

Building Code Update Analysis

| | | | | | |
|-----------------------------|---------------------|---------|--|--|-----------|
| Administrative Amendment | No cost increase | Mandate | Insignificant, < \$100 Significant, \$101-\$1,000 | Discussion, >\$1,000, Cost Savings | 2/19/2014 |
|-----------------------------|---------------------|---------|--|--|-----------|

| # | Purpose and description of amendment | Cost increase | | Comments | Focus Group Comments |
|---|---|---------------|----|---|--|
| | | YES | NO | | |
| 2012 International Building Code (IBC) | | | | | |
| Administrative Amendments | | | | | |
| 1-23 | Administrative Amendments and State Mandates | | | Administrative amendments establishing jurisdiction name, clarifying job titles and state mandated requirements. | The focus group is in favor of adopting the updated codes and Administrative Amendments. |
| 24 | Add a sentence to the end of the paragraph that reads "The height of the building for fire department access shall be measured from the average grade elevation to the highest finished floor level." | | | Clarifies how building height is measured. | |
| | | | | | |
| Mandates | | | | | |
| 26 | Delete the words "Section 1007" and insert the words "State of Illinois Accessibility Standard". | | | The Illinois Accessibility Code is mandated by state law. | |
| 29 | Delete this section and replace with: 1007.1 Accessible Means of Egress Required. Accessible means of egress shall comply with the Illinois Capitol Development Board, Accessibility Standards. | | | Accessible means of egress is mandated by the Illinois Accessibility Code48 | |
| 38 | Delete the table that refers to required plumbing fixtures | | | The Illinois State Plumbing Code mandates required fixtures. | |
| 31 | Delete the entire Chapter relating to accessibility and replace with the "Illinois Accessibility Code" | | | State law requires that we enforce the Illinois Accessibilty Code. | |
| | | | | | |
| Amendments Based on Regional Conditions | | | | | |
| 30 | This amendment would require frost protection for concrete stoops outside of required egress doors. | | | The accessibility code requires that exterior stoops be no lower than 1/2" below the floor of a building. In this area, the freeze thaw cycle can cause stoops to move and possibly prevent a door from opening. Cost \$200 per required door opening. | |
| 32 | Change the minimum required snow load for roofs to thirty pounds per square foot. | | | Snowfall in this area, especially a heavy wet snow event, is such that the thirty pound requirement is warranted. Costs would be dictated by the size and type of construction of the building. | |
| 33 | The building code states that a foundation should extend below the frost line of the locality. | | | It is generally accepted that 42" is a minimum safe depth for a foundation. | |
| 37 | Change this section to require the top of a foundation to be a minimum of 6" above finished grade. | | | The IBC requires the top of a foundation to be a minimum of 12" above the elevation of the street gutter. In older established subdivisions there is not always a gutter for a point of reference. Six inches above finished grade allows adequate protection of a structure from moisture, snow accumulation, flooding, and insect infestation. | |
| | | | | | |
| Life/Safety Amendments | | | | | |
| 23 | Under the R-3 Group add a paragraph that reads "All two (2) hour fire separation assemblies between R-3 residential units shall not contain any mechanical or plumbing systems, unless the mechanical or plumbing system is part of a tested assembly. Electrical systems shall be allowed in accordance with the 2011 National Electrical Code." | | | Eliminates combustible material in rated assemblies | |
| 25 | Change the existing exception to number "1" and add another exception to read, | | | This section requires special conditions for haunted houses to ensure the safety of employees and the public. | |
| 27 | Add a subsection to read: 903.3.1.4 Emergency power supply. Every automatic fire suppression system that requires or is equipped with an electric fire pump shall have an emergency generator to provide power in the case of primary power loss. Exception. Upon submittal of documentation from the Fire Chief having jurisdiction of the area, stating that he has reviewed all pertinent information concerning the interruption of the power supply of the area and is accepting the utility provider as a reliable power supply for the fire pump. | | | Requires a backup generator for commercial properties that need fire pumps for sprinkler systems. This requirement will allow automatic fire sprinklers to function as long as there is water available The generator is not required to be sized to power the entire building, only the sprinkler system and well. Backup generators are typically only needed properties with private wells. As written, this amendment ends the dispute over the backup power requirement. Cost \$10,000 + | |

