

**CHAPTER 1**

**BUILDING CODE**

**SECTION:**

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**5-1-1: INTERPRETATION:**

- A. In their interpretation and application, the provisions of this Title shall be held to be the minimum requirements for the promotion of the public health, safety and welfare.
- B. Where the conditions imposed by any provision of this Chapter upon the construction, alteration or maintenance of buildings or structures are either more restrictive or less restrictive than comparable conditions imposed by any other provision of this Title or of any other applicable law, ordinance, resolution, rule or regulation, the regulations which are more restrictive (or which impose higher standards or requirements) shall govern.
- C. This Title is not intended to abrogate any easement, covenant or any other private agreement, provided that where the regulations of this Title are more restrictive (or impose higher standards or requirements) than such easement, covenant or other private agreement, the requirements of this Title shall govern.
- D. No building or structure which was not lawfully existing at the time of the effective date hereof shall become or be made lawful solely by reason of the adoption of these provisions; and to the extent that, and in any manner that, such building or structure is in conflict with the requirements of this Title, said building or structure remains unlawful hereunder.
- E. Nothing contained in this Title shall be deemed to be a consent, license or permit to locate, construct or maintain any building, structure or facility, or to carry on any trade, industry, occupation or activity.

**5-1-2: SCOPE OF REGULATIONS:**

No building or structure or any part thereof or any appurtenance thereto shall hereafter be constructed, erected,

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altered, installed, added to, enlarged, repaired, converted, removed, demolished or maintained, nor shall the use, location or occupancy thereof be changed except in conformity with the provisions of this Code, and no work for which a building permit is required under the terms of this Chapter or any work with respect to excavation or grading in preparation therefore, shall be commenced until the permit has been issued as herein provided.

**5-1-3: COMPLIANCE TO PERMIT:**

All work performed under a permit issued hereunder shall conform to the approved application, plans and any approved amendments thereto. It shall be unlawful for any owner, agent, architect, structural engineer, contractor, or builder engaged in erecting, altering, or repairing any building, to deviate from the drawings or plans as approved by the code official. Any of the requirements of the provisions of this Ordinance shall operate to annul the permit, which has been issued for such work and shall render the same void.

**5-1-4: CERTIFICATE OF OCCUPANCY:**

No building or structure or any part thereof shall be used or occupied until a Certificate of Occupancy or Conditional Certificate of Occupancy has been issued by the code official. No permit holder shall allow any person or entity to use or occupy a building or structure or any part thereof which is the subject of his or its building permit until a Certificate of Occupancy or Conditional Certificate of Occupancy has been issued by the code official.

The code official shall issue such certificate only if, after inspection, he finds that such building or structure complies with the provisions of this title and all other laws of the Village of Orland Park and the State of Illinois, and that said building or structure has been completed in accordance with the approved plans and documents filed in support of the Application for Building Permit relating to said building or structure. Such certificate shall show the permitted use for the building or structure. A conditional certificate may be issued for the temporary use of a building or structure or portion thereof under the conditions set forth above, or the conditions set forth in Section 5-1-13, Paragraph 110.4 of this Code. (Ord. 3449, 12-04-00)

**5-1-5: INSPECTION; RIGHT OF ENTRY:**

- A. The Building Director shall inspect all buildings or structures during construction or alteration to see that the provisions of law are complied with and that construction is prosecuted safely. He shall cause all violations or suspected violations to be brought to the attention of the appropriate Municipal authorities and shall enforce the provisions of this Chapter, and for that purpose he and his assistants shall have the right to enter any building, structure or premises at any reasonable time.
- B. The Building Director shall keep, or cause to be kept, a record of his acts and doings, which records shall be open to public inspection.
- C. No work shall be done on any part of the building or structure beyond the point indicated in each successive inspection without first obtaining the written approval of the Building Director. Such written approval shall be given only after an inspection shall have been made of each successive step in the construction. There shall be a final inspection and approval by the Building Director, on all buildings when completed and ready for occupancy.
- D. Work requiring a building permit shall not be commenced until the permit holder or his agent shall have posted an inspection record card in a conspicuous place on the front of the premises and in such position as to allow the Building Director to make the required entries thereon regarding inspection of the work. This inspection card shall be maintained in such position by the permit holder until the certificate of occupancy has been issued.

- E. In the event the permittee, contractor or a subcontractor shall request an inspection and it is found by the Building Director that the construction, erection or installation does not meet the requirements of this Chapter, or other applicable ordinances of the Village, and that an additional inspection or inspections shall be necessary, before any additional inspection shall be made, the permittee, contractor or subcontractor shall pay to the Building Department the fee for each such additional inspection. See Village Code, Title 5 Chapter 2- Section 7-5.
  
- F. In the event any construction, erection, alteration, installation, addition to, enlargement, conversion of or repair of any building or any part thereof or appurtenance thereto shall be done in violation of the provisions of this Chapter, or is being done or has been done without permit or permits required therefore by any of the provisions of this Chapter or any other provisions of this Village Code, or is being done or has been done contrary to the drawings or plans as approved by the Building Director, the Building Director is hereby empowered and required forthwith to issue a stop order directing such construction, erection, alteration, installation, addition to, enlargement, conversion of or repair of any building or structure or any part thereof or appurtenance thereto, to cease immediately. If after a stop order has been issued, there is any reason to believe that further work is being done or has been done, the Building Director may, among other remedies provided by law, petition the Circuit Court of Cook County, Illinois, for an injunction as provided by law against the continuing of such work. Also see Section 13 Sub-Sections 113 and 114 of this code for Violations and Stop Work Order.

**5-1-6: BONDING OF CONTRACTORS:**

- A. **Bond Required:** Any sole proprietor, partnership, corporation or organization contracting to perform within the Village the services or trades listed herein shall provide the Village with a bond in the amount of twenty thousand dollars (\$20,000.00) payable to the Village, and executed by a surety company authorized to transact business in the State of Illinois. Such bond shall be provided to ensure compliance with all applicable Village ordinances. A General Contractor shall have a separate \$20,000.00 Surety bond provided for each building permit applied for. (Ord. 3910, 7-19-04; eff. 9-1-04)
  
- B. **Trades and Services Requiring Bonding of Contractors or Subcontractors:** The following typical trades or services shall supply a compliance bond as described above:

- Brick mason
- Building demolition
- Building relocators (movers)
- Cement
- Carpentry
- Demolition
- Electrical
- Excavating
- Fire protection equipment installation
- Fence
- Flooring and tile
- General contractor
- Glazing
- Heating, ventilation and air conditioning Insulation
- Landscaping
- Lawn sprinkler

Miscellaneous - including but not limited to:

cable, overhead door installation, elevator, equipment installation, escalator, foundation repair, general maintenance, metal fabricating, mud jacking (cement raising), satellite dish installation, underground pump and tank work, well drilling or other construction contracting.

Paving

Plumbing

Painting and decorating

Roofing and insulation

Scavenger

Sewer and water, drain layer

Sheet metal

Siding

Sign installation

Structural iron, wood and cement

Swimming pool installation

Tree trimming

Tuck pointing and cleaning

Waterproofing

Wrecking

C. **Licenses and Permits:** No license or permit to perform the trades or services listed above shall be issued unless a surety bond is submitted with the application for said license or permit.

D. **Use of Bond:**

1. Bond funds may be used to bring work not complying with the Village's codes and ordinances into compliance. Funds may be paid directly to the property owner or person contracting with the contractor, or paid to the Village to be used to bring the non-compliant work into compliance.
2. Should the Village be required to expend its funds in enforcing its ordinances pertaining to a license or permit against any contractor or subcontractor whose compliance bond it holds, the Village shall seek reimbursement against the bond for its costs of enforcement.
3. Should the Village be required to expend its funds to repair damages caused by noncompliance with its ordinances pertaining to a license or permit by any contractor or subcontractor whose compliance bond it holds, the Village shall seek reimbursement against the bond for expenses incurred by the Village.

E. **Reinstatement and Termination:**

1. Surety bonds shall be maintained in the full amount required by this Section during the course of the work for which a permit or license is issued. If the bond, or a portion of it is used to reimburse the Village for costs of enforcement or compliance the contractor or subcontractor must replenish the bond in the full amount and maintain such bond for the duration of the work under the permit or license.
2. No bond shall be terminated without written notice to the Village thirty (30) days before the termination date (Ord. 2159, 10-21-91). If work has not been completed, construction shall not be allowed to continued without an active surety bond as described above.

**5-1-7: EXCAVATIONS AND GRADING:**

No excavations shall be made on any real estate nor shall any change in the grade thereof by regrading of said real estate or by placing of fill thereon be permitted until a permit as herein provided shall have been obtained from the Village Engineering Department; provided however, that this Section shall not be applicable where the quantity of earth removed, regraded or filled shall be less than ten (10) cubic yards. The application for said permit shall indicate where said excavation is to be made and by what means or how said regrading is to change the grade of said real estate and by what means said regrading is to take place, i.e. regrading existing soil or by addition of fill. In all instances, field tiles, culverts and natural drainage facilities must be preserved or adequate provision made for the replacement thereof.

**5-1-8: BUILDING CRITERIA FOR HISTORICAL BUILDINGS:**

- A. The provisions of the Village building code ordinances relating to the construction, repair, alteration, enlargement, restoration and moving of buildings or structures, designated as Landmarks or designated Historic Districts by the State or Village are not mandatory. Such buildings or structures must meet the requirements of Section 5 of the Land Development Code pertaining to Certificates of Appropriateness and Chapter 3407 of the 2006/IBC "Building Code" as amended.
- B. However, such buildings must be judged by the Building Director to be safe and not contrary to the public health, safety and welfare with regard to any proposed construction, alteration, repair, enlargement, relocation or location.
- C. Any proposed change must be based upon an applicant's complete submission of professional architectural drawings and specifications and, where applicable, engineering plans and specifications; and any drawings, plans and specifications so submitted shall bear the professional seal of the designer.
- D. The plans, drawings and specifications shall indicate the structural soundness, life safety and fire safety features of the existing structure; and the plans, drawings and specifications shall show the structural soundness, life safety and fire safety features to be included in the proposed change(s).
- E. Any building which is changed pursuant to the provisions of this Section shall be maintained in accordance with the approved plans, drawings and specifications.

**5-1-9: ADDITIONAL REGULATIONS:**

In addition to the regulations adopted hereinafter the following regulations shall also apply:

**5-1-9-1: PLUGGING OF WATER TAPS:**

Whenever a building or structure shall be demolished and water service shall be discontinued, it shall be required that the tap into the main theretofore made shall be permanently plugged. In the event a new water service shall be constructed hereafter for an existing building or structure, and a new tap made into the water main, the tap for the water service, the use of which is to be discontinued, shall be permanently plugged.

**5-1-9-2: CURING AND SEALING OF CONCRETE:**

All concrete shall be cured using appropriate curing methods such as straw, burlap and water or chemical curing compound. At the appropriate time all flatwork shall be sprayed with an anti-spall sealing

compound to insure a continuous membrane. The sealant shall be of such a color to facilitate inspection and to reflect heat.

The sealing compound may be applied after the surface has stiffened so that it will no longer respond to float finishing. Surfaces from which forms have been removed should be saturated with water before spraying with compound. But the compound shall not be applied to either formed or unformed surfaces until the moisture film on them has disappeared; spraying should be started as soon as the surfaces assume a dull appearance. The coating should be protected against damage. Continuity must be maintained for at least twenty eight (28) days. If the sealing compound is not applied at the time of placement, such sealing compound shall be applied by early November following the date of placement. As an option, a combination sealer and curing compound may be used on the date of placement. (Ord. 996, 10-1-79)

See the Land Development Code Section 6-406 for additional requirements

**5-1-10: RULES AND REGULATIONS ADOPTED:**

The following rules and regulations, printed in book or pamphlet form, one (1) copy of each of which was on file in the office of the Village Clerk for more than thirty (30) days prior to the enactment of this Section and which were available for inspection by the public are hereby adopted by reference and made a part of this Chapter for the construction, erection, alteration, installation, addition, enlargement, repair, conversion, removal, demolition, use, location, occupancy and maintenance of all buildings and structures thereof or parts thereof and appurtenances thereof, provided however, the penalty provisions are not adopted. The general penalty provided in the Village Code of Orland Park should be applicable. Where, in this Code, there is a reference to the Building Code, it will also mean the Village Amendments to the Building Code.

Whenever in said publications reference shall be made to a building official or building inspector or other enforcing officials, said reference shall be construed to mean the Director of the Building Department of the Village, and the words "Building Director" shall be specifically substituted for any of said references.

**5-1-11: IBC 2006 ADOPTED :**

Adopted and applicable to all buildings and structures or parts thereof and appurtenances thereof, are those rules and regulations set forth with particularity in the booklet entitled "International Building Code/2006" first printing January 2006, published by International Code Council, INC. 4051 Flossmoor Road, Country Club Hills, Illinois, amended however, in that the following portions indicated in Section 5-1-12 hereof are not hereby adopted, or are hereby amended or added to that code as indicated in Section 5-1-13:

**5-1-12: DELETIONS FROM IBC 2006**

***Comments noted on the right of deletions***

- Subsection 105.2 WORK EXEMPT FROM PERMIT.  
delete items 1,2,3,4,5,6, 8 9, and 12 only
- 105.2.3 Public Service Agencies (Permit exemptions)
- Section 202.0, the following definitions
  - Accessible
  - Accessible route
  - Alternating tread device
  - Marquee
  - Site

- Village does require permits for sheds, fences etc.***
- See Illinois Accessibility Code for this definition***
- See Illinois Accessibility Code for this definition***
- Shall not be used as a stairway***
- Definition is in the Land Development Code***
- Definition is in the Land Development Code***

- Subsection 305.2 *Deletes a Day Care Use from and E Use Group*
- Section 310.1 Use Group R-4 only *Residential Assisted Living with staff.*
- Section 402.1; "Exception 1" only *Covered Mall Foyers/Lobbies not required to comply with this section.*
- Section 402.11 *Children's Playground Structures in Covered Malls - New*
- Subsection 402.14.2 (2/03) *Covered Mall Plastic Signs Height and Widths*
- Subsection 402.14.3 *Covered Mall Plastic Signs Location*
- Subsection 403.3.2 *High Rise Bld Shaft Enclosures reduction.*
- Section 404.3; "Exception" 1 only. *Allowance for non-sprinklered atriums with fire ratings atrium walls*
- Section 406.1.4 Separation Item 1 only *Private Garage Separation is part of 406.1.3*
- Section 507.2 *Unlimited Area for non-sprinklered F-2 or S-2*
- Section 507.3 "Exception" 1 *Unlimited height for Type I & II rack storage*
- Section 507.4 *Unlimited area allowed for 2-story of Group B, F, M or S with fire Sprinkler Protection.*
- Section 507.7 *H Use Group within F and S Uses with Unlimited Area*
- Section 705.3 Exception. *Allows any non-combustible material for a Fire Wall in Type V construction.*
- Section 705.11 Exception Only. *Allows duct and air transfer penetrations of a Fire Wall.*
- Section 708.3 Exception 2 *Sleeping room fire partition separation reduction.*
- Section 711.3 "Exception" only. *Sleeping room horizontal separation reduction*
- Section 711.3.3 *1- hour fire ratings to a 0-hour fire rating where crawl and attic spaces are unusable.*
- Section 721 *Calculated Fire Resistance Section without testing.*
- Subsection 901.6.3 Exception only. *Supervision of Fire protection in an H occupancy.*
- Subsection 903.2.7 *All R Uses to be fire sprinkler protected. See Amendments*
- Subsection 903.2.9.1* *Commercial Parking garages F. Sprinkler 5000 + sf.*

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- Subsection 903.4 Exceptions 2, 3, 4, 5, 6, & 7                    **Sprinkler System Monitoring and Alarms.**
- Section 1007 and its subsections                                    **"Accessible Means of Egress" - per Illinois Accessibility Code**
- 1008.1.1 Exception 5, 6 & 8                                        **Size of Door reductions for dwelling units.**
- Section 1008.1.3.1.1     **Revolving Doors as an Exit component is deleted.**
- Section 1008.1.8.3 Exceptions 2, 2.1, 2.2 & 2.3                **Locks and Latches Deletes allowing a key for egress.**
- Section 1009.9 (Except for access to an unoccupied roof top.)    **Alternating Treads**
- Sections 1102 through 1110 (Ord. 3994, 3-7-05)                **Accessibility Chapter, Regulated by State of Illinois**
- Delete from IBC only the items listed below:
  - Minimum thickness of Exterior Weather Coverings -**
  - Table 1405.2 (Deleted types of Wall Coverings in Orland Park)**
  - Adhered masonry veneer
  - Asbestos – cement boards
  - Asbestos shingles
  - Fiberboard Siding
  - Hardboard Siding
  - Particle Board (sheathing)
  - Particle Board (with sheathing)
  - Terra Cotta (adhered)
- Section 1405.9 and its subsections                                **Adhered Masonry Exterior Veneers**
- Section 1805.4.3 and its subsections                             **Masonry-Unit Footings**
- Section 1805.4.5    **Timber Footings**
- Section 1805.4.6    **Wood Foundations**
- Table 1805.5(1)     **Plain Masonry Foundation Walls**
- Table 1805.5(2)     **8" Masonry Foundation Walls with Reinforcement**
- Table 1805.5(3)     **10-Inch Masonry Fdn Walls with Reinforcement**
- Table 1805.5(4)     **12-inch Masonry Fdn Walls with Reinforcement**
- 1805.5.1.3    **Rubble Stone Foundation Walls**
- 1805.5.2.2    **Masonry Foundation Walls**
- 1805.5.3    **Alternative Foundation Wall Reinforcement**
- 1805.5.4    **Hollow Masonry Foundation Walls**
- Subsection 1807.4.3 "Exception" only                            **Subsoil Drainage Discharge without gravity or mechanical means.**

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| -2109.8.4.3 and its subsections                          | <b>Adobe Foundations.</b>   |
| -2111.9.2 Hearth extension Exception only.               | <b>3/8" Hearth Extension w/firebox 8" above extn.</b>                           |
| -Table 2304.7 (3) notes "g, h and l" only                | <b>Table Footnotes for Floor and roof Sheathing span increases.</b>             |
| -Subsection 2306.1 <b>ASAE</b>                           | <b>Allowable Stress Design - Standard for Agricultural Engineers only.</b>      |
| -Section 2308.9.2.2                                      | <b>2x4 Top Plates w/studs spaced 24"-bearing walls</b>                          |
| -Subsection 2603.4.1.6                                   | <b>Foam Plastic Insulation exposed in Attics and Crawls reduced protection.</b> |
| -Section 2603.9  | <b>Foam Plastic not required to comply with barriers</b>                        |
| -Section 2611.0  | <b>Light Transmitting Plastic Interior Signs</b>                                |
| -Section 2902 and all of its subsections                 | <b>Plumbing Systems See Title 5-4 of Village Code</b>                           |
| -Section 3106  | <b>Marquees</b>   |
| -Subsection 3107 Signs                                   | <b>Signs (See Land Development Code (LDC))</b>                                  |
| -Subsection 3109.2                                       | <b>Swimming Pool Enclosure-Definitions. - See LDC</b>                           |
| -Subsection 3109.3                                       | <b>Public Swimming Pools. - See LDC</b>   |
| -Subsection 3109.4                                       | <b>Residential Swimming Pools - See LDC</b>                                     |
| -Section 3406.2  | <b>Change of Occupancy - Certificate of Occupancy</b>                           |
| -Section 3406.3  | <b>Stairways</b>  |
| -Section 3409  | <b>Accessibility for Existing Buildings</b>                                     |
| -Section 3410.0  | <b>Compliance Alternatives</b>  |
| -Appendix E  | <b>Supplementary Accessibility Requirements</b>                                 |
| -Appendix F  | <b>Rodentproofing</b>   |
| -Appendix G501   | <b>Manufactured Homes</b>   |
| -Appendix G601   | <b>Flood Resistant Recreational Vehicles</b>                                    |
| -Appendix H  | <b>Signs</b>  |
| -Appendix K  | <b>ICC Electrical Code – See Village Code</b>                                   |
| And the following standards from Chapter 35 are deleted: |   |
| -AF&PA: Technical Report 7-87                            | <b>Wood Foundation Systems</b>  |
| -ASAE  | <b>Agricultural Buildings</b>   |

ICC

-ICCA 117.1-03  
-ICC EC-2006  
-IFC-2006  
-IPMC-06  
-SBCCI SSTD 10-99  
-SBCCI SSTD 11-97  
-IPC-2006  
-IPSCD-2006  
-IMC-2006  
-Appendix A 101-4

*Accessibility Standards*  
*Electrical Code*  
*Fire Code*  
*Property Maintenance Code*  
*Hurricane Code*  
*Roof Clay Tiles for Wind*  
*Plumbing Code*  
*Private Sewage Disposal Code*  
*Mechanical Code*  
*Termination of Employment*

**5-1-13: AMENDMENTS TO IBC/2006:**

The below listed Sections and Sub-sections are amended in the following respects:

1. That Section 101.1 shall read as follows:

**101.1 TITLE:** These regulations shall be known as the Building Code of the Village of Orland Park hereinafter referred to as “the building code” or “this code”.

2. That Section 101.2 shall read as follows:

**101.2 SCOPE:** These regulations shall control all matters concerning the construction, alteration, addition, repair, removal, demolition, location, occupancy, change of owner, change of business name and maintenance of all buildings and structures, and shall apply to existing or proposed buildings and structures, except as such matters are otherwise provided for in other ordinances or statutes, or in the rules and regulations authorized for promulgation under the provisions of this code.

**Residential Construction:** The International Residential Code (IRC) referenced in Chapter 35 for the construction of single or attached dwelling units (townhouses) may be used by the Building Official where specific information is not clearly referenced in the International Building Code. This residential code shall not conflict with other ordinances referenced for the construction of single family dwellings, as listed in Chapter 35. All sections or chapters of The International Residential Code may be used to make code interpretations except for electrical, mechanical and plumbing matters, as referenced in other village codes.

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted by the village.

3. That Section 101.4 shall read as follows

**101.4 Referenced Codes:** Title 5 of The Village Code, (Ordinance 2989 as amended) as shown in Chapter 35, shall be used to reference other building related codes regulating Permit Fees, Electrical, Plumbing, Fire Prevention, Mechanical, Property Maintenance, Hotels, Motels and Apartments where referenced in “this code”.

4. That Section 102.0 shall read as follows:

**SECTION 102.0 APPLICABILITY**

**102.1 GENERAL:** The provisions of this code shall apply to all matters affecting or relating to structures, as set forth in Section 101.0. The construction, alteration, repair, addition and removal of all structures shall comply with this code. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

**102.2 EXISTING STRUCTURES:** The legal occupancy of any structure existing on the date of adoption of this code, or for which it has been heretofore approved, shall be permitted to continue without change, except as is specifically covered in this code, the property maintenance and Fire Codes listed in Chapter 35, or as is deemed necessary by the code official for the general safety and welfare of the occupants and the public.

**102.2.1 CHANGE OF USE, OWNER, NAME OF BUSINESS OR OCCUPANCY:** A change of use, owner, name of business or occupancy shall not be made to any structure or space which will subject the structure or space to any special provisions of this code without approval of the code official. The code official shall certify that such structure or space meets the intent of the provisions of law governing building construction for the proposed new use, owner, name of business or occupancy, and that such change does not result in any greater hazard to the public health, safety or welfare.

**102.2.2 ADDITIONS, ALTERATIONS OR REPAIRS:** Additions, alterations or repairs to any structure shall conform to that required of a new structure without requiring the existing structure to comply with all of the requirements of this code.

Additions, alterations or repairs shall not cause an existing structure to become unsafe or adversely affect the performance of the building. Any building plus new additions shall not exceed the height, number of stories and area specified for new buildings. Alterations or repairs to an existing structure which are structural or adversely affect any structural member of any part of the structure having a required fire-resistance rating shall be made with materials required for a new structure.

Entire structures shall be made to conform to the requirements of this code for new buildings under the following conditions:

- When remodeling or alterations take place in more than 50% of its original building area.
- When remodeling increases the original market value by more than 50%.
- When increased in floor area by more than 10% of the original area.
- When a structure is increased in the number of stories.
- When a structure or building is changed to a more hazardous use classification.

Any building or structure which is destroyed or damaged by wind, fire or other casualty or act of God, to an extent which reduces its market value by less than 50% may be repaired or restored to its prior condition, if a building permit for the repair or restoration is issued and construction is begun within six months of the date of the damage. If a permit is not so obtained and construction is not begun **(2/03)** within six months for such repair or restoration OR if a building or structure is damaged or destroyed to an extent which reduces its market value by more than 50%, it may be repaired or restored only if the repaired or restored building or structure conforms to the standards of these regulations. Market value shall be determined by reference to the most recent official property tax assessment rolls available in the year the structure is destroyed or damaged. The extent of damage or destruction shall be determined by the code official by comparing the estimated cost of repairs or restoration with the market value as shown on the tax assessment rolls of the appropriate county collector. (Ord. 3910, 7-19-04)

**102.3 MATTERS NOT PROVIDED FOR:** Any requirements that are essential for the structural, fire or sanitary safety of an existing or proposed building or structure, or for the safety of the occupants thereof, which are not specifically provided for by the code, shall be determined by the code official.

**102.4 REFERENCED STANDARDS:** The standards and ordinances referenced in this code and listed in Chapter 35, shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Where differences occur between provisions of this code and the referenced ordinances of the Village of Orland Park, the more restrictive or specific provisions shall apply.

5. That Sections 104.1 and 104.1.1 shall read as follows:

**104.1 GENERAL Duties and Powers of the Building Code official:**

The code official shall enforce all of the provisions of this code and shall act on any question relative to the mode or manner of construction and materials to be used in the erection, addition to, alteration, repair, removal, demolition or installation of service equipment and the location, occupancy and maintenance of all buildings and structures.

**104.1.1 RULE-MAKING AUTHORITY:**

The code official shall have authority as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this code to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules shall not have the effect of waiving structural or fire performance requirements specifically provided for in this code or of violating accepted engineering practice involving public safety.

