## SIGNIFICANT CHANGES TO THE 2009 INTERNATIONAL RESIDENTIAL CODE

Please note that any structure that is exempt from a building permit is still required to meet the requirements of the adopted building code and all City of Coeur d'Alene Ordinances. If you have questions please contact our Building Department staff at 208-769-2267.

- 1. R105.2 (1) Residential accessory structures such as tool sheds that do not exceed 200 square feet are exempt from building permit requirements.
- 2. R105.2 (10) Residential decks that are free standing, not exceeding 200 square feet, not more than 30 inches above grade at any point, and not serving the required exit door are exempt from building permits.
- 3. R105.2 (7) Pre-fabricated swimming pools that are not over 48 inches in height are exempt from building permit requirements.
- 4. R202 Added definition of habitable attic space. It must meet all requirements for habitable spaces and is not considered as a story.
- 5. Table R302.1 Fire separation distances are amended to less than or equal to 3 feet.
- 6. R302.5.3 Delete section and replace with the following: Penetrations through the separation required in Section R302.6 shall be protected with approved materials to resist the passage of flame and products of combustion. The material filling this annular space shall be required to meet the ASTM E 814 or U L 1479.
- 7. R302.6 Garages shall be separated from a dwelling unit and its attic area, including supporting members with no less than one layer of 5/8 inch Type X Gypsum Board or equivalent on the garage side. If there is habitable or any conditioned space above or below a garage space, the garage side of the floor/ceiling assembly shall be protected with no less than two layers of 5/8 inch Type X Gypsum Board or equivalent. If a common door is provided, it shall be a self-closing, tight-fitting solid-wood door 1 3/8 inches in thickness, or a self-closing, tight-fitting 20-minute fire-rated door, or solid or honeycomb steel doors not less than 1 3/8 inches (34.9 mm) thick. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted.
- 8. R312.1 For the purposes of determining if a guard is required, this section was clarified by stating that the 30 inch measurement from an open sided walking surface to an adjacent grade is extended to any point within 36 inches horizontally to the walking surface.
- 9. R312.2 Requires that the 36 inch height of guards includes the surface of fixed bench seating (on decks).

- 10. R315 Requires carbon monoxide alarms in new construction and existing construction with an attached garage where work requiring a permit occurs and fuel fire appliances exist.
- 11. R317.1 (5) Requires wood siding, sheathing, and wall framing that is less than 2 inches from horizontal concrete surfaces and exposed to weather such as patios, steps, etc. shall be pressure treated.
- 12. R319.1 Address numbers shall contrast with the background, be a minimum of 4 inches in height with a ½ inch minimum brush stroke width and be plainly visible from the road fronting the property. When the address can't be viewed from the public way, a monument, pole or other sign shall be used to identify the structure.
- 13. R404.1.2.2 In all cases, concrete foundation walls shall be laterally supported at the top and bottom. Minimum placement of reinforcing bars for foundation walls which do not exceed 4 feet in height shall be: No greater than 24 inches on center and within 6 inches of the top and bottom of the stem wall horizontally and 48 inches on center vertically. Minimum placement of reinforcing bars for foundation walls exceeding 4 feet in height shall be: No greater than 18 inches on center and within 6 inches of the top and bottom of the stem wall horizontally and 18 inches on center vertically. All vertical reinforcement shall be embedded into the footings without ground contact. Minimum reinforcement for all continuous footings shall be two continuous horizontal reinforcing bars. Minimum reinforcing bar size shall be #4.
- 14. R404.1.2.3.7.4 Minimum cover of rebar cast against the earth is 3 inches; minimum cover of #5 and smaller rebar in removable forms is 1 ½ inches.
- 15. R404.1.2.3.7.5 Minimum lap splices of grade 40 rebar is: #4 20", #5 25", #6 30".
- 16. R408.1 Under-floor ventilation openings are required as follows: 1 square foot for each 1,500 square feet of area when the ground surface is covered with a Class I vapor retarder. At least one ventilating opening is required within 3 feet of each corner of the building.
- 17. R408.1.2 The ground surface of all under-floor spaces shall be provided with a continuous Class I vapor retarder.
- 18. R502.2.2.3 Requires a minimum lateral load connection of two hold down tensioning devices with a minimum capacity of 1500 pounds.
- 19. R602.3 Studs are required to be continuous from support at the bottom plate to a support at the top plate to resist loads perpendicular to the wall. The support shall be a foundation or floor, ceiling or roof diaphragm, or engineered. Stacked framing is no longer allowed.
- 20. R602.10 and associated Tables. There are several requirement changes. Resistance to wind forces has been added. It is strongly suggested that everyone involved in design or construction of residential buildings read the IRC Code Section for complete information.

