

Top Residential Code Changes for 2007

Dear Contractor:

In our ever changing industry of construction, it becomes necessary from time-to-time to make ourselves familiar with new codes and State of Utah amendments to the codes. **Effective January 1st, 2007** permit submittals logged in to our office will comply with the following codes: The new 2006 editions of the **MC** (with appendix J), **IRC** (with appendix E), **IPC**, **IMC**, **IFGC**, **IECC**, **IEBC** (with its appendix chapters), and the 2003 ANSI A117.1 and the 2005 NEC.

This handout, in no way represents all the changes to the 2006 IRC, but is just an attempt to highlight the changes that will affect everyday construction.

Please review these changes and make sure your subcontractors are also familiar with the changes.

- 1) R105.2 (1): Exempt one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses went from 200 sq. ft. of floor area maximum in the 2003 code to only 120 sq. ft. maximum in the 2006 IRC.
- 2) R1 09.1: Requires that reinforcement steel be in place and supported. This change specifically requires that the steel be supported for the inspection of footings, foundations, and suspended slabs, etc ..
- 3) R202: An accessory structure is defined as "a structure not greater than 3,000 square feet in floor area, and not over two stories in height, the use of which is customarily accessory to and incidental to that of the dwelling(s) and which is located on the same lot."
- 4), R302: Exterior walls are now required to have a minimum I-hour fire-resistance rating when the fire-separation distance is less than 5 feet to the property line (or assumed property line). This rating shall be for exposure from both sides. Eaves may project 12 inches into this space. See Table R302.1.
- 5) R310.5: This change clarifies the height requirement for emergency egress which is under a deck or cantilever. The route out to "sky" must be a minimum of 3 feet high the entire way.
- 6) R311.4.3: The language has been cleaned up to help clearly show that a step-down landing is allowed at the required exit door (typically the front 3⁰6⁰ door) The landing can be no more than 7 % inches lower than the top of the threshold. The code still allows for, not more than two risers without a landing, at exterior doors other than the required exit door.
- 7) R311.6.1: This code section requires ramps built under the residential code meet the same slope requirements as commercial ramps.

