

## **ADOPTION OF THE INTERNATIONAL BUILDING CODE 2006**

That a certain code, three (3) copies of which are now on file and have been on file for a period of not less than 21 days in the office of the Village Clerk of the Village of Tinley Park, Cook and Will Counties, Illinois, being entitled and designated "The International Building Code"2006, be and is hereby adopted as a portion of the Comprehensive Building Code of the Village of Tinley Park, Cook and Will Counties, Illinois, for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions, and terms of "The International Building Code"2006 are hereby referred to, adopted and incorporated herein and hereby made a part hereof as if fully set out herein, except as hereinafter deleted, modified or amended.

# CHAPTER III - MINIMUM CONSTRUCTION REQUIREMENTS

## SECTION 300 - GENERAL:

### A. Construction Materials and Methods:

These requirements specify minimum acceptable construction materials and methods. Other materials and methods not specified herein may be approved for use by the Corporate Authority, upon the submission of evidence satisfactory to them that their performance in use will be at least equivalent to that of the materials and methods specified herein. It shall be required that such evidence include adequate reports and test data from a recognized testing laboratory, or proven and authoritative service records, or analysis of performance made in accordance with well established principles or mechanics. The applicant, requesting approval of a material and/or method not specified herein, will be responsible for the submission of all such evidence and shall pay all costs incidental to same.

### B. Loads: -See **International Building Code 2006 Chapter 16-Structural Design**

### C. Vapor Barriers:

#### 1. General:

Definition: A material having a vapor transmission rate of 1.0 perms or less. Outside of wall to have vapor transmission rate of 5.0 perms or more. Generally acceptable are:

- a. 55 lbs. per 108 square feet of smooth roofing.
- b. Foil or foil backed board.
- c. Duplex laminated papers.
- d. Duplex papers coated with metal oxides.
- e. Insulation backup paper-treated.
- f. Insulating gypsum wallboard.
- g. Polyethylene films 4 mil. minimum.
- h. Breather type papers

2. Ceiling: Where unheated spaces above, install independent vapor barrier or one integral with insulating material immediately above ceiling interior finish.

3. Sidewalls: When exterior coefficient of heat transmission is not more than 0.16 B.T.U. per square foot, per degree temperature difference. Install immediately back of interior wall finish.
4. Crawl Space: See Section 200-H-2.
5. Vapor barrier to be applied tightly against any electrical outlets, registers or framed openings.

D. Thermal Insulation and Air Infiltration

1. All exterior walls of heated spaces, and all ceilings, floors, and partitions, between heated and unheated spaces, of all residential structures shall be constructed, and/or insulated, so as to provide a coefficient of heat transmission - "U value" as indicated herein:
  - a. Ceilings and vaulted ceilings Maximum "U" Value - .05 (R-30)
  - b. Exterior walls of frame or masonry veneered frame construction Maximum "U" Value - .07 (R-13)
  - c. Exterior walls of masonry construction Maximum "U" Value - .12 (R-13)
  - d. Partitions between heated and unheated spaces Maximum "U" Value - .07 (R-13)

Note: Closets or alcoves opening into a heated space shall be considered a portion of the heated space.

- e. Floors over unheated basements, crawl spaces, breezeways and garages Maximum "U" Value - .07 (R-19)

Note 1: A basement shall be provided with a positive heat supply to maintain a minimum temperature of +50 degrees F.

Note 2: A crawl space with ventilation louvers is considered unheated. A crawl space without ventilation louvers is considered unheated unless it is (a) provided with positive heat supply equivalent to at least 10% of the total calculated heat loss of the living unit, or (b) is provided with a positive heat supply to maintain a minimum temperature of +50 degrees F., or © issued as a supply or return plenum.

Note 3: A garage is considered unheated unless provided with a positive heat supply to maintain a minimum temperature of +50 degrees F.

Note 4: Ducts and pipes located in unheated crawl spaces shall be insulated as follows:

Warm air supply ducts and plenum shall be covered with insulation material having a minimum "R" value of 11.

Return air ducts shall be covered with insulations material having a minimum "R" value of 7.

Sewer waste, drain and vent pipes shall be covered with insulation material having a minimum "R" value of 7.

- f. Heated crawl spaces: When a crawl space is heated, the perimeter walls do not have to be insulated.
  - g. Concrete slabs: Edge heat loss of concrete slabs around the perimeter of heated spaces shall not exceed a maximum value per lineal foot of exposed edge of 42 BTU for unheated slabs and 50 BTU for heated slabs.
  - h. Perimeter insulation shall extend a minimum of 18 inches below slab on all exterior walls, or extend a minimum of 24 inches under slab, parallel to finish floor.
2. Materials used for thermal insulation of floors, walls, ceilings, roofs and/or partitions in all assemblies including but not limited to basements, crawl spaces, attics, etc. shall be non-combustible, and shall not release toxic gases when exposed to fire.
- a. Blown-in and poured type loose fill may be used in attic spaces where the pitch in roof design is not less than 2.5 to 12.0 and there is not less than thirty inches (30") of clear headroom at the roof ridge.
  - b. Clear headroom shall be the distance from the top of the bottom chord of truss, or ceiling joist, to the underside of the roof sheathing.
  - c. When eave vents are installed, adequate baffling of the vent openings must be provided so as to deflect the incoming air above the surface of the installed blown or poured insulation.
  - d. Baffles shall be of wood or other durable material and shall be in place at the time of the framing inspection.
  - e. When loose fill insulation is proposed, the "R" value of the material shall be shown on the building plans together with the total number of bags and net coverage per bag.

- b. Perimeter insulation shall be rigid, inorganic, waterproof and non capillary, termite and fungi resistant.
  - c. Pipe and duct insulation shall be waterproof, termite and fungi resistant and shall be fire resistant.
3. Venting: For ventilation of attic spaces see Section 200-I, for ventilation of crawl spaces see Section 200-H.

