2015

Northwest Illinois Regional Building Code

Scope:

The *Northwest Regional Building Code* is a collaborative effort to standardize building, electrical, and plumbing codes in the Northwest Illinois region. The permit applicant shall consult the applicable code, and these amendments prior to commencing with a construction project or process noted in the Codes. The permit applicant should also check with the local jurisdiction for any existing or specific ordinances that may supersede or be contrary to these amendments.

2015 International Residential Code

(1) Table R301 2 (1) is deleted and replaced as follows:

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

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY[f]	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP[e]	ICE BARRIER UNDERLAYMENT REQUIRED[h]	FLOOD HAZARD[g]	AIR FREEZING INDEX[i]	MEAN ANNUAL TEMP[j]
	Speed[d] (mph)	Topographic effects[k]	Special wind region[l]	Wind-borne debris zone[m]		Weathering[a]	Frost line depth[b]	Termite[c]					
30	115	NO	NO	NO	A	SEVERE	42"	MOD/ HEAVY	-4 DEG F	YES	SEE LOCAL	SEE TABLE	SEE TABLE

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 "negligible," "moderate" or "severe" for concrete as determined from 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 129, 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.

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)]. 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 1/2-percent values for winter from Appendix C of the *International Plumbing Code*. Deviations from the Appendix C 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 the currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having *jurisdiction*, as amended.

h. In accordance with Sections R905.1.2, R905.2.7.1, R905.3.1, R905.3.1.1, R905.4.3.1, R905.5.3.1 and R905.7.3.1, 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)."

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)."

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.

l. In accordance with Figure R301.2(4), where there is local historical data documenting unusual wind conditions, the *jurisdiction* shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.

m. In accordance with Section R301.2.1.2.1, the *jurisdiction* shall indicate the wind-borne debris wind zone(s). Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.

(2) Section 313 is deleted and replaced as follows:

Section R313

Automatic Fire Sprinkler Systems

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in *townhouses*.

Exceptions:

1. An automatic residential fire sprinkler system shall not be required where *additions* or *alterations* are made to existing *townhouses* that do not have an automatic residential fire sprinkler system installed, unless the installation of automatic fire sprinklers is required by local municipal ordinance or ordinance of the local fire protection district.

R313.1.1 Design and Installation. Automatic residential fire sprinkler systems for *townhouses* shall be designed and installed in accordance with the current edition of The Illinois Plumbing Code and NFPA 13 D.

R 313.1.2 Other Code Requirements. All structures built without automatic fire sprinkler systems shall comply with all code requirements of the *International Residential Code* for non-sprinklered construction.

R313.2 One- and two-family dwellings automatic fire systems. An automatic residential fire sprinkler system shall not be required to be installed in one- and two-family *dwellings*, including additions and alterations to such dwellings.

Exceptions:

1. This provision shall not apply where the installation of automatic fire sprinklers is required by local municipal ordinance or ordinance of the local fire protection district.

R313.2.1 Design and Installation. Automatic residential fire sprinkler systems for one- and two-family *dwellings* shall be designed and installed in accordance with the current edition of The Illinois Plumbing Code and NFPA 13 D.

R 313.2.2 Other Code Requirements. All structures built without automatic fire sprinkler systems shall comply with all code requirements of the *International Residential Code* for non-sprinklered construction.

(3) Section R322.1.5 is amended as follows:

R322.1.5 Lowest floor. The lowest floor shall be the floor of the lowest enclosed area, including basement.

(4) Section R323.2.1 (1 and 4) amended to read as follows:

R322.2.1 Elevation requirements.

1. Buildings and structures in flood hazard areas not designated as Coastal A Zones, shall have the lowest floors elevated 12" (30.5 cm) above the design flood elevation.

4. Basement floors that are below *grade* on all sides shall be elevated 12" (30.5 cm) above the design flood elevation.

(2) Section R322.2.2 is deleted in its entirety

(3) Section R403.3.5 is added as follows:

(5) Section R322.2.2 is deleted in its entirety.

R322.2.2 Enclosed area below design flood elevation.

(6) Section R403.3.5 is amended as follows:

R403.3.5 Detached garages or sheds. The code official may approve a continuous slab on ground foundations which are located where adequate subsoil drainage frost protection is provided and the following conditions are met:

1. Structure is non-occupiable, unconditioned, detached, of Use Groups S or U, does not contain any masonry and does not exceed (1) one story or 25 feet (7.62 m) in height.
2. Slab/foundation may not bear on peats, organic or other questionable soils.
3. Slab thickness is not less than 4" with a minimum of 6" x 6" 10#/10# WWF reinforcing.
4. The perimeter of the slab turns down to a minimum of 12" below grade and is reinforced with a minimum of 1 continuous [minimum 12" tied laps] #4 steel reinforcing bar.
5. A minimum of 4 inches of screened and washed gravel or crushed stone under entire slab. The grade surrounding the building shall fall a minimum of 6" within the first 10'.