- a. The ICC has developed a book in partnership with APA to help in the understanding of the wall bracing provisions. It is available online for purchase at: http://www.iccsafe.org/Store/Pages/Product.aspx?id=7102S09
- b. APA has an informational web page: http://www.wallbracing.org/
- c. Simpson Strong-Tie has two useful tools on their website with the following links: <a href="http://www.strongtie.com/ftp/bulletins/T-SWPDG10/T-SWPDG10.pdf">http://www.strongtie.com/ftp/bulletins/T-SWPDG10/T-SWPDG10.pdf</a> and <a href="http://www.strongtie.com/products/strongwall/wallbracing/intro.asp?newsletter=Nov10">http://www.strongtie.com/products/strongwall/wallbracing/intro.asp?newsletter=Nov10</a>
- 21. R612.3 Opening windows more than 6 feet above grade or surface below are required to have the bottom of the opening a minimum of 24 inches above the floor; unless the opening does not allow the passage of a 4 inch sphere, the opening is provided with a fall prevention device that allows emergency escape and rescue per ASTM F 2090, the window is provided with a self acting opening limitation device that does not allow the passage of a 4 inch sphere and has a release mechanism to allow emergency escape and rescue as described in the Code.
- 22. Table N1102.1 Minimum prescriptive wall insulation has been increased from R-19 to R-20.
- 23. N1102.4.1 Add attic access openings and rim joist junctions to the list of other nine conditions where air seal is required.
- 24. N1102.4.2 Building envelope air tightness and insulation installation is required to be demonstrated by either a blower door test or visual inspection per Table N1102.4.2 criteria.
- 25. N1103.1.1 If a forced air heating system is involved, at least one programmable thermostat is required. It must be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day.
- 26. N1103.2.2 If the air handler and all ducts are not located within conditioned space, duct leakage testing must be performed and approved.
- 27. N1103.2.3 Building framing cavities are no longer allowed as air supply ducts.
- 28. N1104.1 A minimum of 50% of the bulbs in permanently installed lighting fixtures are required to be High Efficacy bulbs.
  - a. High Efficacy Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps or lamps with a minimum efficacy of:
    - i. 60 lumens per watt for lamps over 40 watts.
    - ii. 59 lumens per watt for lamps over 15 watts to 40 watts.
    - iii. 40 lumens per watt for lamps 15 watts or less.
- 29. M1411.6 Locking access caps are required for refrigerant circuit access ports located on exterior of a building for air conditioner condensers.

- 30. M1503.4 Exhaust systems capable of exhausting 400 cfm are required to be provided with automatic make up air.
- 31. Table M1502.4.4.1 A new table to be used for determining clothes dryer duct equivalent length.
- 32. M1502.4.5 When a clothes dryer duct is concealed, the equivalent length is required to be identified on a permanent tag within 6 feet of the duct connection.
- 33. M1502.5 Protective nail plates are required for clothes dryer ducts if within 1 ¼ inches of the framing surface.
- 34. M2103.2 Thermal barriers (insulation) are required for all radiant floor heating systems.
- 35. G2411.1 CSST gas piping systems are required to be bonded to the electrical service grounding electrode system at the point where the service enters the building, or check manufacturers' installation requirements.