

# ORDINANCE

## ORDINANCE ADOPTING THE 2015 INTERNATIONAL RESIDENTIAL CODE WITH REVISED LOCAL AMENDMENTS AND REPEALING ORDINANCE 0-2016-08-10-027

**WHEREAS**, the McHenry County Board through Ordinance 0-2016-08-10-027 adopted the International Residential Code 2015 with local amendments; and

**WHEREAS**, in an effort to better serve the citizenry of McHenry County and meet the code enforcement objectives of the McHenry County Board it has become necessary to revise the County Board adopted local amendments as contained in "attachment A"; and

**WHEREAS**, the Planning and Development Committee has recommended the following minimum fines be established for the following violations of the 2015 International Residential Code:

<u>U.S. CENSUS BUILDING CODE CATEGORY</u>	<u>MINIMUM FINE</u>
101-105 (Single and Multifamily Buildings-new construction)	\$200
213-327 (Commercial Buildings)	\$500
328-329 (various types of residential accessory structures)	\$100
330 (Signal/Transmission Towers)	\$500
434 (Residential additions/alterations)	\$200
438-908, 918-999 (various types of minor construction)	\$100
Signs	\$500

; and

**WHEREAS**, The Planning and Development Committee has recommended that the maximum fine for violation of the International Residential Code 2015 be \$500 per offence with each week that the violation remains uncorrected constituting a separate offence, as provided for in 55 ILCS 5/5-120-17; and

**WHEREAS**, the local amendments contained in "attachment A" are intended to make the County's adoption of the International Residential Code consistent with the County adopted Unified Development Ordinance and the Stormwater Management Ordinance, existing departmental procedures, and to reduce the burden on property owners for obtaining permits for certain specified construction activities.

**NOW, THEREFORE BE IT ORDAINED**, by this County Board of McHenry County, Illinois, that the County Board hereby adopts the International Residential Code 2015 with revised local amendments as contained in "attachment A" and that Ordinance 0-2016-08-10-027 adopting the International Residential Code 2015 with local amendments be repealed except for its application to permit applications filed prior to the date of adoption of this ordinance; and

**BE IT FURTHER ORDAINED**, that the penalty for violation of any of the provisions of the International Residential Code 2015 shall be the minimum fines established below:

<u>U.S. CENSUS BUILDING CODE CATEGORY</u>	<u>MINIMUM FINE</u>
101-105 (Single and Multifamily Buildings-new construction)	\$200
213-327 (Commercial Buildings)	\$500
328-329 (various types of residential accessory structures)	\$100
330 (Signal/Transmission Towers)	\$500
434 (Residential additions/alterations)	\$200
438-908, 918-999 (various types of minor construction)	\$100
Signs	\$500

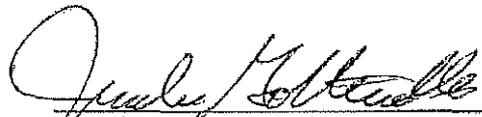
**BE IT FURTHER ORDAINED**, that the maximum fine for violation of the International Residential Code 2015 with local amendments shall be \$500 per offence with each week that the violation remains uncorrected constituting a separate offence; nothing herein, however, shall preclude enforcement proceedings by means other than a fine, including injunction proceedings; and

**BE IT FURTHER ORDAINED**, that if there is any conflict between this code and other codes adopted by the County, the most restrictive provision shall prevail; and

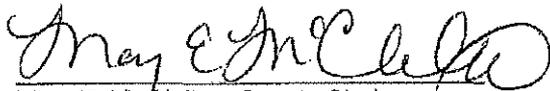
**BE IT FURTHER ORDAINED**, that this Ordinance shall become effective upon passage by the McHenry County Board; and

**BE IT FURTHER ORDAINED**, that the County Clerk is hereby authorized to distribute a certified copy of this Ordinance to the McHenry County Clerk, the Director of Planning and Development, and the Building Code Enforcement Officer.

**DATED** at Woodstock, Illinois, this 18th day of October, A.D., 2016.

  
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 Joseph Gottemoller, Chairman  
 McHenry County Board

ATTEST:

  
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 Mary E. McClellan, County Clerk

ATTACHMENTS:

- 2015 IRC\_Attachment A\_Amendments\_R\_8.23.2016 (PDF)
- Memo\_Adopting revised local amendments to the 2015 IRC Amendments (PDF)

**ATTACHMENT A**  
**2015 INTERNATIONAL RESIDENTIAL CODE**

**ALL SECTIONS**

- 1) Change all references to "code official" to "building official."
- 2) Change all references to "legal counsel" to "State's Attorney Office."

**CHAPTER 1 SCOPE AND ADMINISTRATION**

**3) SECTION R101 GENERAL**

- a) *Revise* section R101.1 "Title" to read as follows:

"R101.1 Title. These provisions shall be known as the Residential Code for *One- and Two-family Dwellings* of *McHenry County*, and shall be cited as such and will be referred to herein as "this code."

