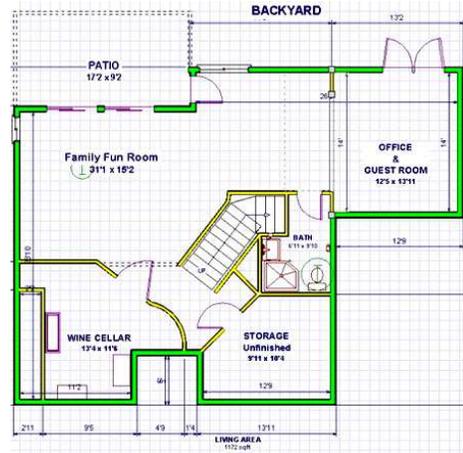


## SINGLE FAMILY RESIDENTIAL BASEMENT FINISH

A building permit is required anytime there is an addition, alteration, repair or demolition to the main structure or accessory structure on a lot or parcel.

### PERMIT REQUIREMENTS

1. A permit application shall be filed in person at the Building Department.
2. **Submit two complete sets of floor plans and wall details.** The plan shall consist of a floor plan with dimensions drawn to scale which show the layout of entire basement. Label the use for all rooms. See sample plans.
3. Show electrical outlets, smoke detectors, lighting, fans, type of wiring (example "12-2 Romex" or conduit with #12 thhn conductors), electrical panel location and number of new circuits and any other electrical equipment.
4. Show location and size of windows, doors, stairs and window wells. Identify emergency escape and rescue windows and egress window wells with ladder.
5. Indicate locations of plumbing fixtures, water heater, furnace, boiler, air conditioner and any cooking appliances. .
6. Identify modifications to the existing structure such as posts, beams and floor joists.
7. Indicate height of dropped ceiling areas less than 7 feet.
8. Letter from an engineer (if cutting new windows or widening existing windows in concrete). This letter shall address lintel/header over window.
9. Type, size, R-value of insulation in walls and ceiling.
10. Fireplace or stove location, type and installation details.
11. Show location and size of exhaust fans and combustion, conditioned and return air ducts.



Once the plans have been submitted, the documents will be reviewed to determine if the project is in compliance with building safety codes, zoning ordinances and other applicable laws. The building permit fee is based on the estimated value of the work being done and is payable before the permit is issued. Check, cash or credit card is acceptable for payment.

The issuance of permits and subsequent inspections of the work performed ensures that all construction in the city is safe and in compliance with the City of Brecksville Codified Ordinances and Building Codes. The primary purpose of these codes is to ensure a safe and healthy environment for the citizens of Brecksville.



Building Department  
City Hall, Lower Level  
9069 Brecksville Rd.  
Monday through Friday - 8:30 AM to 4:30 PM.  
Call 440-526-2630 for information.

## SINGLE FAMILY RESIDENTIAL BASEMENT FINISH

**CAUTION:** If you do work, or have any work done without obtaining a permit, you could be incurring liability in the event of a fire or accident related to the work. In some circumstances your insurance could be invalidated.

**PERMIT ISSUANCE:** As a homeowner you may act as your own contractor, obtain a permit and do the work yourself on your own property. However, if the whole project or any portion of the project, (electrical wiring for example) is under a contract, the contractor must be registered to work in Brecksville. The person obtaining the permit is responsible for inspections and compliance with the applicable codes.

**CALLING FOR INSPECTIONS:** Requests for inspections (24 hour notice) are recorded on the Building Inspection Schedule by calling 440-526-2630. Inspections are usually made on the following day. *No inspection will be made on any work done by any unlicensed contractor.* You should not proceed to cover-up any work that has not been inspected. You should not schedule any concrete or other major work for the same day as the inspection to avoid costly problems.

Most basement remodeling usually require several inspections. Please use the following information to plan for these:

- ◆ Approved plans must be on site.
  - ◆ Rough inspections and approval required- Plumbing, Mechanical- HVAC, Electric and Framing (in floors, walls and ceiling prior to installing insulation or covering).
  - ◆ Insulation (includes draft stopping and fire blocking).
  - ◆ Final Inspection: All Plumbing, Mechanical, Electrical and Framing work done and approved.
- All fixtures and devices installed.  
-All interior surfaces installed and painted or stained.