E. Infiltration of Air

1. All window openings in exterior walls shall be weather-stripped and/or have storm sash installed so as to allow not more than 24 cubic feet of air infiltration per hour per lineal foot of crack when the wind velocity is 15 MPH.

**SECTION 301 – FOUNDATIONS:**

A. Bearing Value of Soils

1. All applications for permits for the construction of new buildings, or structures, shall be accompanied by a statement describing the soil in the ultimate bearing strata, including sufficient records and data to establish its character, nature, and load-bearing capacity. Such records shall be certified by a qualified soils mechanics engineer, who is a professional or structural engineer and is licensed by the State of Illinois as such.
2. In the absence of satisfactory data, the owner shall make borings, test pits, or other soil investigations at such locations, and to sufficient depths, of the bearing materials to the satisfaction of the Building Official.
3. All testing shall be done under the supervision of a registered structural or professional engineer. Copies of all logs, diagrams, records of sample analysis, and engineering recommendations shall be submitted to the building department for inclusion in the department's files.
4. Mud, organic silt, or unprepared fill shall be assumed to have no presumptive bearing capacity unless approved by test.

B. Design of Footings, Piles, Caissons, Grade Beams, and Other Supports

1. These shall be designed to support all tributary dead and live loads to be imposed, on the specific bearing available.
2. All special designs, requiring reinforcement of spread footings, piles, caissons, grade beams or other unusual treatment shall be submitted to the building department with all drawings, calculations, and data for approval, prior to the start of construction.

C. Footings and Foundations

1. Extend bottom of footing to undisturbed, inorganic earth or place footings on a laboratory controlled engineered fill as recommended and certified by an approved independent testing laboratory to the Building Official.
2. Bottom of footing. Not less than 3'6" below finished grade, except where placed on solid rock.
3. Protect against freezing. No concrete shall be placed on frozen ground.

D. Crawl Space

1. Ground level at least 24 inches below bottom of floor joists and girders. The ground under the dwelling shall be approximately level.
2. Remove all debris, sod, tree stumps and other organic matter within area occupied by dwelling.
3. Also refer to Section 200-H.

**SECTION 302 – GRADING, BACKFILLING & LANDSCAPING:**

A. Grades

1. The finished grade, or elevation heights, shall be determined by the Village Engineer, in accordance with established grade plans. The finished grade at building and at each corner of the property shall be indicated on drawings submitted with application for permit. Courses, or means of disposal, of all storm water shall also be indicated on above drawings.
2. All grade stakes and grade elevations shall be established by a registered surveyor or professional engineer.
3. Upon completion of finish grading the Village Engineer shall field check the grades, and certify the propriety of same to the building department. No Certificate of Occupancy will be issued by building department unless such certification is received, unless a delay is granted (not to exceed 6 months) by the Building Official, because of weather conditions.
4. The Permittee shall pay all costs for engineering for setting and checking of grades.
5. Certificate of Occupancy shall indicate owner's responsibility for installation, and maintenance of finish grades and landscaping in accordance with subdivision regulations.

B. Backfilling

1. Material used shall be clean and free from material subject to decay, wood scraps, large boulders, large pieces of concrete or stone, frozen clumps, or other deleterious substances.
  2. No backfill shall be placed against concrete foundation walls before waterproofing has been applied.
  3. Backfill shall be placed carefully against walls and shall be well compacted. When backfilling before the first floor construction is in place, care shall be exercised in operation of heavy equipment near wall. Brace wall if necessary.
  4. Protect all sewers, water lines and other underground work when placing backfill, or when grading.
- C. Grading or Drainage or both, shall be performed so that water will drain away from the building on all sides and off the lot in a manner which will provide reasonable freedom from erosion and pocketed surface water. Construction such as walks, driveways and retaining walls shall be installed so that they will not interfere with drainage. All sidewalks, driveways, patios and other flat work shall have the top of the finished surface 4" minimum below the top of the foundation wall.
- D. Finish Grade and Top Soil
- After rough grading to a level not less than 4" minimum below anticipated finish grade, the builder, or developer, shall bring the levels of the property (excluding areas covered by building, garage, walks, patios or driveways) up to the established finish grade levels with black earth or top-soil. Such top-soil shall be not less than four inches (4") deep, and shall be suitable for planting lawns by seed or sod, after proper preparation by homeowner.
- E. Sod and Seeding

The following standards are basic requirements for all developed lots:

1. The property owner of each and every developed lot or parcel shall landscape all areas of the property (including all adjacent public right-of-ways) not improved by buildings, structures, parking or access-ways.
2. All lots or parcels shall be required to sod the front and side yards of each developed lot. Rear yards may be sodded, seeded or hydro seeded. All landscaping and plantings will be accomplished, within one (1) year, after being issued a Certificate of Occupancy by the Village of Tinley Park.

3. All lots or parcels not seeded or sodded, regardless of the date of occupancy must conform to the requirements of this section within six (6) months of notification by the Village of Tinley Park.

### **SECTION 303 – CONCRETE WORK:**

#### **A. General:**

##### **1. Materials**

- a. Cement: for concrete shall comply with approved standards (ACI-318).
  - b. Aggregates: shall be sized and graded in accordance with approved standards.
    1. Sand: clean, sharp and hard, free from deleterious materials, grade according to intended use.
    2. Coarse aggregate (crushed stone or gravel): Hard, strong, crystalline rock, clean and free from shale or other soft materials.
    3. Lightweight aggregate for structural concrete.
  - c. Water shall be clean and potable.
  - d. Reinforcing steel shall conform to approved standards (ACI-318).
2. Water content, including moisture in the aggregate, shall not exceed 7 gallons of water per bag of cement (except as noted).
  3. Maximum slump: 6 inches (except as noted).
  4. Calcium chloride may be used as an accelerator, but shall not exceed 2 lbs. per bag of cement, and shall be introduced in solution as part of the mixing water.
  5. All concrete shall be air-entrained, 6 %  $\pm$  1 %. Air entraining admixtures shall conform to approved standards.