(7) Section R1005.1 is amended as follows:

R1005.1 Listing and clearances. Factory-built chimneys shall be *listed* and *labeled* and shall be installed and terminated in accordance with the manufacturer's installation instruction. Where, upon inspection, listing

specifications are not present or visible, combustible materials within 18 inches of the chimney shall be protected with 5/8" Type X gypsum board or equivalent.

(8) Chapter 11 ENERGY EFFICIENCY is deleted and replaced as follows:

CHAPTER 11 ENERGY EFFICIENCY
Section 1101 GENERAL

1101.1 SCOPE. The provisions of the Illinois Efficient Buildings Act adopts the International Energy Conservation Code with State of Illinois amendments.

(9) Section N1101.4 (R102.1.1) is amended as follows:

N1101.4 (R102.1.1) Above code programs. Compliance shall be demonstrated by meeting the requirements of the current *International Energy Conservation Code* as mandated by the State of Illinois.

(10) Section M1201.2 is amended as follows:

M1201.2 Application. In addition to the general administration requirements of Chapter 1, the administrative provisions of this chapter shall also apply to the mechanical requirements of Chapters 12 through 24, and the Authority Having Jurisdiction (AHJ).

(11) Section M1201.3 is added as follows:

M1201.3 Licenses and permits. Mechanical licenses and permits shall be obtained in accordance with Chapter 1 and the 2015 International Mechanical Code as amended.

Exception:
1. Jurisdiction with no mechanical licensing requirements.

(12) Section M1203 is added as follows:

M1203 Heating Requirements

M1203.1 Heating Required. Heat/supply air is required in all rooms (including bathrooms).

Exception:
1. Unoccupied storage or other unoccupied spaces.

(13) Section M1401.3.1 is added as follows:

1401.3.1 Calculations Required. The permit applicant shall submit a room by room Manual J, S, and D calculations for all HVAC equipment and/or replacement prior to permit issuance.

(14) Section M1401.6 is added as follows:

M1401.6 Furnace repair. The use of furnace cement or welding for the repair of a furnace heat exchanger is prohibited.

(15) Section M1408 Vented floor furnaces is deleted.

(16) Section M1602.2 - 4. is amended as follows:

4. Return air openings for HVAC systems for all dwelling units, including manufactured and modular homes shall comply with all of the following:
(Remainder unchanged)

(17) G2414.10.1 is added as follows:

G2414.10.1 Welded connections required. All gas lines two and one half inches (2 1/2") inside diameter size or larger shall be of welded construction between the consumer's connection to the gas meter and the shut-off valve located immediately adjacent to any gas burning unit. All gas fuel lines carrying gas at one (1) P.S.I.G. or greater, shall be of welded construction between the consumer's connection to the gas meter and the shut-off valve located immediately adjacent to any gas burning unit.

(18) Section G2415.12 404.12 is amended as follows:

G2415.12 (404.12) Minimum burial depth. Underground piping systems shall be installed a minimum depth of 12 (30.5mm) inches below grade except as provided for in Section G2415.12.1. Piping systems and electrical wiring shall be separated a minimum of 12 inches horizontal when sharing the same trench. Burial depth may be less than 12 inches as provided for in Section 404.12.1.

(19) Section G2445 (621) Unvented room heaters is deleted.

(20) Section P2501.1 is amended as follows:

P2501.1 Scope. The provisions of this chapter and the Illinois Plumbing Code including local amendments shall govern the installation of plumbing. All work shall be performed by State of Illinois licensed plumbers in accordance with the Plumbing Licensing Act.

(21) Appendix E "MANUFACTURED HOUSING USED AS DWELLINGS" is added as part of this Code.

(22) Appendix F "PASSIVE RADON GAS CONTROLS" is added as part of this Code.

(23) Appendix G "PIPING STANDARDS FOR VARIOUS APPLICATIONS" is added as part of this Code.

(24) Appendix H "PATIO COVERS" is added as part of this Code.

(25) Appendix J "EXISTING BUILDINGS AND STRUCTURES" is added as part of this Code.

(26) Appendix M "HOME DAY CARE—R-3 OCCUPANCY" is added as part of this Code.

2015 International Building Code

(1) Section 901.1.1 is added as follows:

Section 901.1.1 International Fire Code. The requirements of this chapter shall include any additional amendments to the 2015 International Fire Code.

(2) Chapter 11 ACCESSIBILITTY is deleted and replaced as follows:

CHAPTER 11 ACCESSIBILITY
Section 1101 GENERAL

1101.1 SCOPE. The provisions of the Illinois Accessibility Code shall control the design and construction of facilities for accessibility for individuals with disabilities.

