EXHIBIT A

5-1-13: AMENDMENTS TO IBC 2009

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. Also the IRC Residential code Section P2904 shall not apply to fire sprinkler requirements in a dwelling or dwelling units.

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". Adoption of the 2009/ICC International Energy Conservation Code (IECC) is referenced in Chapter 13 of these amendments.

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 OTHER LAWS: The provisions of this code shall not be deemed to nullify any provisions of local, state or federal laws.

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.

102.6 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.

102.6.1 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.

102.6.2 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)

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 is revised 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, business inquiries and inspections shall use the English language. IBC Code Subsections 105.3.1 and 105.3.2 shall apply as written by the ICC.

8. That Section 105.5 shall be 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 CERFICATE 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 107.1 shall be revised and read as follows:

107.1 CONSTRUCTION DOCUMENTS: The application for a permit shall be accompanied by not less than three sets of construction plans and other required supporting documents necessary to monitor compliance. 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 107.2.1 shall read as follows:

107.2.1 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.

11. That Section 107.2.5.2 and 107.2.5.3 shall be added to read as follows:

107.2.5.2 PRIVATE SEWAGE DISPOSAL SYSTEM: 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.

107.5.3 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 107.3.1 shall be revised and read as follows:

107.3.1 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.

13. That Section 107.3.4.1 shall be revised and read as follows:

107.3.4.1 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).

14. That Section 108.5 shall be added and read as follows:

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

15. That Section 109.2 shall read as follows:

109.2 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.

109.2.1 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.

109.2.2 SPECIAL SERVICES PERFOMED: 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)

16. That Section 110.3 changes shall read as follows:

110.3 Required inspections. Approvals shall be as specified in Section 110.1. The building official, upon request through adequate written notification, shall make the inspections set forth in Sections 110.3.1 through 110.3.10. Plans and inspection communications shall use the English language. Inspections requests are submitted to the Development Services Department: 1. in person on a written form. 2. through an electronic "Fax". 3. through the Village of Orland Park website at Orland-park.il.us

110.3.1 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, ladders 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.

110.3.2 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.

110.3.3 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 110.3.7.1 d. for cold weather footing inspection restrictions.

110.3.4 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. See Section 110.3.6.1 for required perimeter foundation wall energy insulation prior to backfill.

110.3.5 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.

110.3.5.1 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.

110.3.6 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.

110.3.6.1 ENERGY INSPECTIONS: Inspections shall be requested and approved for compliance with Chapter 13 and shall include, but not be limited to, inspections for: envelope insulation R- and U- values, fenestration U-value, air leakage, duct system R-value, and HVAC and water-heating equipment efficiency. See Village Code Title 5, Chapter 2 for inspection fees required.

ENERGY CONSERVATION - ILLINOIS PUBLIC ACT 096-0778

1. Residential Energy Conservation Code as of 1/28/2010:

a. Building exterior envelope insulation material, installation and R-factors: Basement walls, slabs, crawl space, exterior walls, ceilings (and vaults), attics or roofs and a certificate at electrical panel before occupancy

b. Exterior windows/glazing, doors, and openings during/after rough framing inspections: Verify all product u-factors, labels, air leakage film & seals.

c. Air Leakage and Infiltration prior to exterior masonry veneers: Exterior wall barriers or films or solid material, caulking, gaskets, weather-stripping for doors, windows, utility penetrations, knee walls, garage attic wall(s), tubs and showers, attic openings, rim joist, sill plates, combustion air, fireplace gaskets, recessed lighting, plumbing and electric penetrations, duct joints and seams sealant, ductwork testing etc.

d. Mechanical, Plumbing and Electrical Equipment: Heating and cooling equipment sizing and efficiency, heat pump controls, duct insulation, piping insulation, intakes and exhausts with automatic gravity dampers, programmable thermostat, snow melt controls, electrical fixtures and high-efficacy lamps

e. Pools and Equipment: Pool heaters, time switches, pool covers

f. A qualified 3rd party inspection agency: shall or may be permitted to perform required energy and air leakage inspections as determined by the Building Official. Private inspection contracting services are the responsibility of the land or building owner as a condition of permit issuance. See Village Code (5-2) Permit Fee ordinance.

110.3.7 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 24 hour inspection request is required. Inspections within 24 hours will be timed from days in which the Village is open for business (example: typical requests on a Friday will be inspected on the next Monday).

110.3.7.1 COLD WEATHER REQUIREMENTS: The following requirements for cold weather exterior concrete flatwork placement (sidewalks, drives, patios, etc.) will be in effect November

15th with the possibility of an extension to December 1st 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.

110.3.8 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. Other inspections include, but not limited to Electrical, Plumbing, Mechanical, Fire and Health code regulations.

110.3.8.1 "AS BUILT" SURVEYS WILL SHOW (PRIOR TO ANYCONSTRUCTION BEYOND THE FOUNDATION):

1. Actual foundation footprint and location, and

2. All foundation steps and brick ledge locations/elevations.

110.3.9 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.

110.3.10 FINAL INSPECTION: Upon completion of the building or structure for occupancy (including the final grading complying with Section 110.3.10.1 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.