#### **B. Quality of Concrete:**

1. Job Mix: Minimum cement proportions, by volume.  
1 part portland cement, 2 ½ parts sand, 3 parts coarse aggregate (¾ to 1 inch maximum size).
2. Commercial Ready-Mix.

- a. Minimum portland cement content: 5 bags/cubic yard and a minimum specified compressive strength of concrete 3,000 psi.
  - b. Mixing period shall not extend beyond 1 ½ hours per batch.
3. Exposed Concrete (driveways, sidewalks, curbs and gutters, patios, stoops, etc.)
- a. Minimum portland cement content: 6 bags/cubic yard, for ¾ inch to 1 inch maximum size aggregate and a minimum specified compressive strength of concrete, 3,500 psi.
  - b. Maximum slump: 4 inches.
  - c. Maximum water content, including moisture in the aggregate: 6 gallons per bag of cement.
4. Temperature: Concrete shall not be placed when temperature is below plus 40 degrees F., or when temperature forecast indicates a drop to plus 20 degrees F. during 24 hour period following placement, unless ACI 306-66 (Recommended Practice for Cold Weather Concreting) is strictly followed.
- C. Forms:
1. Double forms required for all basement concrete foundation walls.
  2. Side forms required for footings.
  3. Build tight, straight, plumb, and brace rigidly.
- D. Placing:
1. Place continuously unless otherwise allowed by Building Official.
  2. All walls shall be poured to full height, no horizontal joints permitted. When necessary, provide vertical joints. All vertical joints shall be keyed and caulked from outside.
  3. Spade and rod thoroughly.
- E. Curing and Protection: See ACI-318
- F. Loading:
- Allow sufficient time for strength of concrete to develop before subjecting to loads or traffic.
- G. Footings:

1. General:
    - a. Design for proper distribution of superimposed loads.
    - b. Material: cast-in-place concrete.
    - c. Bear on solid, unfilled ground.
    - d. Unstable or questionable soils will require a soils report by a state licensed testing agency.
  2. Wall Footings:
    - a. Minimum dimensions for spread footings shall be 10 inches deep by 20 inches wide.
  3. Pier, Post and Column Footings:
    - a. Dwellings: Minimum area 6.25 square feet; thickness minimum 12 inches. (Not permitted under exterior walls).
  4. Chimney Footings:
    - a. Dwellings: Minimum thickness, 12 inches; minimum projection each side, 6 inches.
    - b. Pour integral with wall footing when chimney occurs in outside wall or inside bearing wall.
  5. Attached Garages and Breezeways: Provide spread footings same as for house, no trench footings.
- I. Footing Drain Tile:
1. Required outside or inside of basement and crawl space footings. Minimum diameter is 4 inches.
  2. Cover tile with 8 inches gravel, or crushed stone, (95 percent) passing 3/4 inch mesh, less than 5 percent passing 3/8 inch mesh.
  3. Connect drain tile to water-tight sump pit (cast iron, fiberglass, or approved plastic). The sump pump shall discharge through piping approved by the Village into the rear yard. Such sump pumps shall not be allowed to discharge into either the front or side yards or otherwise in front of the building, but need not be connected directly to a storm sewer.
- J. Concrete Foundation Walls Cast in Place. (For masonry unit foundation walls, See Section 305)
1. General

- a. Materials. See Section 303.
  - b. Walls supporting frame construction: Extend concrete not less than 6 inches above adjoining outside finish grade.
  - c. Walls supporting masonry veneered wood frame:  
Extend foundation so that wood portion of wall is not less than 6 inches above outside finished grade.
2. Minimum thickness
    - a. Not less than that of wall supported.
    - b. Supporting porch slabs, steps and one-story wood frame structures without basement, minimum 8 inches.
    - c. Interior walls not subject to lateral pressure, 6 inches minimum
    - d. Masonry veneered walls, minimum 9 inches.
    - e. Eight (8) inches thick solid masonry walls minimum 10 inches.
  3. Girder pockets. Provide 4 inch end bearing on main wall for girder. Form pocket for wood girder 1 inch wider than girder.
  4. Sill anchor bolts to be installed.
    - a. Diameter, ½ inch minimum, bent or hooked.
    - b. Minimum length, 10 inches.
    - c. Provide washer under nuts on bolts.
  5. Anchorage for intersecting walls and slabs. Provide dowel bar anchorage for porch and terrace slabs, concrete or masonry steps and area walls, which adjoin foundation walls. For basementless portions and attached garages, embed four ½ inch round hooked bars 4 feet long in main wall, two near top and two near bottom of attached wall.
  6. Chimney foundations: Start at level of lowest adjacent foundation wall footings.
  7. Damp proofing and waterproofing. See Section 305
- K. Concrete Floor Slabs on Ground:

No floor slab to be placed in water or on a soft wet sub-grade.

1. Construction:
    - a. Fill under slabs: Gravel, sand, screenings, or crushed rock, minimum thickness 4 inches. Earth under fill should be thoroughly leveled and free from vegetable matter, thoroughly tamped.
    - b. Wire mesh reinforcing: When required, minimum weight 40 lbs. per 100 square feet.
    - c. Bottom of slab: Not lower than top of footing. Provide at least 4 inches bearing on footing.
  2. Cement floor finish:
    - a. Finish basement slab with steel trowel.
    - b. Integral finish on concrete slab.
  3. Slabs on ground used as a base for floors or as a finish floor in habitable rooms.
    - a. Minimum thickness, 4 inches
    - b. Provide membrane waterproofing directly under slab, at least 4 mil polyethylene film, lapped 4 inches.
    - c. Provide perimeter insulations. Insulation material shall be rigid, non-capillary and waterproof, not subject to deterioration by termite or fungi.
  4. Basement floor slabs: Minimum thickness, 4 inches.
  5. Garage floor slabs: See Section 315 A or B.
  6. Terrace and porch floor slabs:
    - a. Minimum thickness, 4 inches.
  7. Slabs on ground used to support interior bearing walls or partitions: Thicken to at least 10 inches for a width of 20 inches.
- L. Exterior Concrete Flat Work
1. Public sidewalks, curbs, gutters and driveways (aprons), on Public Property, shall comply with Ordinances regulating Public Improvements within the Village of Tinley Park.