6. That Section 105.1 shall read as follows:

**105.1 PERMIT REQUIRED:** It shall be unlawful to construct, erect, alter, install, add to, enlarge, repair, convert, remove, demolish, locate, or maintain any building or structure or any part of appurtenance thereof; or change the occupancy of a building or structure requiring greater strength, exit or sanitary provisions; or to change to another use of change of occupancy or change in tenants or owners; or to install or alter any equipment for which provision is made or the installation of which is regulated by this code; or to move or add a lot line which affects an existing structure without first filing an application with the code official in writing and obtaining the required permit therefore; except that repairs, as defined in Section 105.2.2 and which do not involved any violation of this code, shall be exempted from this provision. Notice shall also be given to the appropriate Fire Protection District (Orland Fire Protection District, Mokena Fire District or the Palos Fire Protection District).

7. That Section 105.3 has additions as follows:

**105.3 APPLICATION FOR PERMIT:** To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the department of building safety for that purpose.

Such application shall:

1. Identify and describe the work to be covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by construction documents and other information as required in Section 106.
5. State the valuation of the proposed work.
6. Be signed by the applicant, or the applicant's authorized agent.
7. Give such other data and information as required by the building official.
8. A list of all contractors licensed and bonded by the Village of Orland Park.

Any permit application or business inquiries shall use the English language.

8. That Section 105.5 shall revised to read as follows:

**105.5 EXPIRATION:** Every permit issued that requires a certificate of occupancy shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the

work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**105.5.1 PERMITS FOR WORK NOT REQUIRING A CERTIFICATE OF OCCUPANCY:** When a permit has been issued for any type of work that does not require a certificate of occupancy (EG: decks, sheds, porches, fences, swimming pools, building alterations and repairs etc.) and the construction/installation of materials has been started on any project, the work shall continue until it has been completed. It is understood that unless a substantial start on construction is made within six (6) months, and unless substantial progress is made within one (1) year, and unless construction is completed within two (2) years from the date of issuance of a permit, the permit will become null and void. Only one extended permit shall be issued for the completion of the work.

**105.5.2 TIME LIMITATIONS FOR RESIDENTIAL BUILDINGS, ADDITIONS, REMODELING AND ACCESSORY RESIDENTIAL STRUCTURES:** Permits issued for the construction or remodeling of residential buildings and any accessory structures shall become expired when the work permitted is not completed and final approval is issued within 365 days from the date of a permit issuance.

Work not completed within 365 days shall be considered abandoned, unless such work has been pursued in good faith; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated. Permit renewal fees shall also be paid with consideration given for the extent of remaining work to be performed but in no case shall be less than \$150.00 for new residential units and \$50.00 for accessory structures. (Ord. 3910, 7-19-04)

9. That Section 106.1 Shall be revised and read ss follows:

**106.1 CONSTRUCTION DOCUMENTS:** The application for a permit shall be accompanied by not less than three sets of construction plans and other required supporting documents. The construction documents shall be prepared by a registered design professional where required by The State of Illinois statutes. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional. Construction documents shall be prepared using the English Language.

The code official is permitted to waive the requirements for filing construction documents when the scope of the work is of a minor nature. When the quality of the materials is essential for conformity to the code, specific information shall be given to establish such quality, and this code shall not be cited, or the term "legal" or its equivalent used as a substitute for specific information.

10. That Section 106.1.1 Shall Read As Follows:

**106.1.1 INFORMATION ON CONSTRUCTION DOCUMENTS:**

Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations as determined by the building official. Plans submitted for permit review shall be scaled to a minimum size of ¼ inch equals one foot for floor plan portion unless alternate is approved by the code official.

**106.1.1.1 Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

11. That Section 106.2.1 shall added and read as follows:

**106.2.1 PLAT OF SURVEY** A sealed boundary line survey with a legal description shall be submitted with every permit application unless the code official indicates the survey is not required. In the case of demolition, the site plan shall show all construction to be demolished and the location and size of all existing structures and construction that are to remain on the site or plot.

**PROPOSED SURVEYS WILL SHOW (PRIOR TO BREAKING GROUND):**

Accurate foundation location and footprint,  
High/low foundation elevations and locations, and building corners (U.S.G.S. datum),  
Driveway, and service walk, locations and elevations,  
Driveway grade (must be less than 10%),  
Top of curb elevations at property lines (extended),  
Grading: Ground elevations at all lot corners, summits and drainage swales, and  
Any adjacent foundation elevations.

12. That Section 106.2.2 shall added and read as follows:

**106.2.2 PRIVATE SEWAGE DISPOSAL SYSTEM: *Revised Section Number*** The site plan shall indicate the location of a private sewage disposal system where a public sewer is not available. All technical data and soil data required by the State of Illinois Private Sewage Disposal Licensing Act and Code and by the Plumbing Code listed in Chapter 35 shall be submitted with the plan.

13. That Section 106.3.1 shall be revised and read as follows:

**106.3.1 APPROVED CONSTRUCTION DOCUMENTS:**

The code official shall stamp or endorse in writing all bound sets of construction documents "PERMIT PLANS SHALL REMAIN ON THE JOBSITE DURING CONSTRUCTION". One set of the approved construction documents shall be retained by the code official and one set shall be kept at the building site, open to inspection of the code official or an authorized representative at all reasonable times. The third set of construction documents (when required) shall be forwarded to the appropriate Fire District or other authority, for review and approval prior to a fire system's installation and any rough inspections by the Village.

14. That Section 106.3.4.1 shall be revised and read as follows

**106.3.4.1 Professional, Architectural and Engineering Services:**

The construction documents for new construction, alteration, repairs, expansion, addition or modification for buildings or structures shall be prepared by a State of Illinois registered design professional. All construction documents required for a building permit application shall be prepared by a State of Illinois registered design professional as required by Illinois laws or Acts. The construction documents shall include the name and address of the registered design professional and shall be signed, sealed date of license expiration and dated by the registered design professional in accordance with the professional registration laws of the state of Illinois. A State of Illinois Licensed Architect or Structural Engineer must also design residential plans included with a building permit application. Plans must clearly detail all structural specifications necessary to construct and inspect all applications of the architects and/or engineers design to meet Village Code requirements. Where structural assemblies have not been provided for, the design professional shall submit adequate details for a clear understanding of construction application by the installer or trade professional.

The registered design professional shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural observation is required by Section 1709, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur. See Section 1704 for specific duties and reports.

**EXCEPTIONS:** Single-story residential additions less than 600 square feet in total area where special structural engineering is not required.

Construction plans for pre-manufactured structures must be designed by a state of Illinois licensed architect or structural engineer. The permit plans must include that professional's signature, seal and date of license expiration affixed to plans.  
(Ord. 3910, 7-19-04).

15. That Section 107.5 shall be added and read as follows:

**107.5 Temporary Uses and Land Development Code:** Temporary uses shall be in conformance with the Village Land Development Code (6-304)

16. That Section 108.2 shall read as follows:

**108.2 FEE SCHEDULE:** A fee for each plan examination and inspections shall be paid in accordance with the Village of Orland Park's Village Code Title 5 Chapter 2, Chapter 35 of this code and other applicable ordinances.

**108.2.1 LICENSING AND BONDING OF CONTRACTORS:** All contractors performing work in the Village of Orland Park shall be licensed and bonded in accordance with all the appropriate ordinances listed in Chapter 35.

**108.2.2 SPECIAL SERVICES PERFORMED:** Any persons requesting special or emergency services performed by the Village including preliminary inspection, evaluation and/or review shall pay additional fees as shown below:

- a. Village Employees performing "Special Services" during or after normal Business hours shall pay a minimum fee as shown in The Village Code Title 5 Chapter 2. Special Services shall be defined as:
  - Inspections, plan reviews or permit issuance operations requested not during normal village business days/hours.
  - Inspections requested for the same day as the inspection is requested (before the normal 24 hour waiting period).
  - Inspections requested during the normal village business hours for a specific time of the day.
- b. Independent services performed by other than Village personnel (*not directly employed by the village*), shall pay the fees as required by The Village Code Title 5 Chapter 2 "BUILDING PERMITS AND FEES" (Ord. 3910, 7-19-04)

17. That Section 109.3 changes shall read as follows:

**109.3 Required inspections.** The building official, upon adequate notification, shall make the inspections set forth in Sections 109.3.1 through 109.3.10. Plans and jobsite inspection communications shall use the English language.

**109.3.1 JOB ACCESS:** A safe and reasonable access shall be provided to all buildings or structures. This includes a dry gravel walkway, non-slip platforms secured so they do not move around or any other

item the inspector considers safe. If a safe access is not provided, the inspector may not perform the required inspection until a safe access is provided. Guards shall protect all floor and foundation openings.

**109.3.2 JOB SITE CONDITIONS:** Any building or structure that is to be inspected shall have all floors and levels accessible and shall be clean of all debris and obstructions so a visual inspection of all the construction can be performed. Ladders or levels greater than 12 inches are not considered accessible.

**109.3.3 FOOTING INSPECTIONS:** Are made after all the footings are formed but before the concrete is placed. A minimum 2 hours inspection request is required. These inspections may be called in. *See Section 109.3.7.1 d. for cold weather footing inspection restrictions*

**109.3.4 UNDERGROUND PLUMBING AND DRAIN TILE:** Are made prior to pouring any concrete for the floor/crawl space and before backfilling. Inspection request cards to be completed and returned to the Building Department a minimum of 24 hours before the inspection is required.

**109.3.5 PLUMBING, ELECTRICAL AND MECHANICAL:** Rough inspections are made prior to covering or concealment of construction materials, and prior to a framing rough inspection. All rough inspections, including the framing, shall be approved prior to any finishes or coverings being installed. Inspection request cards to be completed and returned to the building department a minimum of 24 hours before the inspection is required.

**109.3.5.1 FIRE PROTECTION SYSTEMS:** Before any rough inspections are made by the village, fire protection system plans and inspections of enclosed fire system components, shall be approved by the appropriate fire district authority, Village or consultant.

**109.3.6 FRAMING ROUGH:** Inspections are made after all framing, fire blocking, draftstopping, wall bracing, roofing, windows and doors are in place for structural stability and weather proofing and after the plumbing, electrical, fire and mechanical rough inspection are made but prior to installing any insulation. An inspection request card is to be completed and returned to the Building Department before any construction is covered and at least 24 hours before the inspection time is requested. Construction shall conform to the code and plans reviewed for permit approval.

**109.3.7 CONCRETE INSPECTIONS:** Are required for all flat work, interior and exterior, including but not limited to driveways, sidewalks, crawl spaces and basements prior to placement. A minimum 2 hour inspection request is required. These inspections may be called in.

**109.3.7.1 COLD WEATHER REQUIREMENTS:** The following requirements for cold weather exterior concrete flatwork placement (sidewalks, drives, patios, etc.) will be in effect November 15<sup>th</sup> with the possibility of an extension to December 1<sup>st</sup> or reduction to an earlier date with the approval of the code official when weather conditions allow:

- a. No concrete shall be placed on a frozen base or sub base,
- b. Outside air temperature must be a minimum of 32 degrees Fahrenheit before concrete can be placed,
- c. If night time temperature is to fall below 32 degrees Fahrenheit, then protection consistent with the intended serviceability of the structure shall be provided.

Straw - 5 days, Insulated blankets - 3 days  
Straw or blankets directly in contact with the concrete may cause the concrete to discolor.

- d. Placement of concrete (footings and foundation walls), when the air temperature is less than 20 degrees Fahrenheit is not permitted unless approved by the code official.

**109.3.8 OTHER INSPECTIONS:** In addition to the inspections above, the Building Department may make or require any other inspections to ascertain compliance with this code and other laws enforced by the Building Department.

**109.3.8.1 "AS BUILT" SURVEYS WILL SHOW (PRIOR TO ANY CONSTRUCTION BEYOND THE FOUNDATION):**

1. Actual foundation footprint and location, and
2. All foundation steps and brick ledge locations/elevations.

**109.3.9 SPECIAL INSPECTIONS:** Where applications for unusual design or magnitude of construction are filed or where code referenced standards in Chapter 35 or is required by Section 1704.0 for special inspections, the code official may require such inspections. The project representative shall submit reports as required by code and code official.

**109.3.10 FINAL INSPECTION:** Upon completion of the building or structure for occupancy (including the final grading complying with Section 109.3.10.1 and the completion of any other work required in the approved plans, and this code) and before the issuance of the certificate of use and occupancy required in Chapter **110.0**, a final inspection shall be made. All violations of this code, the approved plans, and permit shall be noted and the holder of the permit shall be notified of the discrepancies.

**109.3.10.1 FINAL GRADE CERTIFICATION (PRIOR TO OCCUPANCY):**

Permit applicant shall submit certification stating property as developed conforms to the approved engineering grading plan and the proposed survey.

18. That Section 109.7 shall be added shall read as follows

**109.7 WORKMANSHIP:** All work shall be conducted, installed and completed in a workmanlike and acceptable manner so as to secure the results intended by this code. (Ord. 3910, 7-19-04)

19. That Section 110.2 shall read as follows

**110.2 CERTIFICATE ISSUED:** When a building or structure is entitled thereto, the code official shall issue a certificate of use and occupancy within ten days after final inspection and approval. The certificate shall certify compliance with the provisions of this code and the purpose for which the building or structure may be used in its several parts.

20. That Section 110.3 shall read as follows:

**110.3 CONDITIONAL OCCUPANCY PERMIT:** Upon the request of the holder of a permit, the code official may issue a conditional occupancy permit for a specific building or structure, or part thereof, before the entire work covered by the permit shall have been completed, provided that: (1) such portion or portions may be occupied or used safely prior to full completion of the building, structure or exterior land improvements without endangering life or public welfare; (2) the incompleteness is due to factors beyond the permit holder's control and beyond his reasonable scheduling efforts, such as in the case of driveways, sidewalks, rough and/or final grading, exterior painting, gutters and downspouts which normally cannot be completed due to

inclement weather during the time period of November 1st through the following May 15th; (3) in the cases of incomplete items, proof is shown that money is escrowed or otherwise set aside to complete the improvements; and (4) all parties with an interest in the building or structure give written concurrence with the issuance of the conditional occupancy permits.

The conditional occupancy permit shall be issued in the name of the permit holder and the individual or business entity occupying the premises.

In the event that an approved plan for a residence is completed, excepting only landscaping and/or grading requirements, a conditional certificate of occupancy may be issued upon receipt of a request stating that (1) the builder intends to complete the uncompleted work within thirty (30) days (or within ninety (90) days or by June 1, whichever is earlier, if the request is dated between December 1 and April 1); (2) the builder will voluntarily provide a \$5,000.00 cash deposit (or check) in exchange for the conditional certificate of occupancy; and (3) the builder gives the Village the right to enter the property at the Village's sole option to complete the uncompleted work if said work is not completed within the time limit set (this right shall survive the closing of any sale of the property).

The builder's deposit will be refunded less \$250.00 for program administration and inspection costs if the uncompleted work is completed within the time limit set. Otherwise, the Village may, at its sole option, complete the work or have it completed and refund any remaining money to the builder less \$350.00 for program administration completion and inspection costs. Acceptance of a builder's deposit creates no liability for the Village to complete any uncompleted work.

Builders are under no obligation to participate in this voluntary program. If they prefer, they may simply complete all work shown on the approved plan and receive a final certificate of occupancy. (Ord. 3449, 12-4-00)

21. That Section 112.0 shall read as follows:

#### **SECTION 112.0 MEANS OF APPEAL**

**112.1 APPLICATION FOR APPEAL:** The owner of a building or structure or any other person directly affected by a decision of the code official refusing to grant a modification to the provisions of this code concerning the manner of construction or materials to be used in the erection, alteration or repairs of a building or structure may appeal to the President and Board of Trustees. Application for an appeal may be made when it is claimed that the true intent of this ordinance has been incorrectly interpreted, the provisions of this ordinance do not fully apply, or an equally good or better form of construction can be used.

**112.2 MANNER OF APPEAL:** Within fourteen (14) days of the code official's decision for which an appeal is sought, the owner or person shall file a written request for appeal with the Village Manager. The written request shall briefly state the relief sought and the reasons for the relief.

**112.3 TIME OF CONSIDERATION:** Not later than twenty-one (21) days after the Village Manager receives the appeal, the item will be placed on the President and Boards of Trustee's agenda for consideration.

**112.4 CONSIDERATION:** The Board of Trustees shall consider the matter at a regularly scheduled board meeting or the Board may send the appeal to the Building Committee for their input and recommendation before Board consideration. The person appealing, his representative, the code Official and any other person whose interests may be affected, shall be given an opportunity to be heard. The board shall uphold the decision of the code official by a majority vote of the members or the Board may modify or reverse the decision of the code official by a concurring vote of 2/3 or more of the Board.

**112.4.1 RESOLUTION:** The decision of the board shall be by resolution. Certified copies shall be furnished to the appellant and the code official.

**112.4.2 ADMINISTRATION:** The code official shall take immediate action in accord with the decision.

22. That Section 113.4 shall read as follows:

**113.4 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 erect, construct, alter or repair a building or structure in violation of an approved plan or directive of the code official, or a permit or certificate issued under the provisions of this code, shall be subject to the penalty as described in The Village Code Title 1 Chapter 4. or as specified by other adopted ordinances.

**113.4.1 WORK BEGUN WITHOUT A PROPER PERMIT:**

When work has begun or is completed without a proper permit having been obtained, the fee for required inspections and plan reviews shall be as set forth in The Village Code Title 5 Chapter 2 Section 14 ("WORK BEGUN WITHOUT A PERMIT"). (Ord. 3910, 7-19-04)

**113.4.2 WORK CONTINUED BEYOND A FOUNDATION PERMIT:**

When a permit has been issued for the foundation portion of a building only and construction has proceeded above the foundation (or above ground level of the building) prior to the full building permit being issued, a penalty shall be charged for each day work has continued before the permit has been approved and issued by the building official as listed below:

1<sup>st</sup> offense: "Stop Work" order and a fee of \$500.00 with the allowance to remove any hazardous work conditions for that workday.

Additional offenses: "Stop Work" order and a fee of \$1,000.00 with the allowance to remove any hazardous work conditions for that workday.

Also see Section 114.3 of this code for "Unlawful Continuance" (Ord. 3910, 7-19-04)

23. That Section 114.3 shall read as follows:

**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 and subject to the maximum penalty as described in The Village Code Title 1 Chapter 4, in addition to penalties specified in other code sections or as specified by other adopted ordinances. (Ord. 3910, 7-19-04)

24. That Section 115.5 shall read as follows:

**115.5 RESTORATION OF UNSAFE STRUCTURE:** A building, structure or equipment condemned by the code official is permitted to be restored to a safe condition provided that change of use or occupancy is not contemplated nor compelled by reason of such reconstruction or restoration; except that if the damage or cost of reconstruction or restoration is in excess of 50 percent (50%) of its replacement value, exclusive of foundations, such structure shall be made to comply in all respects with the requirements for materials and methods of construction of structures hereafter erected. Restoration shall also be in compliance with Section 102.2.2.

25. That in Section 202.0 the following definitions are added or changed to read as follows:

**BOARD OF TRUSTEES:** The corporate authorities of the Village of Orland Park.

**BUILDING:** Any structure used or intended for supporting or sheltering any use or occupancy. For application of this code, each portion of a building which is completely separated from other portions by fire walls complying with Section 707.0 shall be considered as a separate building except when calculating the total area of a building for requiring an approved fire suppression system. (See Subsection 904.1.1).

**BUILDING CODE:** The Building Code and its Amendments as adopted by the Village of Orland Park.

**CERTIFICATE OF USE AND OCCUPANCY:** The certificate issued by the code official which permits the use of a building or tenant space in accordance with the approved plans and specifications and which certifies compliance with the provisions of law for the use and occupancy of the building or tenant space in its several parts together with any special stipulations or conditions of the building permit (see Section 118.0).

**CHANGE OF USE:** An alteration by change of use in a building or tenant space heretofore existing to a new use group which imposes other special provisions of law governing building construction, equipment or means of egress (see Section 102.0).

**CHANGE OF OCCUPANCY:** The change in purpose for which a building or part hereof is used or intended to be used including a change in tenants or tenant space.

**CHANGE OF OWNER:** The change in ownership of a business, tenant space, building or structure.

26. That Subsection 308.3.1. shall read as follows:

**308.3.1 DAY CARE FACILITY:** A Day Care Facility, which provides care for any length of time for more than five (5) children less than six (6) years of age shall be classified as Use Group I-2.

27. That Section 310.1 shall include revisions to the items shown and read as follows

**310.1 Residential Group R.** Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* in accordance with Section 101.2. Residential occupancies shall include the following:

**USE GROUP R-1** Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including: Boarding houses (transient), Hotels (transient), Motels (transient)

**USE GROUP R-2 STRUCTURES:** This use group shall include all multi-family dwellings or dwellings having more than one dwelling unit where one tenant space is above another tenant space. This use shall also include all apartments, boarding houses, convents, dormitories, fraternities and sororities and monasteries and similar buildings arranged for shelter and sleeping accommodations in which the occupants are primarily non-transient in nature.

**USE GROUP R-3 STRUCTURES:** This use group shall include all buildings arranged for occupancy as detached single family dwellings, including not more than four (4) lodgers or boarders per family and multiple side by side attached single family dwellings where each unit has an independent means of egress and is separated by a two (2) hour fire separation assembly with fire-retardant roof sheathing (see Section 709.0).

**USE GROUP R-4 STRUCTURES:** *See deletions for R-4 Use Groups*

28. That Subsection 310.1.1 is added and shall read as follows:

**310.1.1 INTERNATIONAL RESIDENTIAL CODE**

This code may be used by the Building Official where specific information is not clearly referenced in the International Building Code and shall not conflict with other ordinances or this code for the construction of single family dwellings, as listed in Chapter 35.

29. That Subsection 310.2 shall read as follows:

**310.2 DEFINITIONS: THESE DEFINITIONS ARE ADDED OR REVISED**

**BEDROOM:** A room within a dwelling unit capable of being used for sleeping purposes and having a closet.

**CHILD CARE FACILITIES:** A child care facility which accommodates five (5) or less children of any age shall be classified as Use Group R-3 and shall be located in the residential single family zoning districts.

**DORMITORIES:** A dormitory facility which accommodates more than five (5) persons six (6) or more years old shall be classified as Use Group R-2.

**FAMILY:** Means an individual, or two or more persons related by blood, marriage or adoption, living together as a single housekeeping unit; or a group of not more than 4 persons not related by blood, marriage or adoption, living together as a single housekeeping unit. (See ordinance 3271-8/6/9)

30. That Subsection 310.3 shall read as follows:

**310.3 REQUIRED DWELLING UNIT AND GUESTROOM SEPARATIONS:**

Townhomes (vertically attached) shall be separated by a three (3) wall system with the center wall having a two (2) hours fire resistance rating and shall be continuous from the foundation to the underside to the fire retardant roof sheathing installed per Sections 705, 706 and 708 and as required further by this code and the ordinance listed in Chapter 35. The two (2) hour fire resistance rated wall shall not be penetrated.

Planned Unit Developments (P. U. D's) of single family vertically attached townhouse units (R-3), may use a two (2) hour fire rated non-combustible wall assembly when located on a lot line between units. Exterior walls when located on or near lot lines and open to a separate non-buildable lot of at least 30' in width used as a common yard or open to a public way (street), may have zero (0) hours fire rating when all is located within the same P. U. D.

**310.3.1 R-1 HOTELS AND MOTELS:**

Hotel, Motel rooms and corridors of an R-1 Use Group may be separated with a single non-combustible wall system having a one (1) hour fire resistance rating when the building has a minimum Construction Type as regulated in Section 503 and is fully fire sprinkler protected per 903.2.7 (see Sections 501.2.4)

The fire rating shall continue from a fire rated floor assembly below to a fire rated floor ceiling assembly above or to the roof deck above. Fire retardant sheathing shall be installed as described in Section 310.3. Wall penetrations shall be as specified in Section 711.3.1.1.1. The wall assembly shall be insulated to provide a minimum STC rating of 50, per Sections 1206.2 and 1206.3. (refer to 501.2 for additional details).

Special Inspection services shall be provided for wall and floor conformance to structural design and fire tested assemblies by approved agencies or individuals. Reports shall be in writing to verify conformance with fire tested assemblies per Section 104.4 of this code. (Ord. 3994, 3-7-05)

31. That Subsection 402.4.7 shall read as follows:

**402.4.7 MAIN ENTRANCE DOOR HARDWARE:** The covered malls main exterior means of egress doors are permitted to be equipped with a key operated locking device from the egress side where in compliance with the following conditions.

1. The locking device is of a type that is readily distinguishable as locked.
2. A readily visible, durable sign is posted on the egress side or adjacent to the door stating "This Door To Remain Unlocked When This Building is Occupied." The sign shall be in letters not less than 1 inch high on a contrasting background.
3. The main exterior door is a single door or a pair of doors which, when unlocked, the door or both leafs of a pair of doors swing free.
4. One set of means of egress doors in each of the main entrance doorways shall have an approved egress control device installed and shall unlock in accordance with the following:
  - a. Actuation of the automatic sprinkler system or automatic fire detection system.
  - b. Loss of power to the egress control device.
  - c. Loss of power to the building.
  - d. Capability of being unlocked manually by a signal from an emergency control station.
  - e. The initiation of an irreversible and automatic process that will release the latch within 45 seconds when a force of not more that 15 pounds is applied for 1 second to the release device and not relock until the door has been opened and returned to the closed position for not less than 30 seconds. Any reopening of the door shall restart the 30-second relocking cycle. Any attempt to exit, which exceeds 1 second, shall render the door openable. The time delay and the minimum relocking cycle time shall not be field adjustable.
  - f. Initiation of the irreversible process shall activate an audible alarm in the vicinity of the door.
  - g. A sign having block letters of 1 inch in height shall be provided on the door above and within 12 inches of the release device stating "Push until alarm sounds. Door can be opened in 45 seconds."

