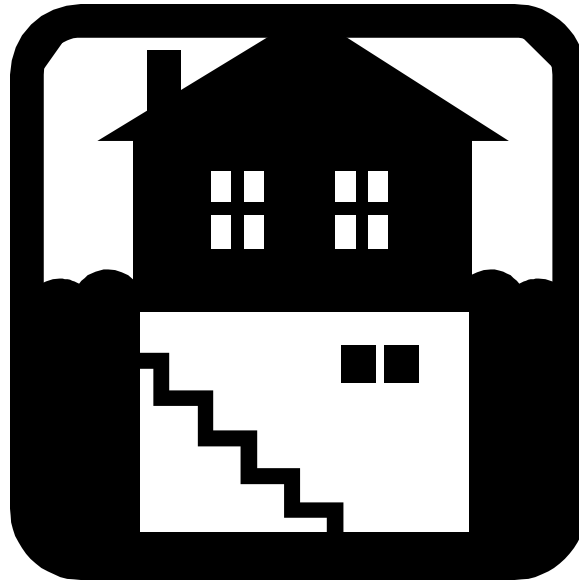




DEPARTMENT OF CODE ENFORCEMENT

14811 MANCHESTER RD • BALLWIN MO 63011
(636) 227-2129



BASEMENT FINISH / REMODEL

Residential



2006 INTERNATIONAL RESIDENTIAL CODE



PERMIT REQUIREMENTS

Finishing your basement can increase the comfort and value of your home. With the assistance of the Ballwin Code Enforcement Department, you can make sure that your project is done in a safe and code-compliant manner.

FINISHING YOUR BASEMENT DOES REQUIRE A PERMIT

In most cases you will also have to obtain mechanical, electrical and plumbing permits. The following information is needed to obtain a building permit:

1. **A completed multipurpose permit application form**, which is available at the front desk of the Ballwin Government Center, or on our web site at www.ballwin.mo.us.
 2. **Two (2) complete sets of plans showing the following:**
 - An entire floor plan (showing finished and unfinished areas) with room uses labeled (*see example, page 4*).
 - Ceiling heights and wall locations.
 - Location and sizes of all windows, doors, and stairs.
 - Location of furnace, water heater, floor drain, fireplace or stove (manufacturer specifications).
 - Location of electrical service panel.
 - Location of escape window and size if applicable.
 - Firestopping detail.
 - Smoke detector locations.
 - Electrical layout.
 - Location of existing or future plumbing work if applicable.
 - Location of supply air grilles, return air grilles, and combustion air, as well as heat gain/heat loss calculations.
 3. **Information addressing emergency escape** from the newly finished area via a walkout door or emergency escape window.
 4. **Show a typical wall section:** stud spacing, vapor barrier, insulation, fire stopping. Show bottom plate in contact with concrete floor as treated lumber. (*see Typical Wall Section diagram, page 4*)
 5. **The minimum ceiling height** is 7'0" in all habitable spaces; 6'6" at beams and ductwork, 6'8" in stairwell.
 6. **Show the location of mechanical equipment, including furnaces, water heaters, and electrical fuse or circuit breaker boxes.** When gas-fired equipment is enclosed in a room that does not provide at least 50 cu. ft. per 1000 BTU output of all equipment combined in that room, it is necessary to provide combustion air from outside that room. This can be accomplished by installing two grilles, 100 sq. in. each, one 1' below ceiling and one 1' above floor (stacked in the same stud space), or by installing a louvered door in a wall common to that room and another larger room (not a bedroom or closet). Also include a layout of the supply air and return air registers and grills. A licensed mechanical contractor must furnish this information, as well as heat loss/heat gain calculations to determine if the system is capable of conditioning the additional finished space.
 7. **Basement bathrooms must have exhaust fans** that are vented to the outside, and may not be combined with any other duct or exhaust system.
 8. **Stairways must have a graspable handrail and a guardrail on open sides.** If the area under the stairs is to be enclosed for storage, the walls and underside of the stairs must be covered with a minimum of one layer of 1/2" gypsum board. Seams and joints are to be taped with a minimum of one coat of drywall compound.
- ❖ **FIRE PERMIT** A fire permit must be obtained from the fire district in which you live:
 West County EMS & Fire Protection District (636) 227-9350
 Monarch Fire Protection District (636) 514-0900



A FEW WORDS OF CAUTION:

At some point in the future, should you want to sell your house, it will have to be inspected and approved by the City of Ballwin. If you did not get a permit for a basement finish, you will have to obtain a building permit and approval before the house can be sold. This may mean that some demolition will have to take place so that the necessary inspections can be made. It is much easier to get the permit when the work is done.