2. Private walks and patios.
  - a. All vegetable matter and black dirt shall be removed.
  - b. Install 4" thick base of compacted gravel, crushed stone or limestone or limestone screenings fill.
  - c. Wire mesh or fiber-mesh reinforcing required in driveway and garage floors.
  - d. Concrete shall be 6 bag mix, and a minimum of 3,500 psi air entrained cement. Four (4) inches is the minimum thickness for private walks and patios.
  - e. Pre-formed expansion strips shall be installed at all joists between slabs and vertical surfaces, i.e.: walls, piers, concrete steps. Also install expansion strip in each 50 lineal feet of walk or drive and at intersections with other walks and slabs.
  - f. Finishing: Walks and steps shall be lightly troweled and broom finished. Score at 5'0" maximum intervals. Finish edges.
  - g. Curing: All sidewalks, patios, curbs, gutters and driveways shall be cured with a liquid curing compound sprayed or not later than 24 hours after pouring of concrete.
  - h. Driveways: All driveways, including the sidewalk area being used as part of the driveway and driveway aprons are required to be five (5) inches in thickness, and meet all requirements of the subdivision regulations.
  - i. Public Sidewalks: All public sidewalks are to be five (5) inches in thickness, except for the sidewalks used as the driveway area, which must meet (h.) of this section.
  - j. Existing Driveways and Sidewalks: All existing driveways, sidewalks and concrete replacements must meet the current codes when being replaced.

**M Repair of Cracks in Foundation Walls:**

Any crack in a foundation wall which permits passage of water into building shall be cut out, on inside of wall, not less than one inch wide and one inch deep. Clean out all loose material and fill cuts flush with epoxy cement grout, or approved equal.

**SECTION 304 -MASONRY See International Building Codes 2006 Chapter 2101**

- A. Fireplaces: - See International Residential Codes 2006 Chapter 10

B. Brick Mail Boxes

1. Permits Required - A building permit and a signed waiver is required prior to any installation of a brick or decorative mail box.
2. Restrictions - Masonry mailbox structures shall not be more than two (2) square feet in size (24 inches by 24 inches) nor shall they be more than five (5) feet in height and shall be erected as follows:

- a. The front edge of the masonry structure shall not be set closer than fifteen (15) inches from the rear edge of the curb or within 2 feet of a Buffalo Box, or within 10 feet of a fire hydrant.
- b. The front of the mailbox itself shall not be closer than 6 inches nor further than fifteen inches from the rear edge of the curb.

NOTE: Masonry mailbox structures do not meet United State Postal Regulations. Contact the Tinley Park Postmaster for a copy of the USPS regulations. Installation of masonry mailbox structures could result in the United States Postal Service curtailing your mail delivery.

3. Construction Requirements

- a. Contact J.U.L.I.E. prior to any excavation.
- b. Install a concrete footing of no less than 36 inches.
- c. The structure shall not be constructed so as to pitch more than 6 inches from a centerline perpendicular to the rear of the footing nor shall the portion of the structure that is to contain the mailbox be cantilevered more than 6 inches from the perpendicular plane of the structure.
- d. The first two tiers of masonry shall be tied into the footing with no less than 5/8 inch re-bar imbedded into the outer footing concrete.

**SECTION 305 – GUTTERS & DOWNSPOUTS:**

When a building is provided with a basement, or crawl space, gutters and downspouts must be installed.

A. Materials:

1. Copper, 16 oz., hard (cornice temper).
2. Galvanized sheet metal: 26 gauge sheets, 1.25 oz. (total weight both sides) zinc coating per sq. ft.

3. Aluminum, not less than .32" thickness for gutters; not less than .024" thickness for downspouts.

B. Roof water Disposal:

Provide outlet acceptable to Building Official.

**SECTION 306 – INTERIOR WALL & CEILING FINISH:**

A. Dry Wall Finish:

1. There shall be 3/8" drywall backer board behind all solid wood paneling less than 5/8" thick, or plywood less than 5/16" thick.
2. All joints in wallboard surfaces intended to receive paint or wallpaper finishes shall be taped and cemented in accordance with manufacturer's directions.
3. Treated joints in pre-decorated wallboard (in unrated assemblies) may be left exposed except when located in kitchen, bath, laundry or similar areas subject to extreme moisture conditions.
4. All joints in wall board surfaces intended to receive paint or wall paper finishes shall be taped and cemented in accordance with manufacture's directions.
5. Treated joints in pre-decorated wall board (in unrated assemblies) may be left exposed except when located in kitchen, bath, laundry or similar areas subject to extreme moisture conditions.

**SECTION 307 – FINISH FLOORS:**

A. Cement Floors:

1. Mix. See Sections 303-B and 303-K-2.
2. Heater room floors on wood construction where solid or liquid fuel is used:
  - a. Minimum thickness, 4 inches.
  - b. Use sheet metal over tops of joints for concrete forms or cut in 1 inch boards flush with top of joists. If wood boards are used, remove after the slab has set.
  - c. Reinforce slab with wire mesh weighing not less than 30 lbs. per 100 square feet, or with 1/4 inch bars spaced 1 foot on center each way.

- 3 .Heater room floors on wood construction where gas burning equipment raises temperature of floor to above 160 degrees, comply with the provisions of 2 above. See American Gas Association specifications.

B. Wood Floors:

1. Materials

- a. Flooring: Kiln-dried materials.
- b. .Strip flooring, hardwood or softwood, minimum thickness 25/32 inch, maximum width 2 1/4 inches for hardwood, 3 1/4 inches for softwood. Wider widths (plank flooring) and parquet flooring may be used when precautions are taken to prevent warping or cupping.
- c. Nails: Maximum spacing, 16 inches on center.
- d. Building paper or deadening felt: Apply under all finish flooring unless floor is insulated.

