

## **Residential Remodel Building Permit Requirements**

### **Basement Finish for One and Two-Family Dwellings and Townhomes**

#### **Important notes about building permit request submissions**

- All permit applications must be submitted online using the [Customer Access](#) portal.
- There is no need to email us when you submit documents. Staff is notified automatically within one business day of your submission.
- Submit documents as PDF file type only.
- Please include the following:
  1. List the site address on all documents and plans.
  2. Include the owner's name on all documents.
- Permit review will be delayed if the required documents are not submitted online, if they are not submitted as PDFs, or if the documentation is missing information.
- All submitted documents will become a public permanent record of the property. It is in your best interest that the submitted PDFs are of the highest quality and detail, in case you or somebody else needs to refer to them in the future.

#### **General guidelines**

- Please refer and use (as applicable) the [Arapahoe County amended Colorado Chapter of the International Code Council Building Guide – Single Family Residential Basement Finish](#) as an aid in proper permit submittal requirements. Additional details may be required.
- All associated new Mechanical, Plumbing, and Electrical scopes of work are to be included with this permit submittal. Separate permits may be allowed with approval by the Chief Building Official.
- Partially or completely finished basements require an egress window (or an egress door) in compliance with the 2021 International Residential Code (IRC) Section R310.
- Each sleeping room must have a fully compliant egress window (door) in place and must be compliant with the following:
  - A minimum of 5.7 square feet of openable area.

- Exception: Grade floor or below grade openings shall have a net clear opening of not less than five square feet.
  - Minimum clear openable height of 24 inches.
  - Minimum clear openable width of 20 inches.
  - Maximum sill height of 44 inches.
  - Window wells must provide a clear horizontal dimension to allow the window to be fully opened and provide a minimum accessible net clear opening of nine square feet with a minimum dimension of not less than 36 inches.
  - Egress ladders are required in window wells over 44" in depth and shall not encroach into the required dimensions of the window well by more than six inches.
  - Bottom rung not to exceed maximum 18" above grade
- Code-compliant combustion air for all fuel-fired appliances will be required to be installed if currently not existing or inadequate.
- Gas appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, or storage closets or in a space that opens only into such rooms or spaces. (Exceptions may apply)
- Ground Fault Circuit Interrupter (GFCI) protection is required for all outlets per the 2020 National Electrical Code (NEC).
- Smoke detectors, and or Combination Smoke/CO detectors must be installed on each story, in the basement being finished, in all sleeping rooms, and in the immediate vicinity directly outside sleeping rooms, as per requirements of the 2021 IRC, Section R314. Carbon Monoxide (CO) Detectors and or Combination Smoke/CO detectors must be installed outside and within fifteen feet of the entrance to each sleeping room, as per requirements of 2021 IRC, Section R315 and Colorado HB09-1091.
- Walls must be provided with a minimum of 3 inches of "float" space (less than 3" float requires approval by soils report or engineers letter) when built on concrete, though an increased gap may be required due to the actual site (soil) conditions.
- Basement exterior walls must be insulated per 2021 IECC Table R402.1.3 with a minimum of R-15 (continuous insulation) or minimum R-19 (cavity insulation), or other approved compliance options per the 2021 International Energy Conservation Code.

## Required documents

Attach the following to the online application:

1. A site plan is required if the proposed basement finish includes new exterior access or an egress stairway. Please contact the [Zoning Division](#) for more specific requirements.
2. Where new window wells are required close to the property line [Zoning Division](#)'s approval may be required.
3. Where applicable, an asbestos report, reviewed by the Colorado Department of Public Health and Environment (CDPHE), might be required. Please see additional notes on how to do this, on page 5 of this document.
4. Construction Plans
  - a. Provide complete sets of construction plans:
    - i. Draw all sets to scale (e.g., 1/4" = 1'0") and specify it on the drawing.
    - ii. Show all work that is proposed.
    - iii. Include a layout of the entire floor or level with adjacent spaces.
  - b. Include the square footage of the area being finished, clearly showing the dimensions for each room and its intended or possible use.
  - c. Show the location and clearances of the furnace and water heater.
  - d. Show the stairway location and whether the under-stair area is to be finished or not.
  - e. Show the location of all required emergency escape and rescue openings (windows or doors), along with documentation showing code compliancy for the window well and egress ladder when required.
  - f. Show that the clearances for the water closet meet the minimum requirements of 15" from the center of the water closet on each side and 21" clear space in front of it.
  - g. Indicate the finished ceiling heights for all areas.

- i. The ceiling height must be a minimum of seven feet, though soffit areas may be reduced to six feet and four inches, for a maximum width of eight feet when necessary to conceal beams, ducts, and piping.
  - h. Indicate whether the crawl space is to be used as storage or not.
  - i. Indicate if there are any structural alterations.
    - i. If structural alterations are necessary, the involvement of a qualified engineer may be required.
5. Provide a complete isometric diagram and an “[Adding or Replacing Gas Appliance questionnaire](#)” when new or replacement gas appliances are installed.
  - a. Note: if existing gas appliance(s) are replaced as “like-for-like”, you must provide the existing BTUH<sup>1</sup> rating plate and new appliance BTUH rating plate.
  - b. Note: When a new furnace is being provided, an ACCA Manual J, S & D may be required. Contact the Building Division to confirm.
6. Provide a completed [Basement Finish Plan Submittal Questionnaire](#).

### **Important additional requirements for a successful inspection**

Download, print and have the following documents ready for the inspector from the [Customer Access](#) portal:

- A color copy of all final stamped permit documents (i.e., all the ones reviewed and approved – these documents are found in the Customer Access portal and will have the file name marked as “FINAL”).
- A copy of the review comments.

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<sup>1</sup> British Thermal Unit per Hour

## **Residential dwelling code compliance and mandatory requirements when finishing a basement**

In addition to the above required documents, please ensure the residential dwelling abides by the following code requirements:

### **Asbestos**

1. Pursuant to CRS 25-7, Part 5, Asbestos Control and Regulation No. 8 Part B, by the Colorado Air Quality Control Commission, it is the responsibility of the owner/builder to apply and procure all necessary permits for any renovation or demolition and/or provide the necessary notification for any demolition or renovation.
  2. The applicant must refer to the [CDPHE Asbestos Permitting Process Guide](#) to provide the report made by a licensed asbestos contractor to CDPHE.
  3. Verification of compliance by the CDPHE according to the State of Colorado Statute is provided to the Arapahoe County Building Department once their review is complete (no action on your behalf is required).
- If permits are not required, the State Air Quality Control Commission will forward proof of such to the Building Department.