

## PLANNING YOUR BASEMENT REMODELING PROJECT

It is important to consider code requirements when planning your basement remodeling project. Some of the more common issues to consider are listed below. Please be aware that this is not a comprehensive list.

The furnace and water heater must be provided with access that would allow the equipment to be replaced, or to be serviced. The manufacturer's instructions will include required clearances on all sides of the equipment, and other important details that may impact how much space must be maintained around the equipment. Do not plan to build walls that will reduce this required space.

Many components of a house require access for servicing and replacement. Your plans should take into account that this access will be provided. The main water shutoff, the drain valve, and the electrical grounding connection to the water line must remain accessible. All electric junction boxes, floor drains, cleanout fittings, backwater valves, gas line unions, and valves for water and gas lines are required to remain accessible.

Electric panels are not allowed within closets or bathrooms. A required working clearance of at least 30" wide and 36" deep in front of the panels must be provided. The panels should remain accessible so that the cover can be removed and accessed for future wiring needs or repair and maintenance.

Plumbing fixture drain lines are required to be sloped not less than 1/4 inch per foot for 2 1/2 inch or less drain lines, and not less than 1/8 inch per foot for 3 inch and larger drain lines. Be sure to consider the distance your drain lines must travel, and the elevation of the drain line you want to tie into, when planning the location of your plumbing fixtures.

New bedrooms are required to have direct access to the exterior by way of a properly sized window or door. Take advantage of existing doors or compliant windows when planning your room layouts.

## REQUIRED INSPECTIONS

AN INSPECTION WILL NOT BE DONE WITHOUT APPROVED PLANS ON THE JOB SITE

These notice times are minimums for scheduling inspections.

1. Concrete (inspections are for the same day pour) 2 hour minimum notice required
  - a) Foundation Wall – Masonry Wall
  - b) Pier Holes
  - c) Structural Slab (suspended and on over 24" fill over dig)

All other inspections require a minimum of 1/2 day notice

2. Underground Rough-In: a) plumbing b) electrical c) mechanical
3. Roof - mid-phase (as coverings are installed, final)
4. Rough-In: electrical, plumbing, mechanical, framing (includes exterior wall bracing)
5. Above Ceiling Electric
6. Above Ceiling Framing
7. Above Ceiling Mechanical
8. Above Ceiling Plumbing
9. Fire Stopping
10. Window Installation
11. Exterior Wall Covering (brick, wood siding, stucco, stone veneer)
12. Insulation (residential only)
13. Drywall (before taping, screw pattern – type of gypsum board)
14. Stucco (lath) (sheetrock must be done) otherwise drywall shall be glued and screwed after stucco application
15. Fireplace (masonry) (insert)
16. Swimming Pool Bonding (pool/spa/hot tub) (shell, deck, wet niche), final
17. Gas Inspection (gas piping interior – exterior, air pressure test)
18. Electrical Service (temporary/permanent)
19. Fire Sprinkler (sprinkler pipe rough-in visual, underground fire mains, hydrostatic test, final)
20. Fire Alarm per NFPA 72 (rough-in, final test)
21. Final Agricultural Barn (set-back to property line)
22. Final Inspection

Johnson County Kansas  
Unincorporated



## Basement Finishing and Remodeling Code Guidelines and Permit Requirements



One of the objectives of the Johnson County Building Officials Association is to enhance construction uniformity and the adoption of common construction codes and procedures. This document is intended assist contractors and home owners in understanding the minimum code requirements for basement finish projects. It is also intended to provide guidance for obtaining permits and inspections.

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<https://www.jocogov.org/dept/planning-and-codes/bld/home>

A permit is required to finish or remodel a basement that involves construction of walls or installation or extension of electrical circuits, plumbing drains or vents, or ductwork.

Repair and maintenance work, such as, carpeting, painting, wall paper, receptacle replacement, fixture replacement (sinks, stools, lighting fixtures), vanities and cabinetry do not require a permit.

An owner who also occupies the residence can perform any part or all of the work. If a contractor is used for mechanical, electrical, plumbing, framing, roofing, the contractor shall hold a Johnson County Contractors License.

