



INTERNAL CONVERSION ACCESSORY DWELLING UNIT (ADU)

This guide aims to support you through the permit process for your project, serving as a fundamental plan submittal under the 2021 International Residential Code. Please note that it may not encompass all circumstances. Depending on the scope and complexity of your project, additional and/or more detailed plans may be necessary.

This permitting process is not intended to take the place of any Homeowner Association (HOA) or Civic Association (CA) requirements; therefore, you need to check with your HOA or CA for any additional requirements they may have.

This guide is intended for use when converting space in an existing home for an ADU when no structural additions are required.

The ADU Addition Guide should be used when additional space for use as an ADU will be built adjoining the principal structure.

The ADU Detached Guide should be used when an ADU will be constructed that is entirely detached or separated from the principal structure.

HOW TO USE THIS GUIDE

1. PRIOR TO APPLYING FOR A PERMIT

Check with any HOA/CA and utilities (including water, sewer, gas/electric, and communications/internet) for ADU requirements/restrictions.

2. APPLY FOR A PRE-SUBMITTAL MEETING

A pre-submittal meeting pursuant to Section 12-14-303 is required prior to submittal of a building permit application for an ADU. Visit the [Centennial Permit Portal](#). Create a new account or log in to an existing account. Apply for a **Pre-Submittal Plan**. It will be helpful to bring a map or sketch of your lot, including the location and dimensions of your principal home and proposed ADU conversion area.

Pre-submittal permit number _____

3. SUBMIT A COMPLETED ADDRESS PERMIT APPLICATION

All ADUs are required to maintain a separate address from the principal dwelling. Visit the [Centennial Permit Portal](#). Create a new account or log in to an existing account. Apply for an **Address Assignment permit**. The key information required is the address of the main home and contact information for the applicant. A Pre-Submittal meeting is required prior to applying for an address permit.