**4) SECTION R102 APPLICABILITY**

- a) *Revise* section R102.7 "Existing structures" to read as follows:

**"R102.7 Existing structures.** The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *International Fire Code*, the *International Existing Building Code*, or as is deemed necessary by the *building official* for the general safety and welfare of the occupants and the public."

**5) SECTION R103 DEPARTMENT OF BUILDING SAFETY**

- a) *Revise* section R103.1 "Creation of enforcement agency" to read as follows:

**"R103.1 Creation of enforcement agency.** The *Department of Planning and Development* is hereby created and the official in charge thereof shall be known as the *Director of Planning and Development*."

- b) *Revise* section R103.2 "Appointment" to read as follows:

**"R103.2 Appointment.** The *building official*, also known as the Building Enforcement Officer, shall be appointed by the *Director of Planning and Development*."

**6) SECTION R104 DUTIES OF THE BUILDING OFFICIAL**

- a) *Revise* section R104.10.1 "Flood hazard areas" to read as follows:

**"R104.10.1 Flood hazard areas.** The building official shall not grant modifications to any provisions required in flood hazard areas as established by Table R301.2(l) unless a determination has been made that *the development complies with the McHenry County Stormwater Management Ordinance*."

**7) SECTION R105 PERMITS**

- a) *Revise* section R105.2 "Work exempt from permit. Building: Exemption 1." to read as follows:

"1. *One-story detached accessory structures that have a maximum floor area of one-hundred fifty (150) square feet and are not located in a floodplain or wetland and comply with all requirements of the McHenry County Unified Development Ordinance and McHenry County Stormwater Ordinance and are properly anchored in accordance with this Code or anchored to a minimum 6" x 6" perimeter concrete curb or anchored with 3'-0" guy rods, 3'-0" auger rods, or piers.*"

- b) *Revise* section R105.2 "Work exempt from permit. Building: Exemption 2." to read as follows:

"2. *Open fences that obscure less than fifty percent (50%) of the view through the fence and that have a maximum height of eight (8) feet and are not located in a floodplain or wetland and comply with all requirements of the McHenry County Unified Development Ordinance and McHenry County Stormwater Management Ordinance.*"

- c) *Revise* section R105.2 "Work exempt from permit. Building: Exemption 3." to read as follows:

Attachment: 2015 IRC Attachment A Amendments\_R\_8.23.2016 (5370 : 2015 International Residential Code with Revised Local Amendments)

- "3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the *adjacent grade* to the top of the wall, unless supporting a surcharge."
- d) Revise section R105.2 "Work exempt from permit. Building: Exemption 5." to read as follows:  
 "5. Sidewalks, patios and driveways that comply with all requirements of the *McHenry County Unified Development Ordinance and McHenry County Stormwater Management Ordinance.*"
- e) Revise section 105.2 "Work exempt from permit. Building: Exemption #10" to read as follows:  
 "10. Replacement windows and doors of the same size."
- f) Add section 105.2 "Work exempt from permit. Building: Exemption #11" to read as follows:  
 "11. Roofing and siding replacements without modification to any existing structural systems."
- g) Add section 105.2 "Work exempt from permit. Building: Exemption #12" to read as follows:  
 "12. Agricultural Exempt Structures as defined by the *McHenry County Unified Development Ordinance* provided they obtain an *Agricultural Exempt Structure Construction Card* and comply with the building setback requirements of the *McHenry County Unified Development Ordinance* and all requirements of the *McHenry County Stormwater Management Ordinance.*"
- h) Add section 105.2 "Work exempt from permit. Building: Exemption #13" to read as follows:  
 "13. Temporary signs and permanent signs that are designated as not requiring permits in the *McHenry County Unified Development Ordinances* provided that they comply with all requirements of the *McHenry County Unified Development Ordinance and McHenry County Stormwater Management Ordinance.*"
- i) Add section 105.2 "Work exempt from permit. Building: Exemption #14" to read as follows:  
 "14. Ground signs located on park or conservation land provided that the sign does not include an off-premise commercial advertising message, are non-illuminated, limited to a maximum sign area of thirty-two square feet, and comply with all requirements of the *McHenry County Unified Development Ordinance and McHenry County Stormwater Management Ordinance.*"
- j) Revise section R105.3 "Application for permit." to read as follows:  
 "To obtain a *permit*, the applicant shall first file an application therefor in writing on a form furnished by the Department of *Planning and Development* for that purpose. Such application shall:"
- k) Revise section R105.3.1.1 "Determination of substantially improved or substantially damaged existing buildings in flood hazard areas." to read as follows:  
 "R105.3.1.1 "Determination of substantially improved or substantially damaged existing buildings in flood hazard areas. For applications for reconstruction, rehabilitation, *addition*, alteration, repair or other improvement of existing buildings or structures located in a flood hazard area, refer to the *McHenry County Stormwater Ordinance.*"
- l) Add section R105.4.1 "Validity of Permit" to read as follows:  
 "Permits for residential construction on platted, non-improved streets/roads will be issued subject to providing access prior to issuance of a *Certificate of Occupancy*. Access must be provided across the entire frontage of the lot or parcel in a manner equal to or better than the following minimum standards:  
 (1) Aggregate surface course to a compacted thickness of ten (10) inches and a width of nineteen (19) feet.  
 (2) Adequate provisions for roadway drainage.  
 For purposes of this section, "non-improved" shall mean streets/roads which have not been constructed to state, county or township standards."
- m) Revise section R105.5 "Expiration" to read as follows:

**"R105.5 Expiration.** Every *permit* issued shall become invalid unless the work authorized by such *permit* is commenced within 180 days after its issuance, or if the work authorized by such *permit* is suspended or abandoned for a period of 180 days after the time the work is commenced. The *building official* is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. *The permit is valid for a maximum period of (2) two years from the time of issuance.*"

- n) Add section 105.5.1 "Restricted Term Permits" to read as follows:

**"105.5.1 Restricted term permits.** *The building official is authorized to limit the validity a permit to a period of 180-days from the time of issuance if the scope of work involves the corrective action or does not merit a (2) two year period.*"

- o) Add section R105.10 "After the Fact Permits and Building Code Compliance Inspections" to read as follows:

**"R105.10 After the fact permits and building code compliance inspections.** *Any owner of property where work has been done without the required permit having been first obtained as required by Section R105.1, shall make an application to the building official and obtain the required permit after the fact. However, the property owner shall be exempt from obtaining an after the fact permit if the work was completed prior to March 1, 2005, and the property owner allows the Department of Planning and Development to conduct a building code compliance inspection and obtains a building permit to correct any deficiencies noted during the building code compliance inspection. After the fact permits and building code compliance inspections shall be subject to payment of regular permit and inspection fees based on the Department of Planning and Development Fee Ordinance.*"

**8) SECTION R106 CONSTRUCTION DOCUMENTS**

- a) Revise section R106.1.4 "Information for construction in flood hazard areas" to read as follows:

**"R106.1.4 Information for construction in flood hazard areas.** For buildings and structures located in whole or in part in flood hazard areas as established by Table R301.2(l), *construction documents shall be prepared in accordance with the McHenry County Stormwater Management Ordinance and this code. Where conflicts exist the more SMO shall supersede.*"

- b) Add section R106.1.5 "Roofed structures supported by piers" to read as follows:

**"R106.1.5 Roofed structures supported by piers.** *Construction plans for roofed structures supported by a structural system other than a continuous footing and attached to a primary structure shall be signed and sealed by a design professional licensed in the State of Illinois.*"

**9) SECTION R107 TEMPORARY STRUCTURES AND USES**

- a) Delete section R107 "Temporary Structures and Uses."

**10) SECTION R109 INSPECTIONS**

- a) Revise section R109.1.1 "Foundation inspection" to read as follows:

**"R109.1.1 Footing inspection.** *Inspection of the footings shall be made prior to placement of any piers, footings, or poles and after the full foundation area is excavated to the required depth. The footing inspection shall include excavations for all foundation walls, frost walls, thickened slabs and isolated piers intended for the support of bearing walls, partitions, structural supports, or equipment.*"

- b) Add section R109.1.1.1 "Backfill inspection" to read as follows:

**"R109.1.1.2 Backfill inspection.** *Inspection made after foundation walls are erected. Prior to backfilling the following systems or components including, but not limited to, damp/waterproofing, subsurface drainage system, exterior insulation, and anchoring shall be placed.*"

- c) Add section R109.1.1.2 "Service inspection" to read as follows:

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**"R109.1.3 Service Inspection.** Service inspection must be conducted prior to any connection by the utility supplier. The service inspection shall include routing of all utilities from the right of way or the utility source to the main distribution point for the structure."

- d) Add section R109.1.1.3 "Slab plumbing inspection" to read as follows:

**"R109.1.1.2 Slab plumbing inspections.** Inspection made prior to the placement of concrete for any and all Plumbing, Electrical & Mechanical installations proposed under concrete slabs."

- e) Revise section R109.1.3 "Floodplain Inspections" to read as follows:

**"R109.1.3 Site development inspections.** Inspections as required and detailed by the McHenry County Stormwater Management Ordinance for building permits."

- f) Add section R109.1.4.1 "Insulation Inspection" to read as follows:

**"R109.1.4.1 Insulation Inspection:** Inspection of insulation that makes up the thermal envelope and insulation at piping, duct, or other system components prior to application of finishes and general concealment. The final energy performance specifications and tests shall be available during inspection."

- g) Revise section R109.3 Inspection requests to read as follows:

**"R109.3 Inspection requests.** It shall be the duty of the permit holder or their agent to notify the building official that such work is ready for inspection at least one work day before said inspection. It shall be the duty of the permit holder requesting any inspections required by this code to provide access to and means for inspection of such work.

## 11) SECTION R110 CERTIFICATE OF OCCUPANCY

- a) Revise section R110.1 "Use and Occupancy" to read as follows:

**"R110.1 Use and occupancy.** A building or structure shall not be used or occupied, and a change in the existing use or occupancy classification of a building or structure or portion thereof shall not be made, until the building official has issued a certificate of occupancy or certificate of completion therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid."