32. That Section 402.6 shall read as follows:

**402.6 TYPES OF CONSTRUCTION:** Covered mall buildings shall be of Type 1 or 2 construction. Covered mall buildings two (2) stories (levels) or less in height are exempt from the area limitations of Table 503.

33. That Subsection 402.6.1 shall read as follows:

**402.6.1 MALL FLOOR/CEILING ASSEMBLIES:** Floor/ceiling assemblies and their supporting columns and beams within multi-level covered malls shall be of one hour fire-resistance rated non-combustible construction.

**EXCEPTION:**

Ceiling Assembly may be penetrated for supply and return air ductwork and lighting fixtures only. The requirement for fire dampers or tented ceiling fixtures does not apply when fixtures are of a plenum type. (Ord. 3910, 7-19-04)

34. That Subsection 402.7.2 shall read as follows:

**402.7.2 MALL TENANT SEPARATIONS:** Each tenant space shall be separated from other tenant spaces by a wall having a fire resistance rating of not less than one hour. The separation wall shall extend from the floor to the underside of the floor or roof deck above. The ceiling shall be a one-hour fire resistance rated assembly.

In a return air plenum ceiling system the fire resistance rated tenant wall may be penetrated by the required amount of grillwork for the proper airflow of the fire exhaust system and the return air system.

**EXCEPTION:**

See Section 402.6.1 of this code for allowed ceiling penetrations. . (Ord. 3910, 7-19-04)

35. That Subsection 402.9.1 shall read as follows:

**402.9.1 SMOKE CONTROL:** A covered mall building and anchor stores shall have an approved smoke control system complying with Section 909.0. If a covered mall building or anchor store has an existing smoke control system it will remain in good working order.

36. That Subsection 402.10 item # 4 shall read as follows:  
(Ord. 4133, 5-1-06)

**402.10 ITEM #4 MAXIMUM AREA:** Kiosks and similar structures shall have a maximum area of 150 square feet.

**EXCEPTION:**

When a mall is 60 feet or greater width, the maximum area of a kiosk may be increased 100% having a maximum area of 300 square feet in area under the following conditions:

- A. The mall exiting and occupant load design shall comply with Subsections 402.4 "Means of egress" and 402.5 "Mall width" of this Chapter.
- B. A kiosk of more than 150 square feet shall not be placed within the intersecting center spaces of mall corridors (center court).
- C. A minimum of 15 feet clear exit width to a height of 8 feet shall be provided between any projection of a tenant space bordering the mall and the nearest kiosk, vending machine or similar structure for the adequate means of clear egress travel.
- D. Kiosks with an area increase shall not be located within 35 feet of an adjacent kiosk or within 48 inches of floor openings for stairways, escalators or guardrails at floor openings.
- E. Plans submitted with a permit application must include all dimensions for the mall width, kiosk size(s) and the distance between the proposed and nearest existing kiosks and/or other structures.
- F. Kiosk design must comply with the Illinois Accessibility Code for the public and employees accessibility.

37. That Subsection 402.15 and Subsection 402.14.1 shall read as follows:

**402.15 PLASTIC PANELS AND PLASTIC SIGNS:** Within every story or level and from side wall of each tenant space, approved plastic panels and signs shall be limited as specified in Sections 402.15.1.

**402.15.1 AREA:** The panels and signs shall not exceed 7.5 percent (.075%) of the wall area facing the mall.

**402.15.2 through 402.15.5** of the IBC Code remain applicable to this Sub-Section.

38. That Section 403.1 shall read as follows:

(3/07)

**403.1 HIGH RISE BUILDING APPLICABILITY:** The provisions of this section shall apply to all buildings more than five (5) stories or sixty (60) feet in height. This section regulates the stories and heights for application of fire alarm and detection zones as required in Section 907.8.2 of this code.

**EXCEPTIONS:** The provisions of this section shall not apply to the following buildings and structures:

1. Airport traffic control towers conforming to the requirements of Section 412.0.
2. Open parking structures (see Section 406.0).
3. Buildings and structures of Use Group A-5 (see Section 303)
4. Low-hazard special uses where approved by the code official (see Section 503.1.2).
5. Buildings and structures of Use Group H (see Section 307)

39. The following Subsection of Section 406 shall read as follows:

**406.1 PRIVATE GARAGES AND CARPORTS:**

**406.1.1 Classification.** Buildings or parts of buildings classed as Group U occupancies because of the use or character of the occupancy shall not exceed 600 square feet in area or one story in height for a R-3 Use Group as provided for in this Section. Use Groups other than Residential may allow a maximum of 800 square feet in area and be classified as a private garage. (See Land Development Code applications)

**406.1.1.1 DEFINITIONS:** The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

**GARAGE, PRIVATE:** A garage with a maximum area as listed in Section 406.1.1 with 3 or less passenger motor vehicles or one commercial motor vehicle without provision for repairing or servicing such vehicles for profit subject to the provisions of The Village Land Development Code (Ordinance 2084 as amended). Also see the Village Land Development Code's zoning districts for any variations.

**FLOOR SURFACE:** The floor surface shall be of concrete or other approved noncombustible material.

**406.1.3 PRIVATE GARAGES, USE GROUP R-3:** Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other opening between the garage and residence shall be equipped with solid wood doors not less than 1-3/4 inch in thickness or equivalent and shall be self closing.

No garages shall be hereafter constructed, installed or erected at a grade that is lower than the established grade where the street pavement and the driveway serving said garage join.

**406.1.3.1 SEPARATION REQUIRED:** The garage shall be completely separated from the residence and its attic area by means of 5/8 inch, type X, gypsum board or equivalent applied to the garage side. All remaining walls to be insulated and finished with 1/2 inch gypsum board. Any columns and steel beams used for supporting upper floor shall be wrapped in said drywall.

**406.1.3.2 FLOOR SURFACE:** Garage floor surfaces shall be constructed of concrete 4 inches thick with 6x6 #6 w.w.mesh or 4 inches thick with fibermesh or 5 inches thick without fibermesh. The floor shall be sloped to facilitate the movement of liquids toward the main entry doorway.

**406.1.3.3 OPENING PROTECTIVES:** The door opening protectives shall comply with one of the following:

1. 1 3/4" inch solid core wood door.
2. 1 3/4" inch solid or honeycomb core steel door.

**406.1.3.4 FIRE BLOCKING OF CONCEALED SPACES:** Where a garage is connected to an occupancy in Use Group R-3 by a concealed space, such as a breezeway, that is of Type 5B construction and 10 feet or greater in length, the junction of the garage and the concealed space shall be fire blocked to comply with Section 716.0.

**406.1.3.5 DOOR SILLS:** The sills of all door openings between garages and adjacent interior spaces shall be raised not less than 4 inches above the garage floor.

**406.2.10 BENEATH ROOMS USE GROUPS R-1, R-2 or I-1:** Private garages located beneath rooms in occupancies in Use Group R-1, R-2 or I-1 shall be separated from adjacent interior spaces by fire partitions and floor/ceiling assemblies which are constructed of solid masonry partitions and concrete floors with not less than a 2-hour fire-resistance rating. See Section 501.2. Attached private garages shall be completely separated from the interior spaces and the attic area by means of 2-hour fire resistance rating. The door opening protectives shall be 1-1/2 hour, Class B fire door meeting the requirements of Section 714.0.

*(See Section 501.3.3 for exception)*

**406.2.10.1 PARKING GARAGE SPRINKLER PROTECTION:**

All parking garages shall be equipped throughout with an automatic sprinkler system in accordance with Section 903:

1. Where the total building area exceeds 8,000 square feet.
2. Where located beneath other use groups.

For the purpose of this section, a roof used for the parking or storage of motor vehicles shall not constitute a story.

**406.3.14: OPEN PARKING GARAGES SPRINKLER PROTECTION:**

All parking garages shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.

1. Where the total building area exceeds 8,000 square feet.
2. Where located beneath other use groups.

For the purpose of this section, a roof used for the parking or storage of motor vehicles shall not constitute a story.

**406.4.3 ENCLOSED PARKING (S-2 Use Group) GARAGES SPRINKLER PROTECTION:**

All parking garages shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.

1. Where the total building area exceeds 8,000 square feet.
2. Where located beneath other use groups.

*Note; Section 903.2.9 for commercial parking garages at 5000 square feet in area has been deleted and this Section would apply..*

For the purpose of this section, a roof used for the parking or storage of motor vehicles shall not constitute a story.

**406.5.3.1 MOTOR VEHICLE SERVICE STATIONS SPRINKLER PROTECTION:**

All parking garages shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.

1. Where the total building area exceeds 8,000 square feet.
2. Where located beneath other use groups.

**406.6.7 REPAIR GARAGES SPRINKLER PROTECTION:**

All parking garages shall be equipped throughout with an automatic sprinkler system in accordance with Section 903:

1. Where the total building area exceeds 8,000 square feet.
2. Where located beneath other use groups.

40. That Section 407.8 and its Subsections are added to Section 407.0 and shall read as follows:

**407.8 GROUP I-2 GENERAL:** All day care centers shall meet the following requirements in addition to other applicable provisions of this code.

**407.8.1 CONSTRUCTION:** All buildings or areas used as and in conjunction with a day care center shall be constructed of non-combustible construction, a minimum of Type 2B. No wood or fire retardant treated wood will be allowed for any part of the construction.

**407.8.2 HVAC CONSTRUCTION:** All heating, air conditioning and ventilation duct work shall be constructed of metal in the appropriate gauges as required by the mechanical code and its amendments as listed in Chapter 35.

**407.8.3 FIRE SUPPRESSION SYSTEM:** All buildings or areas used as and in conjunction with a day care center shall have an approved fire suppression system installed regardless of size. The fire suppression system shall conform to NFPA13 as listed in Section 906.0.

41. That Section 421 and its Subsections are added to Chapter 4 and shall read as follows:

**SECTION 421.0 PARKING AREAS**

**421.1 CURB CUTS:** Parking areas shall be arranged to afford ready and accessible means of entrance and exit at sidewalk level and as required by the State of Illinois Accessibility Code listed in Chapter 35.

**421.2 LANES AND PARKING SPACES:** Access lane shall be provided and parking space as required by the Village of Orland Park Land Development Code as amended and the Illinois Accessibility Code listed in Chapter 35.

**421.3 SURFACE AND DRAINAGE:** Public and private parking areas and driveways shall be graded and paved with asphalt, concrete or other approved materials and shall be maintained to prevent drainage onto adjoining property or sidewalk. Parking areas shall also be maintained to provide a good walking and driving surface. Parking lots shall be designed for the loads anticipated. All parking areas shall be maintained in accordance with this code, the property maintenance and Fire Codes, as amended and listed in Chapter 35.

42. That Section 501.2 and its Subsections are added to Section 501.0 and shall read as follows:

**501.2 ADDRESS AND STREET NUMBERS**

**501.2.1 REQUIRED:** All buildings, tenant spaces and structures shall have an address shown.

**501.2.2 APPROVAL:** Developer's engineer to submit to the Village Engineering Department a street and address map for approval.

**501.2.3 LOCATION:** All numbers shall be placed in a conspicuous place on or near the building entrance. The address is to be visible at night from a light fixture nearby.

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**501.2.4 SIZE AND TYPE:** Number for address to be block style. Script type or written type not allowed.

**501.2.4.1 RESIDENTIAL, SINGLE FAMILY ATTACHED AND DETACHED (R-3):** Numbers shall be a minimum of four (4) inches in height.

**501.2.4.2 ALL OTHERS:** Numbers to be a minimum of six (6) inches in height.

**501.2.5 COLOR:** Address numbers to be a contrasting color to the background color they are being installed onto.

**501.2.6 STREET SIGNS:** Temporary street signs shall be installed by the developer so inspections can be made. The temporary signs may be painted on a piece of wood, but must be large enough to see and legible enough to read.

43 That Section 501.3 is added to Section 501.0 and shall read as follows:

### **501.3 WALLS, VENEERS AND FLOORS**

**501.3.1 SINGLE FAMILY EXTERIOR VENEERS:** All single family attached and detached residences shall contain a face brick or stone anchored veneer, with a minimum 2.625" thickness on a minimum of 90% of their first floor and walk out area/ground level elevations. Any other material exceeding the 10% for the remaining ground level wall surfaces shall be approved by the code official.

**501.3.2 EXTERIOR WALLS ALL OTHER USES:** All exterior walls shall be solid masonry construction or steel column and beam construction (for structural frame support purposes) with a veneer of decorative masonry, decorative architectural concrete panels or similar materials. The same material shall be used for all of the exterior walls of a building. See Section 503.2.

**EXCEPTION:** Use Group R-1 buildings equipped throughout with an automatic fire sprinkler system per 903.3.1.1, may use a structurally engineered noncombustible exterior wall system when special inspections are performed by a State of Illinois Licensed Architect or Structural Engineer per Sections 104.4, 1704.1 and 1704.2 of this code. (Ord. 3994, 3-7-05)

**501.3.3 FLOORS FOR USE GROUPS R-1 AND R-2:** Floors in Use Groups R-1 and R-2 shall be precast or engineered reinforced concrete where separating tenant spaces. See Section 503.5.

**EXCEPTION:** Floors of an R-1 Use Group building may use an engineered combustible floor framing system to separate tenant spaces. A minimum fire separation shall not be less than a one (1)-Hour fire resistance rated assembly when buildings are designed having a minimum Type of Construction per Section 503.5 of this code. (Ord. 4056, 7-19-05)

Approved fire rated opening assemblies shall be limited to a maximum membrane penetration as allowed in Section 711.4.2 for the floor ceiling assembly area. A minimum Sound Transmission Classification shall be as indicated in Section 1206.2 and 1206.3 of this code. (Ord. 3994, 3/7/05)

**501.3.4 INTERIOR WALLS:** Interior walls totally separating dwelling units in Use Group R-1 & R-2 shall be solid masonry.

**EXCEPTION:**

- a. Buildings with an approved automatic fire sprinkler system throughout may use a metal stud 3-wall system with a tested/listed 2-hour fire rating. (See Section 310.3 for intent).

b. R-1 HOTELS AND MOTELS

Hotel, Motel rooms and corridors of an R-1 Use Group building may be separated with a single non-combustible wall system having a one (1) hour fire resistance rating when the building has a minimum Construction of Type II-B or III-B (602.2 and 602.3) and is fully fire sprinkler protected per 903.2.7. (see Section 310.3.1). (Ord. 4056, 7-18-05)

Fire barrier wall partitions shall continue from a fire rated floor assembly below to a fire rated floor ceiling assembly above or to the roof deck above. Fire retardant sheathing shall be installed as described in Section 310.3. Wall penetrations shall be as specified in Section 711.3.1.1.1. The wall assembly shall be insulated to provide an STC rating per Sections 1206.2 and 1206.3.

In multi-story buildings, plumbing drain, waste and vent piping shall not be located within tenant wall fire separation assemblies. Plumbing drain, waste and vent piping shall be located in separate fire rated shafts of a two (2) hour fire rated assemblies per Section 707.

(Ord. 3994, 3-7-05)

44 That Section 501.4 is added to Section 501.0 and shall read as follows:

**501.4 FIRE LANE:** Fire lanes of the approved size and location shall be provided as required by The Village, the Orland Fire Protection District, Mokena Fire Protection District or the Palos Fire Protection District and maintained in accordance with this code, the property maintenance and fire code, as amended and listed in Chapter 35 .

**501.4.1 POSTING OF FIRE LANES:** All fire lanes shall be posted with the appropriate signage as required by the Village, Orland Fire Protection District, Mokena Fire Protection District or the Palos Fire Protection District and maintained in accordance with this code, the Property Maintenance and Fire Codes, as amended and listed in Chapter 35. (*See 9-7-5, 9-7-10-1 and 9-7-10-3 for additional parking details*)

45. That Section 502.1 definition of "Area, Building" shall read as follows:

**AREA, BUILDING:** The area included within the exterior dimensions of the surrounding exterior walls (or exterior walls and fire walls) exclusive of courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above. For the purpose of figuring the total area of a building in determining if an approved fire suppression system is required, fire walls and separation walls will not be considered in establishing separate buildings or fire areas.

**EXCEPTIONS:**

1. Multi-family buildings, Use Group R-2, for fire suppression systems only.
2. Single-family dwellings, Use Group R-3.

46. That the title of Section 503.0 and Table 503 shall read as follows:

**SECTION 503.0 GENERAL HEIGHTS AND AREA LIMITATIONS AND FIRE LIMITS.**

**TABLE 503  
ALLOWABLE HEIGHT AND BUILDING AREAS**  
Height limitations shown as stories and feet above grade plane.  
Area limitations as determined by the definition of "Area, building," per story.

| GROUP          |   | TYPE OF CONSTRUCTION |           |           |           |           |           |           |                           |                  |
|----------------|---|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------|------------------|
|                |   | TYPE I               |           | TYPE II   |           | TYPE III  |           | TYPE IV   | TYPE V<br>See 310.1 & 503 |                  |
|                |   | A                    | B         | A         | B         | A         | B         | HT        | A                         | B                |
|                |   | HGT (ft)<br>HGT (S)  | UL        | 160       | 65        | 55        | 65        | 55        | 65                        | Not<br>Permitted |
| A-1            | S | UL                   | 5         | 3         | 2         | 3         | 2         | 3         | Not                       | Not              |
|                | A | UL                   | UL        | 15,500    | 8,500     | 14,000    | 8,500     | 15,000    | Permitted                 | Permitted        |
| A-2            | S | UL                   | 11        | 3         | 2         | 3         | 2         | 3         | Not                       | Not              |
|                | A | UL                   | UL        | 15,500    | 9,500     | 14,000    | 9,500     | 15,000    | Permitted                 | Permitted        |
| A-3            | S | UL                   | 11        | 3         | 2         | 3         | 2         | 3         | Not                       | Not              |
|                | A | UL                   | UL        | 15,500    | 9,500     | 14,000    | 9,500     | 15,000    | Permitted                 | Permitted        |
| A-4            | S | UL                   | 11        | 3         | 2         | 3         | 2         | 3         | Not                       | Not              |
|                | A | UL                   | UL        | 15,500    | 9,500     | 14,000    | 9,500     | 15,000    | Permitted                 | Permitted        |
| A-5            | S | UL                   | UL        | UL        | UL        | UL        | UL        | UL        | Not                       | Not              |
|                | A | UL                   | UL        | UL        | UL        | UL        | UL        | UL        | Permitted                 | Permitted        |
| B              | S | UL                   | 11        | 5         | 4         | 5         | 4         | 5         | Not                       | Not              |
|                | A | UL                   | UL        | 37,500    | 23,000    | 28,500    | 19,000    | 36,000    | Permitted                 | Permitted        |
| E              | S | UL                   | 5         | 3         | 2         | 3         | 2         | 3         | Not                       | Not              |
|                | A | UL                   | UL        | 26,500    | 14,500    | 23,500    | 14,500    | 25,500    | Permitted                 | Permitted        |
| F-1            | S | UL                   | 11        | 4         | 2         | 3         | 2         | 4         | Not                       | Not              |
|                | A | UL                   | UL        | 25,000    | 15,500    | 19,000    | 12,000    | 33,500    | Permitted                 | Permitted        |
| F-2            | S | UL                   | 11        | 5         | 3         | 4         | 3         | 5         | Not                       | Not              |
|                | A | UL                   | UL        | 37,500    | 23,000    | 28,500    | 18,000    | 50,500    | Permitted                 | Permitted        |
| H-1<br>503.5.2 | S | Not                  | Not       | Not       | Not       | Not       | Not       | Not       | Not                       | Not              |
|                | A | Permitted            | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted                 | Permitted        |
| H-2<br>503.5.2 | S | Not                  | Not       | Not       | Not       | Not       | Not       | Not       | Not                       | Not              |
|                | A | Permitted            | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted                 | Permitted        |
| H-3<br>503.5.2 | S | Not                  | Not       | Not       | Not       | Not       | Not       | Not       | Not                       | Not              |
|                | A | Permitted            | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted                 | Permitted        |
| H-4<br>503.5.2 | S | Not                  | Not       | Not       | Not       | Not       | Not       | Not       | Not                       | Not              |
|                | A | Permitted            | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted                 | Permitted        |
| H-5<br>503.5.2 | S | Not                  | Not       | Not       | Not       | Not       | Not       | Not       | Not                       | Not              |
|                | A | Permitted            | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted | Permitted                 | Permitted        |
| I-1            | S | UL                   | 9         | 4         | 3         | 4         | 3         | 4         | Not                       | Not              |
|                | A | UL                   | 55,000    | 19,000    | 10,000    | 16,500    | 10,000    | 18,000    | Permitted                 | Permitted        |

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|  |        |          |              |             |             |             |             |             |                  |                  |
|--|--------|----------|--------------|-------------|-------------|-------------|-------------|-------------|------------------|------------------|
| I-2  | S<br>A | UL<br>UL | 4<br>UL      | 2<br>15,000 | 1<br>11,000 | 1<br>12,000 | NP<br>NP    | 1<br>12,000 | Not<br>Permitted | Not<br>Permitted |
| I-3  | S<br>A | UL<br>UL | 4<br>UL      | 2<br>15,000 | 1<br>11,000 | 2<br>10,500 | 1<br>7,500  | 2<br>12,000 | Not<br>Permitted | Not<br>Permitted |
| I-4  | S<br>A | UL<br>UL | 5<br>60,500  | 3<br>26,500 | 2<br>13,000 | 3<br>23,500 | 2<br>13,000 | 3<br>25,500 | Not<br>Permitted | Not<br>Permitted |
| M  | S<br>A | UL<br>UL | 11<br>UL     | 4<br>21,500 | 4<br>12,500 | 4<br>18,500 | 4<br>12,500 | 4<br>20,500 | Not<br>Permitted | Not<br>Permitted |
| R-1<br><b>Note a</b>                             | S<br>A | UL<br>UL | 11<br>UL     | 4<br>24,000 | 4<br>16,000 | 4<br>24,000 | 4<br>16,000 | 4<br>20,500 | Not<br>Permitted | Not<br>Permitted |
| R-2<br><b>Note a</b>                             | S<br>A | UL<br>UL | 11<br>UL     | 4<br>24,000 | 4<br>16,000 | 4<br>24,000 | 4<br>16,000 | 4<br>20,500 | Not<br>Permitted | Not<br>Permitted |
| R-3<br>Height<br>Note;<br>See LDC<br>(Ord. 3910) | S<br>A | UL<br>UL | 11<br>UL     | 4<br>UL     | 4<br>UL     | 4<br>UL     | 4<br>UL     | 3<br>UL     | 3<br>7,000       | 2<br>7,000       |
| S-1  | S<br>A | UL<br>UL | 11<br>48,000 | 4<br>26,000 | 3<br>17,500 | 3<br>26,000 | 3<br>17,500 | 4<br>25,500 | Not<br>Permitted | Not<br>Permitted |
| S-2  | S<br>A | UL<br>UL | 11<br>79,000 | 5<br>39,000 | 4<br>26,000 | 4<br>39,000 | 4<br>26,000 | 5<br>38,500 | Not<br>Permitted | Not<br>Permitted |
| U  | S<br>A | UL<br>UL | 5<br>35,500  | 4<br>19,000 | 2<br>8500   | 3<br>14,000 | 2<br>8,500  | 4<br>18,000 | 2<br>9,000       | 1<br>5,500       |

For SI: 1 foot = 305 mm, 1 square foot = 0.0929 m<sup>2</sup>.

S = Number of Stories, A = Building Footprint or Horizontal Projection Area, UL = Unlimited.

See general exceptions to Table 503 for: height increase (504.2), street frontage area (506.2), area (506.3) and Unlimited area building (507)

LDC = LAND DEVELOPMENT CODE ARTICLE 6.

- Note**
- a. For interior walls and floors, see Sections 501.2 and 503.5.
  - b. For open parking structures, see Section 406.3
  - c. For private garages, see Section 406.1

47. That Section 503.2 and its Subsections are added and shall read as follows:

**503.2 FIRE LIMITS:** For the purpose of control of use and construction of buildings to prevent danger of or damage from fire, the code official may establish limiting districts designated “fire limits” and “outside fire limits,” under the legal procedure of the jurisdiction for creating and establishing fire limits. All other areas not included in the fire limits shall be designated as outside the fire limits.

All real estate now included within the corporate limits of the Village of Orland Park, Illinois, and all real estate which may be hereafter included within the Village’s corporate limits is hereby declared to be within the “fire limits,” except real estate improved with single family detached dwellings and associated accessory buildings, and real estate improved with single family row dwellings where there is not a dwelling unit above another unit or use, and associated accessory buildings.

**503.2.1 GENERAL:** All buildings and structures, and all additions to existing buildings and structures,

hereafter erected within the boundaries of the fire limits shall be of Type 1, 2A, or 3A construction as defined in Chapter 6 and regulated in Table 602; and shall be constructed within the height and area limitations of Table 503 except as herein provided. Open parking structures may be constructed as permitted under Section 406.0.

Within the "fire limits," no building or structure or part thereof shall hereafter be constructed, erected or installed unless the exterior walls thereof shall be constructed of solid material: brick, stone, decorative masonry, decorative architectural concrete panels or similar materials or constructed of steel columns and beams with a veneer of anchored masonry, decorative architectural concrete panels or similar materials, except as hereinafter provided in subparagraphs 1 through 6, inclusive. The same material shall be installed on all of the exterior walls of the building.

**EXCEPTION:** Use Group R-1 buildings equipped throughout with an automatic fire sprinkler system per 903.3.1.1, may use a structurally engineered noncombustible exterior wall system when special inspections are performed by a State of Illinois Licensed Architect or Structural Engineer per Section 104.4, and Chapter 17 of this code. (Ord. 3994, 3-7-05)

This Solid Masonry requirement shall not apply to:

1. Multi-family garages. These may be of anchored brick veneer construction when located 15 feet or more from all property lines and built in accordance with the building code as amended;
2. Temporary one-story frame construction shed for use of builders. These may be of wooden construction;
3. One-story frame sheds accessory to residential uses as defined in the Land Development Code;
4. Wood fences not over six feet in height;
5. Industrial buildings. These may be constructed of metal siding under the following conditions:
  - a. The metal siding shall consist of panels described as Architectural Composite Panels, but not of the corrugated style or type;
  - b. The panels shall be factory assembled;
  - c. The panels shall have concealed fasteners;
  - d. The panels shall have an exterior protective finish with a guaranteed minimum 20-year protection color life.
  - e. A solid brick or solid decorative masonry knee wall shall be constructed to a minimum height of seven (7) feet on all sides of the building.
  - f. The knee wall shall enclose a minimum building floor area of 30,000 feet on all sides of the building.
  - g. When offices are built as part of or adjacent to the building, the wall material of the office areas shall be of the same material as the knee wall for the full height of the office areas.
6. Buildings over 5 stories or 60 feet in height when exterior walls have a tested 2 hour fire-resistance rated assembly. Protected openings are required per Section 503.2.3 and Section 705.3.