2. Installation

- a. Finish flooring over sub-flooring: Apply at right angles to sub-flooring except when sub-flooring is laid diagonally.
- b. Finish flooring on strips; wood strips, minimum size, 1" x 2"; or deadening felt on top of sub-flooring.
- c. Strip flooring on concrete: Apply on not less than 2" x 2" sleepers embedded in concrete.
- d. Wood block flooring on concrete: Set blocks in mastic and install in accordance with flooring manufacturer's directions.

C. Ceramic Tile:

1. Materials. **See ASTM C 126-86.**

2. Grade: Not less than Standard grade.

3. Setting bed.

- a. Mix 1 part portland cement, 4 parts sand; or 1 part portland cement, 2 parts sand, and 4 parts pea-size aggregate.
- b. Minimum thickness: 1 1/4 inches, if reinforced with wire mesh; 3 inches when installed below top of chamfered joists, with finish tile surface at least 1 1/2 inches above tops of joists.

4. When applied over wood subfloor: Install asphalt saturated felt over sub-floor underneath the wire mesh.
- D. Rubber Tile, Asphalt Tile, Linoleum and Wall to Wall Carpeting.
1. Do not apply rubber tile or linoleum on slabs resting on the ground. Asphalt tile may be used on slabs bearing on the ground provided the slab area where the tile are to be applied has first been covered with membrane waterproofing.
  2. Hardboard, plywood or similar underlayment leveler having a nominal thickness of 1/4 inch shall be used over wood sub-floors to provide a smooth, flat surface for the finish floor covering (including wall to wall carpeting). Apply in accordance with manufacturer's recommendations.
  3. Adhesive for flooring to be waterproof; type as recommended by manufacturer of the floor covering.

### **SECTION 308 - GARAGES:**

A. General

1. A detached garage must be placed a minimum of ten (10) feet to the rear of the residence as sighted across the driveway, and a minimum of five (5) feet from the rear lot line, and a minimum of five (5) feet from the side lot line. No portion of the structure, including roof overhang or eave shall project into or over any dedicated easement.
2. Floors
  - a. Remove all top soil, loose fill and organic matter under entire area of garage including foundations.
  - b. Install not less than four (4) inches layer of well compacted gravel, crushed stone, or sand.
  - c. Install not less than four (4) inches of concrete (minimum five (5) bag mix), reinforced with wire mesh complying with ASTM A-185; minimum size 6" x 6", #10 x #10. Pull reinforcing up into slab when pouring. In lieu of wire mesh, fiber mesh is an acceptable material.
  - d. Pitch floor to doors, so as to drain efficiently.
  - e. Vehicle door openings shall not exceed ten (10) feet in height. Vehicle doors shall not be the sole egress from the garage.

- f. A communicating door between garage and residence shall not be considered as a required means of egress from the residence.

B. Attached and Built-In Garages

1. Construction, and foundation, and all footings, same as required for the dwelling.
2. If door opening occurs between garage and dwelling, provide 4 inch curb at the service door, or construct garage floor 4 inches lower than adjoining floor. There shall be no open stair leading from a garage to a basement or floor of the house lower than the garage floor. Also refer to Section 204, A-5.
3. Installation of house heating unit or other fuel burning appliance in garage space not permitted.
4. Wood frame walls and doors common to dwelling and garage to be one hour fire rated construction. A one hour fire rated bulkhead shall be established in the attic space directly above the one hour rated garage wall and it shall be continuous from the fire rated wall to the roof deck. Where rooms occur over the garage area, ceilings are required to be double layer of 5/8 inch Type X drywall and all walls shall be one hour fire rated construction. The door opening protectives shall be minimum 1 3/4 inch solid core wood doors or approved equivalent with hollow metal or solid rabbeted wood frames, an approved closer, and approved latching type hardware. Frames shall be properly fire-stopped between rough framing and back face of frame.
5. Hot air heat duct openings shall be a minimum of four (4) feet above floor of garage with a fusible link fire damper. Cold air returns are not permitted.

C. One-story frame detached garages.

1. Maximum size can not exceed 720 square feet.
2. Total height of a pitched roof garage shall not exceed nine (9) feet at the eaves and eighteen (18) feet at the roof peak when measured from the finished floor. Total height of a flat roofed garage shall not exceed twelve (12) feet measured from the finished floor to the highest point of the parapet, fascia, roof surface, or any other portion of the structure.
3. Comply with construction requirements for one-story dwellings with the following exceptions:
  - a. Grade beam construction permitted, consisting of a four (4) inches concrete floor on a minimum four (4) inches of crushed stone, sand or gravel, poured monolithically, with a minimum twenty (20) feet

deep outer edge, a width of ten (10) feet around perimeter of building.

- b. Concrete under sill plates to be a minimum of six (6) inches above finished grade.
  - c. Studs, maximum spacing twenty-four (24) inches on center. Doubling of studs not required on jambs of openings less than 3'5" wide.
  - d. Wall sheathing and building paper may be omitted if corner bracing is used. Each corner is to be braced from top outward in two directions to a minimum of 72" from corner at sill plate, and may be applied on the inside surface of studs, minimum 1" x 4".
  - e. Corner post may be two (2) 2" x 4" or one 4" x 4".
  - f. Top plate may be single, provided rafters occur directly over studs and plate at corners is lapped to provide tie.
  - g. Rafter ties not less than 2" x 4", maximum spacing six (6) feet on center.
  - h. Concrete floor, minimum 4" of concrete on minimum 4" of crushed stone, sand or gravel.
  - i. No fuel burning device shall be installed in any garage, unless AGA approved, vented, gas fired, with sealed combustion chamber.
4. Overhead door and service door heights are 6'6" min. 8'0" max.
  5. Materials for roof construction must be either asphalt shingles, or may match roofing used on an existing dwelling located on the same lot as the new detached structure.
- D. One story solid masonry or masonry veneer detached garages and accessory buildings. Also see Section 213 for maximum area and dimensions.
1. Comply with construction requirements for one-story dwellings with the following exceptions:
    - a. Spread-type footing, minimum size 10" deep by 20" wide. Bottom of footing shall be a minimum 3'6" below finished grade. Foundation walls to be formed both sides, minimum 8" thick poured concrete.
    - b. For brick veneer framing, top of concrete foundation shall be not less than 6" above finished grade.

