

VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL WORKSHOP
OCTOBER 6, 2009 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
Adoption of Updated Building Codes and a Locally Administered Elevator Safety Program.	✓ Resolution ✓ Ordinance Motion Discussion Only	Tom Dabareiner, AICP Community Development Director

SYNOPSIS

Ordinances have been prepared adopting the International Code Council's (ICC) 2006 series of building and fire codes, the 2008 National Electrical Code, and updated amendments to the 2004 State of Illinois Plumbing Code. Additionally, a resolution has been prepared entering the Village into an agreement with the State of Illinois for locally administering an Elevator Safety Program.

STRATEGIC PLAN ALIGNMENT

The Five Year Plan and Goals for 2008-2013 identified *Exceptional Municipal Organization* with a supporting objective of *Providing Top Quality Core Services Responsive to Current and Future Community and Citizen Needs*. Also identified was the goal of *Preservation of Our Residential and Neighborhood Character* with a supporting objective of *Homes and Rental Units Up to Code*.

FISCAL IMPACT

N/A

UPDATE & RECOMMENDATION

This item was discussed at the September 22, 2009 workshop. During that meeting, the Village Council requested additional information pertaining to several items. These items are summarized below:

- Whether the use of panning and ductless returns is permitted by the 2009 Energy Conservation Code.
- When the proposed building code updates would go into effect.
- Whether the proposed building codes are more or less restrictive regarding veneer vapor barriers

Regarding the use of panning and ductless returns, a new state law mandates the use of the 2009 Energy Conservation Code. Section 403.2 deals with ducts. Under 403.2.3, "[b]uilding framing cavities shall not be used as supply ducts." However, panning may support return air flow only where the building cavity is completely sealed (403.2.2). This would require additional inspections and observation by Village inspectors.

In addition, the IRC 2006 code further restricts the practice of panning to single floor use. While an HVAC unit would be allowed return air flow via panning from the first floor, a second HVAC unit would be needed to serve a second floor. Based on this, it is likely less expensive and problematic to provide for ducted return air flow to a single HVAC unit. This concern, along with other potential issues indicated in staff's research (centering on mold, fire and cleanliness concerns) was and remains the basis for the recommended amendment. While the recommendation to allow the use of building cavities for heating or cooling non-habitable areas remains part of staff's proposed code amendments, the 2009 Energy Conservation Code now limits this to return air flow only.

Regarding the effective date of the proposed updates to the building codes, upon approval by the Village Council, the updated codes would be effective after 30 days.

Regarding veneer vapor barriers, in the 2007 update to the IRC's 2006 codes, several definitions were changed. Two of these dealt with "Adhered Stone or Masonry Veneer" and "Vapor Retarder Class." In both cases, the new definitions reflect advancements in the materials or installation process, or improvements in the industry's understanding of moisture removal. In both cases the new definitions mean new or refined steps are available to achieve an equal or superior outcome, compared with earlier versions of the building code.

Staff recommends approval on the October 6, 2009 active agenda.

BACKGROUND

The Village's current building code was adopted in April, 2005. The building code that was adopted at that time was the 2000 edition of the ICC codes. Staff is proposing that the Village update to the 2006 edition of the ICC's building and fire codes, and the *2008 National Electrical Code*. These codes would apply to all commercial and residential buildings throughout the community. The 2006 editions are the most widely adopted codes in the western suburbs. Adoption of these codes would be consistent with comparable communities.

Additionally, since 1985, the Village has operated a local elevator safety program with Elevator Inspection Services, Inc. (EIS). This program has consisted of performing plan reviews and inspections for new and existing elevators and other types of vertical conveyances such as escalators, hoists, and platform lifts through a building permit process and annual inspections. The State of Illinois has more recently passed legislation requiring a municipality to enter into an agreement by resolution with The Office of the State Fire Marshall (OSFM) of Illinois to continue to operate a locally administered program and indicate compliance with standards at least as stringent as those of the State. The legislation was prompted by elevator accidents that had occurred in rural areas of the State that had no program in place. Currently, 166 jurisdictions, primarily in the Chicagoland area, have opted to enter into this agreement. If a municipality chose not to operate a local program, the State would directly regulate vertical conveyances within a municipality. Agreeing to the resolution would mean no change to the Village's elevator inspection program and would maintain greater scrutiny than afforded through the state program.

The specific codes targeted for adoption are:

- *2006 International Residential Code* – governs construction of one and two-family residential buildings
- *2006 International Building Code* – governs construction of all other use types
- *2006 Property Maintenance Code* – governs maintenance of all existing buildings and properties.
- *2006 International Fire Code*- governs construction and maintenance of life safety systems in commercial and multi-family buildings
- *2009 Energy Conservation Code*,
- *2006 Fuel Gas Code*,
- *2006 Mechanical Code*,
- *2008 National Electrical Code* - govern new construction in all building types
- (Note: Additional Codes already in place are the *2004 State of Illinois Plumbing Code* and the *2003 NFPA Life Safety Code*)
- Nine industry standards for vertical conveyances from ANSI, ASME, and ASCE, consistent with State requirements – governs the installation and inspection of new and existing elevators, escalators, platform lifts, hoists, and dumbwaiters

Staff emphasized the following key concepts and strategies with the code adoption proposals:

- Align all regulations with specific Strategic Plan goals.
- Produce code books that are as clear and user friendly as possible.
- Reduce the number of local amendments.
- Maintain consistency with existing ordinance provisions of the Municipal Code and provide cross references.
- Enhance clarification of the code books as written.
- Maintain and provide code provisions that address local construction practices.
- Only include amendments that measure up favorably to a benefit/cost analysis.
- Align the Village's regulations with comparable communities.
- Obtain buy-in from the area builders, developers and property managers.

The following list highlights some of the specific key components and that will be accomplished with the proposed updates:

- Several residential construction existing local amendments have been eliminated in order to follow the baseline codes representing recognized industry standards.
- Sections have been reorganized and enhanced to increase the ability to locate and understand regulations for commonly reoccurring questions.
- Several cross references to State regulations, other code book sections, and the Municipal Code have been incorporated to increase usability of all documents.
- Conflicting provisions between various code books have been eliminated as well as provisions that do not apply to this geographic area of the country.
- One overall updated administrative section will exist in the Municipal Code that applies to all the various code books being adopted.
- Some updated definitions and code provisions from the 2007 ICC code development supplement have been incorporated to increase accuracy, add clarity, and assist with code enforcement activities.
- Long standing and recognized enhanced fire safety regulations have been maintained.
- Updates and clarifications have been provided for the pre-occupancy ordinance compliance approval procedure.
- Clarification on materials that can be used for construction in certain zoning districts such as the downtown area has been added.
- State authorized standards have been incorporated that assist with sizing water service supply lines for existing residences that are being remodeled.

