
ARTICLE III. ONE- AND TWO-FAMILY DWELLINGS

Sec. 6-61. International Residential Code adopted.

There is hereby adopted by the village the 2024 International Residential Code for one- and two-family dwellings, as hereinafter amended (hereinafter the "Residential Code"). At least one copy of the International Residential Code has been on file in the office of the village clerk for a period of at least 30 days prior to the adoption of these provisions and now are and remain on file in the office of the village clerk, and the same are hereby adopted and incorporated as fully as if set out at length herein.

Sec. 6-62. Applicability.

The 2024 International Residential Code shall apply to all single-family detached dwellings, two-family dwellings, and all buildings and structures accessory thereto that are expressly regulated by the International Residential Code.

Sec. 6-63. Deletions, additions, and modifications to the International Residential Code.

The following sections and subsections of the 2024 International Residential Code are hereby added, amended, revised, and changed as follows:

- (1) *R101.1 Title*. Amend to read as follows:

Insert "**the Village of Northbrook, Cook County, Illinois**" for "[name of jurisdiction]".

- (2) *R101.2 Scope*. Delete Exceptions 2, 3, 4 and 5 from the list.

- (3) Subsection *R102.4.3 Energy Efficiency*. Add a new subsection to read as follows:

R102.4.3 Illinois Energy Conservation Code. Whenever a reference is made to the International Energy Conservation Code – Residential Provisions or Chapter 11 of this code, such reference shall be

deemed to refer to the applicable section of the Illinois Energy Conservation Code as adopted separately by the Village of Northbrook.

- (4) *R102.4.4 Mechanical.* Add a new subsection to read as follows:

R102.4.4 International Mechanical Code. Whenever a reference is made to the International Mechanical Code or Chapters 12 through 23 of this code, such reference shall be deemed to refer to the applicable section of the International Mechanical Code as adopted separately by the Village of Northbrook.

- (5) *R102.4.5 Fuel Gas.* Add a new subsection to read as follows:

R102.4.5 Fuel Gas. Whenever a reference is made to the International Fuel Gas Code or Chapter 24 of this code, such reference shall be deemed to refer to the applicable section of the International Fuel Gas Code as adopted separately by the Village of Northbrook.

- (6) *R102.4.6 State Plumbing Code.* Add a new subsection to read as follows:

R102.4.6 Illinois State Plumbing Code. Whenever a reference is made to the International Plumbing Code or Chapters 25 through 33 of this Code, such reference shall be deemed to refer to the applicable section of the Illinois State Plumbing Code, as adopted by the Village of Northbrook.

- (7) *R102.4.7 Electrical Code.* Add a new subsection to read as follows:

R102.4.7 Electrical Code. Whenever a reference is made to Chapters 34 through 43 of this Code, such reference shall be deemed to refer to the applicable section of the National Electrical Code, as adopted by the Village of Northbrook.

- (8) *R103.1 Creation of agency.* Amend to read as follows:

R103.1 Creation of agency. The Department of Development & Planning Services is hereby created and the official in charge thereof shall be known as the *building official*. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

- (9) *R103.2 Appointment.* Amend to read as follows:

R103.2 Appointment. The building official shall be a member of the Department of Development and Planning Services, as established by the Northbrook Municipal Code.

- (10) *Subsection R104.2.3.1 Flood hazard areas.* Delete this subsection in its entirety.

- (11) *R105.2 Work exempt from permit.* Change only the title of this section from "Work exempt from permit" to read as follows:

R105.2 Work exempt from building permit.

- (12) *Subsection R104.3.1. Determination of substantially improved or substantially damaged existing buildings in flood hazard areas.* Delete this subsection in its entirety.

- (13) *R105.5 Expiration.* Delete this subsection in its entirety and replace it with the following:

R105.5 Expiration and Time Extensions. Permits shall expire in accordance with the limits established in Sec. 6-6 of the Northbrook Municipal Code. Extensions may be granted for expired permits in accordance with the standards and procedures established in Sec. 6-6 of the Northbrook Municipal Code.

- (14) *R105.6 Suspension or Revocation.* Amend to read as follows:

R105.6 Suspension, revocation or surrender. The building official is authorized to suspend or revoke a permit issued under the provisions of this Code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of

the provisions of this Code. A permit may also be voluntarily surrendered in accordance with the standards and procedures of Sec. 6-7 of the Northbrook Municipal Code.