## **SECTION 309 – DRIVEWAYS, APRONS, & PARKING AREAS:**

### **A. General**

#### **1. Permits and inspections**

- a. Prior to the installation of any new driveway, or the replacement of an existing driveway, the contractor (or the owner) shall secure a Building Permit. Permits must be prominently displayed.
- b. Application for permit shall be accompanied by two (2) copies of a Certified Survey on which:
  1. All structures are shown, and dimensions to property lines are shown, and,
  2. All driveways, aprons, and approaches are indicated.
  3. Any brick paver or decorative concrete/asphalt driveway approach/apron will require a waiver signed by the homeowner prior to placement.
- c. Inspections. After excavation for drive has been completed, but prior to installation of sub-base, base course or cushion course, the contractor shall request an inspection by Building Official and shall do no additional work until the excavation has been approved by the inspector.

#### **2. License and Bond**

- a. All contractors installing driveways and/or parking areas are required by Village Ordinance to be licensed by the Village of Tinley Park.
- b. All contractors installing driveways and/or parking areas, prior to the issuance of a permit, must furnish to the Village a bond, in the amount of \$20,000.00, secured by a surety company which is acceptable to the Village of Tinley Park, Illinois. Bond shall be payable to the Village and, in effect, guarantee that contractor will comply with all requirements of applicable Village ordinances and codes.

#### **3. Location of driveways:**

Driveways shall be not less than one foot (1'0") from a common private property line.

#### **4. Drainage of driveway:**

Driveways shall not be sloped or pitched so as to cause surface water to drain onto neighboring property.

5. Aprons or approaches:

All driveway construction on or over public property, i.e.: parkways, between curb or edge of street and the property line, shall be paved with concrete or asphalt unless approved otherwise.

B. Concrete

The concrete work materials, construction, expansion joints, and curing shall comply with Section 303-L "Exterior concrete flat work".

C. Asphalted Driveways

1. All materials, size of aggregates, compaction, and installation of same shall comply with the current edition of "Standard Specifications for Road and Bridge Construction" issued by the Illinois Department of Transportation (I.D.O.T.).
2. All black dirt, organic matter and loose fill shall be removed.
3. A six inch (6") base of compacted crushed stone shall be installed.
4. Over stone base install not less than a three inch (3) top course of compacted hot-mix asphalt material.
5. Roll with heavy machine roller to a smooth, dense surface.

D. Parking Areas

1. All parking areas which are required to be provided by the Village ordinances shall be paved with concrete or asphalt paving.
2. Paving shall meet all the requirements for driveway paving.
3. All parking areas shall be pitched so as to drain all surface water. Install catch basins with heavy duty cast iron gratings and frames and connect same with clay tile or cement pipes to storm drainage system or to ditches if no storm drainage system is available.
4. When application for permit is made, drawings shall be submitted showing all areas to be paved, grade elevations, drains, catch basins, inverts of drain lines and all information required to determine run-off of storm water. All drain lines and basins (and detention when applicable) shall comply with the requirements of the Metropolitan Water Reclamation District of Greater Chicago.

5. Drainage of parking areas and driveways shall not spill onto adjacent property.

### **SECTION 310 – EMERGENCY ESCAPE & RESCUE OPENINGS**

Emergency escape window wells with a vertical depth of forty four (4) inches or greater will be required to have an affixed ladder or steps and shall be a minimum inside width of twelve (12) inches, shall project a minimum of three (3) inches from window well and rungs not spaced any more than eighteen (18) inches. **No type of permanent cover shall be installed or attached over any escape and rescue opening.**

### **SECTION 311 – ERECTION & CONSTRUCTION OF FENCES:**

#### A. Definitions

1. A fence is hereby defined as a structure forming a barrier but is not otherwise a part of any building or structure and which may be lawfully erected.
2. Height of a solid fence shall be measured to the topmost member including any ornamental members located on the top of the fence.

#### B. Height and Set Back Limitations

1. No fence shall be constructed between the required building setback line and any road right of way contiguous with the property on which the fence is to be constructed.
2. No fence exceeding six feet (6'0") in height shall be constructed in the side yard of any property.
3. No fence exceeding six feet (6'0") in height shall be constructed in the rear yard of any property.
4. No fence shall extend onto or into the property adjacent to the property adjacent to the property on which the fence is constructed.
5. No shrubbery exceeding two feet (2'0") in height shall be permitted within thirty feet (30'0") from the intersection of two (2) street right of ways.
6. No obstruction of any nature shall be allowed in the public dedicated right of way except for those trees allowed by the Village of Tinley Park.

#### C. Construction Material, Appearance and Safety

1. Fences may be of wire chain link, wire and plastic, wood or any material acceptable to the Village of Tinley Park.

2. Any fence that is determined by the Building Commissioner to have a good side and a poor side shall be constructed so that the good side faces away from the property on which the fence is constructed.
3. No barbed wire fences or barbed wire security top members are permitted except those allowed under the variation provisions of this ordinance.
4. Any chain link fence shall be installed with the sharp points directed down.
5. All fences shall be maintained in a neat and attractive condition free from rot or deterioration. If the Building Commissioner, Building Inspector or the Code Enforcement Commissioner determines that any fence constitutes a hazard to public health or safety, the President and Board of Trustees, on the recommendation of the Building Commissioner, the Building Inspector or the Code Enforcement Commissioner may declare such fence to be a public nuisance and direct the removal of such fence as may be permitted by law.
6. Whenever there are delays which leave the site, building or structure in a condition which presents a potential hazard to the public, either by means of access (whether implied, authorized or unauthorized) or as an attractive nuisance to any person, under those circumstances, the permittee shall secure the site, building or structure in order to protect the public from an accident or injury.

