**ATTACHMENT 1:** 2018 CODE ANALYSIS - COMMITTEE SIGNIFICANT CHANGES

Revised June 19, 2018

| Item | Code | Code Section | New Code Provision (Overview) | What impacts could the new code have? | | | | | | | | Commentary |
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| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 1 | IFC | 2015 IFC 609.4 | Appliance connection to building piping. Listed flexible connectors are required between the fixed fuel gas piping and cooking appliances on castors or other appliances that are moved for cleaning. | More | ● | High | ○ | High $$$ | ○ | | | Allows for replacement of connectors that are not designed for repetitive movement which reduces the chance of failure or leaks causing fires. Recommend addition |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 2 | IFC | 2015 IFC 901.8.2 | Removal of Existing Occupant-Use Hose Lines. Existing 1-1/2 hose lines can be removed under certain circumstances. | More | ○ | High | ○ | High $$$ | ○ | | | Occupant use of hose lines are no longer recommended except for OSHA required occupancies. Maintenance of hose lines are expensive and training on the use of the hose lines are minimal. Most buildings are protected with fire sprinklers and occupants should let the sprinklers do their job and evacuate the building. Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 3 | IFC | 2015 IFC 903.3.1.1.2 | Bathrooms in R2 Occupancies. Provides criteria for not installing sprinklers in bathrooms of specific Group R occupancies | More | ○ | High | ○ | High $$$ | ○ | | | NA |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ● | Reduced | | |
| 4 | IFC | 2015 IFC 904.13 | Domestic Cooking Systems in Group I-2 Condition 1. Addition of an extinguishing system within the domestic cooking hood. | More | ○ | High | ○ | High $$$ | ○ | | | As nursing homes move away from institutional models, they are designing kitchens with a residential feel. Commercial cooking tops and kitchens would require a type 1 hood with a suppression system. This code addition allows for a UL 300A Extinguishing system unit for residential range top cooking. Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 5 | IFC | 2015 IFC 907.2.11.3, 907.2.11.4 | Smoke alarms near cooking appliances and bathrooms. | More | ○ | High | ○ | High $$$ | ○ | | | This new section provides designers, plans examiners, and field inspectors with criteria for locating make alarms in relation to cooking appliances and bathrooms. By properly locating smoke alarms, the number of nuisance alarms may be reduced. Recommend addition. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 6 | IFC | 2015 IFC 1105 | Construction requirements for existing group I-2 | More | ● | High | ● | High $$$ | ● | Improved | | Retroactive construction requirements have been added to the IFC to provide a minimum level for fire and life safety in existing Group I-2 occupancies. Hospitals are required to have a life safety survey on a regular basis. If the facility does not meet certain life safety minimums, it is required to upgrade it's existing facility. The intent of this code is to bring consistency between the two main regulatory agencies: the local jurisdiction and the federal authority having jurisdiction (Center for Medicaid and Medicare Services). Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |

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| 7 | IFC | 2018 IFC 404.2.3, 404.2.3.1, 404.2.3.2, 404.2.3.3 | Lockdown Plans | More | ● | High | ○ | High $$$ | ○ | Improved | | Updates and prescribes details for facility lockdown plans. Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 8 | IFC | 2018 IFC 1010.1.4.4 | Locking arrangements in Educational occupancies | More | ○ | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 10 | IEBC | IRC Appendix J | It is recommended that Appendix J of the IRC (Existing Residential Building) not be adopted. | More | ○ | High | ○ | High $$$ | ○ | | | This IRC code appendix would require the Code Official to attend meetings for design of a repair, alteration or addition to a residence. A licensed design professional should be consulted instead. They are retained to make sure the client best interests are served. This Committee would recommend adding a code change to permit a lower ceiling height for a basement when it is altered into a finished space. The code section was in Appendix J and thought to be beneficial for remodeling existing basements in homes. A code change was sent to the IRC Committee. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 12 | ISPSC | 316.6 | | More | ○ | High | ○ | High $$$ | ○ | | | Solar thermal water heaters utilized for pools and spas shall comply with Sections 316.6.1 (Solar thermal water heaters shall be installed in accordance with the IMC or IRC) through 316.6.2 (collectors and panels shall be listed and labeled in accordance with IC 901/SRCC 100 or ICC 900/SRCC 300. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 13 | ISPSC | 410.1 | | More | ○ | High | ○ | High $$$ | ○ | | | Class A and B pools (Public Pools) shall be provided with toilet facilities having the required number of plumbing fixtures in accordance with the IBC or the IPC. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 14 | IPMC | 106.4 | Minimum fine listed as $50 | More | ○ | High | ○ | High $$$ | ○ | | | Recommend Minimum fine should be one hundred dollars ($100) |
| | | | | NA | ● | Medium | ○ | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 15 | IPMC | 304.3 | Premises identification says add instead of replace | More | ○ | High | ○ | High $$$ | ○ | | | Recommend change to amendment to read "replace" instead of "add" |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 16 | IPMC | 602.1; 602.2;602.3;602.5 | Occupiable workspaces | More | ○ | High | ○ | High $$$ | ○ | | | Should read "delete in its entirety" and refer to Municipal Code Section 4-6-1, 4-6-2 and 4-6-3 |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |

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| 17 | IPMC | 602.4 | Occupiable workspaces requires addition of dates | More | ○ | High | ○ | High $$$ | ○ | | Should be kept as is with dates of "Oct 1 of each year to May 1 of the succeeding year" |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | |
| 18 | IPMC | 703 | Section dealing with Fire Code | More | ○ | High | ○ | High $$$ | ○ | | Recommend keeping as is, however should be reviewed by NFD |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | |
| 30 | IRC | R101.2 | Clarified some uses for buildings that are residential in nature that can be built under the IRC. This code change will bring the IRC to reflect the requirements in the IBC. These structures will need to have a residential sprinkler system installed if they are built under the IRC Code. The occupancies are: Live work units, Owner occupied lodging houses (< 6 guest) and care facilities (< 6 guest). | More | ● | High | ○ | High $$$ | ○ | | Could have an impact on existing buildings because of the sprinkler requirements. The cost for new construction cost for a building listed in one of these occupancies could decrease. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | No Change | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | |
| 31 | IRC | R104.10.1 | Expands the requirements for building in a flood plain. | More | ○ | High | ○ | High $$$ | ○ | Improved | R104.10.1 Flood hazard areas.<br>The flood plain regulations are controlled by Will and DuPage Counties and FEMA.<br>Add Section R104.10.1 in Title 5 to read as: R104.10.1 Flood hazard areas<br>The building official shall not grant modifications to any provision related to flood hazard areas as established by Table R301.2(1) without the granting of a variance to such provisions by the board of appeals. |
| | | | | NA | ● | Medium | ● | Medium $$ | ● | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | |
| 32 | IRC | Table R301.2(1) | Revise Design Table to add more information. The information will better standardize requirements for heating and cooling | More | ○ | High | ○ | High $$$ | ○ | | Revised Table R301.2(1) to be added to Title 5 |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | |
| 33 | IRC | IRC Section R301.2.1 | Change the design wind speed from basic windspeed to Ultimate wind speed | More | ○ | High | ○ | High $$$ | ○ | | No effect for this area. Title 5 Design Criterial Table will need to be revised. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | |
| 34 | IRC | IRC Section R301.3 | Allows for a larger heights for floor | More | ○ | High | ○ | High $$$ | ○ | | Will allow for longer floor spans with a prescriptive design. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | |
| | | | | Less | ● | Low | ● | Low $ | ● | | |