(3) Chapter 13 ENERGY EFFICIENCY is deleted and replaced as follows:

CHAPTER 13 ENERGY EFFICIENCY
Section 1301 GENERAL

1301.1 SCOPE. The provisions of the Illinois Efficient Buildings Act adopts the International Energy Conservation Code with State of Illinois amendments.

(4) Section 1806.2 Exception is amended as follows by adding the following exception:

Section 1806.2 Presumptive load-bearing values.

Exceptions:

1. A presumptive load-bearing capacity shall be permitted to be used where the *building official* deems the load-bearing capacity of mud, organic silt or unprepared fill is adequate for the support of lightweight or temporary structures.

2. Depending on the use, the Code Official may accept designs based upon an assumed soil bearing capacity of 1500 psf provided all of the following conditions are met:

   a. The building height does not exceed one (1) story or 20 feet in buildings which contain masonry or concrete walls.
   b. The building height does not exceed one (1) story or 25 feet in buildings which do not contain any masonry or concrete walls.
   c. The foundation is shallow and the building does not include a basement.
   d. The building seismic use group is not Category II or III as listed in Table 1604.5
   e. Footings bear on virgin soil that is not questionable including but not limited to plastic, liquefied, highly sensitive clays, weakly cemented, peats or organic and expansive materials.

Prior to issuance of a building permit, a statement in accordance with Section 1704.1.1 shall be submitted by the permit applicant including the name of the design professional or qualified soils engineer who will be conducting the inspection.

Following excavations and prior to pouring of foundations, a site inspection and written report shall be prepared by a licensed design professional or qualified soils engineer to indicate that no questionable soils have been discovered. A copy of inspection report shall be submitted to the code official prior to inspection listed in Section 109.3.1.

(5) Chapter 29 Water Supply and Distribution is deleted and replaced as follows:

Chapter 29 WATER SUPPLY AND DISTRIBUTION

Section 2901
General

2901.1 Plumbing. Plumbing for new and existing structures shall comply with the Illinois Plumbing Code.

2901.2 Stormwater Drainage. Stormwater drainage shall comply with Chapter 11 of the 2015 International Plumbing Code

(5) Appendix F "RODENTPROOFING" is added as part of this Code.

(6) Appendix G "FLOOD-RESISTANT CONSTRUCTION" is added as part of this Code.

(7) Appendix I "PATIO COVERS" is added as part of this Code.

2015 International Existing Building Code

(1) Section 410 is deleted in its entirety and replaced with the following:

SECTION 410

ACCESSIBILITY

410.1 General. Accessibility for existing buildings shall comply with the applicable provisions of the Illinois Accessibility Code.

(2) Section 705 is deleted and replaced with the following:

SECTION 705

ACCESSIBILITY

705.1 General. A building, facility or element that is altered shall comply with the applicable provisions of the Illinois Accessibility Code.

(3) Section 806 is deleted and replaced as follows:

SECTION 806

ACCESSIBILITY

806.1 General. A building, facility or element that is altered shall comply with the applicable provisions of the Illinois Accessibility Code.

(4) Section 906 is deleted and replaced with the following:

SECTION 906

ACCESSIBILITY

906.1 General. A building, facility or element that is altered shall comply with the applicable provisions of the Illinois Accessibility Code.

(5) Section 1012.8 is deleted and replaced with the following:

1012.8 Accessibility. A building, facility or element that is undergoing a change of occupancy shall comply with the applicable provisions of the Illinois Accessibility Code.

(6) Section 1105 is deleted and replaced with the following:

SECTION 1105

ACCESSIBILITY

1105.1 General. Additions shall comply with the applicable provisions of the Illinois Accessibility Code.

(7) Section 1204 is deleted and replaced with the following:

SECTION 1204

ACCESSIBILITY

1204.1 General. A building, facility or element that is altered shall comply with the applicable provisions of the Illinois Accessibility Code.

(8) Section 1205.15 is deleted and replaced with the following:

1205.15 Accessibility. A building, facility or element that is undergoing a change of occupancy shall comply with the applicable provisions of the Illinois Accessibility Code.

1401.2 is amended as follows:

1401.2 Applicability. Structures existing prior to 1985, (rest of section remains unchanged)

2015 International Fire Code

(1) Section 307.1.1 is amended as follows:

307.1.1 Prohibited open burning. Open burning shall be prohibited.

Exceptions:

1. Where approved by the local jurisdiction
2. Un-incorporated areas with a burn ordinance

(2) Section 307.1.2 is added as follows:

307.4.4 Materials. Fuel for all recreational fires and bonfires shall consist only of seasoned dry firewood and other material approved by the fire code official. The fire shall be ignited with a small quantity of paper. The fire shall not be utilized for waste disposal purposes, and the fuel shall be chosen to minimize the generation of air contaminants.

(3) Section 307.4.1.1 is added as follows:

307.4.1.1 Permit. All permits, required by section 105.6.31, shall be requested by and issued to the owner of the land upon which the bonfire is to be kindled.