Staff requested input on the proposed update from the Downers Grove Chamber of Commerce, contractors, builders, developers, architects and property managers. Staff representatives met with these individuals on three occasions at the Downers Grove Chamber of Commerce. The IRC proposed amendments were presented on May 14, 2009. The Mechanical, Fuel Gas, Energy Conservation, and Property Maintenance Codes were presented on May 21, 2009. The International Building Code, Electrical, Plumbing, and Fire Code were presented on July 16, 2009.

Based on input from this group of stakeholders, some modifications were made to the proposed codes. The adjustments centered on clarifying proposed language. There were helpful dialogues and no unaddressed or significant objections to the updates or the proposed amendments. Staff recommends approval of the building codes as proposed.

ATTACHMENT
Ordinance

ORDINANCE NO. _____

**AN ORDINANCE ADOPTING THE 2006 INTERNATIONAL RESIDENTIAL CODE
AND AMENDMENTS THERETO**

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County,
Illinois, as follows: (Additions are indicated by shading/underline; deletions by ~~strikeout~~):

Section 1. Section 7.14. is hereby renumbered to be Section 7.1201.

7.14. 2000 International Residential Code - Adoption.

—(a)—The ~~2000~~2006 International Residential Code, is hereby adopted for the purpose of establishing rules and regulations for the construction, alteration, removal, demolition, equipment, use, occupancy, location and maintenance of one- and two- family dwellings as defined therein. The same is adopted in its entirety, except such portions as are hereinafter deleted, modified or amended, and is, together with such amendments, incorporated as fully as if set out at length herein. At least one copy of said Code, including amendments thereto, shall be filed in the office of the Village Clerk, and additional copies shall be available in the Community Development Department.

—(b)—

Section 2. That Section 7.1202. is hereby added to read as follows:

7.1202. International Residential Code - Amendments.

The deletions from and modifications and amendments to the ~~2000~~2006 International Residential Code are the following:

Section R101.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R101.1 Title. These regulations shall be known as the Residential Code for One- and Two-family Dwellings of the Village of Downers Grove, and shall be cited as such and will be referred to herein as "this code".

Section R103 through Section R104 are amended by deleting the same in their entirety and addressed in Chapter 7, Article II of the Downers Grove Municipal Code.

Section R105.1 is amended by deleting the same in its entirety and addressed in Chapter 7, Article III of the Downers Grove Municipal Code.

Subsection R105.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R105.2 Work exempt from permit. Permits shall not be required for the following. Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of ~~this jurisdiction~~the Village

1. One-story detached accessory structures, provided the floor area does not exceed one hundred (100) square feet and is not more than ten (10) feet from the highest point on the roof to grade.

2006 Residential Code

2. Retaining walls that are not more than three feet in height measured from the ~~bottom of the footing grade~~ to the top of the wall.

3. Painting, papering, tiling, carpeting, ~~cabinets, counter tops, fixture and appliance replacements.~~

4. ~~Swings and other playground equipment.~~

5. ~~Window awnings supported by an exterior wall and do not require additional support.~~

46. Windows that are the same size as the ones being replaced. ~~Exception: Homes that have received historic designation by the Village Council.~~

7. Aluminum or vinyl siding replacement. ~~Exception: Homes that have received historic designation by the Village Council.~~

58. ~~Replacement water heaters, furnaces and air-conditioning units.~~

69. ~~Re-roofing work involving the replacement of shingles only, as long as the structural members are left undisturbed.~~

7. Replacement Furnaces and air conditioning units

Section R105.3 through Section R105.3.1 are amended by deleting the same in their entirety and addressed in Chapter 7, Article III of the Downers Grove Municipal Code.

Section R105.3.1.1 is deleted in its entirety

Section R105.3.2 through Section R105.8 are amended by deleting the same in their entirety and addressed in Chapter 7, Article III of the Downers Grove Municipal Code.

Section R106 is amended by deleting the same in its entirety and addressed in Chapter 7, Article IV of the Downers Grove Municipal Code.

Section R108 is amended by deleting the same in its entirety and addressed in Chapter 7, Article VIII of the Downers Grove Municipal Code.

Subsection R106.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

~~Three or more sets of Construction documents and manufactures installation instructions shall be presented with each application for permit. Where the cost of the construction is in excess of ten thousand dollars (\$10,000.00) the construction documents shall be prepared by an Illinois State registered Architect or Structural Engineer. Documents for detached garages, decks, front porches and gazebos will not need a design professional drawing unless it is determined by the Code Official that special conditions exist. If any special conditions exist with the construction of any structure the Building Official is authorized to require additional construction documents which must be prepared by an Illinois State registered Architect or Structural Engineer. The Code Official also has the right to eliminate the requirements for drawings by a registered professional if it is determined that no structural work is being done.~~

Subsection R106.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

~~The construction documents submitted with the application for permit shall be accompanied with a plat of survey. Either of the following two methods can be used to show the proposed work on the property:~~

~~1. The following information can be depicted on the plat of survey. The size and location of the new construction, the existing structures on the site and the distances from the lot lines.~~

~~2. A site plan drawn and stamped by the Illinois State registered Architect or Structural Engineer of record, depicting the size and location of the new construction, the existing structures on the site and the distances from the lot lines.~~

2006 Residential Code

~~In the case of demolition, the site plan or survey shall show the construction to be demolished.~~

Subsection R107.4 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

~~———— The Building Official is authorized to terminate such permit for a temporary structure or use and to order the temporary use discontinued immediately. Any structures related to the temporary use must be removed within fourteen (14) days.~~

Subsections R109.1, R109.1.1, R109.1.2, R109.1.3, 109.1.4, 109.1.5.1 are amended by deleting the same in their entirety and by substituting in lieu thereof the following:

~~———— The Building Official, upon notification from the permit holder or his/her agent, shall make or cause to be made any necessary inspections and shall either approve that portion of the construction as completed or shall notify the permit holder or his/her agent wherein the same fails to comply with this code.~~

Required Inspections:

- ~~1. — Footing, Prior to installation of concrete. Contractor or representative is required to be present for this inspection.~~
- ~~2. — Foundation, prior to backfill.~~
- ~~3. — For new construction a spot survey is to be provided, checked and approved prior to any additional work being done.~~
- ~~4. — Plumbing, a stack test is required, with water from the highest drain. Contractor or representative is required to be present for this inspection.~~
- ~~5. — Rough Framing and Electrical, Contractor or representative is required to be present for this inspection.~~
- ~~6. — Insulation, Contractor or representative is required to be present for this inspection.~~
- ~~7. — Electrical certification.~~
- ~~8. — Commercial Ceiling, Contractor or representative is required to be present for this inspection.~~
- ~~9. — Garage Floor, Contractor or representative is required to be present for this inspection.~~
- ~~10. — Basement Floor.~~
- ~~11. — Floors on Grade.~~
- ~~12. — Final, Contractor or representative is required to be present for this inspection.~~

A spot survey will be required by the Director of Community Development or the Chief Building Inspector when the need for further clarification is required for the proper placement of a structure on a zoning lot.