Address Assignment Permit Number _____

Main Home Address _____

ADU address _____

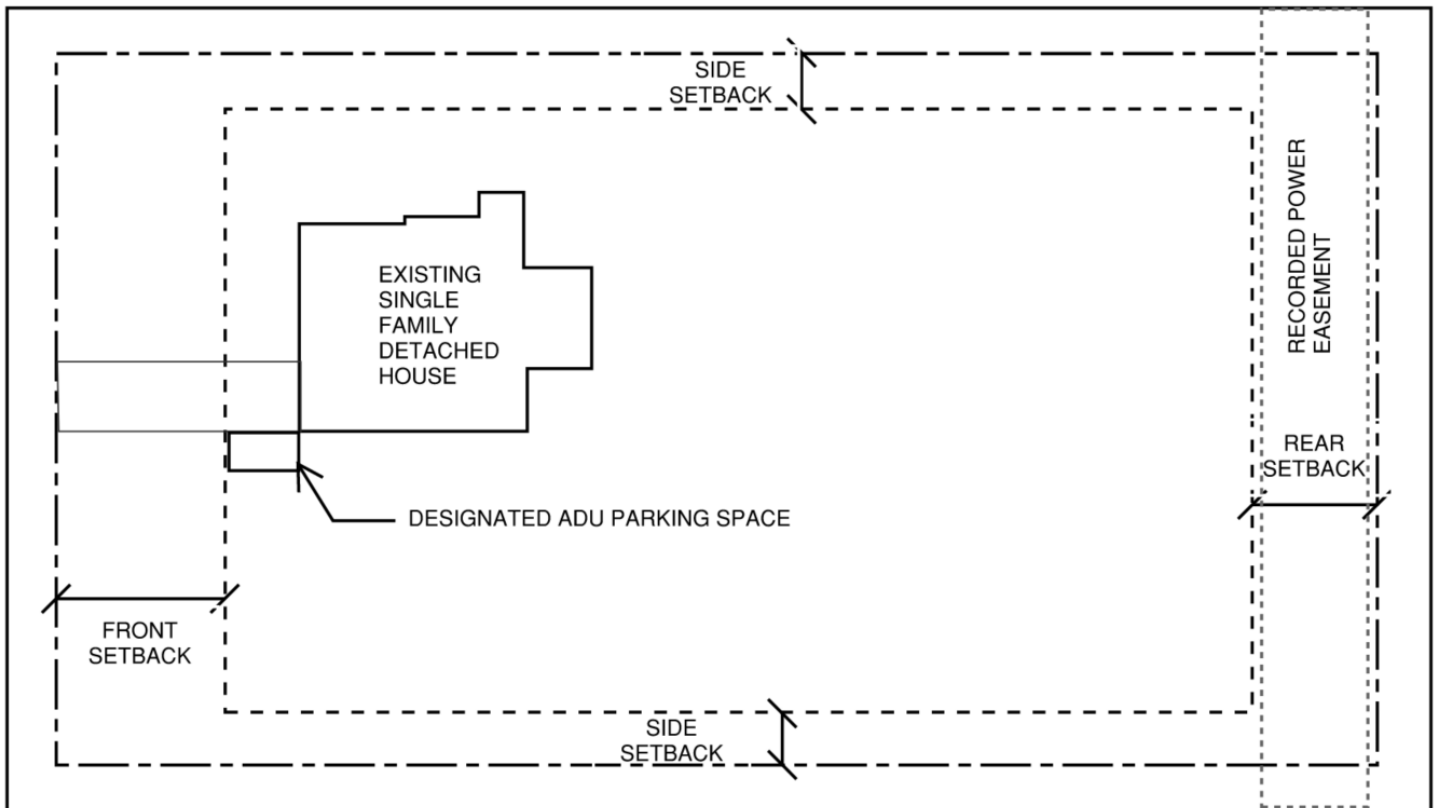
4. SUBMIT A COMPLETED INTERNAL CONVERSION ADU PERMIT APPLICATION

Applications may be submitted by visiting the [Centennial Permit Portal](#). It is important that the permit/application is filled out completely to the best of your knowledge with the NEW address assignment and that you provide any additional pertinent information (i.e., owner and contractor contact information). Fill in the blanks on page ten and indicate which construction materials will be used. It is important to print legibly to help staff review the submitted information. In most cases, the information provided within this worksheet will satisfy the City's requirement for a complete submittal.

5. PROVIDE SITE/PLOT PLANS

