

Finished Basement Regulations, Permits and Installation Guide

This document may not cover all finished basement code requirements and is to be used as a guideline only. The information found within this guide is in relation to the City's adopted 2021 International Residential Code.

PERMIT REQUIRED

A permit is required to finish a basement area into living space in the City of Wentzville and is administered by the Building Department. The permit fee is calculated using the provided estimated cost of construction multiplied by 0.0050, with a minimum of (\$35.00) thirty-five dollars, in addition to a (\$50) fifty dollar plan review fee. Permits shall be applied for on the City's website or inside the City Hall Building in the Community Development lobby. A finished basement permit can be approved within 5-7 business days after all required information is acquired with the permit application, the permit may be reviewed and potentially approved while you wait in our office by appointment. Permits are valid for 180 days from the issuance date and is adjusted for an additional 180 days from the last approved inspection date.

NOTICE: City permit approval Does Not constitute subdivision approval. Please contact your subdivision's H.O.A. for any of their requirements.

SUBMITTAL DOCUMENTS

All submitted documentation shall be a hard copy or in .pdf format and shall be clean and legible. The following information shall be submitted with the permit application for review of a finished basement permit:

1. A scaled drawing showing the finished area of the basement overall including but not limited to:
 - Indicate dimensions of the existing exterior walls and new walls, existing exterior windows and doors, new interior doors and hallways.
 - Show the location of all receptacles, lights, switches, smoke detectors, exhaust fans and all plumbing fixtures.
 - Label each room to indicate it's use, i.e. family room, bathroom, bedroom, etc.
 - Provide dimensions to walls, indicating the new and existing walls.
2. Details for any permanent appliances such as fireplaces, and a section clarifying the construction details of the new walls.

Typically, the more detailed a plan is, the more streamlined the review is.

INSPECTIONS REQUIRED

Two (2) inspections are required for a finished basement permit, a third inspection may be required if you have under floor plumbing, the contractor or homeowner shall submit an inspection request online or call the Building Department to schedule an inspection at least 24 hours in advance.

1. Under floor plumbing changes or additions require a ground rough inspection prior to covering with concrete.
2. Complete rough inspections are required after the framing, plumbing, hvac, and electrical have all been completed, and before covering with finish material or drywall.
3. Final inspection for compliance with all applicable standards is required after the work area is completed.

GENERAL RULES

This guide intends to offer basic information to help the customer with finishing the most simple basement projects, following all residential codes. The plan reviewer may determine that unusual circumstances dictate the need for additional information on any particular project. The following are general guidelines, which may apply to finished basements in the City, and are not all encompassing:

1. Finished ceiling height must not be less than 7 feet.

2. Beams or duct work shall be permitted to project to within 6 foot 4 inches of the finished floor. All habitable rooms are to have a minimum of 70 square feet and shall not be less than 7 feet in any direction. The minimum finished hallway width is 36 inches.
3. Fire blocking is required in concealed spaces of stud walls where furred spaces of masonry or concrete walls leave a gap. Fire blocking material can consist of 2 inch nominal lumber, 23/32-inch plywood, 1/2" drywall, or equivalent.
4. Unfinished ceilings are allowable only when the floor joist are nominal lumber. If constructed with engineered floor joists the ceiling is required to be finished.
5. An AC powered, U.L. listed smoke detector with battery backup shall be located in the vicinity of all bedroom entrance doors and inside each bedroom. Provide a minimum of one such smoke detector at the bottom of the basement stairs. All detectors in the house shall