- (15) *R106.1 Submittal documents.* Delete the second sentence of this subsection so that the new subsection reads as follows:

R106.1 Submittal documents. Submittal documents consisting of construction documents, and other data shall be submitted in two or more sets, or in digital format where allowed by the *building official*, with each application for a permit. Construction documents for all new one-family and two-family residences, additions and alterations shall be prepared by a design professional licensed with 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.

- (16) *Subsection 106.1.6 Cover sheet.* Add a new subsection to read as follows:

R106.1.6 Village Cover sheet. The building official may require that construction drawings include a Village of Northbrook Cover Sheet that includes standardized construction information. The building official shall prepare and update such cover sheets from time to time and make them available for use by design professionals.

- (17) *R109.1.3 Floodplain inspections.* Delete this subsection in its entirety and replace it with the following:

R109.1.3 Floodplain inspections. For construction in flood hazard areas as established by Table R301.2 set forth in Sec. 6-63(24) of this Code, upon placement of the lowest floor, including basement, and prior to further vertical construction, the building official shall require submission of all documentation required in Section R306, and all applicable requirements of the Northbrook Zoning Code.

- (18) *R109.1.5.1 Fire-resistance-rated construction inspection.* Add a new sentence at the end of this subsection so it reads as follows:

R109.1.5.1 Fire-resistance-rated construction inspection. Where fire-resistance-rated construction is required between dwelling units or due to location on property, the building official shall require an inspection of such construction after lathing or gypsum panel products are in place, but before any plaster is applied, or before panel joints and fasteners are taped and finished. In the event the fire-rated assembly is constructed in phases, the construction must allow the inspection that takes place to identify the layer of construction and its attachment.

- (19) *R109.2 Inspection agencies.* Add a new second sentence to make the subsection read as follows:

R109.2 Inspection agencies. The building official is authorized to accept reports of approved agencies, provided such agencies satisfy the requirements as to qualifications and reliability. Prefabricated construction will be permitted for structural framing only. A certificate of approval by an approved agency shall be furnished with all engineered systems.

- (20) *R109.3.1 Condition of property and available equipment.* Add a new subsection to read as follows:

R109.3.1 Condition of property and available equipment. It shall be the duty of the permit holder to ensure the property and structure being inspected is maintained in a safe and orderly condition during the course of the requested inspection. Furthermore, it shall be the responsibility of the permit holder to ensure that ladders, hand tools and other equipment are readily available for the use of those performing inspections.

- (21) *R110.5 Additional requirements and standards for occupancy.* Add a new subsection to read as follows:

R110.5 Additional requirements and standards for occupancy. In addition to the standards and procedures established in this Code, occupancies shall also be governed by the requirements of Sec. 6-12, Certificate of occupancy, of the Northbrook Municipal Code.

- (22) *R112 Means of Appeals*. Delete this Section in its entirety and replace it with a new Section R112 and Subsection R112.1 to read as follows:

R112 Appeals

R112.1 General. Appeals of decisions involving the building official and this Code shall be heard by the Architectural Control Commission in accordance with the procedures established in the Northbrook Municipal Code.

- (23) *R113.4 Violation Penalties*. Add a sentence at the end of this subsection to read as follows:

R113.4 Violation penalties. Any person who violates a provision of this Code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this Code, shall be subject to penalties as prescribed by law. Fees and fines associated with such violations shall be assessed in accordance with the Village of Northbrook Fee Schedule.

- (24) *Table R301.2*. Insert the following information into Table R301.2:

Climatic and Geographic Design Criteria	
Ground Snow Load	30
Wind Speed (mph)	107 mph
Topographic Effects	No
Special Wind Region	Not Applicable
Windborne Debris Zone	Not Applicable
Seismic Design Category	A
Subject Damage From Weathering	Severe
Subject to Damage From Frost line depth	42 inches
Subject to Damage From Termite	Moderate to heavy
Winter Design Temperature	2 degrees
Ice Shield Underlayment	Yes
Flood Hazard	Yes. See Northbrook Zoning Code; Flood Hazard Overlay District
Air Freezing Index	2000
Mean Annual Temperature	50 degrees
Manual J Design Criteria	
Elevation	653
Latitude	42 degrees North
Winter Heating	4 degrees
Summer Cooling	89 degrees
Altitude Correction Factor	None
Indoor Design Temperature	70 degrees
Design Temperature Cooling	75 degrees
Heating Temperature Difference	66 degrees
Cooling Temperature Difference	14 degrees
Wind Velocity Heating	None

Wind Velocity Cooling	None
Coincident Wet Bulb	73 degrees
Daily Range	Medium
Winter Humidity	30%
Summer Humidity	50%

(25) *R301.2.4 Floodplain Construction.* Delete this subsection in its entirety.