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| 35 | IRC | IRC Section R302.2 | Various changes for demising wall construction for townhomes | More | ○ | High | ○ | High $$$ | ○ | | | Items changed were code requirement clarifications. There will not be any changes for the City due to these various code clarifications. The City of Naperville Building Dept. has been enforcing the code for this section as intended. |
| | | | | NA | ● | Medium | ● | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 36 | IRC | IRC Section R308.4.2 | The change is for a window next to the pull hinge side of a door to be safety glazing. Glazing on the latch side of a door will not required to be safety glazing if the wall is less than 180 degrees to the door. | More | ○ | High | ○ | High $$$ | ○ | | | Any window in a wall next to the hinge side of a door that is on an angle from the plane of the door in the close position is not required to be safety glazing. This would most typically occur in a bay area. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ● | Reduced | | |
| 37 | IRC | IRC Section 308.4.4.1 | When glass balusters are used the top rail must stay in place if a pane of glassing breaks. | More | ● | High | ○ | High $$$ | ○ | | | Not common in residential applications |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | Improved | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 38 | IRC | IRC Section R310.1 exception #2 | When a bedroom is located in a basement in a home that is sprinklered an escape and rescue window is not required to be in the bedroom. When escape and rescue window is located in a basement and another opening through the house is provided. | More | ○ | High | ○ | High $$$ | ○ | Reduced | | This is a trade off for a sprinkler system in a home for a bedroom located in a basement. If no suppression system there is no change. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ● | Low | ● | Low $ | ○ | | | |
| 39 | IRC | IRC Section R310.6 | An alteration to a basement other than a bedroom will not require an escape and rescue window to be installed. | More | ○ | High | ○ | High $$$ | ○ | | | This code will impact homes when finishing a basement. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 40 | IRC | IRC Section R311.7.3 | Increase height of run of stairs by 7 inches | More | ○ | High | ◡ | High $$$ | ○ | | | From maximum of 12'-0" to 12'-7" |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 41 | IRC | IRC Sections R311.7.11 & R311.7.12 | The use of alternating tread device & ships ladders can be used for areas < 200SF | More | ○ | High | ○ | High $$$ | ○ | | | This follows the IBC requirements as an alternative to stairs |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |

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| 42 | IRC | IRC Section R311.8.1 | Non-egress door ramps can now be 1:8. 1:12 was previously required. | More | ○ | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ○ | | | |
| 43 | IRC | IRC Section R314 | Smoke Detectors now need to comply with UL268. There is no changes for new construction. For additions and alterations smoke detectors can now be interconnected battery type (110V source is not required). | More | ○ | High | ○ | High $$$ | ○ | | | The previous UL standard that smoke detectors had to comply with was U217. Battery operated units will reduce costs for alternations and additions. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ● | Reduced | | |
| 44 | IRC | IRC Section R315 | CO detectors are now required to be hardwired with battery back-up. Also a CO detector is to be installed in bedroom with gas appliances. All CO detectors need to be interconnected. | More | ● | High | ○ | High $$$ | ○ | Improved | | This has been standard construction practice. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 45 | IRC | IRC Section R324 | Solar panel installation is now in the IRC . Before we had to go the International Fire Code for design and layout. | More | ○ | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ● | Medium | ○ | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 46 | IRC | IRC Section R325.3 | Mezzanine/ Loft areas are not considered a story as long as they are less than 30% and open to area below | More | ○ | High | ○ | High $$$ | ○ | | | City of Naperville Zoning Code would control number of stories. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ○ | | | |
| 47 | IRC | IRC Section R327.1 | Stationary storage battery systems | More | ○ | High | ○ | High $$$ | ○ | | | New section is for off grid dwellings or back up power systems |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 48 | IRC | IRC Section R403.1.1 | Footing chart added based on soil bering capacity | More | ● | High | ○ | High $$$ | ● | | | Slightly wider footing required in some instances. Discussion was on the possibility of making the design requirements for 3000PSF |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 49 | IRC | IRC Section R408.3 | A dehumidification can be added to an unconditioned crawl space in place of crawl space ventilation requirements | More | ○ | High | ○ | High $$$ | ○ | | | Will allow an other method for keeping crawl space areas dry. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
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| 50 | IRC | IRC Section R502.10 | Framed floor openings | More | ● | High | ○ | High $$$ | ● | Improved | | Joist hangers will be required on all floor openings |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 51 | IRC | IRC Section R507.3.1 | Added requirements in code for prescriptive post hole sizing. | More | ○ | High | ○ | High $$$ | ○ | | | Discussion was on the possibility of making the design requirements for to 3000PSF |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 52 | IRC | 2012-2015 R802.4, R802.5 | Modification - Changes to maximum spans for lumber in the ceiling joist and rafter tables of the IRC | More | ○ | High | ○ | High $$$ | ○ | | | For southern pine reflects shorter spans. For Douglas fir/larch and Hem Fir slightly longer spans refer to example on page 193. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 53 | IRC | 2012-2015 R806.1 | Deletion - The 2012 IRC exception along the building official to wave ventilation requirements due to atmospheric or climatic conditions has been deleted. | More | ○ | High | ○ | High $$$ | ○ | | | With recent revisions to the IRC, roof ventilation requirements, and changes in the 2015 IBC both codes now contain specific details on vented and unvented attics, with requirements related to use of vapor retarders and climate/specific instructions on use of air and permeable insulation. As always, the building official has the authority to accept alternative materials, design, and methods of construction in accordance with section R104.11. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 54 | IRC | 2012-2015 R806.5 | Modifications - For unvented attics and unvented rafter spaces, table R806.5 has a new foot note allowing calculation of insulation thickness when the insulation is placed above the roof sheeting. | More | ○ | High | ○ | High $$$ | ○ | Improved | | Section R806.5 provides 3 options for installing insulation at the roof line for unvented attics and unvented rafter spaces. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 55 | IRC | 2015-2018 R802 | Modification - Section R802 design and construction of roofs, has been clarified by dividing the content into three separate sections on roof ridges, rafters, and ceiling joists. | More | ○ | High | ○ | High $$$ | ○ | | | The reorganized section R802 intends to clarify roof and ceiling assembly requirements by organizing the section into components, specifically by dividing the content into 3 separate sections. R802.3 roof ridge, R802.4 rafters, and R802.5 ceiling joists. Little new material is added to this section although wording is slightly changed to clarify intent. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |

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| 56 | IRC | 2015-2018 R802.1.5.4. | Modification - Each stick of fire/retarded/treated lumber and each FRT wood structural panel required a label with 8 specific items of information. | More | ○ | High | ○ | High $$$ | ○ | | | 2018 IRC Section R802.1.5.4 clarifies the intent to have fire retardant wood have 2 labels; one for the general grading and identification of the lumber or panel, the second for the Fire Retardant Treatment. The updated provision also explicitly states that each piece of lumber must be labeled with both marks. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 57 | IRC | 2015-2018 R806.2 | Modification - the minimum vent area exception is clarified starting that net free ventilation may be less than 1/150 only if both required conditions are met. Lower vents must be located in the bottom third of the space. | More | ○ | High | ○ | High $$$ | ○ | | | This only relates to climate zones 6,7, and 8. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 58 | IRC | 905.1.1 | Modification - Item 5.2 is added as an alternative path for unvented attics and rafter assemblies to the requirements of item 5.1. The new option is limited to warm climates and has 10 requirements to address in installation of air impermeable insulation. | More | ○ | High | ○ | High $$$ | ○ | | | This does not relate to our climate zone. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 59 | IRC | 905.1.1 | R905.1.1 Table update for roof underlayment 2012-2015 | More | ○ | High | ○ | High $$$ | ○ | | | The code change recognizes the underlayment provisions contained within the IRC. In the 2012 IRC, underlayment provisions were specified individually for each type of roof covering. There are separate tables for underlayment type, application, and attachment for each roof covering in the IRC that requires underlayment. For metal roof panels in areas with wind speeds of 140 mpg or greater, ASTM D4869 Type 4 underlayment is an approved underlayment. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 60 | IRC | 905.1.1 | R905.7.5 Wood Shingle application code modification 2012-2015 | More | ● | High | ○ | High $$$ | ○ | | | The min. requirements for application of wood shingles are expanded. Fastener type is clarified and a new table lists min. sizes for box nails. Labelling requirements for fastener packaging have also been added. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 61 | IRC | 905.1.1 | R 905.8.6 Wood Shake application modification 2012-2015 | More | ● | High | ○ | High $$$ | ○ | | | The min. requirements for application of wood shakes are expanded. Fastener type is clarified and a new table lists min. sizes for box nails. Labelling requirements for fastener packaging have also been added. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |

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| Item | Code | Code Section | New Code Provision (Overview) | What impacts could the new code have? | | | | | | | | Commentary |
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| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 62 | IRC | 905.1.1 | R 905.16 Photovoltaic Shingles code modification 2012-2015 | More | ● | High | ○ | High $$$ | ○ | | | Additional requirements and limits for photovoltaic shingles have been added to section R905.16. The section now contains requirements for roof decks, min. roof deck slope, underlayment, underlayment applications, ice barrier, and underlayment for high wind areas. The new requirements are consistent with similar attributes for other non flat, single-type roof coverings. Reference to NFPA 70 and R324 for photovoltaic solar energy systems is added. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 63 | IRC | 905.1.1 | R907 Roof-top mounted photovoltaic systems code addition 2012-2015 | More | ● | High | ○ | High $$$ | ○ | Improved | | The code provision describes the requirements and limits of roof-top mounted photovoltaic systems. Specific requirements applicable to rooftop mounted photovoltaic panels and modules are added. These provisions complement the existing requirements for photovoltaic solar energy systems in section R324. The new section also references requirements in NFPA 70. Panels and modules must be listed and labeled to meet the requirements of UL1703. Requirements for resistance of component and cladding loads and min. fire classifications are added. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 64 | IRC | 905.1.1 | R905.1.1 underlayment tables modification 2015-2018 | More | ○ | High | ○ | High $$$ | ○ | | | Underlayment requirements for photovoltaic shingles are revised for consistency with other roofing materials and moved to tables R905.1.1.1 and R905.1.1.2 for underlayment. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 65 | IRC | 905.1.1 | R905.17 building integrated photovoltaic panels code addition | More | ○ | High | ○ | High $$$ | ○ | | | New section R905.17 addresses installation and attachment of building integrated photovoltaic roof panels. These products form part of the roof assembly and are subject to the same requirements as any other type of roof covering. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 66 | IFC | 2015 IFC 609.4 | Appliance connection to building piping. Listed flexible connectors are required between the fixed fuel gas piping and cooking appliances on castors or other appliances that are moved for cleaning. | More | ● | High | ○ | High $$$ | ○ | Improved | | Allows for replacement of connectors that are not designed for repetitive movement which reduces the chance of failure or leaks causing fires. Recommend addition |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● X | Low $ | ● X | | | |
| 67 | IFC | 2015 IFC 901.8.2 | Removal of Existing Occupant-Use Hose Lines. Existing 1-1/2 hose lines can be removed under certain circumstances. | More | ○ | High | ○ | High $$$ | ○ | Improved | | Occupant use of hose lines are no longer recommended except for OSHA required occupancies. Maintenance of hose lines are expensive and training on the use of the hose lines are minimal. Most buildings are protected with fire sprinklers and occupants should let the sprinklers do their job and evacuate the building. Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |

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| 68 | IFC | 2015 IFC 903.3.1.1.2 | Bathrooms in R2 Occupancies. Provides criteria for not installing sprinklers in bathrooms of specific Group R occupancies | More | ○ | High | ○ | High $$$ | ○ | Improved | | Low risk reduction in coverage. Recommend addition |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 69 | IFC | 2015 IFC 904.13 | Domestic Cooking Systems in Group I-2 Condition 1. Addition of an extinguishing system within the domestic cooking hood. | More | ○ | High | ○ | High $$$ | ○ | Improved | | As nursing homes move away from institutional models, they are designing kitchens with a residential feel. Commercial cooking tops and kitchens would require a type 1 hood with a suppression system. This code addition allows for a UL 300A Extinguishing system unit for residential range top cooking. Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ● | Low | ● | Low $ | ○ | | | |
| 70 | IFC | 2015 IFC 907.2.11.3, 907.2.11.4 | Smoke alarms near cooking appliances and bathrooms. | More | ○ | High | ○ | High $$$ | ○ | | | This new section provides designers, plans examiners, and field inspectors with criteria for locating make alarms in relation to cooking appliances and bathrooms. By properly locating smoke alarms, the number of nuisance alarms may be reduced. Recommend addition. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 71 | IFC | 2015 IFC 1105 | Construction requirements for existing group I-2 | More | ● | High | ● | High $$$ | ● | Improved | | Retroactive construction requirements have been added to the IFC to provide a minimum level for fire and life safety in existing Group I-2 occupancies. Hospitals are required to have a life safety survey on a regular basis. If the facility does not meet certain life safety minimums, it is required to upgrade it's existing facility. The intent of this code is to bring consistency between the two main regulatory agencies: the local jurisdiction and the federal authority having jurisdiction (Center for Medicaid and Medicare Services). Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 72 | IFC | 2018 IFC 404.2.3, 404.2.3.1, 404.2.3.2, 404.2.3.3 | Lockdown Plans | More | ● | High | ○ | High $$$ | ● | Improved | | Updates and prescribes details for facility lockdown plans. Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 73 | IFC | 2018 IFC 1010.1.4.4 | Locking arrangements in Educational occupancies | More | ● | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 74 | IFC | 2018 IFC 1103.5.1 | Fire Sprinklers in existing Group A-2 Occupancies | More | ● | High | ● | High $$$ | ● | Improved | | Added section to require the retrofit installation of a fire sprinkler system in existing Group A-2 occupancies where alcoholic beverages are consumed if the occupant load is 300 or more. This is added due to a higher risk to individuals who are impaired in these types of occupancies. Recommend addition. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |

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| 75 | IMC | 2015 IMC 106.1.1 Annual Permit | This is a new provision in 2015. | More | ○ | High | ○ | High $$$ | ○ | | | An annual permit for mechanical repairs can be issued to a person, firm or corporation to perform mechanical work on individual mechanical system or equipment that has already been approved when they employ a qualified tradesperson. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 76 | IMC | 2018 IMC 202 Definitions | Commercial Cook Appliance. The definition was completely rewritten to capture the true intent, eliminate confusion and eliminate circular language and a laundry list of appliances. The code has attempted to define "commercial". | More | ○ | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ● | Medium | ● | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 77 | IMC | 2015 IMC 304.11 Guards | This is a new provision in 2015. | More | ○ | High | ○ | High $$$ | ○ | Improved | | Guards shall be provided where various components that require service and roof hatch openings are located within 10 feet of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches above the floor, roof, or grade below. Exception -- Guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire lifetime of the roof covering. |
| | | | | NA | ● | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 78 | IMC | 2015 IMC 307.3 Condensate Pumps | This is a new provision in 2015. Condensate pumps located in uninhabitable spaces shall be connected to the appliance or equipment served such that when the pump fails the appliance or equipment will be prevented from operating. | More | ○ | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ● | Medium | ● | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 79 | IMC | 2015 IMC 403.3.2 Mechanical Ventilation | This is a new provision in 2015. | More | ○ | High | ○ | High $$$ | ○ | | | Ventilation requirements for R-2 occupancies three stories or less in height have been completely revised to include requirements for inclusion of mechanical exhaust and supply for each dwelling unit. |
| | | | | NA | ● | Medium | ● | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 80 | IMC | 2015 and 2018 403.3.2.4 System Controls | There is a new requirement for labeling of controls for whole-house (dwelling) ventilation systems. | More | ● | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 81 | IMC | 2015 and 2018 403.3.2.5. Ventilating Equipment | A new requirement was added for the testing of exhaust fans for dwelling units. | More | ● | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |

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| 82 | IMC | 2015 and 2018 404.1 Enclosed Parking Garages | The code text was rewritten to clarify the intent with regard to "intermittent" operation. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ◐ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 83 | IMC | 2018 IMC 504.4 Exhaust Installation | The code now speaks to the sealing of clothes dryer exhaust ducts. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 84 | IMC | 2015 IMC 502.20 Manicure and pedicure stations. | A new provision in 2015. City staff inspectors are already doing this. | More | ● | High | ○ | High $$$ | ○ | Improved | | Manicure and pedicure stations shall be provided with an exhaust system in accordance with Table 403.3.1.1 note H. Manicure tables and pedicure stations not provided with factory-installed exhaust inlets shall be provided with exhaust inlets located not more than 12 inches horizontally and vertically from the point of chemical application. No changes to this in 2018. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 85 | IMC | 2018 IMC 504.4.1 Exhaust termination outlet and passageway size | The code now addresses the required size of dryer exhaust ducts terminals. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 86 | IMC | 2015 and 2018 IMC 504.8.2 Duct Installation | The code now addresses the installation of clothes dryer exhaust ducts in wall and ceiling cavities. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 87 | IMC | 2015 IMC 505.3 and 505.4 Common Exhaust Systems for domestic kitchens located in multistory structures. In 2018 changed to IMC 505.5 and 505.6 | This is a new provision in 2015. Where a common multistory duct system is designed and installed to convey exhaust from multiple domestic kitchen exhaust systems, the construction of the system shall be in accordance with 12 items. | More | ● | High | ○ | High $$$ | ○ | | | Applies to multistory multi family. Other than Group R. In other than Group R occupancies, where domestic cooking appliances are utilized for domestic purposes, such appliances shall be provided with domestic range hoods. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 88 | IMC | 2018 IMC 506.3.11 | The intent was clarified regarding clearance to openings to prevent other requirements from being overlooked. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |

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| 89 | IMC | 2015 and 2018 IMC 506.3.13.2 and 506.3.13.3 Termination through an exterior wall, Termination location | The intent was clarified regarding clearance to openings to prevent other requirements from being overlooked. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 90 | IMC | 2018 IMC 506.5.2 Pollution Control Units | The code added coverage for pollution control units (PCUs) which are defined as "Manufactured equipment that is installed in a grease exhaust system for the purpose of extracting smoke, grease particles and odors from the exhaust flow by means of a series of filters." | More | ○ | High | ○ | High $$$ | ○ | Improved | | Definition/Clarification. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 91 | IMC | 2018 IMC 507.2.6 Clearances for Type I Hood | A new exception was added to recognize Type I hoods that are listed for clearances to combustibles of less than 18 inches. | More | ○ | High | ○ | High $$$ | ○ | Improved | | Allows design flexibility. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ○ | Low $ | ● | | | |
| 92 | IMC | 2018 IMC 603.5.2 Phenolic ducts | The code added coverage for a newer type of non-metallic duct, phenolic duct. | More | ○ | High | ○ | High $$$ | ○ | | | Adds new duct type for design flexibility. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 93 | IMC | 2015 and 2018 IMC 603.8.2 Sealing | The code now addresses the testing of underground ducts. | More | ● | High | ○ | High $$$ | ○ | | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 94 | IMC | 2015 and 2018 IMC 603.9 Joints, Seams, and Connections | The code is less restrictive for Snap and Button lock duct joints that are located within the thermal envelope. | More | ○ | High | ○ | High $$$ | ○ | | | Offers design flexibility. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |

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| 95 | IMC | 2015 and 2018 IMC 607.3.1 Damper Testing | The code mandates dynamic type ceiling damper where the subject to continuous air flow from HVAC fans. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 96 | IMC | 2018 IMC 929 High-Volume-Large-Diameter Fans | Include code section and new definition of high volume large diameter fan. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ● | | | |
| 97 | IMC | 2015 1011.1 Tests | New provision in 2015. Upon completion of the assembly and installation of boilers and pressure vessels, acceptance tests shall be conducted in accordance with the requirements of the ASME Boiler and Pressure Vessel Code or the manufacture's requirements, and such tests shall be approved. | More | ● | High | ○ | High $$$ | ○ | Improved | | A verification and testing cost. A copy of all test documents along with all manufacturers data reports required by the ASME Boiler and Pressure Vessel Code shall be submitted to the code official. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 98 | IMC | 2015 and 2018 IMC 1105.6.3 Ventilation Rate | An important clarification was added regarding the ventilation rate required for ammonia systems, thereby resolving an interpretation issue. | More | ● | High | ○ | High $$$ | ○ | Improved | | |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 99 | IMC | 2018 IMC 1107.7 Piping Location | This code section was rewritten to clearly state the intent regarding the prohibited locations for refrigerant piping. | More | ● | High | ○ | High $$$ | ○ | Improved | | Clarifies prohibited locations. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ● | | | |

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| 100 | IMC | 2018 IMC Chapter 14 Solar Thermal Systems | Chapter 14 was significantly increased in content and it was clarified that the chapter applies only to thermal solar as opposed to solar-voltaic. The new text relies on three newly referenced solar product standards developed and maintained by the Solar Rating and Certification Corporation. The text addresses the various types of thermal solar system designs, including direct and indirect systems and drain-back systems. | More | ● | High | ○ | High $$$ | ○ | | Clarifies definitions and expectations for thermal solar systems. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ● | | | |
| 101 | IBC | 105.2 (2012 code change) Items exempt from permit | Work exempt from permit. Exemptions from permit shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Revise item #2: Fences not over 7 feet high. DELETE: Items #1, 3, 4, 6, 8, and 9. | More | ● | High | ○ | High $$$ | ● | Improved | ITEMS ARE ADDRESSED IN MUNICIPAL CODE (6' MAX HEIGHT FOR FENCE) |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 102 | IBC | 202 (2018 Code Addition) "Repair Garage" | Repair Garage. A building, structure or portion thereof used for servicing or repairing motor vehicles. Use Group S-1 | More | ● | High | ○ | High $$$ | ○ | Improved | The IFC had a differing definition which expanded the IBC's repair garage (2000 IBC included painting, body and fender work, engine overhauling or other major repairs with definition since 2003 ed.) scope to include the servicing of motor vehicles. This includes maintenance activities such as break work, oil changes, and similar activities. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 103 | IBC | 202 (2015 code change) "Fire Retardant Treated Wood" 202 (2018 code change) "Greenhouse" (Several definitions have been added). | Fire-retardant-treated wood. Wood products that, when impregnated with chemicals by a pressure process or other means during manufacture, exhibit reduced surface-burning characteristics and resist propagation of fire. GREENHOUSE. A structure or thermally isolated area of a building that maintains a specialized sunlit environment used for and essential to the cultivation, protection or maintenance of plants. | More | ○ | High | ○ | High $$$ | ○ | | Revised definition to permit other treatment methods by other than the pressure process. Greenhouse, repair garage. SLEEPING UNIT: A room or space in which includes permanent provisions for sleeping, and can include provisions for living, eating, and either sanitation or kitchen facilities but not both. Dwelling units are not sleeping units. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ○ | Low $ | ● | | | |
| 104 | IBC | 304.1 Greenhouse (A-3) 309.1 Greenhouse (M) 312.1.1 Greenhouse (U) 2018 Code changes | 303.4 Assembly Group A-3. Greenhouses for the conservation and exhibition of plants that provide public access. 309.1 Mercantile Group M. Greenhouses for display and sale of plants that provide public access. 312.1.1 Utility and Miscellaneous Group-U Greenhouses not classified as another occupancy shall be classified as Use Group U. | More | ○ | High | ○ | High $$$ | ○ | Improved | Where greenhouses are used for assembly, sales, or other activities that are more extensive in scope than that addressed by "Group-U" it shall be appropriately classified as a Group-A or Group-M occupancy. Group-U structures are designed and used specifically for the growing, care and maintenance of plants. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 105 | IBC | 304.1 Business Group B, and Factory Group F. 2015 IBC added Food processing establishments and commercial kitchens. | Business Group B: Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities not more than 2,500 square feet in area. Factory Group F: Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities more than 2,500 square feet in area. | More | ○ | High | ○ | High $$$ | ○ | Improved | | The Group B classification is applied where the facility does not exceed 2500 square feet in floor area. This classification also assumes the facility is not used for assembly purposes, such as a café or bar. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ○ | | | |
| 106 | | 311.1.1 Accessory storage spaces. 2018 Code changes | Accessory storage spaces. A room or space used for storage purposes that is accessory to another occupancy shall be classified as part of that occupancy. | More | ○ | High | ○ | High $$$ | ○ | Improved | | Regardless of size, storage rooms and spaces that are accessory to other uses are to be classified as part of the occupancy to which they are accessory (Modification 2015 IBC) allowance of less than 100 square feet in area and accessory to another occupancy). |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ○ | | | |
| 107 | IBC | 407.2.5 Nursing home housing units. 2015 IBC (Addition) | In Group I-2, Condition 1, occupancies, in areas where nursing home residents are housed, shared living spaces, group meeting or multipurpose therapeutic spaces shall be permitted to be open to the corridor, where all of the following criteria are met: items 1 thru 5 | More | ○ | High | ○ | High $$$ | ○ | Improved | | Shared living spaces, group meeting areas, and multipurpose therapeutic spaces are now permitted to be open to corridors in Group I-2, Condition 1 nursing homes provided five specific conditions are met. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 108 | IBC | 407.2.6 Nursing home cooking facilities. 2015 IBC addition 420.8 Group I-1 cooking facilities. 2018 IBC addition 420.10 Group R-2 dormitory cooking facilities. 2018 IBC addition | 407.2.6 Nursing home cooking facilities. In Group I-2, Condition 1, occupancies, rooms or spaces that contain a cooking facility with domestic cooking appliances shall be permitted to be open to the corridor where all of the following criteria are met: items 1 thru 13. 420.8 Group I-1 cooking facilities. In Group I-1 occupancies, rooms or spaces that contain cooking facilities with domestic cooking appliances shall be in accordance with all of the following criteria: Items 1 thru 9. 420.10 Group R-2 dormitory cooking facilities. Domestic cooking appliances for use by residents of Group R-2 college dormitories shall be in accordance with Sections 420.10.1 and 420.10.2. | More | ● | High | ○ | High $$$ | ○ | Improved | | A room or space containing a cooking facility with domestic cooking appliances is now permitted to be open to the corridor in a Group I-2, Condition 1 nursing home provided 13 specific conditions are met. * A room or space containing a cooking facility with domestic cooking appliances is now permitted to be open to a corridor in Group I-1 occupancies provided nine specific conditions are met. * The installation and use of domestic cooking appliances are now regulated in both common areas and sleeping rooms of Group R-2 college dormitories. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |

**ATTACHMENT 1:** 2018 CODE ANALYSIS - COMMITTEE SIGNIFICANT CHANGES

Revised June 19, 2018

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 109 | IBC | 423 STORM SHELTERS 2015 IBC addition 2018 IBC modification | In areas where the shelter design wind speed for tornados in accordance with Figure 304.2(1) of ICC 500 is 250 MPH..... * 423.3 Critical emergency operations. The following structures must include a storm shelter constructed in accordance with ICC 500: 911 call stations, emergency operation centers and fire, rescue, ambulance and police stations... Exception: Buildings meeting the requirements for shelter design in ICC 500. * 423.4 Group E occupancies. All Group E occupancies with an aggregate occupant load of 50 or more shall have a storm shelter constructed in accordance with ICC 500. | More | ● | High | ○ | High $$$ | ○ | Improved | The construction of complying storm shelters are now required in facilities, and buildings where such facilities are located in geographical areas where the design wind speed for tornadoes is at its highest. * Critical Emergency Operations Facilities * Group E Occupancies * 2018 IBC code modifications 423.4.1 Required occupant capacity. The required occupant capacity of the storm shelter shall include all of the buildings on the site (see code). 423.4.2 Location. Storm shelters shall be located within the buildings they serve or shall be located where the maximum distance of travel from not fewer than one exterior door of each building to a door of the shelter serving that building does not exceed 1,000 feet. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 110 | IBC | 427.1 MEDICAL GAS SYSTEMS "General". 2018 IBC addition | Medical gases at health care-related facilities intended for patient or veterinary care shall comply with Sections 427.2 through 427.2.3 in addition to requirements of Chapter 53 of the International Fire Code. Medical gases shall be located in areas dedicated to the storage of such gases without other storage or uses. | More | ○ | High | ○ | High $$$ | ○ | Improved | In order to provide a more comprehensive and efficient compilation of construction regulations, those IFC medical gas system requirements related directly to building construction have now been replicated in the IBC. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 111 | IBC | 428.1 Scope. Higher education laboratories 2018 IBC addition | Higher education laboratories complying with the requirements of Sections 428.1 through 428.4 shall be permitted to exceed the maximum allowable quantities of hazardous materials in control areas set forth in Tables 307.1(1) and 307.1(2) without requiring classification as a Group H occupancy. | More | ● | High | ○ | High $$$ | ○ | Improved | Higher education laboratories using hazardous materials can now be considered Group B occupancies provided such laboratories comply with new Section 428 (alternative approach to the existing control area provisions). Colleges often have chemistry, biology, medical, engineering and other types of laboratories where significant amounts of hazardous materials are stored and used. The IBC and IFC have not historically addressed these teaching/research laboratories. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 112 | IBC | 503.1.4 Occupied roofs. 2018 IBC addition | Occupied roofs. A roof level or portion thereof shall be permitted to be used as an occupied roof provided the occupancy of the roof is an occupancy that is permitted by Table 504.4 for the story immediately below the roof. The area of the occupied roofs shall not be included in the building area as regulated by Section 506. | More | ● | High | ○ | High $$$ | ○ | Improved | Allowable Height and Area of Occupied Roofs: New criteria is now provided establishing the appropriate methodology in the regulation of building height in stories above grade plane where one or more occupancies is located on the roof. The code has previously been silent as to how this condition affects the allowable height determination. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |

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| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 113 | IBC | 714.4.2 Membrane penetrations. 2015 IBC addition | 714.4.2 Membrane penetrations. Penetrations of membranes that are part of a horizontal assembly shall comply with Section 714.4.1.1 or 714.4.1.2. Where floor/ceiling assemblies are required to have a fire-resistance rating, recessed fixtures shall be installed such that the required fire resistance will not be reduced. | More | ○ | High | ○ | High $$$ | ○ | Improved | | Where the double top plates of a wall interrupt the ceiling membrane of a horizontal assembly, the wall must now be sheathed only with Type X gypsum wallboard. The wall will not require a fire-resistance rating unless needed due to some other code requirement. Item 7: The ceiling membrane of 1- and 2-hour fire resistance rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a wall assembly that is sheathed with Type X gypsum wallboard, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1 or 714.4.1.2 and the ceiling membrane is tight to the top plates. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ● | Low | ○ | Low $ | ○ | | | |
| 114 | IBC | 716.2.6.5 Delayed-action closers. 2018 IBC addition | Delayed-action closers. Doors required to be self closing and not required to be automatic closing shall be permitted to be equipped with delayed-action closers. | More | ○ | High | ● | High $$$ | ○ | Improved | | Delayed-Action Self-Closing Doors: Self-closing doors that are not also required to be automatic-closing are now permitted to be equipped with delayed-action closers. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ○ | Low $ | ● | | | |
| 115 | IBC | 717.1.1 Ducts and air transfer openings. 2015 IBC Clarification | 717.1.1 Ducts and air transfer openings. Ducts transitioning horizontally between shafts shall not require a shaft enclosure provided that the duct penetration into each associated shaft is protected with dampers complying with this section. | More | ○ | High | ○ | High $$$ | ○ | | | 717.1.1 Ducts Transitioning between Shafts: Ducts are now expressly allowed to exit a shaft, transition horizontally, and then enter another shaft without continuous shaft construction. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | No Change | | |
| | | | | Less | ● | Low | ○ | Low $ | ○ | | | |
| 116 | IBC | 904.13 Domestic cooking systems. Group I-2,Cond 1 2015 IBC addition 904.13 (2018 Modified) | In Group I-2 Condition 1, occupancies where cooking facilities are installed in accordance with Section 407.2.6 of this code, the domestic cooking hood provided over the cooktop or range shall be equipped with an automatic fire-extinguishing system of a type recognized for protection of domestic cooking equipment. | More | ● | High | ○ | High $$$ | ○ | Improved | | Requirements for domestic appliances installed within commercial facilities but used only for domestic cooking have been clarified, including provisions for an appropriate fire-extinguishing system for domestic cooking equipment in nursing homes, assisted living facilities and similar buildings. 904.13 (2018 Modified): Domestic-type cooking operations in college dormitories classified as Group R-2. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 117 | IBC | 1010.1.4.4 Locking arrangements in educational occupancies. (2018 IBC addition) | In Group E and Group B educational occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the conditions are met: Items 1 thru 3 | More | ○ | High | ○ | High $$$ | ○ | Improved | | Locking Arrangements in Educational Occupancies: Guidance has been provided to allow for enhanced security measures on educational classroom egress doors and yet still continue to comply with applicable means of egress requirements. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ○ | Low $ | ● | | | |