110.3.10.1 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.

110.3.11 APPROVAL REQUIRED: Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

110.3.12 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)

17. That Section 111.2 shall read as follows

111.2 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.

18. That Section 111.3 shall read as follows:

111.3 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 incompletion 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)

19. That Section 113.0 shall read as follows:

SECTION 113.0 MEANS OF APPEAL

113.1 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.

113.2 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.

113.3 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.

113.4 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 0fficial 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.

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

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

20. That Section 114.4 shall read as follows:

114.4 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.

114.4.1 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)

114.4.2 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:

1st 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 115.3 of this code for "Unlawful Continuance." (Ord. 3910, 7-19-04)

21. That Section 115.3 shall read as follows:

115.3 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)

22. That Section 116.5 shall read as follows:

116.5 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 of 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 102.6.2.

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

AGRICULTURAL, BUILDING: A structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products. This structure shall not be a place of human habitation or a place of employment where agricultural products are processed, treated or packaged, nor shall it be a place used by the public. See Appendix C of this Code. (Ord. 4342, 3-3-08)

EXCEPTION:
A canopy structure of less than 8,000 square feet in area that is used to cover the sales area of horticultural landscaping plantings only; may be considered an "Agricultural Canopy" when horticultural sales are the principal use of the property. See Section 312 of this code and The Fire Code VC 5-5-2 and Chapter 24 for allowed permanent canopy structures as amended. (Ord. 4342, 3-3-08)

AGRICULTURAL CANOPY: A permanent structure or shelter less than 8,000 square feet constructed of fabric or pliable materials supported by any manner, except by air or the contents it protects, and is open without sidewalls or drops on 75 percent of the perimeter used as a retail building with limitations as provided in this code and the Fire Code. (per 2006 IFC) (Ord. 4342, 3-3-08)

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.

FIRE CODE OFICIAL: The Code Official for the Village of Orland Park.

24. That Subsection 308.5.2. shall read as follows:

308.5.2. 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.

25. 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) (3/08)

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

26. 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.

27. 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)

RESIDENTIAL CARE/ASSISTED LIVING FACILITIES: A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.

TRANSIENT: Occupancy of a dwelling unit or sleeping unit for not more than 30 days.

28. That Subsection 310.3 shall read as follows:

310.3 REQUIRED DWELLING UNIT AND GUESTROOOM SEPARATIONS: Townhomes (vertically attached) shall be separated by a masonry wall or 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. See fire rated wall for an R-2 Uses per Section 501.3.4 c., and exceptions when a building has an approved fire sprinkler protection system. See Sections 709.1,709.3 & 712.3 for similar restrictions.

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. (3/07)

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 903.2.8 (see Sections 501.3.4)

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 this 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 1207.2 and 1207.3. (refer to 501.2 for additional details). See sections 709.1 and 709.3 for similar amendments.

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)

29. That section 312 is amended to read as follows:

SECTION 312 UTILITY AND MISCELLANEOUS GROUP U
312.1 General. Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

Agricultural Canopies
See Sections 202, 501.3.2, 907.2 and Appendix C, referencing Village amendments
Aircraft hangars, accessory to a one- or two-family residence (see Section 412.3)
Barns
Carports
Fences more than 6 feet (1829 mm) high
Grain silos, accessory to a residential occupancy
Greenhouses
Livestock shelters
Private garages
Retaining walls
Sheds
Stables
Tanks
Towers
(Ord. 4342, 3-3-08)

30. That Additions and/or Changes to specific Subsections of 402 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 than 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."

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. Covered Mall buildings shall be surrounded on all sides by permanent open space of at least 60 feet.

402.7 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. A common plenum type air handling system between adjacent tenants, does not allow combustible sales merchandise to be directly open or part of a plenum air system.
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)

402.7.1 MALL ATTACHED GARAGES: An attached garage for the storage of motor vehicles having a capacity of not more than nine persons and open parking garages shall be considered as separate building where it is separated (vertically and/or horizontally) from a covered mall building by not less than a 2-hour fire barrier per Sections 707 or 712 or both.

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

402.10. 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.

31. That Subsection 402.11 item # 4 and 402.11.1 shall read as follows:
(Ord. 4133, 5-1-06)

402.11 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.

402.11.1 MALL SALES AND SOLICITERS: Sellers and employees at Mall kiosks and store fronts shall not solicit sales or call out for their products or services to the public. (See Village Code Title 7, Chapter 13).

32. That Subsection 402.16 and Subsection 402.14.1 shall read as follows:

402.16 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.

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

402.16.2 through 402.16.5 of the IBC Code remain applicable to this Sub-Section.

33. The following Subsections of Section 406 shall be revised or added to 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 an 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.

406.1.4 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.

406.1.4.1 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.

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

1. 1 ¾" inch solid core wood door.
2. 1 ¾" inch solid or honeycomb core steel door.

406.1.4.3 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.

406.1.4.4 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 715.0. (See Section 501.3.3, exception not allowed for garages below R-1 and R-2 residential uses)

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 except for an R-3 Use.

