



Residential Basement Finish

General

Obtain a building and electrical permit, and if necessary a mechanical and/or plumbing permit from the Building Permit Center located in the lower level of City Hall.

1. **Inspections** are required before any work is covered.
Framing, electrical, plumbing, and mechanical items must be inspected before insulating. An insulation inspection is required prior to installing sheetrock. A final inspection is required when the project is complete, and prior to use.
2. **Egress Windows** are required in every basement, as well as every sleeping room, and shall have net clear opening of 5.7 sq. ft., and be less than 44" from floor to bottom of window opening.
3. **Escape Ladder** required if window wells are more than 44" in height.
4. **Ceiling Height** is required to be a minimum of 7' above the finished floor.

Framing

Pressure Preservative-Treated Wood shall be used for sole plates.

Floor Joist Protection consisting of a minimum 1/2" sheetrock shall be installed for any unfinished portions of the basement area.

- Exception:
1. Joists of nominal 2x10 standard lumber not required
 2. Up to 80 sq. ft. in the mechanical room area exempt from protection.

Electrical

1. **Tamper Proof Receptacles** All electrical receptacles must be the tamper proof type.
2. **Arc-Fault Circuit Interrupters (AFCI)** All electrical outlets including receptacles, lighting, and smoke detectors must be on circuits protected by AFCI if they are located in bedrooms, living rooms, dining rooms, sunrooms, hallways, closets, finished basement areas, and recreation rooms. Exception: outlets that are an extension of an existing circuit.
3. **Ground-fault Circuit Interrupters (GFCI)** Electrical receptacles shall be on circuits protected by GFCI at the following locations: unfinished basement areas, bathrooms, kitchen counters, garbage disposal, hydro-massage bathtubs, crawl spaces, pools, spas, hot tubs, garages, accessory buildings, outdoor receptacles, receptacles within 6 feet of a sink, and electrically heated floors.
4. **Smoke Detectors** shall be electrically inter-connected, and located inside bedrooms, directly outside each separate sleeping area in the immediate vicinity of the bedrooms, and at least one smoke alarm is required on each story. All smoke alarms are to be the dual sensor type.

5. **Carbon Monoxide Detector** A carbon monoxide detector required directly outside of sleeping areas. This could be a combination C.O. / smoke alarm.
6. **Bathrooms** At least one 20-ampere branch circuit shall be provided to supply receptacle outlets within bathrooms.
7. **Kitchens** At least two 20-ampere small-appliance branch circuits shall be provided for kitchen countertop outlets.
8. **Laundry** At least one 20-ampere branch circuit shall be provided for receptacles located in the laundry area.
9. **Circuit Breakers** 20 amp breakers shall use 12 gauge copper wire or larger. 15 amp circuit breakers shall use 14 gauge copper wire or larger.
10. **Corrugated Stainless Steel Tubing** If CSST gas piping is present within the structure, it shall be bonded to the building grounding system using no. 6 copper wire or larger with listed and labeled wire clamps.
11. **Stud Guards** required over drilled holes in lumber for NM cable (romex) to pass thru if the edges of the holes are closer than 1 ¼ inches from the face of a stud.
12. **Romex** shall be covered with hard surfaced material if less than 7 feet above the floor.

Mechanical

1. **Clothes Dryer Exhaust Ducts** over 35' shall have a booster fan added. Any change in direction deducts from the 35'. Each 90 degree elbow shall deduct 5 feet, and each 45 degree elbow 2 ½ feet. Flexible exhaust ducts shall not be more than 8' long, and shall not penetrate the wall covering (sheetrock). Dryer exhaust ducts shall not terminate within 3' in any direction from openings into buildings.
2. **Bathroom Exhaust Fans** must be vented to the outdoors.
3. **Air Ducts** supply and return air ducts shall be provided for each habitable room.
Exception: No return air ducts are allowed from a bathroom/toilet room or kitchen.

Plumbing

Stud Guards shall protect plumbing pipes within 1 1/2 inches from the face of a stud.

Insulation and Energy Requirements

1. **Insulation requirements** for basement walls shall be R-19 for a cavity fill, or R-15 for continuous type insulation.
2. **Lighting Equipment** a minimum of 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps.

This list has been composed as a guideline to help give an outline of possible items that need to be addressed. The 2012 International Residential Code is the adopted code of the City of Pleasant Hill. All residential construction projects will need to adhere to all requirements of the IRC. This does not represent an all inclusive list of the code requirements.

If you have any questions regarding construction requirements, please contact the City of Pleasant Hill Building Department @ 515-309-9461.