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| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 118 | IBC | 1011.12 Stairway to roof. Per Exception (2015 IBC) | In buildings four or more stories above grade plane, one stairway shall extend to the roof surface unless the roof has a slope steeper than four units vertical in 12 units horizontal (33-percent slope). Exception: Other than where required by Section 1011.12.1, in buildings without an occupied roof access to the roof from the top story shall be permitted to be by an alternating tread device, a ships ladder or a permanent ladder. | More | ○ | High | ○ | High $$$ | ○ | | | Buildings four or more stories above grade plane that do not have an occupied roof or elevator equipment on the roof, access to the roof does not need to be by one of the stairways. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ○ | | | |
| 119 | IBC | 1017.2.2 Increase "EXIT ACCESS TRAVEL DISTANCE" 2015 IBC code change | Group F-1 and S-1 increase. The maximum exit access travel distance shall be 400 feet in Group F-1 or S-1 occupancies where all of the following conditions are met: Items 1 thru 3 | More | ○ | High | ○ | High $$$ | ○ | | | Travel Distance Increase for Groups F-1 and S-1:<br>1. The building classified as Group F-1 or S-1 is limited to one story.<br>2. Min. height finished floor to the bottom of the ceiling/roof deck is 24 ft.<br>3. Equipped throughout with an automatic sprinkler system per 903.3.1.1. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | No Change | | |
| | | | | Less | ● | Low | ○ | Low $ | ○ | | | |
| 120 | IBC | 1604.10 Storm Shelters 2018 IBC addition | Loads on storm shelters. Loads and load combinations on storm shelters shall be determined in accordance with ICC 500 | More | ○ | High | ○ | High $$$ | ○ | Improved | | Storm shelters: The development of loads for storm shelters is to be based on ICC 500 which provides wind speeds for tornado and hurricane shelter design using ASCE 7 load combinations. |
| | | | | NA | ● | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 121 | IBC | 1705.5.2 Metal-plate-connected wood trusses. 2018 IBC addition | Special inspections of wood trusses with overall heights of 60 inches or greater shall be performed to verify that the installation of the permanent individual truss member restraint/bracing has been installed in accordance with the approved truss submittal package. For wood trusses with a clear span of 60 feet or greater, the special inspector shall verify during construction that the temporary installation restraint/bracing is installed in accordance with the approved truss submittal package. | More | ● | High | ● | High $$$ | ○ | Improved | | 1705.5 Wood construction - Special inspections of prefabricated<br>wood structural elements: Five-foot tall wood trusses requiring permanent bracing now require a periodic special inspection to verify that the required bracing has been installed. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 122 | IBC | 2406.4.7 Glazing adjacent to the bottom stairway landing. 2015 IBC Revision | Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 60 inches above the landing and within a 60-inch horizontal arc that is less than 180 degrees from the bottom tread nosing shall be considered a hazardous location. Exception: Glazing that is protected by a guard complying with Sections 1015 and 1607.8 where the plane of the glass is greater than 18 inches from the guard. | More | ● | High | ○ | High $$$ | ○ | Improved | | Safety glazing is required if the glazing is located less than 60” above the bottom of a stair, or within a 60” horizontal arc if less than 180-degrees from the bottom tread nosing. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ● | | | |

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| 123 | IBC | 3001.2 Emergency elevator communication system. 2018 IBC addition | Emergency elevator communication systems for the deaf, hard of hearing and speech impaired. An emergency two-way communication system shall be provided that:<br>1. Is a visual and text-based and a video-based 24/7 live interactive system.<br>2. Is fully accessible by the deaf, hard of hearing and speech impaired, and shall include voice-only options for hearing individuals.<br>3. Has the ability to communicate with emergency personnel utilizing existing video conferencing technology, chat/text software or other approved technology. | More | ● | High | ○ | High $$$ | ○ | Improved | | Additional communication capabilities are now required in accessible elevators to enhance the usability of the two-way communication system by individuals with varying degrees of hearing or speech impairments. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 124 | IBC | 3314 FIRE WATCH DURING CONSTRUCTON. 2018 IBC addition | 3314.1 Fire watch during combustible construction.<br>Where required by the fire code official, a fire watch shall be provided during nonworking hours for construction that exceeds 40 feet in height above the lowest adjacent grade. | More | ● | High | ○ | High $$$ | ○ | Improved | | Fire watch during construction: In order to protect adjacent properties from fire in a building of considerable height when under construction, new provisions have been established to give authority to the fire code official to require a fire watch during those hours where no construction work is being done. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 125 | IFGC | NA | NA | More | ○ | High | ○ | High $$$ | ○ | | | No changes to the 2018 IFGC are proposed by the City. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 126 | IFGC | IFGC 307.6 (2015) IRC G2404.11 A/C Condensation Pumps. New Provision | 307.6 Condensate pumps. Condensate pumps located in uninhabitable spaces, such as attics and crawl spaces, shall be connected to the appliance or equipment served such that when the pump fails, the appliance or equipment will be prevented from operating. Pumps shall be installed in accordance with the manufacturer's instructions. | More | ● | High | ○ | High $$$ | ○ | Improved | | Provisions in referenced codes and standards. Condensation pumps located in attics, crawl spaces and other uninhabited spaces must have controls that shut down the appliance upon failure of the pumping system. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 127 | IFGC | IFGC 404.7 (2015) Protection against physical damage. New Provision | 404.7 Protection against physical damage. Where piping will be concealed within light-frame construction assemblies, the piping shall be protected against penetration by fasteners in accordance with Sections 404.7.1 through 404.7.3.<br>Exception: Black steel piping and galvanized steel piping shall not be required to be protected. | More | ● | High | ○ | High $$$ | ● | Improved | | Provisions added to protect concealed piping from penetration by nails, screws and other fasteners. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |

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| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 128 | IFGC | IFGC 306.6 (2015) Guards are not required where permanent fall arrest/restraint anchorage connector devices. New Provision | [M] 306.6 Guards. Guards shall be provided where various components that require service and roof hatch openings are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface……. Exception: Guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire lifetime of the roof covering. The devices shall be re-evaluated for possible replacement when the entire roof covering is replaced. | More | ○ | High | ○ | High $$$ | ○ | | | Guards are not required (condition as noted). |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 129 | IFGC | IFGC 503.8 (2015) Side wall venting adjacent to adjoining buildings. New Provision | 503.8 Venting system termination location. The location of venting system terminations shall comply with the following (see Appendix C): Item 5. Vent systems for Category IV appliances that terminate through an outside wall of a building and discharge flue gases perpendicular to the adjacent wall shall be located not less than 10 feet horizontally from an operable opening in an adjacent building. This requirement shall not apply to vent terminals that are 2 feet or more above or 25 feet or more below operable openings. | More | ● | High | ○ | High $$$ | ○ | Improved | | Text has been added to address the location of sidewall vent terminals with respect to adjoining buildings. Previous editions of the code were silent on this subject, and the appliance manufacturer's instructions are typically silent as well. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 130 | IFGC | IFGC 614.5, 614.8.4.3 IRC G2439.4, G2439.7.4.3 (2015 ) Dryer Exhaust Duct Power Ventilators. New Provision | [M] 614.5 Dryer exhaust duct power ventilators. Domestic dryer exhaust duct power ventilators shall be listed and labeled to UL 705 for use in dryer exhaust duct systems. The dryer exhaust duct power ventilator shall be installed in accordance with the manufacturer's instructions. [M] 614.8.4.3 Dryer exhaust duct power ventilator length. The maximum length of the exhaust duct shall be determined by the dryer exhaust duct power ventilator manufacturer's installation instructions. | More | ○ | High | ○ | High $$$ | ○ | Improved | | New text recognizes the use of dryer exhaust duct power ventilators (DEDPVs) for installations that exceed the allowable exhaust duct length for clothes dryers. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 131 | IFGC | IFGC 502.7.1 (2015) IRC G2426.7.1 Door Clearance to Vent Terminals. New Provision | 502.7.1 Door swing. Appliance and equipment vent terminals shall be located such that doors cannot swing within 12 inches (305 mm) horizontally of the vent terminal. Door stops or closers shall not be installed to obtain this clearance. | More | ● | High | ● | High $$$ | ○ | Improved | | Coverage has been added to address the condition where a door could impact or come too close to an appliance vent terminal. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ● | | | |