- Provide Site Plan showing the location of at least one off-street parking space for ADU tenants (See LDC Table 12-5-202A).
- Be sure to show the location of your utilities (i.e. gas, water, sewer and electric) and any existing meters. If the project will require moving any utilities or meters, show where those will be relocated.
 - a. If you do not know the locations of your utilities, contact the *Utility Notification Center of Colorado* 1-800-922-1987. ***Remember to ask them about the cost of this service***

EXAMPLE SITE PLAN





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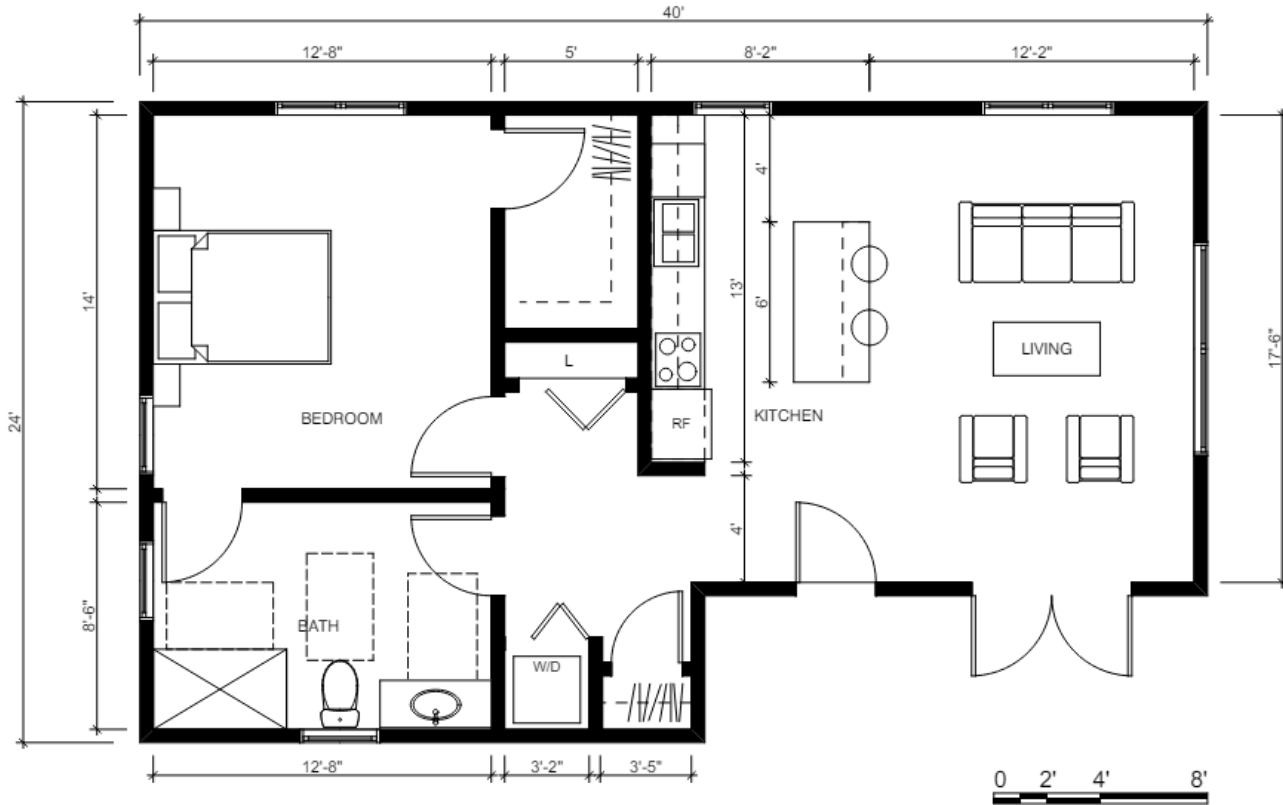
6. PROVIDE A FLOOR PLAN

A simple floor plan is required to show the dimensions of the new Attached ADU. ADUs must meet standards in the [City's current adopted](#) International Residential Code and National Electrical Code.

