

**CHAPTER 25
VILLAGE OF BOLINGBROOK
BUILDING CODES
HISTORY OF ADOPTION**

<u>Ordinance #</u>	<u>Date Passed</u>
021 Bolingbrook Building Code for one and two family dwellings and accessory buildings and fees	03.30.66
023 Building Official-Electrical Inspector and Plumbing Inspector	04.13.66
060 National Electrical Code – 1962 Edition	05.24.67
061 State Plumbing Code – 1959 Edition	05.24.67
062 Amending Ordinance 21	05.24.67
063 National Building Code – 1964 Edition	05.24.67
118 Building Commissioner duties, Building Permit requirements and Building Permit fees	10.23.68
120 Minimum construction requirements for one and two family dwellings and accessory buildings	11.27.68
132 Amending Ordinance 63 regarding brick veneer	01.22.69
138 Amending Ordinance 62 – various changes	04.09.69
143 BOCA® Code – 1965 Edition and 1968 Supplement and all annual supplements	06.25.69
248 Building Permit Fees	04.12.72
316 One and Two Family Dwelling Code – 1971 Edition and all Annual Supplements	02.16.72
330 Building Permits	04.12.72
346 Providing standards for insulating outside walls and ceilings in residential dwelling units.	05.31.72
371 Roof Sheeting	08.16.72
377 Electrical Code	09.06.72
403 Basic Mechanical Code – 1971 Edition – and all Annual Supplements	12.13.72
73-018 BOCA® – 1970 Edition ad 1972 Supplement and all Annual Supplements – Created “Board of Building Code Appeals”	03.21.73
73-057 SBOC – Single Family Residence – January 1970 Edition and all Annual Supplements – National Building Code – 1967 Edition and all Annual Supplements	08.29.73

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<u>Ordinance #</u>	<u>Date Passed</u>
73-058 State Plumbing Code – 1969 Edition	08.29.73
73-059 National Electric Code – 1971 Edition	08.29.73
73-060 Life Safety Code – 1970 Edition	08.29.73
74-026 Building Permit Fees	02.12.74
74-035 Run off or retention of rain	02.26.74
74-043 Building Permit Fees	04.02.74
74-055 Plans to have structural engineering approval	05.07.74
75-045 National Electric Code – 1975 Edition	05.13.75
75-084 Elevators and conveyor equipment	11.04.75
75-089 Violation of Stop Order	11.18.75
76-037 SBOC – Residential <u>Remodeling</u> Regulations when value of remodeling is \$5,000 or less – January 1970 Edition BOCA® – 1975 Edition BOCA® – 1975 Mechanical Code BOCA® – 1975 Fire Prevention Code	04.13.76
76-080 Building Permit Fees	07.20.76
77-052 Accessory Buildings	07.26.77
80-024 Chapter 25 – Building Codes amended in its entirety	03.25.80
80-056 Amended regarding tower and antenna regulations	10.07.80
82-040 Amending Building, Plumbing, Electrical and Mechanical Regulations in its entirety	07.27.82
82-071 Amending by adding Additional Building Demolition Regulations	11.23.82
83-057 Amending Additional Building Demolition Regulations	11.22.83
84-036 Amending by repealing the old Chapter 25 in its entirety and enacting in lieu thereof a new Chapter 25 titled “Building Codes”	08.28.84
84-048 Fence Permit Fees	10.09.84
85-004 Fee Schedule, Elevator and Amusement Rides	01.08.85
85-036 Amending Article 1, Section 25-103, Sub-section 105.4 Restoration of Demolition Site	06.25.85

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<u>Ordinance #</u>	<u>Date Passed</u>
87-040 Amending Sections 25-102; 25-302; 25-402; 25-502; 309.6.3.1; 309.6.3.2; 309.6.3.3; 309.6.3.4; 309.6.3.5, Regarding Multi-Family Building Regulations	05.27.87
88-048 Amending Building, Plumbing, Electrical and Mechanical Regulations	07.26.88
89-024 Amending Miscellaneous Fees	04.11.89
91-063 Amending Fines and Fees	06.11.91
92-002 Required Plans	01.14.92
92-021 Firewalls	03.10.92
92-035 Amending Building and Plumbing Regulations	04.14.92
93-049 Amending Fees	04.27.93
93-049 Amending Plumbing Regulations	04.27.93
93-120 Amending Plumbing Regulations	09.14.93
94-005 Adopt Latest BOCA® Codes	01.11.94
94-020 Amending Driveways	02.22.94
94-035 Adopting Latest National Electrical Code	04.12.94
94-069 Adopting Latest BOCA® National Plumbing Code & Amendments	06.14.94
94-087 With Respect to Fees and Fines	07.26.94
94-127 Deleting Garage Size Requirements	11.29.94
94-172 Adopting Latest CABO One and Two Family Dwelling Code	11.14.95
95-189 Requirements to Keep Copies on File re: Building Codes	12.19.95
97-074 Adopting International and Revising Electrical Code	08.26.97
97-075 Adopting National and Revising Electrical Code	08.26.97
98-034 Amending Inspection and Permit Fees	04.14.98
01-072 Amending Inspection and Permit Fees	04.24.01
02-071 Amending Building, Plumbing, Electrical and Mechanical Regulations	07.09.02
03-045 Amending Fees & Charges	04.22.03

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<u>Ordinance #</u>		<u>Date Passed</u>
03-069	Amending to Add a New Article 9 Thereto (Visitability Code)	06.24.03
04-052	Amending Fees & Charges	05.03.04
04-106	Amending Re Interior Finishes on Residential Garages	08.24.04
04-142	Amending Chapters 17, 22, 24, 25, 30 & 33	11.23.04
05-010	Amending re IKEA (Construction Methods)	01.25.05
05-044	Amending Chapters 17, 24, 25, & 30	04.26.05
06-052	Amending Electrical & Plumbing Regulations	05.09.06
09-034	Amending Building, Plumbing, Electrical & Mechanical Regulations in it's Entirety	05.26.09
09-079	Amending Re Electrical Regulations, Fill Soil and No Step Entrance Removal	11.17.09
10-029	Amending Chapters 9, 13, 25 & 27 with Respect to Fees for Licenses & Inspections	05.11.10

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(REVISED ENTIRELY BY ORDINANCE 09-034)

**CHAPTER 25 – BUILDING, PLUMBING, ELECTRICAL
AND MECHANICAL REGULATIONS**

ARTICLE 1 – BUILDING REGULATIONS

Section 25-101. PURPOSE. The purpose of this Article is to establish the minimum regulations governing the design, construction, alteration, enlargement, repair, demolition, removal, maintenance and use of all buildings and structures; providing for the issuance of permits, collection of fees, making inspection; providing penalties for the violations thereof; and declaring and establishing fire limits.

Section 25-102. ADOPTION OF INTERNATIONAL BUILDING CODE. There is adopted, for the above-mentioned purpose, the “International Building Code, 2006 Edition” as published by the International Code Council, Inc., which code shall be the Building Code of the Village of Bolingbrook in the State of Illinois. One (1) copy of said International Building Code is on file in the office of the Village Clerk of the Village of Bolingbrook. Each and all of the regulations provisions, penalties, conditions and terms of said International Building Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes prescribed in Section 25-103.

Section 25-103. ADDITIONS, INSERTIONS, DELETIONS AND CHANGES. The following sections of the said International Building Code, 2006 Edition, are revised as follows:

Section 101.1. Title. These regulations shall be known as the Building Code of the Village of Bolingbrook, hereinafter referred to as "this code".

Section 104.1. Designation of Code Official. The Village Building Commissioner appointed in accordance with Chapter 3 of the Bolingbrook Municipal Code, is hereby designated as the code official in this code.

Section 105.8 Pre work inspection. When a permit application is submitted, this allows the municipality to perform a pre permit inspection to determine existing conditions.

Section 105.8.1 Consultation Inspections Required. Before rehabilitation work can begin on buildings that have been damaged by fire, water, flooding, or severe weather, a consultation inspection must be performed by structural, electrical, plumbing and mechanical inspectors, to determine what exactly the Village will require to be repaired or replaced.

Section 105.9 Unique construction. When a project has unique features, unusual construction sequences or out of the ordinary construction techniques, the Building Department shall have the authority to require additional documentation to determine code compliance. The Building Department may also add additional fees to the building permit based on the additional inspections required or to cover the cost of specialized inspections or outside inspection or testing agencies.

Section 106.1.4 Plan requirements. The maximum size of building plans submitted for review shall be Thirty-two inches by forty Inches (32” x 40”).

Section 106.2 Required plans.

- (a) The applicant shall submit and receive approval from the Village Engineer, or his designated representative and the Planning and Zoning Administrator or his/her designee, of a "proposed site plan" before a permit is issued.
- (b) The applicant shall submit and receive approval from the Village Engineer, or his/her designated representative and the Planning and Zoning Administrator or his/her designee, of a "foundation survey" before framing may begin.
- (c) The applicant shall submit and receive approval from the Village Engineer, or his/her designee and the Planning and Zoning Administrator or his/her designee, of an "as constructed" grading plan before an occupancy permit is issued.

Section 108.2.1. Inspection fees. A fee for each plan examination, building permit and structural inspection shall be paid in accordance with the following schedule, exclusive of mechanical, plumbing and electrical fees:

PLAN REVIEW FEES: Plan review fees, including administrative and staff review, shall be determined as follows: one hundred and no/100 dollars (\$100.00) plus .0045 times the valuation not to be less than one hundred seventy-five and no/100 dollars (\$175.00). Note: Once initial plan review has been started, plan review fees are non-refundable. (Ordinance 04-052, 05.03.04)

INSPECTION FEES: Unless otherwise specified within this sub-paragraph, all required inspection and reinspection fees shall be seventy five and no/100 dollars (\$75.00). (Ordinance 10-029, 05.11.10)

MISCELLANEOUS FEES: (Ordinance 10-029, 05.11.10)

Demolition of Buildings	\$105.00
plus, for each 10 feet of height	45.00
Elevator, Hydraulic Lift	
Plan Review	135.00
New construction Inspections, per unit	135.00
Semiannual, per elevator	75.00
Hydraulic lift	75.00
Re-inspection of existing	75.00
Contractors Permit	
General contractor, yearly	260.00
Subcontractor, yearly	160.00

CERTIFICATE OF OCCUPANCY FEES: (Ordinance 10-029, 05.11.10)

For residential structures (per building and per unit)	325.00
For commercial and industrial	
Per Building	225.00
Per Unit	225.00
Single Person Office up to 400 Square Feet	75.00

REFUND OF FEES. Upon withdrawal of an application for a building permit, fifty percent (50%) of fees paid in connection with such application, as assessed by this section and other provisions of the Municipal Code, may be refunded. A request for refund must be filed by

the applicant within sixty (60) days of the date of the original application for a building permit. No refunds shall be allowed after said sixty (60) day period. (Ordinance 94-087, 07.26.94)

Section 109.3.8.1 Third Party Special Inspections: Third party special inspections are required for exterior insulation finish systems (EIFS), structural steel members, bolts, welds and connections, sprayed fire-resistive material applied to structural elements and decks. All results and reports must be submitted to the Building Division for approval before an occupancy permit is issued.

Section 110.3. Temporary occupancy. Upon the request of the holder of a permit, the Building Commissioner or his designated representative may issue a Temporary Certificate of Occupancy for a building or structure, or part thereof, before the exterior work has been completed due to winter conditions or what other inclement weather condition may create, provided that such portion or portions will not endanger safety to life or the public welfare. The permit holder must then provide the Village of Bolingbrook with a Letter of Credit as to guarantee the faithful fulfillment that the work will be completed on a given date on which both parties agree.

Section 112 Appeals Board. Delete the section in its entirety:

Section 113.4. Violation penalties. Any person, firm or corporation who shall violate any provision of this code shall, upon conviction thereof, be subject to a fine of not less than seventy five and no/100 Dollars (\$75.00), nor more than One Thousand and no/100 Dollars (\$1,000.00). Each day that a violation continues after due notice has been served, in accordance with the terms and provisions hereof, shall be deemed a separate offense. The commencement of building without a permit shall be subject to a fine of not less than seventy five and no/100 Dollars (\$75.00), nor more than One Thousand and no/100 Dollars (\$1,000.00), in addition to the permit fees in Section 114.3.1 of this code. (Ordinance 89-024, 04.11.89)

Section 114.3. Unlawful continuance. Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than Two Hundred Fifty and no/100 Dollars (\$250.00) or more than One Thousand and no/100 Dollars (\$1000.00).

Section 115.1. Unsafe structures. The code official upon examining buildings or structures reported as dangerous, unsafe structurally or constituting a fire hazard, shall serve on the owner, agent or person in control of the building or structure a written notice describing the building or structure deemed unsafe and specifying the required repairs or improvements to be made to render the building or structure safe or require the unsafe building or structure or portion thereof to be demolished within fifteen (15) days. Such notice shall require the person thus notified to immediately declare to the code official acceptance or rejection of the terms of the order.

Section 115.6. Disregard of unsafe notice. Upon refusal or neglect of the person served with an unsafe notice, to comply with the requirement of the order to abate the unsafe condition, the person shall be in violation of this code requirement, and shall be guilty of permitting an unsafe, dangerous, hazardous condition to exist, subject to a fine of not less than seventy five and no/100 Dollars (\$75.00) nor more than One Thousand and no/100 Dollars (\$1,000.00). Each day that this violation continues shall be deemed a separate offense. (Ordinance 89-24, 4.11.89)

Sections 311.1, 311.2, 311.3 Storage use. All buildings classified as a storage use of any type except High Hazard shall be classified and comply with all requirements for an S-1 occupancy.

Section 419.1.1. Residential regulations. Notwithstanding any provisions of the said International Building Code, 2006 Edition, to the contrary, the standards and specifications in Sections 419.1.2 through 419.4.3 of these code amendments, shall apply to the fabrication, erection, enlargement, alteration and repair of residential buildings and structures in the Village of Bolingbrook. (Ordinance 94-005, 01.11.94)

Section 419.1.2. Group R-2 structures. This group shall include as examples the following, but shall not be limited thereto: condominiums, apartment buildings and, garden apartments.

