The 2006 International Residential Code

The Village of Richton Park has adopted the International Residential Code, 2006 Edition, with the following amendments. Copies of the International Residential Code are available for viewing at the Building Department.

Section 2. The following sections are hereby revised:
Any reference to the International Plumbing Code shall be replaced with Illinois Plumbing Code, current edition.
Any reference to the International Electrical Code shall be replaced with 2005 National Electric Code
Any reference to ICC/ANSI A117.1 shall be replaced with Illinois Accessibility Code, current edition.

*R101.1 Title. **Insert**…Village of Richton Park

Add +R101.4 Workmanship. All work shall be constructed, installed and completed in a workmanlike and acceptable manner so as to secure the results intended by this code. Where recognized standards of workmanship have not been established, they shall be applied to the work being performed. Where standards of workmanship have not been specifically established, the rule of reasonable expectations of a reasonable person shall apply.
The code lacks language for workmanship. Work can be installed poorly but still meet code requirements. This language will provide residents protection from poor workmanship.

R102.5 Appendices. **Add** Appendix A Sizing and Capacities of Gas Piping, Appendix B Sizing of Venting Systems Serving Appliances Equipped with Draft Hood, Category I Appliances and Appliances Listed for Use with Type B Vents, Appendix C Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems, and Appendix D Recommended Procedure for Safety Inspection of Existing Appliance Installation, Appendix G Swimming Pools, Spas and Hot Tubs, Appendix H Patio Covers, Appendix J Existing Buildings and Structures, and Appendix K Sound Transmission are specifically adopted by Village of Richton Park and shall apply.
Adds context for items reviewed in field by inspectors.

*R105.2 Work Exempt form permit.
#1 **Replace** 120 with 60
#2 **Delete**
#3 **Delete**
#4 **Delete**
#5 **Delete**
Mechanical #2 **Delete**

+105.5 Expiration. **Add after** …*the time the work is commenced.* Building permits expire one-year from the date of issuance. New submittal is required if the permit expires without the benefit of an extension.
Places expiration date on the building permit. Previous code editions did not. Prevents structures from sitting idle. Removes ambiguity that currently exists which allows permit to remain active for a rolling 180 days so long activity has taken place on the site, no matter how small.

+R106.1 Submittal documents. **Amend to read**: Construction documents, special inspection and structural observation programs, and other data shall be submitted in three sets with each application for a permit. The construction documents shall be prepared by a registered design professional, registered in the State of Illinois. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional. All truss design drawings shall be submitted at the time the permit is issued. *Requires construction documents and plans to be prepared by registered design professional registered in Illinois. Current code requires jurisdictional statute to enforce.*

Add section *R106.2.1 Plats Required. New construction requires Top of Foundation Plat with elevation of foundation walls and setback requirements per Village of Richton Park zoning code. The plat shall be submitted and reviewed after the foundation walls are set and prior to further construction. The TOF shall match those submitted in the subdivision development plan.
A final plat of survey showing conforming TOF and final topography shall be submitted and approved by village engineer prior to issuance of certificate of occupancy.

+Chapter 2 Definitions
Add Bedroom: A private room planned and intended for sleeping, separated from other rooms by a door. A bedroom will have windows, closet and is physically separate from other rooms.
This language helps properly define a bedroom so proper egress is met, smoke and carbon monoxide detectors are installed and correct impact fees are imposed.

*R301.2 (1) Climatic & Geographic Design Criteria

Ground Snow Load	30psf
Wind Speed	90/3 second wind gust
Seismic Design Category	B
Subject to Damage from Weathering	Severe
Frost Line Depth	42”
Termite	Moderate/Heavy
Winter Design Temp	-4 Degrees Fahrenheit
Ice Barrier Underlayment Required	Yes
Flood Hazard	11/6/2000 FIRM
Air Freezing Index	1700
Mean Annual Temperature	50 Degrees Fahrenheit

+R302.1 Exterior Walls. **Delete** Exceptions
These exceptions are for accessory structures and their fire separation distance from other structures. The Village of Richton Park Zoning Code dictates our separation requirements.

