## 2015 IRC SIGNIFICANT CODE CHANGES

Section	<u>Title</u>	Type of Change	Description	Change from 2012	Estimated Cost Impact	<u>Summary</u>
R301.2.1.1.1	Sunrooms	New	Gives a standard to comply with and categorizes them by wall type and whether conditioned.	No address in previous editions.	Small if any as most manufacturers comply with the standards already.	Recognition that these structures need be structurally sound and safe.
Table R301.2(1)	Climatic and Geographic Design Data	Increased Safety	Adds Special Wind Region & Wind- borne Debris Zone to an existing table.	Recognizes an increased need in areas where historical data indicate a danger.	None as there is no such data in Paradise Valley.	More significant in coastal regions and some mountainous area including Northern Arizona.
Table R301.2.1.5.1	Ultimate Design Wind Speed for Topography	Clarification	Adjusted an existing table for the new wind speed and then modified the effect of local slope conditions.	Similar to the existing table.	Potentially a small increase to compensate for the increased wind speed.	Engineers will have to use these new numbers in the lateral designs when near topographic changes.
R302.1	Exterior Walls	New Option	Roof projections $\geq$ 2' to < 5', fire blocking at rafters is now allowed as well as 1 hour membrane on the underside.	Roof projections $\geq$ 2' to < 5', fire blocking at rafters is now allowed as well as 1 hour membrane on the underside.	No increase in construction cost and possibly a savings may be realized.	This will give builders more flexibility with the construction of roof overhangs at property lines.
Table R302.1(1) & (2)	Exterior Wall Table	New	Reorganized Table that allows penetrations at walls 3' from property line	Reorganized Table that allows penetrations at walls 3' from property line	No cost impact	Allows penetrations at walls less than 5' from the property line.
R304.1	Habitable Room Area	New	Reduced habitable room area to 70 square feet	Reduced habitable room area to 70 square feet	No cost impact	Good change, reduces the minimum room area by 50 square feet.
R314	Smoke Alarms	Clarification and New	Reorganized section to more readable format. Allows battery Smoke Alarms in remodel projects	Reorganized section to more readable format. Allows battery Smoke Alarms in remodel projects	Remodeled homes will see a cost savings as battery alarms are now accepted in lieu of hard wire and interconnection	Good change, battery alarms can be as reliable as hard wired.
R315	Carbon Monoxide Alarms	Clarification and New	Reorganized section to more readable format. Allows battery Carbon Monoxide Alarms in remodel projects	Reorganized section to more readable format. Allows battery Carbon Monoxide Alarms in remodel projects	Remodeled homes will see a cost savings as battery alarms are now accepted in lieu of hard wire and interconnection	Good change, battery alarms can be as reliable as hard wired.
R324	Solar Energy Systems	New	Moved the requirements for access and pathways from the International Fire Code into the IRC.	New Section	No cost impact as this was being required by the IFC.	Makes all the requirements for solar PV installations available in one book.
R325	Mezzanines	New	Moved the requirements for access and openness from the International Building Code into the IRC.	New Section	Potential small cost increase in "lofts" for children as free standing ladders are not allowed.	Safer solution for those small lofts.
R326	Swimming Pools, Spas and Hot Tubs	New	Requires that the design and construction of pools and spas comply with the International Swimming Pool and Spa Code	New Section	unknown	Since the ISPSC started as the Queen Creek Code it should be similar to existing codes.
R403.1.1	Minimum Footing Size	New Technology	Expands footing types into three categories, in some cases allows a smaller footing.	Expands footing types into three categories, in some cases allows a smaller footing.	Most cases will see a reduction in the size of the footings so a savings will be realized. Multi story homes may see a slight increase in minimum footing size.	Good change, reduces footing sizes for most homes.
Tables R502.3.1(1) & (2)	Floor Joist Spans and Tables	Clarification and New	Reorganized span tables in some cases reduce allowable spans and in others, increases allowable spans	Reorganized span tables in some cases reduce allowable spans and in others, increases allowable spans	New design values for Doug-fir and hemlock remain unchanged. Cost impact will increase in longer spans while some will decrease with shorter spans.	This brings the IRC in line with standards.

