

# City of Creve Coeur Building Division



## Finishing Your Basement

Finishing your basement can certainly add livable floor space to your home. The addition of a recreation room, office, study or even a bedroom could be just what your home needs.

Finishing your basement does require a building permit. If your home is located in Creve Coeur, here are some simple guidelines to help you through the permit process. Before coming to the Government Center you will need to prepare and bring two sets of building plans, drawn to scale, that containing the following:

- An overall floor plan of the existing conditions and of the proposed condition
- Location of any existing stairway and walk-out basement door
- Show location of existing rooms and rooms to be added. All rooms should be labeled to indicate the intended use (utility room, bedroom, office)
- Room dimensions
- Door sizes
- Location of supply and return air diffusers along with the CFM at each register
- Clarification that the existing furnace is adequately sized to accommodate the additional living space
- Location of electrical panel box
- Locations of smoke detectors
- A typical wall section that specifies the following:
  - Size and spacing of framing members
  - Method of plate anchorage (hot dipped galvanized nails or bolts)
  - Type and R-value of insulation provided (if applicable)
  - Type of interior wall finish (gypsum, thickness, paint)
  - Firestopping at top plates indicated
  - Type of ceiling (gypsum or acoustical grid)
  - Height of ceiling above finished floor

# Important Building Code Requirements

## Ceiling Height

Finished basements must have a ceiling height of not less than seven feet. Bathrooms must have a ceiling height of not less than six feet-eight inches. Exception: The ceiling height to beams and girders, spaced not less than 4 ft on center, may be 6" inches below the required ceiling height.

## Required Light

Every room or space intended for human occupancy must be provided with natural or artificial light.

## Required Ventilation

Mechanical ventilation of these habitable spaces must be provided by a method of supply air and return air. The volume of return air provided must be equal to the volume of supply air provided.

## Required Draft-Stopping

The space above a suspended ceiling must be divided into approximately equal areas not greater than 1,000 sq ft. The ½" inch gypsum board draft stopping must be installed parallel to the main framing members.

## Required Firestopping

Firestopping must be installed in concealed spaces of furred walls at the ceiling level. Firestopping must also be installed at all interconnections between vertical and horizontal spaces (such as soffits, suspended ceilings).

## Additional Smoke Detectors Required

A combination hard-wired/battery back-up smoke detector must be installed at an approved location within the finished basement and another one within the unfinished basement. Additional AC/DC smoke detectors must be provided in each basement bedroom (if applicable). Note: As a result of the issuance of this building permit, the homeowner is required to upgrade their existing smoke alarm system throughout their entire home to bring it into compliance with today's building code. Today's building code requires AC/DC powered smoke detectors to be installed in the following locations:

- In each sleeping room.
- Outside each separate sleeping area in the immediate vicinity of the bedrooms.
- On each additional story of the home, including your basement.
- All smoke detectors are required to be interconnected such that the actuation of one smoke detector will activate all of the detectors within the home.

**Exception: When existing structures undergo an alteration under a permit, smoke and carbon monoxide detectors may be battery powered only and interconnection is required by hard-wiring or approved wi-fi wireless smoke detectors.**

## **Door Sizes**

Provide dimension of all new interior doors.

## **Emergency escape and rescue opening required**

Every basement or bedroom must have at least one operable window or exterior door approved for emergency escape or rescue. This window or door must open directly from the basement bedroom (if provided) to the outside of the house.

Where a window is provided for emergency escape or rescue, the window must meet all of the following requirements:

The bottom of the clear opening must not be more than 44 inches above the floor.

The minimum net clear opening must be five square feet.

The minimum net clear opening height dimension must be 24 inches.

The minimum net clear opening width dimension must be 20 inches.

A window well may be required if the finished sill height is below the adjacent ground elevation. The minimum horizontal area of the window well must be 9 square feet with a minimum horizontal projection and width of 36 inches. Window wells with a vertical depth greater than 44 inches must be equipped with a permanent, code compliant ladder or steps. A Missouri registered architect is not required to be involved in this project unless there are structural alterations proposed.

## **The Approval Process**

Bring two sets of building plans to the permit counter at the Creve Coeur Government Center located at 300 N. New Ballas Rd. At that time, you will need to complete an application for a building permit.

The permit technician will then review your application along with all attachments to be sure that you have everything needed for a proper plan review. When your plans have been approved by the plan reviewer, you will be notified by phone that your permit is ready. You will also be told the cost of the permit (which includes the cost of plan review and the minimum number of required inspections). Payment is required before the permit can be issued. Note: electrical and plumbing permits (if applicable) must be obtained from the St. Louis County Department of Public Works before any new electrical or plumbing work may be performed. For further information, call (314) 615-5184.

The city will keep one set of the city approved plans for our records and one set will be returned to the applicant for field use. This set of plans must be kept on site and be available to the inspector.