



## Legislation Text

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File #: 18-999B, Version: 1

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### **CITY COUNCIL AGENDA ITEM**

#### **ACTION REQUESTED:**

Pass the ordinance amending Chapter 1 (Building Codes) of Title 5 (Building Regulations) of the Naperville Municipal Code adopting the 2018 International Code Council set of codes, including proposed local amendments.

**DEPARTMENT:** Transportation, Engineering and Development

**SUBMITTED BY:** Allison Laff, AICP, Deputy Director

#### **BOARD/COMMISSION REVIEW:**

At their October 17, 2018 meeting, the Building Review Board recommended approval of the adoption of the 2018 International Code Council set of codes, including proposed local amendments (vote 7-0). Staff concurs.

#### **BACKGROUND:**

##### ***Review to Date***

City staff began the process of the 2018 International Code Council (ICC) update in January 2018. At that time, code committees comprised of city staff and representatives from the business, building and residential community, as applicable, reviewed and identified the significant vs. minor changes proposed in the 2018 set of codes. For reference, significant changes are defined as 2018 International Building Codes and amendments that differ from the existing 2012 International Building Code requirements and its local amendments which may cost the builder/developer/owner additional money or effort during a project. Minor changes reflect current policies or practices the building community is already comfortable implementing and therefore will require little or no additional effort during a project.

In addition to review of the proposed changes, certain committees also reviewed issues and concerns identified by the Building Review Board at their August 17, 2017 meeting, including the use of smart technologies in residential buildings, particularly wireless smoke detectors.

Following committee review of the codes, the significant changes were then presented to the Building Review Board (BRB) on two occasions (April 18, 2018 and May 16, 2018).

Staff presented the full list of significant and minor changes to the City Council on July 17, 2018. Following discussion, the City Council directed staff to *eliminate the proposed residential sprinkler requirements* and return to City Council with a "top ten" list of significant changes focusing on those that may add a large financial impact on a building project. On August 21, 2018, City Council approved the final list of significant changes to be presented for public comment and directed staff to begin the public review period.

**DISCUSSION:**

**Public Review Period**

On September 5, 2018, City staff notified representatives from the Illinois Homebuilders Association, Chamber of Commerce, and the Naperville Area Homeowners Confederation that the public review period was open and requested that any comments regarding the proposed code changes be submitted to the City by October 1, 2018. Staff also presented the same information to the Building Review Board and all representatives that served on a code review committee. The comments received during the public review period are attached and, where applicable, referenced in the local amendments table below.

**Significant Changes/Local Amendments**

The complete matrix highlighting the significant changes identified for each code section (IRC, IBC, IFC, etc.) is attached. Within the attached table, an analysis is included for each code change, including whether the change is more or less restrictive, as well as the potential impact on cost and safety. Where reasonable and consistent with City policies, staff recommends the adoption of the ICC set of codes as presented. However, there are a number of items that do not meet this criteria and are therefore proposed as a local amendment. The significant local amendments proposed are highlighted below.

**PROPOSED LOCAL AMENDMENTS**

Item*	Code	Code Provision Proposed by 2018 ICC	Staff Analysis
17	IRC	Eliminates the requirement to provide an <i>egress window</i> within a bedroom located in a basement if the home is sprinklered and an escape window is located elsewhere in that basement.	This code section is less restrictive than the 2012 version and does not provide the desired level of safety and escape from fire within a home. <b>Staff recommends a local amendment to retain 2012 requirements for residential escape windows. R310.1 Emergency Escape and Rescue Openings: Delete Exception 2.</b>
18	IRC	Eliminates the requirement to provide an <i>egress window</i> when finishing a residential basement if the improvement does not include a bedroom.	This code section is less restrictive than the 2012 version and does not provide the desired level of safety and escape from fire within a home. <b>Staff recommends a local amendment to retain 2012 requirements for residential escape windows. R310.6 Alterations or Repairs of Existing Basements: Delete Exception.</b>

	IRC	Appendix J Section AJ 601.4 permits a reduced headroom in existing residential basements altered to become habitable space.	Staff does not recommend the adoption of Appendix J. However, <b>staff recommends a local amendment to add Section AJ 601.4 to IRC Section R305.1 in order to permit 6'8" of headroom (7' typically required) in existing basements which are built out to include habitable spaces.</b> This amendment, which was recommended by the IRC review committee, will permit the improvement of and reinvestment into existing homes. <b>R305.1 Minimum Height: Add Exception 4. Exception 4. Habitable spaces created in existing basements shall have ceiling heights of not less than 6 feet 8 inches, except that the ceiling height at obstructions shall be not less than 6 feet 4 inches from the basement floor. Existing finished ceiling heights in non-habitable spaces in basement shall not be reduced.</b>
22	IRC	Permits <i>smoke alarms</i> in residential additions and alterations to be interconnected battery type.	This code section is less restrictive than the 2012 version and permits battery operated smoke alarms in renovation projects. <b>Staff recommends a local amendment to this section as it pertains to smoke alarm requirements for existing construction.</b> Said amendment would (a) continue the current practice of requiring hard wired smoke detectors to be installed in renovated areas and (b) ease current (2012) requirements to allow interconnected battery operated smoke detectors to be installed in that portion of the home not impacted by the renovation project (i.e., 1 in every sleeping room and minimum 1 per floor). No changes are recommended for requirements for new construction (either by the ICC code or staff). In all instances, smart technologies are permitted but not required. The City did receive public comment recommending that all smoke alarms in existing construction be required to be hard-wired. <b>R314.6 Exception 2 Smoke Alarms, Power Source: Modify section to read as follows: R314.6 Exception 2: Smoke alarms in the portion of the residence that is not impacted by the renovation or addition installed in accordance with Section R314.2.2 shall be permitted to be battery powered. Smoke alarms within the area of renovation or addition shall follow power source requirements as identified in R314.6.</b>