Section R109.1.1 is amended by deleting the phrase "or equipment and special requirements for wood foundations"

Section R109.1.1.1 is hereby added as follows:

R109.1.1.1 Approval of a spot survey. A spot survey indicating the top of foundation elevation and the foundation distances to lot lines must be submitted and approved by the building official prior to the commencement of framing on the foundation.

Section R109.1.3 is amended by deleting the reference to Table R301.2(1) and substitute in lieu thereof the following:

"local flooding data"

Section R109.1.5 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R109.1.5 Types of inspections. In addition to the called inspections above, the building official

2006 Residential Code

may make or require any other inspections to ascertain compliance with this code and other laws enforced by the building official. Additional inspections required include but are not limited to:

1. Pre-construction, site management inspection
2. Foundation and drain tile prior to backfill
3. Any and all underground utilities
4. Rough framing, electrical, mechanical, plumbing systems
5. Plumbing stack test with water from the highest fixture
6. Insulation with required fire blocking and draft stopping in place
7. New or upgraded electrical service installations prior to activation of service
8. Concrete pours prior to placement of concrete for all exterior and interior slabs on grade, basement and garage floors, stoops, steps, porches, deck piers.

Section R109.1.5.2 is deleted in its entirety.

Section R109.1.6.1 is hereby added as follows:

R109.6.1. Agency approvals. Approval from the Downers Grove Sanitary District will be required as applicable to the type of project.

Section R110 is amended by deleting the same in its entirety and addressed in Chapter 7, Article VII of the Downers Grove Municipal Code.

Section R112 is amended by deleting the same in its entirety and addressed in Chapter 7, Article IX of the Downers Grove Municipal Code.

Section R113 is amended by deleting the same in its entirety and addressed in Chapter 7, Article X of the Downers Grove Municipal Code.

Section R114 is amended by deleting the same in its entirety and addressed in Chapter 7, Article V of the Downers Grove Municipal Code.

CHAPTER 2

Section R202 is amended by adding the following definitions:

Section R202 Definitions.

ADHERED STONE OR MASONRY VENEER. Stone or masonry veneer secured and supported through the adhesion of an approved bonding material applied to an approved backing.

AIR-IMPERMEABLE INSULATION. An insulation having an air permeance equal to or less than 0.02 at 75 Pa pressure differential tested in accordance with ASTM E2178 or E 283.

FLOOD HAZARD AREA. An area as defined by local flooding data.

RESCHECK. A proprietary software application for determining compliance with the International Energy Conservation Code.

TERMITE-RESISTANT MATERIAL. Pressure-preservative treated wood in accordance with the AWWA standards in Section R319.1, naturally durable termite-resistant wood, steel, concrete, masonry or other approved material.

VAPOR RETARDER CLASS. A measure of the ability of a material or assembly to limit the amount of moisture that passes through that material or assembly. Vapor retarder class shall be defined using the desiccant method with Procedure A of ASTM E 96 as follows:

Class I: 0.1 perm or less

Class II: perm greater than .1 but less than or equal to 1.0 perm

Class III: perm greater than 1.0 but less than or equal to 10 perm

Section R202 is further amended by deleting the following definitions:

Section R202 Definitions.

CONFINED SPACE.

UNUSUALLY TIGHT CONSTRUCTION.

VAPOR RETARDER.

CHAPTER 3

Section R301.1.1 is deleted in its entirety.

Section R301.1.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R301.1.3. Engineered design. When a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. Engineered design in accordance with the International Building Code is permitted for all buildings and structures, and parts thereof, included in the scope of this code.

Section R301.2.1.1 is deleted in its entirety.

Table R301.2(1) is hereby amended as follows:

Table R301.2(1)
Climatic and Geographic Design Criteria

Wind Speed (mph)	Seismic Design Category	Subject To Damage From				Winter Design Temp. (degrees)	Flood Hazards
		Weathering	Frost Depth	Termite	Decay		
90 (mph)	17-B	Severe	42" inches	Slight to Moderate	Slight to Moderate	0 degrees	Village Zoning

Ground Snow Level	Wind Speed	Seismic Design Category	Subject to Damage From			Winter Design Temp	Ice Barrier Underlayment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp
			Weathering	Frost line depth	Termite					

2006 Residential Code

25 psf	90 MPH (3 second gust at 33 feet above grade)	B	Severe	42"	Moderate to Heavy	-4 degrees	Yes	Village Zones	2000	50 degrees
--------	--	---	--------	-----	----------------------	------------	-----	------------------	------	------------

Section R301.2.1.2 is deleted in its entirety.

Table R301.2.1.2. is deleted in its entirety.

Section R301.2.1.4 shall be amended by deleting condition #1 and condition #4.

Section R301.2.2.1.2 through Section 301.2.2.4.5 are hereby deleted in their entirety.

Section R301.2.4 first paragraph is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R301.2.4 Floodplain construction. Buildings or structures constructed in whole or in part in flood hazard areas as determined by local flooding data, shall be designed and constructed in accordance with Section 26.62 of the Village of Downers Grove Municipal Code.

Table 301.5 shall be amended by modifying sleeping room use live load "30" as follows:
"40"

~~Section R302, is amended by deleting the same in its entirety and by substituting in lieu thereof the following new Section:~~

~~Placement of the structure on the property will be governed by the requirements in Chapter 28 of the Downers Grove Municipal Code.~~

Section R302.1 Exception #2 shall be amended as follows:

R302.1 Exceptions:

2. Detached garages accessory to a dwelling located within five (5) feet of a lot line are permitted to have roof eave projections not exceeding eighteen (18) inches.

Section R305.1 Exception #5 is hereby added as follows:

R305.1 Exceptions:

5. Crawl spaces containing utilities requiring maintenance and servicing shall have a minimum clear height of thirty (30) inches from the slush coat to the bottom of the floor joists.

Section R309.1 is amended by adding the following to the end of the paragraph:

"The door shall be self closing and self latching."