TYPICAL GUARD & HAND RAIL SYSTEM AT BASEMENT STAIRS

(Residential Construction Only)

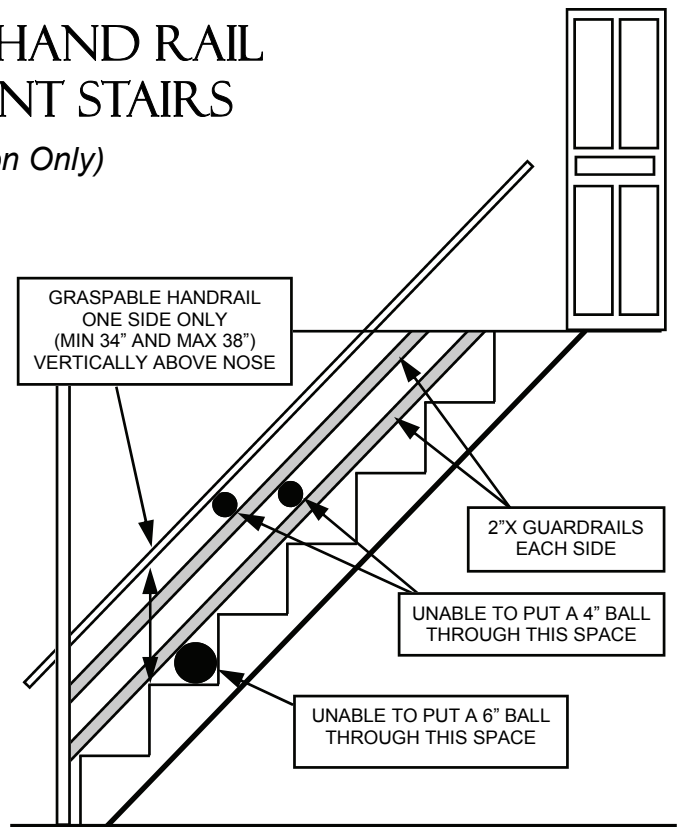
GUARD OPENING LIMITATIONS

Required guards on open sides of stairways, raised floor areas, balconies, porches and decks shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter.

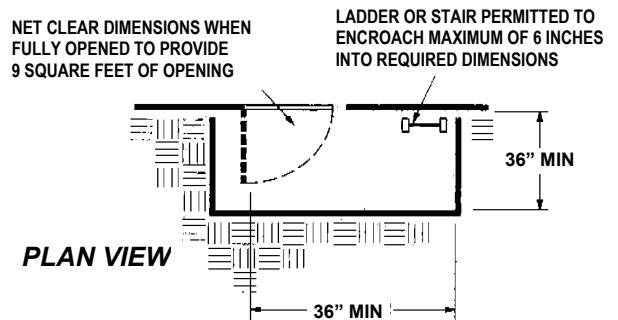
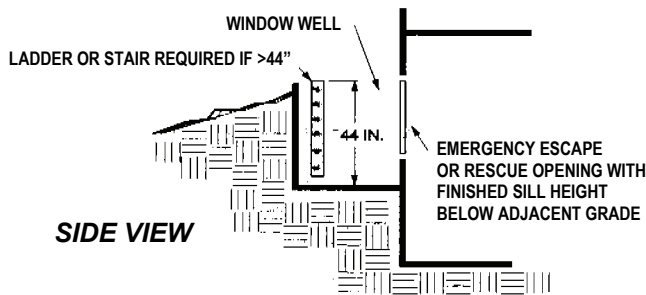
Required guards shall not be constructed with horizontal rails or other ornamental pattern that results in a ladder effect. Guards must be a minimum of 34" vertically above the nose of the tread.

