

**City of Prospect Heights**  
**AMENDMENTS**  
to the  
**ICC INTERNATIONAL RESIDENTIAL**  
**CODE 2003 edition**  
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## City of Prospect Heights

### AMENDMENTS

#### To the ICC International Residential Code 2003 edition

### GENERAL AMENDMENTS

**1. Amendments Supercede ALL:**

The City of Prospect Heights amendments, Zoning Ordinance and Municipal Ordinance shall supercede all sections of all of the applicable adopted model codes.

**2. Conflicts**

Whenever two codes are in conflict, the more stringent requirement shall govern.

**Exception:**

The prescriptive requirements of Chapter 11 in the IRC are optional.

**3. Permit - Required, Duration, Exempt**

A permit is required, and must be obtained before any work may commence. A building permit shall expire six (6) months after the date of issuance for single-family residences, townhomes or any other structure covered under the International Residential Code 2003. Fences and sheds must be completed within 30 days of the start of construction. No permit is required for minor repair or replacement. No permit is required for re-roofing, however the work shall be performed by a state licensed roofing contractor. Proper re-roofing is entirely the owner's responsibility as the owner needs to contract with a state licensed roofing contractor to perform the work.

**3a. Permit Drawings – Architect's Seal**

All drawings submitted for permit shall bear the seal of the Architect's license as well as his signature and the expiration date of his license. Other drawings shall bear the seal and same information of the design professional who prepared them, such as the Structural Engineer, Civil Engineer, Mechanical Engineer, Professional Engineer, etc. as applicable. (Every Sheet)(2 sets required)

EXCEPTION: An architect's seal (i.e. Design Professional seal) is not required for sheds and other minor accessory structures.

**3b. Plan Review Fee:**

For projects which have been reviewed, and then subsequently withdrawn, review fees shall be charged to the applicant for all expenses incurred.

**4. Penalties**

If a building or structure is not completed within the allotted time and the permit expires, the applicant shall be required to pay an additional permit fee, equal to one half (50%) of the original permit fee and provide the Building Department with a schedule of completion, such that the project is complete within thirty (30) days.

If the project is not completed within the thirty (30) day period, an additional fine of \$100.00 per day shall be imposed for each and every day the project is incomplete.

Further, legal action may be taken to insure all fines are paid and the project gets completed. The penalty for beginning work without paying for and obtaining a permit, is that the permit fee shall be doubled.

**5. City's Right to Draw On Bond**

The City of Prospect Heights shall have the right at all times, at its option, to draw on the contractors bond for the costs, including but without limitation for: legal fees, administrative expenses - for damage to neighbor's property or damage to city property – for undertaking any work in violation of the code or for refusing to complete work authorized by any permit.

Also, if the contractor refuses to correct work that is in violation of any code, the bond shall be collected to correct and remedy the code violation.

**6. Replenishment of Bond**

If the City of Prospect Heights draws on the contractor's bond, then the contractor shall replenish the bond to the full amount. If the "Amount to Remedy" exceeded the amount of the bond, the contractor shall also "Make Whole" the amount of the difference required to the party affected, either the City of Prospect Heights or other persons or entity.

Failure to replenish the bond and financially "Make Whole" the affected party, shall result in one or all of the following:

- A Stop Work Order
- Cancellation of the Permit
- Refusal of an Occupancy Permit
- Refusal by the City to Issue Transfer Tax Stamps
- Refusal to Issue the Contractor Any Other New Permit
- Refusal for Said Contractor to do Any Other Work Within the City of Prospect Heights

**7. Damage to Property**

No person engaged in any work pursuant to a permit shall injure damage or destroy any property, public or private, not owned by such person. In the event property is injured, damaged or destroyed, the general contractor shall be responsible for the damage and shall promptly repair and restore the damaged property at his own expense.

The general contractor or applicant acting as a general contractor shall be responsible for all of the sub-contractors actions and shall be responsible for all of the work in its entirety including means, methods and techniques of construction.

**8. Safeguards**

The General Contractor or applicant acting as a general contractor shall be responsible for safety on, in, near and around the job site. All persons undertaking work pursuant to a permit issued by the City of Prospect Heights shall exercise proper care for the safety of all persons and property.

**9. Wet Saw Required**

A wet saw shall be required for cutting all types of masonry, stone, brick pavers, concrete and pavement. Any person not using a wet saw shall be issued a “*Stop Work Order*” and fined \$100.00. The fine must be paid before work is allowed to continue with a wet saw.

**10. Demolitions**

Whenever a building is demolished, the contractor shall be required to provide dust abatement by hosing down the structure with water, during the demolition.

**11. Concrete Foundations**

**a) Footings and Foundation Walls**

All footings and foundation walls shall be cast in place concrete. Wood, Masonry, ICF, Flat ICF, Waffle grid ICF, Screen Grid ICF and other similar systems for foundations are not permitted. All concrete shall be 6 bag mix or an engineered design mix which shall have the specified compressive strength (f'c) of not less than 3,000 pounds per square inch (psi) at 28 days, unless the concrete is required to have a greater compressive strength as designed by the architect or structural engineer. The minimum foundation wall thickness shall be 8” for a frame wall and 10” for a brick veneer wall.

**b) Admixture**

The use of calcium chloride as an admixture is not permitted on site.