Section 419.1.3. Fire walls. A firewall shall be provided continuously from the foundation to its termination at the underside of the roof deck in Type 3, 4, and 5 construction where all of the following conditions are met: (Ordinance 92-021, 03.10.92)

- a. The wall is properly firestopped at the deck.
- b. The roof sheathing or deck is constructed of approved non-combustible materials or of fire-retardant treated wood, for a distance of four (4) feet on both sides of the wall.
- c. Combustible material does not extend through the wall.
- d. The roof covering has a minimum of a Class C rating.
- e. The firewall shall be constructed of masonry or concrete and must be self-sustaining. (Ordinance 92-035, 04.14.92)

Section 419.2. Assemblies. There shall be provided two (2) hour fire resistive walls to be of masonry or concrete construction and free to all combustible materials without openings between all dwelling units, between dwelling units and the common areas within a building, between all guest rooms, between guest rooms and the common areas within a building. When penetrations are absolutely necessary, the penetrated areas must be sealed in such a manner that the required rating will be maintained. (Ordinance 87-040, 05.27.87)

Section 419.2.1. Bearing walls. All such walls within a dwelling unit, which has an adjacent dwelling unit located above, shall have a self-sustaining fire resistance rating of not less than two (2) hours and shall be constructed of masonry or concrete. (Ordinance 87-040, 05.27.87)

Section 419.2.2. Exterior walls. Exclusive of glass openings, the exterior walls of any dwelling unit that have dwelling units located above or below shall be a self-sustaining wall having a two (2) hour fire resistance rating and shall be constructed of masonry and concrete. (Ordinance 87-040, 05.27.87)

Section 419.3. Assemblies. There shall be provided two (2) hour fire resistive floors and ceilings to be of masonry or concrete construction and free to all combustible materials without openings between all dwelling units, between dwelling units and the common areas within a building, between all guest rooms, between guest rooms and the common areas within a building. When penetrations are absolutely necessary, the penetrated areas must be sealed in such a manner that the required rating will be maintained. (Ordinance 87-040, 05.27.87)

Section 419.3.1. All floors. When located above or below other dwelling units or guest rooms shall be of non-combustible material such as precast concrete type, poured concrete type, or other type having not less than a two (2) hour fire resistance rating, free of all combustible materials without openings between dwellings. When penetrations are absolutely necessary, the penetrated area must be sealed in such a manner that the required rating will be maintained. (Ordinance 87-040, 05.27.87)

Section 419.4. Building limitation. All residential buildings with engineered open web floor truss construction shall comply with the requirements in Section 419.4.1 through 419.4.3 (Ordinance 94-005, 01.11.94)

Section 419.4.2. Compartmenting. Areas between the ceiling-floor assembly shall be compartmented with 1/2" type "X" gypsum wallboard, or equivalent, in areas not to exceed 200 square feet.

Section 419.4.3. Openings/Protectives. Any openings for the passage of heating ducts, electrical wiring, water or gas piping or any other piping or wiring incidental to the structure will be packed or sealed with a non-combustible material to effectively prevent the passage of hot fire gases and/or flame from one area to another.

Section 508.3.1.4 Office spaces. Office spaces five hundred (500) square feet and larger in buildings of Use Groups F and S shall be separated from the warehouse or factory area with a minimum floor to roof deck or floor/ceiling assembly of a minimum of one hour fire rating.

Section 406.1.4 Garage separation. Groups R-1, R-2, R-3, R-4 or I-1 shall be separated from adjacent interior spaces by a fire partition having a fire resistance rating of not less than one (1) hour. All beams, columns and support walls supporting living spaces shall be protected. The door assembly leading from the garage to the interior space shall carry a one (1) hour fire rating and shall be supplied with an automatic self-closing device. If an attic opening is located within the garage, this opening must have a minimum 5/8 inch "Type X" drywall, or minimum 3/4 inch "Fire Retardant Treated" plywood panel firmly screwed in place.

Section 406.1.5. Gas curbs. Minimum 4-inch high gas curbs are to be provided in and around the entire garage floor area in all attached garages. The pitch from rear to front must not be less than .02 percent. (Ordinance 92-035, 04.14.92)

Section 507.2 Non-sprinklered, one story. Delete this section. Non-sprinklered unlimited area buildings are prohibited.

Section 507.3 Sprinklered, one story. Delete this section and replace with the following: The area of a one story, Group B, F, M, S and A-4 shall not be limited when the building is equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet in width. Note: Delete exceptions 1 through 3.3.

Section 507.4 Two story. The area of a two-story, Group M building shall not be limited when the building is equipped throughout with an automatic sprinkler system in accordance with section 903.3.1.1, is surrounded and adjoined by public ways or yards not less than 60 feet in width and is type I or II, construction.

Section 507.12 Separation requirements. The separation assemblies between tenants in an unlimited area building of types A, F, and S uses shall have a minimum of a two-hour fire rating.

Table 601. Delete note “e”.

Section 602.5 Type V Construction. Type V construction for new construction is hereby prohibited with the following exceptions:

Exception # 1: Group R-3 structures containing no more than 4 units where over and under construction is employed, and all other R-3 structures.

Exception # 2: Commercial buildings 12,000 square feet or smaller, provided they are equipped throughout with a fire sprinkler system.

Exception # 3: Group R-4 structures- Detached single-family residences.

Exception # 4: Unless otherwise approved by the Building Commissioner.

Section 602.6 Tenant separations. The wall or floor separating all tenant spaces in all construction types shall be a minimum of one hour unless a higher rating is required by another section of this code.

Tenant spaces in unlimited area buildings of types A, F, and S uses shall be separated with separation assemblies carrying a minimum fire rating of 2 hours.

Section 603.1.1 Fire Retardant Treated Wood- shall be permitted in: Delete sections 1.1 through 1.3 and the exception and replace with the following; In Buildings of “Type I” and “Type II” construction, fire retardant treated wood may be used in non-bearing interior partitions where the required fire resistance rating is 1 hour or less. It may also be used in all partitions for support blocking in areas where plumbing fixtures, phone and data systems and similar equipment are supported.

Section 603.1.1 Ducts. Delete this section.

Section 603.1.3 Electrical. Delete this section.

Section 707.2 Shaft enclosure required. Delete exception # 9 in item 11.

Sections 717.2 and 717.2.1 Fireblocking shall be changed to the following: All fireblocking material shall consist of approved non-combustible materials securely fastened in place. All wood for fireblocking, when approved, in construction types I, II and III shall be fire retardant treated lumber in accordance with section 2310.0.

Section 717.3.1 Draftstopping materials. Draftstopping materials shall be changed to the following: Draftstopping materials shall not be less than than five-eighths inch (5/8”) gypsum board or other approved mechanically fastened materials. Plywood or other wood used for draftstopping in construction types I, II, III, IV and V shall be a minimum of one-half inch (1/2”).

Table 1004.1 Standing space in Assembly without fixed seats change to 3 square feet net.

Section 1004.1.1 Areas without fixed seating. Delete the exception.

Section 1013.3.1. Guards. In occupancies of use groups A, B, E, H-4, I-1, I-2, M and R, and in open parking structures, open guards shall have balusters or be of solid material such that a sphere with a diameter of 4 inches cannot pass through any opening. Guards shall not

have an ornamental pattern that would provide a ladder effect. *Exception #1: The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be a maximum size so that a sphere of 6 inches in diameter cannot pass through. #2. Elevated walking surfaces for access to and utilization of electrical, mechanical and plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere of 21 inches in diameter cannot pass through.*

Section 1016.2 Roof vent increase. Delete the entire section.

Section 1019.2 and Table 1019.2 Buildings with one exit. Delete the section and Table. *Exception: Small spaces of non-combustible construction, less than 1500 square feet, in fully sprinklered buildings, or spaces that are located in a manner to where it would be structurally infeasible to provide two exits as determined by the Building Commissioner or his/her designee.*

Section 1020.1 Enclosure required. Delete exception 9.

Section 1101.3 Conflicts. When there is a conflict between this code and the Illinois Accessibility, the stricter of the two shall be enforced.

Section 1606.2.1. Miscellaneous Design Loads. Mechanical equipment, electrical equipment, suspended ceilings, plumbing and other building and mechanical systems that are supported by the building structure, shall be supported from the top of the bar joists and/or trusses unless otherwise specified in writing by the design professional of record.

Section 1607.1 General. Add the following: The minimum roof live load shall be 30 psf.

Section 1608.2 Snow loads. Change this section to read as follows: The minimum ground snow load shall be 30 psf.

Section 1612.3 Establishment of flood zone areas. See the Village of Bolingbrook Engineering Department for flood plain requirements.

Section 1805.4.3 Masonry-unit footings. Delete this section in its entirety.

Section 1805.5.1.3 Rubble stone. (Foundations) Delete this section in its entirety.

Section 1805.5.4 Hollow masonry walls. Add the following: The use of masonry is not allowed for below grade construction.

Section 1805.2.2. and 1805.5.1.4 Trench footings and foundations. All trench footings foundations shall be not less than ten (10) inches in thickness, forty-two (42) inches in depth and must bell out to twelve (12) inches at the base, and must bare on clean, solid, undisturbed soil that will provide the required P.S.I.'s prescribed by code to sustain the super-imposed placed upon it not to exceed two stories in height or twenty-two (22) feet to the means. (Ordinance 92-035, 04.14.92)

Section 1805.5.1.5 Foundation. All overhangs, such as bow windows, bay windows, fireplaces or other projections, projecting 8 or more inches from the outer wall of a building and forming a recess within the building that are elevated eighteen (18) inches above grade or lower must rest on a foundation wall. (Ordinance 92-035, 04.14.92)

Section 1808.1.1 Timber footings and wood foundations. All references to wood or timber footings or foundations are hereby deleted in their entirety.

Section 2210.4.1. Wall Stud. Studs in steel frame walls utilized for plumbing (plumbing walls), shall not be have penetrations larger than 50% of the width of the studs and penetrations must be centered on the stud. *Exception: Unless otherwise specified in writing by the design professional of record.*

Any plumbing wall, which has three inch (3") or larger stack vent or a combination of vents and water piping, must be not less than 6-inches in size.

Section 2304.4 Bearing walls. On all bearing walls, headers 6 feet or greater are to bear on double cripple supports. (Ordinance 94-005, 01.11.94)

Section 2304.5. Deck bearing. All decks attached to frost protected structures or elevated 18-inches or more above grade, must bear on piers minimum 8-inches in diameter at a depth not less than 42-inches and extend at least 6-inches above grade. Total length of pier 48-inches. Floating decks higher than 18 inches above the ground must rest on frost protected footings. Stair supports for these decks must also be frost protected. See deck handout for additional requirements. (Ordinance 94-005, 01.11.94)

Section 3303.4 Restoration of demolition site. All foundations, walls, footings, concrete floors, and other concrete in areas below grade must be removed. All demolition debris, including, but not limited to bricks, concrete, wood and metal shall be removed, and all voids resulting from the above removal shall be filled to at least the existing grade with granular materials in accordance with Section 213 of the State of Illinois Standard Specifications for Road and Bridge construction, except that a maximum of twenty (20) percent of non-organic rubble may be used as fill material. The area must then be swaled for proper drain-off. The land must be restored as close as possible to its' original stage. The final top layer of fill shall contain adequate topsoil to sustain grass and be seeded in a professional manner.

The only exception to this shall be when the proposed site is 5 or more acres in size and when the demolition/restoration would, to a large degree, include the filling of areas over 2 acres in size below existing grade. Provided that the above conditions are met, the applicant may choose to create a retention/detention storm water facility or another type of open space recreation facility, which obtains its main attractiveness through the use of permanent surface waters of 2 acres or more in size. The applicant would be required to provide a facility, which is safe for its intended or potential users as provided in other sections of the Bolingbrook Municipal Code. The applicant would also have to provide the previously mentioned survey of the facility and design the facility according to good engineering practice to enable it to function for indeterminate time periods without extensive maintenance or harm to neighboring properties, public facilities or groundwater resources. The ownership and maintenance of the facility shall be negotiated with the Village as part of the review process enabling demolition. Specific items not directly covered shall be considered by the Director of Public Works based on their potential merits or impact on the community. (Ordinance 85-036, 06.09.85)

Section 3303.7 Bonding requirement. The applicant shall furnish, or shall have its demolition contractor or contractors furnish for Village approval a demolition schedule and a surety bond for acceptable performance and completion. Each surety bond shall be in the full amount of the demolition contract to which it applies and shall guarantee the faithful fulfillment of the demolition covered thereby in accordance with the Village ordinances. Each bond shall comply with the laws of the State of Illinois. Upon completion of the demolition in accordance with Village ordinances, the surety bond shall be returned to the applicant. If the demolition is not completed in accordance with Village ordinance, the Village shall give notice to the applicant stating the action(s) required to comply with the Village ordinances and if the applicant fails to take action stated, the Village shall have the right to utilize said bond, or any portion thereof to satisfactorily complete the demolition.

Section 3301.3. Mud and debris control. (Ordinance 94-005, 01.11.94) Builders are responsible for:

- a. Mud left on streets by contractors or material suppliers must be cleaned at least at the end of each day, and more often if the accumulation is sufficient to cause a hazard.
- b. Material debris must be placed in a dumpster at the end of each day or any confined area such as a garage, etc.
- c. Crossing landscaped areas, improved parkways, or adjacent properties is prohibited.
- d. NOTE: Final inspections and occupancies will not be approved until all construction debris excavation materials are removed from site.

Compliance with this control will provide and enhance the natural beauty of the environment. Failure to comply with this control requirement will result in:

- a. A fine/or penalties, citations issued requiring court appearances.
- b. Suspension of building permit.

Section 3307.2. Deep Excavations. Whenever an excavation is made to a depth of more than 3-feet below the established curb, the person who causes such excavation to be made, if afforded the necessary license to enter the adjoining premises, shall preserve and protect from injury at all times and at his own expense such adjoining structure or premises which may be affected by the excavation. If the necessary license is not afforded, it shall then be the duty of the owner of the adjoining premises to make his building or structure safe by installing proper underpinning or foundations or otherwise. Such owner, if it be necessary for the prosecution of his work, shall be granted the necessary license to enter the premises where the excavation or demolition is contemplated.