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 garages of commercial truck or buss parking is limited to 5000 square feet.

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

406.5.4 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.
3. Commercial repair of trucks or busses shall comply with Section 903.2.9.1 #4. (3/07)

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.
3. Commercial repair of trucks or busses shall comply with Section 903.2.9.1 #4.

34. That Section 407.10 and its Subsections are added to Section 407.0 and shall read as follows:

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

407.10.1 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.

407.10.2 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.

407.10.3 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.

35. That Section 420 shall read as follows:

420.1 GROUPS I-1, R-1, R-2, R-3: Occupancies in Groups I-1, R-1, R-2 and R-3 shall comply with the provisions of this section and other applicable provisions of this code.

420.2 Separation walls. Walls separating dwelling units in the same building, walls separating sleeping units in the same building and walls separating dwelling or sleeping units from other occupancies contiguous to them in the same building shall be constructed as fire partitions in accordance with Sections 501.3.4, Table 601 Footnote h, and 709.3.

420.3 Horizontal separation. Floor assemblies separating dwelling units in the same buildings, floor assemblies separating sleeping units in the same building and floor assemblies separating dwelling or sleeping units from other occupancies contiguous to them in the same building shall be constructed as horizontal assemblies in accordance with Section 501.3.3, 709.3 and 712.

36. That Section 424 and its Subsections are added to Chapter 4 and shall read as follows:

SECTION 424.0 PARKING AREAS

424.1 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.

424.2 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.

424.3 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.

37. 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 using Arabic numerals of a size as described in Section 501.2.4.

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.

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.

38. 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 of non-combustible construction using solid masonry, or steel column and beam construction using metal studs 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 503.2.1 items #7 for wood framing & item #8 for metal wall studs. (Ord. 4499 – 8-3-09). The minimum concrete or masonry veneer is 2.65" in depth.

a. 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, 1704.2 and 1704.3 of this code. (Ord. 3994, 3-7-05)

b. Agricultural Canopies as allowed in Section 312.1 for an Agricultural Use and are not classified as a Tent may use a roll up type side wall material. Pliable material may only be lowered for protecting plant material during frost conditions when the canopy is not open to the public or occupied. Permanent Canopy construction and materials shall also comply with the Village Fire Code (VC 5-5). (Ord. 4342, 3-3-08)

Construction and maintenance approval of permanent canopies using fabric or pliable materials shall comply with all of the following conditions: (Ord. 4342, 3-3-08)

a. Special inspection reports must be submitted to the Village by a qualified inspection agency, a State of Illinois licensed architect or engineer or the manufacturer's representative stating the canopy was installed per installation requirements. (Ord. 4342, 3-3-08)

b. Special Inspection reports shall review the canopy for: (Ord. 4342, 3-3-08)

1. Structural integrity conformance to the design engineer's plan and Building Code.
2. Design materials used in compliance to the Building and Fire Codes.
3. All matters regulated by the Fire Code for a permanent canopy. (3/08)

Citations will be issued to the land owner and a court appearance is required for violations of this ordinance without preliminary warnings. (Ord. 4342, 3-3-08)

See Sections 202, 312, 907.2 and Chapter 35 Appendix C of this ordinance for additional code references. (Ord. 4342, 3-3-08)

c. 1-story Business (B) Use Group occupancies with less than 5000 total square feet of floor area, allow a 1-hour Type V-A Construction Type with a decorative masonry veneer. Lot line setbacks and multiple buildings located on the same lot must conform with Fire Limits exception in section 503.2.1 GENERAL (Ord. 4499, 8-3-09)

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 and 709.3.

EXCEPTIONS:
1. 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 and are fully fire suppressed per Section 903.2.8. (Ord. 4056, 7-19-05).

See Section 310.3.1 for required special inspections. Approved fire rated opening assemblies shall be limited to a maximum membrane penetration as allowed in Section 713.4.2 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)

2. Floors of an R-2 use group may use a non-combustible floor joist (metal bar joist) with a non-penetrated 2-hour fire resistive separation rating (see d. below) under the following conditions:

a. When the residential floor is not located above a garage floor or other more hazardous use.
b. When the building floor area does not exceed the height and area limitations for a non-fire sprinkler protected building (see 903.1.2 & 903.2.8).
c. When a drop ceiling is installed below the fire rated floor/ceiling assembly for the installation of plumbing, electrical and mechanical equipment to rooms. (Ord. 4499, 8-3-08)
d. In buildings fully fire sprinkler protected per NFPA 13, the fire rated floor assembly may be reduced to a 1-hour rated assembly (similar to the interior wall fire rating reduction).