- c) **Depth**  
The minimum depth for all footings shall be 3'-6", measured from finished grade to the bottom of the footing.
- d) **Thickness**  
The minimum thickness for all footings shall be 12 inches.
- e) **Extension**  
All footings shall extend a minimum of 6" each side of the foundation wall it is supporting.  
Example: A 1'-0" wide foundation wall shall be supported by a 2'-0" wide footing
- f) **Foam Plastic Forms**  
Foam plastic forms used for pouring a foundation wall (or exterior, or interior wall) into a grid pattern, and then left in place, are not permitted. Insulating Concrete forms (ICF) are not permitted. Flat ICF, Waffle Grid ICF, Screen Grid ICF and other similar systems are not permitted.
- Reinforcement**  
All foundation walls shall have steel reinforcing bars, a minimum of 2-5# bars @ the top and bottom of the foundation wall, running continuous.
- g) **Three-Season Rooms/Porches**  
Three season rooms, screened porches and the like shall be built on a full footing and foundation wall, like any other habitable space. (300 s.f. or less may utilize a trench footing) – the trench footing shall be 12" wide x 48" below grade with  
2-5# bars @ top and bottom.
- h) **Existing Masonry Foundation**  
When a second floor addition is planned for an existing house which has a masonry foundation or a concrete foundation that is of questionable structural integrity, the existing foundation must be evaluated by a license structural engineer. The Structural Engineer shall prepare and submit a written report to the Building Department that indicates one or more of the following:
- The existing foundation is capable of supporting the new loads imposed by the addition.
- Or
- The existing foundation shall be capable of supporting the new loads if specified reinforcement or improvements are made.
- Or
- The existing foundation is not capable of supporting new loads.

The Structural engineers report is to protect the owner in advance from a catastrophic and/or unexpected collapse of the structure.

**i) Window Well Covers Required**

Bars, grills, covers, screens or similar devices are required to be placed over all window wells, whether rescue, escape or otherwise. Window well covers shall be capable of supporting a full grown adult. (minimum capacity 250 lbs.)

**j) Concrete Slabs**

Concrete slabs in basements and slab on grade construction shall be a minimum of 4" thick w/6 X 6 W 1.4 X W 1.4 W. W. F. over 6 Mil. Vapor barrier over a 5" crushed stone base.

**12. Carpentry**

- a) All framing shall be 16" O. C. or less than 16" O. C. (balloon framing shall not be permitted)
- b) **ALL plumbing walls shall be 2 x 6 wood stud framing. (minimum)**
- c) All framing shall be dimension lumber with the lumber species and grade identified on the permit drawings.
- d) All roof sheathing shall be 5/8" exterior grade plywood, minimum. O.S.B. and particle board are **NOT** permitted for roof sheathing.
- e) **Wall sheathing** shall be minimum 1/2" plywood or 1/2" O.S.B. (oriented strand board). The entire exterior envelope (exterior walls) shall be completely sheathed with 1/2" plywood or 1/2" O.S.B. wall sheathing.
- f) All **floors** shall be 2 layers of 5/8" plywood or 3/4" plus 1/2" plywood. A single layer of 1-1/4" plywood is not permitted for floor sheathing. O. S. B. is not permitted for floor sheathing.
- g) Two layers of 5/8" Type X G.W.B. shall be required on the ceilings of a garage which has habitable rooms above. A single layer of 5/8" Type X G.W.B is required between all garage and attached homes, and enclosing all mechanical rooms/closets.
- h) Interior **soffits** must be fire-blocked with 5/8" Gypsum Board or 1/2" plywood at the concealed wall and ceiling areas, entirely.

- i) **Fire-blocking Required:**  
**Fire-blocking** shall be provided to cut off all concealed draft openings (both vertical and horizontal) to form an effective fire barrier between stories and between a top story and a roof space. (See Section R-602.8). Materials which may be used are as follows:
- Unfaced Batt insulation, when the stud cavity is filled to a height of 16" vertically per R-602.8.1.1
  - Blankets of Mineral Wool
  - Thermal fiber or Fire Safe batts
  - Drywall compound
  - Cementitious material
  - 3-M Fire-stopping caulk or equal (intumescent fire-stopping caulk)
  - Other approved materials installed in such a manner as to be securely retained in place as an acceptable fire block by the Building Official.
- NOTE:** Foam plastic products are not permitted to be used as a fire-blocking or fire-stopping material.
- j) **Fire block** at the rim height of every tub with 2 x wood blocking, every stud space, all around, - or –  
Provide water resistant 5/8" G.W.B. or 1/2" DURA ROCK completely down to the floor behind all tubs and shower stalls for proper fire-stopping, or use other materials as permitted in Section R-602.8.1.
- k) Manufactured "**I**" joists may be used if and only if the entire residence has an automatic fire sprinkler system installed per N.F.P.A. 13R, "Installation of Sprinkler Systems for Residential Occupancies".
- l) **Wood roof trusses** and wood **floor trusses** must have their metal gusset plates covered with 1/2" plywood, glued and screwed over every gusset plate, both sides. The plywood must extend 6" beyond each side of the plate. (That is, on 3 sides of the plate, the 4<sup>th</sup> side is usually obstructed by sheathing or ceiling board).
- m) **Three season rooms**, screened in porches and like structures shall be built with construction consistent with this code, and the same as any other house addition. All shall have a full footing and foundation (See Amendment 11h, 300 s.f. or less may utilize a trench footing). Use of foam plastic panels, structural or otherwise are not permitted. A one-hour fire rating is required at walls and ceiling. (5/8" gypsum board Type X).