| # | Purpose and description of amendment | | YES | NO | Comments | Focus Group Comments |
|----|---|--|-----|----|---|--|
| | Life/Safety Amendments | | | | | |
| 28 | Requires emergency lights in toilet rooms | | | | Commercial toilet rooms generally do not have windows. Occupants are not familiar with the rooms and need lighting to find exits in an emergency. Cost: Light \$50, labor \$100 | |
| | Regional Common and Best Practice Amendments | | | | | |
| 39 | Add a new section to read: 2902.6 Waste lines. All plumbing waste lines that are located in, or under concrete slabs shall be cast iron. Exception: Waste lines that go through the foundation wall shall be ductile iron and extend on the outside of the foundation wall a minimum of five feet. | | | | The State of Illinois will be adopting a new plumbing code in the near future. At that time we will be presenting amendments for adoption | Affected group members have no issues with this provision. |

| # | Purpose and description of amendment | Cost increase | | Comments | Focus Group Comments |
|-------|---|---------------|------------|---|--|
| | | YES | NO | | |
| | 2012 International Residential Code (IRC) | | | | |
| | Administrative Amendments | | | | |
| 40-54 | Administrative Amendments and State Mandates | | | Administrative amendments establishing jurisdiction name, clarifying job titles and state mandated requirements. | The focus group is in favor of adopting the updated codes and Administrative Amendments. |
| | Mandates | | | | |
| 60 | Delete this section and replace with the following sentence: "Refer to Article 8 of the Lake County Unified Development Ordinance." | | | The UDO addresses flood resistant construction. | |
| | Amendments Based on Regional Conditions | | | | |
| 61 | Change the minimum footing size | | | A smaller footing size reduces bearing area for a foundation and does not allow for correction of an out of square footing when forming concrete walls. Lake County does not require soil tests, so the increased footing allows for more bearing for the foundation. Soil test tradeoff. | Affected group members agree |
| 62 | Amend this section to require foundation drains for all dwellings and additions. | | | This code section allows foundation drains to be omitted under certain circumstances. This could result in flooded basements and crawl spaces. We propose to delete this section and require foundation drains for foundations that support living areas. Costs could be as high as \$500 for a homeowner who did not want to install a foundation drain. Soil conditions in the county warrant foundation drainage. | Affected group members have no issues with this provision. |
| | Life/Safety Amendments | | | | |
| 55 | All references to ½ inch gypsum board should be changed to 5/8 inch Type X and the last line deleted. | | | Addresses fire separation of a dwelling from a garage. Additional cost would be .03 per square foot, or less than \$50 for a two car garage. An exception would be granted for homes with sprinkler systems. Fire sprinkler tradeoff. | The focus group has no issues with this amendment |
| 58 | This section addresses residential fire sprinklers. Delete this section with no substitution. | | | Reported costs range from \$1.25-\$3.50 per square foot. Our research indicates that the owner of a 1,500 square foot ranch with a basement and served by a well would spend \$10,500 to install a sprinkler system. Savings on homeowners insurance would be minimal. There would also be monthly fire alarm monitoring costs associated with the installation of fire sprinklers. This requirement would create an enormous burden on potential homeowners. | Mostly in favor of deleting this section. One member was opposed to fire sprinklers at the beginning of the meetings but changed his position based on the fire department presentation. |
| 59 | Amend this section to be less restrictive. | | As written | As written, this section would require installation of interconnected smoke detectors throughout an entire house when a permit for a minor alteration is issued. We propose to require smoke detector upgrades only if practical and only if the alterations are substantial. | All focus group members are in favor of our proposal. State law already requires some level of protection in all homes. |
| | Regional Common and Best Practice Amendments | | | | |
| 57 | Amend this section to require a minimum ceiling height of 7'-6" and 7" clear below ceiling fixtures in exiting basements that are converted to living area. | | | The 2012 IRC allows for a 7' ceiling height. This does not allow for safe installation of ceiling fans and light fixtures. This change would make the requirement less restrictive than the current code. | Affected group members have no issues with this provision. |

| # | Purpose and description of amendment | | Cost increase | | Comments | Focus Group Comments |
|----|--|--|---------------|----|---|--|
| | | | YES | NO | | |
| | Regional Common and Best Practice Amendments | | | | | |
| 59 | Amend this section to allow wood posts to be imbedded in concrete. | | | | Current codes do not allow wood posts to be imbedded in concrete. We propose to amend this section to allow this practice for open decks that do not support screen rooms, sun rooms, or roof structures. | All members in favor of this change. |
| 63 | Amedment relating to crawl space access. | | | | Clarifies allowed locations for crawl space access. | The focus group has no issues with this amendment |
| 67 | Delete the exception that allows single top plates in bearing walls. | | | | In the past, many problems arose in building allowed to be constructed without a double top plate. The solutions to these problems end up adding costs to the building. | Affected group members have no issues with this provision. |
| 68 | At a section requiring gutters on single-family dwellings with basements | | | | Soil conditions in this area make it necessary for single-family dwellings with basements to have gutters and downspouts installed. | |