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).
See Section 310.3.1 for required special inspections

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. See Section 310.3.1 for required special inspections. (8/09)

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)

c. R-2 MULTI-FAMILY
Multi-family R-2 use groups may reduce the 2-hour fire rated masonry or 3-wall assembly to a 1-hour tested fire rating if the building is fully fire sprinkler protected in accordance with Section

903.1.1. (Ord. 4499, 8-3-09). The fire rated tenant wall shall be continuous from the foundation to or through fire rated floor/ceiling assemblies of an equal fire rating to that of the common tenant wall(s). (See Table 601 footnote h. for additional notes)

When the building is 100% fully fire sprinkler protected per Section 903.1.1, penetrations are allowed in masonry fire rated wall assemblies as permitted in this code. When the design option for a 3-wall fire partition assembly is used, the center wall shall not be penetrated. Permitted masonry wall penetrations shall be effectively sealed to prevent the movement of air from adjoining tenants. Masonry wall penetrations shall comply with Section 713.3 and the sound rating requirements referenced in Sections 709.3 item 3, 1207.2 and 1207.3.

39. 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 Village Code 9-7-5, 9-7-10-1 and 9-7-10-3 for additional parking details)

40. 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.

41. 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 See 310.1 & 503	
		A	B	A	B	A	B	HT	A	B
	HGT (ft)	UL	160	65	55	65	55	65	50	35
	HGT (S)									
A-1	S	UL	5	3	2	3	2	3	Not Permitted	Not Permitted
	A	UL	UL	15,500	8,500	14,000	8,500	15,000		
A-2	S	UL	11	3	2	3	2	3	Not Permitted	Not Permitted
	A	UL	UL	15,500	9,500	14,000	9,500	15,000		
A-3	S	UL	11	3	2	3	2	3	Not Permitted	Not Permitted
	A	UL	UL	15,500	9,500	14,000	9,500	15,000		
A-4	S	UL	11	3	2	3	2	3	Not Permitted	Not Permitted
	A	UL	UL	15,500	9,500	14,000	9,500	15,000		
A-5	S	UL	UL	UL	UL	UL	UL	UL	Not Permitted	Not Permitted
	A	UL	UL	UL	UL	UL	UL	UL		
B	S	UL	11	5	3	5	3	5	1 4999 (Ord. 4499)	Not Permitted
	A	UL	UL	37,500	23,000	28,500	19,000	36,000		
E	S	UL	5	3	2	3	2	3	Not Permitted	Not Permitted
	A	UL	UL	26,500	14,500	23,500	14,500	25,500		
F-1	S	UL	11	4	2	3	2	4	Not Permitted	Not Permitted
	A	UL	UL	25,000	15,500	19,000	12,000	33,500		
F-2	S	UL	11	5	3	4	3	5	Not Permitted	Not Permitted
	A	UL	UL	37,500	23,000	28,500	18,000	50,500		
H-1 503.5.2	S	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
	A									
H-2 503.5.2	S	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
	A									
H-3 503.5.2	S	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
	A									
H-4 503.5.2	S	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
	A									
H-5 503.5.2	S	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
	A									

I-1	S A	UL UL	9 55,000	4 19,000	3 10,000	4 16,500	3 10,000	4 18,000	Not Permitted	Not Permitted
I-2	S A	UL UL	4 UL	2 15,000	1 11,000	1 12,000	NP NP	1 12,000	Not Permitted	Not Permitted
I-3	S A	UL UL	4 UL	2 15,000	1 11,000	2 10,500	1 7,500	2 12,000	Not Permitted	Not Permitted
I-4	S A	UL UL	5 60,500	3 26,500	2 13,000	3 23,500	2 13,000	3 25,500	Not Permitted	Not Permitted
M	S A	UL UL	11 UL	4 21,500	2 12,500	4 18,500	2 12,500	4 20,500	Not Permitted	Not Permitted
R-1 Note a	S A	UL UL	11 UL	4 24,000	4 16,000	4 24,000	4 16,000	4 20,500	Not Permitted	Not Permitted
R-2 Note a	S A	UL UL	11 UL	4 24,000	4 16,000	4 24,000	4 16,000	4 20,500	Not Permitted	Not Permitted
R-3 Height Note; See LDC (Ord. 3910)	S A	UL UL	11 UL	4 UL	4 UL	4 UL	4 UL	3 UL	3 7,000	2 7,000
S-1	S A	UL UL	11 48,000	4 26,000	2 17,500	3 26,000	2 17,500	4 25,500	Not Permitted	Not Permitted
S-2	S A	UL UL	11 79,000	5 39,000	3 26,000	4 39,000	3 26,000	5 38,500	Not Permitted	Not Permitted
U	S A	UL UL	5 35,500	4 19,000	2 8500	3 14,000	2 8,500	4 18,000	2 9,000	1 5,500

For SI: 1 foot = 305 mm, 1 square foot = 0.0929 m^2.

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

42. 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 non-combustible material or solid material: brick, stone, decorative masonry, decorative architectural concrete panels or similar materials or constructed of non-combustible metal, 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. (Ord. 4499, 8-3-09). An anchored masonry veneer shall be a minimum of 2.625" in depth.