Tables R802.4(1) & (2)	Ceiling Joists and Rafter Tables	Clarification and New	Reorganized span tables in some cases reduce allowable spans and in others, increases allowable spans	Reorganized span tables in some cases reduce allowable spans and in others, increases allowable spans	New design values for Doug-fir and hemlock remain unchanged. Cost impact will increase in longer spans while some will decrease with	This brings the IRC in line with standards.
Tables R802.5.1(1) to (9)	Ceiling Joists and Rafter Tables	Clarification and New	Reorganized span tables in some cases reduce allowable spans and in others, increases allowable spans	Reorganized span tables in some cases reduce allowable spans and in others, increases allowable spans	New design values for Doug-fir and hemlock remain unchanged. Cost impact will increase in longer spans while some will decrease with	This brings the IRC in line with standards.
N1101.5.1	Thermal Envelope depiction	New requirement	The building's thermal envelope shall be represented on the construction drawings.	Not specifically required in 2012.	No cost impact.	This information is required on plans so it can be determined where the thermal envelope is located. This will help plan review, inspections, and contractors.
N1101.13	Compliance Paths	New performance path	The compliance paths have been clarified. There is a prescriptive path, a performance path with "Mandatory" requirements and an Energy Rating Index (ERI) path.	The 2012 required compliance with the mandatory provisions and either the prescriptive or performance path.	No cost impact.	This new section adds flexibility and clarification.
N1101.14	Permanent Energy Certificate	Clarification	The code requires the permanent certificate to be placed on a wall in proximity to the furnace, in a utility room, or in another approved location inside the building.	Previous requirement was to place the certificate in the electrical panel.	No cost impact.	This allows the permanent certificate to be placed in locations other that the electrical service panels which are usually outdoors subject to weather related damage.
N1102.1.3	R-value Computation - Insulated Siding	New technology	The labeled R-value for insulated siding must be reduced by R-0.6 for calculation purposes.	In the 2012 IRC only insulation products can contribute to the overall R-value.	Cost savings.	Insulated siding products have permanent insulation and can now be considered as continuous insulation, with a reduction factor applied.
N1103.3	Duct Sealing and Testing	Clarification	The duct sealing and testing provisions have been reorganized for clarity.	The significant change places the duct pressure testing methods and the maximum air-leakage rates in separate sections.	Possible cost savings in the event of a duct leakage test failure.	The major change is that duct leakage is made prescriptive, which would allow for alternative performance measures in the case of a test failure.
N1103.5 P2905	Heated Water Circulation and Temperature Maintenance	New technology	Hot water circulation systems must be provided with a circulating pump. The control shall be automatic and accessible.	Allowed for continuously-operating recirculation pumps.	Cost savings.	Controls turn off the circulation system if there is no demand for hot water. This change saves energy.
N1105.4.2	Performance Method - Compliance report	Verification	A compliance report on the proposed design shall be submitted with the application for the permit and at final inspection.	Only one compliance report is required to be submitted with the permit plans.	No cost impact.	The second report based on the as- built conditions will provide verification that the proposed design was met.
N1106	Energy Rating Index Compliance Alternative	New technology	This section establishes criteria for compliance using an Energy Rating Index (ERI) analysis.	New code provision.	Cost savings.	This new section will allow the use of HERS scores. The 2015 score of 52 is significantly lower than the 2012 score of 73.
N1107.6	Historic Buildings	Clarification	Allows historic buildings to be exempted from the energy requirements under some circumstances	Current code exempts any historic building on a register from the requirements of the code.	Possible initial cost increase with long-term energy savings.	This change will lead to increased efficiency for any historic buildings undergoing alterations or restoration without harming the building.
M1305.1.3.1	Electrical Requirements	New	Requires that exposed lamps in attics be protected from damage by location or lamp guards.	Current code requires the light but no protection.	Minor cost as the lamp guard is generally less than \$10 and only a couple are required per house.	Good change as the safety is increased at little cost.
M1502.4.4 & .4.5.3 G2439.4	Dryer Exhaust Duct Power Ventilators	New	DEDPV allowed if listed to UL 705	DEDPV allowed if listed to UL 705	No cost impact for dryer duct runs greater than 35'.	This will aid in the design and installation of long dryer vents.