- b) Delete in section R110.3 "Certificate issued" item #7.  
 c) Delete in section R110.3 "Certificate issued" item #8.  
 d) Delete in section R110.3 "Certificate issued" item #9.

## 12) SECTION R115 UNSAFE STRUCTURES AND EQUIPMENT

- a) Add section R115.1 "Conditions" to read as follows:

**"R115.1 Conditions.** All Structures or existing equipment which are or hereafter become unsafe, unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. All unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe. Boarding up of a structure is considered a temporary measure until a decision can be made as to what remedy the owner will pursue as provided in this section; but cannot exceed (6) six months or as the building official may deem necessary."

- b) Add section R115.2 "Record" to read as follows:

**"115.2 Record.** The building official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition."

- c) Add section R115.3 "Notice" to read as follows:

**"R115.3 Notice.** If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes that condition deemed unsafe. Such notice shall require the person thus notified to declare immediately to the building official the specific repairs or improvements that will be made to abate the unsafe condition or to demolish the unsafe structure within a stipulated time."

- d) Add section R115.4 "Method of service" to read as follows:

**"R115.4 Method of service.** Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally or (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon person responsible for the structure shall constitute service of notice upon the owner."

- e) Add section R115.5 "Restoration" to read as follows:

**"R115.5 Restoration.** The structure or equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. The extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of this code."

- f) Add section R115.6 "Disregard of notice" to read as follows:

**"R115.6 Disregard of notice.** Upon refusal or neglect of the person served with an unsafe notice to comply with the requirements of the order to abate the unsafe condition, the State's Attorney Office shall be advised of all the facts in order to pursue recourse provided by law."

**13) SECTION R116 EMERGENCY MEASURES**

- a) Add section R116.1 "Imminent danger" to read as follows:

**"R116.1 Imminent danger.** When, in the opinion of the building official, there is imminent danger of failure or collapse of a building or structure or any part thereof which endangers life, or when any structure or part of a structure has fallen and life is endangered by the occupation of the building or structure, the building official is hereby authorized and empowered to order and require the occupants to vacate the same forthwith. The building official shall cause to be posted at each entrance to such structure a notice reading as follows: "This Structure is Unsafe and its Occupancy has been prohibited by the building official." It shall be unlawful for any person to enter such structure except for the purpose of making the required repairs or of demolishing the same."

- b) Add section R116.2 "Temporary safeguards" to read as follows:

**"R116.2 Temporary safeguards.** When, in the opinion of the building official, there is imminent danger due to an unsafe condition, the building official shall cause the necessary work to be done to render such structure temporarily safe, whether or not the legal procedure herein described has been instituted."

- c) Add section R116.3 "Closing streets" to read as follows:

**"R116.3 Closing streets.** When necessary for the public safety, the building official shall temporarily close structures and close or order the authority having jurisdiction to close sidewalks, streets, public ways and places adjacent to unsafe structures, and prohibit the same from being used."

- d) Add section R116.4 "Emergency repairs" to read as follows:

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**"R116.4 Emergency Repairs.** For the purpose of this section, the building official may employ the necessary labor and materials to perform the required work as expeditiously as possible under authority granted by the governing body."

e) Add section R116.5 "Costs of emergency repairs" to read as follows:

**"R116.5 Costs of emergency repairs.** Costs incurred in the performance of emergency work shall be paid from the Department of Planning and Development. The State's Attorney Office shall institute appropriate action against the owner of the premises where the unsafe structure is or was located for repayment of costs incurred."

f) Add section R116.6 "Unsafe equipment" to read as follows:

**"R116.6 Unsafe equipment.** Equipment deemed unsafe by the building official shall not be operated after the date stated in the notice unless the required repairs or changes have been made and the equipment has been approved, or unless an extension of time has been secured from the building official in writing."

g) Add section R116.6.1 "Authority to seal equipment" to read as follows:

**"R116.6.1 Authority to seal equipment.** In the case of an emergency, the building official shall have the authority to seal out of service immediately any unsafe device or equipment regulated by this code."

h) Add section R116.6.2 "Unlawful to remove seal" to read as follows:

**"R116.6.2 Unlawful to remove seal.** Any device or equipment sealed out of service by the building official shall be plainly identified in an approved manner. The identification shall not be tampered with, defaced or removed except by the building official and shall indicate the reason for such sealing."

**CHAPTER 2 DEFINITIONS**

**1) R202 DEFINITIONS**

a) Revise section R202 Definitions. [RB] BUILDING OFFICIAL to read as follows:

**"R202 Definitions.** [RB] BUILDING OFFICIAL. Also known as Building Enforcement Officer. The officer or other designated authority charged with the administration and enforcement of this code."