Section 3307.3. Shallow excavations. Whenever an excavation is made to a depth less than 3 feet below the curb, the owner of a neighboring building or structure the safety of which may be affected by the proposed excavation, shall preserve and protect from injury and shall support his building or structure by the necessary underpinning of foundations. If necessary for that purpose, such owner shall be afforded a license to enter the premises where the excavation is contemplated.

Section 3410.2 Applicability. This section is applicable as of the date this code is adopted.

Chapter 35 referenced standards, delete the following:

ICC-EC ICC Electric Code
IPSDC International Private Sewage Disposal Code
IWUIC International Wildland-Urban Interface Code

Appendix – Adopt appendix I.

SECTION 25-104. REGISTRATION OF GENERAL CONTRACTORS

(A) General. No person, firm, partnership or corporation shall install, superintend, maintain or repair any work for which a permit is required by this code unless such person, firm, association, partnership, corporation or contractor holds a current contractors permit. Contractor's permits shall be issued by the Building Commissioner upon the payment of a fee and fulfillment of bond and insurance requirements.

Exception: The provisions herein contained shall not apply to the owner of his dwelling serving as a general contractor or for working on his dwelling.

(B) Contractors Registration Fee. The fee for General Contractors registration shall be two hundred sixty dollars (\$260.00) per year; the fee for Subcontractors registration shall be one hundred sixty dollars (\$160.00) per year, and said contractors registration shall be renewed annually. (Ordinance 10-029, 05.11.10)

(C) Bond requirements. No person, firm, association, partnership or corporation shall be granted a contractors permit until he or it has filed with the Building Commissioner a bond issued by a surety company, in the principal amount of ten percent (10%) of the total cost of all material and labor necessary to perform the desired task, but not less than twenty thousand and no/100 dollars (\$20,000.00). the "Bond" is to run continuous for the duration of the warranty but not to be less than one (1) year, conditioned upon the faithful observance of all regulations and requirements of ordinances of the Village of Bolingbrook then in force, or which may thereafter be in force, concerning or regulating all structures within the Village of any loss, cost, damage, expense or liability of any kind whatsoever which the Village may suffer or which may occur against it by such person, firm, association, partnership or corporation in performing work in the Village. (Ordinance 92-035, 04.14.92)

(D) Insurance requirements. All contractors registered to conduct business or work within the Village, whether or not their place of business is within the Village, shall be required to have a liability insurance policy providing coverage for not less than the amount of one hundred thousand and no/100 dollars (\$100,000.00) for bodily injury, three hundred thousand and no/100 dollars (\$300,000.00) for each occurrence, and property damage coverage of not less than twenty five thousand and no/100 dollars (\$25,000.00). Evidence shall be filed along with the application for contractor's permit to the Village in the form of a certificate of insurance naming the Village of Bolingbrook as additionally insured under said policy.

ARTICLE 2 – RESIDENTIAL ONE AND TWO FAMILY DWELLING CODE

Section 25-201. PURPOSE. The purpose of this Article is to establish minimum regulations governing the design, construction, alteration, enlargement, repair, demolition, removal, maintenance and use of all buildings and structures; providing for the issuance of permits, collection of fees, making inspection; providing penalties for the violations thereof; and declaring and establishing fire limits. (Ordinance No. 92-035, 04.14.92)

Section 25-202. ADOPTION OF INTERNATIONAL RESIDENTIAL CODE for ONE- AND TWO- FAMILY DWELLINGS. There is adopted for the above-mentioned purpose, the “International Residential Code for One- and Two- Family Dwellings, 2006 Edition” as published by the International Code Council which code shall be the building code for one and two Family Dwellings in the Village of Bolingbrook in the State of Illinois. One (1) copy of said International Residential Code is on file in the office of the Village Clerk of Bolingbrook. Each and all of the regulations, provisions, penalties, conditions and terms of said International Residential Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this Article.

Section 25-203. ADDITIONS, INSERTIONS, DELETIONS AND CHANGES. The following sections of the said International Residential Code for One-and Two- Family Dwellings, First Edition, 2006, are revised as follows:

Section R101.1. Insert; The Village of Bolingbrook.

Section R104.4.1. Consultation Inspections Required. Before rehabilitation work can begin on buildings that have been damaged by fire, water, flooding, or severe weather, a consultation inspection must be performed by structural, electrical, plumbing and mechanical inspectors, to determine what exactly the Village will require to be repaired or replaced.

Section R108.4.1. Miscellaneous Fees: **(Also see Miscellaneous Permit Fee sheet available in the Building Division located in the Community Development Department for additional miscellaneous fees.)** (Ordinance 10-029, 05.11.10)

Fireplace	\$ 80.00
Conversion or replacement of furnace	\$ 45.00
Installation or replacement of siding	\$ 80.00
Installation or replacement of roof sheathing	\$ 80.00
Residential Swimming Pools:	
Above Ground	\$ 45.00
In Ground	\$135.00
Fence	\$30.00
Paver Brick Installations (contractors must register with Village)	\$45.00

INSPECTION FEES: (Per Inspection).

New Buildings	\$ 75.00
Existing Single Family and Attached Buildings	\$ 45.00
Accessory Structures	\$ 45.00

Section R109.1.5.1. EIFS Inspections Required. A special inspection by the manufacturer's representative or other qualified 3rd party inspector is required for all EIFS installations. Inspections are required at the rough and final stages of installation. Reports must be submitted to the Building Division for approval prior to issuing an occupancy permit or certificate of completion.

Section R112 Appeals Board. Delete the section in its entirety:

Table R301.2(1) Climatic and Geographic Design Criteria. Insert the following:

Roof Snow Load	-	30 pounds per square foot
Wind Speed	-	90 miles per hour
Seismic Condition by Zone	-	B
Subject to Damage from Weathering	-	Severe
Frost Line Depth	-	42 inches
Termite	-	Moderate to Heavy
Winter Design Temperature	-	(-4 degrees)
Ice Barrier	-	Required
Flood Hazard	-	Chapter 33 of Bolingbrook Municipal Code
Air freezing Index	-	1700
Mean Annual Temp	-	50 degrees

Section R305.2 Basement Ceiling Height. The minimum height measured from the surface of the basement floor to the lowest part of the floor joists above shall be (8'8") eight feet eight inches. The minimum height measured from the surface of the basement floor to the bottom of the lowest beam, girder or structural support shall be (7'8") seven feet eight inches. *Exception: House designs where it is structurally infeasible as determined by the Building Commissioner, and/or locations where groundwater and soil conditions pose a significant risk of basement flooding, as determined by the Village of Bolingbrook.*

Section R308.4 (5.1) Glazing, Hazardous Locations. Glazing must be safety or tempered glass or approved equivalent if any portion is located within 42 inches of the plumbing fixtures and areas identified in section R308.4 (5).

Section R309.2.1. Garage Separation. Attached garages shall be separated from the dwelling and attic areas by not less than 5/8 inch Type X gypsum board applied to the garage side of all walls and ceilings. Attic openings within the garage shall have panels of 5/8 inch Type X drywall or 3/4 inch fire retardant treated plywood resting on a 1 x 4 or greater ledger nailed vertically into the framing. Panels are to be screwed in place or latched to prevent them from rising with heat in case of fire.

Section: R309.7 Gas curb. A minimum four-inch (4") gas curb shall be provided in and around the entire garage floor area in all attached garages. The garage floor pitch from back to front must not be less than .02 percent (.02%).

Section R309.8. Residential Garages, Interior Finishes. All interior walls and ceilings of garages in newly constructed single family and attached single family homes shall be finished

with 5/8" Type X drywall, then taped, sanded and painted. The workmanship and quality of the finish shall be comparable to the interior walls of the home. (Ordinance 04-106, 08.24.04)

Section R310.1 Emergency escape windows. Change the first two (2) lines to read as follows; Emergency Escape and Rescue required. All basements and every sleeping room shall have at least one operable emergency escape and rescue opening. Basement egress windows must meet the requirements of section R310.1.4 of the 2006 IRC. The required opening size must be obtained by normal operation of the window.

Section R310.1.5 Basement Escape Window Location. Emergency escape windows in basements shall be located on a side elevation of a single family dwelling to prevent being covered by decks or other attached structures, unless otherwise approved by the Building Commissioner his/her designee.

Section R310.2.2 Window Well Covers. Window wells with a horizontal projection of more than twenty-four inches (24") shall be provided with covers that allow for the transmission of daylight and protect children from falling into the window well. These covers shall comply with Section R310.4 of the 2006 International Residential Code. (Ordinance 05-010, 01.25.05)

Section R312.2 Guard Opening Limitations: Add the following language; Required guards shall not be constructed with horizontal rails or balusters that result in an ornamental design creating a ladder effect.

Section R317.1 Separations In Two-Family Dwellings. Dwelling units in two-family dwellings shall be separated from each other by a masonry or concrete wall carrying a fire rating of not less than two (2) hours. Separation walls shall be continuous from the floor slab to the underside of the roof deck. The roof sheathing on each side of the wall shall be fire-retardant treated and shall extend from the wall to a point of least four feet (4') away from the wall.

Section R317.2 Townhouses. Townhouses shall include as examples the following, but shall not be limited thereto: condominiums, attached single-family, townhouses, row houses, and any townhouse style construction.

Section R317.2.1. Fire walls. A firewall shall be provided continuously from the foundation to its termination at the underside of the roof deck of combustible roof decks in Type 3, 4, and 5 construction where all of the following conditions are met: (Ordinance 92-021, 03.10.92)

- a. The wall is properly firestopped at the deck.
- b. The roof sheathing or deck is constructed of approved non-combustible materials or of fire-retardant treated wood, for a distance of four (4) feet on both sides of the wall.
- c. Combustible material does not extend through the wall.
- d. The roof covering has a minimum of a Class C rating.
- e. The firewall shall be constructed of masonry or concrete and must be self-sustaining. (Ordinance 92-035, 04.14.92)

Section R317.2.1.1 Assemblies. There shall be provided two (2) hour fire resistive walls to be of masonry or concrete construction and free to all combustible materials without openings between all dwelling units, between dwelling units and the common areas within a building,

between all guest rooms, between guest rooms and the common areas within a building. When penetrations are absolutely necessary, the penetrated areas must be sealed in such a manner that the required rating will be maintained. Corridors constructed with one layer of drywall on each side of each corridor wall shall be considered in compliance with this requirement. (Ordinance 87-040, 05.27.87)

Section R325 Gutters. Gutters and downspouts shall be installed on all habitable dwellings with basements and/or crawlspaces

Section R401.5 Sill plate gaps. Sill Plate Gaps: Gaps between sill plates and foundations shall be sealed with mortar or a similar approved material.

Section R402 Materials. Delete sections R402.1, R402.1.1 and 402.1.2

Section R403.1.1 Footings. Shall be changed to the following: The minimum dimensions for spread footings shall be eight inches (8") deep and eighteen inches (18") wide, except that masonry veneer on frame walls placed on concrete foundations shall be supported by spread footings with minimum dimensions of ten inches (10") deep and twenty inches (20") wide. These dimensions are based on a soil bearing capacity of 3,000 pounds per square foot. Soils with a lesser bearing capacity or where unusual loading conditions exist, larger footings or reinforcement may be required. The design must be provided by an Illinois licensed architect or an Illinois licensed structural engineer.

Section R403.1.1.1 Keyway. A two-inch (2") by two-inch (2") keyway must be provided in the top of the footing underneath the centerline of the foundation wall, for the entire length of the wall.

Section R403.1.1.2 Footings. Footings must be keyed at least two inches (2") into undisturbed soil or shall be interlocked into the soil by other approved means.

Section R403.1.1.3 Footing Reinforcement. The footing shall be reinforced with steel bars where the footings cross or bear on filled trenches or unstable soil.

Section 403.1.1.4 Trench Footings and Foundations. All trench foundations shall not be less than ten inches (10") thick and forty-two inches (42") in depth, and must bell out to twelve inches (12") at the base. All foundations must be placed on solid undisturbed soil capable of supporting the load of the structure. When new foundations are connecting to existing foundations, a connection detail must be included in the building plans and the method of connection must be approved by the Building Commissioner or his/her designee.

Section R403.1.4 Minimum Depth. The minimum frost depth shall be 42 inches.

Section R403.2 Wood Footings. Delete the section in its entirety.

Section 403.3 Frost protected shallow foundations. Delete the section in its entirety.

Section R403.1(a) Stoop Support. All stoops, steps, porches and platforms must be supported in a manner acceptable to the Building Commissioner or his/her designee. Such support designs may include wing walls extended to the footing and/or full frost protected foundations.

Section R403.1(b) Deck bearing. All decks attached to frost protected structures or elevated 18-inches or more above grade, must bear on concrete footings/piers minimum 8-inches in diameter at a depth not less than 42-inches and extend at least 6-inches above grade.

Total length of pier 48-inches. Floating decks higher than 18 inches above the ground must rest on frost protected footings/piers. Stair supports for these decks must also be frost protected. See deck handout for additional requirements. (Ordinance 94-005, 01.11.94)

Section R403.1(c) No Step Entrance Removal. It shall be unlawful to remove a not step entrance to a home until an approved no step entrance is first placed elsewhere at the same level of the home. (Ordinance 09-079, 11.17.09)

Section R403.4.1 Temporary Steps. Where temporary steps are installed at exterior exits, the steps must be supported by a frost protected foundation or equivalent, and must be constructed of materials approved for exposure to weather.

Section R403.5 Post Support. Wooden posts supporting decks or porches or similar structure constructed six feet (6') above grade or more, shall be a minimum of six inches by six inches (6"x 6") nominal lumber. All wood used for construction for these structures shall be naturally durable or pressure treated wood approved for exterior use. Concrete piers shall be a minimum of 8 inches in diameter and shall be 42 inches minimum below grade to 6 inches above grade, totaling 48 inches.

Section R403.5.1 Post to Footing Connections. Wooden posts supporting decks or porches or similar structures shall not be placed in concrete. They shall be anchored to the concrete footing with post anchors approved and designed for such use, unless otherwise approved by the Building Commissioner or his/her designee.