#### D. Permits and Inspection

1. It shall be unlawful for any person to erect a fence within the Village limits without first obtaining a permit from the Building Department. Applicant for permit shall submit two (2) copies of a certified survey. Survey shall indicate all buildings and structures, building lines, and dimensions. Also, all present and proposed fencing, gates, heights, and distances to property lines shall be indicated. Building Permit cards shall be prominently displayed during the period of construction and shall not be removed until installation is approved by Building Official. No fence permit shall be issued until such time as the phone Company, the Commonwealth Edison Company, the Northern Illinois Gas Company and the Public Works Department of the Village of Tinley Park, of the applicant's intention to construct a fence upon a lot in the Village of Tinley Park and until their respective services shall have been located upon such lot.
2. All contractors prior to the issuance of a permit must furnish to the Village a bond, in amount of \$20,000.00 secured by a surety company which is acceptable to the Village of Tinley Park, Illinois. Bond shall be payable to the Village and, in effect, guarantee that the contractor will comply with all requirements of applicable Village Ordinances and codes.

E. License and Bond

1. All contractors installing fencing are required by Village Ordinance to be licensed by the Village of Tinley Park.
2. All contractors prior to the issuance of a permit must furnish to the Village a bond, in amount of \$20,000.00 secured by a surety company which is acceptable to the Village of Tinley Park, Illinois. Bond shall be payable to the Village and, in effect, guarantee that the contractor will comply with all requirements of applicable Village Ordinances and codes.

F. Variations

Any variations to Section 310 dealing with fences shall be issued by the Building Committee or Zoning Board of Appeals of the corporate authority of the Village of Tinley Park, upon the recommendation of the Zoning Administrator and after written notice of the application for such variation shall have been given to adjacent property owners and after hearing on such variation shall have been held by the Permits and License Committee.

**SECTION 312- STORAGE/UTILITY SHEDS**

A. Permits Required – No storage/utility shed shall be erected within the Village of Tinley Park without first obtaining a permit.

B. Number limited – No more than one (1) storage/utility shed shall be located on any residential lot within the Village of Tinley Park.

C. Limitations – No storage/utility shed shall exceed two hundred (200) square feet in area, nor exceed fifteen (15) feet in height. No overhead (roll up) doors larger than six (6) feet in width or seven (7) feet in height are allowed on storage/utility sheds.

D. Construction Requirements – Storage/utility sheds in excess of one hundred (100) square feet in area shall be constructed on a concrete slab consisting of a minimum of four (4) inches of concrete on a minimum four (4) inches of crushed stone base. Storage/utility sheds shall be constructed in compliance with all other applicable provisions of Tinley Park Comprehensive Building Codes.

**SECTION 313 – DECKS, PORCHES & GAZEBOS**

A. Permits are required for all decks, porches, gazebos, trellises, and all accessory structures.

B. All structures are required to be a minimum of five (5) feet from all property lines, and off any utility easement

C. Open air front porches cannot extend more than five (5) feet into the front yard.

- D. All concrete load bearing piers are to be a minimum of eight (8) inches diameter by forty two (42) inches below grade.
- E. All loads to conform to International Building Code 2006
- F. Guardrails are required when platforms extend more than 24 inches above grade. Railings are to be 32 to 36 inches in height on residential properties and a minimum of 42 inches in commercial properties.
- G. Handrails must be on exterior steps of more than 3 risers, handrails shall not be less than 30 inches and no more than 38 inches vertically above the leading edge of threads or above finished floor.
- H. Balusters must be so that a 4 inch sphere may not pass through any opening. No ladders style balusters allowed.
- I. Maximum height of all accessory structures is fifteen (15) feet above finished grade.

#### **SECTION 314 – TRASH ENCLOSURES**

- A. Where required: Trash and recycling enclosures shall be provided at all new buildings and uses including single family attached and detached dwelling units (if the owner chooses to have a dumpster instead of garbage cans). The enclosed area shall be screened on three (3) sides by a wall from view from public streets and any abutting properties and have a gate made of wood or vinyl fencing material (no chain link fencing can be used). There shall not be any types of enclosures or container in the front yards or any building or use including single family attached and detached units.
- B. Construction Materials: Any wall around a dumpster or trash handling area shall be constructed in a durable fashion of brick, stone or other masonry materials with a gate opening which will accommodate the pickup of the dumpsters by the scavenger service.
- C. Enclosure Height: Any enclosure constructed shall have a height not greater or less than 6 feet.
- D. Foundation: Any enclosure constructed shall have a concrete foundation capable of supporting the walls and any other live and dead loads anticipated.
- E. Size of Trash Enclosure: The area of a trash enclosure for a site or business shall be sized using dimensions, which relate to the size and use of the principal building and as approved by the building official.
- F. Existing Buildings: Existing buildings and properties prior to October 2002, shall conform to **Chapter IIIV, IPMC Section 307.5 Dumpster Enclosures.**

#### **SECTION 315 DEFINITIONS:**

**Area Building.** The total area of all floors or stories contained within the building perimeter. Areas of the building not provided with surrounding walls shall be

included in the building area if included within the horizontal projection of the roof or floor above. Also see definition in Section 702 of the IBC for fire suppression requirements.

**Area Usable.** The sum of the net horizontal area of all floors within outside walls of a residential building exclusive of areas in cellars, basements, unfinished attics, garages, open porches and accessory structures, but including any area that is roughed in but not completed which is designed and intended for human occupancy.

**Basement.** A story of a building partially underground, and having more than half of its story height below the grade plane.

