



Residential Basement Finish

Guides For Homeowners

DID YOU KNOW?

- As “owner-builder” you are the responsible party of record on such a permit. If your work is being performed by a contractor, you may protect yourself from possible liability if the contractor applies for the permit in his or her name.
- If you plan to do your own work, with the exception of various trades that you plan to subcontract, the subcontractors must apply for trade permits..
- If you plan to do your own work, including all of the tradework, then you may apply for the permit.
- Frequent practices of unlicensed contractors is to secure “owner-builder” building and trades permits, erroneously implying that the property owner is providing his or her own labor and material personally.
- It would benefit you to hire a licensed contractor

Why Do I need a Permit?

There are many important reasons to obtain building permits and to have inspections performed for your construction project.

Protects property values

Your home is typically your largest investment. If your construction project does not comply with the building codes, your investment could lose value. If others in your neighborhood make unsafe or substandard changes to their homes, it could lower the resale values for the entire community.

Saves Money

Homeowners insurance policies may not pay for damages caused by work done without permits and inspections.

Makes Selling Property Easier

Listing associations require owners to disclose any home improvements or repairs and whether permits were obtained. Many financial institutions will not finance a purchase without proof of a final inspection. If you decide to sell a home or building that has had modifications without a permit, you may be required to tear down the addition, leave it unoccupied or do costly repairs.

Improves safety

Your permit allows the building department to inspect for potential hazards and unsafe construction. By ensuring your project meets the minimum building code standards of safety, the building department can reduce the risk of fire, structural collapse and other issues that might result in costly repairs, injuries and even death. Inspections complement the contractor's experience and act as a system of checks and balances that can result in a safer project.

Tips on hiring contractors

- ◆ Hire only licensed contractors.
- ◆ Get at least 3 bids.
- ◆ Get 3 references, and ask to see a project.
- ◆ Get it in writing, but before you sign the contract, make sure you completely understand.
- ◆ Do not make final payment until you have received a Certificate of Occupancy (CO) and until you are satisfied.

BASEMENT FINISH REQUIREMENTS

Ceiling Heights:

If the finished ceiling will be less than 7', please consult your Building Department.

Emergency Escapes:

All basements and sleeping rooms must have an emergency escape window or exterior door. Emergency escape windows with a sill height below grade must be provided with an emergency escape window well as well as a ladder. For details on Emergency escape windows, see Section R310 of the International Residential Code.

Smoke Detectors/Carbon Monoxide Alarms:

Smoke detectors are required in all basements. If the finished basement contains a sleeping room, a smoke detector must be installed on the ceiling or wall in the sleeping room and in the hallway or area immediately outside of the sleeping room. Smoke detectors added to satisfy the above requirements must be hard-wired with a battery backup and interconnected with existing smoke detectors. Smoke detectors are required to be hardwired and interconnected in new AND existing bedrooms, halls and on each level. Carbon Monoxide alarms are required outside sleeping rooms in the immediate area.

Insulation:

Provide a copy of the ResCheck calculations.

Fuel Burning Appliances:

Furnaces and water heaters cannot be located in a bedroom or bathroom unless appliances are installed in a dedicated enclosure in which all combustion air is taken directly from outdoors and a weather stripped solid door equipped with an approved self closing device is installed. If the furnace and water heater are being enclosed, adequate combustion air must be provided for these appliances to operate properly. A minimum of 30" clear working space must be provided in front of furnaces and water heaters. Maintenance or removal of each appliance must be possible without removing the other or disturbing walls, piping, valves, wiring and junction boxes.

Fire Blocking:

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 intersection of stud walls and soffits or dropped ceilings. A detail of typical fire blocking is included in this handout. Fire blocks may be constructed of 1-1/2" lumber, 3/4" plywood or particle board, 1/2" gypsum board or fiberglass insulation 16" minimum in height, securely fastened.

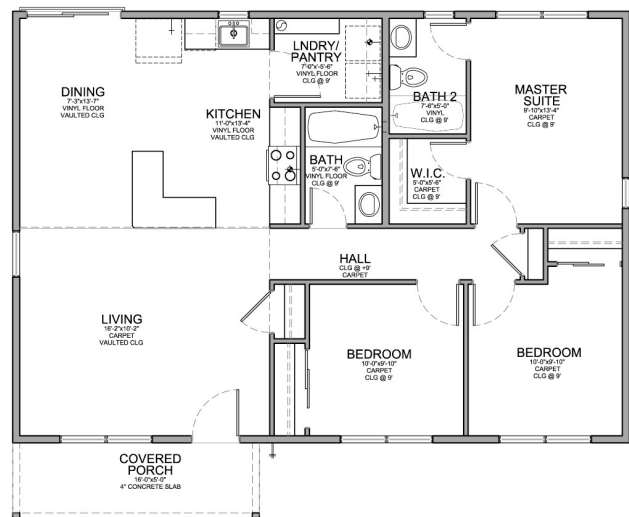
Space under Stairs:

If access to the area or space under the basement stairs is provided for storage or other uses, the walls and ceiling of this enclosed space must be protected on the inside with 1/2" gypboard.

