

## Residential Basement Finish

A basement finish requires a plan review and permit before work commences. The licensed general contractor or homeowner (performing the work) obtains the permit and is responsible for inspections being completed.

Exception: If the home is a rental property, a licensed general contractor must obtain the permit and is responsible for all work passing inspections, including any work performed by licensed subcontractors.

### PLANS

The homeowner, designer or architect provides a basement finish plan that is drawn to 1/4" = 1' scale. Identified on the plan is the address of the basement finish, and the name of the plan designer, address and phone number. (Please refer to the sample floor plan drawing in this packet.) Most basement finish plans can be reviewed and a permit issued the same day. (The plans reviewer can usually determine if a variance is required when existing, nonconforming conditions impede compliance with a code provision, such as finished ceiling heights and soffit dimensions.) See page 2 for example floor plan.

### PERMITS

After the plan is approved, the permits are issued. Separate construction, electrical, mechanical and plumbing permits are required if work is being performed in each discipline. A homeowner may obtain the permits and perform all of the work, or the homeowner may choose licensed subcontractors to perform portions of the work, such as electrical, mechanical or plumbing. After the permit is issued, post the placard where it can be viewed from the street.

## Basement finishes done without Permit & Inspections

If a basement was finished or work began prior to obtaining a permit, please follow these guidelines:

- Provide a plan for review of building, mechanical, plumbing and electrical work.
- Inspections will require access to this work and may require the removal of finishes.
- It is the responsibility of the homeowner or contractor to remove these finishes and replace the finishes after inspections are performed and work is passed.
- The individual who obtained the permit (including attached subcontractors) is responsible for calling to request the inspections, and making corrections of work required to pass inspections. If this is a rental property, the permit must be obtained by the appropriately licensed contractor.

*Please be aware that inspections of finished basements are limited to the areas of work exposed, and therefore Pikes Peak Regional Building Department cannot validate that all work complies with code.*

### GENERAL CODE REQUIREMENTS

**Bedroom:** Any room larger than 70 sq. ft. having a closet

**Ceiling heights:** Minimum 7'0" finished floor to ceiling; 6'8" under soffits; maximum soffit width of 50% of the room or 8'0".

**Egress window wells:** Minimum 36" from exterior foundation to inside of well. Vertical depth >44" requires a permanent ladder with the lowest rung ≤ 18" above grade.

**Exits/egress:** Two exits required to include main stair and one egress window or door. Egress window to the exterior required in each bedroom: minimum 20" width, 24" height and 5.7 sq. ft. of opening area. Maximum 44" sill height from floor.

**Fire stopping:** top of furred walls and 10' horizontal - vertical where soffit and wall meet.

**Gas fueled appliances:** Gas furnaces and water heaters cannot be located in or obtain combustion air from a bedroom, bathroom

or closet. Clothes dryers must be in rooms provided with make-up air.

**Insulation exterior wall:** R-10 continuous, R-13 cavity

**Natural light and ventilation:** 8% and 4% respectively of the square footage of the room area for habitable rooms. Alternatively, artificial lighting providing 6 foot-candles and mechanical ventilation of minimum 0.35 air changes per hour.

**Bathroom exhaust fan:** Minimum 50 CFM, ducted to exterior using rigid, flex metallic or Class 1 duct products. Must terminate minimum of 3' from any opening into the building.

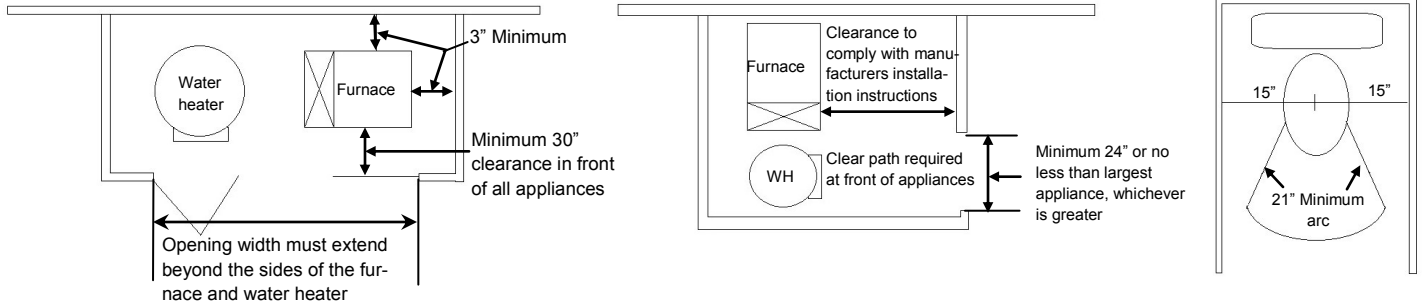
**Non-bearing walls:** Required to be floating (see detail)

**Smoke/carbon monoxide detectors:** install at least one smoke detector per level, in all bedrooms and hallways to bedrooms. Carbon monoxide detectors must be installed outside of all bedrooms. Both must be interlinked and hardwired where possible.

## FURNACE AND WATER HEATER ENCLOSURES

Combustion air must be provided to an area with volume of 100 cubic feet per 1000 BTUs for draft hood appliances; 50 cubic feet per 1000 BTUs for fan-assisted appliances.

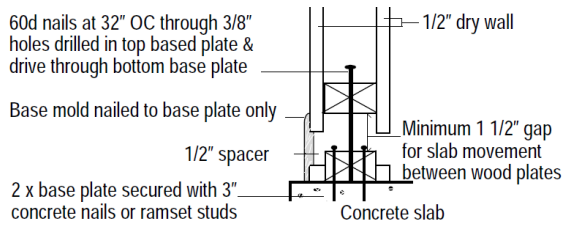
**Provide either a fully louvered door or two transfer grills in the wall.** Each transfer grill is to be sized for net free area of 1 square inch per 1000 BTU/hr input ratings of all the appliances within the room, or 100 square inches, whichever is greater. When using two grills, the upper grill must be located within 12" of the ceiling, and the lower grill must be located within 12" of the floor. For clearance dimensions, see diagrams.



**MECHANICAL ROOM CLEARANCES**

## WATER CLOSET & SHOWER:

- Shower must have minimum 900 sq. inches & encompass a 30" diameter circle.
- Water Closet must have 15" clearance on either side of center & minimum 21" clearance at the front



**FLOATING WALL DETAIL (required)**