HANDRAIL HEIGHT

Handrail height, measured vertically from the sloped plane adjoining the tread nosing shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).



EMERGENCY EGRESS



WINDOW WELLS, LADDERS & STEPS

Window wells required for emergency escape and rescue shall have horizontal dimensions that allow the door or window of the emergency escape and rescue opening to be fully opened. The horizontal dimensions of the window well shall provide a minimum net clear area of 9 square feet with a minimum horizontal projection and width of 36 inches.

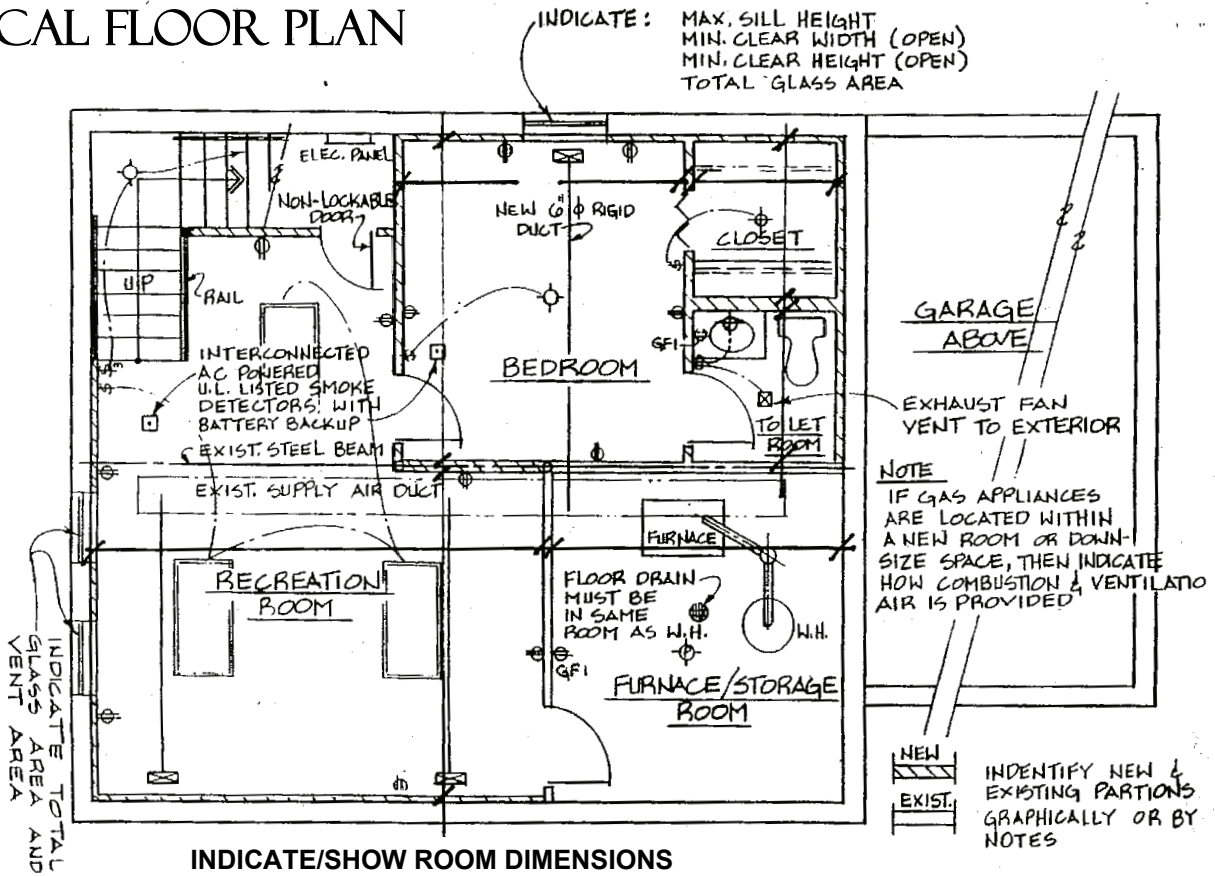
Window wells with a vertical depth greater than 44 inches below the adjacent ground level shall be equipped with a permanently affixed ladder or steps with the window in the fully open position. Ladders or steps required by this section shall be permitted to encroach a maximum of 6 inches into the required dimensions of the window well. Ladders or rungs shall have an inside width of at least 12 inches, shall project at least 3 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well.