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 and allowed to be of wood frame exterior walls when located 10 feet or more from all property lines. Less than a 10 feet setback requires construction in accordance with the principle building as amended; (Ord. 4499, 8-3-09)

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 75 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 705.5. (8/09)

7. Exterior walls for 1-story office buildings of less than 5000 square feet in gross exterior building footprint area are permitted within the fire limits under the following conditions:

a. Construction type must be a minimum of 5A (1-hour fire rating for structural members per Table 601.

b. Buildings exterior walls and their roof projection more than 30 inches are not permitted to be located less than 30 feet from an adjacent structure on the same lot. An interior lot line setback shall not be less than 15 feet.

c. The occupant load of the entire building shall not exceed 50 persons. (Ord. 4499, 8-3-09)

8. Building exterior walls constructed of structural metal studs are allowed when structurally engineered by a State of Illinois Licensed Architect or Structural Engineer (also see Sections 104.4, 107.3.4.1 and 1704.1). Special inspections must be performed by an approved agency as specified in Section 1703 and inspection reports shall be submitted before any interior finishes for a rough or partial rough framing approval are requested. Plans and special inspections for metal studs shall include:
a. Metal wall design shall be in accordance with AISI-WSD for cold- formed steel studs, per Section 2210 for Light-Framed Construction.
b. Labeling of metal studs for the gauge/thickness on bearing wall conditions.
c. The connections for support and bracing of all members shall be installed as structurally designed to resist vertical and horizontal loads.
d. A statement of special inspections required by the responsible contractor as noted in Sections 1705 and 1706 of this code.
e. All exterior walls require an anchored masonry veneer as noted above and in Table 1405.2 as amended. (Ord. 4499, 8-3-09)

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. (8/09)

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[a] 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	4 hour	Not Permitted	B

building			
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 705.11 and 706.5.)
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 705.8.

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.

43. 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.

503.3.1. FIRE SEPARATION: Exterior walls shall be constructed with the fire-resistance ratings as required in Section 705.

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

44. 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 buildings with more than one story above grade and a 200 percent (I s = 200 percent) increase is allowed for single story buildings. 1 story Religious A-3 Occupancy Classifications allow a 300 percent area increase and a 200% area increase for Religious buildings more than 1-story above grade. (Ord. 3910, 7-19-04)

EXCEPTION:

a. Group H-1, H-2 or H-3 (Use groups not permitted within the Village).

b. R-1 hotels having 2 or more stories above grade, (including "Mixed occupancies" per Section 508) of Type III-B construction, are allowed a 200% area increase when using 12,000 square feet as a maximum area limitation in Table 503. See Table 601 footnote k, for Type III Construction exception for this reduced basic floor area. (Ord. 4056, 7-18-05)

45. That Section 508.3.3 is revised and shall read as follows:

508.3.3 SEPARATION No separation is required between non-separated occupancies.

Exception: 1. Group H-2, H-3, H-4 or H-5 occupancies shall be separated from other occupancies in accordance Section 508.4
2. I-1, 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.

46. That Section 508.5 is added to Chapter 5 and shall read as follows:

508.5 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.

47. 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.

48. 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. Streets and address numbers shall use the English Language.

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. Address shall use the English Language.

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.

49. That Section 512 and is 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

50 That Table 601 shall read as follows:

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

BUILDING ELEMENT	*TYPE I*		**TYPE II**		**TYPE III**		**TYPE IV**	**TYPE V**	
	A	**B**	**A**	*B*	**A**	**B**	**HT**	**A[d]**	**B**
Primary structural frame [g]. (see Section 202)	3[a]	2[a]	1	0	1	0	HT	1	0
Bearing walls Exterior [f, g, i, j, k] Interior [h, k]	3 3[a]	2 2[a]	1 1	0 0	2 1	2 0	2 1/HT	1 1	0 0
Nonbearing walls and partitions Exterior [f, g, i, j, k]	See Table 602								
Nonbearing walls and partitions Interior [e, f, h, k]	0	0	0	0	0	0	**See Section** 602.4.6	0	0
Floor construction Including supporting beams and joists [e,]	2	2	1	0	1	0	HT	1	0
Roof construction Including supporting beams and Joists [e,]	1-1/2[b]	1[b,c]	1[b,c]	0[c]	1[b, c]	0	HT	1[b, c]	0

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

b. Except in Group F-1, H, M and 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. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

c. 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 of Type V-A construction, provided such system is not otherwise required by other provisions of the Village 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.

e. Not less than the fire-resistance rating required by other sections of this code.

f. Not less than the fire-resistance rating based on fire separation distance (see Table 602).

g. Not less than the fire-resistance rating as referenced in Section 704.10

h. Attached residences shall be separated with a two (2) hour fire rated assembly by using a rated masonry or 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 707.5 and as required further by this code and the ordinances listed in Chapter 35. The fire resistance rated 3-wall separations shall not be penetrated. Masonry wall penetrations shall be limited as specified in Section 501.3.4 and shall be effectively sealed to prevent the movement of air from adjoining tenants. Sound ratings shall be maintained

i. 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.

j. 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)

k. 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.