- Include the main home's dimensions and rooms in the floor plan. The ADU cannot exceed 50% of the principal home's footprint unless the ADU occupies an existing attic or basement space.
- Include any modifications to wall openings and/or windows with dimensions, and any items to be relocated.
- Special consideration will be given to any new openings that exceed 6' in a bearing wall of the main home. A plan from a registered engineer may be required in these instances.
- Fire-resistant construction may be required based on the distance to other homes. [2021 IRC Chapter 3 Building and Planning](#)
- Each ADU must provide a kitchen (includes a stove/cooktop, range, oven, or one or more 220 volt or greater outlets or gas line connections with appropriate ventilation), at least one bathroom and fan, and a bedroom or somewhere of the intent or designated for sleeping.
- Habitable rooms shall comply with the requirements for natural light and ventilation shown in the table below. When the requirements for light and ventilation cannot be met by natural means, a whole house ventilation system shall be provided in accordance with section M1507 of the International Residential Code.
- Heat is required in all habitable rooms. Show how the ADU will be supplied with heat.
- Provide detail regarding plumbing and show furnace and water heater locations.
- Receptacles shall be installed so that no point measured horizontally along the floor line of any wall space is more than 6 feet from a receptacle outlet.
- Hallways of 10 feet or more in length shall have at least one receptacle outlet. The hall length shall be considered the length measured along the centerline of the hall without passing through a doorway.
- GFCI protection shall be provided as outlined in the International Residential Code section E3902.
- Smoke detectors are required in homes. Regulations call for detectors to be powered by electricity (not battery-operated). Where dwellings are attached, detectors may need to be interconnected.
- ADUs cannot enclose existing bedroom or basement egress window/s.

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Example Floor Plan



*Example ADU floor plan from Stephen Dalton Architects www.SDArchitects.net



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Basement Conversions:

- A plan or letter from a registered engineer is required when any new openings in the existing foundation wall or in a bearing wall are proposed to ensure structural integrity has not been compromised.
- List window dimensions and type of windows being installed.
- All basements and bedrooms require emergency egress windows and where the emergency egress is below grade, a code compliant window well with ladder shall be provided (see requirements shown in this guide).
- Emergency egress windows cannot be enclosed or obstructed in any way. Egress windows located under a deck must have a clear path of egress at least 36 inches in height that leads directly to the exterior of the home.
- Finished ceiling height in existing basements shall not be less than 6'-8" with a minimum ceiling height of 6'-4" under obstructions such as beams and ductwork. Clearly indicate areas where ceiling heights are less than 7'.
- Furnaces and water heaters cannot be located in or accessed through a bedroom or bathroom unless the appliances are of the direct vent type. If the furnace and water heater are being enclosed, adequate combustion air must be provided for these appliances to operate properly. For maintenance purposes, a minimum of 30" clear working space is required to be provided in front of the furnace and water heater. Maintenance or removal of each appliance must be possible without removing permanent construction or disturbing walls, piping, valves, wiring and J-boxes.
- Provide R-19 wall cavity insulation or R-15 continuous insulation at the perimeter basement walls.
- Where access to the area under the basements stairs is provided for storage or other uses, the walls and ceiling of this enclosed space shall be protected on this inside with minimum ½" drywall.
- Fire blocking must be installed in concealed spaces of wood-furred walls at the ceiling level, at 10' intervals along the length of the wall, and at all interconnections of concealed vertical and horizontal spaces such as intersections of stud walls and soffits or dropped ceilings. **Details of fire blocking options are shown within this guide.** Fire stops may be constructed of ½" lumber, ¾" plywood or OSB, ½" gyp board or fiberglass insulation. Manufacturer's specification documents for the fireblocking method chosen must be included with the project submittal.
- If your home is served by a septic system, an approval letter from Arapahoe County Public Health is required if you are adding bedroom(s) in the basement. Click [HERE](#) for more information.



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7. DESIGN REQUIREMENTS

ADUs require their own separate entrance. This can be provided through an external door or from inside the entrance to the main house (for example, through a shared foyer or mud room).

8. PROVIDE A WILL-SERVE LETTER FROM UTILITY COMPANIES

A will serve letter from all applicable utility districts (water, sewer, gas/electric) will be required as part of the permit application.

ADDITIONAL CONSIDERATIONS.

The following are not required to be indicated on a site plan or floor plan, but property owners may wish to consider them before finalizing an application.

1. How will the ADU occupant get from the sidewalk or parking space to their front door? Will there be a paved path for access?
2. Where will ADU mail be delivered?
3. Will the ADU occupant share trash/recycling service with the main home, or will the ADU occupant need space for separate trash/recycling receptacles? Note: LDC Section 12-3-608. Individual garbage containers must have a cover and be screened from public view except when placed at the curbside for collection.

I am returning this document to the City of Centennial as part of my submittal for a building permit. I have read this document in its entirety and understand its content. Upon reading this document, I understand that additional materials may be required of me prior to obtaining a permit. I will adhere to the building codes adopted by the City of Centennial in the construction of my project.

X

Signature/Date



INTERNAL CONVERSION ACCESSORY DWELLING UNIT (ADU)

CONSTRUCTION DRAWING DETAILS:

Construction Detail Notes:

ROOM PLANNING REQUIREMENTS (R303 through R305)

Use	Area (ft ²)	Width	Ceiling height [†]	Natural light*	Natural ventilation*
Living	70	7'-0"	7'-0"	8% floor area	4% floor area
Dining	70	7'-0"	7'-0"	8% floor area	4% floor area
Kitchen	N.A.	N.A.	7'-0"	8% floor area	4% floor area
Bedroom	70	7'-0"	7'-0"	8% floor area	4% floor area
Bathroom	N.A.	N.A.	6'-8"	3 square feet	1 1/2 square feet

* See Sections R303.1 & R303.3 for mechanical ventilation and artificial light and R303.4 for required whole-house mechanical ventilation.