### 13. Electrical

- a) **Smoke Alarms** shall be interconnected and shall be located per all requirements of Section **R-313** of the IRC as follows:
- In each sleeping room
  - Outside each separate sleeping area in the immediate vicinity of the bedrooms
  - On each story of the dwelling, including basements
  - Above or near the furnace
- aa) **Carbon Monoxide Detectors** shall be provided as follows:
- Outside each separate sleeping area in the immediate vicinity of the bedrooms
  - **On every floor** on which a fossil fuel burning boiler or furnace is located and/or in the room in which the furnace or water heater is located.
  - **On every floor** in which sleeping rooms are heated by any type of warm air heating plant that burns fossil fuel. Ref: State of Illinois 91<sup>st</sup> General Assembly Legislation 91HB0603 Engrossed.
- b) **Arc-Fault Circuit - Interrupter Protection.**  
All branch circuits that supply 125-volt, single phase, 15- and 20- ampere outlets installed in dwelling unit bedrooms shall be protected by an arc-fault circuit interrupter listed to provide protection of the entire branch circuit. (per Section 210.12 (B) of N.E.C.)
- c) All electrical conductors shall be copper,  
**Aluminum Conductors** are not permitted.
- d) **Non-Metallic Sheathed Cable**, Mineral insulated, metal-sheathed cable, rigid non-metallic conduit and boxes, armored cable, and flat conductor cable are all **NOT PERMITTED.**
- e) All switches, receptacles and light fixtures in a bathroom, powder room, shower, etc. shall be **GFCI protected.**
- f) **Required Outlets** – Receptacle outlets and lighting outlets shall be installed as specified in sections 210.52 through 210.70 in the N.E.C. 2002.
- g) Exterior below ground conduit may be rigid galvanized (min.) 6” deep,
- or –  
Electrical grade non-metallic conduit (min.) 18” deep
  - or –

Type "UF" cable with ground conductor (min.) 24" deep per N. E. C. Table 300.5

- h) Low voltage wiring** and cables are not required to be in conduit for single-family homes and townhomes.
- i) Sump pumps and ejector pumps:** The electrical circuit which provides power for the sump pump and/or ejector pump shall each have a dedicated circuit independent of all circuits in the building and shall have a single outlet.

#### **14. Mechanical**

- a)** All **dryer vents** shall be metal or metal flex. Non-metallic vents for dryers are not permitted.
- b)** All **ductwork** shall be a closed system and in compliance with the International Mechanical Code Section 603. Use of a stud space or joist space for a supply or plenum return is not permitted. Gypsum ducts are not permitted.
- c)** Provide a 1-1/2" pre-cast concrete pad under all furnaces which are set on a wood floor. (or use 2 layers of 1/2" DURA ROCK or a 2" Thickness of poured concrete).
- d)** All bathroom, shower and powder room exhaust fans shall have insulated duct work.

#### **15. Fireplaces**

- a) Masonry Fireplaces**  
All wood burning fireplaces shall be constructed of masonry per section R-1003 of the IRC and in compliance with the New York Masonry Associations guidelines and details. The hearth extension shall always be 20" minimum. Provide an exterior air supply per Section R-1005. The smoke shelf shall be 12 inches minimum.

**b) Direct Vent Fireplaces**

Direct vent fireplace units which burn gas only and have a fixed glass plate in front of the firebox which cannot be opened, are permitted.

i) The direct vent unit may terminate the vent at the outside wall, directly behind the unit, with a collar, per manufacturer's installation instructions.

ii) If a chimney is created for the direct vent, on the outside of the building, it must be brick or stone veneer. Wood siding or non masonry materials are not permitted to enclose the chimney created on the outside wall.

If the direct vent is run vertically in the interior of the building, it may terminate through the roof as an exposed vent. If the vent through the roof has a chimney enclosure around it, the enclosure must be clad to look like stone or brick. (Wood siding or similar siding material shall not be permitted to create a chimney.)

**c) Ventless Fireplace**

Ventless fireplace units which burn gas and have no vent to the outside, are not permitted in bedrooms, basements and attics. They must be operated with a door or window open, per manufacturers instructions.

**16. Interior Wood Paneling**

All interior wood paneling shall be applied over 5/8" G. W.B. which is secured to wood framing @ 16" O. C.

**SPECIFIC AMENDMENTS to the Sections of the IRC 2003 edition**

**17. R-101.1 Title**

These provisions shall be known as the Residential Code for One and Two-Family Dwellings of the City of Prospect Heights, and shall be cited as such and will be referred to herein as "this code".

**18. R-101.2 Scope**

The provisions of the International Residential Code for One- and Two-Family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location removal and demolition of single family residences, townhouses and duplexes, and their accessory

structures. (Towhouses and duplexes shall have a vertical wall as a fire barrier and shall not have one dwelling unit stacked above another. Apartment type buildings and other multiple dwelling buildings shall be governed by the IBC 2003 as amended.

**No exception for existing buildings:**

Existing buildings undergoing repair, alteration, additions or movement shall comply with the requirements of this code, same as new buildings.

19. **R-103.1** **Enforcement Agency**  
The individual in charge of the Building Department shall be known as the Building Official *and/or* Building and Zoning Director.
20. **R-104.11** **Tests**  
Add: The Building Official shall have the final authority to approve or disapprove materials, designs, assemblies, products, methods of construction, equipment, and etc. proposed to be used in any construction project.
20. **R-104.11** **Work exempt from permit**  
All work shall require a permit, including detached accessory structures, fences, retaining walls, patios, decks, gazebos, sidewalks, driveways, swimming pools and all other construction listed on the City of Prospect Heights fee schedule.
21. **R-105.2** Work **exempt** from permit shall be as follows:
- Emergency repairs
  - Minor repair or replacement
  - Painting, papering, carpeting, tiling, cabinets and other finish work
  - Re-roofing of a single family residence or townhouse
22. **R-106.1** **Submittal documents:**  
All construction documents submitted shall be signed and sealed by the Design Professional who prepared them. (The Licensed Architect, Structural Engineer, or Registered Professional Engineer shall include his license number, signature, and the expiration date of his license clearly identified on the drawings.)