**503.2.2 HIGH HAZARD NOT PERMITTED:** Buildings of Use Group H shall not be permitted within the fire limits.

**503.2.3 TYPE 2B OR 3B CONSTRUCTION PERMITTED:** Buildings and structures, and additions to existing buildings and structures, hereafter erected within the fire limits may be of Type 2B or 3B construction as defined in Chapter 6 and regulated in Tables 602 and 503 when constructed and located in accordance with the requirements of Table 503.5.3.

**Table 503.2.3  
EXTERIOR WALL FIRERESISTANCE RATING REQUIREMENTS**

| 1. Width of fire separation adjacent to exterior wall            | 2. Fire-resistance rating of exterior wall <sup>a</sup> or barrier | 3. Fire-resistance rating of exterior opening protectives | 4. Minimum classification of roof covering |
|--|--|---|--|
| On lot lines or less than 3 feet there from or from any building | 4 hour   | Not Permitted   | B  |
| 3 feet or more but less than 6 feet                              | 3 hour   | 3 hour  | B  |
| 6 feet or more but less than 11 feet - Notes b,c                 | 2 hour   | 1-1/2 hour  | B  |
| 11 feet or more but less than 30 feet - Notes b,c                | 1 hour   | 3/4 hour  | B  |
| 30 feet or more - Notes b,c                                      | 0 hour   | 0 hour  | C  |

Note a - Not less than required by Table 602. The exterior wall or barrier shall extend to the height of the building and be so constructed so that it will remain structurally in place for the duration of time indicated by the required fire-resistance rating. When the exterior wall or barrier is adjacent to a flat roof, it shall be constructed with a parapet. (See Section 704.11 and 707.5.)

Note b - For multi family (R-2) not greater than 3 stories in height and vertically attached single family row dwellings (R-3 townhomes), the width of required fire separation distances may be reduced by 50% for each hourly rating.

Note c - For multi-family (R-2) not greater than 3 stories in height the exterior wall opening shall comply with Table 704.8.

**503.2.4 STORM ENCLOSURES:** Temporary storm enclosures may be erected of Type 2B or 5 construction not more than 10 feet in height and not more than 3 feet wider than the entrance doors which they serve, provided they do not project more than 10 feet beyond the building.

48. That Section 503.3 and its Subsections are added and shall read as follows:

**503.3 OUTSIDE THE FIRE LIMITS:** Outside the fire limits all types of construction for residential R-3 uses , except as herein specifically prohibited or for which commercial or special approval is required in connection with special uses and occupancies in Chapters 3 and 4 shall be permitted within the height and area limitations of Table 503.

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**503.3.1. FIRE SEPARATION:** Exterior walls shall be constructed with the fire-resistance ratings as required in Section 704.0.

**503.3.2 ROOF COVERINGS:** Roof coverings shall conform to the fire resistive requirements for Class A, B, or C or roofings complying with the provisions of Chapter 15.

49. That Section 506.3 shall read as follows:

**506.3 AUTOMATIC SPRINKLER SYSTEM INCREASE:**

Where a building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the area limitation in Table 503 is permitted to be increased by 100 percent (I s = 100 percent) for multi-story buildings and 200 percent (I s = 200 percent) for one and two story buildings. A 300 percent area increase is allowed for 1 and 2 story Churches of an A-3 Occupancy Classification. (Ord. 3910, 7-19-04)

**EXCEPTION:**

- a. Group H-1, H-2 or H-3 (Use groups not permitted within the Village).
- b. Multi-Story R-1 hotels with "Mixed occupancies" (per Section 302.3) of Type III construction, are allowed a 200% area increase from the area shown for Type V-A Construction in Table 503 of the model code without Village amendments, i.e. 12,000 sf. See Table 601 footnote k, for Type III Construction exception for this reduced basic floor area.  
(Ord. 4056, 7-18-05)

50. That Section 508.3.2.3 is revised and shall read as follows:

**508.3.2.3 SEPARATION** No separation is required between occupancies.

- Exception:
1. Group H-2, H-3, H-4 or H-5 occupancies shall be separated from other occupancies in accordance Section 508.3.3
  2. R-1, R-2 and attached single family of an R-3 use group shall be separated with 2-hour fire rated tenant wall as described in Sections 310.3

51. That Section 508.4 is added to Chapter 5 and shall read as follows:

**508.4 SEPARATE BUILDINGS:** Each use shall be considered a separate building when each such use is completely separated from adjacent uses by fire walls having a fire-resistance rating corresponding to that required by Table 602. Each building shall then comply with the provisions of this code applicable to the use of that building. For the purpose of figuring the total area of a building to determine if an approved fire suppression system is required, fire walls and separation walls will not be considered in establishing separate buildings or fire areas. A building must have separate exterior walls and roofs before it can be considered a separate building.

52. That Section 510.0 is added to Chapter 5 and shall read as follows:

**SECTION 510.0 - TRASH ENCLOSURES**

**510.1 WHERE REQUIRED:** Trash and Recycling enclosures shall be provided at all buildings and uses except for single family attached and detached dwelling units. The enclosed area shall be screened on three (3) sides by a wall from view from public streets and any abutting properties. There shall not be any types of enclosure or container in the front yard of any building or use including single family attached and detached units.

**510.2 CONSTRUCTION MATERIALS:** Any wall around a dumpster or trash handling area shall be constructed in a durable fashion of brick, stone, or other masonry materials with no greater than twenty-five percent (25%) of the wall surface left open for a gate. The wall shall be constructed of the same building material and in the same architectural style as the principal structure.

**EXCEPTION:** Manufacturing districts may use wood fencing materials constructed in a durable fashion in place of required brick, stone or other masonry materials as noted above. Newly constructed wooden garbage enclosures must be part of a site/elevation plan review required through the Community Development Department. (Ord. 4005, 4-4-05)

**510.3 ENCLOSURE HEIGHT:** Any enclosure constructed shall have a height not greater than seven (7) feet and not less than five (5) feet.

**510.4 FOUNDATION:** Any enclosure constructed shall have a concrete foundation capable of supporting the walls and any other live and dead loads anticipated.

**510.5 SIZE OF TRASH ENCLOSURE:** The area of a trash enclosure for a site or business shall be sized using dimensions, which relate to the size and use of the principal building and as approved by the Building Official.

53. That Section 511.0 is added to Chapter 5 and shall read as follows:

**511.0 ADDRESS AND STREET NUMBERS**

**511.1 REQUIRED:** All buildings, tenant spaces and structures shall have an address shown.

**511.2 APPROVAL:** Developer's engineer to submit to the Village Engineering Department a street and address map for approval.

**511.3 LOCATION:** All numbers shall be placed in a conspicuous place on or near the building entrance. The address is to be visible at night from a light fixture nearby.

**511.4 SIZE AND TYPE:** Number for address to be block style. Script type or written type not allowed.

**511.4.1 RESIDENTIAL, SINGLE FAMILY ATTACHED AND DETACHED (R-3):** Numbers shall be a minimum of four (4) inches in height.

**511.4.2 ALL OTHERS:** Numbers to be a minimum of six (6) inches in height.

**511.5 COLOR:** Address numbers to be a contrasting color to the background color they are being installed onto.

**511.6 STREET SIGNS:** Temporary street signs shall be installed by the developer so inspections can be made. The temporary signs may be painted on a piece of wood, but must be large enough to see and legible enough to read.

54. That Section 512 and its Subsections shall read as follows:

**512.0 MINIMUM FLOOR AREA FOR DWELLINGS:**

**512.1 AREA:** The minimum floor area above grade for single and multi-family dwellings, excluding the garages, based on the appropriate zoning district shall be as required in Sections 510.1.1 through 510.1.5.

**512.1.1 DISTRICT E-1 (SINGLE FAMILY):**

1. One story and split level type to contain 2000 square feet.
2. One story raised ranch main floor area to contain 2000 square feet.
3. Two story to contain 2600 square feet with a minimum of 1400 square feet of said floor area to be on the first floor.

**512.1.2 DISTRICT R-1 (SINGLE FAMILY):**

1. One story and split level type to contain 1800 square feet.
2. One story raised ranch main floor area to contain 1800 square feet.
3. Two story to contain 2400 square feet with a minimum of 1200 square feet of said floor area to be on the first floor.

**512.1.3 DISTRICT R-2 (SINGLE FAMILY):**

1. One story and split level type to contain 1600 square feet.
2. One story raised ranch main floor to contain 1600 square feet.
3. Two story to contain 2200 square feet with a minimum of 1100 square feet of said floor area to be on the first floor.

**512.1.4 DISTRICT R-3 (SINGLE FAMILY DETACHED AND ATTACHED):**

1. Detached:
  - a. One story and split level type to contain 1400 square feet.
  - b. One story raised ranch main floor to contain 1400 square feet.
  - c. Two story to contain 2000 square feet with a minimum of 1000 square feet of said floor area to be on the first floor.
2. Attached vertically (Duplex):
  - a. One story and split level type to contain 1000 square feet.
  - b. One story raised ranch main floor to contain 1000 square feet.
  - c. Two story to contain 1400 square feet with a minimum of 800 square feet of said floor area to be on the first floor.

**512.1.5 DISTRICT R-4 (SINGLE FAMILY ATTACHED AND DETACHED AND MULTI-FAMILY):**

1. Detached
  - a. See Section 510.1.4 (1) (Ord. 4005, 4-4-05)
2. Attached (Duplex)
  - a. See Section 510.1.4 (2) (Ord. 4005, 4-4-05)
3. Attached (Townhomes)
  - a. One story and split level type to contain 1000 square feet.
  - b. One story raised ranch main floor to contain 1000 square feet.
  - c. Two story to contain 1400 square feet with a minimum of 800 square feet of said floor area to be on the first floor.
4. Multi-Family

|                             |                  |
|-----------------------------|------------------|
| a. Efficiency Units         | 600 square feet  |
| b. One Bedroom Unit         | 700 square feet  |
| c. Two Bedroom Unit         | 800 square feet  |
| d. Three/more Bedroom Units | 1000 square feet |

55. That Table 601 shall read as follows:

**TABLE 601  
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (hours)**

| BUILDING ELEMENT   | TYPE I                           |                | TYPE II        |                | TYPE III       |                | TYPE IV | TYPE V         |   |
|--|----------------------------------|----------------|----------------|----------------|----------------|----------------|---------|----------------|---|
|  | A                                | B              | A <sup>d</sup> | B <sup>d</sup> | A              | B <sup>d</sup> | HT      | A <sup>d</sup> | B |
| Structural frame <sup>a</sup><br>Including columns, girders, trusses | 3 <sup>b</sup>                   | 2 <sup>b</sup> | 1              | 0              | 1              | 0              | HT      | 1              | 0 |
| Bearing walls  |                                  |                |                |                |                |                |         |                |   |
| Exterior <sup>f, i</sup>   | 3                                | 2              | 1              | 0              | 2              | 2              | 2       | 1              | 0 |
| Interior   | 3 <sup>b</sup>                   | 2 <sup>b</sup> | 1              | 0              | 1              | 0              | 1/HT    | 1              | 0 |
| Nonbearing walls and partitions                                      | See Table 602<br>See Section 602 |                |                |                |                |                |         |                |   |
| Exterior <sup>f, i</sup>   |                                  |                |                |                |                |                |         |                |   |
| Interior <sup>e, g, &amp; h</sup>                                    |                                  |                |                |                |                |                |         |                |   |
| Floor construction<br>Including supporting beams and joists          | 2                                | 2              | 1              | 0              | 1              | 0              | HT      | 1              | 0 |
| Roof construction<br>Including supporting beams and joists           | 1-1/2 <sup>c</sup>               | 1 <sup>c</sup> | 1 <sup>c</sup> | 0 <sup>c</sup> | 1 <sup>c</sup> | 0              | HT      | 1 <sup>c</sup> | 0 |

For SI: 1 foot = 304.8 mm.

- a. The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and bracing members designed to carry gravity loads.
- b. Roof supports: Fire-resistance ratings of structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
- c.
  1. Except in Factory-Industrial (F-I), Hazardous (H), Mercantile (M) and Moderate Hazard Storage (S-1) occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below.
  2. In all occupancies, heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.
- d. An approved automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed to be substituted for 1-hour fire-resistance-rated Type V construction, provided such system is not otherwise required by other provisions of the code or used for an allowable area increase in accordance with Section 506.3 or an allowable height increase in accordance with Section 504.2. The 1-hour substitution for the fire resistance of exterior walls shall not be permitted.

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- e. For interior nonbearing partitions in Type IV construction, also see Section 602.4.6.
- f. Not less than the fire-resistance rating based on fire separation distance (see Table 602.)
- g. Townhomes shall be separated by a three (3) wall system with the center wall having a two (2) hours fire resistance rating and shall be continuous from the foundation to the underside to the fire retardant roof sheathing installed per Section 707.6.2 and as required further by this code and the ordinance listed in Chapter 35. The two (2) hour fire resistance rated wall shall not be penetrated.
- h. Planned Unit Developments (P. U. D.'s) of single family vertically attached townhouse units (R-3), may use a 2 hour fire rated non-combustible wall assembly when located on a lot line between units. Exterior walls when located on or near lot lines and open to a separate non-buildable lot of at least 30' in width used as a common yard or open to a public way (street), may have zero (0) hours fire rating when all is located within the same P. U. D.
- i. Detached single family occupancies within the fire limits, may use unprotected openings when building exterior walls have at least a 7 feet separation distance to an imaginary line between 2 buildings (14 feet between buildings) allowing for a 0 hour fire rating of exterior walls. (see Section 708.8.3 exception #2 for required fire separations between units)
- j. Walls between tenants (in other than residential occupancies) and within the same building shall be continuous and extend from the floor to the floor or roof deck above. Openings for building service equipment less than 100 square inches are permitted for every 25 feet of wall separation length
- k. Bearing walls of Type III Construction are allowed to be reduced to a 1-hour fire-resistance rating when construction height and area does not exceed the allowable area specified in Section 506.3 Exception b (Type V-A Construction) (Ord. 4056, 7-18-05)

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56. That Table 602 shall read as follows:

**TABLE 602<sup>d</sup>**

**FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE<sup>a, g</sup>**

| FIRE SEPARTATION DISTANCE<br>(feet) | TYPE OF CONSTRUCTION | GROUP H | GROUP F-1, M, S-1 | GROUP A, B, E, F-2,R <sup>f</sup> , S-2, U <sup>b</sup> |
|-------------------------------------|----------------------|---------|-------------------|---|
| < 5 <sup>c</sup>                    | All                  | 3       | 2                 | 1   |
| ≥ 5                                 | IA                   | 3       | 2                 | 1   |
| < 10                                | Others               | 2       | 1                 | 1   |
| ≥ 10                                | IA, IB               | 2       | 1                 | 1   |
| < 30                                | IIB,VB               | 1       | 0                 | 0   |
|                                     | Others               | 1       | 1                 | 1   |
| ≥ 30                                | All                  | 0       | 0                 | 0   |

For s1 1foot = 304.8 mm.

- a. Load-bearing exterior walls shall also comply with the fire-resistance requirement of Table 601.
- b. For special requirements for Group U occupancies see Section 406.1.2
- c. See Section 705.1.1 for party walls.
- d. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
- e. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- f. Group U when used as accessory to Group R-3, as applicable in Section 101.2 shall not be required to have a fire-resistance rating where fire separation distance is 10 feet or more.
- g. See Table 503.2.3 for Types 2B and 3B Construction within the Fire Limits.

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57. That Section 602.3 shall read as follows:

**602.3 Type III:** Type III construction is that type of construction in which the exterior walls are of noncombustible and masonry- materials and the interior building elements are of any material permitted by this code.

58. That in Section 702.0 the definition for "Fire Wall" shall read as follows:

**702 DEFINITIONS**

**FIRE WALL:** A fire-resistance rated masonry wall, having protected openings, which restricts the spread of fire and extends continuously from the foundation to or through the roof with sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall. Fire walls shall not be penetrated. (See Section 707.0).

59. That Section 703.3 shall read as follows:

**703.3 ALTERNATIVE METHODS FOR DETERMINING FIRE RESISTANCE:**

Alternative methods for determining fire resistance. The application of any of the alternative methods listed in this section shall be based on the fire exposure and acceptance criteria specified in ASTM E 119. The required fire resistance of a building element shall be permitted to be established by any of the following methods or procedures:

1. Fire-resistance designs documented in approved sources.
2. Alternative protection methods as allowed by Section 104.11.

60. That Section 704.1 shall read as follows:

**704.1 GENERAL:** All exterior walls shall comply with the applicable provisions of this code and with the fire-resistance rating requirements of this section, Section 503.2.3 and Section 602.0.

**EXCEPTION:** The provisions of Sections 705.2 and 705.3 shall not apply to exterior walls which face buildings on the same lot where the buildings are such that, if combined into one structure, the resulting building will otherwise comply with the height and area limitations of Section 503.0 (see Section 503.1.2)

61. That Section 704.5.1 is added and shall read as follows:

**704.5.1 EXTERIOR WALLS OF ATTACHED R-3 RESIDENTIAL UNITS:** Exterior walls within the fire limits for attached single family residential buildings shall follow the requirements of footnote b in Table 503.2.3, but are not required to exceed a 2 hour fire separation rating when separation is less than 3 feet (less than 6 feet between exterior walls of 2 building on the same lot. **See definition of fire separation distance in Section 702).**

62. Table 704.8 shall read as:

**Table 704.8**  
**MAXIMUM AREA OF EXTERIOR WALL OPENINGS<sup>a,k,l</sup>**  
**Fire Separation Distance (in feet)**

| Classification of openings | Fire Separation Distance (in feet) |                                    |  |   |                                       |                                       |                                       |                       |
|----------------------------|------------------------------------|------------------------------------|--|---|---------------------------------------|---------------------------------------|---------------------------------------|-----------------------|
|                            | 0 to 3 <sup>f,j</sup>              | greater than 3 to 5 <sup>b,f</sup> | greater than 5-10 <sup>b,c,d,f,i</sup> | greater than 10-15 <sup>b,c,d,f,g,i</sup> | greater than 15-20 <sup>c,d,g,f</sup> | greater than 20-25 <sup>c,d,f,g</sup> | greater than 25-30 <sup>c,d,f,g</sup> | greater than 30       |
| Unprotected                | Not Permitted <sup>g</sup>         | Not Permitted <sup>b,g</sup>       | 10% <sup>g</sup>                       | 15% <sup>g</sup>                          | 25% <sup>g</sup>                      | 45% <sup>g</sup>                      | 70% <sup>g</sup>                      | No Limit <sup>b</sup> |
| Protected                  | Not Permitted                      | 15%                                | 25%                                    | 45%                                       | 75%                                   | No Limit <sup>b</sup>                 | No Limit <sup>b</sup>                 | No Limit <sup>b</sup> |

- a. Values given are percentage of the area of the exterior wall.
- b. See Section 704.7 for unexposed surface temperature.
- c. For occupancies in Group R-3, as applicable in Section 101.2, the maximum percentage of unprotected and protected exterior wall openings shall be 25 percent. See Table 601 Footnote i for exterior wall fire rating.
- d. The area of openings in an open parking structure with a fire separation distance of greater than 10 feet shall not be limited.
- e. For occupancies in Group H-2 or H-3, unprotected openings shall not be permitted for openings with a fire separation distance of 15 feet or less.
- f. For requirements for fire walls for buildings with differing roof heights, see Section 705.6.1.
- g. The area of unprotected and protected openings is not limited for occupancies in Group R-3, as applicable in Section 101.2 with a fire separation distance greater than 5 feet.
- h. Buildings whose exterior bearing wall, exterior nonbearing wall and exterior structural frame are not required to be fire-resistance rated shall be permitted to have unlimited unprotected openings.
- i. For special requirements for Group U occupancies, see Section 406.1.2.
- j. Buildings whose exterior bearing wall, exterior nonbearing wall and exterior structural frame are not required to be fire-resistance rated by Table 601 or 602 shall be permitted to have unlimited unprotected openings.
- k. Includes accessory buildings to Group R-3 as applicable in Section 101.2.
- l. See Table 503.2.3 for exterior wall openings in types 2B and 3B construction classifications.

63. That Section 705.9 shall read as follows:

**705.9 FIRE WALLS PENETRATIONS AND CUTTING :** Cutting of fire walls and party walls for chases, piping or for structural members shall not be permitted.

64. That Section in 707.4 shall be revised to read as follows:

**707.4 SHAFT FIRE RESISTANCE RATING:** Shafts and stairwells shall be enclosed with fire separation assemblies having a fire resistance rating of not less than two (2) hours. The number of stories connected by the shaft enclosure shall include any basements but not any mezzanines. Shaft enclosures shall have a fire-resistance rating not less than the floor assembly penetrated, but need not exceed 2 hours.

**EXCEPTIONS:**

1. Stairway enclosures of less than 3 stories may be of a fire resistive rating of not less than 1 hour. (See Section 1003.3.3.13)

65. That Section 708.1 General, shall read as follows:

**708.1 Fire Partitions General.**

Wall assemblies installed as required by Sections, 310.3, 402.7.2,1004.3.2.1 and 302.3 shall comply with this section. These include:

1. Walls separating dwelling units.
2. Walls separating sleeping units in Group R-1, R-2 and I-1 Occupancies.
3. Walls separating tenant spaces in covered mall buildings.
4. Corridor walls as required by Section 1017.1.
5. Elevator lobby separation as required by Section 707.14.1.
6. Residential aircraft hangars.
7. See Table 601 Footnote "j"
8. Wall separating tenants in multi-tenant business and commercial buildings. (Ord. 3910, 7-19-04)

66. That Section 708.3 is revised and shall read as follows:

**708.3 FIRE-RESISTIVE RATING OF FIRE PARTIONS**

The fire-resistance rating of fire partitions shall be 1 hour.

**EXCEPTIONS:**

1. Corridor walls as permitted by Table 1017.1 EXCEPTIONS ONLY.
2. **MULTIPLE SINGLE FAMILY DWELLINGS:** Single family dwelling units (Use Group R-3) may be located adjacent to other single family dwelling units (Use Group R-3) provided each dwelling unit is completely separated from the adjacent dwelling units(s) by fire separation wall(s) of not less than two hours fire-resistance rated construction as required by Section 310.3. The fire separation wall shall not be penetrated. Single family dwelling units having independent means of egress when attached in this manner, shall be considered as one building classified as Use Group R-3 for the purpose of determining the applicable provisions of this code.

3. FLOORS FOR USE GROUPS R-1 AND R-2:

Floors in Use Groups R-1 and R-2 as specified in Section 501.3.3 shall be a precast or engineered reinforced concrete fire barrier of at least a two (2) hour fire resistance rating where separating guest rooms, tenant spaces, dwelling units and exit corridors. (See Section 503.2 concerning fire limits and restrictions).

**EXCEPTION:** Floors In Hotels or Motels of an R-1 Use Group building may be reduced to a combustible one (1) hour horizontal fire resistance rating as required by Section 711.3 when a building is fully fire sprinkler protected per Section 903.2.7 and is designed with a minimum construction of Type IIB or IIIB. (See Section 501.3.3) (Ord. 3994, 3-7-05; Amd Ord. 4056, 7-18-05)

4. TENANT SPACE SEPARATIONS:

Walls and floor/ceilings separating tenants in multi-tenant business and/or commercial buildings shall be a 1 hour fire resistive rated assembly continuing through attic spaces tight to the roof deck or to a rated floor above. (Ord. 3910, 7-19-04)

67. That Section **708.4** shall read as follows:

**708.4 CONTINUITY:** All fire partitions shall extend from the top of the floor assembly below to the underside of the floor/roof slab or deck above or to the fire-resistance rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. The supporting construction shall be protected to afford the required fire-resistance rating of the wall supported, except for exit access corridor walls in buildings of Types 2B, 3B and 5B construction. All allow vertical spaces shall be fireblocked at every floor level as required in Section 717.

68. That Section 711.3 shall read as follows:

**711.3 HORIZONTAL FIRE-RESISTANCE RATING:**

The fire-resistance rating of floor and roof assemblies shall not be less than that required by the building type of construction. Where the floor assembly separates occupancies, or separates a single occupancy into different fire areas, the assembly shall have a fire-resistance rating of not less than that required by Section 302.3.3 based on the occupancies separated. Floor assemblies separating dwelling units or guestrooms shall be a minimum of two (2) hour fire-resistance-rated construction. See Sections 310.3, 501.3 and 708.3 Exceptions in R-1 Use Group buildings. Horizontal fire assemblies shall require special inspection reports by approved agencies or individuals for conformance to tested fire assemblies per Section 104.4 of this code. (Ord. 3994, 3-7-05)

Commercial tenant spaces shall be separated as noted in Section 708.3, item #4.

69. That Section 712.3 shall read as follows:

**712.3 PENETRATIONS OF FIRE-RESISTIVE RATED WALLS**

Penetrations that are allowed into or through fire walls, fire barriers, smoke barrier walls, and fire partitions shall comply with the provisions of this section.