† 6'-8" min. at plumbing fixtures and for non-habitable basements.

- Homes with automatic fire suppression systems (fire sprinklers) require suppression plans to be submitted, reviewed, and approved by South Metro Fire Rescue. Please click [HERE](#) to learn more about submittal requirements for South Metro Fire Rescue.
- Attic ventilation and access may be required.
- Pre-engineered floor systems may be used and should be installed according to the manufacturer's installation instructions.
- For all pre-engineered systems, the manufacturer's installation instructions must be available to the inspector on site.
*Failure to provide these materials upon request will result in your project failing inspection.



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C O L O R A D O

INTERNAL CONVERSION ACCESSORY DWELLING UNIT (ADU) FIXTURE CLEARANCE REQUIREMENTS

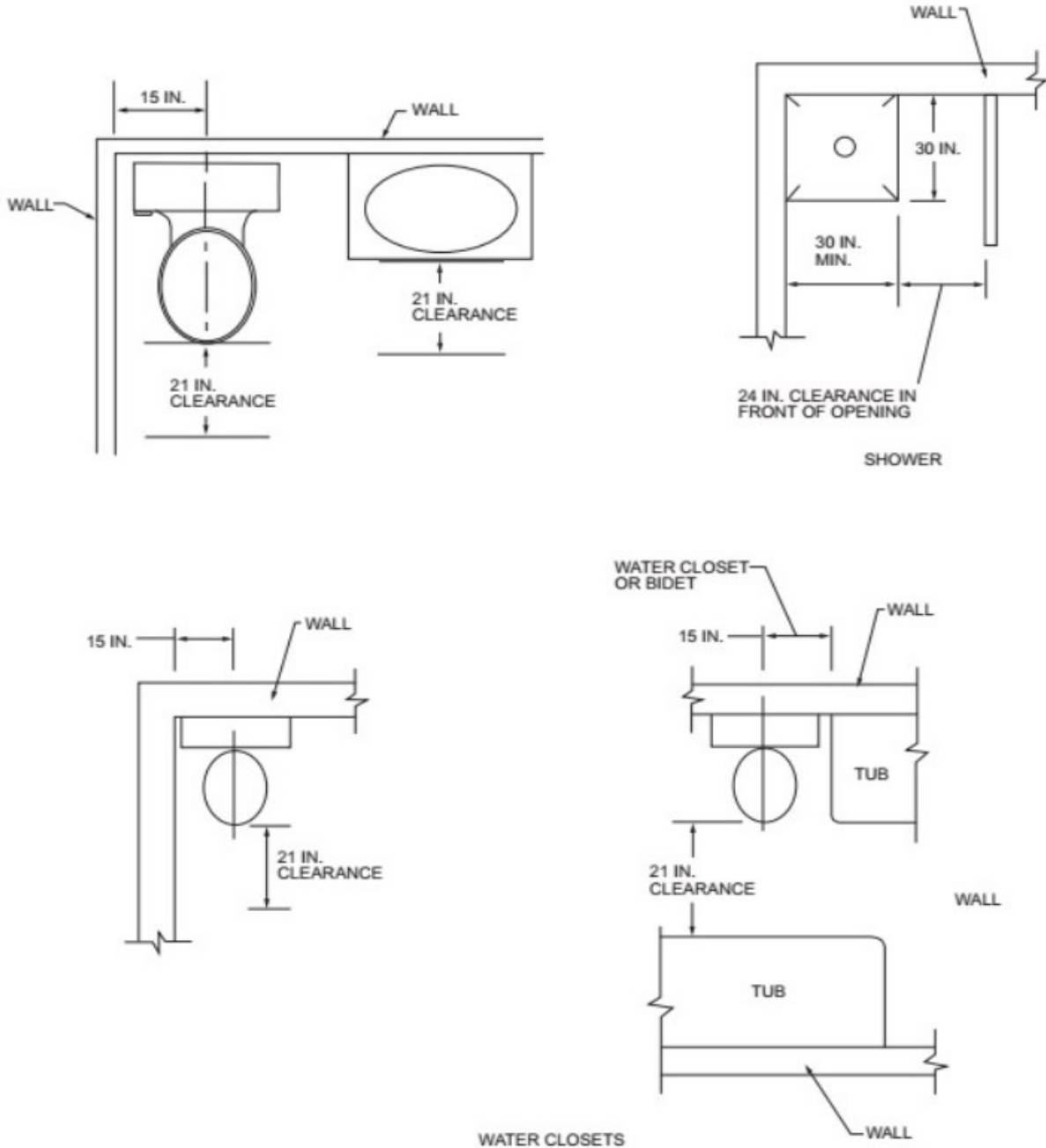


FIGURE R307.1 MINIMUM FIXTURE CLEARANCES



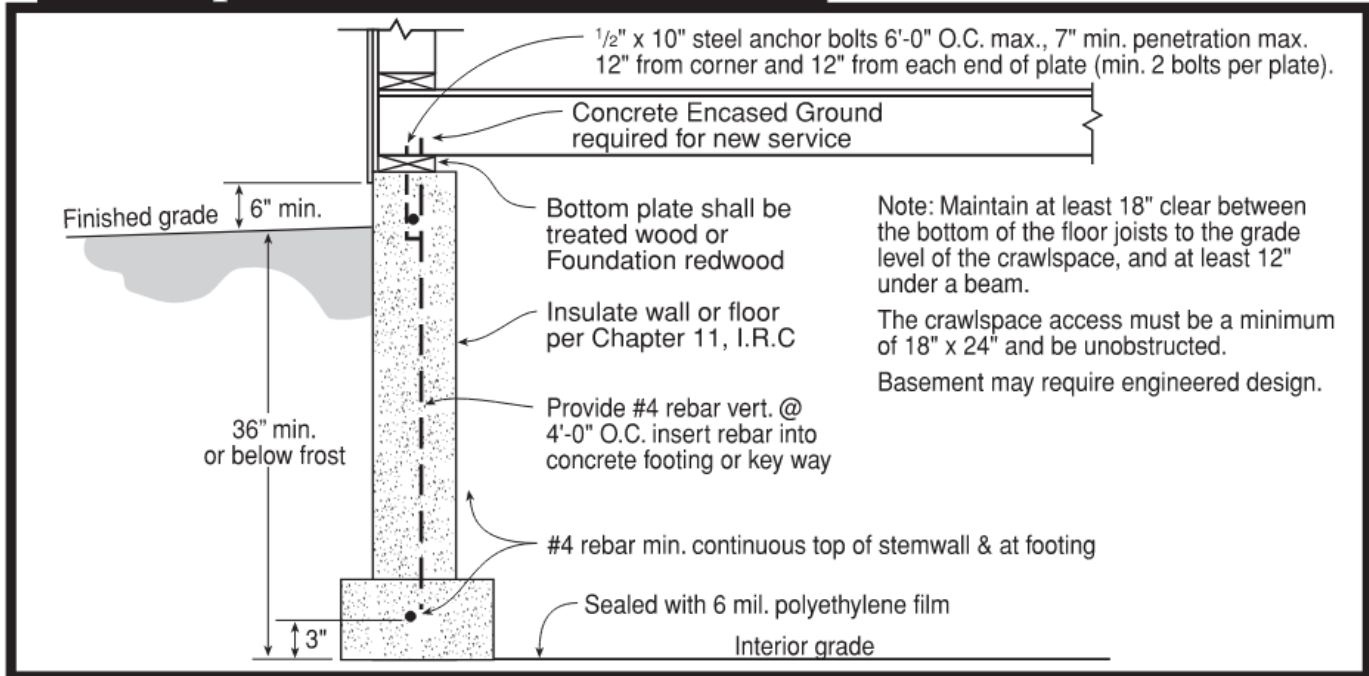
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INTERNAL CONVERSION ACCESSORY DWELLING UNIT (ADU)