(4) Section 505.3 is added as follows:

505.3 Strip malls. When a strip mall has multiple tenant spaces and a dedicated sprinkler control/fire alarm room, the room shall have its own street address.

(5) Section 901.4.2.1 is added as follows:

901.4.2.1 Discontinuance of use. All non-required fire protection systems shall be approved for discontinuance by the fire code official. All discontinued equipment and devices, such as pull stations, nozzles, detectors, sprinklers, sensors, panels and hose connections shall be removed so as not to give a false indication that the structure, area or space is protected.

(6) Section 903.2.11.1 item #3 is added as follows:

903.2.11.1 Stories without openings.

3. An interior stairway that conforms to requirements of Section 1005 with a fire separation assembly enclosure of not less than 1 hour, which has a door directly to the exterior and the stairway does not connect more than 2 stories. The basement or windowless story floor level shall be 15 feet (4572 mm) or less vertically from the exterior door threshold level and the door threshold shall be within 10 feet (3048 mm) of grade. Interior stair doors or openings shall be provided in each 50 linear feet (15240 mm) or fraction thereof on at least one side of the basement or windowless story.

(7) Section 903.3.9 is added as follows:

903.3.9 Interior control valves. The fire code official may require interior control valves to be installed to isolate occupancies that share a fire suppression system. Where valves are installed in a system, valves shall be supervised or locked in the "open" position.

(8) Section 903.3.10 is added as follows:

903.3.10 Exterior Control valves: All exterior fire suppression control valves shall have an exterior Indicator Valve (PIV or WPIV) provided in a location approved by the fire code official. Valves shall be locked in the "open position".

(9) 903.4.2.1 is added as follows:

903.4.2.1 Strip malls. Strip malls shall provide individual tenant space notification to comply with IFC 907.1

(10) 907.1.2.1 is added as follows:

907.1.2.1 Qualifications. Shop drawings for fire alarm systems shall be prepared by one of the following:

(1) An Illinois licensed Professional Engineer with formal training in fire alarm layout/design.

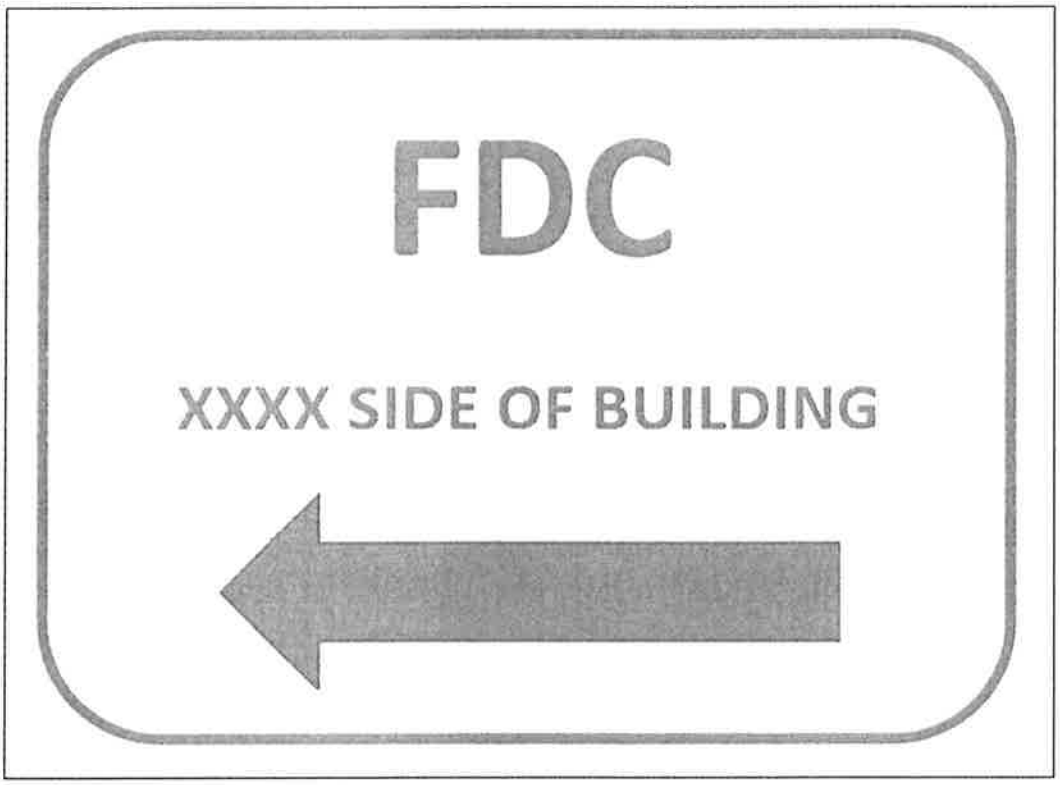
(2) A holder of a valid NICET level III or higher certification in Fire Alarm System Layout, who is either employed by or hired by the fire alarm installation contractor.