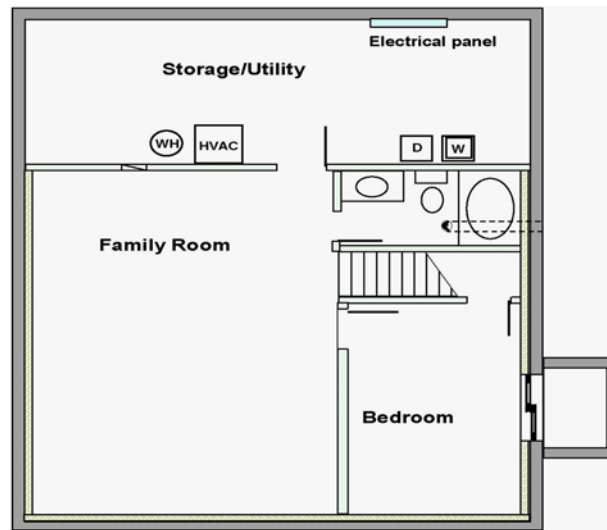
The basement finishing booklet that's online covers existing construction, framing, wall sole plates, fasteners, fire blocking, wiring & piping protection, cutting; boring & notching, floor joists, top of wall support, ceiling heights, wall finishes, stairways, egress, energy efficiency, windows, electrical, plumbing, venting, bath fans, mechanical, backwater valves. Structural modifications, such as relocation of support columns, relocation of bearing walls, or reframing floor joists are not within the scope of this document. A registered design professional should be hired to provide review and design services for structural projects. Go to the Building Codes web site, <http://buildingcodes.jocogov.org/Accepted%20Methods.htm>

### Building permit Requirements

1. Submit a residential permit application. The form is available on the web site, <http://buildingcodes.jocogov.org/forms.htm>, or here in the office.

2. Submit a floor plan. The sample floor plan shown has been provided showing the minimum information necessary on the plans. Plans shall be drawn to a scale (1/4-inch or 1/8-inch equals 1-foot is preferred). On the submitted floor plan please verify:

- egress window or door
- smoke detectors
- combustion air requirements for gas fired appliances location and size of opening for combustion air
- maintaining 1" clearance for non-bearing walls to floor system above
- arcfault required for new bedrooms



3. If a bedroom is part of the remodel, please contact Johnson County Environmental to make sure your septic is adequate. We will need to receive a copy of their report to issued.

4. All sub-contractor forms, completed by a licensee or permittee for electrical, framing, mechanical, or plumbing.

5. Homeowner Installation form, if the homeowner will perform the work.

6. Completed Energy Code Submittals per JOCO Regulations and the 2012 IRC, Chapter 11 Requirements. The permit fees are due when the permit is issued.

### EMERGENCY ESCAPE AND EGRESS OPENINGS – (2006 IRC R310)

Basements, and all sleeping rooms are required by code to have at least one emergency escape opening with a net clear area of 5.7 sq. ft. A separate egress opening for the adjoining area of the basement is not required if there is an egress opening in a basement bedroom. The minimum net clear opening may be reduced to 5 square feet if your emergency egress opening is a window with the sill not more than 44 inches below the finished grade level adjacent to the window. Emergency escape windows are allowed to be installed under decks, provided the location of the deck allows the window to be fully opened, and provides a path not less than 36 inches in height to a yard area.

**Stairways** – The rise and run requirements for stairways has changed over the years. Many stairs of older homes were constructed with a treads and risers that do not meet current codes. Newer homes are constructed to a 7-3/4 riser and 10 inch run standard. The basic rise and run do not have to be upgraded to meet current code requirements as part of the basement finish for older homes. Floor covering materials should be carefully considered because the maximum variation from between the highest and lowest riser is 3/8 inch. Adding a finish material more than 3/8 inch in thickness to the floor in front of the stairs might reduce the height of the first riser too much, and create a code violation.

Open risers are not permitted. As part of the basement finish any existing open risers shall be blocked solid. Where possible the blocking shall be installed to provide a 3/4 inch nosing for each tread.

All stairways shall have a minimum clear width of 36 inches at all points above the handrail height, and below the required headroom height (6' – 8" measured vertically from the sloped plane adjoining the tread nosings, and floor surfaces of landings and platforms). The minimum clear width of the stairway at or below the handrails is 31.5 inches.

**Handrail** – A handrail shall be provided on at least one side of each stairway that consists of 4 or more risers between landings. Handrails shall be continuous along each flight of stairs (from landing to landing) from the top riser to the bottom riser. Handrails shall be placed between 34 and 38 inches above the nosing of steps and provide a graspable surface. The handrail shall have a circular cross-section with an outside diameter between 1-1/4 and 2 inches with a circumference of between 4 and 6 inches. The space between the handrail and wall shall be not less than 1-1/2 inches.

**Guardrail** – Where the height of any riser on the open side of a stair or landing is more than 30 inches above the floor guardrails are required to prevent falling off of the stairs. Guard rails shall be not less than 34 inches in height measured at the nosing of treads. The guardrail shall have intermediate railings below the guardrail spaced so a sphere greater than 4 inches in diameter cannot pass through at any point, except that a 6 inch limitation is permitted the at the triangular opening formed by the intersection of the tread and riser at the bottom of the guardrail.