## GENERAL REQUIREMENTS

**CEILING HEIGHT:** Habitable rooms may have a ceiling of not less than 7'0" as measured from the finished floor to the ceiling. Beams, pipes, and ducts may project from the ceiling not less than 6'6" from the finished floor.

**STAIRWAY FIRE PROTECTION:** If space under the stairs is used for storage, or is enclosed usable space, a minimum of one layer of 1/2" gypsum board is required to be installed on the inside of walls, and under stair treads (ceiling) of the under stair space as a fire resistive measure.

**HEATING AND RETURN AIR:** All finished areas are to be provided with heat. Return air is required for forced air heating systems in a central location and all rooms. Storage areas need not be heated.

**SMOKE DETECTORS:** Smoke detectors shall be installed throughout the entire house,

located as required for new buildings. Smoke detectors are required to be hardwired and interconnected. Smoke detectors shall be installed in each bedroom and at a point centrally located in the hall or area giving access to each separate bedroom. Additional detectors may need to be installed dependant upon the configuration of the house as verified by the Building Inspector during inspection. If interior wall or ceiling finishes are not removed or accessible, battery operated devices are acceptable.

**COMBUSTION AIR:** Fuel burning furnaces and water heaters are required to be provided with combustion air obtain from outside. The required size of the combustion air ducts is determined by using Chapter 17 of the Residential Code of Ohio. One opening is located in the upper 12 inches of the room and the other is located in the lower 12 inches of the room.

**EMERGENCY EGRESS WINDOWS:** Every bedroom is required to have at least one operable window or door approved for emergency escape or rescue which shall open directly to the exterior. The door or window shall be operable from the inside without the use of special tools. All escape or rescue windows shall have a minimum clear opening area of 5.7 square feet. The minimum net clear opening height shall be 24". The minimum net clear opening width shall be 20". The maximum finished sill height shall be 44 inches above the finished floor. Exterior window areaways (window wells) provided for escape or rescue windows shall be at least 9 square feet of horizontal area. All window wells with a vertical depth of more than 44" shall be equipped with a permanently affixed ladder. See page 8 for diagrams and details.

**LIGHT VENTILATION AND SANITATION:** All habitable rooms are to be provided with natural light and ventilation by means of exterior glazed openings with an area of not less than (8%) of the floor area or artificial light as approved by the building official. Natural ventilation is required with minimum openable area of (4%) of the floor area being ventilated. Habitable rooms are any space used for living eating, sleeping or cooking. Bathrooms, toilet compartments, closets, hall, storage or utility space, and similar area are not considered habitable space.

**BATHROOMS:** Toilets must be provided with a minimum of 21 inches in front of the toilet and 15 inches between the center of the toilet and any sidewall or other obstruction. Showers shall have a minimum inside dimension of 900 square inches, capable of encompassing a 30" circle and be finished 72" above the drain with non-absorbent materials. A ventilation fan is required in toilet rooms with unopenable windows and bathrooms with a tub or shower. The fan must be vented to the exterior of the building.

**INSULATION:** All perimeter below grade walls require R-10 continuous insulation. Framed walls with batt insulation in the cavities requires an R-13 value. Rim joists require R-19 value.

**FIREBLOCKING:** Fireblocking 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 wall and soffits or dropped ceilings. A detail of typical fireblocking is included on the following page of this handout. Fireblocks may be constructed of "2 by" lumber, 3/4" plywood or particle board, 1/2" gypsum board or fiberglass insulation securely fastened.

**FUEL BURNING APPLIANCES:** Furnaces and water heaters cannot be located in a bedroom or bathroom. 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 must be provided in front of furnaces and water heaters. Maintenance or removal of each appliance must be possible without removing other or disturbing walls, piping, valves, wiring and junction boxes.