**712.3.1.1.1 R-1 USE GROUP HOTEL AND MOTEL GUESTROOM FIRE SEPARATIONS**

Fire separations of a single wall assembly allowed in Hotels and Motels per Section 310.3.1 may be penetrated with electrical outlets only, using approved opening protectives. Electrical openings shall be as permitted in Section 712.3.1.2. In multi-story buildings, plumbing drain waste and vent piping shall not be located within tenant wall fire separation assemblies. Plumbing piping shall be located in separate fire rated shafts of a two (2) hour fire rated assemblies, per Section 707, when penetrating floors. (Ord. 3994, 3-7-05)

70. That Section 720.1 shall read as follows:

**720.1 PRESCRIPTIVE FIRE RESISTIVE GENERAL:**

The provisions of this section contain prescriptive details of fire-resistance-rated building elements. When allowed by the building official, the materials of construction listed in Tables 720.1(1), 720.1(2), and 720.1(3) may be assumed to have the fire-resistance ratings prescribed therein. A state of Illinois licensed architect or engineer must submit a detailed plan for the field assembly of any fire resistive applications used in these tables. Where materials that change the capacity for heat dissipation are incorporated into a fire-resistance-rated assembly, fire test results or other substantiating data shall be made available to the building official to show that the required fire-resistance rating time period is not reduced.

71. That Section 901.2 shall read as follows:

**901.2 FIRE PROTECTION SYSTEMS**

All fire protection systems required by this code shall be installed, repaired, operated and maintained in accordance with this code, the Fire Code and Village Codes and ordinances listed in Chapter 35. All required fire suppression and standpipe systems shall be provided with at least one automatic supply of fire extinguishing agent of adequate pressure, capacity and reliability to perform the function intended.

Fire Protection systems used for hood and duct systems protection reference in Section 904.11 or the Mechanical Code referenced in Chapter 35, shall use the NFPA Standard 96 for applications.

72. That Section 901.5.1 shall be added and read as follows:

**901.5.1 CERTIFICATION:** The contractor shall provide the code and fire officials with a certification indicating that the system is installed in compliance with this code and that the appropriate acceptance tests have been conducted. These systems shall be certified to U. L. or F. M. certification standards.

73. That Section 901.7 and its subsections are added to Section 901.0 and shall read as follows:

**901.8 FIRE DISTRICT ACCESS:** All buildings, structures and tenant spaces shall provided a key for the Knox Box to be used by the Fire District in case of an emergency.

**EXCEPTION:**

1. Buildings, structures or tenant spaces not required to have a knox box.

**901.8.1 KNOX BOX REQUIRED:** All buildings, structures or tenant spaces to be supervised as required by this code shall provide a Knox Box for placement of keys for access to the building, structure or tenant space for fire district use is case of an emergency. Tenants in a shopping center and multi-story office building may share a Knox Box with other tenants, however, verification in writing from the fire district is required. There shall be a maximum of seven (7) tenants or keys per box. See Sections 903.4.1 and 907.2 for required supervision

**901.8.2 LOCATION:** The location of the Knox Box shall be by the main entrance unless an alternate location is approved in writing by the fire district.

**901.8.3 MOUNTING HEIGHT:** The Knox Box shall be mounted between a minimum of 18 inches to a maximum height of six (6) feet above the immediate surrounding grade in which a person can stand on without any assistance.

**901.8.4 SUPERVISION:** All Knox Boxes shall be supervised in the “trouble mode” of the fire alarm by the dispatchers for:

**901.8.4.1 ORLAND FIRE PROTECTION DISTRICT:** All Knox Boxes installed within the Village limits south of 135th Street.

**901.8.4.2 PALOS FIRE PROTECTION DISTRICT:** All Knox Boxes installed within the Village limits north of 135th Street.

**901.8.4.3 MOKENA FIRE DISTRICT:** All Knox Boxes installed within the Village and located within the Mokena Fire District

74. That Section 901.9 is added to Section 901.0 and shall read as follows:

**901.9 CERTIFICATE OF SERVICE:** All required fire suppression and fire protection systems required to be supervised shall have the complete system checked, tested and certified that it meets this code and the Fire Code listed in Chapter 35, and is in proper working condition. All tests shall be witnessed by a member of the appropriate fire district with 24 hour notice given to the appropriate district. A new certificate shall be submitted to the code and fire officials on a yearly or multi-year basis.

75. That Section 901.10 and its Subsections are added to Section 901.0 and shall read as follows:

**901.10 CONSTRUCTION DOCUMENTS REQUIRED:** Construction documents or shop drawings, or both, for the installation of fire protection systems shall be submitted to indicate conformance to this code and shall be reviewed by the appropriate fire district prior to issuance of the permit.

Note: Since fire departments are responsible for inspecting the proper maintenance of fire protection systems in buildings, the administrative authority shall cooperate with the fire districts in the discharge of responsibility to enforce this chapter.

The construction documents and shop drawings submitted to fire protection districts, shall contain sufficient detail as outlined herein to evaluate the protected hazard and the effectiveness of the system.

This Code section for plans and documents has been removed from the New Code

**901.10.1 DETAILED SHOP DRAWINGS:** Shop drawings for the installation of fire protection systems shall be submitted for review and approval prior to the installation of a fire protection system. Included on the shop drawings shall be information showing the basis for compliance with the design density, the specific arrangement of the system, the devices and their method(s) of operation, and the suppression agent. The details on the construction documents or shop drawings for the fire protection system shall include design considerations, spacing and arrangement of fire protection devices, protection agent supply and discharge requirements, calculations with sizes and equivalent lengths of pipe and fittings, and protection agent source. Sufficient information shall be included to identify the apparatus and devices utilized and other information as required by this code.

**901.10.2 MATERIALS AND CONTENTS INFORMATION:** Construction documents for fire protection systems permit shall include information on the contents, the occupancy, the location and arrangement of the structure and the contents involved, the exposure to any hazard, the extent of the system coverage, the suppression system design criteria, the supply and extinguishing agents, the location of any standpipes, and the location and method of operation of detection and alarm devices.

76. That Subsection 903.1.2 is added to Section 903.1 and shall read as follows:

**903.1.2 TOTAL AREA:** For purposes of calculating total square feet (area), the total floor area includes mezzanines and basements contained within the surrounding exterior walls of the building on all floors and

levels which are added together. The area included within the surrounding exterior walls of a building includes canopies, when in the opinion of the code official the canopy creates or may create a hazardous situation, and all enclosed extensions and is also added to the calculation. Areas of a building not provided with surrounding walls shall be included within the building area if such areas are included within the horizontal projection of the roof or floor above. Interior walls, including fire walls, and horizontal fire walls (floors), fire separation walls and party walls, shall not be considered as walls which divide a structure into two or more separate buildings, but a structure containing such interior walls shall be considered as one building for the purposes of this Section.

**EXCEPTION:** Fire walls may be utilized to divide a structure of Use Group R-2 into more than one (1) building. The total area then shall be calculated between fire walls for compliance to this Chapter.

77. That Section 903.2.1 shall read as follows:

**903.2.1 USE GROUP A:** An automatic fire suppression system shall be provided throughout all buildings and/or areas of Use Group A as follows:

1. Where the total area of a Use Group A exceeds 5,000 square feet.
2. Where the seating capacity of a restaurant exceeds 74 seats.
3. Throughout all levels above and below where the Use Group A exceeds 5,000 square feet.

Subsections 903.2.1.1 through 903.2.1.4 shall comply with this Subsection of Assembly Uses.

Use Group A-5 requirements for concession stands etc. noted in Subsection 903.2.1.5 shall apply.

78. That Section 903.2.2 shall read as follows:

**903.2.2 USE GROUP E:** An automatic fire suppression system shall be provided throughout all buildings of Use Group E.

79. That Section 903.2.3 and its Subsections shall read as follows:

**903.2.3 USE GROUPS B, F-1, F-2, M, S-1, S-2:** An automatic fire suppression system shall be provided throughout all buildings of Use Group B, F-1, F-2, M, S-1, S-2 having a total area of 8,000 square feet or greater. Public garages shall also conform to Section 406.0.

**903.2.3.1 Woodworking operations.**

An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 2,500 square feet (232 m<sup>2</sup>) in area which generate finely divided combustible waste or which use finely divided combustible materials.

80. That Section 903.2.5 shall read as follows:

**903.2.5 USE GROUP I:** An automatic fire suppression system shall be provided throughout all buildings of Use Group I.

81. That Section 903.2.7 shall read as follows:

**903.2.7 USE GROUP R-1:** An automatic fire suppression system shall be provided throughout all buildings and/or areas of Use Group R-1.

**USE GROUP R-2:** An automatic fire suppression system shall be provided throughout all buildings and/or areas of Use Group R-2 having a total floor area greater than 10,000 square feet or four (4) or more stories in height.

**903.2.7.1 USE GROUP R-2 FURNACE ROOMS:** A minimum of one (1) sprinkler head is required in each furnace room and/or utility room in all multi-family, multi-story buildings less than 10,000 square feet. The required sprinkler head shall be installed in the potable water system without any branch piping. A backflow preventor will not be required.

82 That Section 903.2.8 shall read as follows.

**903.2.8 GROUP S-1:** See section 903.2.3 and 903.2.9 for fire sprinkler area requirements.

**903.2.8.2 BULK STORAGE OF TIRES:** Buildings and structures where the area for the storage of tires Exceeds 20,000 cubic feet (566 m3) shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

83 That Section 903.2.9 shall read as follows

**903.2.9 GROUP S-2:** Section 903.2.9 shall apply for fire sprinkler system requirements.

**(F) 903.2.9.1 Commercial parking garages.** An automatic sprinkler system shall be provided throughout buildings used for storage of commercial trucks or buses where the fire area exceeds 8,000 square feet (464 m2). (See Section 903.2.3 that regulates this Use Group).

84. That Subsection 903.3.1 is added to Section 906.1 and shall read as follows:

**903.3.1.1 FIRE SPRINKLER SYSTEM STANDARDS:**

Sprinkler systems shall be designed and installed in accordance with Sections 903.3.1.1, 903.3.1.2 or 903.3.1.3.

**SPRINKLER PIPING MATERIAL:** All sprinkler piping material to be approved metallic piping. Plastic pipe is not allowed for sprinkler piping material except for a R-3 Use Group.

85. That Subsection 903.3.1.2 shall read as follows:

**903.3.1.2 NFPA 13R SYSTEMS:** In Use Group R-2 buildings greater than 10,000 square feet or less than four residential stories in height, systems may be designed and installed in accordance with NFPA 13R listed in Chapter 35. An addressable fire alarm system shall be installed as required by the Orland, Palos or Mokena Fire Protection District.

**903.3.1.2.1 Balconies and decks.** Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units where the building is of Type V construction. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

86. That Section 903.3.5 is added to Section 903.0 and shall read as follows:

**903.3.5 WATER SUPPLIES.**

Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the Village Plumbing Code. Locations of exterior Fire District connections shall be as approved by the building and fire officials.

87. That Subsection 903.3.5.1. is added to Section 903. 3.5.1 and shall read as follows:

**903.3.5.1 DOMESTIC CONNECTION:** A backflow preventor shall be installed as required by Section 903.3.5. Shut off valves shall not be permitted in the suppression system piping. Water supply shall be controlled by the riser control valve to the domestic water piping.

**EXCEPTION:** Shut-off valve in the sprinkler system piping are permitted provided that such valves are supervised (signaled) in accordance with Section 903.4.1.

88. That Section 903.3.5.3 is added to Section 903.3.5 and shall read as follows:

**903.3.5.3 CROSS CONNECTION:** Public water supply shall be protected from all suppression, standpipe and limited area systems by a backflow preventor as required by Village Ordinance No. 1519 and the plumbing code as listed in Chapter 35.

89. That Section 903.3.5.4 is added to Section 903.3.5 and shall read as follows:

**903.3.5.4 MULTI-TENANT OCCUPANCY:** When an automatic fire suppression system is installed in a multi-tenant building, each tenant shall have its own supply line off the main or riser with its own water flow switches control valve and strobe light mounted on the exterior of the tenant space and as indicated in Section 903.4.

90. That Section 903.4.1 and its subsections shall read as follows:

**903.4.1 FIRE SUPPRESSION SIGNALING:** All automatic fire suppression systems shall be supervised by connecting to the appropriate dispatcher for the Village of Orland Park in accordance with NFPA 72 listed in Chapter 35 and Subsections 903.4.1.2 through 903.4.1.5

**EXCEPTIONS:**

1. Underground gate valves with roadway boxes.
2. Limited area sprinkler system.

**903.4.1.2 ORLAND FIRE PROTECTION DISTRICT:** All installations within the village limits and within the Orland Fire Protection District Limits.

**903.4.1.3 PALOS FIRE PROTECTION DISTRICT:** All installations within the village limits and within the Palos Fire Protection District limits.

**903.4.1.4 MOKENA FIRE PROTECTION DISTRICT:** All installation with the village limits within the Mokena Fire Protection District limits.

**903.4.1.5 TENANT SPACE LIGHT:** In every tenant space in a shopping center, strip mall, or where there are multiple tenants, there shall be a flashing, blinking or revolving strobe light visible in a public access area indicating which tenant space the activated system is in. The exact location of the light shall be verified with the fire official.

91. That Subsection 903.6 shall read as follows:

**903.6 CROSS CONNECTION:** The potable water supply shall be protected against backflow in accordance to Village Code Title 4 Chapter 11 and the plumbing code listed in Chapter 35.

92. That Subsection 905.3.1 shall read as follows:

**905.3.1 BUILDING HEIGHT:** Standpipe systems shall be installed throughout all buildings greater than 2 stories in height or floor levels more 30 feet above fire department vehicle access or when there is more than one story below the highest level of fire department vehicle access.

93. That Subsection 905.3.1.1 shall be added to read as follows:

**905.3.1.1 BUILDING AREA:** Standpipe systems shall be installed in all buildings where any portion of the building floor area is more than 30 feet above or below or has more than 250 feet of travel from the nearest point of fire department vehicle access.

**EXCEPTIONS:**

1. Buildings of Use Group R-2 meeting the requirements of Section 1019.2.
2. Buildings of Use Group R-3.

94. That Section 906 shall read as follows:

**906: PORTABLE FIRE EXTINGUISHERS WHERE REQUIRED:** Portable fire extinguishers of the approved type and size shall be installed in all buildings and tenant spaces at locations approved by the fire district or as referenced in the Village Fire Code adopted and referenced in Chapter 35.

95. That Section 907.2 and its Subsections shall read as follows:

**907.2 FIRE ALARM AND DETECTION SYSTEM WERE REQUIRED:**

An approved manual, automatic, or manual and automatic fire alarm system shall be provided in accordance with Sections 907.2.1 through Section 907.2.23. Where automatic sprinkler protection, installed in accordance with Section 903.3.1.1 or 903.3.1.2, is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required. An approved automatic fire detection systems shall be installed in accordance with the provisions of this code and NFPA 72. Devices, combinations of devices, appliances and equipment shall comply with Section 907.1.2. The automatic fire detectors shall be smoke detectors, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms where, during normal operation, products of combustion are present in sufficient quantity to actuate a smoke detector.

Fire Alarm and Detection systems are required in all buildings and/or portions thereof unless the building has 100% fire sprinkler system protection per this code.

**907.2.10.2 POWER SOURCE:**

In new construction, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for over current protection.

*The Illinois Smoke Detector Act shall apply and take precedence where more restrictive to all residential units*

**EXCEPTIONS:**

1. Smoke alarms are not required to be equipped with battery backup in Group R-1 where they are connected to an emergency electrical system.

2. Smoke alarms are permitted to be solely battery operated in existing buildings, buildings not served from a commercial power source and in existing areas where alterations or repairs regulated for Residential alterations and repairs and do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

96. That Section 907.9 shall read as follows:

**907.9 ALARM INDICATING APPLIANCES:** Alarm notification appliances shall be provided and shall be listed for their purpose. Alarm indicating appliances shall meet the requirements of the Illinois Accessibility Code, listed in Chapter 35, whichever is more restrictive.

97. That Section 907.9.3 and its subsections shall read as follows:

**907.9.3 FIRE PROTECTION SIGNALING SYSTEMS:** All required fire protective signaling systems shall transmit alarm and trouble signals to the appropriate dispatcher for the Village of Orland Park in accordance with NFPA 72 listed in Chapter 35 and in Sections 907.9.3.1, 907.9.3.2 and 907.9.3.4.

*Note: this section is also referenced in the Fire Code.*

**EXCEPTION:**

1. Single station detectors as required by Section 907.2.10.
2. Smoke detectors in patient sleeping rooms in buildings of Use Group I-2 (see Section 407.6 Exception)

**907.9.3.1 ORLAND FIRE PROTECTION DISTRICT:** All installations within the village limits and within the Orland Fire Protection District Limits.

**907.9.3.2 PALOS FIRE PROTECTION DISTRICT:** All installations within the village limits and within the Palos Fire Protection District limits.

**907.9.3.4 MOKENA FIRE PROTECTION DISTRICT:** All installation with the village limits within the Mokena Fire Protection District limits.

**907.9.3.5 USE GROUP R-2 PUBLIC AREAS:** Required smoke detectors and manual pull stations located in the public hallways of all multi-family, multi-story buildings shall be connected to the appropriate dispatcher for the Village of Orland Park through the main fire alarm panel.

98. **Insert** after the definition of Bleachers, "Clear width-doors" to Section 1002.0 .

**1002.1 CLEAR WIDTH-DOORS:** Doorway clear width is measured with the door open 90° degrees, measured between the face of the door and the face of the opposite stop.

99. That Subsection 1003.2.7 shall read as follows:

**1003.5 Elevation change.**

Where changes in elevation of less than 12 inches (305 mm) exist in the means of egress, sloped surfaces shall be used. Where the slope of a route is greater than one unit vertical in 20 units horizontal (5-percent slope), ramps complying with Section 1010 and Chapter 11 of this code shall be used. Where the difference in elevation is 6 inches (152 mm) or less, the ramp shall be equipped with either handrails or floor finish materials that contrast with adjacent floor finish materials.

**EXCEPTIONS:**

1. A stair with a single tread (1 tread and 2 risers or less) with a maximum riser height of 8 inches (178 mm), is permitted for buildings with occupancies in Groups F, H, R-2 and R-3 and as applicable in Section 101.2, and Groups S and U at exterior doors and doors into attached private garages not required to be accessible by Chapter 11.
2. A stair with a single riser or with two risers and a tread is permitted at locations not required to be accessible by Chapter 11, provided that the risers and treads comply with Section 1009.3, the minimum depth of the tread is 13 inches (330 mm), and at least one handrail complying with Section 1012 is provided within 30 inches (762 mm) of the centerline of the normal path of egress travel on the stair.
3. An aisle serving seating that has a difference in elevation less than 12 inches (305 mm) is permitted at locations not required to be accessible by Chapter 11, provided that the risers and treads comply with Section 1025.11 and the aisle is provided with a handrail complying with Section 1025.13. Any change in elevation in a corridor serving nonambulatory persons in a Group I-2 occupancy shall be by means of a ramp or sloped walkway.

100. That Section 1006 shall read as follows:

**1006.1 MEANS OF EGRESS ILLUMINATION, ARTIFICIAL /EMERGENCY LIGHTING:** All means of egress, including the exit discharge, all multi-facility restrooms, electrical and mechanical rooms, paths of travel, enclosed stairs, and other locations required by the code and fire officials, shall be equipped with artificial lighting facilities to provide the intensity of illumination herein prescribed continuously during the time that conditions of occupancy of the building required that the exits be available. All stairs within or serving a dwelling unit shall be provided with illumination and controls in accordance with Section 1205.4. Lighting shall also be provided to illuminate the exit discharge. Means of egress lighting in occupancies in Use Group R-2, other than lighting within a dwelling unit, shall be wired on a circuit independent of circuits within any dwelling unit. The disconnecting means and overcurrent protection device shall not be located within a dwelling unit or such that access to such devices must be obtained by going through a dwelling unit.

**1006.2 EMERGENCY POWER SOURCE:** All means of egress lighting in all buildings or portions thereof shall be connected to an independent power source (battery back-up) or other approved auxiliary power (emergency generator) to assure a duration of not less than 1-1/2 hour continued illumination in case of an emergency or power loss. All power sources shall be installed in accordance with The Village Code Title 5 Chapter 3 (Village Electrical Code).

**1006.3 ILLUMINATION LEVEL:** The means of egress illumination level shall not be less than 1 foot-candle (11 lux) at the walking surface level. This level of illumination may be an average but in no case shall be less than 0.1 foot-candle at any point of egress along the floor level.

**Exception:** For auditoriums, theaters, concert or opera halls and similar assembly occupancies, the illumination at the walking surface level is permitted to be reduced during performances to not less than 0.2 foot-candle (2.15 lux), provided that the required illumination is automatically restored upon activation of a premises' fire alarm system where such system is provided.

101. That Section 1008.1.3.5 shall read as follows:

**1008.1.3.5 SECURITY GRILLES:** Horizontal sliding or vertical security grilles that are part of a means of egress shall be openable from the inside without the use of a key of special knowledge or effort. A

sign indicating an emergency release along with the release shall be placed within six feet of the grille. The sign and release shall be placed between 18 and 48 inches above finished floor. The grille shall be openable with a maximum force of 5 pounds to a minimum height of 4 feet above the floor. The grille shall remain secured in the full-open position during the period of occupancy by the general public. Grilles shall not be brought to the closed position and locked when there are more than 10 persons occupying the space. Where two or more exits are required, not more than one-half of the exits shall be equipped with grilles. To facilitate fire district access to a space with grilles, a key for the grille or grilles shall be placed in an alarmed Knox-Box for fire district use in an emergency.

102. That Subsection 1008.1.9 shall read as follows:

**1008.1.9 PANIC AND FIRE EXIT HARDWARE:**

Where panic and fire exit hardware is installed, it shall comply with the following:

1. The actuating portion of the releasing device shall extend at least one-half of the door leaf width.
2. A maximum unlatching force of 15 pounds (67 N). Each door in a means of egress from an occupancy of Group A, I-2 or E having an occupant load of 100 or more and any occupancy of Group H-1, H-2, H-3 or H-5 shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware. If balanced doors are used and panic hardware is required, the panic hardware shall be of the push-pad type and the pad shall not extend more than one-half the width of the door measured from the latch side.

103. That Subsection 1008.4 shall read as follows:

**1008.4 HAZARDOUS AREAS:** Doors leading to hazardous areas such as loading platforms, switch rooms and mechanical rooms shall be equipped with knobs, handles or push bars that have been knurled on the side away from danger. Doors leading to hazardous areas that have self-closing devices and automatically lock from the side from which accidental egress can be made are permitted to be installed without knurling on the operating device.

104. That Subsection 1010 shall read as follows:

**1010 RAMPS:** Ramps used as a means of egress shall meet this code and the State of Illinois Accessibility Code listed in Chapter 35.

105. That Section 1011 shall read as follows:

**1011.1 EXIT SIGN LOCATION:** EXIT signs shall be located at all exit doors and/or exit access areas, so as to be readily visible. Sign placement shall be such that any point in the exit access shall not be more than 100 feet from the nearest visible sign. Exit signs shall direct occupant to required exits.

**EXCEPTIONS:**

1. "EXIT" signs are not required in sleeping room areas of Use Group I-3, R-1 and R-2.
2. Use-Group R-3 and its accessory buildings.
3. In a tenant space of Use Groups B & M having an area of 250 square feet or less and having only one door in the space which is the exit access door.

**1011.2 EXIT SIGN ILLUMINATION:** In all buildings and portions thereof, all required means of egress

shall be indicated with approved internally illuminated signs reading EXIT, visible from the exit access and, when necessary, supplemented by directional signs in the access corridors or wherever indicated or required, indicating the direction and way of egress. Signs shall be listed and labeled and installed in accordance with the manufacturer's instructions. Exit signs shall be illuminated at all times.

**1011.3 SIZE AND COLOR FOR EXIT SIGNS:** "Exit" signs shall have red letters at least 6 inches high and the minimum width of each stroke shall be 3/4 inch on a white or black background. The word "EXIT" shall have letters having a width of not less than 2 inches except that the letter "I" and the minimum spacing between letters shall not be less than 3/8 inch. Signs larger than the minimum size herein required shall have letter widths and spacing in the same proportions to the height as indicated in this section. If an arrow is provided as part of an "Exit" sign, the construction shall be such that the arrow direction cannot be readily changed. The word "Exit" shall be clearly discernible and energized at all times. Light Emitting Diodes (LEDS) exit signs will be considered as meeting the requirements of this Section and Section 1011.4.

**1011.4 STAIRWAY EXIT SIGNS:** Each door to an enclosed exit stairway shall be equipped with tactile signage reading "EXIT" complying with the Illinois Accessibility Code listed in Chapter 35 and installed on the side of the door from which egress is to be made.

**1011.5 POWER SOURCE:** All exit signs shall be illuminated at all times. Exit signs shall be connected to an independent power source (battery back-up for each unit) or other approved auxiliary power (emergency generator) to assure a duration of not less than one and one-half (1-1/2) hour continued illumination in case of an emergency or power loss. All power sources shall be installed in accordance with The Village Code Title 5 Chapter 3 (Village Electrical Code).

106. That Subsection 1012.1.1 shall be added read as follows:

**1012.1.1 EXCEPTIONS FOR REQUIRED HANDRAILS**

1. Aisle stairs provided with a center handrail need not have additional handrails.
2. Stairways for dwelling units not required to be accessible, spiral stairways and aisle stairs serving seating only on one side are permitted to have a handrail on one side only.
3. Decks, patios, and walkways that have a single change in elevation where the landing depth on each side of the change of elevation is greater than what is required for a landing do not require handrails.
4. In Group R-3 occupancies, a change in elevation consisting of 2 risers and one tread at exterior entrance or egress doors do not require handrails.

107. That Subsection 1013.4 shall read as follows:

**1013.4 SCREEN PORCHES:** Porches and decks that are enclosed with insect screening shall be provided with guards where the walking surface is located more than *16 inches* (762 mm) above the floor or grade below.

**EXCEPTIONS:**

1. Guards are not required where a protective bar is installed 34 inches to 38 inches above the porch or deck on the side of the screening having access thereto. The bar shall be capable of resisting a horizontal load of 50 pounds per linear foot without contacting the screen and be a minimum of 1-1/2 inches in height.

2. Deck less than 30 inches in height above grade may use secure permanent benches at least 18 inches in height in lieu of guardrails.