51. That Table 602 shall read as follows:

TABLE 602

FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE [a, e, i]

FIRE SEPARTATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	GROUP H [f]	GROUP F-1, M, S-1 [g]	GROUP A, B, E, F-2, R[h], S-2 [g], U[b]
X < 5[c]	All	3	2	1
X ≥ 5	IA	3	2	1
X < 10	Others	2	1	1
X ≥ 10	IA, IB	2	1	1[d]
X < 30	IIB,VB	1	0	0
	Others	1	1	1[d]
X ≥ 30	All	0	0	0

For SI: 1 foot = 304.8 mm.

a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
b. For special requirements for Group U occupancies, see Section 406.1.2.
c. See Section 706.1.1 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. For special requirements for Group H occupancies, see Section 415.3.
g. For special requirements for Group S aircraft hangars, see Section 412.4.1.
h. 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.
i. See Table 503.2.3 for Buildings of Types 2B and 3B Construction within the Fire Limits.

52. 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. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies for blocking and backing only.

53. 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 706.0).

54. 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.

55. That Section 705.1 shall read as follows:

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

EXCEPTION: The provisions of Sections 706.2 and 706.3 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)

56. That Section 705.5.1 is added and shall read as follows:

705.5.1 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 the separation is less than 3 feet (less than 6 feet between exterior walls of 2 buildings on the same lot. See definition of fire separation distance in Section 702).

57. Table 705.8 shall read as:

Table 705.8
Maximum Area of Exterior Wall Openings on Fire Separation Distance and Degree of Opening Protection [j, k]

Fire Separation Distance (Feet)	Degree of Opening Protection	Allowable Area [a,]
a, b, c, d, e, f. g, h, I j, k 0 to less than 3 [b, c]	Unprotected, Nonsprinklered (UP, NS)	Not Permitted
	Unprotected, Sprinklered (UP, S) [i]	Not Permitted
	Protected (P)	Not Permitted
3 to less than 5 [d, e]	Unprotected, Nonsprinklered (UP, NS)	Not Permitted
	Unprotected, Sprinklered (UP, S) [i]	15%
	Protected (P)	15%
5 to less than 10 [e, f]	Unprotected, Nonsprinklered (UP, NS)	10%
	Unprotected, Sprinklered (UP, S) [i]	25%
	Protected (P)	25%
	Unprotected, Nonsprinklered (UP, NS)	15%

10 to less than 15 [e, f, g]	Unprotected, Sprinklered (UP, S) [i]	45%
	Protected (P)	45%
15 to less than 20 [f, g]	Unprotected, Nonsprinklered (UP, NS)	25%
	Unprotected, Sprinklered (UP, S) [i]	75%
	Protected (P)	75%
20 to less than 25 [f, g]	Unprotected, Nonsprinklered (UP, NS)	45%
	Unprotected, Sprinklered (UP, S) [i]	No Limit
	Protected (P)	No Limit
25 to less than 30	Unprotected, Nonsprinklered (UP, NS)	70%
	Unprotected, Sprinklered (UP, S) [i]	No Limit
	Protected (P)	No Limit
30 or greater	Unprotected, Nonsprinklered (UP, NS)	No Limit
	Unprotected, Sprinklered (UP, S) [i]	Not Required
	Protected (P)	Not Required

For SI: 1 foot = 304.8 mm.

UP, NS = Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

UP, S = Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

P = Openings protected with an opening protective assembly in accordance with Section 705.8.2.

a. Values indicated are the percentage of the area of the exterior wall, per story.

b. For the requirements for fire walls of buildings with differing heights, see Section 706.6.1.

c. For openings in a fire wall for buildings on the same lot, see Section 706.8.

d. The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.

e. Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.

f. The area of unprotected and protected openings shall not be limited for Group R-3 occupancies, with a fire separation distance of 5 feet or greater.

g. The area of openings in an open parking structure with a fire separation distance of 10 feet or greater shall not be limited.

h. Includes buildings accessory to Group R-3.

i. Not applicable to Group H-1, H-2 and H-3 occupancies.

j. Includes accessory buildings to Group R-3 as applicable in Section 101.2.

k. See Table 503.2.3 for exterior wall openings in types 2B and 3B construction classifications.

58. That Section 706.9 shall read as follows:

706.9 FIRE WALLS PENITRATIONS AND CUTTING : Cutting of fire walls and party walls for chases, piping or for structural members shall not be permitted. Penetrations shown in Section 713 shall apply to Fire Barriers, Shaft Enclosures, Fire Partitions and Horizontal Assemblies as noted in Sections 707, 708, 709, 712 and fire resistive assemblies that are not classified as a "Fire Wall" as defined in Section 702.

59. That Section in 708.4 shall be revised to read as follows:

708.4 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. Shaft and Stairway enclosures of less than 3 stories may be of a fire resistive rating of not less than 1 hour. (See Section 1022.1).
2. Single Family Dwellings

60. That Section 709.1 General, shall read as follows:

709.1 FIRE PARTITIONS GENERAL
Wall assemblies of a minimum 1-hour fire rating shall be installed as required by Sections, 310.3, 402.7.2, 1018.1 and 508.4 shall comply with this section including: (Ord. 4499, 8-3-09)