23. **R-113.4** **Violation Penalties:**  
Add: The Building Official and/or his agents may issue citations which carry a fine of \$100.00 per day for each and every violation which exists. The \$100.00 per day penalty also applies to “orders” in which the contractor or other persons “fail to comply” as directed by the building official, inspectors, or his agents.
24. **R-114.2** **Unlawful Continuance**  
Any person who shall continue to work after having been served a “Stop Work Order” shall be liable to a fine of \$100.00 for the first day, \$200.00 for the second day and an additional \$500.00 for the third day.
25. **R-202** **Air Admittance Valve**  
Air admittance valves are not permitted.
26. **R-11** **Site Requirements** is hereby added.  
All sites shall have a Code of Conduct Sign clearly posted including address. All construction sites shall have the following and comply with the following.
- a) Approved **portable sanitation** facility maintained in an approved manner on site.
  - b) All contractor/service providers and other persons associated with a construction project shall **restrict the parking of vehicles** to one side of the street. Do not park vehicles on the public parkway or blocking the public sidewalk.
  - c) Keep **public walks clear and passable**. Maintain sidewalk area with compacted gravel as necessary throughout the duration of construction, so that it is safe for pedestrians to walk on.
  - d) **Sidewalks** shall not be blocked with parked vehicles. Concrete trucks or delivery vehicles may block the sidewalks for a short period of time while they are placing concrete or delivering materials.
  - e) For new homes, keep **tree protection** in place and properly constructed at all times. The contractor may be required to install **tree protection**, when deemed necessary by the Building Official, for home “additions”.
  - f) **Do not place or store materials** on the public parkway.

- g) Provide a dumpster** for all trash and discarded building materials, or keep the trash or scrap building materials contained inside of the building. The maximum length of time that a dumpster may be on site is 6 months. After 6 months, all garbage and debris shall be placed in a 6 yard dumpster which shall be located inside the garage, or the garbage and debris shall be placed in trash receptacles located inside the house.
- h) Maintain streets and sidewalks free of mud.** The General Contractor shall be responsible to clean up large clumps of mud, immediately, as trucks or other vehicles leave the site. (\$100.00 fine for each occurrence.)
- i) On all new construction sites, the designed area for the driveway shall be graveled.** Gravel shall be in place immediately after the foundation is backfilled. This gravel is a sacrificial base for use during construction. More gravel shall be added as appropriate during construction to assist in keeping the site and the public streets clean. Additional gravel shall be added to meet appropriate requirements for the pre-pour driveway inspection.
- j) Spot Survey Required**  
The City requires that the builder of a new single-family home submit a spot survey after the pouring of the foundation and that those documents be reviewed and approved by the City prior to any framing work being started on the structure. The spot survey shall indicate the dimension from the foundation to all property lines and all pertinent elevations. In both cases, these documents shall be signed and sealed by either a Professional Engineer or a Registered Land Surveyor and shall contain verbiage indicating that the foundation has been installed in accordance with the site plan submitted and approved by the City.
- k) Neighbor property:** The General Contractor is responsible for controlling the sub-contractors and the project as a whole. No person shall trespass on a neighbor's property, without their permission. Do not damage neighbor's property. The General Contractor shall be responsible to restore any damage to neighbor's property, or compensate that neighbor for damage to his property, regardless of which subcontractor or service provided actually did the damage.
- l) All construction sites** shall be fenced. The fence shall be a 6 ft. chain-link fence with locking gate surrounding the entire site.

- m) **Landscaping:** The minimum requirement for landscaping is that the entire property must be seeded or sodded by a professional landscaper.
- n) **Keep erosion control** measures in place as directed by the City Engineer.
- o) **No open fires** or burning, except for heating sand for mortar.
  
- p) **Obey work hours:** Monday through Saturday 7 am – 6 pm  
*NO* work on Sundays or Legal City Holidays
  
- q) **Window Well Drains and Perimeter Drainage**  
All window wells shall have adequate drainage installed. A drain pipe of not less than 4 inches in diameter, shall be connected to a tee fitting, incorporated with the building foundation footing drain tile system  
  
A perimeter drain with leaders from window wells, is always required at basements. A 4 inch diameter perimeter drain tile at footing shall be set on a minimum of 2 inches of stone and covered with a minimum of 6 inches of stone. The total height of the stone used shall be 12 inches minimum. (2"+4"+6"=12"). The top of the tile must be below the top of the footing.
  
- r) **Sump Pump Discharge**  
The sump pump discharge of the perimeter drain tile system shall be approved by the City Engineer. The discharge of the sump pump is storm water and shall **not** be connected to or discharged into the sanitary sewer.
  
- s) **Downspouts**  
All downspouts as well as storm water sump pumps shall be connected to the ground storm sewer system as directed by the City Engineer. Downspouts and storm water sump pumps may discharge onto your own property and be absorbed into the soil when pre-approved by engineering. Drainage shall not run onto adjacent property. Provide a grading plan to the city engineer for pre-approval.

**27. R-202 Definitions**

- a) **Air Admittance Valves** are not permitted.
- b) **Insulating Concrete Forms (ICF)** are not permitted.
- c) **Manufactured Home:** Manufactured homes as defined are not permitted. Any manufactured home must meet all of the requirements of “this code” as well as the requirements of the amendments.
- d) **Structural Insulated Panels (SIPS)** Structural insulated panels are not permitted.
- e) **Wet Vents:** Wet vents are not permitted.