(11) 907.1.4 is added as follows:

907.1.4 Strip malls. Fire alarm systems shall be capable of identifying a fire alarm device activation or waterflow device activation in each tenant space. An audio/visual device shall be provided at the front entrance to each tenant space to identify the location of an activated device(s).

(12) Section 912.2.2 is added as follows:

912.2.2 Existing buildings. On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an *approved* sign mounted on the street front or on the side of the building. **Such sign shall be reflective and constructed of material designed to resist weathering. The sign shall have a white background with all lettering and graphics red in color.** Such sign shall have the letters "FDC" not less than 6 inches (152 mm) high and words in letters not less than 2 inches (51 mm) high or an arrow to indicate the location **not less than 3 inches (75 mm) high**. Such signs shall be subject to the approval of the fire code official.



(13) Section 912.6 is amended as follows:

912.6 Backflow protection. A water supply serving a fire suppression system shall be protected against backflow with a Reduced Pressure Zone (RPZ) backflow device and comply with the requirements of *Illinois Plumbing Code.*

(14) Section 5601.2.2 is amended as follows:

5601.2.2 Sale and retail display. Persons shall not construct a retail display nor offer for sale *explosives, explosive materials*, or fireworks (1.3G or 1.4G).

(15) Section 5601.1 is amended as follows:

5601.1 General. Outdoor fireworks displays, use of pyrotechnics before a *proximate audience* and pyrotechnic special effects in motion picture, television, theatrical and group entertainments productions shall comply with Section 5608.2 through 5608.10 and NFPA 1123, 1126 and all requirements of the Illinois Office of the State Fire Marshal (OSFM).

(16) Appendix B "Fire-Flow Requirements for Buildings" is added as part of this Code.

(17) Appendix C "Fire Hydrant Locations and Distribution" is added as part of this Code.

(18) Appendix D "Fire Apparatus Roads" is added as part of this Code.

(19) Appendix F "Hazard Ranking" is added as part of this Code.

(20) Appendix H "Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) Instructions" is added as part of this Code.

2015 International Mechanical Code

(1) Section 309.1 is amended as follows:

309.1 Space-heating systems. Interior spaces intended for human occupancy shall be provided with active heating systems capable of maintaining a minimum indoor temperature of 68°F (20°C) at a point 3 feet (914 mm) above floor on the design heating day. The installation of portable space heaters shall not be used to achieve compliance with this section.

Exception: Interior spaces where the primary purpose is not associated with human comfort.

(2) Section 508.1 is amended as follows:

508.1 Makeup air. *Makeup air* shall be supplied during the operation of commercial kitchen exhaust systems that are provided for *commercial cooking appliances.* The amount of *makeup air* supplied to the building from all sources shall be approximately equal to the amount of *exhaust air* for all exhaust systems for the building. The *makeup air* shall not reduce the effectiveness of the exhaust system. *Makeup air* shall be provided by mechanical means. Mechanical *makeup air* systems shall be automatically controlled to start and operate simultaneously with the exhaust system. *Makeup air* intake opening locations shall comply with Section 401.4.

(3) Section 603.6.1.1 is amended as follows:

603.6.1.1 Duct length. Flexible air ducts shall ~~not~~ be limited in length to 8 feet overall from termination point and contain no more than the equivalent of one 90 degree turn with no offset greater than 45 degrees. All flexible air ducts shall be of the insulated type. Flexible ducts shall only be used for branches.

(4) Section 603.6.2.1 is amended as follows:

603.6.2.1 Connector length. Flexible air connectors shall be limited in length to ~~14 feet~~ 8 feet overall from termination point and contain no more than the equivalent of one 90 degree turn with no offset greater than 45 degrees. All flexible air connectors shall be of the insulated type. Flexible ducts shall only be used for branches.

(5) Section 801.2.2 is added as follows:

801.2.2 Fuel burning appliances. PVC vent piping for a fuel burning appliance that is located in a concealed space shall be marked/labeled every 36 inches so as to distinguish it from plumbing or other piping.

(6) Section 918.7 is added as follows:

918.7 Furnace cement or welding. The use of furnace cement or welding for the repair of furnace heat exchangers is prohibited.

(7) Section 929 is added as follows:

SECTION 929
UNVENTED ROOM HEATERS
929.1 General. Unvented room heaters and/or fireplaces are prohibited

(8) Section 1002.1.1 is added as follows:

1002.1.1 Installation. Water heaters greater than 5 gallons shall not be elevated more than 18" above finished floor (AFF). When elevated, the appliance shall be secured in an approved manner.

(9) Appendix A "Chimney Connector Pass-Throughs" is added as part of this Code.

2015 International Fuel Gas Code

(1) Section 402.6 is amended as follows:

402.6 Maximum Design Operating Pressure. The maximum design operating pressure for piping systems 1 pound per square inch gauge (psig) (34kPa gauge) or greater shall be welded.