Section R309.1.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R309.1.1 Duct penetration. Ducts in the garage penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage sheet steel or other approved material and shall have no openings into the garage and shall be covered with a minimum of ½ inch gypsum board.

Section R309.1.1.1 is hereby added as follows:

R309.1.1.1 Separation from heating units. A common door between the garage and the main

house heating unit shall not be permitted.

Section R309.1.1.2 is hereby added as follows:

R309.1.1.2 Installation of garage heaters. Heaters installed in garages shall be installed per the provisions of Section 304 of the 2006 International Mechanical Code as adopted and amended.

Subsection R309.2, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

~~An attached garage shall be separated from the residence and its attic area by not less than 5/8 inch type X gypsum board or equivalent applied to the garage side. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than 5/8 inch type X gypsum board or equivalent. Garages located less than ten (10) feet from a dwelling unit on the same lot shall be protected with not less than 1/2 inch gypsum board applied to the interior side of exterior walls that are within this area. Openings in these walls shall be regulated by Section R309.1.~~

Section R309.3.1 is hereby added as follows:

R309.3.1 Gas curb. The garage floor surface shall be a minimum of 6 inches below the adjacent top of foundation for the common walls with the living space. A six (6)-inch high by four (4)-inch wide concrete gas curb may be poured against the common walls in lieu of the six (6) inch difference in elevation.

Section R3109.2 is amended by deleting the words "3 feet (914mm)" and by substituting in lieu thereof the following:

"10 feet"

Section R3109.2 is further amended by deleting the last sentence of the paragraph.

Subsection R309.5, is amended by deleting the same in its entirety.

Section R309.6 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R309.6 Automatic garage door openers. Automatic garage door openers, if provided, shall be listed in accordance with UL 325 and wired in accordance with the provisions of the 2008 National Electrical Code.

Section R310.1 is amended by deleting the first three sentences in their entirety and by substituting in lieu thereof the following:

R310.1 Emergency escape and rescue required. Basements and every sleeping room shall have at least one (1) operable emergency and rescue opening. Such opening shall open directly into a public street, public alley, yard or court. Where basements contain one (1) or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room and a minimum of one (1) in the main area that can be accessed without passing through a room subject to locking.

Section R310.2.2 is hereby added as follows:

R310.2.2 Window well covers. All window wells shall be covered by a metal grate-type or reinforced fiberglass cover capable of supporting a weight of two hundred fifty (250) lbs. The cover shall be easily removable from the inside without the use of keys, tools, or special knowledge.

Subsection R311.1, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

~~Not less than two exit doors on the main level as remote as possible from each other conforming~~

2006 Residential Code

~~with subsections 311.2, 311.3 of this code shall be provided from each dwelling unit. The required exit doors shall provide for direct access from the habitable portion of the dwelling to the exterior without requiring travel through a garage.~~

Section R311.5.8.1 is amended by adding the following sentence at the end of the paragraph:

"Spiral stairways shall not be part of a required means of egress."

Section R312.1 is amended by adding the following sentence at the end of the first paragraph:

"Decorative planter boxes, and built-in seating that do not comply with these height requirements shall not be substituted for providing the required guard."

~~Subsection R312.2, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~———— The width of each interior landing shall not be less than the stairway or door served. The minimum size of a landing for exterior doorways will be 44 inches x 48 inches. Landings will be required at the top and bottom of all stairways.~~

Section R313 is amended to read as follows:

SECTION R313

SMOKE ALARMS AND CARBON MONOXIDE ALARMS

~~Section R313, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~———— The latest edition of the Illinois Accessibility Code and HUD will govern ramp construction.~~

Section R313.2.1 is amended to add the following condition:

3. Installation, alteration, or repairs of plumbing or mechanical systems that do not result in the removal of interior wall or ceiling finishes exposing the structure, are exempt from the requirements of this section.

Section R313.4 is hereby added as follows:

R313.4 Carbon Monoxide Detection. Every dwelling unit shall be equipped with at least one approved carbon monoxide alarm within fifteen (15) feet of every room used for sleeping purposes. The carbon monoxide alarm may be combined with the smoke detecting devices provided that the combined unit emits an alarm in a manner that clearly differentiates the hazards. The carbon monoxide alarms may be either battery powered, plug- in with battery back-up, or wired into the structure's AC power line with a secondary battery back-up.

~~Subsection R314.5, is amended by deleting the same in its entirety.~~

~~Subsection R314.9, is amended by deleting the same in its entirety.~~

~~Subsection R316.1, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~———— Porches, balconies, and decks shall have guard rails not less than 36 inches in height. Open sides of stairs with a total of three risers or more above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads.~~

Section R317.2 exception shall be amended to delete the words "Chapters 33 through 42" and by substituting in lieu thereof the following:

"the National Electrical Code as adopted and amended by the Village"

Section R318.1 shall be amended to delete Exception #3.

Section R319.1 Condition #1 shall be amended to add the following to the beginning of Condition #1:

"Structural members for all exterior decks and porches, "

Section R319.1 shall further be amended to delete Condition #2 and by substituting in lieu thereof the following:

2. All wood framing members that rest on concrete or masonry exterior foundation walls.

Section R319.1.3 shall be deleted in its entirety.

Section R320.5 shall be deleted in its entirety.

Section R321.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R321.1 Premises identification. Buildings shall have mounted address numbers placed in a position that is plainly legible from the street fronting the property. Where the distance from the street to the building does not allow for the numbers to be easily viewed, alternative signage shall be provided subject to the review and approval of the Building Official. Address numbers shall be a minimum of four (4) inches high with a minimum stroke width of .5 inches in Arabic font and contrast with their background.

Subsection R321.2, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

~~—————Townhouses: Each townhouse is to be considered a separate building and shall be constructed as follows:~~

~~—————1. External Walls. If two buildings are located within thirty feet of each other, one of those buildings shall have a two hour wall without openings on its side that is nearest the other building except that openings shall be permitted in exterior walls closer than 30 feet provided that the internal walls of the end units are two hour rated firewalls.~~

~~—————2. Internal Walls~~

~~—————Internal walls shall be provided in accordance with one of the following two options:~~

~~—————(i) Option 1. A two hour rated firewall extending to the underside of the roof without openings shall be provided between each dwelling unit. The roof sheathing four feet on each side of the firewall shall be of an approved non-combustible material or fire retardant wood. If a two-hour rated firewall is extended to a minimum of two feet above the roof, non-combustible roof sheathing shall not be required on either side of the firewall.~~

~~—————(ii) Option 2. A one hour rated firewall extending to the underside of the roof without openings shall be provided between each dwelling unit consistent with all other requirements of Option 1; provided that an electrically supervised fire suppression system is installed within each townhouse dwelling unit in compliance with N.F.P.A. 13 R.~~

