



2012 IRC CODE REQUIREMENTS BASEMENT FINISH

STRUCTURAL:

1. The basement must have at least one window to meet egress, and each bedroom as well. The bedroom egress window can count as the basement egress window. It must be minimum 5.7 sq. ft. opening area. The minimum dimension for width is 20" and 24" for height, but the 5.7 sq. ft. must still be met (For instance, an opening 20" wide must be a minimum 41" high, or one 24" high must be 34.2" wide).
 - a. Casement windows may require special "egress hardware" kits to allow the window to open fully to achieve the egress width.
 - b. For window wells 44" in depth and greater an attached egress ladder shall be installed.
 - c. Minimum egress window well horizontal projection is 36".
 - d. The interior window sill shall be a maximum 44" above the floor.
2. All bottom-plate lumber in contact with the concrete shall be treated or decay resistant.
3. Minimum ceiling height is 7', beams & ductwork maybe at 6'6" from floor. Unfinished areas may have a ceiling at 6'8" with beams & ducts at 6'4".
4. Floating walls are required within the city limits of Evans, however if you have concerns you may want to contact a Structural Engineer if there is a concern.
5. Firestop all soffits, chases, and dropped ceilings, and any other concealed spaces where a fire, if started, might spread throughout the structure of the house without detection. Wood with a minimum thickness of 3/4" or fiberglass insulation, with the paper/plastic backing removed and secured in place may be used.
 - a. The typical places where firestopping is required is at the top of walls where a dropped ceiling or duct chase leaves an open cavity from the wall into the chase, or

a furred wall against a concrete foundation which leaves a space open to the floor joists above between it and the house exterior frame wall at the ceiling.

6. Understair storage, when enclosed with a door and no side open to another space, shall have 5/8" Type X gypsum board, fire resistive sheet rock, taped & mudded, on all surfaces made of combustible materials.
7. Water resistant "greenboard" drywall when installed on ceilings must have the framing installed on 12" centers.
8. Cement board or glass mat gypsum board must be used for tile backer in tub/shower walls, not "greenboard".
9. The mechanical room may not have any openings connected to a bedroom or bathroom. If the door to the mechanical room opens into a bedroom or bathroom, the door must be gasketed on sides & top (weather-stripping is good) and be self-closing and all combustion air must be taking from the exterior. A carbon monoxide detector (plug-in type is acceptable) shall be installed in the bedroom or bathroom.
10. Any glass within a tub or shower enclosure which is less than 5' above the drain surface shall be tempered.
11. Framed walls against the concrete foundation shall have unfaced insulation, minimum R13, installed in the stud cavities, or R11 if continuous behind wall. Use no vapor or moisture barrier at all.

ELECTRICAL:

1. Bathroom receptacles shall be supplied with a dedicated 20 amp GFCI protected circuit. The existing bathroom receptacle circuit may be utilized for the receptacle only, with the fan and light supplied by a general use lighting circuit, OR the receptacle, bath fan and lights may all be on a new 20 amp dedicated circuit, if the circuit is for that bath room only (If this method is used, it is advised to wire it so if the GFCI trips it will not turn off the light).
2. Each bedroom shall have a smoke detector, as well as any adjoining hallways and the common area. These shall be inter-connected and hard-wired with the existing smoke detectors in the house. If your house does not currently have smoke detectors, it may be required that they be installed throughout the entire house, in both old & new areas. See specific notes on the approved plans and/or call the Building Department for requirements.
3. All circuits shall be Arc Fault protected except those required to be GFCI protected, or burglar/fire alarm circuits.
4. Recessed can lighting shall be I. C. ("insulation contact") rated.