(2) Section 403.10.4, 1 is amended as follows:

1. Threaded fittings in sizes larger than 2 inches shall not be used.

(3) Section 404.2.1 is added as follows:

404.2.1 Prohibited use. Corrugated stainless steel tubing (CSST) shall not be installed outdoors.

(4) Section 404.3.1 is added as follows:

404.3.1 Prohibited Use Underground. Corrugated stainless steel tubing (CSST) shall not be used underground.

(5) Section 404.9.1 is added as follows:

404.9.1 Roof locations. Gas piping installed on roof surfaces shall be painted yellow. Paint and application method shall be approved by the code official.

(6) Section404.13.1 is added as follows:

404.13.1 Separation. Exterior gas piping and electric lines underground shall be horizontally separated a minimum of 12" (304mm).

(7) Section 409.4.1 is added as follows:

409.4.1 Service Valves. Service valves installed within 24" (61 cm) of the regulator, shall have no more than three screwed connections.

(8) Section 503.5.5 - 4 is replaced as follows:

4. For sizing a chimney venting system connected to appliances using mechanical draft, the effective area of the chimney flue shall not be greater than two sizes over the effective area required for the appliances.

(9) Appendix A "SIZING AND CAPACITIES OF GAS PIPING" is added as part of this Code

(10) Appendix B "SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS (IFGS)" is added as part of this Code.

(11) Appendix C "EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS (IFGS)"is added as part of this Code.

(12) Appendix D "RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION (IFGS)"is added as part of this Code.

NFPA 70: National Electrical Code, 2014 Edition

(1) Article 210.19(A) (5) shall be added as follows:

210.19 Conductors—Minimum Ampacity and Size. (A) Branch Circuits Not More Than 600 Volts. (5) Microwave Circuits. The wiring used to supply power to a permanently installed microwave oven shall consist of a dedicated circuit installed with 12 AWG or larger conductors.

(2) Article 210.70(A) (1) shall be amended as follows:

210.70 Lighting Outlets Required. (A) Dwelling Units. (1) Habitable rooms. At least one wall switch-controlled lighting outlet shall be installed in every habitable room and bathroom. The switch shall be installed at a point of entry to the room. The main lighting outlet in each room may not be fed from the load side of a GFCI device. Unless 210.70(A)(1) Exception No. 1 is applied, provision shall be made in the wiring of each ceiling box of all habitable rooms (excluding dining rooms) for a luminaire to operate independently from a fan.

(3) Article 210.70(A) (3) shall be deleted and replaced as follows:

210.70 Lighting Outlets Required. (A) Dwelling Units. (3) Storage or Equipment Spaces. For accessible attics, underfloor spaces, utility rooms, each area of an unfinished basement, and equipment spaces, at least one lighting outlet containing a switch or controlled by a wall switch shall be installed in such spaces. At least one point of control shall be at the usual point of entry to these spaces. A lighting outlet shall be provided within six feet of any equipment requiring servicing.

(4) Article 210.70(C) shall be amended as follows:

210.70 Lighting Outlets Required. (C) Other Than Dwelling Units. For accessible attics and underfloor spaces, at least one lighting outlet containing a switch or controlled by a wall switch shall be installed in such spaces. At least one point of control shall be at the usual point of entry to these spaces. A lighting outlet shall be provided within six feet of any equipment requiring servicing.

(5) Article 230.11 shall be added as follows:

230.11 Service Modifications. When any part of the service entrance equipment, branch circuit panel, or service conductor is replaced, modified, or required to be repaired, the service in its entirety must be installed to comply with the current codes. The main branch circuit panel shall be at least 16 spaces.

Exception: Replacement or addition of a branch-circuit overcurrent protective device

(6) Article 230.43 shall be deleted and replaced as follows:

230.43 Wiring Methods for 1000 Volts, Nominal, or Less. Service-entrance conductors and service laterals overhead shall be installed in accordance with the applicable requirements of this *Code* covering the type of wiring method used and shall be limited to rigid metal conduit (RMC) or intermediate metal conduit (IMC). Electrical metallic tubing (EMT) may be used inside a building or structure.

(7) Article 230.70 (A) (1) shall be deleted and replaced as follows:

230.70 General. (A) Location. (1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location, either outside of a building or structure, or inside at or within 5 feet of the meter enclosure.

(8) Article 250.52 shall be amended as follows:

Article 250.52 Grounding electrodes. A concrete-encased electrode that complies with 250.52(A) (3) will be required in all new construction. (Remainder of article unchanged)

(9) Article 300.1(D) shall be added as follows:

300.1 Scope. (D) Mixed Use and Occupancy Buildings. The entire mixed use and occupancy building shall be wired by the most restrictive code.

