



Lakewood

Unpermitted Residential Basement Finish

This handout describes the process to Bring an unpermitted basement finish project into legal compliance. Please note this process is very invasive and involves partial or complete demolition of the previously performed construction.

Contractors and Homeowners as General Contractors:

- Homeowners may obtain a building permit, plumbing permit, mechanical permit and electrical permit, and may perform the work on their own one- and two-family dwelling or townhouse. The homeowner may not obtain a permit for work in a condominium or multi-unit residential dwelling.
- Registered contractors must obtain all the permits and perform the work for a condominium or similar attached residential dwelling.
- Any person hired to perform work must have the required registration to do work within the City of Lakewood. Registrations may be obtained through www.Lakewood.org/eTRAKiT.
- Contractors performing electrical or plumbing work must be licensed with the State of Colorado and registered with the City of Lakewood.
- Mechanical, electrical and plumbing systems work may be performed by MEP systems contractors registered with the City of Lakewood. After a permit has been issued, the "add contractor to existing permit" form must be filled out at <https://www.lakewood.org/Government/Departments/Public-Works/Building-and-Construction-Permits>. Homeowners who wish to do the mechanical, electrical, and plumbing work on their own projects must add themselves into the permit using the add contractor to existing permit button and the link above for each of the building systems they will be working on.

Submittal Requirements:

- Provide a completed permit application through eTRAKiT.
- Upload a complete set of the following plans. Refer to the following pages for examples and checklists.
 1. Floor Plans. Show separate existing and proposed floor plans existing plans should show the configuration of the basement *PRIOR* to it being finished.
 2. Show all new and relocated electrical and plumbing work to be performed.
 3. Floor to Ceiling Section showing floating walls etc.
 4. Detail indicating the finished ceiling height in all rooms including under beams and ducts protruding below the ceiling.

General Information:

- All walls built on a concrete slab must be floated. Allow a minimum of 1½" of float and hold the drywall at least 1" off the slab or use a spacer of the same thickness as the wall material to attach baseboard molding. See Sample Floor to Ceiling Section on page 4.
 - All habitable and finished areas must have a minimum finished ceiling height of 7'-0 except as allowed in bathrooms.
 - Smoke detectors must be added throughout the house if they do not currently exist. These must be hardwired and interconnected unless



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removal of drywall would be required. In that case a battery powered unit is allowed. A smoke detector must be provided in each bedroom and in each common area (hallway) outside of bedrooms. At least one smoke detector is required on each floor that does not have any bedrooms.

- In homes with either an attached garage or fuel fired appliances, carbon monoxide alarms are required to be installed within 15' of all sleeping rooms on all levels of the home. Devices may be hardwired or plug-in and must be installed per the manufacturer's specifications. A combination smoke and carbon monoxide alarm is allowed provided that the device has different tones for smoke and carbon monoxide alarms.
- Egress windows are required in each bedroom. Basements without bedrooms must have at least one egress window or door located in the basement and leading directly to the exterior. An engineer's design is required if alterations to the foundation are needed to install egress windows or doors. Refer to the Egress Window handout.
- Enclosed storage spaces provided under stairs must be enclosed with ½" drywall.

Natural light and ventilation must be provided in all habitable rooms. Window or approved openings area must equal or exceed 8% of finished floor area in each room. Half of the window area must be operable for ventilation unless other specific provisions are made. Please contact the building permit office for information when you are proposing mechanical ventilation and artificial light instead of the required natural light and ventilation.

- Furnaces and water heaters cannot be located in a room directly accessed through a bedroom or bathroom.
- Dryer installations require a minimum 4" vent to exterior with back draft damper.

Bathrooms must meet the following criteria:

- A clear area of at least 21" must be provided in front of the toilet.
- The toilet must be positioned with at least 15" from the center of the toilet to obstructions on either side.
- The bathroom ceiling height must be a minimum of 7' with exception of a minimum ceiling height of 6'-8" is allowed over a toilet or lav sink. A shower or tub equipped with a shower head must have a ceiling height of 6'-8" or more over the tub or shower.
- A bathroom exhaust fan or an operable window is required. The exhaust fan must vent to the exterior of the home and the vent termination must be located at least 3' from any intake to the home. Instead of an exhaust fan, operable bathroom windows may be used and must provide at least 3 square feet of glazed area of which at least half is operable. If an exhaust fan is used the CFM of the exhaust fan must be provided in the drawings.
- Receptacles for a bathroom must be GFCI protected and on a 20-amp dedicated circuit.
- Showers shall be finished with a non-absorbent surface to a height of at least 6'