108. That Subsection 1013.7 shall be added to read as follows:

**1013.7 EXTERIOR WINDOW WELL OPENINGS ADJACENT TO AND WITHIN 3 FEET OF WALKING PATHS :** Exterior window well openings at grade levels having more than a 16 inch change of elevation, must be protected with an approved structural grate or grill for the protection of these openings at the ground levels adjacent to the exterior wall of buildings. Design of protecting grates/grills must resist 200 pounds of force at any point and be readily removable from the interior side at an emergency escape well opening required by Section 1009.1.

109. That Subsection 1014.2 and 1014.2.1 shall read as follows:

**1014.2. EGRESS THROUGH ADJOINING SPACES:** Egress from a room or space may open into an adjoining or intervening room or area, provided such adjoining room is accessory to the area served, is not of a higher hazard than the room or space from which egress is made, and provides a direct means of egress to an exit. The adjoining space shall be limited to less than 10% of the space though which it passes and has a discernable path of travel . When the egress is through a storage area or similar space it shall be a minimum of four (4) feet in width and the floor shall be striped with a contrasting color distinguishable from other areas for the full length of the access.

**1014.2.1.EGRESS PATHS NOT PERMITTED:** An exit access shall not pass though a kitchen, mechanical room, restroom, closet or similar space. An exit access shall not pass through a room subject to locking. Means of egress from dwelling units, rooming units, guest-rooms and dormitory units shall not lead through other such units, or through toilet rooms or bathrooms.

110. That Table 1015.1 shall read as follows:

**TABLE 1015.1  
SPACES WITH ONE MEANS OF EGRESS**

| USE GROUP | MAX. OCCUPANT LOAD | MAX. TRAVEL DISTANCE (FT) | MAX. SIZES SPACE (SQ. FT.) |
|-----------|--------------------|---------------------------|----------------------------|
| A         | 50                 | 50                        | 1000                       |
| B         | 50                 | 75                        | 3000                       |
| E         | 25                 | 50                        | 1000                       |
| F         | 30                 | 75                        | 3000                       |
| H-2       | 3                  | 50                        | 1000                       |
| H-3       | 3                  | 50                        | 1000                       |
| H-4       | 10                 | 50                        | 1000                       |
| I*        | 10*                | 50*                       | 2000*                      |
|           |                    |                           |                            |

|     |    |     |      |
|-----|----|-----|------|
| M   | 50 | 75  | 2000 |
| R   | 10 | 75  | 2000 |
| S,U | 30 | 100 | 3000 |

\* Except Day Care Centers (2 means of egress are required for Day Care Centers)

111. That Subsection 1019.2 shall read as follows:

**1019.2 BUILDINGS WITH ONE EXIT:** Only one exit shall be required in buildings of Use Group R-3 and in buildings of the use groups and characteristics specified in Table 1019.2. Exterior doors that are provided in addition to the minimum required shall conform to this code for landings and stair requirements to grade when installed.

**TABLE 1019.2  
BUILDINGS WITH ONE EXIT\***

| Use Group | Maximum Height Above Grade * | Size                       | Maximum Exit Access Travel Distance | Minimum Fire Resistance Rating of Exit Enclosure | Minimum Fire Resistance Rating of Opening Protection |
|-----------|------------------------------|----------------------------|-------------------------------------|--|--|
| R-2       | 3 stories                    | 2 dwelling units per floor | 50 feet                             | 2 hour   | 1 hour   |
| B         | 2 stories                    | 3000 square feet per floor | 50 feet                             | 1 hour   | 1 hour   |

\* No Basements or Cellars are allowed with a single exit except as may be allowed for an R-3 Use

112. That Subsection 1020 shall read as follows:

**1020.1 INTERIOR VERTICLE EXIT ENCLOSURES:** Interior exit stairways and interior exit ramps shall be enclosed with fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. Exit enclosures shall have a fire-resistance rating of not less than 2 hours where connecting Three stories or more and not less than 1 hour where connecting less than three stories. The number of stories connected by the exit enclosure shall include any basements but not any mezzanines. An exit enclosure shall not be used for any purpose other than means of egress.

**EXCEPTIONS:**

1. In all occupancies, other than Group H and I occupancies, a stairway is not required to be enclosed when the stairway serves an occupant load of less than 10 and the stairway complies with either Item 1.1 or 1.2. In all cases, the maximum number of connecting open stories shall not exceed two.
  - 1.1 The stairway is open to not more than one story above the story at the level of exit discharge; or
  - 1.2 The stairway is open to not more than one story below the story at the level of exit discharge.

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2. Exits in buildings of Group A-5 where all portions of the means of egress are essentially open to the Outside need not be enclosed.
3. Stairways serving and contained within a single residential dwelling unit or sleeping unit in Group R-1, R-2 or R-3 occupancies are not required to be enclosed.
4. Stairways that are not a required means of egress element are not required to be enclosed where such stairways comply with Section 707.2.
5. Stairways in open parking structures that serve only the parking structure are not required to be enclosed.
6. Stairways in Group I-3 occupancies, as provided for in Section 408.3.6, are not required to be enclosed.
7. Means of egress stairways as required by Section 410.5.3 are not required to be enclosed.
8. In other than Group H and I occupancies, a maximum of 50 percent of egress stairways serving one Adjacent floor are not required to be enclosed, provided at least two means of egress are provided from both floors served by the unenclosed stairways. Any two such interconnected floors shall not be open to other floors. Unenclosed exit stairways shall be remotely located as required in Section 1015.2.
9. In other than Group H and I occupancies, interior egress stairways serving only the first and second stories of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 are not required to be enclosed, provided at least two means of egress are provided from both floors served by the unenclosed stairways. Such interconnected stories shall not be open to other stories. Unenclosed exit stairways shall be remotely located as required in Section 1015.2.

113. That Subsection 1020.1.7 shall read as follows:

**1020.1.7 SMOKEPROOF ENCLOSURES WHERE REQUIRED:** All exit stairways serving buildings having more than 5 stories or 60 feet in height shall be protected by a smoke proof enclosure. Section 405.8.2 shall also apply to buildings having floors below grade (underground buildings).

**1020.1.7.1 Enclosure exit.** A smokeproof enclosure or pressurized stairway shall exit into a public way or into an exit passageway, yard or open space having direct access to a public way. The exit passageway shall be without other openings and shall be separated from the remainder of the building by 2-hour fire-resistance-rated construction.

**EXCEPTIONS:**

1. Openings in the exit passageway serving a smokeproof enclosure are permitted where The exit passageway is protected and pressurized in the same manner as the smokeproof enclosure, and openings are protected as required for access from other floors.
2. Openings in the exit passageway serving a pressurized stairway are permitted where the exit passageway is protected and pressurized in the same manner as the pressurized stairway.
3. A smokeproof enclosure or pressurized stairway shall be permitted to egress through Areas on the level of discharge or vestibules as permitted by Section 1024.

114. That Subsection 1023.2. shall read as follows:

**1023.2. USE IN A MEANS OF EGRESS.**

Exterior exit stairways shall not be used as an element of a required means of egress for occupancies in Group I-2. For occupancies in other than Group I-2, exterior exit stairways shall be permitted as an element of a required means of egress for buildings not exceeding 2 stories or 30 feet (22 860 mm) in height subject to the provision of Sub-section 1023.3.

115. That Section 1023.3 shall read as follows:

**1023.3 EXTERIOR RAMPS AND STAIRWAYS OPEN SIDES:** Exterior ramps and stairways shall have openings on at least one side facing an outer court, yard or public way. The openings shall have an aggregate width of not less than 20 percent (20%) of the stairway perimeter and an aggregate area on each level of not less than 12 percent (12%) of the total perimeter wall area of each level. In occupancies other than Use Group R-3, treads, platforms and landings which are part of the exterior stairways and are subject to snow and ice shall be protected to prevent accumulation of same. The protection of the exterior stairway shall be a three sided enclosure with a roof or other approved designs. The enclosure shall be of the same materials and type of construction as the structure it is attached to. Exterior stairways shall not be accepted as an exit in the following cases:

1. Building of Use Group I-2.
2. Buildings greater than 2 stories in height.

116. That Subsection 1024.1 shall read as follows:

**1024.1 EXIT DISCHARGE:** All exits shall discharge directly at a public way or at a yard, court or open space of the required width and size to provide all occupants with a safe access to a public way. The exit discharge shall be onto a paved area of concrete, asphalt or other approved material and shall be a minimum of 5 feet by 5 feet in size. The exit discharge paved area shall also take into consideration the State of Illinois Accessibility Code, listed in Chapter 35, for wheelchair use. An exit discharge shall not re-enter a building.

**EXCEPTIONS:**

1. A maximum of 50 percent of the number and capacity of the exit enclosures is permitted to egress through areas on the level of discharge provided all of the following are met:
  - 1.1. Such exit enclosures egress to a free and unobstructed way to the exterior of the building, which way is readily visible and identifiable from the point of termination of the exit enclosure.
  - 1.2. The entire area of the level of discharge is separated from areas below by construction conforming to the fire-resistance rating for the exit enclosure.
  - 1.3. The level of discharge is protected throughout by an approved automatic sprinkler system and any other portion of the level of discharge with access to the discharge area is protected throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 or separated from the other portions of the building in accordance with the requirements for the enclosure of exits.
2. A maximum of 50 percent of the number and capacity of the exit enclosures is permitted to egress through a vestibule provided all of the following are met:
  - 2.1. The entire area of the vestibule is separated from areas below by construction conforming to the fire-resistance rating for the exit enclosure.
  - 2.2. The depth from the exterior of the building is not greater than 10 feet (3048 mm) and the length is not greater than 30 feet (9144 mm).
  - 2.3. The area is separated from the remainder of the level of exit discharge by construction providing protection at least the equivalent of approved wired glass in steel frames.
  - 2.4. The area is used only for means of egress and exits directly to the outside.

3. In Use Group R-3 the minimum landing size shall be 3 foot by 3 foot.
4. Stairways in open parking garages complying with Section 1020.1, Exception 5, are permitted to egress through the open parking garage at the level of exit discharge.

117. That in Section 1026.1 shall read as follows:

**1026.1 EMERGENCY ESCAPE GENERAL.**

In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R as applicable in Section 101.2 and Group I-1 occupancies. Basements and sleeping rooms below the fourth story shall have at least one exterior emergency escape and rescue opening in accordance with this section. Such opening shall open directly into a public street, public alley, yard or court. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement.

**EXCEPTIONS:**

1. In other than Group R-3 occupancies as applicable in Section 101.2, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
2. In other than Group R-3 occupancies as applicable in Section 101.2, sleeping rooms provided with a door to a fire-resistance-rated corridor having access to two remote exits in opposite directions.
3. The emergency escape and rescue opening is permitted to open onto a balcony within an atrium in accordance with the requirements of Section 404 provided the balcony provides access to an exit and the dwelling unit or sleeping room has a means of egress that is not open to the atrium.
4. Basements with a ceiling height of less than 7 feet 0 inches (2032 mm) shall not be required to have emergency escape and rescue windows. (*Note: Habitable rooms are not allowed for basements less than 7 feet 0 inches in height.* See Section 1208.2.
5. High-rise buildings in accordance with Section 403.
6. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior exit balcony that opens to a public way.
7. Basements without habitable spaces and having no more than 200 square feet (18.6m<sup>2</sup>) in floor area shall not be required to have emergency escape windows.
8. As otherwise approved by the code official.

118. That Section 1026.5.3 shall read as follows:

**1026.5.3 WINDOW WELL GUARDS:** Exterior window wells deeper than 44 inches below the top of the window well shall be protected with guards. Bars, grilles, grates, or similar devices are permitted to be placed over emergency escape window well openings provided the minimum net clear opening size complies with Section 1009.5.1 and such devices shall be releasable or removable from the inside without the use of a key, tool, or force greater than that which is required for normal operation of the escape and rescue opening.

119. That Section 1101.1 and 1101.2 shall read as follows:

**1101.1 SCOPE:** The design and construction of facilities for the physically disabled persons shall comply with the State of Illinois Accessibility Code as listed in Chapter 35. IBC Code Sections 1103 through 1109 are deleted as shown in Section 5-1-12 of the Village Code. (Ord. 3994, 3-7-05)

**1101.2 DESIGN:** Buildings and Facilities shall be designed and constructed to meet the Illinois Accessibility Code. (Ord. 3994, 3-7-05)

**1110 SIGNAGE FOR ACCESSIBILITY:**

The ICC subsections of the Section (1110.1 through 1110.3) may be used for reference by the "Building Official" only when there is no conflict with the Illinois Accessibility Code. The State of Illinois Accessibility Code shall be used where regulations are similar.

120. That Subsection 1203.4.1.2 shall read as follows:

**1203.4.1.2 OPENINGS BELOW GRADE:** Where openings below grade provide required natural ventilation, the outside horizontal clear space measured perpendicular to the opening shall be one and one-half times the height of the opening.

121. That Subsection 1203.4.2.1 shall read as follows:

**1203.4.2.1 BATHROOMS, TOILET AND POWDER ROOMS:** Every bathroom, toilet and powder room and kitchen shall be provided with mechanical exhaust ventilation. Mechanical ventilation shall be provided in accordance with the mechanical code as referenced in Title 5 of the Village Code. (Ord. 3994, 3-7-05)

122. That Section 1203.5.1 is added to Section 1209.0 and shall read as follows:

**1203.5.1 RECIRCULATION:** Recirculation of air supplied to kitchens, toilet rooms, bathrooms, restrooms, locker rooms, storage areas, laboratories, garages and similar rooms shall not be permitted.

123. That Section 1203.6 shall read as follows:

**1203.6 ALTERNATIVE MECHANICAL VENTILATION:** Enclosed attic, rafter, and crawl spaces may be equipped with a mechanical ventilation system conforming to the requirements of the mechanical code listed in Chapter 35. The mechanical system cannot replace more than 50 percent of the required roof vents.

124. That Subsection 1205.2.3 shall be added to read as follows:

**1205.2.3 BASEMENT NATURAL LIGHTING:** A minimum natural lighting of 2% of the floor areas (glass See Section 1203.4.1.3) is require for a basement. Habitable spaces in basements require 8% of the floor area for exterior openings for the room or space served for light and ventilation as noted in Section 1205.3.

125. That Sections 1207.2 and 1207.3 shall read as follows:

**1207.2 AIR-BORNE NOISE:** Walls, partitions and floor/ceiling assemblies, separating dwelling units from each other or from public or service areas shall have a sound transmission class (STC) of not less than 50 for air-borne noise when tested in accordance with ASTM E90 listed in Chapter 35. This requirement shall not apply to dwelling unit entrance doors; however, such doors shall be tight fitting to the frame and sill.

**1207.3 STRUCTURE BORNE SOUND:** Floor/ceiling assemblies between dwelling units or between a dwelling unit and a public or service area within the structure shall have an impact insulation class (IIC) rating of not less than 50 when tested in accordance with ASTM E492 listed in Chapter 35.

126. That Section 1208.2 shall read as follows:

**1208.2 CEILING HEIGHTS:** Habitable (spaces) rooms other than kitchens shall have a ceiling height of not less than 7 feet 6 inches. Hallways, corridors, bathrooms, toilet rooms, kitchens, laundry rooms and habitable basements that are only used as recreation rooms shall have a ceiling height of not less than 7 feet measured to the lowest projection from the ceiling.

**EXCEPTIONS:**

1. In occupancies in Use Group R-3, the maximum projection below the required ceiling height of beams and girders spaced not less than 4 feet on center shall be 6 inches.
2. If any room in a building has a sloping ceiling, the prescribed ceiling height for the room is required in one-half the area thereof. Any portion of the room measuring less than 5 feet (1524 mm) from the finished floor to the finished ceiling shall not be included in any computation of the minimum area thereof.
3. Mezzanines constructed in accordance with Section 505.1.

127. That Section 1209.0 shall read as follows:

**1209.1 ACCESS TO CRAWL SPACE:** Access shall be provided to crawl spaces by a minimum opening size of 24 inches by 24 inches, but not less than what would be required to remove and install any equipment taken out.

**1209.2 ACCESS TO ATTIC:** An opening not less than 20 inches by 30 inches with ready access thereto shall be provided to any attic area having a clear height of over 30 inches. If an attic access is provided for in a closet, it shall be of the walk in type only without obstruction to the attic access opening. Access openings shall be large enough to remove and install any equipment taken out. Pull down ladder/stairs shall be provided when mechanical equipment is installed in the attic area. A minimum 24 inch wide walk way shall be provided up to and around the mechanical equipment.

**1209.3 MECHANICAL APPLIANCES** Access to mechanical appliances installed in under-floor areas, in attic spaces, and on roofs or elevated structures shall be in accordance with the International Mechanical Code and Section 1209.3.1.

**1209.3.1 EQUIPMENT ON ROOFS OR ELEVATED STRUCTURES:** Where equipment and appliances requiring access are installed on roofs or elevated structures at a height exceeding 16 feet, such access shall be provided by a permanent approved means of access, the extent of which shall be from grade or floor level to the equipment's level service space. Such access shall not require climbing over obstructions greater than 30 inches high or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). See mechanical code listed in Chapter 35 for additional requirements.

**1209.4 ACCESS FOR WHIRLPOOL:** Access to the motor and shut off switch shall be provided by a minimum opening size of 14 inches by 14 inches. Any plumbing fixture, framing or any electrical and/or plumbing piping shall not block access.

128. That Subsection 1211 shall read as follows:

**SECTION 1211  
MISCELLANEOUS BUILDING ELEMENTS**

**1211.1 DOORSTOPS:** All swinging doors shall be provided with doorstops to prevent damage to adjacent walls, equipment or fixtures. Stops may be provided for on the wall, baseboard, floor or hinge.

129. That Subsection 1301.1.1 shall read as follows:

**1301.1.1 CRITERIA:**

Buildings shall be designed and constructed in accordance with Section 1302., The International Energy Conservation Code/2006 Edition and as regulated by the State Of Illinois.

130. That Section 1302 shall read as follows:

**1302. RESIDENTIAL INSULATION REQUIREMENTS:**

**1302.1 Minimum R Values**

The minimum R-values for insulating components shall be as follows:

| LOCATION   | MINIMUM R-VALUE |
|--|-----------------|
| Exterior walls   | 13              |
| Ceiling, flat  | 30              |
| Ceiling, vaulted   | 19              |
| Heated floor slab on grade   | 5               |
| Floor or foundation wall above unheated area                                 | 13              |
| Exterior foundation walls for habitable spaces below grade (finish basement) | 5               |

131. That Section 1401.2 is added to Section 1401.0 and shall read as follows:

**1401.2 GUTTERS AND DOWNSPOUTS:** Gutters and downspouts, exterior or interior, are required on all buildings and shall be constructed of approved corrosion resistant non-combustible or schedule 40 plastic pipe materials. All gutters and downspout material shall have a permanent color finish. Any alternative commercial building drainage system(s) design, shall be approved by the Building Official with the intent of designating roof drainage locations, property maintenance and weather protection to the building and the public.

132. That Section 1403.7 is added to Section 1403.0 and shall read as follows:

**1403.7 EXTERIOR WALL & VENEER REQUIREMENTS:** Construction of exterior walls shall comply with Sections 501.3 and 503.2.1.

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133. That Subsection 1405.1.1 is added to Section 1405.1 and shall read as follows:

**1405.1.1 BACKING SURFACES FOR VENEERS IN TYPE 5 CONSTRUCTION:** Wood backing surfaces may be used in Type 5 construction and shall be a minimum ½ inch thick. All types of veneers shall have a backing surface unless approved by the code official.

134. That Table 1405.2 shall read as follows:

**TABLE 1405.2  
MINIMUM THICKNESS OF WEATHER COVERINGS d.**

| COVERING TYPE                                | MINIMUM THICKNESS<br>(inches) |
|--|-------------------------------|
| Anchored masonry veneer (see Section 501.3)  | 2.625 <i>depth</i>            |
| Aluminum siding                              | 0.019                         |
| Exterior plywood (with sheathing)            | ½ inch                        |
| Exterior plywood (without sheathing)         | ½ inch                        |
| Glass-fiber reinforced concrete panels       | 0.375                         |
| Marble slabs                                 | 1                             |
| Precast stone facing                         | 0.625                         |
| Steel (approved corrosion resistant)         | 0.0149                        |
| Stone (cast artificial)                      | 1.5                           |
| Stone (natural)                              | 2                             |
| Structural glass                             | 0.344                         |
| Stucco or exterior Portland cement plaster   |                               |
| Three-coat work over:                        |                               |
| Metal plaster base                           | 0.875 <sup>b</sup>            |
| Unit masonry                                 | 0.625 <sup>b</sup>            |
| Cast-in-place or precast concrete            | 0.625 <sup>b</sup>            |
| Two-coat work over:                          |                               |
| Unit masonry                                 | 0.5 <sup>b</sup>              |
| Cast-in-place or precast concrete            | 0.375 <sup>b</sup>            |
| Terra cotta (anchored)                       | 1                             |
| Vinyl siding                                 | 0.035                         |
| Wood shingles                                | 0.375                         |
| Wood siding (without sheathing) <sup>a</sup> | 0.5                           |

For SI: 1 inch = 25.4 mm

- a. Wood siding of thickness less than 0.5 inch shall be placed over sheathing that conforms to Section 2304.6.
- b. Exclusive of texture.
- c. As measured at the bottom of decorative grooves.
- d. See Sections 501.3 and 1403.7 for required exterior masonry veneers

135. That Subsection 1405.2.1 is added to Section 1405 and shall read as follows:

**1405.2.1 BUILDING PAPER AND MOISTURE BARRIER:**

Where veneers of brick, clay tile, concrete, stucco or natural or artificial stone are used, 15 pound felt or an approved moisture barrier paper shall be attached to the sheathing with flashing wherever necessary to prevent moisture penetration behind the veneer. Flashing shall be installed behind the building paper and over foundation walls in such a manor so as to provide for moisture drainage and protection as referenced in Section 1405.3.2 for masonry and other veneer applications as required in sections of this code. .

136. That Subsection 1405.5.3 is added to Section 1405 and shall read as follows:

**1405.5.3 WOOD FRAME:** Masonry veneer anchored to wood framing shall be attached with corrosion-resistant corrugated sheet metal not less than 0.029 inch (No. 22 gage) by  $\frac{7}{8}$  inch wide, or corrosion-resistant ties of strand wire not less than 0.148 inch (No. 9 W&M gage) wire with the ends of the wire bent to a 90-degree angle to form a hook not less than 2 inches long. The metal ties shall be embedded in the mortar joint a minimum of one-half the veneer thickness. Each metal tie shall support not more than 3 square feet of wall area with a maximum spacing of 16 inches vertically and 32 inches horizontally. Where anchored veneer is applied over wood frame the studs shall be spaced a maximum of 16 inches on center. A 1-inch minimum air space shall be maintained between the anchored veneer and the sheathing. Moisture protection shall be provided as required by Section 1405.2.1.

137. That Subsection 1405.5.4 is added to Section 1405.5 and shall read as follows:

**1405.5.4 STEEL FRAME:** Masonry veneer anchored to corrosion-resistant steel framing shall be attached with corrosion-resistant ties of strand wire not less than 0.148-inch (No. 9 W&M gage) wire with the ends of the wire bent to a 90-degree angle to form a hook not less than 2 inches long. The wire ties shall be embedded in the mortar joint a minimum of one-half the veneer thickness. Each metal tie shall support not more than 2.67 square feet of wall area with a maximum spacing of 16 inches vertically and 24 inches horizontally. Where anchored veneer is applied over steel frame, the studs shall be spaced a maximum of 16 inches on center and be faced with sheathing (as allowed for each type of construction in Chapter 6) on both sides. A 1-inch minimum air space shall be maintained between the anchored veneer and the sheathing. Moisture protection shall be provided as required by Section 1405.2.1

138. That Subsection 1405.5.5 is added to Section 1405.5 and shall read as follows:

**1405.5.5 MASONRY OR CONCRETE WALLS:** Masonry veneer anchored to masonry or concrete walls shall be attached with corrosion-resistant ties of strand wire not less than 0.148-inch (No. 9 W&M gage) wire with the ends of the wire bent to a 90-degree angle to form a hook not less than 2 inches long. The metal ties shall be embedded in the mortar joint a minimum of one-half the veneer thickness. Each metal tie shall support not more than 3 square feet of wall area with a maximum spacing of 16 inches vertically and 32 inches horizontally. A 1-inch minimum air space shall be maintained between the anchored veneer and the supporting masonry or concrete walls.

139. That Section 1405.8 shall read as follows:

**1405.8 Terra cotta:**

Anchored terra cotta or ceramic units not less than 1.625 inches (41 mm) thick shall be anchored directly to masonry or concrete construction. Tied terra cotta or ceramic veneer units shall be not less than 1.625 inches (41 mm) thick with projecting dovetail webs on the back surface spaced approximately 8 inches (203 mm) on center. The facing shall be tied to the backing wall with corrosion-resistant metal anchors of not less than No. 8 gage wire installed at the top of each piece in horizontal bed joints not less than 12 inches (305 mm) nor more than 18 inches (457 mm) on center; these anchors shall be secured to 0.25-inch (6.4 mm) corrosion-resistant pencil rods that pass through the vertical aligned loop anchors in the backing wall. The veneer ties shall have sufficient strength to support the full weight of the veneer in tension. The facing shall be set with not less than a 2-inch (51 mm) space from the backing wall and the space shall be filled solidly with Portland cement grout and pea gravel. Immediately prior to setting, the backing wall and the facing shall be drenched with clean water and shall be distinctly damp when the grout is poured.

140. That Section 1405.14.1 shall be added to read as follows:

**1405.14.1 EXTERIOR INSULATION AND FINISH SYSTEM (EIFS):** Special inspection shall be required for EIFS installations having a total area greater than 1,000 square feet and shall be in accordance with Section 1704.12. The EIFS installation shall be approved and tested materials complying with the ASTM standards as listed in Chapter 35. When an EIFS is installed it shall not be lower than the top of the front windows or seven feet (7'-0") above grade whichever is higher or as approved by the Community Development Department.