~~—————(b) Townhouse structures containing six or more dwelling units shall have at least one hour rated firewalls extending to the underside of the roof without openings between each dwelling unit consistent with all other requirements of Option 1 above, and shall have an electrically supervised fire suppression system in each townhouse dwelling unit installed in compliance with N.F.P.A. 13 R."~~

~~—————(c) Townhouse structures containing one or more dwelling units with an aggregate floor area of 3,000 square feet or more (excluding square footage of any garage) shall have at least one hour rated firewalls extending to the underside of the roof without openings between each dwelling unit consistent with all other requirements of Option 1 above, and shall have an automatic fire detection system in accordance with the provisions of the Downers Grove Building Code and the Downers Grove Fire Prevention Code.~~

~~_____ (d) _____ If pre-engineered plywood "I" joists are used in the townhouse structure, the structure shall have a two-hour rated firewall extending to the underside of the roof without openings between each dwelling unit consistent with all of the requirements of Option 1 above, and shall have an electrically supervised fire suppression system in each dwelling unit installed in compliance with N.F.P.A. 13.~~

~~**Section R324.1** is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~**R324.1 General.** Buildings and structures constructed in whole or in part in flood hazard areas (including A or V Zones) as established by local flooding data shall be designed and constructed in accordance with the provisions contained in this section and the Village of Downers Grove Municipal Code Section 26.62.~~

~~**Section R324.3 through Section 324.3.6** shall be deleted in their entirety.~~

~~Section R326, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~_____ Dwelling units that are required to be accessible will follow the latest edition of the Illinois Accessibility Code and HUD.~~

~~Section R327, is amended by deleting the same in its entirety.~~

CHAPTER 4

~~**Section R401.1** is amended to delete the last sentence of the first paragraph.~~

~~**Section R401.1** is further amended to delete the exceptions.~~

~~**Section R401.1** is further amended to delete the last paragraph of the section.~~

~~**Section R401.2** is amended by deleting the words "wood and" from the last sentence.~~

~~**Section R401.2.1** shall be added as follows:~~

~~**R401.2.1 Weather-related construction methods.** All concrete preparation, placement, and protection for footings, foundations, and flatwork with temperature conditions below freezing shall be in accordance with accepted industry standards and the protection provisions of ACI 318 when applicable.~~

~~**Section R402.1 through Section R402.1.2** are deleted in their entirety.~~

~~**Section R402.3.1** is hereby added as follows:~~

~~**R402.3.1 Precast concrete foundation materials.** Materials used to produce precast concrete foundations shall meet the following requirements.~~

- ~~1. All concrete used in the manufacture of precast concrete foundations shall have a minimum compressive strength of 5,000 psi at 28 days. Concrete exposed to a freezing and thawing environment shall be air entrained with a minimum total air content of 5 percent.~~
- ~~2. Structural reinforcing steel shall meet the requirements of ASTM A 615, A 706 or A 996, the minimum yield strength of the reinforcing steel shall be 40,000 psi Grade 40. Steel reinforcement for precast concrete foundation walls shall have a minimum concrete cover of 3.4 inch.~~
- ~~3. Panel-to-panel connections shall be made with Grade II Steel fasteners.~~
- ~~4. The use of non-structural fibers shall conform to ASTM C 1116.~~
- ~~5. Grout used for bedding precast concrete foundations placed upon concrete footings shall meet ASTM C 1107.~~

2006 Residential Code

~~Subsection R402.1 is amended by deleting the same in its entirety.
Subsection R402.1.1, is amended by deleting the same in its entirety.
Subsection R402.1.2, is amended by deleting the same in its entirety.~~

Section R403.1 is amended by deleting the words "fully grouted masonry" and "wood foundations".

Table R403.1 is amended to delete "Masonry footings".

~~In Figure R403.1(1) exterior, W will equal the requirements for 2-story in table R403.1 but at no time will W be less than 10 inches.~~

Subsection R403.1.1 is amended by adding the following: ~~deleting the phrase "masonry footings",~~
—— Only single story wood frame construction, no brick or stone veneers room additions, and single story wood frame construction, no brick or stone veneers garages where the space between the ceiling joists or wall ties is less than 40 inches will be able to use the foundation known as exterior in figure R403.1(1) of this code.

Section R403.1.1 is further amended by deleting the last sentence of the section.

Figure R403.1(2) and Figure R 403.1(3) are deleted in their entirety.

~~Subsection R403.2, is amended by deleting the same in its entirety.~~

Section R403.1.1.2 is added as follows:

R403.1.1.2 Open deck and gazebo piers. One-story wood deck structures without roofs, and free-standing gazebo type structures with roofs, shall be permitted to be constructed on concrete piers. The piers shall be spaced in accordance with proper structural design for the anticipated loading conditions. All wood supporting columns shall be anchored to the piers with galvanized post base anchors.

Section R403.1.1.3 is added as follows:

R403.1.1.3 Screen rooms and Three-season room foundations. Screen rooms and three-season rooms shall be supported on a minimum of an eight (8) inch wide continuous trench-type foundation.

Section R403.1.1.4 is added as follows:

R403.1.1.4 Stoop foundations. When constructed of concrete, stone or masonry materials, the main entry stoop or front porch exceeding three (3) risers in height shall be supported on a minimum of a continuous perimeter trench type foundation 42" deep. All other exterior stoops and stairs shall be supported on a minimum of wing walls tied with reinforcing bars to the main foundation or 8" diameter concrete piers, 42" deep.

Section R403.1.2 is amended by deleting the same in its entirety.

Section R403.1.3 is amended by deleting the same in its entirety.

Section R403.1.4.2 is amended by deleting the same in its entirety.

Section R403.1.5.1 is added as follows:

R403.1.5.1 Reinforcement of stepped foundations. Where stepped footings support continuous concrete foundations walls, a minimum of two (2) No. 4 steel reinforcing bars shall run continuously through the foundations wall for a minimum distance of one (1) foot beyond the ends of the footing break in both directions.

Section R403.1.6 is hereby amended to delete the words "In Seismic Design Categories".

Section R403.1.6 is further amended to add the following at the end of the second paragraph:

"Only steel shims and grout shall be permitted to fill sill plate gaps. No wood or loose shims shall be permitted."

Section R403.1.6.1 is amended by deleting the same in its entirety.

Subsection R403.2, is amended by deleting the same in its entirety.

Section R403.3 is amended by deleting the same in its entirety.

Figure R403.3(1), (3) and (4) are amended by deleting the same in their entirety.