*R305.1 Minimum Height - **Delete section and replace with -** Habitable rooms including finished or unfinished basements shall have a minimum ceiling height of not less than 7 feet 6 inches. Not more than 50% of the required area may have a sloped ceiling less than 7 feet 6 inches in height with no portion of the required area less than 5 feet in height.

Exceptions: 1. Beams and girders may not project more than 8-inches below the required ceiling height.

2. Duct or other obstructions may project to within 6-feet 8-inches of the finished floor

3. Kitchen, bathrooms and hallway may have a ceiling height of 7-feet from finished floor to finished ceiling.

4. Not more than 50% of the required area may have a sloped ceiling less than 7 feet 6 inches in height with no portion of the required area less than 5 feet in height.

+R309.1 Opening Protection. **Add** ….and shall be self-closing and self-latching.
Ensures fire separation between garage and dwelling.

*R309.2 Separation Required. **Amend to read -** The garage shall be separated from the residence and its attic area by not less than 5/8-inch Type X gypsum board or equivalent applied to the garage side. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall be protected by not less than 5/8-ich gypsum or equivalent.
Increases fire protection/separation between garage and dwelling to 5/8" drywall instead of ½".

+R309.3 Floor surface. **Add** The sills of all door openings between the garage and adjacent interior spaces and all walls common with the dwelling unit shall be raised with a concrete sill not less than 4-inches above the concrete garage floor with a width of not less than 4-iches.
Provides barrier from gas, oil and other liquids often used and stored in garages from entering the dwelling.

+R311.5.6 Handrails. **Delete** four **and replace with** three
Handrail at four or more risers is a potential hazard. Consistent with R312.1 Guards.

+R312.1 Guards. **Add** In the first, second and third sentences change "30 inches" to three (3) risers or eighteen inches (18").
Code requires porches, balconies, ramps or raised floors located more than 30" above the floor or grade to have guardrails. A 30" drop could result in substantial injury.

*****R313.2 Location **Add** #4. In attics or crawl spaces where mechanical equipment is installed, smoke alarms are required.

Add +R313.4 Single and multiple station carbon monoxide detectors: All carbon monoxide detectors shall be installed in accordance with the provisions of manufacture's installation instructions and the household fire-warning equipment of NFPA 72.
Consistent with State of Illinois statute

Add +R313.5.1 Location. Carbon monoxide detectors shall be located within 15 feet of each bedroom or sleeping room.
Consistent with State of Illinois statute

Add +R313.5.2 Power source. In new construction, required carbon monoxide detectors shall receive their primary power from the building wiring is served from the commercial source and shall be equipped with a battery backup. Carbon monoxide detectors shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnection switch other than as required for over-current protection.
R313.4 and R313.5.1 re-states the State of Illinois Carbon Monoxide Detector requirements.
R313.5.2 requires new construction to be wired with a battery back-up.

*R317.1 Two-family Dwelling. **Replace** "by wall and/or floor assembly of not less than 1-hour" with "by concrete/masonry wall and /or floor assembly of not less than 2-hour."

*R317.2 Townhouses. **Insert** "concrete/masonry" between "by fire-resistance" and "wall assemblies"

+R321.1 Premises Identification. **Add -** The address shall be Arabic numerals only and be of a contrasting color to the building's exterior. The numeric designation shall be properly lighted and permanently attached to the building.
Provides for enhanced visibility of premise identification for emergency vehicles.

+R322.1 Scope. **Delete and replace with** Accessible dwelling units shall comply with the current edition of the Illinois Accessibility Code.
The Village of Richton Park is governed by the Illinois Accessibility Code.

+R324.1.6 Protection of water supply and sanitary sewer systems. **Delete** in accordance with the plumbing provisions of this code and chapter three **and replace with** in accordance with the Illinois Plumbing Code, current edition.
The Village of Richton Park is governed by the state's plumbing code.