**CHAPTER 3 BUILDING PLANNING**

**1) R301 DESIGN CRITERIA**

a) Delete Table R301.2(1) and replaced as follows:

**TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY <sup>f</sup>	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP <sup>g</sup>	ICE BARRIER UNDERLAYMENT REQUIRED <sup>h</sup>	FLOOD HAZARDS <sup>9</sup>	AIR FREEZING INDEX <sup>i</sup>	MEAN ANNUAL TEMP <sup>i</sup>
	Speed <sup>d</sup> (mph)	Topographic effects <sup>k</sup>		Weathering <sup>a</sup>	Frost line depth <sup>b</sup>	Termite <sup>c</sup>					
30	115	NO	A	SEVERE	42	M-H	-4	YES	SMO	2000	50 <sup>o</sup> F

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 128, C 145, C 216 or C 652.

b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.

c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.

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- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 97<sup>1</sup>/<sub>2</sub>-percent values for winter from Appendix D of the *International Plumbing Code*. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

- b) *Revise section R301.2.4 "Floodplain construction" to read as follows:*

**"R301.2.4 Floodplain construction.** Buildings and structures constructed in whole or in part in flood hazard areas as established by Table R301.2(l), and substantial improvement and restoration of substantial damage of buildings and structures in flood hazard area, shall be designed and constructed in accordance with *the requirements of the McHenry County Stormwater Management Ordinance.*"

**2) R302 FIRE-RESISTANT CONSTRUCTION**

- c) *Revise section R302.1 "Exterior walls" to read as follows:*

**"R302.1 Exterior walls.** Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with *the McHenry County Unified Development Ordinance. Where the Unified Development Ordinance does not apply, such structures shall be regulated by Table R302.1(l).*"

- d) *Delete section R302.1 Exterior Walls. Exception #2.*
- e) *Delete section R302.1 Exterior Walls. Exception #4.*
- f) *Delete section R302.1 Exterior Walls. Exception #5.*

**3) R309 GARAGES AND CARPORTS**

- g) *Revise section R309.3 "Flood hazard areas" to read as follows:*

**"R309.3 Flood hazard areas.** For buildings located in flood hazard areas as established by Table R301.2(l), garage floors shall be *constructed in accordance with the McHenry County Stormwater Management Ordinance.*"

- h) *Add section R309.6 "Service door" to read as follows:*

**"R309.6 Service Door.** *One (1) service door leading directly to the exterior is required for attached or detached garages.*"

- i) *Add section R309.7 "Gas Curb" to read as follows:*

**"R309.7 Gas Curb.** A concrete curb extending at least four inches (4") above the garage floor and around all below grade openings shall be provided for attached garages."

**4) R311 MEANS OF EGRESS**

- a) *Revise section R311.2 "Egress door" to read as follows:*

**"R311.2 Egress doors.** Not less than *two* egress doors shall be provided for each *dwelling* unit. At least one of the required egress doors shall be side-hinged, and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). *The second required egress door shall be permitted to be a side-hinged door or a slider. The clear height of the door opening shall be not less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort.*

- b) *Revise section R311.5.1.1 "Ledger Attachment" to read as follows:*

**"R311.5.1 Attachment.** Exterior landings, decks, balconies, stairs and similar facilities shall be positively anchored to the primary structure to resist both vertical and lateral forces or shall be designed to be self-supporting. Attachment shall *comply with Table R507.2.*"

## 5) R313 AUTOMATIC FIRE SPRINKLER SYSTEMS

- a) *Revise section R313 "AUTOMATIC FIRE SPRINKLER SYSTEMS" to read as follows:*

**"R313.1 Townhouse automatic fire sprinkler systems.** An automatic residential fire sprinkler system shall *not be required* in townhouses.

**R313.1.1 Design and installation.** Where provided, automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with *the Illinois Plumbing Code and NFPA 13 D.*"

**R313.2 One- and two-family dwellings automatic fire systems.** An automatic residential fire sprinkler system shall *not be required* in one- and two-family dwellings.

**R313.2.1 Design and installation.** When provided, automatic residential fire sprinkler systems shall be designed and installed in accordance with *the Illinois Plumbing Code and NFPA 13D.*

**R313.3 Other Code Requirements.** *All structures built without automatic fire sprinkler systems shall comply with construction and separation requirements for non-sprinklered construction described in this code.*

## 6) R322 FLOOD RESISTANT CONSTRUCTION

- a) *Revise section R322.1.5 to read as follows:*

**"R322.1 General.** Buildings and structures constructed in whole or in part in flood hazard areas, including A or V Zones and Coastal A Zones, as established in Table R301.2(l), and substantial improvement and restoration of substantial damage of buildings and structures in flood hazard areas, shall be designed and constructed in accordance with the provisions of *the McHenry County Stormwater Management Ordinance and as contained in this section. Construction documents shall be prepared by an architect or appropriate design professional licensed in the State of Illinois.* Buildings and structures that are located in more than one flood hazard area shall comply with the provisions associated with the most restrictive flood hazard area. Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with *the McHenry County Stormwater Management Ordinance and ASCE 24.*"

## 7) R324 SOLAR ENERGY SYSTEMS

- a) *Revise section R324.2 to read as follows:*

**R324.3 Photovoltaic systems.** Photovoltaic systems shall be designed and installed in accordance with *the McHenry County Unified Development Ordinance, Sections R324.3.1 through R324.7.2.5 and NFPA 70* Inverters shall be *listed and labeled* in accordance with UL 1741. Systems connected to the utility grid shall use inverters listed for utility interaction.