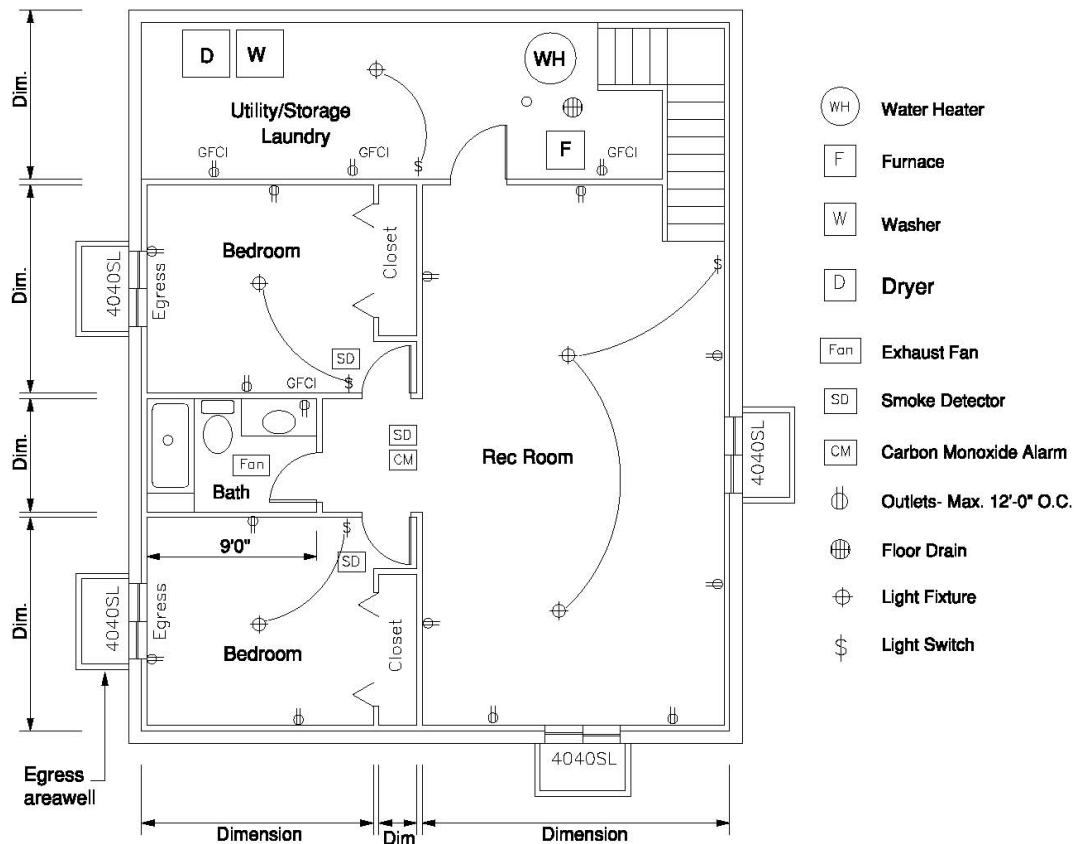


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above the shower floor.

- Showers bases that are constructed in the field must have notes or details specifying how they are to provide a watertight assembly. Shower pans will be tested during the inspection process and must be able to hold water for 15 minutes without leaking.
- Tile backing in tub and shower areas must be cement board, fiber-cement or glass mat gypsum.
- All glass installed in a shower surround or shower door must be tempered or safety glazing. All glass products must be installed for the building inspector to verify the tempered or safety glazing at or before final inspection.



SAMPLE FLOOR PLAN

Draw to Scale: Min. 1/4"=1'0"