- 8) R401.3: Drainage slope away from foundations for at least 10 feet is to be 5 % percent minimum. Impervious surfaces, or swells, within the 10 feet, may have a 2 % percent slope minimum.
- 9) R404.5: This section talks about retaining walls that are not laterally supported at the top and retain more than 24 inches of unbalanced fill. These walls are now required to be engineered.
- R602.6.1: When the top plate (either in exterior or interior walls) is cut, drilled, or notched more than 50 percent of its width, a 16 gauge x 1 W' wide metal tie shall be fastened across and to the plate at each side of the opening with not less than eight 16d nails at each side.
- 10) R613.2: Sills of exterior windows which are located more than 6 feet above grade, and less than 24 inches above the interior floor surface must meet some new requirements. The area of the window less than 24 inches above the interior floor surface must now be fixed or have an opening or a guard which does not allow the passage of a 4 inch diameter sphere.
- 11) R 702.4.2: Tubs and showers with tiled walls and wall panels in shower areas, now require cement, fiber-cement, or glass mat gypsum backers; green board is no longer allowed in this application. Note: the backer board cannot be installed over green board. Also note: "unless the backerboard has been evaluated as a water proof membrane, a moisture barrier is required in rooms or areas where high humidity or moisture is present, such as bathrooms and showers. The moisture barrier must be installed over framing and must be free from holes and breaks."
- 12) R703.2: There is now a requirement for a water-resistive barrier under all exterior siding materials. This includes vinyl siding.
- R703.8: The code disallows all supposed self-flashing windows to be used without a separate flashing material, and includes a more detailed description for the proper installation of the required flashing material.
- 13) ,
- 14) NII 0 1.4.1: Blown insulation markers need to be attached to attic trusses every 300 square feet facing the attic access that will show in inches the depth of the blown insulation.
- 15) NII 01.8: A permanent certificate shall be posted on or in the electrical distribution panel listing the predominant R-values of insulation installed in or on ceiling *lroof*, walls, foundation, (slab, basement wall, crawlspace wall and *lor* floor) and ducts outside the conditioned spaces; U-factors of windows, and the solar heat gain coefficient of windows. The type and efficiency of heating, cooling and service water heating equipment shall also be listed. Note: The listing will not allow you to drill or modify the panel or cover in any way to accomplish this.
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- 17) M1501.1: The code clarifies that mechanically exhausted air shall not be discharged into the attic, soffit, roof or crawl space. This means that bath fan vents will need to terminate at the exterior of the building (not in the soffit).
- 18) G2401.2: (Utah State amendment) Requires the fuel gas meter and surrounding piping is to be protected from physical damage, including falling, moving, or migrating ice and snow.
- 19) G2413.1: (Utah State amendment) Requires the minimum size of gas service to a dwelling is 1" inch.
- 20) G2422.1: CSST is now an approved appliance connector. (If done per manufacturers specifications).
- 21) P2708.1.1: Showers shall have doors sized to provide a minimum of 22" inch net clear opening.
- 22) P2713.3: Bathtubs and whirlpool bathtub valves shall limit the temperature to a maximum of 120⁰ degrees F.
- 23) P2720.1: Where the manufacturer's instructions do not specify the location and minimum size access opening, access openings to jetted tub pumps and motors shall be 18"x18" if the pump is more than 2 feet from the opening otherwise a 12 "x 12" access is adequate.
- 24) P2801.7: Water Heaters need to be strapped at the top one-third **and** the bottom one-third.
- 25) P3201.2: Traps for floor drains shall be fitted with a trap primer or shall be of the deep seal design.
- 26) P3201.6: Now the maximum horizontal distance from the fixture outlet to the trap weir is specified not to be more than 30 inches, the vertical distance is still limited to 24 inches.
- 27) P3201.7: Shower traps and trap arms are now to be sized according to the flow rates of all showerheads and body sprays the drain serves.
- 28) E3802.7: All 15- and 20-ampere receptacles that are located within 6 feet of the outside edge of a laundry, utility or wet bar sink shall have ground-fault circuit-interrupter protection.

Note: Because of the confusion regarding IRC requirements and Utah State amendments pertaining to stairs, the following references have been listed:

R311.5.3: (Utah State amendment) Stair treads and risers.

- R311.5.3.1 (Utah State amendment) Riser height. The maximum riser height shall be 8 inches (203 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than $\frac{1}{8}$ inch (9.5 mm).
- R311.5.3.2 (Utah State amendment) Tread depth. The minimum tread depth shall be 9 inches (228 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than $\frac{1}{8}$ inch (9.5 mm). Winder treads shall have a minimum tread depth of 10 inches (254 mm) measured as above at a point 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the greatest winder tread depth at the 12 inch (305 mm) walk line shall not exceed the smallest by more than $\frac{1}{8}$ inch (9.5 mm).
- R311.5.3.3 (Utah State amendment) Profile. The radius of curvature at the leading edge of the tread shall be no greater than $\frac{9}{16}$ inch (914.3 mm). A nosing not less than $\frac{1}{4}$ inch (19 mm) but not more than $\frac{1}{2}$ inch (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than $\frac{1}{8}$ inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosing shall not exceed $\frac{1}{4}$ inch (12.7 mm). Risers shall be vertical or sloped from the underside of the leading edge of the tread above at an angle not more than 30° degrees (0.51 rad) from the vertical. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4 inch (102 mm) diameter sphere.

(Utah State amendment) Exceptions.

1. A nosing is not required where the tread depth is a minimum of 10 inches (254 mm).
2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

Note: This means that concrete stairs, without nosings, must have a tread depth of 10 inches.

All other stairway requirements are as written in the International Residential Code.