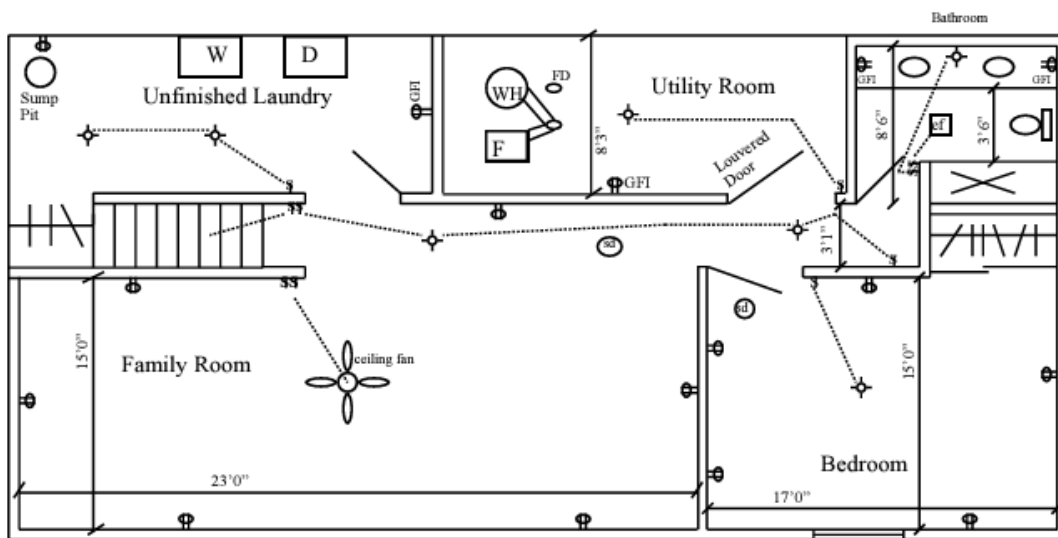
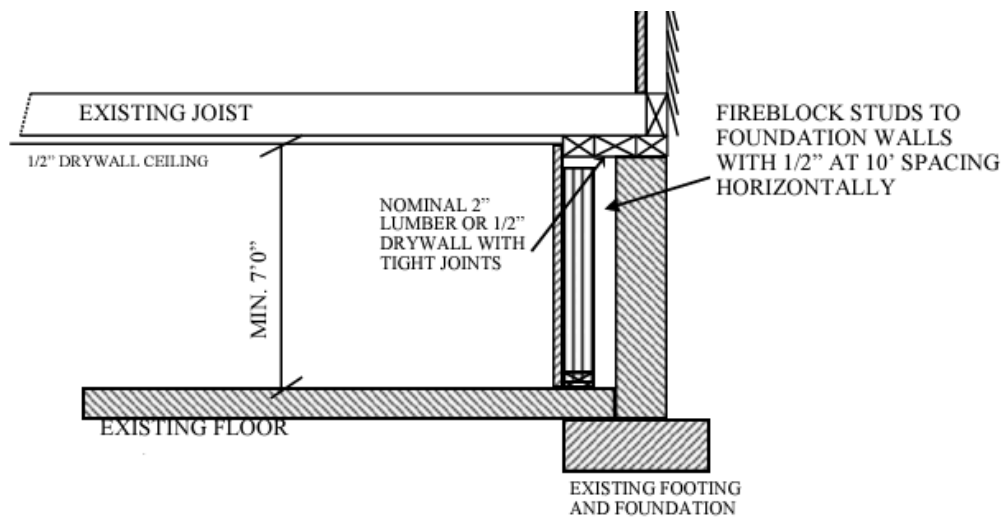
be interconnected so that the activation of any alarm will sound all alarms throughout the house. Smoke detectors must also be wired on a lighting circuit.

6. An approved carbon monoxide alarm shall be installed outside of each separate sleeping area. In the immediate vicinity of the bedrooms with fuel fired appliances and/or attached garage. Combination smoke/carbon monoxide alarms are allowable.
7. Receptacles are required in all habitable rooms spaced 12 feet apart so that no space measured horizontally along the floor line is more than 6 feet from a receptacle. Receptacles are not required to be tamper resistant.
8. GFCI receptacles are required in bathrooms, receptacles that serve within 6'0" of a wet bar, kitchen countertops, and in unfinished basement spaces. A laundry circuit and a single receptacle dedicated to a sump pump in an unfinished area are exempt from this requirement.
9. At least one wall switched lighting outlet shall be installed in every habitable room, bathroom, hallway, stairway, and exterior doors. Lighting installed at interior stairways shall have a wall switch at each floor level.
10. A basement bedroom shall have one window or door meeting the following: a maximum clear sill height of 44", minimum clear width of 20", minimum clear height of 24", and clear open area of 5.0 sq ft, at grade.
11. All branch circuits supplying bedroom receptacles are required to have an arc-fault interrupter, a combination type AFCI located at the origin of the branch circuit or an outlet branch circuit type AFCI at the first receptacle of the existing branch circuit is code compliant.
12. Interior door openings are to have a minimum clear width of 28 inches. Bathroom door openings are to have a minimum clear width of 26 inches.
13. Bathroom exhaust fans must be a minimum of 50 cfm and exhaust to the exterior.
14. If your plans include the enclosure of your furnace and water heater, ventilation at the top and bottom of the room will be required. Ventilation must equal 1 square inch for every 1,000 Btu/h of input rating of the fuel-burning appliance. A louvered door or combustion air vent through the wall can accomplish this. A door opening wide enough to repair or replace your mechanical equipment must be provided. A 12 inch clearance from the side of your furnace and a 30 inch clearance on the fuel burning side (front) is required. Please consult your HVAC manufacturers specifications for clearance requirements.

NO living area shall be used until the final approval is granted by the City.

Questions? Please call the Building Division at (636) 327-5101.

FINISHED BASEMENT GUIDE



SAMPLE FLOOR PLAN

Window opening
32" width x 25" height

KEY

- | | |
|----------------|--------------|
| Receptacle | Furnace |
| Exhaust Fan | Water Heater |
| Smoke Detector | Switch |
| Light Fixture | |
| Floor Drain | |