- b) *Revise section R324.3 to read as follows:*

**R324.2 Solar thermal systems.** Solar thermal systems shall be designed and installed in accordance with *the McHenry County Unified Development Ordinance, Chapter 23 and the International Fire Code.*

- c) *Revise* section R324.4.1 to read as follows:

**"R324.4.1 Roof load.** Roof structures that provide support for photovoltaic panel systems shall be designed for applicable roof loads. Portions of roof structures not covered by photovoltaic panels shall be designed for *dead loads and live loads in accordance with R301.4 and R301.6*. Roof structures that provide support for photovoltaic panel systems shall be designed for the following load cases:

- (1) *Dead Load (including photovoltaic panel weight) plus snow load in accordance with Table R301.2(1)*
- (2) *Dead Load (excluding photovoltaic panel weight) plus roof live load or snow load, whichever is greater, in accordance with Section R301.6."*

- d) *Revise* section R324.6.1 "Fire separation distances" to read as follows:

**"R324.6.1 Fire separation distances.** Ground-mounted photovoltaic systems shall maintain a *fire separation distance of 7'-0"* from any other accessory or principle structure or as allowed by the *McHenry County Unified Development Ordinance*.

**8) R326 SWIMMING POOLS, SPAS AND HOT TUBS**

- a) *Revise* section R326 SWIMMING POOLS, SPAS AND HOT TUBS to read as follows:

**"R326.1 General.** The design and construction of pools and spas shall comply with the *McHenry County Pool and Spa Ordinance*."

**CHAPTER 4 FOUNDATIONS**

**9) R403 FOOTINGS**

- a) *Revise* section R403.1.1 "Minimum size" to read as follows:

**"R403.1.1 Minimum size.** The minimum width, W, and thickness, T, for concrete footings shall be *no less than 16" x 8" for light-frame construction and 20" x 10" for light-frame construction with brick veneer* or in accordance with Tables R403.1(1) through R403.1(3) and Figure R403.1(l) or R403.1.3, as applicable. The footing width shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Footing projections, P, shall be not less than 2 inches (51 mm) and shall not exceed the thickness of the footing. Footing thickness and projection for fireplaces shall be in accordance with Section R1001.2. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood foundations shall be in accordance with the details set forth in Section R403.2, and Figures R403.1(2) and R403.1(3).

- b) *Add* section R403.1.1.1 "Turned down footing" to read as follows:

**"R403.1.1.1 Turned down footing.** *The minimum width, W, of a turned down footing shall be no less than 12" or shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. The minimum depth shall be in accordance with Section R403.1.4."*

- c) *Delete* section R403.1.4.1 "Frost protection" *Exceptions 3*.

**10) R404 FOUNDATION AND RETAINING WALLS**

- a) *Revise* section R404.1.2.1 "Masonry foundation walls" to read as follows:

**"R404.1.2.1 Masonry foundation walls.** Concrete masonry and clay masonry foundation walls shall have a *minimum nominal thickness of 8"* or as set forth in Table R404.1.1(1), R404.1.1(2), R404.1.1(3) or R404.1.1(4) and shall also comply with applicable provisions of Section R606. In buildings assigned to Seismic Design Categories D0, D, and D2, concrete masonry and clay masonry foundation walls shall also comply with Section R404.1.4.1. Rubble stone masonry foundation walls shall be constructed in accordance with Sections R404.1.4 and R606.3.2. Rubble stone masonry walls shall not be used in Seismic Design Categories D0, D, and D2."

**11) R405 FOUNDATION DRAINAGE**

Attachment: 2015 IRC Attachment A Amendments\_R\_8.23.2016 (5370 : 2015 International Residential Code with Revised Local Amendments)

- b) Add section R405.2.4 "Point of discharge" to read as follows:

**"R405.2.4 Point of discharge.** The point of discharge of the drainage system shall be diverted in such a manner so as to not create a hazard and shall be no closer than one half (1/2) the distance between the required yard setback and the property line or five (5) feet, whichever is greater."

**12) R408 UNDER-FLOOR SPACE**

- a) Revise section R408.5 "Removal of debris" to read as follows:

**"R408.5 Removal of debris.** The under-floor *grade* shall be cleaned of all vegetation and organic material and granular fill, pea gravel, or a concrete slab placed over a vapor barrier that complies with R508.2.3. All wood forms used for placing concrete shall be removed before a building is occupied or used for any purpose. All construction materials shall be removed before a building is occupied or used for any purpose."