Floor Plan drawn to 1/4" = 1'0" or larger standard scale

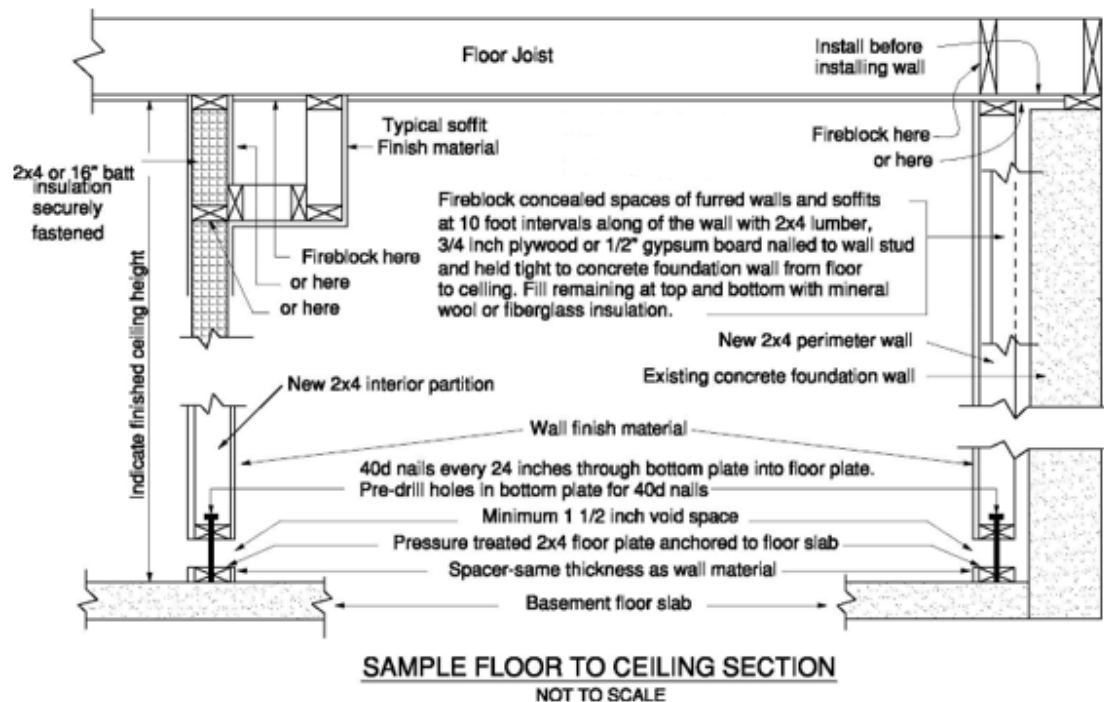
- Label all rooms (bedroom, bathroom, closet, etc.) and dimension all walls provide the area of the room (IE. 60 s.f.)
- Indicate all window locations and include size and type (e.g. 48" x 48" slider) provide the glazing area and operable area for natural light and ventilation calculations)
- Indicate the proposed layout of bathroom fixtures (tub, toilet, sink, shower) provide notes on the drawings that all fixtures will have shut off valves and



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p-traps and that all plumbing fixtures will be vented. Provide the size and material the vent piping and plumbing piping are made of.

- Indicate approximate location of all new or existing electrical receptacles, switches, lights, bathroom exhaust fans, and smoke detectors. Label all GFCI protected receptacles. Show which light switches control which lighting fixtures. In bedrooms if no light fixture is shown, 1/2 switches receptacles must be shown control from a light switch. All electrical receptacles in unfinished basements must be GFCI protected, in finished basements, this is not required unless a receptacle is within 6 feet of a water source or servicing a counter.
- Indicate location of any new or existing sump pump, a sump pump must have a dedicated receptacle within 6 feet of the sump to plug it in.
- Indicate location of all new or existing furnaces and water heaters. Include location and size of all new or existing combustion air pipes and the size and efficiency of any new furnace and/or water heater. Ideally provide a manufacturer's cut sheet for all new appliances being installed.



Floor to Ceiling Section

- Indicate finished ceiling height including finished height under beams and ducts
- Indicate wall and floor coverings in all rooms (drywall, paneling, tile, carpet, vinyl, etc.)
- Indicate basement floor type (e.g. concrete slab, structural wood floor)
- Indicate insulation in perimeter framed basement walls, minimum R-15 continuous or R-19 cavity



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Once a permit has been issued for the basement finish, the homeowner must:

1. Open select finished walls as tagged by the inspector to expose wall cavities, If the drywall can be removed from one side of a wall for access to the cavity that will be sufficient.
2. Strip the drywall at the bases of select walls to show the floating wall detail shown above has been installed. If floating walls are not installed then *all* the walls must be removed and new walls utilizing the correct details must be installed.
3. Insulation must be exposed in specified locations for inspectors to view and verify the quantity and condition of the insulation.
4. Wiring within the walls must be exposed in specified locations for a rough electrical inspection to be performed.
5. At bathrooms and kitchens in basements, a section of tile must be removed to show the correct tile backer board was used in the installation of the wall and tile. A section of drywall on the opposite side of the wall may be removed to show the appropriate backer board was installed behind the tile.
6. Plumbing must be exposed where possible. If plumbing was installed in floor slabs the plumbing must be scoped and recorded for the inspector to see the size, configuration and installation of the piping.

This is a very invasive process. Since the city can not identify when the finish was performed, all unpermitted basement finish projects must meet the following codes:

2015 International Building code

2020 National electrical code

2015 International Energy Conservation code.

The 2015 International Existing Building code does not apply since the city cannot determine when the finish was performed.

The city will endeavor to make this process as minimally invasive as possible, however, photographs of the work that was completed cannot be accepted, the city cannot prove any photo is from the construction project in question. Inspections must be done in person by a City Inspector.