141. That 1503.4.1 and Table 1505.1 shall read as follows:

**1503.4.1 Gutters:** Add the requirements of Section 1401.2 as amended to this sub-section.

**TABLE 1505.1: (MINIMUM ROOF COVERING CLASSIFICATION)**

**Delete** footnotes a and c. See Section 503.2.3 for buildings within the Fire Limits

142. That Subsection 1507.1.1 shall be added to Subsection 1507.1 to read as follows:

**1507.1.1 Ice Dam Protection for Roofs:** Within the Village of Orland Park ice dam protection is required for all types of roof coverings except "Built Up" or "Membrane" type roofs requiring underlayment(s). The ice barrier shall consist of at least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet, shall be used in lieu of normal underlayment and extend from the eave's edge to a point at least 24 inches (610 mm) inside the exterior wall line of the building.

143. That Section 1507.2.8.2 shall be revised to read as follows:

**1507.2.8.2 ASPHALT SHINGLES ICE DAM MEMBRANE:** Within the Village Of Orland Park, a membrane that consists of at least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet shall be used in lieu of normal underlayment and extend from the eave's edge to a point at least 24 inches (610 mm) inside the exterior wall line of the building.

**EXCEPTION:** Detached accessory structures that contain no conditioned floor area.

144. That Table 1507.8 shall read as follows:

**Table 1507.9.3 WOOD SHAKE UNDERLAYMENT:** In all areas of Orland Park an Ice Shield underlayment is required for wood shake installation as noted in this Section. Underlayment shall comply with ASTM D226, Type I or ASTM D4869. In areas where there has been a history of ice forming along the eaves causing a backup of water, an ice barrier that consists of at least two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet shall be used in lieu of normal underlayment and extend from the eave's edge to a point at least 24 inches (610 mm) inside the exterior wall line of the building.

**EXCEPTION:** Detached accessory structures that contain no conditioned floor area.

145. That Section 1608.3 and 1608.4 shall be added to read as follows:

**1608.3 FLAT AND LOW-SLOPED ROOF SNOW LOADS:** The snow loads on unobstructed flat roofs and roofs having a slope of 5 degrees (1 inch per foot = 4.76 degrees) or less ( $P_f$ ) shall be calculated in pounds per square foot using a minimum ground snow load of 30 pounds per square foot where:

The snow load on low sloped roofs having a slope of greater than 5 degrees (1 inch per foot = 4.76 degrees) but less than 18.43 degrees (4/12 or 4 inches per foot) shall be calculated in pounds per square foot using a minimum ground snow load of 30 pounds per square foot.

A state of Illinois licensed architect or structural engineer shall prepare all structural design as required by the Illinois Department of Professional Regulation Acts.

**1608.4 SLOPED ROOF SNOW LOADS:** The snow load on sloped roofs having a slope of greater than 18.43 degrees (*4/12 or 4 inches of rise per each 12 inches of horizontal run*) shall be calculated in pounds per square foot using a minimum ground snow load of 30 pounds per square foot.

**ROOF LOAD EXCEPTION:**

The ground snow load for sloped roofs having a slope greater than 30 degrees (*7/12 or 7 inches of rise for 12 inches of horizontal run*) shall be not less than 20 psf. Reductions in snow loads shall not be permitted.

Snow loads acting on a sloping surface shall be considered to act on the horizontal projection of that surface.

A state of Illinois licensed architect or structural engineer shall prepare all structural design as required by the Illinois Department of Professional Regulation Acts.

146. That Section 1612.2 shall read as follows:

**1612.1 FLOOD RESISTANT CONSTRUCTION:** All buildings and structures erected in areas prone to flooding shall be constructed and elevated as required by the provisions of this section and Village of Orland Park Ordinance Number 2028 and 2084, as amended, listed in Chapter 35. Where there are conflicting requirements, the most stringent shall prevail.

Within flood hazard areas as established in Section 1612.3, all new construction of buildings, structures and portions of buildings and structures, including substantial improvements and restoration of substantial damage to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and flood loads.

147. That Subsection 1803.2.1 shall read as follows:

**1803.2.1 BACKFILL COMPACTION:** All backfill material shall be laid and compacted in layers of not more than 16 inches thick. Care must be used so the foundation will not be damaged.

148. That Table 1805.(1) shall read as follows:

**Table 1805.5(1)  
PLAIN CONCRETE FOUNDATION WALLS<sup>a</sup>**

| Wall height<br>(feet) | Depth of<br>unbalanced<br>backfill height<br>(feet) | Minimum wall thickness (inches)  |   |  |
|-----------------------|---|--|---|--|
|                       |   | Soil classes and lateral soil load <sup>a</sup> (pounds per square foot per foot of depth) |   |  |
|                       |   | GW, GP, SW and<br>SP soils<br>30   | GM, GC, SM, SM-SC<br>and ML soils<br>45 | SC, MH, ML-<br>CL and<br>inorganic CL<br>soils<br>60 |

|   |             |        |        |        |
|---|-------------|--------|--------|--------|
| 7 | 4 (or less) | 10     | 10     | 10     |
|   | 5           | 10     | 10     | 10     |
|   | 6           | 10     | 10     | 10     |
|   | 7           | 10     | 10     | 10     |
| 8 | 4 (or less) | 10     | 10     | 10     |
|   | 5           | 10     | 10     | 10     |
|   | 6           | 10     | 10     | 10     |
|   | 7           | 10     | 10     | 10     |
| 9 | 8           | 10     | 10     | 12     |
|   | 4 (or less) | 10     | 10     | 10     |
|   | 5           | 10     | 10     | 10     |
|   | 6           | 10     | 10     | 10     |
|   | 7           | 10     | 10     | 10     |
|   | 8           | 10     | 10     | 12     |
|   | 9           | Note b | Note b | Note b |

Note a. For design lateral soil loads and description of soil classes, see Section 1611.0. Soil classes are in accordance with the Unified Soil Classification System and design lateral soil loads are for moist soil conditions without hydrostatic pressure.

Note b. An analysis in compliance with ACI 318 listed in Chapter 35 is required.

149. That Subsection 1805.1.1 shall be added to read as follows:

**1805.1.1 STEP FOOTINGS:** Step footing foundation walls shall be reinforced by a minimum of 2 #4 reinforcing bars or as designed by an architect or structural engineer.

150. That Subsection 1805.1.2 shall read as follows:

**1805.1.2 DEFINITIONS:** The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

**Wall:**

**Foundation Wall:** A wall below the floor nearest grade which serves as a structural support for a wall, pier, column or other part of a building, or the wall of a basement that resists lateral soil load. Foundation walls shall be constructed of solid concrete material as noted in Section 1805.5.2..

**Retaining Wall:** A wall that is not laterally supported at the top, designed to resist lateral soil load.

151. That Section 1805.2.1 shall read as follows:

**1805.2.1 FROST PROTECTION:** Except when erected upon solid rock or otherwise protected from frost, foundation walls, piers and other permanent supports of all buildings and structures larger than 120 square feet in area or 13 feet in height, shall extend below the frost line (minimum 42 inches), and spread footings of adequate size shall be provided when necessary to properly distribute the load within the allowable bearing value of the soil. Or such structures shall be supported on piles when solid earth to rock is not available. Footings shall not bear on frozen soils.

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**EXCEPTION:**

1. Detached garages for single-family dwellings (Use Group R-3) may use a monolithic type pour for floors with an 18" deep perimeter foundation.
2. Sheds for single-family dwellings greater than 120 square feet must use a monolithic type pour for floor and foundation.

152. That Section 1805.4.2.3 and its Subsections shall read as follows:

**1805.4.2.3 PLAIN CONCRETE FOOTING:**

In plain concrete footings, the edge thickness shall not be less than 10 inches (203 mm) for footings on soil.

**1805.4.2.3.1 MINIMUM FOOTING WIDTH FOR R-3 STRUCTURES:**

For occupancies of Group R-3 of light- frame construction, the required minimum footing width supporting foundation walls shall be 20 inches.

**EXCEPTION:**

Minimum 12" trench footings are allowed for building additions subject to design by a State of Illinois licensed architect or engineer and approval by Building Official.

153. That Section 1805.5 and its Subsections shall read as follows:

**1805.5 FOUNDATION WALLS:** Concrete foundation walls shall be designed in accordance with Chapter 19 or 21. Foundation walls that are laterally supported at the top and bottom and within the parameters of Table 1805.5(1) is permitted to be designed and constructed in accordance with Sections 1805.5.1 through 1805.5.4.

**1805.5.1 FOUNDATION WALL THICKNESS:** The minimum thickness of concrete foundation walls that are laterally supported at the top and bottom shall comply with Sections 1805.5.1.1 through 1805.5.1.3, or shall be designed in accordance with ACI 530/ASCE 5/TMS 402 or ACI 318 listed in Chapter 35. Foundation walls that are not laterally supported at the top and bottom and foundation walls that are not within the parameters of Table 1805.5 (1) shall be designed in accordance with ACI 530/ASCE 5/TMS 402 or ACI 318 listed in Chapter 35.

**1805.5.1.1 THICKNESS BASED ON WALLS SUPPORTED:** The thickness of foundation walls shall not be less than the thickness of the wall supported, except that foundation walls of at least 10 inch nominal width shall be permitted to support brick-veneered frame walls and 10 inch wide cavity walls where the total height of the wall supported, including gables, is not more than 20 feet, provided the requirements of Section 1805.5 (1) are met.

**1805.5.1.2 THICKNESS BASED ON SOIL LOADS, UNBALANCED BACKFILL HEIGHT AND WALL HEIGHT:** The thickness of foundation walls shall comply with the requirements of Table 1805.5 (1) for plain concrete walls.

**1805.5.1.3 PLAIN CONCRETE:** The thickness of concrete foundation walls shall not be less than required in Section 1805.5 (1) where the height of the unbalanced fill (height of finished ground level above the basement floor or inside ground level) exceeds 8 feet or where the equivalent fluid weight of the unbalanced fill exceeds 30 pounds per cubic foot or where the height of the foundation wall between lateral supports exceeds 8 feet, the foundation wall thickness shall be determined by structural analysis in accordance with ACI530/ASCE5TMS402 or ACI318.1 listed in Chapter 35.

154. That Subsection 1805.5.2 shall read as follows:

**1805.5.2 FOUNDATION WALL MATERIALS:**

A Foundation wall shall be constructed of solid concrete building material (for its entire depth, width and height) with a minimum thickness as specified in Section 1805.5.1.3 and is continuous extending from the top of a footing to at least 4 inches above the building's final exterior grade elevations level(s). (Ord. 3910, 7-19-04)

Foundation walls shall be constructed of solid concrete designed by a State of Illinois licensed design professional and in accordance with Table 1805.5(5) or shall comply with the following: (Ord. 3910, 7-19-04)

1. The size and spacing of vertical reinforcement shown in Table 1805.5(5) is based on the use of reinforcement with a minimum yield strength of 60,000 psi (414 MPa). Vertical reinforcement with a minimum yield strength of 40,000 psi (276 MPa) or 50,000 psi (345 MPa) is permitted, provided the same size bar is used and the spacing shown in the table is reduced by multiplying the spacing by 0.67 or 0.83, respectively.
2. Vertical reinforcement, when required, shall be placed nearest the inside face of the wall a distance,  $d$ , from the outside face (soil side) of the wall. The distance,  $d$ , is equal to the wall thickness,  $t$ , minus 1.25 inches (32 mm) plus one-half the bar diameter,  $d_b$  [ $d = t - (1.25 + d_b/2)$ ]. The reinforcement shall be placed within a tolerance of  $\pm 3/8$  inch (9.5 mm) where  $d$  is less than or equal to 8 inches (203 mm) or  $\pm 1/2$  inch (2.7 mm) where  $d$  is greater than 8 inches (203 mm).
3. In lieu of the reinforcement shown in Table 1805.5(5), smaller reinforcing bar sizes with closer spacings that provide an equivalent cross-sectional area of reinforcement per unit length of wall are permitted.
4. Concrete cover for reinforcement measured from the inside face of the wall shall not be less than 3/4 inch (19.1 mm). Concrete cover for reinforcement measured from the outside face of the wall shall not be less than 1.5 inches (38 mm) for No. 5 bars and smaller and not less than 2 inches (51 mm) for larger bars.
5. Concrete shall have a specified compressive strength,  $f_c$ , of not less than 2,500 psi (17.2 MPa) at 28 days.
6. The unfactored axial load per linear foot of wall shall not exceed  $1.2 t f_c$ , where  $t$  is the specified wall thickness in inches.

155. That Section 1805.10 and its Subsections shall read as follows:

**1806.1 DESIGN FOR RETAINING WALLS:** Retaining walls shall be designed to resist the design lateral soil loads in Section 1610. including both dead and live load surcharges to which such walls are subjected; and to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Where the backfill or the retaining wall exceeds 4 feet in height, it shall be designed by an Illinois Architect or Structural Engineer.

**1806.1.1 GUARDS FOR RETAINING WALLS:** Where retaining walls with differences in grade level on either side of the wall in excess of 18 inches are located closer than 3 feet to a walk, path, parking lot or driveway on the high side, such retaining walls shall be provided with guard details that are constructed in accordance with Sections 1013.1, 1013.2 and 1013.3 or other approved protective measure.

156. That Section 1806.2 shall read as follows:

(3/07)

**1807.2 DAMPPROOFING REQUIRED:** Where hydrostatic pressure will not occur as determined by Section 1802.2.3 floors and walls shall be damp proofed in accordance with this section.

157. That Subsection 1806.2.2.1 shall read as follows:

**1807.2.2.1 SURFACE PREPARATION OF WALL:** Prior to application of damp proofing material on concrete walls, all holes and recesses resulting from the removal of form ties shall be sealed with a bituminous material or other approved materials.

158. That Subsections 1806.3.2 and 1806.3.2.1 shall read as follows:

**1807.3.2 WATERPROFFED WALLS:** Walls required to be waterproofed shall be of concrete and shall be designed and constructed to withstand the hydrostatic pressures and other lateral loads to which the walls will be subjected.

Waterproofing shall be applied from the bottom of the wall to not less than 12 inches (305 mm) above the Maximum elevation of the ground-water table. The remainder of the wall shall be dampproofed in accordance with Section 1807.2.2. Waterproofing shall consist of two-ply hot-mopped felts, not less than 6-mil (0.006 inch; 0.152 mm) polyvinyl chloride, 40-mil (0.040 inch; 1.02 mm) polymer-modified asphalt, 6-mil (0.006 inch; 0.152 mm) polyethylene or other approved methods or materials capable of bridging nonstructural cracks. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

**1807.3.2.1 SURFACE PREPARATION OF WALLS:** Prior to the application of waterproofing materials on concrete walls, the walls shall be prepared in accordance with Section 1807.2.2.1.

159. That Subsection 1807.4 shall read as follows:

**1807.4 SUBSOIL DRAINS:** Subsoil drains shall be provided around foundations enclosing habitable or usable spaces located below grade or which are subjected to ground water conditions. Drains shall be installed 1 inch below the top of foundation footing and shall discharge by mechanical means into an approved drainage system complying with the plumbing code listed in Chapter 35.

160. That Subsection 1807.4.3 shall read as follows:

**1807.4.3 DRAINAGE DISCHARGE:**

The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the Illinois Plumbing Code as listed in Chapter 35.

161. That Subsection 1906.4 and its Subsections shall read as follows:

**1906.4. LOCATION OF JOINTS:** Joints in girders shall be offset a minimum distance of two times the width of intersecting beams. Control and isolation joints shall be provided for all flat work in accordance with Subsections 1906.4.4.1 and 1906.4.4.2.

**1906.4.1 CONTROL JOINTS LOCATION:** Control joints shall be provided for in driveways, patios, walks and garage floors.

**1906.4.1 (a) SIDEWALKS:** Joints shall be spaced a maximum of 4 feet for service walks and 5 feet for public walks for the full width of the walk.

**1906.4.1 (b) PATIOS, GARAGE FLOORS AND DRIVEWAYS:** Joints shall be provided at maximum intervals of 10 feet each way.

**1906.4.1 (c) DEPTH OF JOINTS:** Joints may be tooled or sawed and the depth of the joint can be figured by  $T/4$  (T= thickness of concrete). The maximum width shall be 1/4 inch.

**1906.4.2 ISOLATION JOINTS LOCATION:** Isolation joints are used to separate dissimilar construction. Joints shall be provided where the walk abuts the house, porch, driveway, steps, curbs, and other construction.

**1906.4.2 (a) JOINT MATERIALS:** Isolation joint materials shall be 1/2" thick premolded joint material or approved equal for the full depth of the slab.

162. That Section 1906.5 shall read as follows:

**1906.5 SLEEVES:** When a column is to be installed, a sleeve shall be provided if the floor is placed prior to setting the column. The sleeve shall be sized to accommodate the steel column and shall be flush with the finished concrete column footing. The sleeve shall sit on the center of the column footing. A steel column shall not sit on a poured concrete floor.

163. That Section 1910.1 shall read as follows:

**1910.1 CONCRETE FLOORS GENERAL:**

The thickness of concrete floor slabs supported directly on the ground shall not be less than 4 inches (89 mm) except for crawl space floors are allowed to be 2 inches minimum. A 6-mil (0.006 inch; 152 mm) polyethylene vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or subgrade and the concrete floor slab, or other approved equivalent methods or materials shall be used to retard vapor transmission through the floor slab.

**EXCEPTION:**

A vapor retarder is not required:

1. For detached structures accessory to occupancies in Group R-3 as applicable in Section 101.2, such as garages, utility buildings or other unheated facilities.
2. For unheated storage rooms having an area of less than 70 square feet (6.5 m<sup>2</sup>) and carports attached to occupancies in Group R-3 as applicable in Section 101.2.
3. For buildings of other occupancies where migration of moisture through the slab from below will not be detrimental to the intended occupancy of the building.
4. For driveways, walks, patios and other flatwork that will not be enclosed at a later date.
5. Where approved based on local site conditions.

164. That Section 2111.9.2 shall read as follows:

**2111.9.2 HEARTH EXTENSION THICKNESS:** The minimum thickness of hearth extensions shall be 4 inches (51 mm).

165. That Section 2111.10 shall read as follows:

**2111.10: HEARTH EXTENSIONS** Every fireplace shall be constructed with a hearth extension of brick, stone, tile, or other noncombustible material. All fireplace openings shall have a hearth extension of not less than twelve (12) inches on each side of the opening and shall extend at least sixteen (16) inches in front. Such hearths shall be supported on trimmer arches of brick, stone, tile or concrete not less than 4 inches thick or other equally strong noncombustible and fire resistance rated materials. All combustible forms or centering shall be removed after completion of the supporting construction.

166. That Section 2303.1.2 and its Subsections shall read as follows

**2303.1.2 PREFABRICATED GENERAL DESIGN REQUIREMENT:**

Any floor, wall or roof framing plans that do not show conventional applications must be designed by a State of Illinois Licensed Architect or Structural Engineer as defined in The Illinois Architectural Practice Act (P.A. 86-702, 305/6) and as required in Section 106.3.4.

The design of structural elements or systems, constructed partially or wholly of wood or wood-based products, shall be based on one of the following methods.

**2303.1.2.1 Allowable stress design.**

Design using allowable stress design methods shall resist the applicable load combinations of Chapter 16 in accordance with the provisions of Sections 2304, 2305 and 2306.

**2303.1.2.2 Load and resistance factor design.**

Design using load and resistance factor design methods shall resist the applicable load combinations of Chapter 16 in accordance with the provisions of Sections 2304, 2305 and 2307.

**2303.1.2.3 Conventional light-frame wood construction.**

The design and construction of conventional light-frame wood construction shall be accordance with the provisions of Sections 2304 and 2308.

167. That Table 2304.6 shall read as follows:

**TABLE 2304.6  
MINIMUM THICKNESS OF WALL SHEATHING**

| SHEATHING TYPE  | MINIMUM THICKNESS                                    | MAXIMUM WALL STUD SPACING |
|---|--|---------------------------|
| Wood boards   | 5/8 inch   | 16 inches on center       |
| Fiberboard  | 1-1/2 inch   | 16 inches on center       |
| Wood structural panel                                     | In accordance with Table 2308.9.3(2) and 2308.9.3(3) | ---                       |
| M-S "Exterior Glue" and M-2 "Exterior Glue" Particleboard | In accordance with Table 2306.4.3 and 2308.9.3(5)    | ---                       |
| Gypsum sheathing  | 1/2 inch   | 16 inches on center       |
| Gypsum wallboard  | 1/2 inch   | 16 inches on center       |
| Reinforced cement mortar                                  | 1 inch   | 16 inches on center       |

For SI: 1 inch = 25.4 mm

168. That Table 2304.7 (3) shall read as follows:

**TABLE 2304.7(3)**  
**ALLOWABLE SPANS AND LOADS FOR WOOD STRUCTURAL PANEL SHEATHING AND**  
**SINGLE-FLOOR GRADES CONTINUOUS OVER TWO OR MORE SPANS WITH STRENGTH**  
**AXIS PERPENDICULAR TO SUPPORTS<sup>a,b</sup>**

| SHEATHING GRADES                     |                             | ROOF <sup>c</sup>                 |                         |                         |           |
|--------------------------------------|-----------------------------|-----------------------------------|-------------------------|-------------------------|-----------|
| Panel span rating<br>roof/floor span | Panel thickness<br>(inches) | Maximum span (inches)             |                         | Load <sup>e</sup> (psf) |           |
|                                      |                             | With edge<br>support <sup>f</sup> | Without edge<br>support | Total load              | Live load |
| 12/0                                 | 1/2                         | 12                                | 12                      | 40                      | 30        |
| 16/0                                 | 1/2                         | 16                                | 16                      | 40                      | 30        |
| 20/0                                 | 1/2                         | 20                                | 20                      | 40                      | 30        |
| 24/0                                 | 1/2                         | 24                                | 20 <sup>g</sup>         | 40                      | 30        |
| 24/16                                | 1/2                         | 24                                | 24                      | 50                      | 40        |
| 32/16                                | 15/32, 1/2, 5/8             | 32                                | 28                      | 40                      | 30        |
| 40/20                                | 19/32, 5/8, 3/4, 1/8        | 40                                | 32                      | 40                      | 30        |
| 48/24                                | 23/32, 3/4, 1/8             | 48                                | 36                      | 45                      | 35        |
| 54/32                                | 1/8, 1                      | 54                                | 40                      | 45                      | 35        |
| 60/32                                | 1/8, 1 1/8                  | 60                                | 48                      | 45                      | 35        |
| SINGLE FLOOR GRADES                  |                             | ROOF <sup>c</sup>                 |                         |                         |           |
| Panel span rating                    | Panel thickness<br>(inches) | Maximum span (inches)             |                         | Load <sup>e</sup> (psf) |           |
|                                      |                             | With edge<br>support <sup>f</sup> | Without edge<br>support | Total load              | Live load |
| 16 oc                                | 1/2, 19/32, 5/8             | 24                                | 24                      | 50                      | 40        |
| 20 oc                                | 19/32, 5/8, 3/4             | 32                                | 32                      | 40                      | 30        |
| 24 oc                                | 23/32, 3/4                  | 48                                | 36                      | 35                      | 25        |
| 32 oc                                | 1/8, 1                      | 48                                | 40                      | 50                      | 40        |
| 48 oc                                | 13/32, 11/8                 | 60                                | 48                      | 50                      | 40        |

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kN/m<sup>2</sup>.

- a. Applies to panels 24 inches or wider.
- b. Floor and roof sheathing conforming with this table shall be deemed to meet the design criteria of Section 304.7.
- c. Uniform load deflection limitations 1/180 of span under live load plus dead load, 1/240 under live load only.
- d. Panel edges shall have approved tongue-and-groove joints or shall be supported with blocking unless 1/4-inch minimum thickness underlayment or 1 1/2 inches of approved cellular or lightweight concrete is placed over the subfloor, or finish floor is 3/4-inch wood strip. Allowable uniform load based on deflection of 1/360 of span is 100 pounds per square foot (psf) except the span rating of 48 inches on center is based on a total load of 65 psf.
- e. Allowable load at maximum span.
- f. Tongue-and-groove edges, panel edge clips (one midway between each support, except two equally spaced between supports 48 inches on center), lumber blocking, or other. Only lumber blocking shall satisfy blocked diaphragms requirements.
- g. For 1/2-inch panel, maximum span shall be 24 inches.

(3/07)

169. That Subsection 2308.8.5 shall read as follows:

**2308.8.5 BRIDGING:** In all floor, attic and roof framing there shall not be less than one line of bridging for each 8 feet of span. The bridging shall consist of not less than 1-inch by 3-inch lumber, double-nailed at each end, or of equivalent metal bracing of equal rigidity. A line of bridging shall also be required at supports where adequate lateral support is not otherwise provided.

170. That Section 2308.9.1 shall read as follows:

**2308.9.1 FRAMING OF BEARING WALLS:** Posts and studs in bearing walls and partitions shall be designed as bridging, wall coverings and the floor and roof assemblies. 2 X 4 studs in bearing walls shall not be spaced more than 16 inches on center and 2 X 6's spaced not more than 24 inches on center. The walls shall be fabricated in such a manner as to provide adequate support for the material used to enclose the building and to provide for transfer of all lateral loads to the foundation in accordance with Section 1604.4. This Section amends Table 2308.9.1

171. That Subsection 2308.9.1.1 shall be added to read as follows:

**2308.9.1.1 NON-STURCTURAL EXTERIOR WALL SHEATHING:** Four (4) foot by eight (8) foot fiberboard or insulation type sheathing panels may be applied vertically to wood studs not less than two (2) inches nominal in thickness spaced sixteen (16) inches on center as a non-structural element.

172. That Subsection 2308.9.2.3 shall read as follows:

**2308.9.2.3 INTERIOR NONBEARING WALLS AND PARTIONS:**

Interior nonbearing walls and partition studs shall be spaced not more than 24 inches (711 mm) on center and are permitted to be set with the long dimension parallel to the wall. Interior nonbearing partitions shall be capped with no less than a single top plate installed to provide overlapping at corners and at intersections with other walls and partitions. The plate shall be continuously tied at joints by solid blocking at least 16 inches (406 mm) in length and equal in size to the plate or by ½ inch by 1½-inch (12.7 mm by 38 mm) metal ties with spliced sections fastened with two 16d nails on each side of the joint.