| | | Cost increase | | | | |
|--|---|---------------|------------|---|--|--|
| # | Purpose and description of amendment | YES | NO | Comments | Focus Group Comments | |
| | | | | | | |
| 2011 National Electrical Code (NEC) | | | | | | |
| Administrative Amendments | | | | | | |
| 67 | Delete the entire section and replace with the current appeals process adopted by the Lake County Planning, Building & Development Department | | | Lake County currently uses the ZBA to hear building code appeals, but will be exploring other options. | | |
| | | | | | | |
| Utility Provider Mandate | | | | | | |
| 73-74 | Specifies allowed materials for overhead electrical services. | | | No change from current requirement. These amendments keep our department consistent with Commonwealth Edison preferences and other jurisdictions requirements. | Affected group members have no issues with this provision. | |
| | | | | | | |
| Regional Common and Best Practice Amendments | | | | | | |
| 70 | Allow sump and ejector pumps to be on dedicated non GFCI circuits | | As Written | Under the new code all basement receptacles must be GFCI protected. We propose to exempt sump and ejector pumps. This actually decreases costs slightly. | Group members are in favor of this exemption | |
| 72 | Amend this section to make it less restrictive. | | | Currently the 2011 NEC requires that any circuit that is altered be upgrade to an AFCI protected circuit. In older homes, this could require replacement of the entire electrical service and/or all wiring. We propose to allow the building official to waive this requirement if it is found that it is not practical to comply. | Group members are infavor of this amendment. | |
| 75 | Addresses buried utilities | | | Requires that electrical conductors not be buried in the same trench as gas or water lines. An exception does allow water and electrical serving a pool to be in the same trench. | Affected group members have no issues with this provision. | |
| 76 & 77 | Addresses the use of NM cable (Romex) and AC cable (BX) | | | The amendment limits the use of these two wiring methods to residences only. | Affected group members have no issues with this provision. | |

| # | Purpose and description of amendment | | Cost increase | | Comments | | | Focus Group Comments |
|-------|---|--|---------------|----|----------|--|--|----------------------|
| | | | YES | NO | | | | |
| | 2012 International Mechanical Code (IMC) | | | | | | | |
| 78-88 | Only administrative and mandated amendments are proposed to the IMC. They address jurisdiction title, appeals process, and fee schedules. | | | | | | | |

| # | Purpose and description of amendment | Cost increase | | Comments | | | Focus Group Comments |
|-------|---|---------------|------------|----------|--|--|--|
| | | YES | NO | | | | |
| | 2012 International Fuel Gas Code (IFGC) | | | | | | |
| | Administrative Amendments | | | | | | |
| 89-97 | Administrative amendments relating to jurisdiction, appeals, and fee schedules. | | | | | | |
| | Life/Safety Amendments | | | | | | |
| 98 | Delete the section that allows corrugated vent connectors | | As Written | | These devices are sold at big box stores by homeowners who do not have the tools or knowledge to use solid connectors. They are subject to damage during and after installation and could leak carbon monoxide. They are more expensive than solid pipe. | | |
| | | | | | | | Affected group members have no issues with this provision. |

| # | Purpose and description of amendment | Cost increase | | Comments | Focus Group Comments |
|--------|--|---------------|---------------|---|--|
| | | YES | NO | | |
| | 2012 International Swimming Pool and Spa Code (ISPSC) | | | | |
| 99-108 | Administrative amendments relating to jurisdiction, appeals, and fee schedules and flood hazard areas. | | | | |
| | Life/Safety Amendments | | | | |
| 109 | Delete the provision that requires windows opening to a pool to be alarmed | | As Written | Operable windows generally have screens installed that would discourage small children from approaching the pool. | Group members are in favor of this amendment. Their feeling is that it does not pose a significant safety risk |

| # | Purpose and description of amendment | | Cost increase | | Comments | Focus Group Comments |
|---------|---|--|---------------|----|---|--|
| | | | YES | NO | | |
| | 2012 International Fire Code (IFC) | | | | | |
| 110-116 | Administrative amendments relating to jurisdiction, appeals, and fee schedules. | | | | | |
| | Jurisdictional Amendments | | | | | |
| 117 | Delete the chapter relating to fire protection systems and replace with "Chapter 9 of the 2012 International Building Code" | | | | Fire protection systems are addressed by the building code. | Affected group members have no issues with this provision. |
| 118 | Delete the chapter relating to means of egress and replace with "Chapter 10 of the 2012 International Building Code" | | | | Means of egress is addressed by the building code. | |