**Ranch style home.** A single story house with not less than an 4:12 pitch roof and shall include a three-step ranch.

## SECTION 316 ALLOWABLE HEIGHT AND BUILDING AREAS

TABLE 503 ALLOWABLE HEIGHT AND BUILDING AREAS <sup>a,g</sup> Height limitations shown as stories and feet-above grade plane. Area limitations as determined by the definition of "Area, building," per story										
		TYPE OF CONSTRUCTION								
		Type I		Type II		Type III		Type IV	Type V	
		A	B	A	B	A	B	HT	A	B
Group	HGT(feet)									
	HGT(S)	UL	160	65	55	65	55	65	50	40
A-1	S	UL	5	3	2	3	2	3	2	1
	A	UL	UL	15,500	8,500	14,000	8,500	15,000	11,500	5,500
A-2	S	UL	11	3	2	3	2	3	2	1
	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-3	S	UL	11	3	2	3	2	3	2	1
	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-4	S	UL	11	3	2	3	2	3	2	1
	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-5	S	UL	UL	UL	UL	UL	UL	UL	UL	UL
	A	UL	UL	UL	UL	UL	UL	UL	UL	UL
B	S	UL	11	5	4	5	4	5	3	2
	A	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
E	S	UL	5	3	2	3	2	3	1	1
	A	UL	UL	26,500	14,500	23,500	14,500	25,500	18,500	9,500
F-1	S	UL	11	4	2	3	2	4	2	1
	A	UL	UL	25,000	15,500	19,000	12,000	33,500	14,000	8,500
F-2	S	UL	11	5	3	4	3	5	3	2
	A	UL	UL	37,500	23,000	28,500	18,000	50,500	21,000	13,000
H-1	S	1	1	1	1	1	1	1	1	NP
	A	21,000	16,500	11,000	7,000	9,500	7,000	10,500	7,500	NP
H-2 <sup>d</sup>	S	UL	3	2	1	2	1	2	1	1
	A	21,000	16,500	11,000	7,000	9,500	7,000	10,500	7,500	3,000
H-3 <sup>d</sup>	S	UL	6	4	2	4	2	4	2	1
	A	UL	60,000	26,500	14,000	17,500	13,000	25,500	10,000	5,000

H-4	S	UL	7	5	3	5	3	5	3	2
	A	UL	UL	37,500	17,500	28,500	17,500	36,000	18,000	6,500
H-5	S	4	4	3	3	3	3	3	3	2
	A	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
I-1	S	UL	9	4	3	4	3	4	3	2
	A	UL	55,000	19,000	10,000	16,500	10,000	18,000	10,500	4,500
I-2	S	UL	4	2	1	1	NP	1	1	NP
	A	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
I-3	S	UL	4	2	1	2	1	2	2	1
	A	UL	UL	15,000	10,000	10,500	7,500	12,000	7,500	5,000
I-4	S	UL	5	3	2	3	2	3	1	1
	A	UL	60,500	26,500	13,000	23,500	13,000	25,500	18,500	9,000
M	S	UL	11	4	4	4	4	4	3	1
	A	UL	UL	21,500	12,500	18,500	12,500	20,500	14,000	9,000
R-1	S	UL	11	2 <sup>h</sup>	2 <sup>h</sup>	2 <sup>h</sup>	NP	2	NP	NP
	A	UL	UL	24,000	16,000	24,000	NP	20,500	NP	NP
R-2 <sup>h</sup>	S	UL	11 <sup>h</sup>	NP	NP	NP	NP	NP	NP	NP
	A	UL	UL	NP	NP	NP	NP	NP	NP	NP
R-3 <sup>e,f</sup>	S	UL	11	3	3	3	3	3	3	3
	A	UL	UL	g	g	g	g	g	g	g
R-4	S	UL	11	4	4	4	4	4	3	2
	A	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
S-1	S	UL	11	4	3	3	3	4	3	1
	A	UL	48,000	26,000	17,500	26,000	17,500	25,500	14,000	9,000
S-2 <sup>b,c</sup>	S	UL	11	5	4	4	4	5	4	2
	A	UL	79,000	39,000	26,000	39,000	26,000	38,500	21,000	13,500
U <sup>c</sup>	S	UL	5	4	2	3	2	4	2	1
	A	UL	35,500	19,000	8,500	14,000	8,500	18,000	9,000	5,500

UL = Unlimited, NP = Not permitted.

- a. See the following sections for general exceptions to Table 503:
  1. Section 504.2, Allowable height increase due to automatic sprinkler system installation.
  2. Section 506.2, Allowable area increase due to street frontage.
  3. Section 506.3, Allowable area increase due to automatic sprinkler system installation.
  4. Section 507, Unlimited area buildings
- b. For open parking structures, see Section 406.3
- c. For private garages, see Section 406.1
- d. See Section 415.5 for limitations.
- e. See Section 510.0 for area of buildings and/or dwelling unit.
- f. See IRC as amended for construction requirements.
- g. See Zoning Ordinance of the Village of Tinley Park for setbacks which govern the area.
- h. See Table 601.

## SECTION 317 ADDRESS AND STREET NAMES

- A. Required. All buildings, tenant spaces and structures shall have an address shown.
- B. Approval. Developer's engineer to submit to the Village engineer a street address map for approval.
- C. Location. All numbers shall be placed in a conspicuous place on or near the building entrance and street side. The address is to be visible at night from a light fixture nearby.
- D. Size and Type. Numbers for address to be block style. Script type or written type not allowed.

E. Residential, Single Family Attached and Detached (R-3). Numbers shall be a minimum of four (4) inches in height.

F. All Others. Numbers to be a minimum of six (6) inches in height.

G. Color. Address numbers to be contrasting color to the background color they are being installed onto.

H. Street Signs. Temporary street signs shall be installed using a four (4) inch square post, seven (7) feet in height installed three (3) feet into the ground by the developer. The temporary signs shall be painted on a piece of wood, in block numbers and letters six (6) inches in height and legible enough to read from the street. Temporary street signs shall be approved by the building official.

### **END OF CHAPTER III**