1. Walls separating dwelling units. (see Section 310.3, 501.3.4 and Table 601 footnote h.). (Ord. 4499, 8-3-09)
2. Walls separating sleeping units in Group R-1, R-2 and I-1 Occupancies. (see sections 310.3.1, 501.3.4.). (Ord. 4499, 8-3-09)
3. Walls separating tenant spaces in covered mall buildings.
4. Corridor walls as required by Section 1018.1.
5. Elevator lobby separation as required by Section 708.14.1.
6. Residential aircraft hangars.
7. See Table 601 Footnote "h, i, j and k)"
8. Wall separating tenants in multi-tenant business and commercial buildings shall be of a 1-hour fire rated assembly. Buildings with 100% fire sprinkler protection may reduce the tenant wall fire rating to ½ hour and allow non-fire rated glass to be installed where facing open area lobbies accessible to all tenant space similar to a covered mall application. (Ord. 3910, 7-19-04; Amd. Ord. 4499, 8-3-09)

61. That Section 709.3 is revised and shall read as follows:

709.3 FIRE-RESISTIVE RATING OF FIRE PARTIONS AND FLOORS (Ord. 4499, 8-3-09)
The fire-resistance rating of fire partitions and floors shall be 1 hour and as specified below:

1. Corridor walls as permitted by Table 1018.1 EXCEPTIONS shall not conflict with any special provisions of this Village Code.

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. Sections 501.3.3 and 501.3.4 for R-2 Walls and Floors using fire sprinkler exceptions is allowed.

3. PARTIONS AND FLOORS FOR USE GROUPS R-1 AND R-2:
Tenant Walls for R-1 and R-2 Use Groups shall be as specified in Section 501.3.4. 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. Fire sprinkler protected buildings allow a reduction to a one (1) hour fire rated floor assembly per Section 501.3.3. (Section 503.2 references fire limits and restrictions).

EXCEPTION:
a. 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 903.2.8 and is designed with a minimum construction of Type IIB or IIIB. (See Sections 501.3.3 and 503.2) (Ord. 3994, 3-7-05; Amd Ord. 4056, 7-18-05)
b. Floors of a multi-family (R-2) use group may use a non-combustible floor joist (metal bar joist per Section 501.3.3) with a non-penetrated fire resistive separation rating with all the following conditions when:

1. The residential floor is not located above a garage floor or other more hazardous use.
2. The building floor area does not exceed the height and area limitations when the building is not non-fire sprinkler protected per Sections 903.2.8 (as amended) and 903.3.1. (note; area and height increases are only allowed per 506.3 & 903,3,1,1)
3. A drop ceiling is installed below the fire rated floor/ceiling assembly for the installation of plumbing, electrical and mechanical equipment supply to rooms.
4. An airborne sound transmitting (STC) rating of at least 55, and a structure borne (IIC) rating of 50 are provided.
(See Sections 406.2, and 712.3 for references)
(Ord. 4499, 8-3-09)

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)

Buildings with 100% fire sprinkler protection may reduce the tenant wall and floor fire ratings to ½ hour and allow non-fire rated glass to be installed where facing open area lobbies accessible to all tenant space similar to a covered mall application. This reduction does not apply where sections of the code are specific to a certain use or application (example multi-family dwelling corridors). (Ord. 4499, 8-3-09)

62. That Section 709.4 shall read as follows:

709.4 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 concealed vertical spaces shall be fireblocked at every floor level as required in Section 717.

63. That Section 712.3 shall read as follows:

712.3 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 709.3, item #4.

64. That Section 713.3 shall read as follows:

713.3 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 Sections 713.3.1 through 713.3.3. Penetrations in smoke barrier walls shall also comply with Section 713.5

And Subjection 713.3.1.1.1 shall be added to read as follows:

713.3.1.1.1 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 713.3.1.2. 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 having a two (2) hour fire rated assemblies, per Section 708, when penetrating floors. (Ord. 3994, 3-7-05)

65. 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 structural engineer must submit a plan detailing 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.

66. 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.

67. 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.

68. That Section 901.8 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 907.6.5 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

69. 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.

70. 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 Village of Orland Park or professional services as approved by the Building Official, 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 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.

71. 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 crates 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.

72. That Section 903.2.1shall 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.

73. That Section 903.2.3 shall read as follows:

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

74. That Section 903.2.4 and its Subsections shall read as follows:

903.2.4 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.

903.2.4.1 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 m2) in area which generate finely divided combustible waste or which use finely divided combustible materials.

903.2.4.2 MERCANITLE:
An automatic fire suppression system shall be provided throughout all M Use Group buildings used for display and sale of upholstered furniture.

75. That Section 903.2.8 shall read as follows:

903.2.8 USE GROUP R-1: An automatic fire suppression system shall be provided throughout all buildings and/or areas of Use Group R-1. See 709.3 item # 3 for other code references.

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.

903.2.8.1 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 preventer will not be required. See 709.3 item # 3 for other code references.

76. That Section 903.2.9 shall read as follows.

903.2.9 GROUP S-1: See section 903.2.4 for fire sprinkler area requirements.

903.2.9.1 REPAIR GARAGES: Shall comply with Section 406.6.7 as amended

903.2.9.2 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.

77. That Section 903.2.10 shall read as follows

903.2.10 GROUP S-2 ENCLOSED PARKING GARAGES:
Section 903.2.4 shall apply for fire sprinkler system requirements.
Exception: Enclosed parking garaged located beneath R-3 (Single Family Dwellings).