173. That Subsection 2308.9.3 Item #3 is amended to read as follows:

**2308.9.3 BRACING:** Item number 3 has been revised to read:

3. Wood structural panel sheathing with a thickness not less than ½ inch for 16-inch (406 mm) stud spacing and not less than ½ inch for 24-inch (610 mm) stud spacing in accordance with Tables 2308.9.3(2) and 2308.9.3(3) as revised for ½ inch minimum sheathing thickness.

The maximum spans for wood structural panel sheathing shall be limited by the allowable stresses and deflections for the design live load, but shall not be greater than the spans specified in Table 2308.9.3(2), 2308.9.3(3), Table 2308.9.3(4), Table 2308.9.3(5). In any case the minimum panel thickness shall be 1/2 inch. The spans specified in these tables shall apply to wood structural panels not treated with fire-retardant chemicals. The design criteria for fire-retardant-treated wood structural panels shall be provided by valid research reports from approved sources.

174. That Subsection 2308.9.3 is amended to delete bracing items #4 and #5.

175. That Table 2308.9.3(2) shall read as follows:

**TABLE 2308.9.3(2)  
EXPOSED PLYWOOD PANEL SIDING**

| <b>MINIMUM THICKNESS<sup>a</sup><br/>(inch)</b> | <b>MINIMUM NUMBER OF PLYS</b> | <b>STUD SPACING<br/>(inches)<br/>Plywood siding applied directly to<br/>studs or over sheathing</b> |
|---|-------------------------------|---|
| 1/2   | 3                             | 16  |
| 1/2   | 4                             | 16  |

For SI: 1 inch = 25.4 mm

a. Thickness of grooved panels is measured at bottom of grooves.

176. That Table 2308.9.3(3) shall read as follows:

**2308.9.3(3)  
WOOD STRUCTURAL PANEL WALL SHEATHING**

| <b>MINIMUM<br/>THICKNESS<br/>(inch)</b> | <b>PANEL SPAN RATING</b>                         | <b>STUD SPACING (inches)</b>      |   |   |
|---|--|-----------------------------------|---|---|
|   |  | <b>Siding nailed to<br/>studs</b> | <b>Sheathing under coverage specified in<br/>Section 2308.9.3</b> |   |
|   |  |                                   | <b>Sheathing parallel<br/>to studs</b>                            | <b>Sheathing<br/>perpendicular to<br/>studs</b> |
| 1/2                                     | <b>12/0, 16/0, 20/0<br/>Wall-16" o.c.</b>        | <b>16</b>                         | <b>-</b>  | <b>16</b>                                       |
| 1/2                                     | <b>16/0, 20/0, 24/0, 32/16<br/>Wall-24" o.c.</b> | <b>16</b>                         | <b>16</b>   | <b>16</b>                                       |
| 1/2                                     | <b>24/0, 24/16, 32/16<br/>Wall-24" o.c.</b>      | <b>16</b>                         | <b>16<sup>a</sup></b>   | <b>16</b>                                       |

For SI: 1 inch = 25.4 mm.

a. Plywood shall consist of four or more plies.

177. That Table 2308.9.3(5) shall read as follows:

**2308.9.3(5)  
PARTICLE BOARD WALL SHEATHING**

**Table 2308.9.3(5)  
ALLOWABLE SPANS FOR PARTICLEBOARD WALL SHEATHING<sup>a</sup>**

| <b>Grade</b>   | <b>Thickness<br/>(inches)</b> | <b>Stud Spacing (inches)</b>  |  |
|--|-------------------------------|-------------------------------|--|
|  |                               | <b>Siding Nailed to Studs</b> | <b>2. Sheathing Under<br/>Coverings Parallel or<br/>Perpendicular to Studs</b> |
| <b>M-S "Exterior Glue"<br/>and<br/>M-2 "Exterior Glue"</b> | <b>1/2</b>                    | <b>16</b>                     | <b>16</b>  |

Note a: Where not exposed to the weather and where the long dimension of the panel is parallel or perpendicular to the studs.

178. That Table 2308.9.3(5) shall read as follows:

**2308.9.3(5)  
HARDBOARD SIDING**

| SIDING                              | MINIMAL NOMINAL THICKNESS (inch) | 2 x 4 FRAMING MAXIMUM SPACING | NAIL SIZE <sup>a,b,d</sup> | NAIL SPACING  |   |
|-------------------------------------|----------------------------------|-------------------------------|----------------------------|---|---|
|                                     |                                  |                               |                            | General   | Bracing Panels <sup>c</sup>                     |
| <b>1. Lap siding</b>                |                                  |                               |                            |   |   |
| Direct to studs                     | ½                                | 16" o.c.                      | 8d                         | 16" o.c.  | Not applicable                                  |
| Over sheathing                      | ½                                | 16" o.c.                      | 10d                        | 16" o.c.  | Not applicable                                  |
| <b>2. Square edge panel siding</b>  |                                  |                               |                            |   |   |
| Direct to studs                     | ½                                | 16" o.c.                      | 6d                         | 6" o.c. edges;<br>12" o.c. at intermediate supports | 4" o.c. edges;<br>8" o.c. intermediate supports |
| Over sheathing                      | ½                                | 16" o.c.                      | 8d                         | 6" o.c. edges;<br>12" o.c. at intermediate supports | 4" o.c. edges;<br>8" o.c. intermediate supports |
| <b>3. Shiplap edge panel siding</b> |                                  |                               |                            |   |   |
| Direct to studs                     | ½                                | 16" o.c.                      | 6d                         | 6" o.c. edges;<br>12" o.c. at intermediate supports | 4" o.c. edges;<br>8" o.c. intermediate supports |
| Over sheathing                      | ½                                | 16" o.c.                      | 8d                         | 6" o.c. edges;<br>12" o.c. at intermediate supports | 4" o.c. edges;<br>8" o.c. intermediate supports |

For SI: 1 inch = 25.4 mm.

- a. Nails shall be corrosion resistant.
- b. Minimum acceptable nail dimension:

|                | Panel Siding (inch) | Lap Siding (inch) |
|----------------|---------------------|-------------------|
| Shank diameter | 0.092               | 0.099             |
| Head diameter  | 0.225               | 0.240             |

- c. Where used to comply with Section 2308.9.3.
- d. Nail length must accommodate the sheathing and penetrate framing 1-1/2 inches.

179. That Subsection 2308.10.4.1.1 shall be added to read as follows:

**2308.10.4.1.1 CATHEDRAL CEILINGS:** When ceiling joists and rafter ties are omitted and rafters are used to create a cathedral type ceiling (sloped or flat), rafter ends shall be supported on bearing walls, headers or ridge beams. Rafters shall be attached to the support in accordance with Table 2304.9.1 and metal support hangers when appropriate. Ridge beams shall be capable of carrying the imposed roof loads and shall be supported by structural elements that transmit the loads to the foundation.

180. That Section 2701.1 shall read as follows:

**2701.1 ELECTRICAL SCOPE:** The provisions of this chapter shall control design and construction of all new

installations of electrical conductors, equipment and systems in buildings or structures; and all alterations to existing wiring systems therein to insure safety. All such installations shall conform to the provisions of the property maintenance and electrical codes, as amended, listed in the Village Code Title 5 Chapter 3 where reference is made in this code to an electrical code, it shall mean the Village of Orland Park Electrical Code, as amended.

181. That Section 2702.1 shall read as follows:

**2702.1 EMERGENCY STANDBY POWER SYSTEMS**

Emergency and standby power systems shall be installed in accordance with the Village Electrical Code referenced in the Village Code Title 5 under Chapter 35 of this code.

182. That Section 2702.2 shall read as follows:

**2702.2 EMERGENCY POWER SOURCE WHERE REQUIRED:**

All means of egress lighting in all buildings or portions thereof shall be connected to an independent power source (battery back-up) or other approved auxiliary power (emergency generator) to assure a duration of not less than 1-1/2 hour continued illumination in case of an emergency or power loss. All power sources shall be installed in accordance with The Village Code Title 5 Chapter 3 (Village Electrical Code). Emergency power shall also be provided as listed in Sub-Sections 2702.2.1 through 2702.2.19 of this IBC Code.

183. That Section 2801.0 and its subsections shall read as follows:

**SECTION 2801.0 GENERAL**

**2801.1 MECHANICAL SCOPE:** The provisions of this chapter shall control the construction, inspection and maintenance of all mechanical equipment and systems in respect to structural strength, fire safety and operation.

**2801.2 MECHANICAL CODE:** All mechanical equipment and systems shall be constructed, installed and maintained in accordance with this code, the Property Maintenance Code, Fuel Gas Code and Mechanical Code, as referenced in the Village Code Title 5 Chapters 6 and 7. Where reference is made in this code to a mechanical code, it shall mean the Village of Orland Park Mechanical Code, as amended. Masonry chimneys, fireplaces and barbecues shall comply with the Village Mechanical Code and Chapter 21 (Masonry Chapter) of this code.

**2801.2.1 HEATING EQUIPMENT REQUIRED:**

All shell buildings (with or without a proposed tenant) shall include a permanent source of heating equipment for the entire building. When a space within a building is not served by a central heating system, each separate space shall be designed and able to maintain a minimum temperature of 55 degrees at an outdoor temperature of -10 degrees with its own equipment complying with the Village Mechanical Code. (Ord. 3910, 7-19-04)

**2801.3 MECHANICAL UNSAFE ORDERS:** All existing mechanical equipment and systems shall be maintained and operated in accordance with the requirements of this code, property maintenance and mechanical codes, as amended, listed in Chapter 35. Any such equipment which does not comply with the requirements, and the operation of which is deemed unsafe to the building occupants, shall be altered as ordered by the code official to secure adequate safety.

184. That Section 2802.1 shall read as follows:

**2802 UNVENTED APPLIANCES:** It shall be unlawful to install or cause to be installed or use any and all un-

vented gas, oil and solid fuel fired heat producing appliance for use within a building, new or existing, unless approved by the code official. See other existing mechanical code amendments which are to be included with a revised adopted Mechanical Code 5-5-3. (These code items apply until relocated)

185. That Section 2901.1 shall read as follows:

**2901.1 PLUMBING SYSTEMS SCOPE:** The design and installation of plumbing systems, including sanitary and storm drainage, sanitary facilities, water supplies and storm water and sewage disposal in buildings, shall comply with the requirements of this chapter, this code, the property maintenance and plumbing codes, as amended, listed in Chapter 35. Where reference is made in this code to a plumbing code it shall mean Village of Orland Park Plumbing Code/The State of Illinois Plumbing Code, as amended.

186. That Section 2901.2 shall be added to read as follows:

**SECTION 2901.2 SEWER AND WATER SUPPLY DATA**

**2901.2. PUMPS:** Pumps shall not be installed in any water piping system unless approved by the code official.

187. That Chapter 30 for Elevators and Conveying Systems, include subsection additions and revisions to read as follows:

**3001.2.1 ADDITIONAL REFERENCED STANDARDS:** All conveyances shall be designed, constructed, installed, operated, inspected, tested, maintained, altered and repaired in accordance with addenda ASME A17.1-2005, A17.1(a)-2005, A17.1(s)-2005, ASME A17.2-2004, ASME A17.3-2005, ASME A18.1-2005, ASME QEI-1-2004, ANSI A10.4-2004, and ASCE 21-2000. (Ord. 4284, 9-4-07)

**3002.4 ELEVATOR CAR TO ACCOMMODATE AMBULANCE STRETCHER:** In all buildings at least one elevator shall be provided for fire district emergency access to all floors in a building. Such elevator car shall be of such size and arrangement to accommodate a minimum 24 inch by 80 inch (610 mm by 2088 mm) ambulance stretcher in the horizontal open position and shall be identified by the International Symbol for emergency medical services (Star of Life). The symbol shall not be less than 3x3 inches high and wide (76 mm x 76 mm) and shall be placed inside on both sides of the main lobby hoistway door frame. The minimum size to be 2500 pounds with clear inside dimensions not be less than 6'8" wide x4' deep with a 42" side slide door.

**[F] 3003.2 FIRE-FIGHTERS' EMERGENCY OPERATION:** Elevators shall be provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with ASME A17.1 and NFPA 72.

**3006.1 MACHINE ROOM ACCESS:** An approved means of access shall be provide to elevator machine rooms and overhead machinery equipment spaces. This means is to be used as a passage way through the machine room to other areas of the building or roof.

188. That Sections 3007, 3008, 3009, 3010, 3011 and 3012 shall be added to read as follows:

**3007: EXISTING ELEVATORS**

**3007.1 Safety Code For Existing Elevators:** All Existing Elevators are to comply with ASME 2005 17.3, Safety Code for existing elevators and escalators. (Ord. 4284, 9-4-07)

### 3008 ELEVATOR MAINTENANCE AND ACCIDENTS

**3008.1 OWNERS RESPONSIBILITY:** The owner of the owner's legal agent for the building in which the equipment is located shall be responsible for the care, maintenance and safe operation of all equipment covered by this code after the installation thereof and acceptance by such owner or agent. The owner or legal agent shall make or cause to be made all periodic tests and inspections and shall maintain all equipment in a safe operation condition as required by this code.

**3008.2 CONTRACTORS RESPONSIBILITY:** The person installing any device covered by this code shall make all acceptance tests and shall be responsible for the care and safe operation of such equipment during its construction and until temporary or finally accepted by the Village or Orland Park or their authorized agent for inspections.

**3008.3 MAINTENANCE ITEMS:** All operation and electrical parts and accessory equipment or devices subject to this code shall be maintained in a safe operating condition. The maintenance of elevators, dumbwaiters and escalators shall conform to ASME A17.1 listed in Appendix A.

**3008.4 UNSAFE CONDITIONS:** If, upon inspection, any equipment covered by this code is found to be in an unsafe condition, or not in accordance with the provisions of this code, the Village of Orland Park 's or its authorized inspection agent, shall thereupon serve a written notice of such finding upon the building owner or lessee, stating the time when recommended repairs or changes shall be completed. After the service of such notice, it shall be the duty of the owner to proceed within the time allowed to make such repairs or changes as are necessary to place the equipment in a safe condition. It shall be unlawful to operate such equipment after the date stated in the notice unless such recommended repairs or changes have been made and the equipment has been approved by the Village or its inspection agent. An extension of time may be secured if permitted by the Village or its authorized agent performing required inspections. The time durations may be from 24 hours, 7 days, 15 days or a maximum of 30 days as determined by the Building Official.

**3008.4.1 POWER TO SEAL EQUIPMENT OUT OF SERVICE:** In cases of emergency, the Village or its authorized inspection agent shall have the authority to seal out of service any device or equipment covered by this code when, in the opinion of the Village or its authorized inspectors performing this service, the condition of the device is such that the device is rendered unsafe for operation: or for willful failure to comply with the recommendations and orders.

**3008.4.2 NOTICE OF SEALING OUT OF SERVICE:** Before sealing any device out of service, the Village or its authorized inspection agent, except in a case of emergency, shall serve written notice upon the building owner or lessee stating intention to seal the equipment out of service and the reason therefore.

**3008.4.3 UNLAWFUL TO REMOVE OUT OF SERVICE SEAL:** Any device sealed out of service by the Village's authorized inspector, shall be plainly marked with a sign or tag indicating the reason for such sealing. Any tampering with, defacing or removing of the sign, tag or seal without approval shall constitute a violation and fined as indicated in Chapter 1 of this code.

**3008.5 ACCIDENTS REPORTED AND RECORDED:** The owner of the building shall immediately the Village of every accident involving personal injury or damage to apparatus on, about or in connection with any equipment covered by this code and shall afford the Village every facility for investigating such accident. When an accident involves the failure, breakage, damage or destruction of any part of an apparatus or

mechanism, it shall be unlawful to use such device until after an examination by the Village or its inspection agency has approved the equipment for use. The Village inspection staff or its authorized inspector shall make a prompt examination into the cause of the accident and to enter a full and complete report thereof in the records of the Building Department. Such records shall be open for public inspection at all reasonable hours.

**3008.5.1 ACCIDENTS REQUIRED TO BE REPORTED TO THE STATE FIRE MARSHAL:** As mandated by the 2007 Elevator Safety Act, an owner or lessee of a conveyance must report all injuries and any damages over \$1,000,000 to the Division of Elevator Safety before the close of the next business day. Incident Report Forms can be found at [www.state.il.us/osfm/Elevator/IncidentReporting.htm](http://www.state.il.us/osfm/Elevator/IncidentReporting.htm). (Ord. 4284, 9-4-07)

**3008.6 REMOVAL OF DAMAGED PARTS:** It shall be unlawful to remove from the premises any part of the damaged construction or operating mechanism of elevators, or other equipment subject to the provisions of this code, until permission has been given by the Village.

### **3009 CERTIFICATE OF COMPLIANCE**

**3009.1 EQUIPMENT OPERATION APPROVAL BEFORE USE:** The operation of all equipment governed by the provisions of this code and hereafter installed, relocated or altered shall be unlawful by the persons other than the installer until such equipment has been inspected and tested as herein required and a final certificate of compliance has been issued by the Village.

**3009.2 POSTING CERTIFICATES OF COMPLIANCE:** The owner or lessee shall post the current- issued certificate of compliance in a conspicuous place inside the elevator.

### **3010 CONSTRUCTION DOCUMENTS AND PERMITS**

**3010.1 APPLICATION:** The application for a permit shall be accompanied by construction documents in sufficient detail and indication the location of the machinery room and equipment to be installed, relocated or altered; and all supporting structural members, including foundations. The construction documents shall indicate all materials to be used and all loads to be supported or conveyed. Documents are required to be reviewed and approved before permit is issued (See Chapter 1 of these amendments).

***Elevators and Conveying Systems shall conform to the Illinois Accessibility Code per Chapter 11 of this Code***

**3010.2 PERMITS:** Equipment for devices subject to the provisions of this code shall not be constructed, installed relocated or altered unless a permit has been received by the Village and issues before work is commenced. A copy of such permit shall be kept at the construction site at all times while work is in progress. Fees shall be paid to the Village for required permits and maintenance inspections as established and revised.

### **3011 TESTS AND INSPECTIONS**

**3011.1 TESTING AND INPSECTIONS GENERAL:** All equipment and devices covered by the provisions of this code shall be subjected to acceptance and maintenance tests and inspections as required herein.

**3011.2 ACCEPTANCE TESTS:** Acceptance tests and inspections shall be required on all new, relocated and altered equipment subject to the provision of this chapter and this code. Tests and inspections shall be of such a nature as to determine whether the entire installations is designed, constructed and installed in compliance with this code, and shall include all parts of the equipment and machinery. In addition, Full Load Test to be don on all equipment. All such tests shall be made n compliance with the requirements of Section 8.10 and the in the presence of the Village, or by an approved agency as designated by the Village and by the person installing such equipment.

**3011.3 PERIODIC TESTS AND INSPECTIONS:** Periodic tests shall be required on all new and existing power elevator, and periodic inspections shall be made of all new and existing equipment subject to the provisions of this chapter.

**3011.3.1 PERIODIC TESTS:** Periodic tests shall be made by the Village or by an approved agency, and shall be made at the expense of the responsibility of the owner. Where such tests are not made the Village, the approved agency shall submit a detailed report of the tests to the Village on approved forms not more than 30 days after the completions of the tests.

**3011.3.2 PERIODIC INSPECTIONS:** Periodic inspections shall be made by the Village or by an approved agency. Where such inspections are not made by the Village, the approved agency shall submit a detailed report of the inspection the Village on approved forms not more than 30 days after the completion of the inspections.

**3011.3.3 FREQUENCY OF TESTS AND INSPECTIONS:** Tests and inspections shall be conducted at intervals of not more than those set forth in ASME A17.1 listed in Chapter 35 for elevators, escalators, dumbwaiters and moving walks.

### **3012 MISCELLANEOUS HOISTING AND ELEVATING EQUIPMENT**

**3012.1 MISCELLANEOUS HOISTING AND ELEVATING EQUIPMENT:** All miscellaneous hoisting and elevating equipment shall be subjected to tests and inspections as required by the Village of Orland Park to ensure safe operation.

**3012.2 CONVEYORS:** Conveyors and related equipment shall be inspected and tested in accordance with ASME B20.1 listed in Chapter 53

189. That Section 3102.1 shall read as follows:

**3102.1 MEMBRANE STRUCTURES GENERAL:** The provisions of this section shall apply to air-supported, air inflated, membrane-covered cable and membrane-covered frame structures, collectively known as membrane structures, erected for a period not more than 120 days. Those erected for a shorter period of time shall comply with the applicable provisions of the Fire Code listed in Chapter 35 and Section 3103.0. Membrane structures covering water storage facilities, water clarifiers, water treatment plants, sewage treatment plants or similar facilities not used for human occupancy, are required to meet only the requirements of Sections 3102.3.1 and 3102.7.

190. That Section 3103.1 shall read as follows:

**3103.1 TEMPORARY STRUCTURES GENERAL:** The provisions of this section shall apply to tents, membrane structures and other structures and shall be erected and removed in accordance with the time limitation as specified by Orland Park Land Development Code, as amended, listed in Chapter 35. Those erected for a longer period of time as allowed shall comply with Section 3103.0 or with all applicable sections of this code where Section 3103.0 is not applicable.

191. That Subsection 3103.1.1 shall read as follows:

**3103.1.1 TEMPORARY STRUCTURES PERMIT REQUIRED:** No temporary structures shall be erected, operated or maintained for any purpose without obtaining a permit from the code official. Special permits required by this code shall be secured from the code official. Permits for temporary structures shall not exceed 120 days.

192. That Section 3109 shall read as follows:

**3109 POOLS - GENERAL:** Pools used for swimming or bathing shall conform to the Village of Orland Park Ordinances and the Land Development Code, as amended, listed in Chapter 35 and to the requirements of this section provided that these regulations shall not be applicable to any such pool less than 20 inches deep or having a surface area less than 250 square feet except where such pools are permanently equipped with a water re-circulating system or involve structural materials. For the purposes of this code, pools are classified as private swimming pools or public swimming pools, as defined in the Land Development Code, as amended, listed in Chapter 35. Materials and construction used in swimming pools shall comply with the applicable requirements of this code and the Land Development Code, as amended, listed in Chapter 35.

193. That Section 3303.6 shall read as follows:

**3303.6 SERVICE CONNECTIONS**

Before a structure is demolished or removed, the owner or agent shall notify all utilities having service connections within the structure such as water, electric, gas, sewer and other connections. A permit to demolish or remove a structure shall not be issued until a release is obtained from the utilities, stating that their respective service connections and appurtenant equipment such as meters and regulators have been removed or sealed and plugged in a safe manner; and evidence that applicable county, state and any other governing body permits have been or are being secured from the applicable governing bodies.

194. That Section 3403.1 shall read as follows:

**3403.1 EXISTING BUILDING OR STRUCTURES:** An alteration to any structure shall conform to the code requirements for a new structure and shall not result in an increase in hazard to the occupants. Portions of the structure not altered and not affected by the alteration are not required to comply with the code requirements for a new structure. Any alteration shall meet the requirements of this Chapter and Chapter 1.

195. That Section 3405.1 shall read as follows:

**3406.1 CHANGE OF OCCUPANCY APPROVAL:** No change of occupancy shall be made to any structure which will subject the structure to any special provisions of this code without approval of the code official. The code official shall certify that such structure meets the intent of the provisions of law governing building construction for the proposed new occupancy, and that such change of occupancy does not result in any greater hazard to the public health, safety or welfare. Any change of occupancy shall meet the requirements of this Chapter and Chapter 1.

196. That the following ordinances of the Village of Orland Park are added after WRI Standard in Chapter 35 and shall read as follows:

Village of Orland Park  
14700 Ravinia Avenue  
Orland Park, Illinois 60462

Land Development Code  
Ordinance No. 2084 as amended includes, but is not limited to:  
Architectural Review  
Concrete (driveway and sidewalk)  
Criteria for Historical Buildings  
Fences  
Landscape guidelines

Satellite Dish  
Signs  
Soil erosion  
Temporary Structures  
Zoning

Bonding of Contractors  
Village Code, Title 5, Chapter 1 Section 6

Building and Inspection Fees  
Village Code, Title 5, Chapter 2  
Cross Connection (Reduce Pressure Backflow)  
Ordinance No. 1519 as amended

Electrical Code  
Village Code, Title 5, Chapter 3

Fire Code  
Village Code, Title 5, Chapter 5  
The 2006 International Fire Code (IFC) may be used for a reference and application by the Code Official until this Chapter of Title 5 is amended.

Flood Plains  
Ordinance Nos. 2028, 2084 as amended

Licensing of Certain Businesses/Contractors  
Village Code, Title 7, Chapter 1 and 2

Mechanical Code  
Village Code, Title 5, Chapter 6

Motels, Hotels, Rooming Houses and Apartments  
Village Code, Title 5, Chapter 8

Opening and Excavation in any Street  
Village Code, Title 3, Chapter 3

Property Maintenance Code  
Village Code, Title 5, Chapter 7

Plumbing Code  
Village Code, Title 5, Chapter 4

Swimming Pool  
The Village Land Development Code and Ordinance No. 882 as amended

Village of Orland Park  
Village Code Ordinance #2989 as amended

Water Connection Fee  
Village Code, Title 4, Chapter 4

197. That in Chapter 35 immediately after the SAE referenced standards the following is added and shall read as follows:

State of Illinois  
Capital Development Board  
Wm. G. Stratton Building  
401 S. Spring Street, 3<sup>rd</sup> Floor  
Springfield, Illinois 62706  
Illinois Accessibility Code.....April 24, 1997, as amended

State of Illinois  
Department of Public Health  
Plumbing Program  
525 W. Jefferson Street  
Springfield, Illinois 62761

Illinois Private Sewage Disposal.....1996 Licensing Act and Code, as amended

(Entire Chapter redone - Ord. 3723, 1-20-03; Amd. Ord. 4223, 2-19-07)

(3/07)