Section 404.1 Foundation and Retaining Walls and related tables are deleted. The text from the 2003 International Residential Code section 404.1 and related tables are adopted.

Section R404.1.9 Special Foundation Requirements. All overhangs, such as bay windows, bow windows, fireplaces and other building sections projecting from the outside wall of the building eight inches (8") or more and located eighteen inches (18") or less above grade, must rest on a frost protected foundation wall.

Section R404.17.1 Foundation Bracing for Backfill Placement. Construction documents shall include details for bracing foundation walls prior to backfill.

Section 404.5 Retaining walls. Change 24 inches to 48 inches, subject to the authority having jurisdiction.

Section R405.1 Drain Tile and Risers. Footing drain tile shall have filter socks and be a minimum four inches (4") in diameter and shall be covered by a minimum ten inches (10") of three-quarter inch (3/4") clean stone. Window well riser pipes shall be four inches (4") in diameter of solid plastic pipe, and it shall drain into a drain tile tee at the bottom of drain tile footing. It must be secured properly to assure a tight fit and shall not be disturbed during backfill.

Section R408.8 Crawl Space Floor. All crawl space floors shall be covered with a minimum of two inches (2") screened coat of concrete over a minimum 6-mil vapor barrier. Floor shall be approximately level.

Section R408.9 Crawl Space Clearance. The minimum clearance between the lowest structural member and the floor of a crawlspace shall be three feet (3').

Section R502.3.4 Floor Trusses. Engineered Floor Trusses: When engineered open web floor trusses are used in floor-ceiling assemblies in residential construction, the areas

within the assemblies must be draftstopped ever two hundred (200) square feet with a minimum half-inch (1/2") type X drywall and fire taped. Engineered floor trusses and "I" type truss joists may not be exposed in basements and must be covered by half-inch (1/2") type X drywall minimum, and fire taped, or must be protected from fire by other equivalent means approved by the Village.

Section R502.7.1 Bridging. Cross Bridging: All floor joists shall be provided with cross bridging spaced at a maximum of eight feet (8') apart. The wood bridging material shall have a minimum size of one-inch (1") by three inches (3") and shall be double nailed at each end. Bridging split by nailing is unacceptable. Solid blocking, full depth or equivalent, is also acceptable.

Section R502.14 Floor Trusses. Engineered Floor Trusses: When engineered open web floor trusses are used in floor-ceiling assemblies in residential construction, the areas within the assemblies must be draftstopped every two hundred (200) square feet with a minimum half-inch (1/2") type X drywall and fire taped. Engineered floor trusses and "I" type truss joists may not be exposed in basements and must be covered by half-inch (1/2") type X drywall minimum, and fire taped, or must be protected from fire by other equivalent means approved by the Village.

Section R506.2.5 Fill Material. Soil Settlement Control: In all residential areas, the over dig in all garages must be filled with material that will drop to a density of ninety-five percent (95%) or greater. When clay or other approved materials are used, it must be placed in six to eight inch (6"-8") lifts and compacted to a density of ninety-five percent (95%). Aggregate, when used, shall not exceed three inches (3") in size. Differential settlement must be controlled. NOTE: In all residential construction, garage over-dig trenches located within the garage and at the front exterior of the garage shall be backfilled with clean rough cut aggregate of ¾ inch to 3 inches in size.

Exception: Bank Run Gravel may be used as backfill material only if stones larger than three inches (3") are removed and the Bank Run Gravel is mechanically compacted in sixteen inch (16") lifts. Bank Run Sand is prohibited for use as backfill material. (Ordinance 09-079, 11.17.09)

Section R506.3 Radon Protection Required. See Appendix F of the 2006 IRC. NOTE: Electrical supplies for radon exhaust fans can not use flexible whips longer than 3 feet in length.

Section R602.7.3 Headers. Headers, Bearing Walls: Headers spanning six feet (6') or longer that are located within load bearing walls shall bear on double cripple supports minimum. The header size shall not be less than the minimum specified in the code.

Section R802.11 Roof Connections. Rafter and Truss Connections: All roof rafters and roof trusses shall be attached to wall top plates with hurricane straps, rafter ties or other tie downs or connectors approved for such use. When rafters or trusses rest on double top plates, the ties or connectors must attach to both plates.

Section R803.2.4 Roof Sheathing. The minimum thickness of plywood or similar type roof decking shall be seven-sixteenths inch (7/16"). Three-eighths inch (3/8") decking may be used if rafter spacing does not exceed sixteen inches (16") on center. Decking or sheathing having a thickness of one-half inch (1/2") or less, spanning twenty-four inches (24") must be provided with structural clips located at the center point of each span. Panel widths less than 24 inches and spanning more than 16 inches shall have 2 structural clips evenly spaced between structural supports. Panel widths greater than 12 inches but less than or equal to 16 inches shall have solid blocking under joints and/or edges.

Section R905.2.7.1 Ice Barrier. Add the following: Ice dam protection shall be installed.

Section N1102.1.1 Windows installed in residential construction shall have a minimum glazing U factor of .35 and a SHGC (solar heat coefficient) of .35.

NOTE: 1102.3.6 Replacement Windows shall comply with the requirements of section N1102.1.1.

Section N1104 Insulation Requirements.

Section 1104.1 Insulation Requirements.

1. Exterior requirements:

- A. Air infiltration barrier: An air infiltration barrier shall be required on all residential buildings. The air infiltration barrier shall be continuous, unbroken and undamaged material covering all sheathing products of vertical residential frame exterior walls. Material shall be applied from sealed mudsill joints at the top of the foundation; material shall be pulled inside all exterior wall openings and secured to the framing for inspection during rough framing. Siding shall not be placed on exterior walls until after the air infiltration barrier has been inspected and approved at the time of rough framing inspection. *Exception: Detached uninhabited structures such as sheds and garages that are unheated or air conditioned.*

Vapor transmission rate shall be 5.0 perms or more. Water resistance shall be not less than 41.8 CMS, hydrostatic pressure test, AATCCF method 127.

- B. Caulking and sealant: Exterior joints around windows and door frames, between wall cavities and window or door frames, between wall panels and penetrations or utility services through walls, floors and roofs, and all other openings in the exterior envelope shall be caulked, gasketed, weather-stripped or otherwise sealed.
2. Ceilings: Cathedral ceilings shall be insulated with a material with an R-Value of not less than 38 *or equivalent to satisfy requirement per 2006 IRC*. Flat ceilings shall be insulated with a material with an R-Value of not less than 38 *or equivalent to satisfy requirement per 2006 IRC*.
3. Rafter vent channel: A vent channel shall be provided in each rafter bay of a cathedral ceiling. Continuous venting is required at the ridge or between rafter bays.
4. Exterior walls: Exterior walls and walls abutting unconditioned or unheated spaces shall be insulated with a material with an R-Value of not less than 13. The use of plastic as a moisture/vapor barrier on exterior walls shall be prohibited.
- a. Air supply ducts or pipes will only be allowed in exterior walls if insulation with a minimum R-Value of 13 can effectively be installed between the exterior sheathing and supply ducts. Walls between garages and living spaces shall be included.

- b. All box joists shall be insulated with a material of the same R-Value as the exterior walls.
 - c. In finished basements, exterior basement walls must be insulated with a material having an R-Value of not less than R-11. Exterior walls must be provided with an approved moisture/vapor barrier. Use of plastic as a moisture barrier is prohibited.
5. Insulation for exterior perimeters of concrete floor slabs on grade shall be required. The insulation shall be at least two inches (2") thick and shall extend down along the foundation wall at least two feet (2'). The insulation material shall be rigid, inorganic, waterproof and non-capillary.
 6. Sliding Patio Doors: Air infiltration rate shall not exceed .50 CFM per square foot of opening. Glass shall be insulated. Frames, jambs and thresholds, if other than wood, shall have a thermal barrier.
 7. Glass: All glass in habitable areas shall be double-glazed or insulated. (Exception: Single glazed with storm windows.)
 8. Windows, doors, siding and all exterior finishes must be installed and/or applied in a manner consistent with manufacturer's instructions and must be properly caulked and/or flashed to prevent rain water and moisture from leaking into the structure.
 9. Unheated Spaces: Hot and cold water lines in unheated spaces shall be insulated with a material having an R-Value of not less than 7. All heating and cooling supply and return air ducts and plenums shall be insulated with a material having an R-Value of not less than 7 and must be approved for such use. Floors above unheated spaces shall be insulated with a material having an R-Value of not less than 25.

Chapter 43 referenced standards, delete the following:

ICC-EC ICC Electric Code
 IEBC International Existing Building Code
 IPSDC International Private Sewage Disposal Code
 IWUIC International Wildland-Urban Interface Code

Delete the following:

Part V Mechanical Chapters 12 – 23
 Part VI Fuel Gas Chapter 24
 Part VIII Plumbing Chapters 25 – 32
 Part VIII Electrical Chapters 33- 42

Appendix – Adopt appendix A, B, C, E, F, G, H, J, K, M, N. Any local code amendments shall supersede the appendix.

ARTICLE 3 – PLUMBING REGULATIONS

Section 25-301. PURPOSE. The purpose of this Article is to establish the minimum regulations governing the design, installation and construction of plumbing systems, by providing reasonable safeguards for sanitation to protect the public health against the hazards of inadequate, defective or unsanitary plumbing installations.

Section 25-302. ADOPTION OF INTERNATIONAL PLUMBING CODE and the State of Illinois Plumbing Code. There is adopted, for the above-mentioned purpose, the “International Plumbing Code, 2006 Edition”, as published by the International Code Council and the Illinois Plumbing Code, which code shall be the plumbing regulations of the Village of Bolingbrook in the State of Illinois. One (1) copy of said International Plumbing Code and the Illinois Plumbing Code is on file in the office of the Village Clerk of the Village of Bolingbrook. Each and all of the regulations, provisions, penalties, conditions and terms of said International Plumbing Code and the Illinois Plumbing Code, are hereby referred to, adopted, and made a part hereof, as if fully set out in this Article with the additions, insertions, deletions, and changes prescribed in Section 25-303.

When there is a conflict between the International Plumbing code, 2006 edition and the Illinois Plumbing Code the stricter of the two requirements shall be followed as determined by the plumbing inspector.

Section 25-303. ADDITIONS, INSERTIONS, DELETIONS AND CHANGES. The following sections of the said International Plumbing Code are revised as follows. The stricter of the requirements of the amended International Plumbing Code or the Illinois Plumbing Code shall be applied at the discretion of the Plumbing Inspector.

Section 101.I. Title: These regulations shall be known as the Plumbing Code of the Village of Bolingbrook, hereinafter referred to as “this code”.

Section 101.2. Scope: In future subdivisions, when new sewer and water mains are to be installed, the sewer and water stubs are to be located in the center of the lot, free and clear of service walks, drives, and public walks. (Ordinance No. 97-074, 08.26.97)

Section 102.4.1. Continuation: The legal use and occupancy of any structure existing on June 22, 1982, or for which it has been heretofore approved, may be continued without change except as may be specifically covered in this code or deemed necessary by the Village Plumbing Inspector for the general safety and welfare of the occupants and the public. (Ordinance No. 97-074, 08.26.97)

Section 103.2.1. Code Official: The plumbing official in this code shall be the Village Plumbing Inspector appointed in accordance with Chapter 3 of the Bolingbrook Municipal Code. (Ordinance No. 97-074, 08.26.97)

Section 104.I. Continuation: The legal use and occupancy of any structure existing on June 22, 1982, or for which it has been heretofore approved, may be continued without change except as may be specifically covered in this code or deemed necessary by the Village Plumbing Inspector for the general safety and welfare of the occupants and the public.

Section 106.6.2 Fee Schedule: The permit fees for all plumbing work shall be as indicated in the following schedule: (Ordinance 10-029, 05.11.10)

Residential: Base fee of \$450 plus \$10.00 per fixture

Commercial/Industrial: \$75.00 for each inspection required, plus \$12.00 per fixture

Section 106.6.3 Fee refunds. Delete the section in its entirety.

Section 108.4. Violation Penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall install plumbing work in violation of an approved plan or directive of the Village Plumbing Inspector, or of a permit or certificate issued under the provisions of this code, shall be guilty of a code violation punishable by a fine of not less than fifty and no/100 dollars (\$50.00) and not more than one thousand and no/100 dollars (\$1,000.00) in addition to the permit fees in Section P-106.5.2 of this code. (Ordinance 97-074, 08.26.97)

Section 108.5. Unlawful Continuance. Any person who shall continue any plumbing work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than one hundred and no/100 dollars (\$100.00) nor more than one thousand and no/100 dollars (\$1000.00). Each day that a violation continues shall be deemed a separate offense. (Ordinance 97-074, 08.26.97)

Section 109 Appeals Board. Delete the section in its entirety:

Section 301.3.1. Public Systems Available: A public water supply system or public sewer system shall be deemed available to premises used for human occupancy if such premises are within two hundred (200) feet, measured along a street, alley or easement, of the public water supply or sewer system, and a connection conforming with the standards set forth in this code may be made thereto. (Ordinance 97-074, 08.26.97)

Section 305.6.1 Sewer Depth. Insert - 36 inches minimum.