CRAWL SPACE FOUNDATION DETAIL

Crawlspace Foundation Detail A

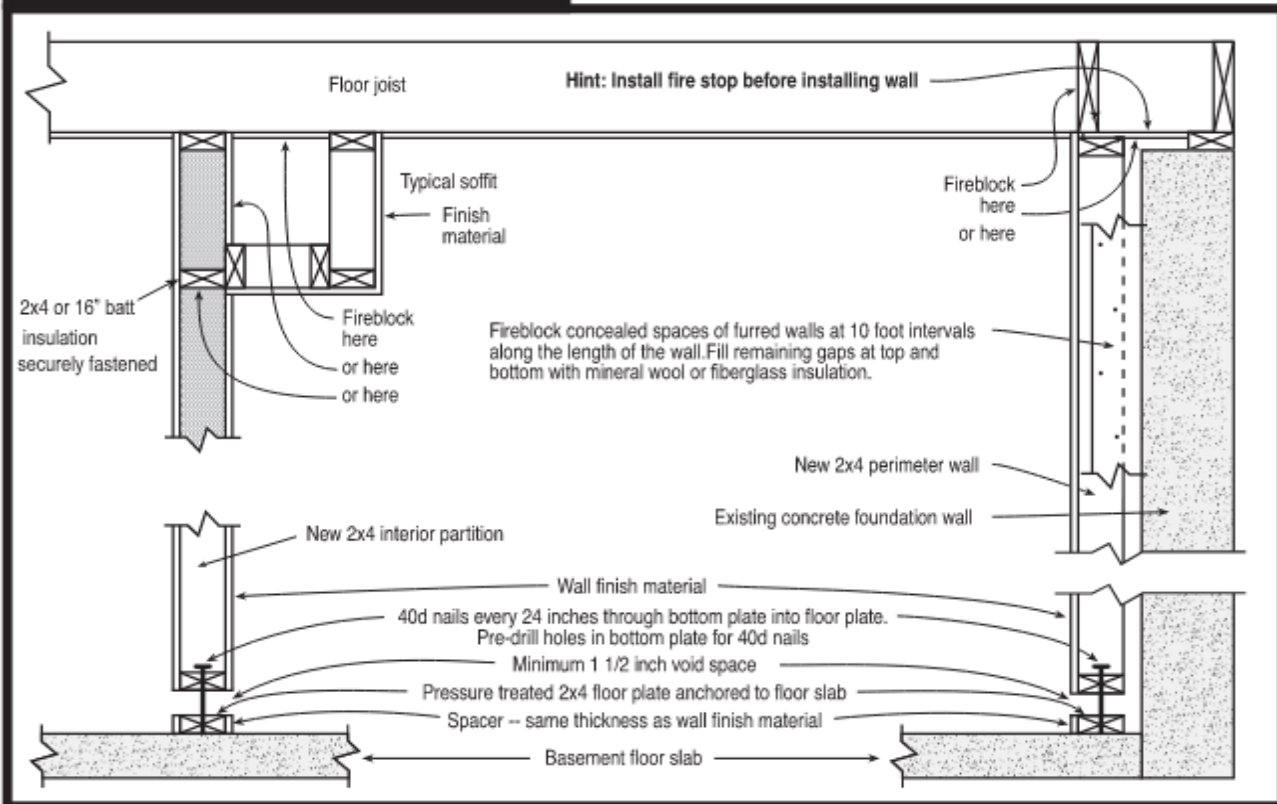




Centennial C O L O R A D O

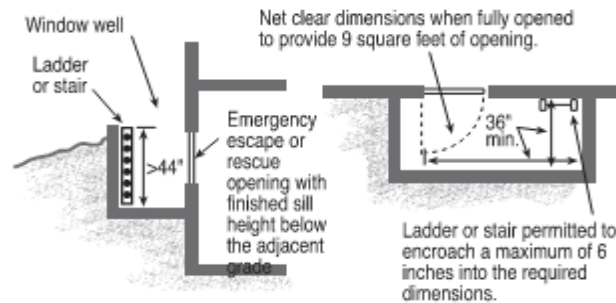
INTERNAL CONVERSION ACCESSORY DWELLING UNIT (ADU)

Basement Finish Details



Emergency Escape & Rescue Window Well

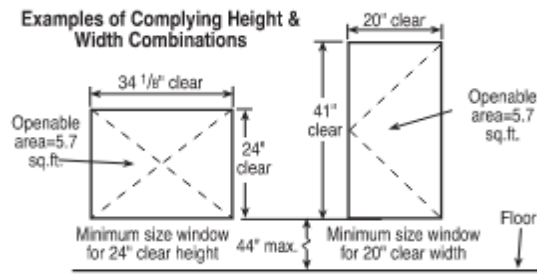
Emergency Escape And Rescue window wells must provide a minimum area of 9 square feet with a minimum dimension of 36 inches and shall enable the window to open fully. If the depth of the window well exceeds 44 inches, a permanently affixed ladder must be provided. The ladder must not interfere with the operation of the window.



Emergency Escape & Rescue Window

Emergency Escape And Rescue Windows must meet the following criteria:

- A minimum total openable area of not less than 5.7 square feet
- A minimum clear openable height of not less than 24 inches
- A minimum clear openable width of not less than 20 inches.
- A finished sill height of not more than 44 inches above the floor and the window should be operable from the inside with normal operation and without the use of tools, keys or special knowledge.

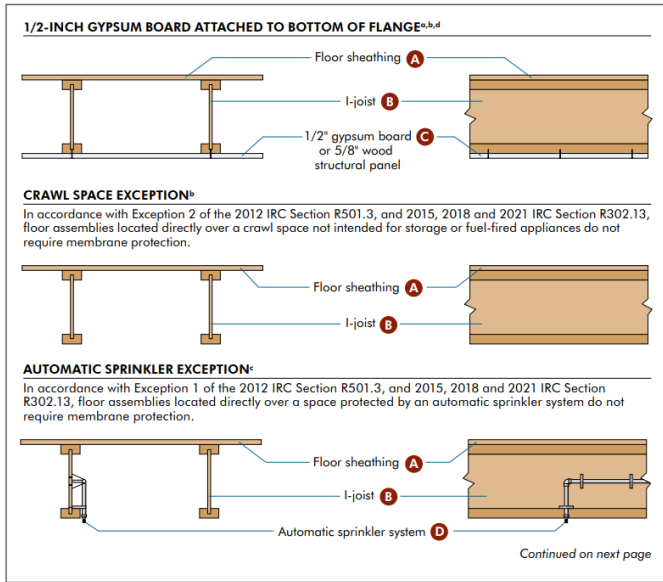


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FIRE PROTECTION OF FLOORS (FIREBLOCKING) – EXAMPLES IRC Section R302.13

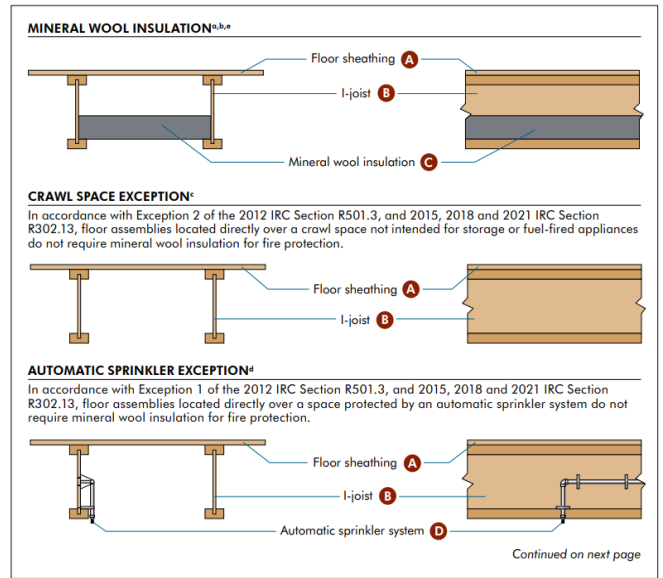
Fire Protection: 1/2-inch Gypsum Board Attached to Bottom of Flange

The following fire resistance design represents the default protection specified in the 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13.