**28. R-301.1.2 Construction Systems**  
 Balloon framing is not permitted.

**29. R-301.2 (1) Climatic & Geographic Design Criteria**  
 Table

<b>Ground Snow Load</b>	<b>30 P. S. F.</b>
<b>Wind Speed</b>	<b>90 mph., 3 second gust-Fig 301.2(4) 75 mph, fastest mile – Table 301.2.1.3</b>
<b>Seismic Design Category</b>	<b>B</b>
<b>Weathering</b>	<b>Severe</b>
<b>Frost Line Depth</b>	<b>42” Below Finished Grade(minimum)</b>
<b>Termite</b>	<b>Slight to Moderate</b>
<b>Decay</b>	<b>Slight to Moderate</b>
<b>Winter Design Temperature</b>	<b>-4 Degrees Fahrenheit</b>
<b>Ice Shield Underlayment Required</b>	<b>Yes</b>
<b>Flood Hazards</b>	<b>Contact Engineering</b>
<b>Air Freezing Index</b>	<b>1750</b>
<b>Mean Annual Temperature</b>	<b>50 Degrees Fahrenheit</b>

30.     **303.9**            **Basements – light and ventilation**  
Basements shall be provided with an aggregate glazing area in windows of not less than 2% of the floor area and 2% ventilation. All habitable spaces in a basement shall be designed per R303.1. (8% light and 4% ventilation).
31.     **R305.1.1**       **Crawlspace height**  
All crawlspace areas shall have a minimum required clear height of 3 feet (36 inches). Beams, girders, ductwork, mechanical and plumbing components may project into that area as long as there remains 2 feet (24 inches) under those projections.
32.     **R-306.3**        **Private Sewage Disposal**  
A private sewage disposal system is not permitted.
33.     **R-309.2**        **Separation Required**  
This section is hereby amended to require 5/8” fire rated gypsum board on all walls and ceilings of an attached garage. (2 layers of 5/8” fire rated gypsum board is required on the ceiling of the garage if habitable rooms, a storage room or closet is above.)
34.     **R-309.3**        **Garage Floor Drainage**  
The garage floor shall have a minimum slope from back to front of 2 (two) inches, for drainage. A garage floor may not slope to any drain. (All garage floors shall be 5” thick concrete over 5” crushed stone base and have wire mesh or be fiber mesh concrete.)
35.     **R-309.3.1**     **Gas Curb**  
The floor of the garage shall be separated vertically from the adjacent floor of the main residence by a concrete gas curb, minimum 6 inches in height.
36.     **R-301.5**        **Attic and Crawlspace Access**  
Access to attics and crawlspaces shall be a minimum of 30 inches by 30 inches. A light is required in the immediate vicinity of the opening, inside the attic and/or crawlspace.
37.     **R-311.5.1**     **Spiral Stairways**  
Spiral stairways are not permitted to be used as a means of egress; they are considered a decorative element only.
38.     **R-312.1**        **Guardrails**  
In addition to the requirements of this section, add: “Porches, balconies, decks or exterior raised floor surfaces 8 feet or more above the floor or grade below shall have a guardrail not less than 42 inches in height.”

**39. R-314 Foam Plastic**  
Structural Insulation Panels (SIPS), Insulating concrete forms, structural panels comprised of foam plastic and sheet metal on each side, or any other structural or building component constructed utilizing foam plastic is not permitted.

**40. R-316.1.3 Exterior Wall and Ceiling/Roof Insulation**  
The minimum insulation in 2 x 4 stud walls shall be R-13. The minimum insulation in a 2 x 6 stud wall shall be R-19. The minimum insulation in the ceiling/roof area shall be R-38. All slab on grade construction shall be insulated with a minimum of R7.5 utilizing rigid insulation material, 2'-0" vertical and 2'-0" horizontal, continuous at the perimeter. See Amendment #62 for other energy efficiency requirements and options.

**41. R-317 Dwelling Unit Separation for Townhouses & Duplexes**

a) Townhouses and duplexes shall have a 2 (two) hour fire rated, masonry vertical separation wall, constructed of 8" C.M.U. between each unit (and independent of each unit). The 8" C. M. U. fire separation wall shall be continuous with no penetrations from front to rear, and from foundation wall to underside of roof sheathing, between each and every unit. (Or may utilize through roof parapet wall constructed of 8" masonry.)

The supporting foundation wall, for the masonry separation wall, shall have a minimum width of 1' - 8" if floor joists are bearing on the foundation wall. A minimum width of 1'-6" is required if joists are parallel to the foundation wall. Provide 3 - #5 bars top and bottom in the foundation wall. The footing must extend 6" each side of the foundation wall. (i.e. 2'-8" wide footing for a 1'-8" wide foundation wall. The footing shall be 1'-0" thick).

b) The plywood roof sheathing shall be fire retardant plywood for a minimum of 4'-0" each side of the masonry fire separation wall.

**Or**

c) Install 5/8" G. W. B TYPE "X" in each joist space up against the sheathing and support the G. W. B. with continuous 2 x 2 wood blocking each side. Provide the G. W. B. protection 4'-0" each side of the masonry wall, continuous, front to back.

**Or**

- d) Install a minimum 8” wide masonry fire barrier wall with a parapet through roof, extended not less than 30 inches above the roof per code requirements.
- e) Each and every townhouse wall which is adjacent to the masonry fire separation wall shall be sheathed with ½” plywood or ½” O. S. B. from the foundation wall, continuous all the way to the roofline sheathing. This is to insure that each unit is self-contained, and in the event of one unit being destroyed by fire, and the masonry wall came down, the adjacent unit would be adequately enclosed and relatively weather tight.
- f) Townhouse and Duplex units by definition are units, which have a vertical masonry fire separation wall. Townhouses and Duplexes are not permitted to be constructed in a configuration in which they are stacked, one on top of another. Stacking dwelling units puts the structure in a TYPE 1A AMENDED Category with apartments and condominiums and like structures. (See IBC Amendments)

**42. R-321**

**Site Address**

Premises identification: The address numbers shall be a minimum of 6 inches high with a minimum stroke of 0.5 of a contrasting color, facing the street and readily visible for emergency vehicles.