(10) Article 300.5 (D) (3) shall be amended as follows:

300.5 Underground Installations. (D) Protection from Damage (3) Service Conductors. Underground service conductors shall be installed in galvanized or stainless steel rigid metal conduit (RMC) or intermediate metal conduit (IMC). Underground service conductors that are not subject to physical damage may be installed in Schedule 80 rigid electrical nonmetallic conduit (PVC), protected by galvanized or stainless steel rigid conduit (RMC) or intermediate metal conduit (IMC) to a minimum of 450 mm (18 inches) below grade. No exposed nonmetallic conduit shall be allowed. Underground service conductors that are not encased in concrete and that are buried 450 mm (18 inches) or more below grade shall have their location identified by a warning ribbon that is placed in the trench at least 300 mm (12 inches) above the underground installation.

(11) Article 300.11(A) (3) shall be added as follows:

300.11 Securing and Supporting. (A) Secured in Place. (3) Tie Wire. Tie wire shall not be allowed as a sole means of supporting or securing conduit or cable in above ground applications.

(12) Article 300.13(C) shall be added as follows:

300.13 Mechanical and Electrical Continuity--Conductors. (C) Multiple Conductors. A device designed to be used for switching or as a receptacle may not be used to provide electrical continuity to any circuit conductor.

(13) Article 300.13(D) shall be added as follows:

300.13 Mechanical and Electrical Continuity-Conductors. (D) Push-Type Clamping Devices.

No push-type or clamp-type connections for splices or for terminating to devices will be allowed unless the wire connection is secured with a screw or crimping tool.

Exception 1: Disconnecting means for ballasts.

Exception 2: Factory installed terminations in luminaires.

(14) Article 310.106(B) shall be deleted and replaced as follows:

310.106 Conductors. (B) Conductor Material. Conductors in this article shall be aluminum, copper-clad aluminum, or copper unless otherwise specified. Aluminum and copper-clad aluminum conductors shall be prohibited to be installed in sizes smaller than 4 AWG. Stranded aluminum conductors 4 AWG through 1000 kcmil marked as Type RHH, RHW, XHHW, THW, THHW, THWN, THHN, service-entrance Type SE Style U and SE Style R shall be made of an AA-8000 series electrical grade aluminum alloy conductor material.

(15) Article 314.27 (A) (2) shall be amended as follows:

314.27 Outlet Boxes. (A) Boxes at Luminaire or Lampholder Outlets. (2) Ceiling Outlets. At every outlet used exclusively for lighting, the box shall be designed or installed so that a luminaire or lampholder may be attached. Boxes shall be required to support a luminaire weighing a minimum of 23 kg (50lb). A luminaire that weighs more than 23 kg (50lb) shall be supported independently of the outlet box, unless the outlet box is listed and marked on the interior of the box to indicate the maximum weight the box shall be permitted to support. In all habitable rooms with a ceiling fixture (other than recessed fixtures) in a location acceptable for a ceiling-suspended (paddle) fan in single-family, two-family or multi-family dwellings, a box rated for ceiling fan support shall be installed.

(16) Article 334.10 including (1) through (5) shall be deleted and replaced as follows:

334.10 Uses Permitted. Type NM, Type NMC, and Type NMS cables shall be permitted to be used only in the following: R-2, R-3, and R-4 structures (as defined by the International Building Code) not exceeding three floors above grade.

(17) Article 334.15(D) shall be added as follows:

334.15 Exposed Work. (D) All Unfinished Areas. Any exposed cable 7 feet (213.36cm) or closer to the floor must be protected with a durable building material or sleeved in an approved manner.

(18) Article 334.40 (B) shall be deleted in part:

334.40 Boxes and Fittings. (B) Devices of Insulating Material. Delete "and for repair wiring in existing buildings where the cable is concealed."

(19) Article 410.36(B) shall be amended as follows:

410.36 Means of Support. (B) Suspended Ceilings. Framing members of suspended ceiling systems used to support luminaires shall be securely fastened to each other and shall be securely attached to the building structure at appropriate intervals. Luminaires smaller than 610 mm by 610 mm (24 inches by 24 inches) shall be securely fastened to the ceiling framing member by mechanical means such as bolts, screws, or rivets. Listed clips identified for the use with the type of ceiling framing member(s) and luminaire(s) shall also be permitted. Fluorescent fixtures 610 mm by 610 mm (24 inches by 24 inches) or larger shall be supported independently of the ceiling grid by at least two wires on opposite corners of the fixture. The same size (or larger) wire used to support the ceiling system shall be used to support the fixture, but in no case shall the wire size be smaller than size No. 12 AWG steel.

The Illinois State Plumbing Code is hereby amended as follows:

(1) Section 890.120 is amended as follows:

Section 890.120 Definitions

"Quick Closing Valves": A valve or faucet that closes automatically when released or one that has fast action closing, or one that closes with (1/2) one half turn or less.