Section 305.8.1. Plumbing Wall. Any plumbing wall, which has three inch (3") or larger stack vent or a combination of vents and water piping, must be not less than 6-inches in size. (Ordinance 97-074, 08.26.97)

Section 311.1. Toilet Facilities for Workers. Toilet facilities shall be provided for construction workers, and such facilities shall be maintained in a sanitary condition. Construction worker facilities of the non-sewer type shall conform to ANSI Z4.3. (Ordinance 05-010, 01.25.05)

Section 406.1.1. Automatic Clothes Washers. If automatic clothes washers are located above basement levels, there must be a safe pan installed under them to protect property and occupants below. The safe pan shall be turned up on all sides at least two inches (2"), with a vented 1-inch drain run to the floor drain; floor drain must not be under pan. The safe pan shall be constructed of materials listed under Section P-417.5.2, Pans, and 417.5.4 PE, Sheets. (Ordinance 97-074, 08.26.97)

Section 409.3. Dishwashing Machines; waste connections. Dishwashing machines shall discharge separately into a trapped fixture tailpiece of a kitchen sink, and they shall not discharge through a connection for a food waste grinder. Commercial dishwasher waste shall be cast iron or other approved material for a distance of a minimum of twenty (20) feet past the connection to the drain line. (Ordinance 97-074, 08.26.97)

Section 419.4. Public Washrooms: Urinals shall have visible water trap seals without strainers in order to permit cleaning and maintenance of the fixtures, and they shall be of the

siphon jet type. Floor drains in washrooms shall have a trap primer. (Ordinance 97-074, 08.26.97)

Section 502.5. Water heaters. When heaters need replacing, a new relief valve shall be installed, and a permit must be obtained from the Building Department. After installation, the heater shall be inspected within 48 hours of installation. Reinspections of corrected items must be performed within 7 business days. If water heaters are located above basement level, there shall be a safe pan installed under them to protect property and occupants below. The safe pan shall be turned up on all sides at least two (2) inches and shall be constructed of material listed in Chapter 5, Section 504.8, Required Pan. There shall be a drain in the safe pan one (1) inch in diameter, which shall drain into a two (2) inch drain in area, and the drain must not be under the pan. Water heaters must be readily accessible for repair and/or replacement.

Section 603.1.1. Water service size and meter location. (Changed in its entirety by Ordinance 06-052, 05.09.06) Water meters shall not be located above ceilings or crawl spaces. If the water service enters the building in a crawl space, the service must continue to a proper meter location so as to be accessible for repair and/or replacement. The utility company servicing the area will install meters and remote readers three-quarter inch (3/4") through two-inch (2") diameter only. Meters may be obtained by contacting the water utility company that has jurisdiction in the area.

The minimum diameter of water service pipe shall be one inch (1") in single-family residences. Larger diameters may be necessary as determined by the number of water fixture units (WFU).

The minimum diameter of water service pipe in commercial and industrial installations shall be two inches (2") with a Full Port Ball Valve for independent shut-off.

In commercial and industrial buildings with a master meter, water distribution to each unit shall be a minimum of two inches (2") in diameter. This piping shall be a minimum Type-L copper above ground and Type-K below.

Section 603.1.2. Water service and meter installations in multi-family buildings. In multi-family buildings below three (3) stories, each unit shall have its own water meter. There shall also be a meter for fire protection and irrigation systems, if required. Meters are to be located in a separate room with an outside door and key made available to the utility company providing service in that area.

Section 603.1.3. Water service and meter installations in row townhomes and attached single-family buildings. In attached single family buildings and townhomes each unit shall have its own B-box from the water main. Water meters are to be readily accessible for repair and/or replacement.

Section 605. Water distribution pipe. C.P.V.C. pipe shall have a standard pressure/temperature rate of 100 psi/180 degrees (F) and minimum standard requirement of ASTM D2846 and shall be installed per manufacturer's specifications. Piping shall not be anchored tightly to supports but with smooth straps or hangers to allow for movement. When C.P.V.C. is used for tub spouts or shower risers, it must be anchored so as not to move when spout or shower arm is used. Water heater connections shall have a minimum of six inches (6") clearance from any heat source before connecting to CPVC pipe. If copper distribution pipe is to be used, it shall be a minimum of "Type M" above ground and "Type K" below ground.

Section 606.1.1. Location of full open valves in multi-family buildings. In buildings three (3) stories and below, valves shall be located as follows: The valves before each meter are to be a locking type full port ball valves, the valve after each meter shall be a regular type full port

ball valve. In row townhomes and attached single family homes, the valves are to be regular full open ball valves. Valves three-quarter inch (3/4") through two inches (2") are to be full port ball valves

Section 608.16.4. Connections to automatic fire sprinkling systems. The potable water supply to automatic fire sprinkling systems shall be protected with double detector check valve system. Double detector or any backflow protectors are to be installed by a licensed plumber of the State of Illinois. It shall be the responsibility of the water customer to have the backflow device tested annually or as the manufacturer recommends after the initial inspection upon installation. A copy of the test results along with testers C.C.C.D.I. name and number must remain on site; a copy shall also be sent to the Water Department servicing the customer and Building Department. (Ordinance 97-074, 08.26.97)

Section 701.3.1 Sanitary sewer. Attached single family dwellings, such as townhomes, row-houses or similar type of structures and types of construction, shall be treated as separate buildings and each dwelling shall have a separate sanitary sewer system, which shall be connected to a public sanitary sewer or private sewer disposal system located at least ten feet (10') outside the building.

Section 702.1.1. Entire sanitary waste stack and vent pipe. In buildings above two (2) stories (other than single family), the sanitary waste stack shall be cast iron, including closet waste, in lieu of bell and spigot cast iron (made with lead and oakum); no-hub cast iron is allowed and must be installed as per manufacturer's instructions. Closet collars are to be installed with lead and oakum. Lavatories, tubs, shower wastes and the like may be plastic, copper or galvanized; the proper adapter must be used to make this change. (Ordinance 97-074, 08.26.97)

Section 702.2.1. Underground plumbing building drain. Underground drain and waste piping shall be a minimum of four inch (4") PVC plastic or service weight cast iron unless otherwise approved by the plumbing inspector or building commissioner. All waste piping below basement floor shall discharge to an ejector pit and pump to an overhead sanitary system.

Section 702.2.2. Independent systems. Drainage systems, plumbing and venting systems shall be separate and be independent from any other. Each unit or building shall have an independent connection to the sewer and water main servicing the building. This shall include attached single family buildings, row townhomes, 3-, 4-, 6-, 8-plex and the like. The sewer shall be six (6) inches in diameter. (Ordina97-074, 08.26.97)

Section 702.3.1. Building sewer pipe. If sewer and/or water are run under a parking area, driveway or walk, the sewer material shall be S.D.R. #35 plastic or cast iron pipe. The ditch is to be filled to grade with #6 or #8 stone or road mix; the density is to be 95%. The sewer is to be 6-inches (6") in diameter. (Ordinance 97-074, 08.26.97)

Section 904.1 Roof Extension. Insert a minimum extension of twelve (12) inches and increased one pipe size.

Section 1003.2.1. Grease interceptors and separators. Interceptors and separators are to be located outside of buildings whenever possible. If interceptors or separators are located within buildings, there shall be a safe pan installed under them to protect property and occupants below. The safe pan shall be turned up all sides at least two inches (2"). There shall be a drain in the pan at least one inch (1") in diameter, which shall be run to a floor drain in the area. The pan shall be constructed of materials listed in Section 417.5.2, *Pans*, and 417.5.4 PE, *Sheets*. The floor drain must be a minimum of two inches (2"), which must be vented, and shall not be under the safe pan. (Ordinance 97-074, 08.26.97)

Section 1101.2.1. Rooftop Drainage. Buildings 200 square feet and larger must be equipped with gutters and downspouts or equivalent rainwater drainage systems, unless otherwise approved by the Building Commissioner. Buildings 12,000 square feet and larger shall have rooftop rainwater drainage systems that are tied directly into the storm sewer system.

Section 1102.2.1. Inside above ground storm drain piping. In buildings above two (2) stories that have inside downspouts, the downspouts are to be cast iron. In lieu of bell and spigot (made with lead and oakum), no-hub pipe is allowed and must be installed, as per manufacturer's instructions; stub-up may be plastic. (Ordinance 97-074, 08.26.97)

Section 1102.3. Underground building storm drainpipe: Underground building storm drainpipe shall be a minimum 4 inch service weight cast iron, 4 inch PVC or SDR #35 plastic pipe. (Ordinance No. 97-074, 08.26.97)

Section 1102.4. Building Storm Sewer Pipe. When building storm sewer pipe is under a parking area, driveway, or walk, the sewer material shall be S.D.R. #35 plastic pipe or service weight cast iron. The ditch is to be filled to grade with #6 or #8 stone or road mix; the density should be ninety-five percent (95%). (Ordinance 97-074, 08.26.97)

Section 1111.1.1. Subsoil Drain Pipe. Window well riser pipe shall be four inches (4") in diameter of solid plastic pipe, and it shall drain into a drain tile tee at the bottom of drain tile footing. It must be secured properly to assure a tight fit and shall not be disturbed during backfill. (Ordinance No. 97-074, 08.26.97)

Section 1111.1.3. Radon Protection and sump pits: All ejector pits and sump pits shall be the "sealed type" using gasketed bolt on tops and pipe collars, to help prevent against radon infiltration. If pit is to be vented, Vent pipes must be independent of all other plumbing vent piping.

Section 1111.1.4. Sump Pumps. All sump pumps used for footing and foundation stormwater drainage, installed in residential buildings shall be a minimum of one-half (1/2) horse power and shall be approved and listed for such use. Minimum discharge pipe size shall be 1 ½ inches. Larger drainage systems may require larger more powerful pumps and shall be sized according to maximum demand. Manufacturer's installation manual must be available to plumbing inspector at time of inspection. Manufacturer's listing of HP & size must be visible at time of inspection.

Chapter 13 referenced standards, delete the following:

ICC-EC ICC Electric Code

IEBC International Existing Building Code

IPSDC International Private Sewage Disposal Code

Illinois State Plumbing Requirements:

The City, Town, Village, Township or County that requires a permit for installation and repair of plumbing may not issue a permit without verification that the applicant has a valid plumbing license or that the applicant is the owner occupant of the single family residence that is the subject of the permit.

A letter of intent shall be included with all plumbing permit applications. The letter shall be written on the licensed plumber of records business stationary and shall include the license holders signature and, if the license holder is incorporated, the license holder's corporate seal. If the license holder is not incorporated, the letter must be notarized.

Section 25-304. Registration of plumbing contractors

(A) **General.** No person, firm, association, partnership or corporation doing business as a plumbing contractor shall install, superintend, maintain or repair any plumbing system covered by this code unless such person, firm, association, partnership, or corporation is duly licensed to perform such work and then only after a permit has been obtained to cover such work. Contractors shall be registered with the Village and must be able to meet the following qualifications: the person, firm, association, partnership or corporation is licensed by the State of Illinois to perform plumbing work. A copy of the current plumber's license and State registration must be submitted.

(B) **Property owner exemption.** The provisions herein contained shall not prohibit the owner of a single family structure from personally doing his own work on said single family dwelling, provided he is qualified or working with a qualified, licensed plumber and not without first obtaining a permit. Property owner must reside at subject property for a minimum of six months after completing work.

(C) **Reciprocal registration.** Plumbing contractors duly qualified and licensed in other municipalities may be registered with the Village by reciprocity, provided that the plumbing inspector accepts the equality of procedure under which such candidate obtained the original license.

(D) **Valid State Registration.** All plumbing contractors are required to file with the Village of Bolingbrook Building Department, a copy of the valid and current State Plumbing Contractors Registration card.

(E) **Valid State License.** All plumbing contractors must be licensed to perform such work, and a copy of the current and valid state license must be submitted to the Village of Bolingbrook Building Department.

NO PERSON, FIRM, ASSOCIATION, PARTNETRSHIP OR CORPORATION SHALL INSTALL, SUPERINTEND, MAINTAIN OR REPAIR ANY WORK FOR WHICH A PERMIT IS REQUIRED UNLESS SUCH PERSON, FIRM, ASSOCIATION, PARTNERSHIP, CORPORATION OR CONTRACTOR HOLDS A CURRENT VILLAGE OF BOLINGBROOK CONTRACTORS FORM.

ARTICLE 4 – ELECTRICAL REGULATIONS

Section 25-401. PURPOSE. The purpose of this Article is to establish the minimum regulations governing the design, construction, alteration, repair, removal, maintenance and use of all electrical conductors and equipment; providing for the issuance of permits, collection of fees, making inspections; providing penalties for the violations thereof.

Section 25-402. ADOPTION OF THE NATIONAL ELECTRICAL CODE. There is adopted, for the above-mentioned purpose, the “National Electrical Code 2005 Edition” as published by the National Fire Protection Association, which code shall be the electrical code of the Village of Bolingbrook in the State of Illinois. One (1) copy of said National Electrical Code is on file in the office of the Village Clerk of the Village of Bolingbrook. Each and all of the regulations, provisions, penalties, conditions and terms of said National Electrical Code are hereby referred to, adopted and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes prescribed in Section 25-403. (Ordinance 97-075, 08.26.97)

Section 25-403. ADDITIONS, INSERTIONS, DELETIONS AND CHANGES. The following Articles of the said National Electrical Code are revised as follows:

Article 90.10. Permits. No electrical equipment shall be installed or altered within the Village unless a permit has first been issued by the Building Commissioner or his/her designee. If said work has started without a permit, a fine shall be levied and that fine shall be a minimum of One Hundred and no/100 Dollars (\$100.00), in addition to the permit fees. (Ordinance 94-035, 04.12.94)

Article 90.11. Application for permit. All persons seeking to install electrical equipment, before commencing any work of any kind, shall file an application for a permit in the office of the Electrical Inspector. The application shall describe in detail the material and apparatus to be used, the name of the owner of the premises, and a detailed description and plan of work to be done. The plan shall indicate the type and location of all outlets, the size of all motors and power-consuming equipment, i.e., all current-consuming devices which shall make up the connected load, conduit runs, size of conductors for branch circuits and feeders to be installed. The location of all panel boards and cabinets and the number and rating of the circuits shall be indicated. Each individual feeder will be separately protected against overload and controlled by a load-breaking device of suitable capacity. Service, branch circuits and feeder connections shall be sized for the maximum protective device rating. The aforementioned must be described to the fullest on all prints, prior to the plan reviewing.

The plan shall include complete load calculations.

Article 100. Clarification of Specific Definitions:

Electrical equipment: The term "electrical equipment" as used in this code means conductors and equipment installed for the utilization of electricity supplied for light, heat or power, but does not include radio apparatus or equipment for wireless reception of sounds and signals, nor ordinary household appliances such as toasters, vacuum cleaners, etc. and does not include apparatus, conductors and other equipment installed for or by public utilities, including common carriers which are under the jurisdiction of the Illinois Commerce Commission for use in their operation as public utilities.

Qualified: To mean as to the knowledge one has in relation to the work he is to perform, in the field of electricity he must be a journeyman electrician.