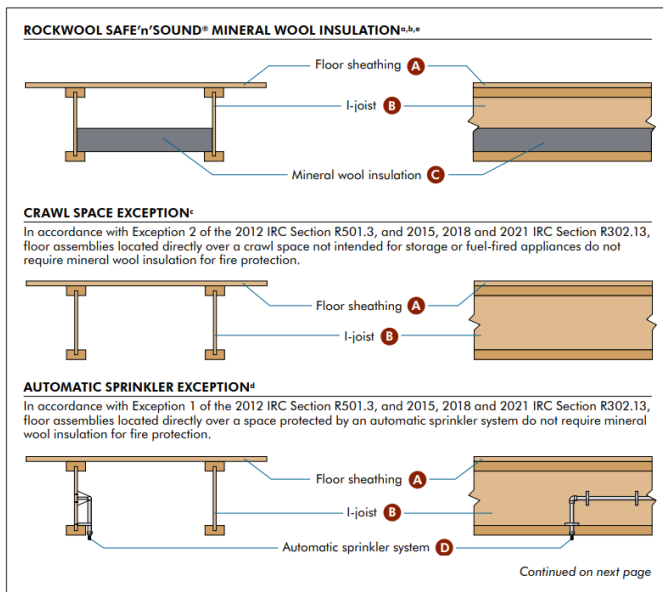
Fire Protection: Mineral Wool Insulation

The following fire resistance design is an alternative to the 2-by-10 dimensional lumber prescribed in Exception 4 of 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13 with demonstrated equivalent fire performance.



Fire Protection: Rockwool SAFE'n'Sound® Mineral Wool Insulation

The following fire resistance design is an alternative to the 2-by-10 dimensional lumber prescribed in Exception 4 of the 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13, with demonstrated equivalent fire performance.

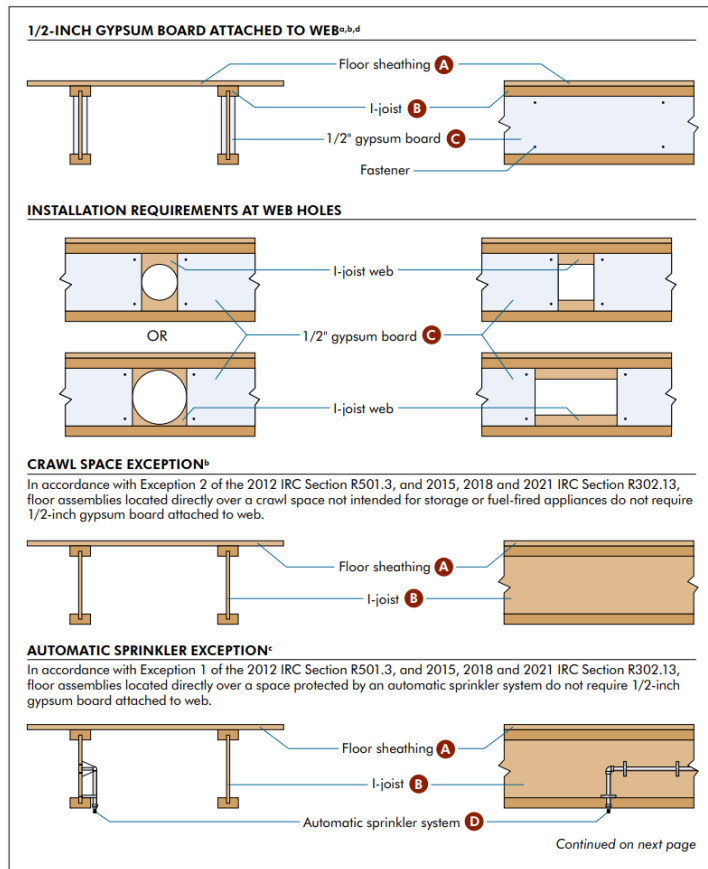


INTERNAL CONVERSION ACCESSORY DWELLING UNIT (ADU)

FIRE PROTECTION OF FLOORS – EXAMPLES (CONTINUED)

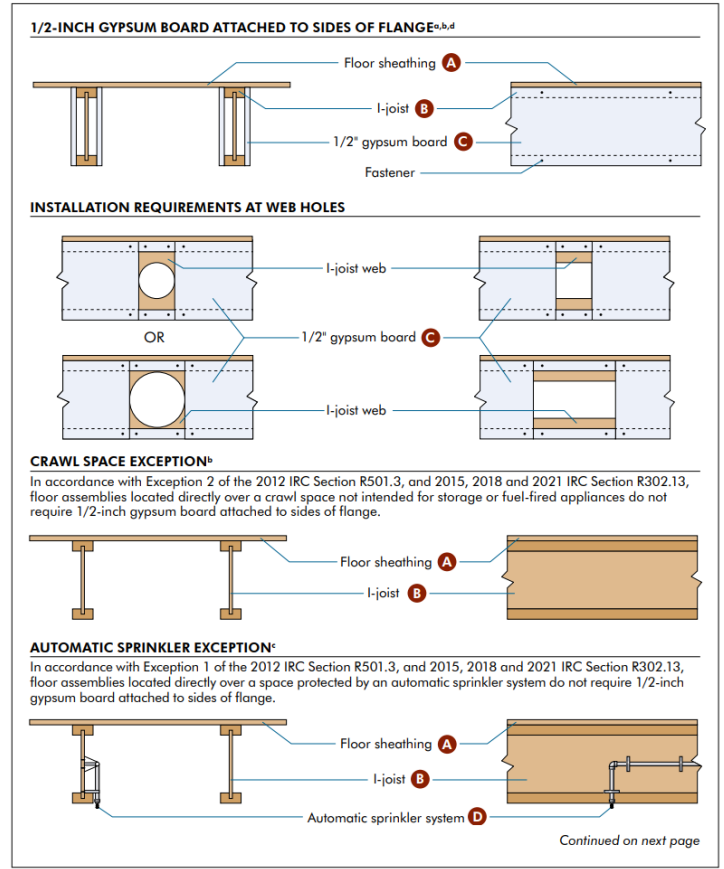
Fire Protection: 1/2-inch Gypsum Board Attached Directly to Web