(26) *Table R302.6 Dwelling Unit Garage separation.* Revise Table R302.6 to specify the material used for garages as indicated below:

Table R302.6 Dwelling Unit Garage Separation

Separation	Material
From the dwelling unit and attics	Not less than ½-inch Type X gypsum board or equivalent applied to the garage side
From portions of the dwelling unit above the garage	Not less than ½-inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than ½-inch Type X gypsum board or equivalent
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than ½-inch Type X gypsum board or equivalent applied to the interior side of exterior walls that are within this area

(27) *R306.1.4 Establishing the design flood elevation.* Delete the subsection in its entirety and replace it as follows:

R306.1.4 The design flood elevation is set forth in the Northbrook Zoning Code, as amended.

(28) *R306.1.5 Lowest floor.* Delete the subsection in its entirety and replace it as follows:

R306.1.5 The lowest floor is set forth in the Northbrook Zoning Code, as amended.

(29) *R306.1.9 Manufactured homes.* Delete the subsection in its entirety.

(30) *R306.1.10 As-built elevation documentation.* Delete the subsection in its entirety and replace it as follows:

R306.1.10 As-built elevation documentation shall be provided as set forth in the Northbrook Zoning Code, as amended.

(31) *R306.2 Flood hazard areas (including A Zones).* Delete the subsection in its entirety and replace it as follows:

R306.2 Flood hazard areas are determined as set forth in the Northbrook Zoning Code, as amended.

(32) *R306.3 Coastal high-hazard areas (including V Zones).* Delete the subsection in its entirety and replace it as follows:

R306.3 Coastal high-hazard areas are determined as forth in the Northbrook Zoning Code, as amended.

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- (33) *R309.1 Townhouse Automatic sprinkler systems.* Amend to read as follows:

R309.1 Townhouse and one-and two-family dwellings automatic sprinkler systems.

An automatic sprinkler system shall be installed in townhouses and in one- and two-family dwellings.

Exception: An automatic sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with a sprinkler system unless the amount of added habitable floor area (excluding basement area) exceeds 115 percent of the habitable floor area (excluding basement area) of the existing dwelling, in which case a sprinkler system shall be required. Such permits shall be classified as **Major Renovation Permits**.

- (34) *R309.1.1 Design and installation.* Amend to read as follows:

R309.1.1 Design and installation. Automatic sprinkler systems for townhouses and one- and two-family dwellings shall be designed and installed in accordance with NFPA 13D.

- (35) *R309.2 One- and two-family dwellings automatic sprinkler systems.* Delete subsection in its entirety.

- (36) *R309.2.1 Design and installation.* Delete subsection in its entirety.

- (37) *R310.2.2 Alterations, repairs and additions.* Amend to read as follows:

R310.2.2 Alterations, repairs and additions. Where alterations, repairs or additions requiring a permit occur, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

Exceptions:

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck.
2. Installation, alteration or repairs of plumbing or mechanical systems.
3. Installation, alteration or repairs of “stand-alone” electrical permits including lighting upgrades, electric service and/or circuit breaker panel upgrades, generators and circuits for sump pumps associated with drain tile projects.

- (38) *Add a new section R310.2.2.3 to read as follows:*

R310.2.2.3 Special alterations and additions. *Smoke alarms shall be installed in accordance with R310.2.2 when photovoltaic systems with battery back up equipment (ESS), battery back-up equipment and/or electric vehicle (EV) charging systems or receptacles are installed.*

- (39) *Add a new section R310.4.1 to read as follows:*

R310.4.1 Central Alarm Systems: *When a professionally installed central alarm system (monitored or unmonitored) is installed, modified or added onto, the system must be NFPA 72 and NFPA 720 compliant and certified as being compliant in writing by the alarm contractor and a copy of the alarm contractors Illinois State License provided.*

- (40) *R319.4.4.1 Window well covers required.* Add a new subsection to read as follows:

R319.4.4.1 Window well coverings required.