Readily accessible: Capable of being reached quickly for operation, renewal, or inspection, exceptionally close approach, not guarded by locked doors, not to travel any great distance, such as out of doors, through hallway, etc.

Article 110.3(A) (9) Electric components: i.e. boxes, conduit, wireways luminaries or other items shall not be supported from the roof deck or the bottom cord of the bar joist, unless the licensed design professional of record specifically designed the structure to support the load of the additional equipment and noted so on the applicable building plan sheets.

Article 210-19(A)(5). Branch Circuits: The minimum size conductor for branch circuits shall be No. 12 AWG copper. *Exception: Branch circuits in single family dwellings and attached single family dwellings.*

Article 210.11. Additional Branch Circuit Requirements.

(D) Except as may be specially approved by the Electrical Inspector each occupancy shall be provided with fuse or circuit over-current devices for the number of circuits as required to serve the minimum loads stated herein.

(E) There shall be at least two (2) additional accessible 20-ampere circuits to serve the appliance convenience receptacles only in the kitchen of the dwelling occupancy. (Appliance circuits shall be so arranged that outlets on one circuit shall alternate with those on another circuit.) The two (2) small appliance circuits are to be completely independent of any other consuming devices.

(F) The dishwasher and disposal are to be installed on their own separate circuit completely independent of any other current-consuming devices. When installing the dishwasher and disposal, an additional ground must be installed and must be green in color.

(G) The refrigerator is to be on its own separate circuit.

(H) Other Circuits. Separate additional branch circuits shall be provided in a dwelling occupancy as required for:

- (1) Major appliances. All major appliances shall be wired and fused according to the nameplate rating.
- (2) Window air conditioning units larger than one-half ton (1/2 HP or 6,000 BTU approximately).
- (3) Electric space heaters, 750 watts and larger.
- (4) Motors of 1/2 HP or larger.
- (5) Water heaters – 240 volt minimum #10 wire.
- (6) Electric dryers – 240 volt minimum #10 wire with “L” shaped receptacle.
- (7) Sump pump.

Article 210-52(A)(4) Basement receptacles. In single family dwellings with unfinished basements, at least one electric receptacle/outlet shall be placed on each perimeter wall, located at approximately the center of the wall and a minimum of 42 inches above the finished floor. These receptacles/outlets shall be ground fault protected. In finished basements, receptacle/outlets shall be placed at a maximum of twelve feet (12') on center as required by the 2005 National Electric Code.

Article 210.52(G).1. Garage Electrical Receptacles Required. In all single family and attached single family residential garages, a GFCI protected electrical convenience receptacle

shall be provided on all interior walls and at least one standard receptacle shall be provided at the ceiling for the garage door opener. (Ordinance 09-079, 11.17.09)

Article 210.52(I) Dryers and double ovens. 240 volt electric dryers and double ovens shall have 4 wire receptacles wired back to the main panel.

Article 210-70(D) Garage light. A ceiling light must be installed in all attached garages, and must be serviced by a switch located no more than two (2) feet from the service door to the garage.

Article 215.1.1 Secondary or sub feeders. Any secondary or sub feeders crossing under driveways, parking lots or vehicle traffic ways shall be encased in heavy wall rigid metal conduit or intermediate metal conduit buried at least 24 inches deep.

Article 230.9.1 Additional requirements for services.

(A) Only underground services will be allowed. The Service Entrance Conductor shall be not less than 3 No. 3/0 copper approved for the location and protected in threaded type heavy wall galvanized conduit. Grounding bushings shall be required for all electric services. (Ordinance 97-075, 08.26.97)

(B) The minimum service capacity approved for each dwelling unit less than 2,500 square feet shall be a 3-wire, ground neutral, 100-ampere service. Service entrance conductors shall not be smaller than 3 No. 2 type THW, or RHW or equivalent. (At no time shall aluminum wire ever be used as service entrance conductors.) Service entrance conductors shall be continuous (without splice) from meter fitting to service disconnecting means; and shall be enclosed in a minimum 1-1/4-inch threaded type heavy wall galvanized conduit for above and below grade. The neutral conductor shall be white in color or otherwise identified. Conductors shall be of copper as listed in this code. Dwellings that have an area greater than 2,500 square feet shall have a minimum service rating of 200 amps.

(C) Service entrance equipment shall not be located in bathrooms, toilets, clothes closets, near easily ignitable materials, stoves, radiators, sinks, laundry tubs, piping, heating ducts, garage, heating plants, or within five (5) feet of any sump pump, nor shall it be installed less than thirty-six inches (36") above floor level. (Ordinance 97-075, 08.26.97)

(D) In all commercial and industrial installations, snap-in breakers are not permitted. Bolt-on breakers shall be used.

(E) Heavy wall galvanized conduit shall be used as the raceway to shelter the feeder conductors from the meter socket to the service distribution panel.

(F) Each occupant shall have readily accessible to all over-current devices protecting the conductors supplying his occupancy. The term readily accessible implies a need for performing promptly an indicated act. For example, to reach quickly a disconnecting switch or circuit breaker without the use of ladders, chairs, etc. The installation of such a switch or circuit breaker at a height above seven feet (7') or to a run outside his premises is not considered "readily accessible". The six movement of the hand rule will at this point apply. All required ground clamps for all services shall be approved for the use and location. Example: J-12A one type. (Ordinance No. 97-075, 08.26.97)

(G) The maximum height of the main disconnecting switch is not to exceed six feet (6') nor be lower than a minimum of five feet (5').

Article Testing 230.95(D). All test results shall be submitted to the building department prior to occupancy; i.e., ground fault protection of equipment.

Article 240.4(B) Devices rated 800 amps or less. Delete the section in its entirety.

Article 250.70 (5). Ground Clamps. Water main ground clamps shall be of the pipe type ground clamp listed and labeled for the use. *Example: Brundy types GAR-BU and GAR 3902 series or equivalent.*

Article 300.5 (L) Secondary or sub feeders. Any secondary or sub feeder crossing under driveways, parking lots or vehicle traffic ways shall be encased in heavy wall rigid metal conduit or intermediate metal conduit buried at least 24 inches deep.

Article 300.5 (M) Exterior wiring methods. Rigid metallic conduit or intermediate metallic conduit (IMC) shall be used in all exposed exterior installations. The use of EMT outdoors or buried below grade is prohibited.

Article 300.5 (N) Conduit requirements. All electrical wiring, except low voltage, shall be placed in metal conduit and boxes. Portable office partitions with plastic raceways shall be wired with flexible metal conduit.

Article 301. Additional requirements on wiring methods.

(A) Services.

- (1) All feeder lines on the primary side of service disconnect must be in copper (wire approved for the purpose) but not to be smaller than #2 copper.
- (2) All service feeder lines entering the building must be in a minimum one and one-quarter inch (1-1/4") threaded type heavy wall galvanized conduit above and below grade.
- (3) All services must be inspected prior to energizing.
- (4) All services are to be underground.
- (5) All service installations are to be checked for voltage drop and results submitted to the Electrical Inspector.
- (6) Service entrance raceways must be sealed outside to eliminate temperature change and condensation. i.e., duct seal.

(B) Service panels and all other electrical equipment shall be so installed as to not prevent the R-11 or greater value lessened. Also, the raceway used to supply the feeder cables to the service panel must be sealed on the outside to prevent the possible mixing of cold air with the warm air to eliminate condensation and frost. i.e. duct seal.

(C) All electrical work in unfinished intended habitable areas shall be recessed and not surface-mounted. In unfinished habitable areas specified to be owner completed, all electrical work shall be roughed in. This does not include areas such as basements. (Ordinance 97-075, 08.26.97)

(D) All aluminum siding shall be grounded when in contact with a current consuming device.

(E) All electrical work done within the Village shall be done by only qualified electricians.

(F) When passing conduit through plates, studs, or floor joist, the hole must be drilled in the strongest part as not to weaken the plate, stud, or floor joist involved. When permissible to notch, at no time shall the notch be more than one size larger than the size conduit you are notching for; at no time shall more than one side of the stud ever be notched nor more than one-third (1/3) of the stud or plates be removed. All unnecessary drilling or notching will be unacceptable. Chain saws are not to be a substitute for drilling. All unnecessary damage will be repaired by the responsible party.

(G) There shall not be more than ten (10) receptacles, or a combination of ten (10) receptacles and lighting outlets on any given fifteen (15)-amp circuit when considered as general illumination circuits.

(H) Porcelain pull chains installed in storage areas of less than six feet six inches (6' 6") shall be protected by a shield approved for such use.

(I) Receptacles in office areas shall be spaced as to eliminate the possible use of extension cords. The location of the receptacle shall be the same as stipulated in Article 210 Section 210-52 of the 2005 NEC. No point along a wall shall be further than 6 feet from an outlet. (Ordinance 97-075, 08.26.97)

(J) When permissible by code that three-eighths inch (3/8") flexible conduit can be used, it must be provided with an equipment ground wire green in color. For all new work, wiring shall be installed in rigid conduit, electrical metallic tubing, or surface metal raceways, except that it shall be permissible to use a section flexible metal conduit not to exceed four feet (4') in length. When flexible connections are necessary, conduits shall be not smaller than one-half inch (1/2") electrical trade size. Armored cable such as BX shall not be used in new work, including garage or other accessory buildings. All raceway joints shall be made tight and shall provide a continuous electrical circuit for grounding purposes. (Ordinance 97-075, 08.26.97)

(K) Sealtight and Greenfield connectors are not to be concealed, but remain accessible.

(L) Old Work. Metallic armored cable may be used for extensions to existing wiring, where the original construction was done with such materials, and use of conduit is not practical. Such wiring shall be in accordance with the applicable parts of the current issue of the National Electrical Code.

(M) Conduit in Concrete. Rigid steel conduit, or intermediate metal conduit shall be used when concealed within concrete construction. Electrical metallic tubing shall not be used in concrete or direct burial. *Exception:* Extreme conditions that require service feeder duct-banks of equivalent design or greater, as approved by the Building Commissioner or his/her designee. (Ordinance 06-052, 05.09.06)

(N) A doorbell must be installed with the appropriate low voltage transformer, front of dwelling.

Article 310.2 (B) Conductor material. All conductors shall be copper.

Article 324 Flat Conductor Cable: Type FCC. Delete the section in its entirety.

Article 330 Metal clad Cable: Type MC. Delete the section in its entirety.

Article 334 Non-metallic Cable: Type NM, NMC, NMS. Delete the section in its entirety.

Article 338 Service Entrance Cable: Type SE and USE. Delete the section in its entirety.

Article 356 Liquid Tight Non-metallic Cable: Type LFNC. Delete the section in its entirety.

Article 374 Cellular Metal Floor Raceways. Delete the section in its entirety.

Article 394 Concealed Knob and Tube Wiring. Delete the section in its entirety.

Article 408.30.1 Panel board disconnects. All panel boards and sub panels within a tenant space, in multi-family housing shall be provided with main disconnect.

Article 410.16 c. Lay in luminaires (light fixtures) in suspended ceilings shall be supported independent of ceiling grid by 2 (two) 12 gauge pencil rods at opposite corners to the top of the bar joist.

Article 700.9(B)(5) Exit light circuits. All one hundred fifteen (115) volt illuminated exist signs shall derive their power from a separate dedicated circuit.

Section 25-404. INSPECTIONS

(A) When the service is installed and accessible, it shall be the duty of the person, firm or corporation installing the electrical work to notify the Building Department, who shall then inspect the work to assure it is in compliance with all the requirements of the codes. An approval tag will then be placed on the service. The approval tag will then give the utility company the authority to energize the service.

(B) When the electrical work has been roughed-in and exposed, it shall be at this point that the Building Department will be notified to have the work inspected for fulfillment of the code requirements. At no time shall any electrical work be covered up without an inspection.

(C) Upon total completion of the electrical work, the Building Department will be then notified and a final inspection made. If approved, an approval certificate will be issued.

(D) The inspection department shall be properly notified twenty-four (24) to forty eight (48) hours in advance of each inspection called for by this code. No inspections shall be considered as automatic. Installing electricians or his agent may be required to be present on inspection.

Section 25-405. PERMIT AND INSPECTION FEES FOR ELECTRICAL WORK.

(Amended in its entirety by Ordinance 03-045, 04.22.03) The fees hereinafter set forth shall be paid for inspection by the Village of all electrical equipment that is installed or altered:

(A) New construction or complete remodeling. For the inspection of all electrical work in one- and two-family residences and apartment buildings, including service, all circuits, fixtures, receptacles and switches. The fee shall be as follows: (Ordinance 10-029, 05.11.10)

1. All residential units with 1,000 or more square feet of floor area, but less than 2,000 square feet per family unit\$225.00
2. With 2,000 or more square feet of floor area, per family unit.....\$245.00

(B) Except as provided in the Subparagraph (A) above, the inspection fee for electrical services for all other installations shall be as follows:

100 Ampere	\$200.00
101 to 200 Ampere, 3 or 4 wire	\$210.00
201 to 300 Ampere, 3 or 4 wire	\$220.00
301 to 400 Ampere, 3 or 4 wire	\$230.00
401 to 500 Ampere, 3 or 4 wire	\$240.00
501 to 600 Ampere, 3 or 4 wire	\$250.00
601 to 800 Ampere, 3 or 4 wire	\$270.00

Fees for service in excess of 800 ampere shall be computed on the basis of the rating of service disconnects installed prorated according to the schedule above and shall include feeders, risers, and all wiring and equipment up to the branch circuit distribution panels or motor power panels or control centers additional sub-panels as distribution panels, or motor panels or control center will be computed as above for the inspection fee.

(C) Except as provided for hereinabove for all residential units, the fee for inspection of nominal 15 or 20 ampere two wire circuits, including fixture, sockets or receptacles, shall be as follows: \$10.00 plus an additional \$5.00 per circuit.

These fees are for a two (2) wire 120 volt branch circuit, each two (2) wire 240 volt single phase circuit, or three (3) wire 1/20/240 single phase circuit shall be charged the fee for two (2) circuits. Each 120/208 volt three (3) phase four (4) wire circuit shall be charged a fee for three (3) circuits. For inspections of a 30 to 60 ampere circuit, the inspection fee shall be double the amount of the same number of 15 or 20 ampere circuits.