(2) Section 890.180 is amended by adding a) 1) and 2) as follows:

Section 890.180 Sewer and Water Pipe Installations

a)

1) Sewer trenching and/or tunneling not to exceed ten feet (10') total distance.

2) Ditches shall be left accessible for inspection of sewer and/or water piping.

(3) Section 890.420 is amended by as follows:

Section 890.420 Pipe Cleanouts

a) Location of Cleanouts within a Building Drain or Building Sewer.

1) Cleanouts shall be not more than 50 feet apart, including the developed length of the cleanout pipe, in horizontal drainage lines of four (4) inches or less size. Cleanouts shall be not more than 100 feet apart, including the developed length of the cleanout pipe, in horizontal drainage lines of over four (4) inches to ten (10) inches in size. Cleanouts shall not be more than 150 feet apart, including the developed length of the cleanout pipe, in horizontal drainage lines exceeding ten (10) inches in size. For underground drainage lines exceeding ten (10) inches in size, manholes instead of cleanouts shall be provided and shall be located at intervals of not more than 150 feet.

(4) Section 890.510 is amended by adding a) 7) as follows:

Section 890.510 Grease Interceptor Requirements

a)

7) All new or altered installations serving institutions or commercial establishments in which grease, fats, culinary oil, or similar waste products from kitchens or food processing areas, or in which

grease, fats, or culinary oils are wasted in connection with utensil, vat, dish, or floor cleaning processes shall install grease interceptors. All waste lines and drains carrying culinary oil, grease, or fats in the above type establishments shall be directed to one or more interceptors before connecting to the plumbing system. If interceptors are located outside the building, they shall be accessible for maintenance purposes within ten (10) feet of the building.

(5) Section 890.750 is amended by adding c), d), and e) as follows:

Section 890.750 Hydro Massage/Whirlpool Bathtubs

c) Manufacturer's instructions. The product shall be installed in accordance with the manufacturer's installation instructions.

d) Access to pump. Access shall be provided to circulation pumps in accordance with the fixture or pump manufacturer's instructions. Where the manufacturer's instructions do not specify the location and minimum size of field-fabricated access openings, and where pumps are located more than 2 feet (609mm) from the access opening, an 18-inch by 18-inch (457mm by 457mm) minimum sized opening shall be installed. A door or panel shall be permitted to close the opening. In all cases, the access opening shall be unobstructed and the size necessary to permit the removal and replacement of the circulation pump.

e) Leak testing. Leak testing and pump operation shall be performed in accordance with the manufacturer's installation instructions.

(6) Section 890.1150) is amended by adding a) 5) as follows:

Section 890.1150 Water Service Pipe Installation

a)

5) Combination services (Fire and Domestic) shall split outside the building with an individual stop on the domestic service located a minimum of 5 feet (152.4cm) from the building.

(7) Section 890.1200 is amended by adding a) 1) as follows:

Section 890.1200 Water Service Sizing

a)

1) In existing structures which have a ¾" (1.905cm) water service and the service is being replaced, ¾" pipe may be used provided that the building's water supply fixture unit count (WSFU) does not exceed Appendix A Table N limits.

(8) Section 890.1210 is amended by adding j) as follows:

Section 890.1210 Design of a Building Water Distribution System

j) All new family dwellings shall have provisions made for soft water hookup, with three valves for bypass, except for outside lawn hydrants and cold water in kitchen sink with proper bypass. Connections and provisions shall be made of properly sized and vented trap within five feet (5') distance of water softener. Bypass connection for future use shall be capped. Exceptions must be requested in writing to the Board of Appeals and will be granted only after inspection has been conducted.

(9) Section 890.1430 is amended by adding d) as follows:

Section 890.1430 Stack Vents, Vent Stacks, Main Vents

d) Minimum Size of Stack Vent. Any structure in which a building drain is installed/repaired shall have each stack vent or vent stack carried full size to the roof and shall increase to a minimum of four (4) inches, 12 inches below the roof line and 12 inches above the roof line.

(10) Section 890. APPENDIX A - Plumbing Materials, Equipment, Use Restrictions and Applicable Standards is amended as follows:

Section 890. TABLE A – Approved Building Drainage/Vent Pipe.

1) Acrylonitrile Butadiene Styrene (ABS) Pipe shall not be permitted.

Section 890. TABLE A – Approved materials for Building Sewer

1) Acrylonitrile Butadiene Styrene (ABS) Pipe shall not be permitted.

Section 890. TABLE A - Approved Materials for Water Service Pipe.

1) Acrylonitrile Butadiene Styrene (ABS) Pipe shall not be permitted.

7) Galvanized Steel Pipe shall not be permitted.

(11) Section 890. TABLE B – Minimum Number of Plumbing Fixtures is amended as follows:

Section 890. TABLE B - Minimum Number of Plumbing Fixtures

All facilities for employee use

Other fixtures – 1 Service sink per floor