The following fire resistance design is an alternative to the 2-by-10 dimensional lumber prescribed in Exception 4 of the 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13 with demonstrated equivalent fire performance.



Fire Protection: 1/2-inch Gypsum Board Attached Directly to Sides of Flange

The following fire resistance design is an alternative to the 2-by-10 dimensional lumber prescribed in Exception 4 of 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13 with demonstrated equivalent fire performance.



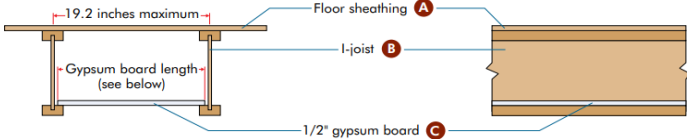
INTERNAL CONVERSION ACCESSORY DWELLING UNIT (ADU)

FIRE PROTECTION OF FLOORS (FIREBLOCKING) – EXAMPLES (CONTINUED)

Fire Protection: 1/2-inch Gypsum Board Installed on Top of the Bottom Flange

The following fire resistance design is an alternative to the 2-by-10 dimensional lumber prescribed in Exception 4 of the 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13 with demonstrated equivalent fire performance.

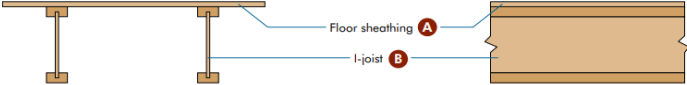
1/2-INCH GYPSUM BOARD^{a,d}



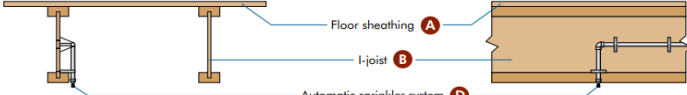
Joist spacing (in.)	Required length for gypsum boards (in.)
12	11-1/8 ± 1/8
16	15-1/8 ± 1/8
19.2	18-3/8 ± 1/8

Note:
Gypsum board lengths shown above provide at least a 1/4-inch bearing on the top of the bottom flange in each I-joint as installed. For other joist spacings, the required gypsum board lengths shall be adjusted so that the required gypsum board lengths are determined based on a full bearing on the flange at one end of the joist spacing, while maintaining at least a 1/4-inch bearing at the other end. If double joists are used, the required gypsum board lengths shall be reduced from the table above by a length equal to the flange width.

CRAWL SPACE EXCEPTION^b
In accordance with Exception 2 of the 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13, floor assemblies located directly over a crawl space not intended for storage or fuel-fired appliances do not require gypsum board for fire protection.



AUTOMATIC SPRINKLER EXCEPTION^c
In accordance with Exception 1 of the 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13, floor assemblies located directly over a space protected by an automatic sprinkler system do not require gypsum board for fire protection.

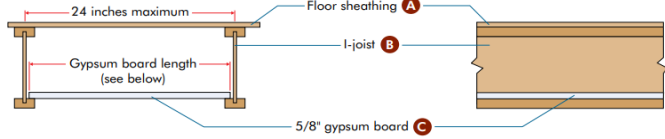


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Fire Protection: 5/8-inch Gypsum Board Installed on Top of the Bottom Flange

The following fire resistance design is an alternative to the 2-by-10 dimensional lumber prescribed in Exception 4 of the 2012 IRC Section R501.3, and 2015, 2018 and 2021 IRC Section R302.13 with demonstrated equivalent fire performance.

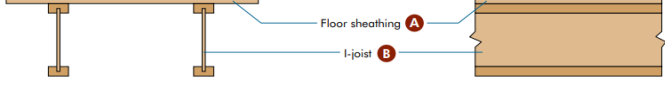
5/8-INCH GYPSUM BOARD^{a,d}




Joist spacing (in.)	Required length for gypsum boards (in.)
12	11-1/8 ± 1/8
16	15-1/8 ± 1/8
19.2	18-3/8 ± 1/8
24	23-1/8 ± 1/8

Note:
Gypsum board lengths shown above provide at least a 1/4-inch bearing on the top of the bottom flange in each I-joint as installed. For other joist spacings, the required gypsum board lengths shall be adjusted so that the required gypsum board lengths are determined based on a full bearing on the flange at one end of the joist spacing, while maintaining at least a 1/4-inch bearing at the other end. If double joists are used, the required gypsum board lengths shall be reduced from the table above by a length equal to the flange width.

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