5. Receptacles shall be installed within 6' of any doorway, and spaced every 12' maximum measured lineally along the wall line. Any useable wall space 2' or longer will require a minimum of one receptacle.
6. Unfinished, storage, and mechanical rooms are required to have one GFCI protected receptacle each; which may be supplied from any non-dedicated circuit. The dedicated sump pump circuit shall not be used for any other purpose, whether or not a pump is installed.
7. Incandescent light fixtures in clothes closets shall be a minimum of 12" from the vertical plane of the shelving and/or rod to the edge of the fixture; fluorescents and recessed cans at 6" from the vertical plane of shelf or rod. No unprotected bulbs may be placed in closets of any kind.
8. Sub panels shall not be placed in closets or bathrooms. Minimum clear working space directly in front of sub panel to be 36", with a 30" clear working space measured horizontally. The sub panel does not have to be centered within the 30" horizontal clearance space. No duct work, pipes, or equipment shall be directly above the sub panel.
9. Any general use receptacles within 6' of any laundry, bar or other sinks shall have GFCI protection.
10. Secure electrical cable (romex) at four and a half foot intervals, and within eight inches of any junction boxes.
11. Please note "box fill" requirements of electrical boxes when purchasing. The number of wires in a given box is limited to the cubic inches of space of that box. The box is marked with the cubic inches in the inside back portion of the box. Some boxes are marked with the number of electrical cables (romex) that can be in the box.
12. All splices shall be placed in a junction box, and be accessible at the finished stage. Hidden, covered, or non-accessible junction boxes are not allowed. A cover plate is required at final inspection.
13. When terminating electrical cables (romex) into metal boxes, bath fans, or similar applications a romex connector is required to secure the cable.
14. All receptacles shall be of the tamper resistant type.
15. Carbon monoxide detectors are required by state law to be installed when any interior renovations are done. The detector shall be placed within 15' of the doorway to any sleeping room. A plug-in CO detector is acceptable.

PLUMBING:

1. A temperature/pressure balanced "anti-scald" valve is required in a tub/shower.
2. Shower base to encompass a minimum 30" circle inside the shower walls, with a minimum area of 1024 square inches.
3. Minimum of 30" wide space for toilet, measured 15" on each side from center of toilet stub to sidewalls, cabinets, and shower/tub basins.
4. Minimum 24" clear space in front of toilet, lavatory, and shower.
5. Any plumbing groundwork modifications shall be inspected before covering.
6. Plumbing in addition to pre-existing rough-ins may require backwater protection, as may any added drains which tie into upstairs drain stacks.
7. Vents shall be taken to atmosphere wherever possible; mechanical air inlet valves only allowed upon approval of Building Department.

MECHANICAL:

1. A window with minimum 1.5 square feet of openable area is required in bathrooms, or an exhaust fan vented to the exterior terminating a minimum of 36" away from openings into the house.
2. Provide adequate combustion air to mechanical room using one or more methods listed below:
 - a. Two ducts piped from the exterior, one ending within 12" from the ceiling, and one 12" from the floor.
 - b. Grills from the interior rooms, minimum of 100 square inches each, one high, one low. These shall not come from bedrooms or bathrooms, and their use may be limited by the cubic feet of the area with which they communicate.
 - c. A combination of a. and b.
 - d. Louvered doors, if not in bedroom or bathroom.
3. Minimum 30" free clearance in front of furnace & water heater, and adequate clearance for service and replacement of all other equipment and/or appliances in mechanical room.
4. Maintain the minimum clearances of furnace and water heater flue pipes to combustible materials of 1" for doublewall and 6" for singlewall pipe.

5. All habitable rooms shall be able to maintain minimum 68 degrees at 3' above the floor, typically with added heat runs.
6. It is recommended but not required to install additional return air inlets to aid in balancing the heating/cooling loads, but if installed they shall not draw from bathrooms, storage areas or mechanical rooms.

This is just a generalized list of the most commonly noted code requirements you should be aware of while performing construction on your home. This is not all inclusive, and not all code-related items can be noted here or on the plans. Some notes may not be applicable to your job. Field inspections may determine other requirements. If you have any questions, please call the Building Department at 970-475-1120.