(D) For inspection of each motor or current consuming device other than luminaires (lighting fixtures), the inspection fee shall be as follows:

1. One motor or current-consuming device..... \$10.00
2. Additional motor or current device \$10.00
3. Motors of 1/4 H.P. or less \$10.00

(E) Inspection fees as determined by the Building Commissioner shall be a minimum of seventy five and no/100 Dollars (\$75.00) per inspection. (Ordinance 10-029, 05.11.10)

Section 25-406. REGISTRATION OF ELECTRICAL CONTRACTORS

(A) **General.** No person, firm, association, partnership or corporation doing business as an electrical contractor shall install, superintend, maintain, or repair any electrical system covered by this code unless such person, firm, association, partnership, or corporation is duly licensed to perform such work and then only after a permit has been obtained to cover such work. Contractors permits shall be issued by the Building Commissioner to those persons, firms, associations, partnerships or corporation which are able to meet the following qualifications: that he has operated as a journeyman electrician for not less than five (5) years and that he has certification of having passed the required testing to perform as an electrical contractor.

(B) Property owner exemption: The provisions herein contained shall not prohibit the owner of a single family structure from personally doing his own work on said single family dwelling, provided he is qualified or working with a qualified, licensed electrician and not without first obtaining a permit.

(C) Reciprocal registration. Electrical contractors duly qualified and licensed in other municipalities may be issued a contractors permit by reciprocity, provided that the electrical inspector accepts the equality of procedure under which such candidate obtained the original license. (Ordinance 97-075, 08.26.97)

(D) Registration fee. The registration fee for contractors permit shall be one hundred sixty dollars (\$160.00) per year as a subcontractor, and two hundred sixty dollars (\$260.00) per year as a general contractor, and said permit shall be renewed annually. (Ordinance 10-029, 05.11.10)

(E) Bonding requirements. No person, firm, association, partnership or corporation shall be granted a contractors permit until he or it has filed with the Building Commissioner a bond issued by a surety company, in the principal amount of ten percent (10%) of the total cost of all material and labor necessary to perform the desired task contracted to complete the agreed work, but not less than Twenty Thousand and no/100 Dollars (\$20,000.00), conditioned upon the faithful observance of all regulations and requirements of ordinances of the Village of Bolingbrook then in force, or which may thereafter be in force, concerning or regulating electrical work within the Village of Bolingbrook and further to indemnify, save, and keep harmless the Village from any loss, cost, damage, expense or liability of any kind whatsoever which the Village may suffer or which may accrue against it by reason of anything done by such person, firm, association, partnership or corporation in performing electrical work in the Village. (Ordinance 97-075, 08.26.97)

(F) Insurance requirements. All contractors registered to conduct business or work within the Village, whether or not their place of business is located within the Village, shall be required to have a liability insurance policy providing coverage for not less than the amount of one hundred thousand and no/100 dollars (\$100,000) for Bodily Injury, three hundred thousand and no/100 dollars (\$300,000) for each occurrence, and Property Damage of twenty-five thousand and no/100 dollars (\$25,000). Evidence shall be filed along with the Application for Contractor's Permit to the Village in the form of a Certificate of Insurance naming the Village of Bolingbrook as an additional insured under said policy. (Ordinance 97-075, 08.26.97)

ARTICLE 5 – MECHANICAL REGULATIONS

Section 25-501. PURPOSE. The purpose of this Article is to establish the minimum regulations for the design, installation and construction of mechanical systems, by providing reasonable safeguards to protect the public health and safety against the hazards of inadequate, defective or unsafe mechanical systems and installations.

Section 25-502. ADOPTION OF INTERNATIONAL MECHANICAL CODE. There is adopted for the above-mentioned purpose, the "International Mechanical Code, 2006" as published by the International Code Council, Inc., which Code shall be the mechanical regulations for the Village of Bolingbrook in the State of Illinois. One (1) copy of said International Mechanical Code is on file in the office of the Village Clerk of the Village of Bolingbrook. Each and all of the regulations, provisions, penalties, conditions and terms of said International Mechanical Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes prescribed in Section 25-503 of this Chapter. (Ordinance 95-189, 12.19.95)

Section 25-503. ADDITIONS, INSERTIONS, DELETIONS AND CHANGES. The following Sections of the said International Mechanical Code are revised as follows:

Section 101.1. Title: This code shall be known as the Mechanical Code of the Village of Bolingbrook hereinafter referred to as the mechanical code or "this code".

Section 103.1. Designation of Mechanical Official: The Village Building Commissioner, appointed in accordance with Chapter 3 of the Bolingbrook Municipal Code, is hereby designated as the mechanical official in this code.

Section 106.5.2 Fees for periodic inspections: The fee for each required building inspection as determined by the Building Commissioner shall be seventy five and no/100 dollars (\$75.00). (Ordinance 10-029, 05.11.10)

Section 106.5.3 Fee refunds: Delete this section.

Section 108.4. Penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements hereof or who shall erect, construct, alter or repair mechanical equipment or systems in violation of any approved plan or directive of the Village Building Commissioner, or of a permit or certificate issued under the provisions of the code, shall be guilty of a code violation punishable by a fine of not less than seventy five and no/100 dollars (\$75.00) and not more than one thousand and no/100 dollars (\$1,000.00). Each day that a violation continues shall be deemed a separate offense. The commencement of mechanical work without a permit shall be subject to a fine of not less than seventy five and no/100 Dollars (\$75.00) nor more than one thousand and no/100 dollars (\$1,000.00) in addition to the permit fees in this code. (Ordinance 89-024, 04.11.89)

Section 108.5. Unlawful continuance: Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition shall be subject to a fine of not less than two hundred and fifty and no/100 dollars (\$250.00) or more than one thousand and no/100 dollars (\$1,000.00).

Section 109. Appeals Board. Delete the section in its entirety. (See the Village of Bolingbrook Appeals Process.)

Section 304.12 Unvented appliances: Unvented appliances shall be allowed only by special permission of the Building Commissioner.

Section 403.1.1 Undercuts: Door undercuts shall not be used for the transfer of return air from one space to another. *Exception: #1. Single family and attached single family laundry rooms. #2. Unless otherwise approved by the Building Commissioner or his/her designee.*

Section 507.1.1 Kitchen Hoods: All commercial kitchen exhaust hoods shall be tested and listed in accordance with UL 710 and shall be listed and bear the label of an approved testing agency.

Section 601.5 Duct locations: Furnace and air ducts shall be raised a minimum of one and one half inches (1½") above basement floors.

Section 601.6 Slab on grade ductwork: Approved ductwork used in slab on grade construction, including all duct joints, shall be water tight to prevent ground water infiltration.

Section 602.3 Studs and joist spaces: The space between studs or joists shall not be used as a plenum for supplying air. The space between studs or joists used, as a plenum for return air shall not be part of a required fire rated assembly. Air shall not be removed from more than one floor level at a time. All conditions shall be firestopped or draftstopped in accordance with the Code. (Ordinance 94-005, 01.11.94)

Stud and joist spaces used as return air plenums shall be allowed in single family homes and town-homes only. At no time shall they be allowed in a fire separation wall.

Section 603.1 Residential requirement: In all residential developments, rigid metallic ducts shall be used for supply and return air distribution, unless otherwise provided for in this code.

Section 603.1.1 Ductwork: Environmental air ductwork shall be sized according to ACCA Manual D. Multiple furnaces shall not share the same supply or return air ductwork unless specifically required or approved by the manufacturer of the furnaces.

Section 603.6.1 Flexible air duct and duct connectors: Flexible return air ducts and duct connectors shall only be permitted in attics and similar areas where direct access to the duct and duct connectors and connection points is provided. Flexible ducts and duct connectors shall be limited to 8 feet in length and located in accessible areas only.

Section 603.10.1 Duct hangers: Duct hangers shall not be attached to the roof decking. Ducts shall be supported by structural framing members.

Section 603.10.2 Residential: In residential construction, supply duct trunk lines shall be suspended a minimum of five eighths of an inch (1") below the floor joists. All residential bathrooms shall be provided with a supply air vent connected to the HVAC system with a minimum 6 inch diameter duct. The vent defuser shall have an adjustable damper.

Section 901.5 Spark Arrestors & Outdoor Fireplaces. Approved spark arrestors shall be provided on all chimneys serving wood burning fireplaces and stoves. They shall be of the pre-manufactured type, designed and approved for this use. All outdoor fireplaces and fire pits shall be pre-manufactured and approved for this use. They shall be placed in a safe location in accordance with the manufacturer's instructions and the 2006 International Fire Prevention Code.

Section 901.6 Installation requirements. Fabricated fireplace chimneys located on an outside wall or extending five feet (5') or more above the roof penetration, shall be enclosed within a chase, providing the required separation distance to combustible materials.

Section 903.4. Firestopping. Chases enclosing factory built fireplace vent systems must be constructed as follows: (Ordinance 94-005, 01.11.94)

- a. When located on the exterior of the building, the fireplace chase must be drywalled completely for the first level and then fire stopped at the top of the first level.
- b. The wall adjacent to the living area must be fire-stopped completely to the underside of the roof assembly. The fire stopping should extend 6-inches beyond the chase area. One-half-inch plywood may be used on the upper section (above the first level).
- c. Factory built chimney vents shall maintain a minimum clearance of 2 inches to combustibles unless otherwise required by the manufacturer.

Section 1303.12 Appliance connections. Approved flexible connectors shall only be used for gas appliances equipped with castors or otherwise subject to periodic movement. All connectors shall be listed for the use.

Chapter 15 referenced standards, delete the following:

ICC-EC ICC Electric Code
IEBC International Existing Building Code

Additional Mechanical Requirements:

1. All test and balance reports must be submitted at least 3 days prior to final inspection.
2. All new gas supply lines must be pressure tested and inspected.
3. All roof-top penetrations greater than 12 inches by 12 inches shall be supported by the building structure.
4. Flexible duct work shall not exceed 8 feet in length (accessible areas only).
5. All furnace replacements require a permit to be obtained prior to installation. If a high efficiency furnace is to be installed, that will no longer use the original b-vent, the mechanical professional must provide calculations to determine if the b-vent is still sized appropriately for the remaining units using the vent; i.e., water heaters.

Section 25-504. REGISTRATION OF HEATING, AIR CONDITIONING AND MECHANICAL CONTRACTORS.

(A) General. No automatic or manually controlled heat-producing, air conditioning, or mechanical ventilation equipment may be installed, replaced or repaired within the Village except by persons, firms, or corporations duly licensed and/or registered to perform such work, except as hereinafter provided, and then only after a permit has been obtained to cover such work. Contractor's permits shall be issued by the Building Commissioner, or his/her designee, to those persons, firms, or corporations qualified to perform such work. Proof of qualifications must be provided upon request. *Exception: Emergency situations, as long as a permit is obtained the next business day.*

(B) Registration fee. The fee for contractors permit shall be one hundred sixty and no/100 dollars (\$160.00) per year, and said permit shall be renewed annually. (Ordinance 10-029, 05.11.10)

(C) Property owner exemption. The provisions herein contained shall not prohibit the owner of a single family structure from personally doing his own work on said single family dwelling, provided he is qualified or has a professional journeyman heating and air conditioning person to supervise his work and not without first obtaining a permit.

(D) Bonding requirements. No person, firm, association, partnership or corporation shall be granted a contractors permit (registration) until he or it has filed with the Building commissioner a bond issued by a surety company, in the principal amount of ten percent (10%) of the total cost of all material and labor necessary to perform the desired task, but not less than twenty thousand and no/100 dollars (\$20,000.00), conditioned upon the faithful observance of all regulations and requirements of ordinances of the Village of Bolingbrook then in force, or which may thereafter be in force, concerning or regulating heating, ventilating and air conditioning work within the Village of Bolingbrook and further to indemnify, save and keep harmless the Village from any loss, cost, damage, expense or liability of any kind whatsoever which the Village may suffer or which may accrue against it by reason of anything done by such person, firm, association, partnership or corporation in performing work in the Village.

(E) Insurance requirements. Insurance requirements for mechanical contractors shall be the same as required for other contractors as outlined in this code and as listed on the contractors permit registration form.

ARTICLE 6 – DRIVEWAYS AND PARKING LOTS

Section 25-601. PURPOSE. The purpose of this Article is to establish the minimum regulations governing the design and construction, alteration, enlargement, repair, removal, and maintenance of all private or public drives and private and commercial parking lots.

Section 25-602. PERMIT REQUIRED. No person shall hereafter build or construct any driveway or parking lot without first obtaining a permit to do so from the office of the Building Commissioner.

Section 25-603. BOND REQUIREMENT. The applicant shall furnish or shall have his contractor furnish to the Village a Surety Bond for acceptable performance and completion. The Surety Bond shall be for the full amount of the contract for which it applies and shall guarantee the faithful fulfillment of the agreed intent in accordance with the Village ordinance. The Bond shall comply with the laws of the State of Illinois. Upon completion of the agreed intent in accordance with the Village ordinances, the Surety Bond shall be returned to the applicant. If the installation is not completed in accordance with Village ordinance, the Village shall give notice to the applicant stating the action(s) required to comply with the Village ordinances and if the applicant fails to take the action stated, the Village shall have the right to utilize said Bond or any portion thereof to satisfactorily complete the agreed intended installation.

Section 25-605. MINIMUM PAVEMENT THICKNESS AND MATERIAL FOR PRIVATE AND PUBLIC DRIVEWAYS AND FOR PRIVATE OR PUBLIC PARKWAYS.

	<u>THICKNESS & MINIMUM</u>	<u>MATERIAL TYPE & REINFORCEMENT</u>
(A) Residential	6" No. 9 Compacted Stone	4" 1-11 Bituminous compacted to 2"
(B) Commercial	8" No. 9 Compacted Stone	1-1/2" Bituminous Binder Stone, 1-1/2" Bituminous Wearing Surface Course
(C) Residential	4" No. 9 Compacted Stone Minimum	4" Class "X" Concrete <u>with wire mesh or fiber mesh reinforcement.</u> Reinforcement not permitted in apron.
(D) Commercial	8" No. 9 Compacted Stone Minimum	6" Class "X" Concrete <u>with wire mesh or fiber mesh reinforcement.</u> Reinforcement not permitted in apron.