Section R403.3.1 through Section 403.3.4 are amended by deleting the same in their entirety.

Section R404.1 is amended by deleting the number "3.5 inches (89 mm)" and substituting in lieu thereof the following:

"4.0 inches"

Section R404.1.1, Section R404.1.2, Section R404.1.4 and Section R404.1.5.1 are amended by deleting the words "In Seismic Design Categories D"

Section R404.1.8 is amended by deleting the same in its entirety.

Subsection R404.2, is amended by deleting the same in its entirety.

Subsection R404.2.1, is amended by deleting the same in its entirety.

Subsection R404.2.2, is amended by deleting the same in its entirety.

Subsection R404.2.3, is amended by deleting the same in its entirety.

Table R404.2.3 is amended by deleting the same in its entirety.

Table R404.2.4 is amended by deleting the same in its entirety.

Table R404.2.5 is amended by deleting the same in its entirety.

~~Subsection R404.2.4, is amended by deleting the same in its entirety.~~

~~Subsection R404.2.5, is amended by deleting the same in its entirety.~~

~~Subsection R404.2.6, is amended by deleting the same in its entirety.~~

Section R404.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R404.3. Wood sill plates. Wood sill plates shall be a minimum of two (2)-inch by four (4)-inch nominal lumber. Sill plate anchorage shall be in accordance with Sections R403.1.6 and R602.11. Sill plates shall be of naturally durable or pressure-treated wood.

Section R404.4 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R404.4 Insulating concrete form foundation walls. Insulating concrete form (ICF) foundation walls shall be designed and constructed in accordance with the provisions of this section or in accordance with the provisions of ACI 318. Project drawings, typical details and specifications are required to bear the seal of a State of Illinois licensed architect or structural engineer responsible for the design.

Section R404.4.1 is hereby amended to delete the words "In Seismic Design Categories".

Section R404.4.7.2 is amended by deleting the same in its entirety.

Section R405.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R405.1 Concrete or masonry foundations. Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. A continuous perforated pipe, six (6) inch minimum diameter, shall be placed on a minimum of two (2) inches of washed gravel and covered with not less than six (6) inches of the same material. A sump pit and pump shall be provided. The sump pump discharge shall be in accordance with Section 26.62 of the Downers Grove Municipal Code.

Section R405.1 is further amended by deleting the exception.

Section R405.2 through Section R406.3.4 are amended by deleting the same in their entirety.

Subsection R405.2, is amended by deleting the same in its entirety.

Subsection R406.3, is amended by deleting the same in its entirety.

Subsection R406.3.1, is amended by deleting the same in its entirety.

Section R407.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R407.3 Structural requirements. The columns shall be restrained to prevent lateral displacement at the bottom and top end. Wood columns shall not be less in nominal size than four (4) inches by four (4) inches and steel columns shall not be less than three (3)-inch diameter standard pipe or approved equivalent. No loose steel shims shall be permitted at the top or bottom ends. Shims must be welded or bolted through to the steel beam being supported.

Section R407.3 is further amended by deleting the exception.

Section R408.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R408.3 Unvented crawl space. Ventilation openings in under-floor spaces specified in Sections R408.1 and R408.2 shall not be required where:

1. A two (2) inch minimum concrete slush coat floor slab is provided and one of the following is provided for the under-floor space.
 - 1.1 Continuously operated mechanical exhaust ventilation at a rate equal to one (1) cfm for each fifty (50) square feet of crawlspace floor area, including an air pathway to an adjacent conditioned space, and perimeter walls insulated in accordance with the International Energy Conservation Code.
 - 1.2 Conditioned air supply sized to deliver at a rate equal to one (1) cfm for each fifty (50) square feet of under-floor area, including a return air pathway to an adjacent conditioned space, and perimeter walls insulated in accordance with the International Energy Conservation Code.

Section R408.4 is amended to add the following at the end of the first paragraph:

"A minimum of thirty (30) inch vertical clearance is required for access requirements where mechanical equipment is located under floors."

Section R408.7 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R408.7 Flood resistance. For buildings located in areas prone to flooding as established by local

flooding data.

Subsection 408.5, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

— The finished grade of underfloor surfaces (i.e. crawlspaces) shall be at least 24 inches from the bottom of the floor joists and shall have a 2 inch coating of concrete. These areas shall also include a floor drain connected to the sanitary system of the building. The concrete floor can be pitched in such a manner as to allow any liquid to flow from the underfloor surface to the existing area as long as the existing area has a properly installed floor drain. The pitch will need to be a minimum of ½ inch in 10 feet.

Subsection R408.6, is amended by deleting the same in its entirety.

CHAPTER 5

Subsection R502.1.4, is amended by adding the following sentence:

— Prefabricated wood I-joists shall be inspected by an engineer from the selling agent and a letter of proper installation will be given to the Community Development Department before any other framing inspection.

Subsection R502.2.1, is amended by adding the following sentence:

— Only cantilevers not exceeding two (2) feet shall be accepted without a set of drawing that are prepared and stamped by a structural engineer registered in the state of Illinois or an Illinois registered architect.

Section R502.6 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R502.6 Bearing. The ends of each joist, beam or girder shall have not less than one and a half (1.5) inches of bearing on wood or metal and not less than three (3) inches on masonry or concrete. Bearing for engineered lumber products must meet the requirements of the manufacturer.

Section R502.7 is amended by deleting the exception.

Section R502.7.1 is amended to add the following at the end of the first paragraph:

"Bridging split in nailing must be removed and replaced."

Section R504, is amended by deleting the same in its entirety.

Subsection 506.1, is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R506.1 General. Concrete slab-on-grade floors and exterior slabs, shall be a minimum of 4.0 inches thick (for expansive soils, see Section R403.1.8). The specified compressive strength of concrete shall be set forth in Section R402.2 for basements, 5 inches for garage floors and 4 inches for accessory buildings other than garages larger than 12 feet x 12 feet. The specified compressive strength of concrete shall be as set forth in subsection R402.2. of this code

Exception: Crawl space floors only need to be a minimum of 2 inches thick.

Exception: Crawl space floors shall consist of a minimum of 2 inches of concrete on a vapor retarder as specified in 506.2.3 on a base as specified in Section 506.2.2. If plumbing fixtures are located on the floor directly above the crawl space area, a floor drain shall be installed per the State of Illinois Plumbing Code.

Section R506.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R506.2 Base. A four (4)-inch thick base course consisting of CA-6 type gravel, or three-fourths (3/4) inch crushed stone shall be placed and machine-compacted on the prepared subgrade for all slabs.

Section R506.2.3 is amended by deleting the Exception #1.