**43. R-323.1.8**

**Manufactured Housing**

Manufactured and prefabricated construction shall comply with all of the code provisions and amendments for standard construction, as amended by the City of Prospect Heights, herein.

**44. R-401**

**Wood Foundations**

Wood foundations are not permitted.

**43. R-401.3**

**Drainage**

Drainage shall be as approved by the City Engineer.

**45. R-401.3**

**Concrete Compressive Strength**

Revise Section R-402.2 and Table R-402.2, such that, in all cases the minimum specified compressive strength of concrete shall be 3, 000 p.s.i., or greater as indicated by Table R-402.2.

**47. R-403.1.1 Footings, Minimum Size**

- a) All spread footings shall be one foot (12 inches) thick, and a minimum of 20 inches wide for an 8” wide foundation wall. Footing projections shall be at least 6” each side of the foundation wall. Example: A 10 inch foundation wall requires a 22 inch wide footing. Provide a continuous 1-1/2” x 3-1/2” key way centered in the top of all spread footings.
- b) Trench footings may be utilized for slab on grade additions, such as a 3-season room and the like, which does not exceed an area of 300 square feet, and is only one story in height. The trench footing shall be 12” wide with 2-#5 bars top and bottom. The bottom of the trench footing shall be 48 inches below grade.
- c) Concrete slab for a detached garage, shall utilize a full perimeter grade beam **12 inches wide** with a depth of **12 inches below grade**. It shall also have 2-#5 bars continuous around perimeter. The garage slab shall be 5” thick with wire mesh or fiber mesh concrete poured monolithic with the grade beam. The slab shall be over a 5” crushed gravel base.
- d) Concrete slabs for sheds may be a 4” concrete slab over 4” crushed stone base. Turn down perimeter edge below grade as necessary, minimum 6 inches, when a slab is provided. A shed is not required to have a concrete slab but must be properly anchored.

**48. R-403.1.4.1 Frost Protection**  
All footings shall **be 42 inches** below grade. Delete the “EXCEPTIONS” in this section.

**49. R-404 Masonry Foundation**  
Masonry foundation walls and others are not permitted. Masonry foundation walls, pier & curtain wall foundations, rubble stone masonry, wood foundation walls, insulating concrete forms (ICF), waffle grid insulating concrete form wall and screen grid insulating concrete form wall systems are **“NOT PERMITTED”**.

**50. R-405.1 Foundation Drainage**  
Delete the EXCEPTION.  
Add: The electrical circuit that provides power for the **sump pump** in the perimeter drainage system shall be a dedicated circuit, independent of all circuits in the building and shall have a single outlet.

- 50a. R-502.2.1 Decks**  
All decks shall be designed for a 60 P.S.F. live load. All decks shall be supported by concrete filled post holes which are 42" inches below grade. The wood posts shall be securely anchored with metal post base anchors which are embedded in the concrete or mechanically fastened to the concrete, with expansion bolts.
- 51. R-504 Pressure Preservatively Treated – Wood Floors (on ground)**  
Treated wood floors on the ground shall not be permitted. Delete this section in its entirety.
- 52. R-506 Concrete Floors ( on ground)**  
Concrete slab-on-ground floors shall be minimum of 4" thick over 5" crushed stone base. Basement concrete floors shall have a 6 mil. vapor barrier.
- a) Garage slabs shall be a minimum of 5" thick over a 5" crushed stone base. Attached garages shall have a 6 mil. vapor barrier.
  - b) Concrete floors in basements shall be 4" concrete slab with 6 x 6 W 1.4 W. W. F. over 6 MIL. Vapor barrier over 5" crushed stone base, minimum
  - c) Typical welded wire fabric required for various slab thicknesses are as follows:
    - 4" CONC. SLAB – 6 x 6 W 1.4 x W 1.4 W.W.F. 5"
    - CONC. SLAB – 6 x 6 W 2.1 x W 2.1 W.W.F. 6"
    - CONC. SLAB – 6 x 6 W 2.9 x W 2.9 W.W.F (ALL VAPOR BARRIERS SHALL BE 6 MIL.)
  - d) Blast furnace slag shall not be permitted as a base for a concrete slab.
  - e) Delete the Exception in section R-506.2.2. The exception says that a base course is not required under certain conditions. A base course shall always be required.
- 53. R-602.3.2 Top Plate**  
A double top plate shall always be required. Delete the Exception in this section. A single top plate is not permitted.

- 54. Tables**
- R-602.3**  
**(3 & 4)**
- Stud Spacing and Panel Thickness**  
Stud spacing shall always be 16" O.C. or less than 16" O. C.
- a) The minimum panel thickness shall be ½" plywood or ½" O.S.B. for wood structural panel wall sheathing.
- b) Particle board wall sheathing is not permitted.
- 55. R-602.8**
- Fire-blocking Required**  
Fire-blocking shall be required per this section. Other materials which may be used, in addition to the materials listed in **R-602.8.1**, are Therma fibre insulation and approved intumescent fire-stopping caulk. (See 12i carpentry)
- NOTE:** Foam plastic products are not permitted to be used as a fire-blocking or fire-stopping material.
- 55a. R-602.9**
- Cripple Walls** – Cripple walls shall be 2 X 6 studs @ 16" O.C. minimum. Foundation cripple walls which have a stud height less than 14 inches shall be sheathed on both sides with a wood structural panel that is glued with sub-floor adhesive and fastened to both the top and bottom plates in accordance with Table 602.3 (1) or the cripple walls shall be constructed of solid blocking. Cripple walls shall be supported on continuous foundations.
- 56. R-606.1.1**
- Professional Registration Required**  
All project drawings, typical details and specifications **are** required to bear the seal of the architect or engineer responsible for the design (typical for all).
- 57. R-611**
- Insulating Concrete Form Wall Construction**  
Delete this section in its entirety. ICF wall construction is not permitted.
- 58. R-613**  
**Add:**
- Exterior Windows**  
All exterior windows shall have insulating glass.