M1502.4.6 G2439.7.5	Dryer Duct Length Identification	Clarification and New	Label of duct length only required if the duct exceeds 35' in length	Every concealed dryer duct required a label.	Slight cost reduction on shorter dryer duct runs.	Every dryer can push the air 35' so no label makes sense.
M1506.2	Exhaust Ducts	Clarification and New	New table establishes maximum exhaust duct lengths.	Not addressed previously.	Potential increase in cost if a larger duct is required.	Increase efficiency and moisture reduction.
G2404.11	Condensate Pumps	New	Condensate pumps must be connected to the appliance such that if the pump fails the appliance will not operate.	Not previously addressed.	Minor cost increase at the front end but a major savings if the pump fails.	Potential saving over the life of the appliance as damage from condensate is minimized.
G2411.1.1	Electrical Bonding CSST	Clarification New	Reorganizes bonding for CSST gas tubing and establishes maximum lengths and listing of connectors.	Previously the requirement was there but it was unclear as to how it was to be accomplished.	Little cost increase for those tradesmen that were doing it correctly.	Good change as it makes things clearer.
G2414.6	Plastic Pipe, Tubing and Fittings	Clarification	Specifically states that PVC and CPVC are unacceptable materials for gas supply.	The listing of the ASTM numbers of allowed materials wasn't enough.	No cost impact as these materials weren't allowed and were never used anyway.	More definitive language can reduce the potential for mistakes and potential failures.
G2439.7	Clothes Dryer Exhaust Duct Installation	Clarification New	Clothes dryer exhaust duct installation minimum requirements are clearly delineated.	Previously a duct was required but no guidance of how it was to be installed appeared in the code.	No cost increase for those tradesmen that were installing them correctly.	Good change to give some guidance on a correct installation.
P2502.1	Existing Building Sewers	Clarification	Requires inspection of the interior of existing drainage piping under concrete slabs when entire sanitary drainage piping is changed.	Previously the visual inspection could be from the outside of the pipe.	Increase in installation cost will be realized in remodels.	Not a huge impact as the piping is usually replaced anyway.
P2801.6	Water Heater Pan	New	Plastic pans are allowed but not beneath gas-fired water heaters.	Only galvanized pans were allowed.	Potential savings for electric watrer heaters and no cost change for gas- fired ones.	Common sense change both to allow palstic and to prohibit them under a gas flame.
P2901	Potable Water	Clarification New	Signage and color requirements where a nonpotable water system is used.	Not previously addressed.	No cost impact.	Significant safety issue is addressed in those instances where an alternative water system is used.
P2910 to P2913	Nonpotable and Reclaimed Water Systems	New	Requirements for the installation of Nonpotable and reclaimed water sytems.	Not previously addressed.	Not required systems so no cost impact.	Significant safety issue is addressed in those instances where an alternative water system is used.
P3009	Subsurface Lnadscape Irrigation Systems	Renamed and Expanded	What was Gray Water Recycling Systems has been renamed and the requirements clarified.	Too complicated to use before this is an attempt to be more clear and more understandable.	Unknown.	An improvement but still cumbersome.
E3901.9	Required receptacle outlets; garages	New	Now requires a separate circuit to feed garage receptacles with no other loads, must have one receptacle per vehicle space	Previous code did not require this	Increase in installation cost will be realized, \$200 to \$300	This effort is to prewire a garage for the possibility of electric vehicle charging.
E3902.8	Bathtub or shower stall receptacles	New	Requires outlets within 6' of a tub or shower shall have GFCI protection	Previous code did not require this	No cost impact.	These were already protected under other provisions.
E3902.9	Laundry areas	New	Requires outlets in a laundry area to have GFCI protection	Previous code did not require this	Increase in installation cost will be realized. \$20 to \$50	Expanding the use of GFCI's has been proven to decrease shock hazards
E3902.10	Dishwasher branch circuit	New	Requires outlets supplying a dishwasher to have GFCI protection	Previous code did not require this	Increase in installation cost will be realized. \$20 to \$50	Expanding the use of GFCI's has been proven to decrease shock hazards
E3902.16	Arc-Fault Protection	Expanded	Now requires kitchen and laundry outlets to be Arc-Fault protected	Previous code did not include the kitchen or laundry receptacles	Increase in installation cost will be realized; \$150 to \$200	Only Siemens makes an AFCI/GFCI receptacle so this will get their product more widely used.