CHAPTER 6

Subsection R606.5 is amended by adding the following subsection:

~~———— R606.5.2 Deck piers shall be a minimum of 42 inches deep, 6 inches above finished grade and not less than 10 inches in diameter. Concrete piers will only be allowed for open porches and decks without roofs.~~

~~———— Wood may not be placed in the concrete pier.~~

Section R602.5 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R602.5 Interior nonbearing walls. Interior nonbearing walls shall be permitted to be constructed with studs at sixteen (16) inches on center. Interior nonbearing walls shall be capped with at least a single top plate. Interior nonbearing walls shall be fire blocked in accordance with Section R602.8.

Section R602.7.2 is amended by deleting the last sentence of the paragraph.

Section R602.8.1 is amended by deleting "Batts or blankets or mineral wool or glass fiber or other approved materials installed in such a manner as to be securely retained in place shall be permitted as an acceptable fire block."

Section 602.8.1.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R602.8.1.1 Unfaced fiberglass. When piping, conduit or similar obstructions are encountered, the insulation shall be packed tightly around the obstruction.

Section R602.8.1.3 is hereby added as follows:

R602.8.1.3 Draftstopping. For draftstopping requirements see Section R502.12.

Section R602.10 shall be amended to delete the phrase "For buildings in Seismic Design Categories D"

Table R602.10.1 shall be amended to delete Seismic Design Categories C and D

Section R602.10.2.2 is amended by deleting the same in its entirety.

Table R602.10.6 shall be amended to delete Seismic Design Categories C and D

Section R602.10.9, Section R602.10.11, Section R602.10.11.3 through Section R602.11.3 are amended by deleting the same in their entirety.

Section R606.1.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R606.1.1 Professional registration required. When the empirical design provisions of ACI 530/ASCE 5/TMS 402 Chapter 5 or the provision of this section are used to design masonry; project drawings, typical details and specifications are required to bear the seal of a State of Illinois licensed architect or structural engineer.

Section R606.4.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R606.4.2 Support at foundation. Cavity wall or masonry veneer construction must be supported on a foundation wall of equal width of the wall system above.

Figure R606.11(2) and Figure R606.11(3) are amended by deleting the same in their entirety.

Section R606.12 through Table R606.12.4.2 are amended by deleting the same in their entirety.

Section R606.16 is hereby added as follows:

R606.16 Weep holes. See section 703.7.6 for weep hole requirements.

Section R607.1.3 is amended by deleting the same in its entirety.

Section R607.3 shall be amended to add Condition #3 as follows

3. See section 703.7.4 for wall tie spacing requirements.

Section R611.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R611.1 General. Insulating concrete form (ICF) walls shall be designed and constructed in accordance with the provisions of this section or in accordance with the provisions of ACI 318. Project drawings, typical details and specifications and required to bear the seal of a State of Illinois licensed architect or structural engineer responsible for the design.

Section R611.2 is amended by deleting the second paragraph.

Section R611.6.1 is amended by deleting "In Seismic Design Categories D"

Section R611.6.2 is amended by deleting the same in its entirety.

R611.7.1.2 is amended by deleting the first and second paragraphs in their entirety and by substituting in lieu thereof the following:

R611.7.1.2 Vertical steel. Above-grade concrete walls shall have reinforcement in accordance with Sections R611.3, R611.4, or R611.5 and R611.7.2.

R611.7.1.3 is amended by deleting the second and third paragraph.

Section R611.7.4 is amended by deleting "Table R611.7 (11) shall be used to determine the minimum amount of solid wall length for townhouses in Seismic Design Category C, and all buildings in Seismic Design Categories D."

Table R611.8(2), Figure R611.8(6), Figure R611.8(7), Section R611.8.1.1 through Section R611.9.1 are amended by deleting the same in their entirety.

Section R613.7 is amended by deleting the same in its entirety.

CHAPTER 7

Section R702.3.2.1 is hereby added as follows:

R702.3.2.1 Concealment of framing. All framing of finished rooms, closets, storage areas, and under stairways shall have a minimum of one half (1/2) inch thick gypsum board applied.

Section R703.2 is amended by deleting Exception #1

Section R703.3.1 is amended by adding at the end of the paragraph the following sentence:

“All panels shall contain an approved rated siding grade mark. All panels shall be decorative in appearance such as T1-11 siding.”

Section R703.4 is amended by adding at the end of the paragraph the following sentence

“Siding materials shall not be nailed directly to studs unless the material is a structural rated panel designed for this purpose.”

Section R703.7 is amended by deleting Exception #2

Table R703.7(2) is amended by deleting the same in its entirety.

Section R703.7.2 is amended by deleting the same in its entirety.

Section R703.7.4.1 is amended by deleting the exception.

Section R704 is hereby added as follows:

R704 Weather caulking. All exterior openings in the exterior weather protective membrane shall be caulked with an elastic, non-hardening and firmly adhering material, the intersections of all wood to masonry, or dissimilar materials shall be caulked.

CHAPTER 8

Section R801.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R801.3 Roof drainage. All dwellings and accessory buildings of four hundred (400) square feet or larger shall have a controlled method of water disposal from roofs that will collect and discharge roof drainage to the ground surface at least five (5) feet from foundation walls, or to an approved drainage system, or in a manner as reviewed and approved by the building official.

Section R802.5.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R802.5.1 Purlins. Purlins shall be engineered by the design professional of record.

Table R802.5.1(7) is amended by deleting the same in its entirety.

Table R802.5.1(8) is amended by deleting the same in its entirety.

Section R802.7.1 is amended by deleting the exception.

Section R803.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R803.1 Lumber sheathing. Allowable spans for lumber used as roof sheathing shall conform to Table R803.1. Spaced lumber sheathing for wood shingle and shake roofing shall conform to the requirements of Sections R905.7 and R905.8.

Section R803.2.4 shall be added as follows:

R803.2.4 Sheathing supports. Sheathing clip supports or other methods approved by the design professional of record shall be used when framing centers exceed sixteen (16) inches o.c.

Section R806.1 is amended by amending the "1/8 inch minimum" and by substituting in lieu thereof the following:

"1/16 inch minimum"

Section R806.2 shall be amended to delete the last sentence of the first paragraph in its entirety and by substituting in lieu thereof the following:

"As an alternative, the net free cross-ventilation area may be reduced to 1/300 when a Class I or II vapor barrier is installed on the warm-in-winter side of the ceiling."

Section R806.4 is amended by deleting Exception #3.

CHAPTER 9

Section R903.4.2 is hereby added as follows:

R903.4.2 Gutters and downspouts.