- b) Revise section R408.7 "Flood resistance" to read as follows:

**"R408.7 Flood resistance.** For buildings located in the flood hazard areas refer to the requirements of the *McHenry County Stormwater Management Ordinance.*"

**CHAPTER 5 FLOORS**

**1) R507 EXTERIOR DECKS**

- a) Revise Table R507.2 Deck Ledger connection to Band Joist to read as follows:

Table R507.2 DECK LEDGER CONNECTION TO BAND JOIST <sup>a, b</sup> (Deck live load = 40 psf, deck dead load = 10 psf)

JOIST SPAN	6' and less	6' 1" to 8'	8' 1" to 10'	10' 1" to 12'	12' 1" to 14'	14' 1" to 16'	16' 1" to 18'
<b>Connection details</b>	<b>On-center spacing of fasteners<sup>d, e</sup></b>						
1/2-inch diameter lag screw with 1/2-inch maximum sheathing <sup>c, d</sup>	16	16	16	8	8	8	8
1/2-inch diameter bolt with 1/2-inch maximum sheathing <sup>d</sup>	16	16	16	8	8	8	8
1/2-inch diameter bolt with 1-inch maximum sheathing <sup>e</sup>	16	16	16	8	8	8	8

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

- a. Ledgers shall be flashed in accordance with Section R703.8 to prevent water from contacting the house band joist.
- b. Snow load shall not be assumed to act concurrently with live load.
- c. The tip of the lag screw shall fully extend beyond the inside face of the band joist.
- d. Sheathing shall be wood structural panel or solid sawn lumber.
- e. Sheathing shall be permitted to be wood structural panel, gypsum board, fiberboard, lumber or foam sheathing. Up to 1/2-inch thickness of stacked washers shall be permitted to substitute for up to 1/2 inch of allowable sheathing thickness where combined with wood structural panel or lumber sheathing.

- b) Revise section R507.2.4 "Deck lateral load connection" to read as follows:

**R507.2.4 Deck lateral load connection.** Where a lateral load connection is provided, the connection shall be permitted to be in accordance with Figure R507.2.3(1) or R507.2.3(2). Where the lateral load connection is provided in accordance with Figure R507.2.3(1), hold-down tension devices shall be installed in not less than two locations per deck, within 24 inches of each end of the deck. Each device shall have an allowable stress design capacity of not less than 1,500 pounds (6672 N). Where the lateral load connections are provided in accordance with Figure R507.2.3(2), the hold-down tension devices shall be installed in not less than four locations per deck, and each device shall have an allowable stress design capacity of not less than 750 pounds (3336 N).

**CHAPTER 11 ENERGY EFFICIENCY**

- 1) Delete "CHAPTER 11 [RE] ENERGY EFFICIENCY" and replace as follows:

"The provisions of the Illinois Energy Conservation Code as adopted separately by the McHenry County Board shall regulate the design and construction of buildings for the effective use and conservation of energy over the useful life of each building."

**PART VII – Plumbing**

- 1) Delete CHAPTER 25 THROUGH 32 and replace as follows:

"The provisions of the Illinois Plumbing Code as adopted separately by the McHenry County Board shall govern the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing equipment."

**PART VIII – Electrical**

- 1) Delete CHAPTER 34 THROUGH 43 and replace as follows:

"The provisions of the National Electrical Code as adopted separately by the McHenry County Board shall govern the installation of electrical systems, equipment and components indoors and outdoors that are within the scope of this code, including services, power, distribution systems, fixtures, appliances, devices and appurtenances."

**PART IX – Reference Standards**

- 1) Delete Appendix A "SIZING CAPACITIES OF GAS PIPING"
- 2) Delete Appendices B "SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES, AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS"
- 3) Add Appendix C "EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS" as part of this code.
- 4) Delete Appendix D "RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION"
- 5) Delete Appendix E "MANUFACTURED HOUSING USED AS DWELLINGS"
- 6) Add Appendix F "PASSIVE RADON GAS CONTROLS" as part of this code.
- 7) Delete Appendix G "PIPING STANDARDS FOR VARIOUS APPLICATIONS"
- 8) Delete Appendix H "PATIO COVERS"
- 9) Delete Appendix I "PRIVATE SEWAGE DISPOSAL"
- 10) Delete Appendix J "EXISTING BUILDINGS AND STRUCTURES"
- 11) Delete Appendix K "SOUND TRANSMISSION"
- 12) Add Appendix L "PERMIT FEES" to read as follows:  
 APPENDIX L PERMIT FEES  
 Permit fees shall be in accordance to the Fee Ordinance as adopted by the McHenry County Board.
- 13) Delete Appendix M "HOME DAY CARE -- R-3 OCCUPANCY"
- 14) Delete Appendix N "VENTING METHODS"
- 15) Delete Appendix O "AUTOMATIC VEHICULAR GATES"
- 16) Delete Appendix P "SIZING OF WATER PIPING SYSTEM"
- 17) Delete Appendix Q "RESERVED"
- 18) Delete Appendix R "LIGHT STRAW-CLAY CONSTRUCTION"
- 19) Delete Appendix S "STRAWBALE CONSTRUCTION"
- 20) Delete Appendix T "RECOMMENDED PROCEDURE FOR WORST-CASE TESTING OF ATMOSPHERIC VENTING SYSTEMS UNDER N1102.4 OR N1105 CONDITIONS ≤5ACH"
- 21) Delete Appendix U "SOLAR-READY PROVISIONS – DETACHED ONE- AND TWO-FAMILY DWELLINGS, MULTIPLE SINGLE-FAMILY DWELLINGS (TOWNHOUSES)"

Attachment: 2015 IRC Attachment A Amendments R\_8.23.2016 (5370 : 2015 International Residential Code with Revised Local Amendments)



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Department of Planning and Development

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17.2.A.b

August 24, 2016

To: Members of the Planning & Development Committee

From: Adam Wallen, Building Enforcement Officer  
Dennis Sandquist, Director of Planning and Development

Re: Adoption of the 2015 International Residential Code with revisions to the County's local amendments.

