

Basement Finishing

Building Code requirements and informational handout (updated March 2, 2015)

1. Minimum ceiling height of 6-feet 4-inches, R305.2.
2. Heat capable of maintaining 68 degrees 3-feet off the floor and 2-feet from exterior walls in all habitable rooms, R303.9. System must be balanced after installing heat ducts and cold air returns.
3. **Smoke alarms** shall be provided throughout the home on each level, in each bedroom and in the immediate vicinity outside of bedrooms. They must be hardwired and interconnected if access can be provided without removal of interior wall or ceiling finishes, R314.
4. **Carbon monoxide alarm** shall be installed outside of but not more than 10-feet from bedrooms, R315.
5. Basements and every sleeping room shall have at least one operable emergency escape and rescue opening that opens directly into a public way or to a yard or court that opens to a public way, R310.
6. Egress window minimum net clear openings are: 5.7 total square feet (5 square feet if at grade level) 24-inch height, 20-inch width and sill height of not more than 44-inches from the floor, R310.1.1. *Replacement windows are exempt from these requirements when window is not smaller in size with same operating style that provides equal or greater opening area of existing window, R310.1.5.*
7. Window wells shall have at least 9 square feet of net clear area with a minimum horizontal projection and width of 36-inches. An attached ladder or steps is required when the vertical depth below grade exceeds 44-inches. The ladder or rungs shall be at least 12-inches wide, project at least 3-inches from the wall and spaced not more than 18-inches apart, R310.2. *A window well drainage system is required when not in well drained soils, R310.2.2.*
8. Bathroom with no openable window requires exhaust fan exhausting to outside. Exhaust duct must be insulated to minimum R-3.3 for first 3-feet from exterior wall, R303.3 and Energy code R403.2.1.
9. Stairs with four or more risers require a continuous full-length handrail with no sharp edges on at least one side. It must have a minimum 1 ½-inch space between the handrail and wall or guard, R311.7.
10. Enclosed accessible space under stairs shall be protected on the enclosed side with ½-inch gypsum board, R302.7.
11. Wood in contact with concrete or masonry that is in direct contact with the ground must be treated or separated from the concrete or masonry by an impervious moisture barrier, R317.
12. Minimum insulation requirements: exterior above ground walls R-20, foundation walls R15 (R-10 with exception) rim R-10. Refer to foundation wall insulation handout for specific requirements, Energy Code Table R402.1.1 and R402.2.8.

State Plumbing Code requirements:

1. All new plumbing shall be inspected, tested and approved prior to being covered.
2. Refer to attached Plumbing Code Check list for additional requirements.

Inspections Required:

1. Plumbing, heating and electrical rough-in
2. Framing (can be done with plumbing and heating rough-in inspections but after the electrical rough-in inspection by the State Electrical Inspector)
3. Insulation (after framing inspection has passed)
4. Plumbing and heating final
5. Electrical final inspection by State Electrical Inspector. Call Eugene Boyle at 763-633-9148 between 7AM and 8:30AM, M-F
6. Building Final (can be done with plumbing and heating final inspections).

Notes:

1. Separate permits are required for plumbing, heating, and electrical work
2. The permit holder is responsible for scheduling inspections, (763-689-3211)
3. For additional information or help with questions call the City Building Inspector at 763-552-3208

With permit application, provide a sketch of basement that shows:

1. Dimensions with total square feet calculated of each room to be finished.
2. Label use of each area; bedroom, bathroom, family room, office, utility room, etc.