1. Gutters and downspouts shall be installed on all dwelling units and accessory buildings that are four hundred (400) square feet or larger unless omission is specifically permitted by the building official.
2. Downspouts shall not be connected to the sanitary sewer system or to the footing draitile system unless specifically permitted by the building official. All outlets shall discharge into the front and rear yards through an open splash block or as otherwise permitted by the building official.
3. Gutter and downspout material shall consist of the following:
 - a. 16 ounce, hard, cornice tempered copper
 - b. 26 gauge galvanized sheet metal with a 1.25-ounce total weight psf zinc coating
 - c. Aluminum with a minimum gauge of .019
 - d. Vinyl or other material when permitted by the building official.

Section R905.2.4.2 is hereby added as follows:

R905.2.4.2 Fire resistance of asphalt shingles. Asphalt shingles shall be of Class C label or better per the requirements of Section 1505 of the International Building Code.

Section R905.2.7.2 is amended by deleting the same in its entirety.

Section R905.3.3.3 is amended by deleting the same in its entirety.

Section R907.7 is hereby added as follows:

R907.7 Ventilation. When re-covering or replacing an existing roof, the roof shall be ventilated in accordance with the requirements of Section R806.

CHAPTER 10

Section R1001.3 through Section R1001.3.2 are amended by deleting the same in their entirety.

Section R1001.4 through Section R1001.4.1 are amended by deleting the same in their entirety.

Section R1002.4 is amended by deleting the same in its entirety.

Section R1003.3 through Section R1003.4.1 are amended by deleting the same in their entirety.

Section R1003.11.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

R1003.11.3 Gas appliances. Flue lining systems for gas appliances shall be in accordance with the International Mechanical Code.

Section R1004.1.1 is hereby added as follows:

R1004.1.1 Insulated fire boxes. When a factory-built fireplace is installed on an outside wall, the frame cavity surrounding the firebox shall be insulated in the same manner as the adjacent wall areas. The product's rating for clearance to combustibles shall be maintained. A minimum of ½" gypsum board shall be installed over combustible materials extending from the bottom of the firebox to the firestop located above the appliance.

Section R1005.4.1 is hereby added as follows:

R1005.4.1 Chimney enclosures. Portions of the chimney which pass through habitable spaces or closets shall be enclosed in a drywall chase to avoid personal contact, contact with combustible material, and damage to the chimney.

Section R1005.4.2 is hereby added as follows:

R1005.4.2 Installation of firestops. Firestops shall be installed inside of the chase enclosing the factory-built chimney. The firestop device shall be as provided by the manufacturer for use with that specific chimney being installed. The firestops shall be placed at a minimum at the level of each ceiling that the chimney passes through or when located on an outside wall, at the points equivalent to each ceiling line. All installations shall meet the requirements of the manufacturer's installation guidelines.

Section R1005.4.3 is hereby added as follows:

R1005.4.3. Insulating of chase. When the enclosing fireplace chase is located on an outside wall or adjacent to an unheated area, it shall be insulated in the same manner as the adjacent walls up to the firestop. The insulation shall then be covered with 1/2 inch drywall.

Chapter 11 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

See the 2009 International Energy Conservation Code as adopted and amended by the Village.

CHAPTERS 12 through 23 - Residential Mechanical

Section M1201.1 is hereby amended to delete "24" and by substituting in lieu thereof the following:
"23"

Section M1201.2 is hereby amended to delete "24" and by substituting in lieu thereof the following:

"23"

Section M1405.1, Section M1406.1, Section M1406.2, and Section M1407.1 are hereby amended to delete the phrase "Chapters 33 through 42 of this code" and by substituting in lieu thereof the following:

"the applicable provisions of the 2008 National Electrical Code."

Section M1413.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

M1413.2 Protection of potable water. The potable water system shall be protected from backflow in accordance with the provisions of the State of Illinois Plumbing Code.

Section M1601.1.1 is amended by deleting Condition #7 and its subsections in their and by substituting in lieu thereof the following:

7. Stud wall cavities and the spaces between solid floor joists shall not be used for air plenums serving habitable spaces. Supply and return air shall be conveyed in a ducted system.

Section M1601.4 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

M1601.4 Under –floor plenums. An under floor space used as a supply plenum to a habitable space shall not be permitted.

Section M1801.1 and Section M2001.1.1 are amended by deleting reference to "Chapter 24" and by substituting in lieu thereof the following:

"the International Fuel Gas Code."

Section M2004.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

M2004.1 General. Water heaters used to supply both potable hot water and hot water for space heating shall be installed in accordance with this chapter, the manufacturer's installation instructions, the 2006 International Fuel Gas Code, and the 2008 National Electrical Code.

Section M2005.1 shall be amended to delete reference to "Chapter 24" and and by substituting in lieu thereof the following:

"The International Fuel Gas Code."

Section M2005.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

M2005.3 Electric water heaters. Electric water heaters shall also be installed in accordance with the applicable provisions of the 2008 National Electrical Code.

Chapter 24 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

See the 2006 International Fuel Gas Code as adopted and amended by the Village.

Chapter 25 through Chapter 42³² are amended by deleting the same in their entirety and by substituting in lieu thereof the following:

See the State of Illinois Plumbing Code as adopted and amended by the Village.

Chapter 33 through Chapter 42 are amended by deleting the same in their entirety and by substituting in lieu thereof the following:

See the 2008 National Electrical Code as adopted and amended by the Village.

2006 Residential Code

The following appendicies are adopted by reference as amended:

~~Appendix E is amended by deleting the same in its entirety.~~

~~Appendix F is amended by deleting the same in its entirety.~~

APPENDIX G

AG106.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

AG106.2 Suction Fittings. Pool and spa suction outlets shall have a cover that conforms to ANSI/ASME A112.19.8-2007 on every drain/gate.

APPENDIX K

~~Appendix H is amended by deleting the same in its entirety.~~

~~Appendix I is amended by deleting the same in its entirety.~~

~~Subsection AJ301.1.2 is amended by deleting the same in its entirety.~~

~~Subsection AJ301.2 is amended by deleting the same in its entirety.~~

~~Subsection AJ301.4 is amended by deleting the same in its entirety.~~

~~Subsection AJ501.2 is amended by deleting the same in its entirety.~~

~~Subsection AJ501.3 is amended by deleting the same in its entirety.~~

~~Subsection AJ501.5 is amended by deleting the same in its entirety.~~

~~Subsection AJ601 is amended by deleting the same in its entirety.~~

Section #3 That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

Section #4. That this ordinance shall be in full force and effect November 6, 2009.

Mayor

Passed:

Published:

Attest: _____

Village Clerk