**Board / Committee Action Requested:**

Adopt the 2015 International Residential Code with revised local amendments, as contained in Attachment A.

**Background and Discussion:**

On August 2, 2016, the County Board adopted the 2015 International Residential Code (IRC) with certain local amendments. Prior to adopting the IRC, the County Board removed two proposed local amendments and returned them to the P&D Committee for further consideration. In addition, upon review of the local amendments, staff has identified a typographical error in one provision.

The provisions returned to committee for further review, included:

- Add section R309.6 "Service door" to read as follows: "R309.6 Service Door. One (1) service door leading directly to the exterior is required for attached or detached garages."
- Delete "CHAPTER 11 [RE] ENERGY EFFICIENCY" and replace as follows: "The provisions of the Illinois Energy Conservation Code as adopted separately by the McHenry County Board shall regulate the design and construction of buildings for the effective use and conservation of energy over the useful life of each building."

The typographical error to be corrected:

- ~~Delete~~ Add Appendix F "PASSIVE RADON GAS CONTROLS" as part of this code.

On August 23, 2016, the P&D Committee reviewed the two local amendments that were returned to the Committee as well as the typographical error. The Committee directed staff to prepare an ordinance (re)adopting the 2015 International Residential Code, with revised local amendments including the two amendments returned by the County Board and correcting the typographical error.

Attachment: Memo\_Adopting revised local amendments to the 2015 IRC Amendments (5370 : 2015 International Residential Code with Revised



Service Door Requirement

The County began requiring one service door to be installed when constructing detached or attached garages under 1983 CABO adopted by the County in 1983. The requirement has been in place and is largely accepted by owners and the construction community for its health and life safety benefits. The service door provides egress directly to the exterior in the event that the overhead garage door becomes inoperable through power or mechanical failure. The door becomes increasingly beneficial if the entry door to the residence is not functional or its use is overly hazardous due to fire or related emergency.

The installation of a service door does impose additional costs to owners and contractors. A 3'-0" x 6'-8" steel service door retails for approximately \$265.00, installation costs can be approximated based upon labor and miscellaneous materials, \$250.00, netting an approximated cost of the service door installation at \$515.

The requirement has been required for new construction and reconstruction only. Renovation work does not trigger the requirement. The construction costs per square foot of a new single family residence of standard construction is between \$120-\$150/sf. The construction cost of a 2250-sf residence would be range between \$270,000 and \$337,500. The cost of installing a service door to meet this requirement represents 0.15% to 0.19% of the total cost of construction.

Chapter 11 Energy Efficiency Requirement

The State of Illinois requires all municipalities and counties to adopt the Illinois Energy Conservation Code. Section 600.400[a] of the Illinois Energy Conservation Code identifies the 2015 International Energy Conservation Code as the applicable standard for Residential Buildings. The State Statute precludes the county from enforcing energy efficient building standards for residential construction in a manner that is either less or more stringent than the state standards. The County Board adopted the Illinois Energy Conservation Code, on May 5, 2015 via County Board Ordinance O-201505-10-016.

The County's local amendments to the 2015 International Residential Code should direct property owners and builders to the correct energy efficiency standards. Not doing so will result in construction projects being designed or constructed to the incorrect standards. If the County Board disagrees with any standards contained in the Illinois Energy Conservation Code, the Board should direct staff to request that the state consider an amendment to its code.

Appendix F

The local amendment should properly indicate that Appendix F "PASSIVE RADON GAS CONTROLS" is added (not deleted) as part of the International Residential Code.

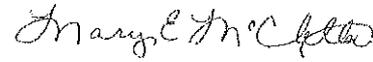
Attachment: Memo\_Adopting revised local amendments to the 2015 IRC Amendments (5370 : 2015 International Residential Code with Revised

STATE OF ILLINOIS        )  
                                  ) SS  
COUNTY OF MCHENRY    )

17.2 A

I, Mary E. McClellan, County Clerk within and for said County and State aforesaid, do hereby certify the attached to be a true and complete copy of Ordinance O-201610-10-036 Adopting the 2015 International Residential Code with revised local amendments and repealing Ordinance O-201608-10-027

WHEREOF I have hereunto subscribed my hand and affixed the official seal of said County, at my office in Woodstock, Illinois this 18th day of October, 2016

  
McHenry County Clerk