**59. R-703.9**

**Exterior Insulation Finish Systems (EIFS)**

**Add:**

All Exterior Insulation Finish Systems (EIFS) shall be a completely drainable type system utilizing one or more of the following, as specified by the manufacturer's installation instructions:

- A continuous mesh
- A "Wrinkle Wrap" type of building wrap
- Vertical groove drains in the insulation board
- Other method as prescribed by the manufacturer's installation instructions

- a) The insulation shall be mechanically fastened.
- b) The contractor performing the work must be a certified installer of the EIFS product that he is installing
- c) The Certified EIFS contractor shall provide a warranty for the labor and materials, identifying that the installation was performed in accordance with manufacturer's installation instructions as well as the provisions of this code. Any and all violations of this code or discrepancies with the manufacturer's installation instructions shall be corrected at the expense of the EIFS contractor, and General Contractor who has control over the project.
- d) The City of Prospect Heights Building Department does not recommend EIFS and assumes no responsibility for its use and/or application to any building.

**60. R-801.3**

**Roof Drainage and Sump Discharge**

Roof drainage and stormwater discharge shall be directed by the city engineer on a case by case basis. The City Engineer's directive in the plan review process or as directed in the field during construction is the final authority with respect to roof drainage and sump pump (stormwater) discharge.

- a) Storm water from the roof, perimeter drain tile system, sump pump or any other source shall not be connected to the sanitary sewer.
- b) A sanitary sewer shall not be connected to a storm sewer.

**61. R-905.2.7.1 Ice Protection**

**(i.e. Self-Adhesive ice/water shield)**

Ice protection shall be provided for asphalt shingled roofs that consists of a self-adhering polymer modified bitumen sheet, which shall be used in lieu of normal underlayment and shall extend from the eaves edge to a point at least 24 inches inside the exterior wall line of the building.

- a) The same requirement applies for metal roof shingles, mineral surface roll roofing, slate and slate type shingles, wood shingles, wood shakes, similar roofs and when a complete “tear-off” occurs for re-roofing of an existing building.

**62. Chapter 11 Energy Efficiency**

**Modify as follows:**

The energy efficiency related requirements for the City of Prospect Heights shall be as follows:

- a) All **windows** shall have insulating glass
- b) Provide a minimum of R-13 insulation with a vapor retarder (i.e. kraft paper or equal) in all **2” x 4”** exterior stud walls.
- c) Provide a minimum of R-19 insulation with a vapor retarder (i.e. kraft paper or equal) in all **2” x 6”** exterior stud walls.
- d) Provide a minimum of R-38 insulation in **roof area**. Also provide ventilation baffles in every space between roof rafters or trusses, to vent roof properly.
- e) **Cathedral or Sloped Ceilings** shall be designed by the architect to achieve the highest R-Value possible in complying with the R-38 standard requirement. In no circumstance shall the R-Value be less than R-30. Proper roof ventilation shall be provided, with baffles and continuous ridge vent or other as designed by the architect.
- f) **Basements:** Whenever a basement is finished, the exterior perimeter walls shall be insulated with a minimum of R-10 insulation, on the interior side of the basement wall.

- g) **Optimal Design** – The architect, owner or general contractor may at their own option choose to increase the energy efficiency related requirements set forth by the City of Prospect Heights. The architect, owner or general contractor may at their own option choose to follow all or some of the prescribed requirements of Chapter 11 in the IRC.
  
- 63. **M-1408** Delete this section in its entirety. Vented floor furnaces are not permitted.
  
- 64. **M-1601.1** Items #5, #6 and #7 are hereby deleted. Construction cavities in stud and joist spaces shall not be used as a plenum for air supply or returns.
  
- 65. **Part VII Plumbing – Chapter 25 through 32.**  
All plumbing shall comply with the Illinois State plumbing code and the more stringent, City of Prospect Heights amendments, to that code.
  
- 66. **P-2903.7 Water Service Pipe**  
The minimum size water service pipe shall be 1 inch, type K copper.
  
- 67. **P-2904 CPVC Plastic Pipe**  
All forms of plastic, vinyl, CPVC, PEX, etc. shall not be permitted for use in a water distribution system.
  - a) Water distribution lines Type L copper shall not be placed on any outside/exterior walls.
  
  - b) The use of foam core pipe shall not be permitted.

68. **P-3103.1 Vent Pipe – Roof Extension**  
All open vent pipes which extend through a roof shall be terminated at least 12 inches above the roof.
69. **Part VIII Electrical Chapters 33 through 42.**  
All electrical shall comply with the N.F.P.A. 70, National Electrical Code 2002 and the more stringent, City of Prospect Heights Amendments to that code.
- a) The electrical Chapters 33 through 42 of the International Residential Code 2003 may be referenced and shall apply when:
- The standards set forth are at least as stringent as the NEC 2002 as amended.
  - The standards set forth are at least as stringent as the applicable City of Prospect Heights amendments.
  - When the NEC 2002 and the City of Prospect Heights amendments are silent on a particular subject.
70. **Chapter 41 – Swimming Pools**  
See Appendix G and amendments to Appendix G, for additional detailed requirements.
71. **Part IX Chapter 43 Referenced Standards**  
All of the referenced standards listed in Chapter 43 of the IRC 2003 edition are hereby adopted by the City of Prospect Heights.
72. **Part X Appendices of the IRC 2003 edition:**
- **Appendices A, B, C** are hereby adopted by the City of Prospect Heights
  - **Appendix D – Recommended Procedure for Safety Inspection of an Existing Appliance Installation** - shall be for information only and is not adopted or part of this code.
  - **Appendix E** – Manufactured Housing used as dwellings is hereby deleted.
  - **Appendix F – Radon Control Methods** shall be for information only and is not adopted or part of this code.