1. Sides. Any window well of dwelling facing the side lot line shall be protected by a window well cover designed to support a 200-pound load or have a three-foot tall railing installed to prevent a falling hazard while still allowing the window to function as an escape.

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2. Front and rear. Any window well located on the front of a dwelling, the side of a dwelling facing a street (corner side yard), or the rear of a dwelling and is located within thirty-six (36) inches of a finished walking surface shall be protected by a window well cover or a three-foot railing.
3. Waiver. The building official may waive the above requirements upon demonstration that the protection is unnecessary to prevent a hazardous condition.
- (41) **R323.1.1.3 Private residence elevators machine/control rooms.** Add a new Section R323.1.1.3 and associated Subsection R323.1.1.4
- R323.1.1.3 Private residence elevators machine/control rooms.** Private residences with elevators shall have a separate elevator machine or control room with the following minimum specifications or equipment may be in a mechanical area of the dwelling. Equipment shall comply with A17.1-2019 section 5.3.1.6.1(a) (b), 5.3.1.6.2 and 5.3.1.6.3 for guarding of equipment.
- 1) The room shall have walls having a minimum one-hour fire rating.
 - 2) The room shall have clear headroom of at least 84 inches.
 - 3) The door shall be a minimum 36" wide by 80" tall and capable of being locked.
 - 4) The main line disc switch shall be located on the lock side of the door and shall be fused and heavy duty.
 - 5) The car light disconnect switch shall be located on the lock side of the door and shall be fused, rated and general duty.
 - 6) The light switch for the room shall be located on the lock side of the door.
 - 7) The room shall be illuminated to a minimum level of 10 foot-candles.
 - 8) The room shall have a 110V GFI Duplex outlet located below the light switch.
 - 9) The room shall be equipped with a minimum 5lb ABC Fire Extinguisher, located on the lock side of the door.
- (42) **R326 Sanitation.** Delete all subsections in their entirety and amend with the following:
- R326 Sanitation.** Refer to the Illinois Plumbing Code, as adopted by the Village of Northbrook.
- (43) **R506.1 General.** Add a sentence at the end of the subsection to read as follows:
- R506.1 General.** Concrete slab-on-ground floors shall be designed and constructed in accordance with the provisions of this section or ACI 332. Such floors shall be not less than 3 1/2 inches (89 mm) thick (for expansive soils, see Section R403.1.8). The specified compressive strength of concrete shall be as set forth in Section R402.2. Install a 6" x 6" - 10/10 w.w.f. (welded wire fabric) mesh in all basements and attached garages.
- (44) **R506.3.2 Base.** Delete the exception in this subsection.
- (45) **Appendix BC: Accessory Dwelling Units (ADU).** Adopt this appendix in its entirety.
- (46) **Appendix BE: Radon Control Methods.** Adopt this appendix in its entirety. (Commentary: 420 ILCS 52, "The Illinois Radon Resistant Construction Act", requires that all new residential construction in this State shall include passive radon resistant construction.)
- (47) **Appendix BF: Patio Covers.** Adopt this appendix in its entirety.
- (48) **Appendix BG: Sound Transmission.** Adopt this appendix in its entirety.
- (49) **Appendix BH: Automatic Vehicular Gates.** Adopt this appendix in its entirety.

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- (50) **Appendix BN: Extended Plate Wall Construction.** Adopt this appendix in its entirety.
 - (51) **Appendix BO: Existing Buildings and Structures.** Adopt this appendix with the following modifications:
 - 1) **Subsection BO104.2.3 Plumbing materials and supplies.** Delete in its entirety.
 - 2) **Subsection BO104.3 Water closets.** Delete in its entirety.
 - 3) **Subsection BO104.4 Electrical.** Delete in its entirety.
 - 4) **Subsection BO105.5 Electrical equipment and wiring.** Delete in its entirety.
 - (52) **Appendix CA: Sizing and Capacities of Gas Piping.** Adopt this appendix in its entirety.
 - (53) **Appendix CB: Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances and Appliances Listed for Use with Type B Vents.** Adopt this appendix in its entirety.
 - (54) **Appendix CC: Recommended Procedure for Safety Inspection of an Existing Appliance Installation.** Adopt this appendix in its entirety.
 - (55) **Appendix NB: Solar-Ready Provisions-Detached One-and Two-Family Dweelings and Townhouses.** Adopt this appendix in its entirety.

Secs. 6-63—6-70. Reserved.