge at grade level. Curved stairways, spiral stairways, alternating tread devices, ship's ladders, and ladders are prohibited.
  - 1.3 Travel path from the exterior to the fire pump room shall be through a *corridor* or *exit passageway* with a minimum fire-resistance rating to match interior exit stairway enclosure rating requirements for the building.
  - 1.4 No intervening rooms between the stairway termination and the fire pump room.
2. In *high-rise buildings* where the use of fire pumps arranged in series is required due to maximum pressure limitations, the fire pumps supplying the higher zones may be located above grade level.
3. In *existing buildings* where a new fire pump is being added or an existing fire pump is being replaced with a new fire pump of different nominal rating, the location and access shall be preplanned and approved by the *fire code official*.

4. Existing fire pumps, including where an existing fire pump and/or controller is being replaced with new equipment of the same nominal rating.

**Supporting Information (Required):**

All proposals must include a written explanation and justification as to how they address physical, environmental, and/or customary characteristics that are specific to the City and County of Denver. The following questions must be answered for a proposal to be considered.

- Purpose: What does your proposal achieve?

The existing language for this section is unenforceable as it is currently written. The first sentence is “Access to fire pumps in new buildings shall be located at grade level with the level having direct access to outside or located one level below grade.” This sentence doesn’t specify that fire pumps or fire pump rooms are required to be located at grade level, rather “access to fire pumps” is required at grade level, which is open to interpretation and has been contested on past projects.

- Reason: Why is your proposal necessary?

The revised section is less ambiguous and clearly requires the fire pump room to be located at grade level. The exception that allows fire pumps to be located one level below grade has been split out of the single paragraph for clarity.

The addition of the requirement to protect the access path to sub-grade fire pump rooms is aligned with the intent of NFPA 20. The means of access to sub-grade fire pump rooms has been clarified and refers to existing base code. The requirement for stairs, rather than alternating treads, ladders, or spiral stairways, further clarifies the expectations for access to the fire pump room in an emergency.

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

This is an existing Denver Fire Department requirement that helps clarify acceptable locations for fire pump rooms. My proposal makes it easier to read and eliminates ambiguity.

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

**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     X  Decrease    \_\_\_ No Impact  
Restrictiveness:          X  Increase    \_\_\_ Decrease    \_\_\_ 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.