73. **Appendix G of the IRC 2003 edition– Swimming Pools, Spas and Hot Tubs is hereby adopted and amended as follows:**

Add the following new section AG101.1.1

**SECTION AG101.1.1 GENERAL OVERVIEW REQUIREMENTS FOR SWIMMING POOLS, SPAS AND HOT TUBS.**

- a) **ALL HOT TUBS and SPAS are required to have an APPROVED SAFETY COVER**
- b) **LOCATION: All pools must be 50% visible from inside your home.**
- No shrub, bush, tree, structure, equipment or other impediment to vision, except the fence and gate, shall be placed as to impair the visibility of the entire area of the pool surface from the side of the pool nearest the dwelling on the premises. In case of round or irregularly shaped pools this “side” shall be considered as a projection of the face nearest the dwelling
  - Pools must be 10 feet from any building, which includes the house, shed, garage, balcony, porch, deck or any accessory structure
  - 10 feet is measured from the eave or edge of structure to the water edge
  - The pool may not be installed over an easement
  - Must be 10 feet away from any and all overhead power lines
  - Must be 5 feet away, measured horizontally, from any underground power lines
  - The distance is always measured horizontally from the waters edge of the pool.
  - Must be at least 5 feet from a side property line and at least 5 feet from a rear property line

- c) **Where a wall of a dwelling serves as part of the barrier of the pool, the following shall apply:**
- All doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and its screen (if present) are opened
  - The alarm shall sound continuously for a minimum of 30 seconds immediately after the door is opened
  - The alarm shall have a minimum sound pressure rating of 85 dBA at 10 feet and the sound of the alarm shall be distinctive from other household sound such as smoke alarms, telephones and door bells
  - The alarm shall automatically reset under all conditions
  - The alarm shall be equipped with manual means, such as touch pads or switches, to deactivate the alarm temporarily for a single opening from either direction
  - Such deactivation shall last for not more than 15 seconds
  - The deactivation touch pads or switches shall be located at least 54 inches above the threshold of the door
- d) **Barrier** – A barrier is required for all swimming pools, hot tubs and spas. See Section AG105.
- e) **Other Safeguards**  
When the pool is not in use under the supervision of the owner, his agent, tenant or other responsible person, all access gates or doors leading directly to the pool area shall be securely locked, and/or other safeguards, such as an approved cover, shall be in place to provide protection against the possibility of accidental falling into the pool by a person.
- f) **GRADING AND SITE DRAINAGE**
- Maintain existing grading and site drainage. All unused excavated material shall be removed from the site.
- g) **ELECTRICAL**
- All electrical wiring required for pumps, lights and outlets must comply with the National Electric Code
  - No extension cords are permitted
  - All wiring must be ground fault protected
  - A single twist lock receptacle is permitted between 5 feet and 10 feet of the inside edge of the pool, ground fault protected, for the pump
  - All other outlets must be ground fault protected and at least 10 feet from the inside edge of the pool.

- For all pools at a dwelling unit, a receptacle is required between 10 feet and 20 feet from the inside edge of the pool, ground fault protected.
- No lighting fixture shall be installed over a pool or within 5 feet horizontally of the inside walls of a pool unless it is located at least 12 feet above the maximum water level

**h) WATER SUPPLY**

- The water supply for the pool must be taken from a sill cock connected to a house water service and must include a vacuum breaker or back flow prevention device
- The swimming pool shall not collect or hold stagnant or improperly treated water
- The pool may not be drained on any other property
- The pool must be drained to the curb or gutter located along an adjacent street during warm weather

**i) PERMIT PROCEDURES**

If the pool, hot tub or spa holds more than 1,000 gallons of water, or has a depth of 24 inches or greater, a permit is required for construction of installation. A permit is required for all hot tubs and spas.

1. Obtain a pool permit application from the Building Department.
2. Submit the completed application along with two (2) copies of each of the following:
  - a) Plat of Survey indicating proposed location of the pool
  - b) With distances from property lines dimensions
  - c) A grading plan for the pool is needed if excavation or filling or any change of grade is required
  - d) The manufacturer's specifications for the pool and filter, if the pool is above ground
  - e) The set of architectural plans if the pool is in ground

**j) ILLEGIBLE PLANS WILL NOT BE ACCEPTED**

- k) Call JULIE Joint Utility Location Information for Excavating at 1-800-892-0123, for utility line location information, JULIE is a free service.**

**74. Appendix G – Section AG102 - Definitions Omitted**

**75. Appendices H & I - deleted**

**Appendices H and I shall be deleted in their entirety.**

**76. Appendix J – Existing Buildings and Structures**

Appendix J shall be adopted by the City of Prospect Heights.

- a) All new work on existing buildings and structures shall be in compliance with this code and the local amendments.
- b) Delete Section AJ102.4 Replacement Windows in its entirety. All replacement windows shall be insulating glass or match the other existing windows on the structure.

**77. Appendix K – Sound Transmission - Deleted**

Delete this section in its entirety.

**78. Appendix L – Electrical Provisions cross- reference with the N.E.C.**

Appendix L shall be adopted by the City of Prospect Heights

**~~~END ~~~**