+R402.1 Wood foundations. **Delete entire section and replace with** Wood foundations are prohibited

+R403.1 General. **Delete all references to wood footings**

+R403.2 Footings for wood foundations. **Delete and replace with** Wood footings are prohibited

+R404.1.1 Masonry foundation walls. **Delete section and replace with** The use of concrete blocks for footing and foundations is not allowed. All concrete footing and foundations shall be mechanically formed.
Concrete masonry units are porous and are prone to deterioration.

+R404.1.2.1 Concrete foundation walls reinforcement. **Add** Minimum reinforcement for plain concrete foundation walls shall consist on two No.4 horizontal bars located in the upper 12 inches of the wall and two No. 4 horizontal bars located in the lower 12 inches of the wall.

+R404.2 Wood foundation walls. **Delete section and replace with** Wood foundation walls are prohibited.
Wood foundations are subject to weather, soil and termite decay and deterioration.

*R405.2.3.1 Sump pump drainage. **Add** New construction requires sump pumps be connected to the public storm drainage system IAW the Village of Richton Park storm drainage plan.

+R407.3 Structural Requirements. **Delete Exception**.
R407.3 requires columns to be restrained from lateral displacement at the bottom end. This exception would eliminate this requirement in our seismic design category.

*R408.4 Access. **Delete and replace with** Access shall be provided to all under-floor spaces. Access opening through the floor or wall shall be a minimum of 24-inches by 30-inches.

Add *R408.4.1 Height. The minimum clearance from the surface to the under floor area to the bottom of the lowest point of the floor joists shall not be less than 36-inches. Mechanical fixtures suspended between or under the floor joists shall not be less than 24 inches.

Add +R502.3.4 Maximum Spacing. The maximum spacing for floor joists shall be sixteen inches on center.
Eliminates the possibility of 19" or 24" spacing for floor joists. Standard building procedure in Illinois.

*R503.2.1.1 Subfloor and combined subfloor underlayment. **Add** "and shall be of tongue and groove type." after …in Table R503.2.1.1 (1).
Standard construction procedure.

*R503.2.3 Installation. **Amend to read** All subfloors shall be glued to the joist with subfloor adhesive and attached to the wood framing by screws or ring shank nails in accordance with Table R602.3 (1) and shall be attached to cold-formed steel framing in accordance with Table R505.3.1 (2)
Standard construction procedure.

+Section R504 Pressure Preservatively Treated Wood Floors (On Ground) Delete **section in its entirety.**
Treated wood will eventually decay and deteriorate.

+R506.1 General. **Delete and replace with…** The thickness of concrete floor slabs in crawl spaces supported directly on the ground shall not be less than 2-inches. The thickness of concrete floor slabs of basement floors shall not be less than 4-inches. The minimum thickness of all concrete exposed to freezing and thawing conditions, including garage floors, shall be a minimum of 4-inches with 6x6 W.W.F. installed at the mid-point of slab thickness. All exposed concrete shall be a minimum of 6-bag mixture with an air entrainment of 4% to 7% to achieve a minimum compressive strength of 3500 psi after 28 days. Fibrous concrete reinforcement shall be permitted in lieu of welded wire fabric reinforcement when installed in accordance with manufacturer's specification and field verification.
Requires concrete in crawl space. Increases minimum thickness of concrete for other on ground pours to 4"for concrete exposed to freezing and thawing.

+R602.10.3 Braced wall panel construction methods. **Delete** #5, #7 in its entirety.
Eliminates using gypsum board or cement plaster as the bracing for wall panels.

*R802.1.3 Fire-retardant-treated wood. **Delete and replace with** Fire-retardant treated lumber shall not be used for rafter, trusses and ceiling joists.

+R802.3.2 Ceiling joists lapped. **Delete all references to butted joists being used.**
Requires joists over load bearing walls to be lapped. Each member would have to bear 3" instead of 1 ½" and be fastened together.