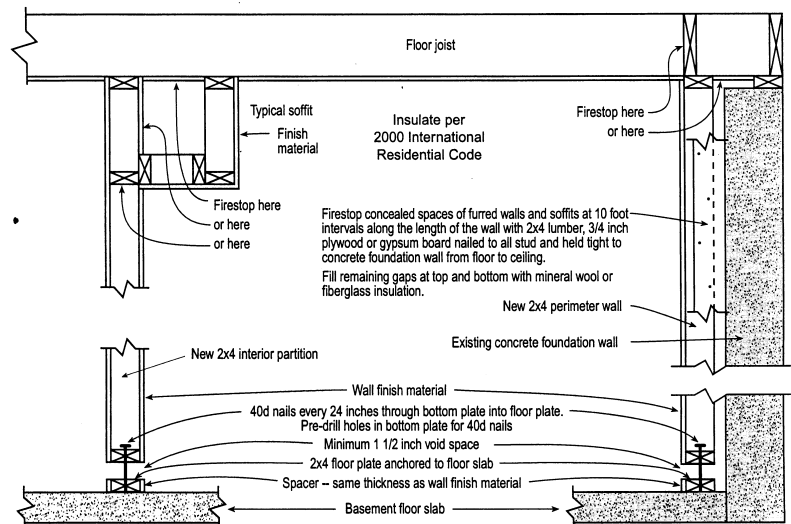
Bathrooms:

Toilets must be provided with a minimum of 21" in front of the toilet and 15" from the center of the toilet and any sidewall or other obstruction. Showers shall have a minimum inside dimension of 900 square inches. A ventilation fan is required in toilet rooms and bathrooms with unopenable windows. The fan must be vented to the exterior of the building and not to terminate within 3' of an opening.

Sample Floor plan



Basement Finish Details



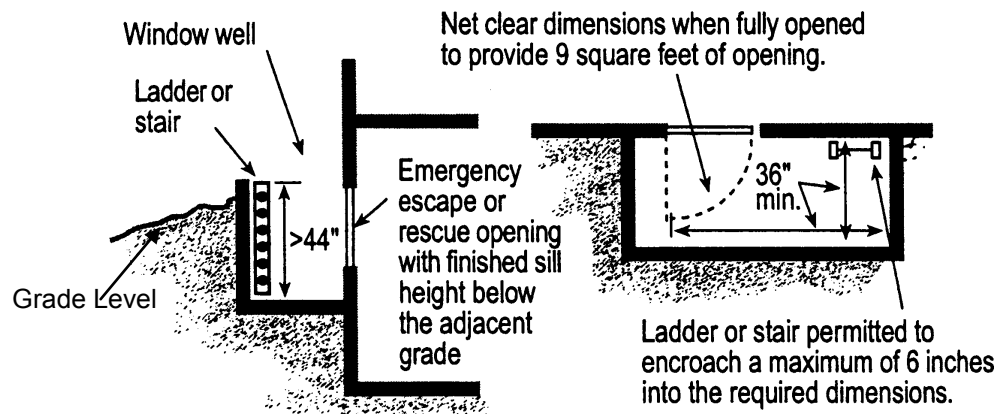
BASEMENT FINISH REQUIREMENTS

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Emergency Escape & Rescue Window Well

Emergency Escape and Rescue Window Clearances

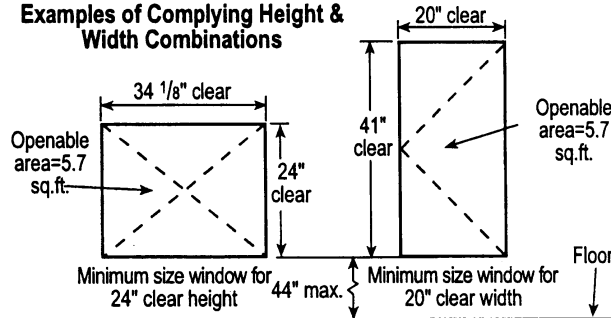
Emergency Escape And Rescue window wells must provide a minimum area of 9 square feet with a minimum dimension of 36 inches and shall enable the window to open fully. If the depth of the window well exceeds 44 inches, a permanently affixed ladder must be provided. The ladder must not interfere with the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



Emergency Escape 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 should be openable from the inside without the use of separate tools, knowledge or effort.

Examples of Complying Height & Width Combinations



Emergency Escape and Rescue Window Area

Note: cutting into any existing foundation wall requires a letter from a licensed Colorado engineer.