30	IRC	Added requirements in code for prescriptive post hole sizing for <i>residential decks</i> .	This code section may result in an increase in the number or size of piers required for residential decks depending on size and design. Staff finds that the proposed code is unnecessarily burdensome and <b>recommends a local amendment to permit a design professional to use a presumptive design soil bearing capacity of not more than 3000 pounds per square foot.</b> This amendment, which was recommended by the IRC review committee, will permit a more reasonable number, size, and spacing of piers for residential decks. <b>R507.3.1 Footings, Minimum Size, Change: R507.3.1 Minimum Size. The minimum size of concrete footings shall be in accordance with Table R507.3.1 or other approved method, based on the tributary area and allowable soil bearing pressure of a presumptive design soil bearing capacity of not more than 3000 psf.</b>
	IRC	Requires a lateral connection for <i>residential decks</i> .	Staff finds that the prescriptive hold-down lateral connection seems overly conservative for residential decks are 30" or less above grade. <b>Staff recommends a local amendment to only require the lateral connection for decks 30" or more above grade.</b> For decks 30" or less above grade, the lag screw/bolt connections from the deck ledger to band joist shall be accepted. <b>R507.9.2 Lateral Connection, Add: R507.9.2.1 The prescriptive hold-down lateral connection as identified in section R507.9.2 shall not be required for decks 30" or less above grade. At decks 30" or less above grade, the lag screw/bolt connections from the deck ledger to band joist required by R507.9.1 shall be accepted.</b>
117	NEC	Requires arc-fault circuit interrupter protection in <i>residential dwelling units</i> .	This code section is more restrictive than the local amendment adopted in conjunction with the 2012 ICC set of codes. <b>Staff recommends maintaining the prior 2012 local amendment which permits, but does not require, the use of arc-fault protection.</b> However, the City did receive public comment recommending the adoption of the 2018 code on arc-fault protection as presented.
120	NEC	Requires installation of tamper resistant receptacles in <i>residential dwelling units</i> .	This code section is more restrictive than the local amendment adopted in conjunction with the 2012 ICC set of codes. <b>Staff recommends maintaining the prior 2012 local amendment which permits, but does not require, the use of tamper resistant receptacles.</b> Staff finds that these receptacles are often difficult to use. However, the City did receive public comment recommending the adoption of the 2018 code on tamper resistant receptacles. <b>Keep current amendment: Article 406.12 - Tamper-Resistant Receptacles in Dwelling Units: Delete in its entirety.</b>

	IRC	Continues to waive perimeter fencing requirements if a lockable safety cover is installed on a residential swimming pool.	This code section is less restriction than the local amendment adopted in conjunction with the 2012 ICC set of codes. <b>Staff recommends maintaining the prior 2012 local amendment to continue to require perimeter barriers even if a lockable safety cover is provided</b> , as this requirement maintains better life safety provisions. Staff recommends maintaining current code requirements for pool barriers. <b>Keep current amendment: 305.1 (Barrier Requirements) General Change to read: The provisions of this section shall apply to the design of barriers for all aquatic vessels. These design controls are intended to provide protection against the potential drowning and near drowning by restricting access to such vessels. These requirements provide an integrated level of protection against potential drowning through the use of physical barriers and warning devices. Barrier exceptions: 1. Spas or hot tubs with a lockable safety cover which complies with ASTM F 1346.</b>
	IRC	Requires glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36" above the landing.	<b>Staff recommends a local amendment, which was also recommended by the IRC code review committee, to require glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 60" above the landing.</b> The proposed revision will make the IRC requirements consistent with the IBC requirements. <b>R308.4.6 Glazing Adjacent to Stairs and Ramps: Revise Exception 2. Exception 2. Glazing 60 inches or more measured horizontally from the walking surface.</b>

\*References the item number as provided on the comprehensive list of significant changes attached.

**BRB Review**

Staff presented the 2018 International Code Council set of codes, including proposed local amendments, to the Building Review Board (BRB) on October 17, 2018. No members of the public provided testimony at this meeting. Following limited discussion and clarification, the BRB recommended approval of the 2018 International Code Council set of codes, including proposed local amendments (vote 7-0). Staff concurs with the BRB’s recommendation.

**Proposed Ordinance**

City Council conducted the first reading of the proposed ordinance regarding the proposed building code updates on November 20, 2018. There were no public speakers at this meeting and no formal comments made by the City Council. On December 4, 2018, staff recommends that the City Council pass the ordinance adopting the 2018 International Code Council set of codes, including proposed local amendments. Following adoption, the updated codes will become effective for all permits submitted on and after January 1, 2019.

**FISCAL IMPACT:**

None.