+R802.8.1 Bridging. **Delete and replace with**…Rafters that are carrying finish material on the interior side and ceiling joists shall be laterally supported by solid blocking, diagonal bridging (wood or metal) or a continuous 1-inch by 3-inch wood strip nailed across the rafters or ceiling joists at intervals not exceeding 8 feet.
Eliminates 6 to 1 depth to thickness ratio. Requires lateral support on all rafters and ceiling joists.

Add +R802.11.6 Rafter to wall connection. Rafters shall be connected to wall plates by the use of approved connectors having a resistance to uplift of no less than 175 pounds and shall be installed in accordance with the manufacturer's specifications on all design ceilings. For roof

assemblies subject to wind uplift pressures of 20 pounds per square foot or greater, as established in Table R301.2(2), adjusted for height and exposure per Table R301.2(3), see section R802.11.
Tray and cathedral ceilings do not have ceiling joists tying in rafters and walls. The tie down will help resist uplift forces.

*R803.2.1.2 Fire-retardant-treated plywood. **Delete and replace with** Fire-retardant-treated plywood shall not be used for roof sheathing.

Add +R903.6 Gutter and downspouts. All structures shall be provided with gutter and downspouts unless omission is specifically permitted by the building official.
Gutters and downspouts are not specifically required by code. This would ensure all new structures have adequate roof drainage.

+R905.7.3.1 Ice barrier. **Delete and replace with** Ice barrier protection is required on all pitched roofs and where there is a possibility of ice forming along the eaves causing a back-up of water.
Eliminates ambiguity in code language. Code requires ice barrier protection in areas where there is a "history" of ice forming along eaves causing backup. "History" is subjective. This will require the use of ice barrier on all applications.

*R907.3 Recovery versus replacement **Add** #5 Installing architectural style shingles

*M1305.1.3 Appliances in attics **- Insert after last sentence -**The attic must be accessible by fixed ladder, folding stairs or permanent staircase.

+M1307.5 Electrical appliances. **Delete section and replace with** Electrical appliances shall be installed in accordance with the National Electric Code 2005.
The Village of Richton Park uses the National Electric Code as our source for codes and standards.

+M2005.3 Electric water heaters. **Delete section and replace with** Electric water heaters shall also be installed in accordance with the National Electric Code 2005.
The Village of Richton Park uses the National Electric Code as our source for codes and standards.

+Section G2402.3 (201.3) Terms defined in other codes. **Delete** ICC Electrical Code and International Plumbing Code **and replace with** National Electric Code 2005 and Illinois Plumbing Code, current edition.
The Village of Richton Park uses the National Electric Code and the Illinois Plumbing Code as our source for codes and standards.

+Section G2422.1 Connecting appliances. **Change first sentence to read**…Furnaces, water heaters and boilers, unless specifically required by the manufacturer, shall be connected to the piping system by only rigid metallic pipe and fittings. Other appliances, unless specifically required by the manufacturer, shall be connected to the piping system by one of the following:
This will eliminate the use of flexible piping which is more prone to damage and possible health and fire hazard.

+Section G2448.2 (624.2) Water Heaters utilized for space heating. **Delete** this code **and replace with** Illinois Plumbing Code, current edition and National Electric Code 2005.
The Village of Richton Park uses the National Electric Code and the Illinois Plumbing Code as our source for codes and standards.

+Section G2410.2 (309.2) Connections. **Delete** Chapters 33 to 42 **and replace with** National Electric Code 2005.
The Village of Richton Park uses the National Electric Code as our source for codes and standards.

* Part VII Plumbing Chapters 25 to 32 The adopted Illinois Plumbing Code and Chapter 1427 of the Codified Ordinances has precedence over Chapters 25-32 of the International Residential Code.
The Village of Richton Park uses the Illinois Plumbing Code as our source for codes and standards.

*Part VIII Electrical Chapters 33 to 42 The adopted National Electric Code and Chapter 1428 of the Codified Ordinances has precedence over Chapters 33-42 of the International Residential Code.
The Village of Richton Park uses the National Electric Code as our source for codes and standards.

*Existing amendment
+New amendment
Italics reason for amendment