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| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 132 | IFGC | IFGC 303.3 (2018)<br>IRC 2406.2 (2018)<br>Allow gas-fired dryer in bathroom.<br>Code Modification | 303.3 Prohibited locations. Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:<br>Item 6. A clothes dryer is installed in a residential bathroom or toilet room having a permanent opening with an area of not less than 100 square inches (0.06 m2) that communicates with a space outside of a sleeping room, bathroom, toiler room or storage closet. | More | ○ | High | ○ | High $$$ | ○ | | | A new option was added to allow a gas-fired clothes dryer to be installed in a toilet room or bathroom. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ○ | Low $ | ● | | | |
| 133 | NEC | 2017NEC 210.8(A)(4) | Ground-Fault Circuit-Interrupter Protection for Personnel in Dwelling Units. Crawlspace receptacles to be GFCI protected | More | ● | High | ○ | High $$$ | ○ | Improved | | Considered a damp location. GFCI protection can be provided by nearby installed receptacle. / Leave in. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 134 | NEC | 2017NEC 210.8(A)(5) | Ground-Fault Circuit-Interrupter Protection for Personnel in Dwelling Units. ALL receptacles in unfinished areas not intended to be habitable rooms to be GFCI protected. | More | ○ | High | ○ | High $$$ | ○ | | | There has been discussion from builders that GFCI malfunction has caused sump-pump failure, and loss of contents and/or finishes of basement. Normally the Sump Pump is in an area not intended as a habitable room, and as such CODE requires this protection. / Possible approach is a simplex (single)receptacle for use for the pumps. |
| | | | | NA | ● | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 135 | NEC | 2017NEC 210.8(A)(10) | Ground-Fault Circuit-Interrupter Protection for Personnel in Dwelling Units. ALL receptacles in Laundry areas to be GFCI protected. | More | ● | High | ○ | High $$$ | ○ | Improved | | Previously receptacles within 6' of the edge of a laundry sink were GFCI protected. This extends to all receipts in the laundry area. / Leave in. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 136 | NEC | 2017NEC 210.8(E) | Ground-Fault Circuit-Interrupter Protection for Personnel in Dwelling Units. ALL lighting outlets not exceeding 120V installed in crawlspaces to be GFCI protected. | More | ● | High | ○ | High $$$ | ○ | Improved | | Previously lighting was not GFCI protected. This is easily accommodated by feeding the lighting from the load side of adjacent GFCI protected device. / Leave in. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 137 | NEC | 2017NEC 210.11(C )(4) | BRANCH CIRCUITS REQUIRED. Garage Branch Circuits. In addition to the number of branch circuits required by other parts of this section, at least one 120-volt, 20 ampere branch circuit shall be installed to supply receptacle outlets in attached | More | ● | High | ○ | High $$$ | ○ | Improved | | Previously the garage receptacle power could be provided from other (shared) circuits. This is a new component of the Residential Load Calculation, and a new breaker to be installed in the panel, and a circuit to be run to the garage |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |

**ATTACHMENT 1:** 2018 CODE ANALYSIS - COMMITTEE SIGNIFICANT CHANGES

Revised June 19, 2018

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| | | | supply receptacle outlets in attached garages and in detached garages with electric power. This circuit shall have not other outlets. | Less | ○ | Low | ○ | Low $ | ○ | | | space - dedicated to the garage (and adjacent, readily accessible outdoor receptacle outlets). / Leave in |
| 138 | NEC | 2017NEC 210.12 | ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION. | More | ● | High | ○ | High $$$ | ● | | | 2017NEC210.12 ARD-FAULT CIRCUIT-INTERRUPTER PROTECTION. Since the 2011NEC (2012ICC) code cycle the AFCI protection has expanded to include virtually all 15- and 20-ampere branch circuits supplying outlets or devices installed in dwelling unit kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or similar areas. The City of Naperville opted to maintain the coverage limits as written in the 2005NEC, which limits the protection to all openings in bedrooms (sleeping spaces) only. / Committee recommends maintaining that amendment to the 2017NEC210.12 Article. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ○ | No Change | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 139 | NEC | 2017NEC210.52(G)(1) | REQUIRED OUTLETS. DWELLING UNIT RECEPTACLE OUTLETS. GARAGES. In each attached garage and in each detached garage with electric power, at least on receptacle outlet shall be installed in each vehicle bay and not more than 1.7m (5-1/2') above the floor. | More | ● | High | ○ | High $$$ | ○ | Improved | | Previous Article 210.11(C )(4) required a new circuit for the garages. This further defines where that circuit is to be distributed. It can allow for Electrical Vehicle Charging (if amperage is per the manufacturer) or in colder climes - to plug in accessories like a block heater or a service light or battery maintenance device (trickle charger). With conduit in place, future "upgrade" to higher amperages for Electrical Vehicle Charging could be easier to install after the walls are closed up? / Leave in. |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 140 | NEC | 2017NEC210.70(A)(2)(4) | 2017NEC210.70 LIGHTING OUTLETS REQUIRED.(A) DWELLING UNITS. (2)ADDITIONAL LOCATIONS. (4) Lighting outlets controlled in accordance with 210.70(A)(2)(3) <Interior stairways> shall not be controlled by use of dimmer switches unless they provide the full range of dimming control at each location. | More | ● | High | ○ | High $$$ | ○ | Improved | | In the past, there was no limitation on the installation of dimmers for hallways that may include an interior stairway of six risers or more. It was possible, therefore to have a dimmer at one end of the hallway set at a very low level, or off - while the 3 way switch at the other end of the hallway (or at the base of the stairway) was ON/OFF only. This created a potentially dangerous condition of an underlit flight of stairs. New code language requires controls at both ends (and potentially in the middle of) 3 way switching with dimming capabilities. / Leave in. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 141 | NEC | 2017NEC410.12(1) | 2017NEC410.12(1) TAMPER-RESISTANT RECEPTACLES. This article mandates locations where TR receptacles are to be installed in Dwelling Units in all areas where receptacles are required. | More | ● | High | ○ | High $$$ | ○ | Improved | | City Council elected to remove this imposition from the scope of the adopted 2011NEC during the 2012ICC Code Update reviews. It was determined at that time that the commercial requirements (as specified in 406.12(2-7) including exception (1) be maintained. / COMMITTEE recommends continuing the previous Council Direction, and make the installation of TR receptacles in Dwelling Units (1,2-family and multi-family residences) optional. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |
| 142 | NEC | 2017NEC410.9(B)(1) | 2017NEC410.9 RECEPTACLES IN DAMP OR WET LOCATIONS (B)WET LOCATIONS. (1)RECEPTACLES OF 15 AND 20 AMPERES IN A WET LOCATION. All 15- and 20-Ampere, | More | ● | High | ○ | High $$$ | ○ | Improved | | Weather Resistant receptacles have "potted/sealed" electronics (in the case of AFCI or GFCI receptacles and switches) and have improved design to retard the intrusion of moisture into the contact surfaces making them more reliable in the long run. This could also improve GFCI |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |

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| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| | | | 125 through 250volt non-locking type receptacles shall be listed and so identified as the weather resistant type (WR). | Less | ○ | Low | ● | Low $ | ○ | | | protection for unfinished basement areas and garages. The devices come at an increased cost to the installer. / COMMITTEE recommends: Leave in |
| 143 | NEC | 2017NEC410.62(C )(1) | 2017NEC410.62 CORD-CONNECTED LAMPHOLDERS AND LUMINAIRES. (C ) ELECTRIC-DISCHARGE AND LED LUMINAIRES. (1) CORD-CONNECTED INSTALLATION. A luminaire or a listed assembly in compliance with any of the conditions in (a) through (c ) shall be permitted to be cord connected provided the luminaire is located directly below the outlet or busway, the cord is not subject to strain or physical damage, and the cord is visible over its entire length except at terminations. | More | ○ | High | ○ | High $$$ | ○ | | | Previously this Article required the installation of a cord plug and receptacle, quite often of the twist-locking type. This revision clears up the concerns for termination with strain relief and inside of a luminaire canopy or a box listed for the use. / COMMITTEE recommends: Leave in |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |
| 144 | NEC | 2017NEC514.11(A) | 2017NEC514.11(A) MOTOR FUEL DISPENSING FACILITIES. CIRCUIT DISCONNECTS. (A) EMERGENCY ELECTRICAL DISCONNECTS. One or more clearly identified emergency shutoff devices or electrical disconnects shall be located not less than 20 ft. and not more than 100 ft. from the fuel dispensing devices they serve. | More | ● | High | ○ | High $$$ | ○ | Improved | | Previously the disconnects were not as clearly defined, nor their locations and ranges from the dispensers quantified./ COMMITTEE recommends: Leave in |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 145 | NEC | 2017NEC517.2 | 2017NEC517.2 HEALTH CARE FACILITIES. DEFINITIONS. MEDICAL OFFICE (DENTAL OFFICE). Dental office has been added specifically to Medical Office definition. | More | ● | High | ○ | High $$$ | ○ | Improved | | Previously there was debate as to whether Dental Offices were to be considered as Medical Offices, and associated grounding considerations were nebulous/unclear. Dental Offices are hereby clarified as Patient Care Areas, and as such are subject to the grounding rules that apply to all other Medical Offices and areas./COMMITTEE recommends: Leave in |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 146 | NEC | 2017NEC517.19(A) | 2017NEC517.19(A). HEALTH CARE FACILITIES. CRITICAL CARE SPACES. PATIENT BED LOCATION BRANCH CIRCUITS. The electrical receptacles or the cover plates for the electrical receptacles supplied from the life safety and critical branches shall have a distinctive color or marking so as to be readily identifiable. | More | ● | High | ○ | High $$$ | ○ | Improved | | This will aid in the connection of equipment in a CRITICAL CARE SPACE, PATIENT BED LOCATION to the CORRECT electrical supply system present in these areas. It will prevent loss of power in critical areas for critical equipment to maintain functionality of said equipment./ COMMITTEE recommends: Leave in |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 147 | NEC | 2017NEC517.30(B)(2) | 2017NEC517.30 SOURCES OF POWER. TWO INDEPENDENT POWER SOURCES. (B) TYPES OF POWER SOURCES. (2) FUEL CELL SYSTEMS. Fuel cell systems shall be permitted to serve as the alternate source for all or part of an essential electrical system. | More | ○ | High | ○ | High $$$ | ○ | Improved | | This is an addition in the 2017 NEC that allows new technologies to be utilized to provide the redundant power source for ESSENTIAL ELECTRICAL SYSTEMS in those areas where multiple systems are required. Previously Emergency Electrical generators and their distribution systems were the only alternative. This will allow design flexibility, and can provide reliable second source of power in these areas. / COMMITTEE recommends: Leave in |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ● | Low | ○ | Low $ | ○ | | | |

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| 148 | NEC | 2017NEC517.30(C ) | 2017NEC517.30(C ) SOURCES OF POWER. LOCATION OF ESSENTIAL ELECTRICAL SYSTEM COMPONENTS. Essential Electrical System Components SHALL be located to minimize interruptions caused by natural forces common to the area (e.g., storms, floods, earthquakes, or hazards created by adjoining structures or activities). Installations of electrical service SHALL be located to reduce possible interruption of normal electrical services resulting from similar causes as well as possible disruption of normal electrical service due to internal wiring and equipment failures. | More | ● | High | ○ | High $$$ | ○ | Improved | Electrical feeders shall be located to provide physical separation of the feeders of the alternate source and from the feeder of the normal electrical source to prevent possible simultaneous interruption. This is already in place for Edward/Elmhurst and the DMG facilities where required. Future renovations and additions will be scrutinized to maintain these protections./ COMMITTEE recommends: Leave in |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 149 | NEC | 2017NEC517.41(C ) | 2017NEC517.41(C ) REQUIRED POWER SOURCES. LOCATION OF ESSENTIAL ELECTRICAL SYSTEM COMPONENTS. Essential Electrical System Components SHALL be located to minimize interruptions caused by natural forces common to the area (e.g., storms, floods, earthquakes, or hazards created by adjoining structures or activities). Installations of electrical service SHALL be located to reduce possible interruption of normal electrical services resulting from similar causes as well as possible disruption of normal electrical service due to internal wiring and equipment failures. | More | ● | High | ○ | High $$$ | ○ | Improved | Electrical feeders shall be located to provide physical separation of the feeders of the alternate source and from the feeder of the normal electrical source to prevent possible simultaneous interruption. This is already in place for Edward/Elmhurst and the DMG facilities where required. Future renovations and additions will be scrutinized to maintain these protections./ COMMITTEE recommends: Leave in |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 150 | NEC | 2017NEC590.4(G) | 2017NEC590(G) TEMPORARY INSTALLATIONS. GENERAL. SPLICES. A box, conduit body, or other enclosure with a cover installed, shall be required for all splices except where: (1) The circuit conductors being splices are all from nonmetallic multi-conductor cord or cable assemblies, provided that the equipment grounding continuity is maintained with or without the box. (2) The circuit conductors being spliced are all from metal sheathed cable assemblies terminated in listed fittings that mechanically secure the cable sheath to maintain effective electrical continuity. | More | ○ | High | ○ | High $$$ | ○ | | This will allow some additional flexibility in temporary installations, while still maintaining electrical continuity and grounding capacity. / COMMITTEE recommends: Leave in. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | No Change | | |
| | | | | Less | ● | Low | ● | Low $ | ● | | | |

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| | | | | Will it be more or less restrictive? | | Will it take more of a level of effort to follow? | | Will it cost more for builders? | | How could it impact safety? | | |
| 151 | NEC | 2017NEC590.6(A)(1) | 2017NEC590.6(A)(1) TEMPORARY INSTALLATIONS. GROUND-FAULT PROTECTION FOR PERSONNEL. RECEPTACLE OUTLETS NOT PART OF PERMANENT WIRING. All 125-volt, single-phase, 15-, 20-, and 30-Ampere receptacle outlets that are not a part of the permanent wiring of the building or structure and that are in use by personnel shall have ground-fault circuit protection for personnel. | More | ● | High | ○ | High $$$ | ○ | Improved | | While covered previously in other area, this additional language provides protection for construction personnel on jobsites where Temporary Installation of lighting and power for construction is provided. / COMMITTEE recommends: Leave in. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ○ | | | |
| | | | | Less | ○ | Low | ● | Low $ | ● | | | |
| 152 | NEC | 2017NEC690 | 2017NEC690 SOLAR PHOTOVOLTAIC (PV) SYSTEMS | More | ● | High | ○ | High $$$ | ○ | Improved | | As Solar Photovoltaic (PV) Systems flourish and become more commonplace, the NEC has evolved and revised language to clarify many of the sections. As the technology changes, greater care in review and installations for these system becomes more complex, and it is imperative that we continue to learn as these systems are proposed and installed around the City./ COMMITTEE recommends: Leave in |
| | | | | NA | ○ | Medium | ● | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ○ | Low $ | ○ | | | |
| 153 | NEC | Previously approved change from 2012 NEC Code | Municipal Code 5-1f-4: Wiring - the wiring methods specified in Chapter 3 of the NEC will be permitted except as noted: Article 334 Nonmetallic Sheathed Cable: Type NM, type NMS cables shall only be permitted to be used in the following: Temporary wiring in accordance with NEC Article 590 or low voltage lighting systems less than 30 volts in accordance with NEC Article 411. Article 338 - Service Entrance Cable: Type SE cables shall only be permitted to be used in temporary wiring in accordance with NEC Article 590. | More | ● | High | ○ | High $$$ | ○ | Improved | | The Committee recommends that this exception continue in the 2018 Code Update. |
| | | | | NA | ○ | Medium | ○ | Medium $$ | ● | | | |
| | | | | Less | ○ | Low | ● | Low $ | ○ | | | |