EMERGENCY ESCAPE AND RESCUE OPENINGS

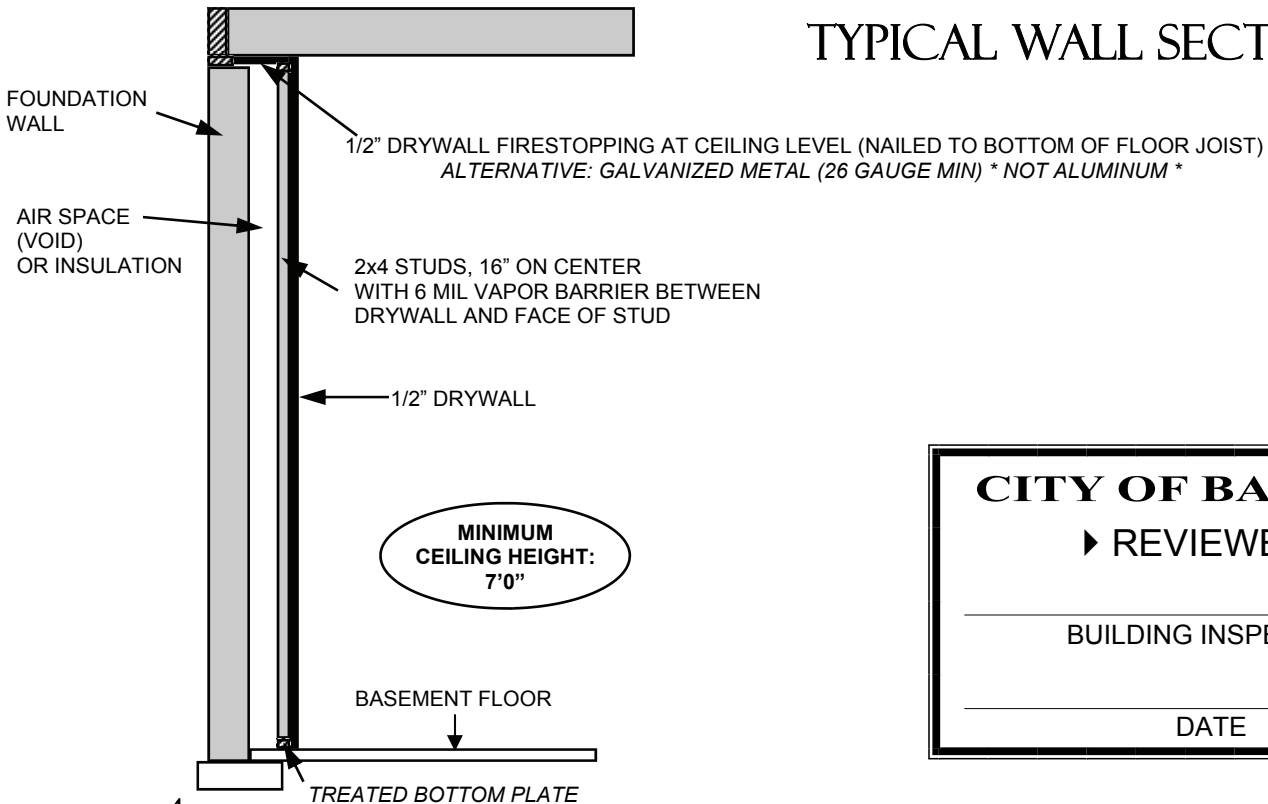
Basements with habitable space and every sleeping room shall have at least one openable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Windows used for emergency escape and rescue shall have a maximum sill height of 44 inches, a minimum net clear opening of 5 square feet, a minimum opening height of 24 inches and minimum opening width of 20 inches. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

Exception: For permit applications for a basement finish not including sleeping areas, AC powered UL listed smoke detectors with battery backup, interconnected to a first floor smoke detector, will be allowed in place of an emergency escape window.

TYPICAL FLOOR PLAN



TYPICAL WALL SECTION



CITY OF BALLWIN	
▶ REVIEWED ◀	
_____ BUILDING INSPECTOR	
_____ DATE	