Section 25-606. CONDITION OF BASE. All organic or loose fill must be removed completely. The pavement must be set on a solid base testing ninety-five percent (95%) density.

Section 25-607. DRAINAGE. The ground must be so designed as to remove the excess water rapidly and avoid the possibility of water collecting beneath the pavement.

Section 25-608. INSPECTIONS. There shall be a minimum of three (3) inspections as follows:

- (A) The condition of the base surface.
- (B) The thickness and compaction of the sub-surface.
- (C) The final inspection to insure the required thickness and appearance.

Section 25-609. **REPAIR AND MAINTENANCE.** It shall be the duty of the owner of the property to maintain the driveway or parking lot in good repair and free from all obstructions.

Section 25-610. **DRIVEWAY SLOPE.** Driveways shall be sloped to drain properly. Driveways shall have a minimum four percent (4%) slope and a maximum ten percent (10%) slope unless otherwise approved by the Building Commissioner or his/her designee. (Ordinance 94-020, 02.22.94)

ARTICLE 7 – FUEL GAS REGULATIONS

Section 25-701. PURPOSE. The purpose of this Article is to establish the minimum regulations for the design, installation and construction of fuel gas systems, by providing reasonable safeguards to protect the public health and safety against the hazards of inadequate, defective or unsafe fuel gas systems and installations.

Section 25-702. ADOPTION OF INTERNATIONAL FUEL GAS CODE. There is adopted for the above-mentioned purpose, the "International Fuel Gas Code, 2006" as published by the International Code Council, Inc., which Code shall be the fuel gas regulations for the Village of Bolingbrook in the State of Illinois. One (1) copy of said International Fuel Gas Code is on file in the office of the Village Clerk of the Village of Bolingbrook. Each and all of the regulations, provisions, penalties, conditions and terms of said International Fuel Gas Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes prescribed in Section 25-503 of this Chapter. (Ordinance 95-189, 12.19.95)

Section 25-703. ADDITIONS, INSERTIONS, DELETIONS AND CHANGES. The following Sections of the said International Fuel Gas Code are revised as follows:

Section 101.1. Title: This code shall be known as the Fuel Gas Code of the Village of Bolingbrook hereinafter referred to as the mechanical code, fuel gas code or "this code". If any section of this code conflicts with a section of another code adopted by the Village of Bolingbrook, the most restrictive code shall apply.

Section 104.1. Designation of Mechanical Official: The Village Building Commissioner, appointed in accordance with Chapter 3 of the Bolingbrook Municipal Code, is hereby designated as the mechanical official in this code.

Section 106.5.2 Fees for periodic inspections: The fee for each required inspection as determined by the Building Commissioner shall be seventy five and no/100 dollars (\$75.00). (Ordinance 10-029, 05.11.10)

Section 106.5.3 Fee refunds: Delete this section.

Section 108.4. Penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements hereof or who shall erect, construct, alter or repair mechanical equipment or systems in violation of any approved plan or directive of the Village Building Commissioner, or of a permit or certificate issued under the provisions of the code, shall be guilty of a code violation punishable by a fine of not less than seventy five and no/100 dollars (\$75.00) and not more than one thousand and no/100 dollars (\$1,000.00). Each day that a violation continues shall be deemed a separate offense. The commencement of mechanical work without a permit shall be subject to a fine of not less than seventy five and no/100 dollars (\$75.00) nor more than one thousand and no/100 dollars (\$1,000.00) in addition to the permit fees in this code. (Ordinance 89-024, 04.11.89)

Section 108.5. Unlawful continuance: Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition shall be subject to a fine of not less than two hundred fifty and no/100 dollars (\$250.00) or more than one thousand and no/100 dollars (\$1,000.00).

Section 109 Appeals Board. Delete the section in its entirety.

Section 403.4 Delete the section and add the following: All fuel gas supply and distribution piping shall be black iron. Flexible gas pipe shall be used as the appliance hookup, only when required by the manufacturer, and shall not pass through any wall, floor or ceiling assemblies.

Section 411.1 # 7 Appliance connections: Approved flexible connectors shall only be used for appliances equipped with castors or otherwise subject to periodic movement. All connectors shall be listed for the use.

Section 601.2 Spark arrestors: Approved spark arrestors shall be provided on all chimneys serving wood burning fireplaces and stoves.

Section 601.3 Installation requirements: Fabricated fireplace chimneys located on an outside wall or extending five feet (5') or more above the roof penetration, shall be enclosed within a chase, providing the required separation distance to combustibile materials. (Ordinance 89-024, 04.11.89)

Section 601.4. Firestopping: Chases enclosing factory built fireplace vent systems must be constructed as follows: (Ordinance 94-005, 01.11.94)

- a. When located on the exterior of the building, the fireplace chase must be drywalled completely.
- b. The wall adjacent to the living area must be fire-stopped completely to the underside of the roof assembly. The fire stopping should extend 6-inches beyond the chase area. One-half-inch plywood may be used on the upper section.

Section 621.1.1 Unvented appliances: The use of unvented appliances shall be prohibited. *Exception: Unless otherwise approved by the Building Commissioner or his/her designee.*

Chapter 8 referenced standards, delete the following:

ICC-EC ICC Electric Code
IEBC International Existing Building Code

ARTICLE 8 – ENERGY CODE

Section 25-801. PURPOSE. The purpose of this Article is to establish the minimum regulations for the design, installation and construction of buildings and building systems, by providing reasonable criteria for the conservation of energy.

Section 25-802. ADOPTION OF INTERNATIONAL ENERGY CONSERVATION CODE. There is adopted for the above-mentioned purpose, the “International Energy Conservation Code, 2006” as published by the International Code Council, Inc., which Code shall be the energy conservation regulations for the Village of Bolingbrook in the State of Illinois. One (1) copy of said International Energy Conservation Code is on file in the office of the Village Clerk of the Village of Bolingbrook. Each and all of the regulations, provisions, penalties, conditions and terms of said International Mechanical Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes prescribed in Section 25-503 of this Chapter. (Ordinance 95-189, 12.19.95)

Section 25-803. ADDITIONS, INSERTIONS, DELETIONS AND CHANGES. The following Sections of the said International Energy Conservation Code are revised as follows:

Section 101.1 Title. This code shall be known as the Energy Conservation Code of the Village of Bolingbrook hereinafter referred to as the energy conservation code or “this code”.

Section 302.1 Degree days. Add the figure 6639 degree days (Chicago, O’Hare) for all types of construction.

Section 502.1.3 Recessed light fixtures. Delete section and add the following: When installed in the building envelope, all recessed light fixtures shall be Type IC rated, manufactured with no penetrations between the inside of the recessed fixture and the ceiling cavity and must be gasketed or sealed to prevent air leakage from the building or space.

Section 502.1.6 Exterior envelope requirements. All residential buildings shall be provided with a wall insulating material having a thermal resistance value (R-value) of not less than thirteen.

Section 502.2.1.5.1 Crawl space walls. All perimeter insulation, when required, shall have a thermal resistance (R-value) of not less than nine (9). The insulation may be placed vertically on the inside of the foundation wall or horizontally beneath the slab for a minimum distance as provided for in this section.

Section 502.2.1.6.1 Basement walls. All finished basements, used as a habitable space shall be provided with a wall insulating material having a thermal resistance value (R-value) of not less than eleven (11).

Section 503.3.3.1 Piping insulation. Add the following to the end of the text: In all unheated space, hot and cold lines shall be insulated with a material having and R-value of not less than seven (7).

Section 602.1.1.1.1 Exterior envelope requirements. All residential buildings shall be provided with a wall insulating material having a thermal resistance value (R-value) of not less than thirteen (13). All vaulted ceilings shall be provided with an insulating material having a thermal resistance value (R-value) of not less than thirty-eight (38). Note: In vaulted ceiling construction, the roof rafter/ceiling joist members shall be sized to provide a minimum of 1 inch (1”) air gap between the insulation and the roof sheathing for adequate cross ventilation. All

rafter end voids shall be provided with insulation baffles at soffit vents to ensure no blockage will occur.

Section 602.1.11 Residential floors. All residential buildings where floors are located over unheated spaces, the floor shall be provided with an insulating material having a thermal resistance value (R-value) of not less than twenty five (25). In addition, all box joist ends shall be insulated to the same R-value as the wall.

Section 602.1.2.1 Flat ceiling requirements. All residential buildings shall be provided with a flat ceiling insulating material having a thermal resistance value (R-value) of not less than thirty-eight (38).

Chapter 6 referenced standards, delete the following:

ICC-EC ICC Electric Code

ARTICLE 9 – VISITABILITY CODE

(Added in its entirety by Ordinance 03-069, 06.24.03)

Section 25-901. **PURPOSE.** The purpose of this Article is to establish minimum regulations for the design, installation and construction of single family and attached single family homes, by providing reasonable criteria for visitability by persons with disabilities.

Section 25-902. **TITLE.** This Article shall be known as the Visitability Code of the Village of Bolingbrook and is hereinafter referred to as the “Visitability Code” or “this Code”.

Section 25-903. **ELECTRICAL WALL SWITCHES.** In all single family and attached single family dwellings, all wall switches controlling light fixtures and fans shall be located at a height not to exceed forty-eight (48) inches above finished floor. Height shall be determined by measuring from the finished floor to the center of the switch.

EXCEPTIONS: This requirement does not apply where the use of special equipment dictates otherwise as required by the manufacturer. This requirement does not apply to thermostats or breaker panels.

Section 25-904. **ELECTRICAL WALL RECEPTACLES.** In all single family and attached single family dwellings, all wall receptacles shall be located at a height not less than fifteen (15) inches above finished floor. Height shall be determined by measuring from the finished floor to the center of the receptacle.

EXCEPTION: This requirement does not apply where the use of special equipment dictates otherwise as required by the manufacturer.

Section 25-905. **STEP FREE ENTRANCE.** Every single family dwelling and attached single family dwelling shall be provided with at least one (1) step free entrance, accessible from an accessible route from a parking area or public way. This step free entrance shall be approached by a slope no greater than 1 in 12 (less steep is desirable). This entrance can be approached by a sidewalk, a driveway, a garage floor, or other useable route. The step free entrance may be located at any entrance to the home. If the step free entrance is located in the garage, a door bell button shall be located outside the overhead garage door. In a case where a lot is so steep that it cannot be graded to a maximum slope of 1 in 12, the driveway may have to exceed a 1 in 12 slope. In this case, upon approval by the Building Commissioner, the builder may construct a 1 in 12 (or less) route leading from the driveway to the no-step entrance. If the grade of a lot is so steep that providing a step free entrance would be unfeasible or dangerous, the Building Commissioner may waive this requirement.

In addition, the Director of Public Works and Engineering may waive any of the aforesaid entrance requirements if, within his discretion, he determines that such entrance is not feasible based on water table elevations.

Section 25-906. **WALL REINFORCEMENT.** Bathroom walls shall be provided with wood blocking installed flush within wall framing, to support grab bars as needed. The wood blocking, when measured to the center, shall be located between thirty-three (33) inches and thirty-six (36) inches above the finished floor. The wood blocking shall be located in all walls adjacent to a toilet, shower stall or bathtub. All bathrooms, washrooms and powder rooms shall meet all applicable requirements of this Code.

Section 25-907. **FIRST FLOOR WASHROOM/POWDER ROOM.** There shall be at least one washroom/powder room, containing at least one water closet (toilet) and one lavatory (sink), on the dwelling floor located closest to grade level. This washroom/powder

room shall be designed and constructed in a manner that will provide wheelchair access to both the water closet and lavatory.

EXCEPTION: If a no-step entrance is located at a level other than the level closest to grade, such as the lower level of a split level home, and a washroom or powder room that complies with the requirements of this Code is located on the same level as the no-step entrance, a first floor washroom/powder room shall not be required.

Section 25-908. WASHROOM/BATHROOM DESIGN. All washrooms, bathrooms and powder rooms shall meet all applicable requirements of this Code. It is not essential (although it is recommended) to have a large turning radius inside a residential washroom, bathroom or powder room. In a small washroom, bathroom or powder room, the wheelchair user can roll in forward and roll out backward. A minimum thirty-two (32) inch clear path must be provided to all fixtures and the room must be designed in a manner that will allow the user to be able to shut the door when using the room. The bathroom, washroom or powder room door may be hinged to swing out to provide more room, if the hallway design provides the proper clearances.

Section 25-909. DOORS AND HALLWAYS. All exterior and interior doors shall not be less than three (3) feet in width and six (6) feet, eight (8) inches in height, and shall provide a minimum clear opening of thirty-two (32) inches. All required exit doors shall be side hinged. The minimum width of a hallway or exit access shall not be less than forty-two (42) inches, and in no event shall the width of the hallway be less than required by the 1997 Illinois Accessibility Code.

EXCEPTIONS: Sliding doors, providing that a minimum thirty-two (32) inch clear opening is maintained. Interior pocket doors, providing that a minimum thirty-two (32) inch clear opening is maintained. Interior doors that do not require passage for access as determined by the code official, for example, doors to linen closets and pantries in which the shelves are located immediately inside the door opening. Any interior door located in a manner that when fully open, a minimum thirty-two (32) inch clear opening is provided.

Section 25-910. ROUTES WITHIN A DWELLING UNIT. Every single family and attached single family dwelling shall have an accessible route through the hallways and passageways of the floor level served by the step free entrance. Hallways shall not be less than forty-two (42) inches in width. All other passageways, other than doorways, shall not be less than thirty-six (36) inches in width.

Section 25-911. PENALTY. Any person, firm or corporation that violates any provision of this Article shall be subject to a fine of not less than \$75.00 nor more than \$1000.00 for each such offense, and each day on which violation occurs or continues to occur shall be a separate offense.

Section 112 Appeals Board. Delete the section in its entirety:

Chapter 35 referenced standards, delete the following:

ICC-EC ICC Electric Code
IPSDC International Private Sewage Disposal Code
IWUIC International Wildland-Urban Interface Code