(F) 903.2.10.1 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 5,000 square feet).(See Section 903.2.4 that also regulates this S-2 Use Group).

78. That Subsection 903.3.1.2 shall read as follows:

903.3.1.2 NFPA 13R SYSTEMS: In Use Group R-2 buildings (*as amended in 501.3 & 503.2*) and greater than 10,000 square feet and 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. See 2009/IBC model code language of this section applicable to existing and new structures that may be of Type V Construction (*note; Type V construction for new R-2 Use/building is not permitted by the Village Code per code section 503.2*).

79. That Section 903.3.5 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.

903.3.5.1 DOMESTIC CONNECTION: A backflow preventer 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.

80. 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 preventer as required by Village Ordinance No. 1519 and the plumbing code as listed in Chapter 35.

81. 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.

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

903.4.1 FIRE SUPPRESSION SIGNAL MONITORING: All automatic fire suppression systems shall be electronically supervised by connecting to the appropriate dispatcher for the Village of Orland Park in accordance with NFPA 72 listed in Chapter 35. Appropriate Districts include: Orland Fire Protection District, Palos Fire Protection District and Mokena Fire Protection District.

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

903.4.1.1 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.

83. That Subsection 905.3.1 shall read as follows:

905.3.1 BUILDING HEIGHT AND TRAVEL DISTANCE: 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 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.

84. That Section 906 shall read as follows:

906: PORTABLE FIRE EXTINGUISHERS WHERE REQUIRED: Portable fire extinguishers of the approved type and size (4A 60BC) shall be installed in all buildings and tenant spaces at readily accessible locations (within 5 feet of required exit doors) as approved by the "Fire Code Official" or as referenced in the Village Fire Code adopted and referenced in Chapter 35. Fire extinguishers shall also be located near cooking areas and other specific locations noted within this Section.

85. 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 this Section and 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/heat 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. Notification and alarms are required per NFPA 72 and the Illinois Accessibility Code.

EXCEPTIONS:
1. An Agricultural Canopy that is less than 8000 square feet in area of an Agricultural use not containing combustible storage except for plant sales, may be permitted without a fire alarm system when design complies with the Village Code and Land Development Code regulations. (Ord. 4342, 3-3-08)

See Sections 202, 312.1, 501.3.2, 3105, 2404.5 and Chapter 35 Appendix C for other code amendments. (Ord. 4342, 3-3-08)

2. Single story buildings less than 5000 square feet for gross exterior footprint area and with an occupant load of less than 50 persons are allowed with a local alarm only, when no other type of fire suppression system protection is required by this code. A local alarm does not apply to Institutional, residential or other hazardous uses. (Ord. 4499, 8-3-09)

907.2.11.4 SMOKE ALARMS 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.

86. That Section 907.5.2 shall be revised and Section 907.5.3 shall be added to read as follows:

907.5.2 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, or meet Sections 907.5.2.1 through 907.5.2.3, whichever is more restrictive.

907.5.3 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

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

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

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

907.5.3.5 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.

87. Insert after the definition of DOOR, BALANCED, "DOORWAY-CLEAR WIDTH" to Section 1002.1.

1002.1 DOORWAY-CLEAR-WIDTH: The clear width of a doorway opening is measured with the door open at 90o degrees from its closed position, measured between the face of the door and the face of the opposite stop. Permitted sliding doors noted in Section 1008.1.2, Exception # 9 must be designed to allow for accessible lever type opening devices required by the Illinois Accessibility Code.

88. That Sections of 1006 and 1007 shall read as follows:

1006.1 MEANS OF EGRESS ILLUMINATION, ARTIFICIAL /EMERGENCY LIGHTING: All rooms and usable floor surfaces in a building requiring a means of egress, including the exit discharge, shall be equipped with artificial lighting facilities shall be illuminated at all time the building or space is occupied.

Exception:

1. Occupancies in Group U
2. Aisle access ways in a Group A.
3. Dwellings and Sleeping units in Groups R-1, R-2 and R-3
4. Sleeping units of Group I Occupancies.

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 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.

1006.3 ILLUMINATION EMERGENCY POWER SOURCE: All required 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).

1007 ACCESSIBLE MEANS OF EGRESS: See 5-1-12 Deletions and the Illinois Accessibility Code (IAC) for means of egress specifications. Sections of the model Code may be used by the Building Official when there is no conflict with the State of Illinois Accessibility Code. Example: Areas of Refuge Sections 1007.8 through 1007.11 for two-way communication, identification, signage and instructions.

89. That Section 1008.1.4.5 shall read as follows:

1008.1.4.5 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.

90. That Subsection 1008.1.10 shall read as follows:

1008.1.10 PANIC AND FIRE EXIT HARDWARE:
Doors Serving rooms or spaces with an occupant load of 50 or more in a Group A, E, I-2 occupancies or electrical equipment rooms rated at 1200 amperes or more shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware. Where panic and fire exit hardware is installed, it shall comply with the following:

1008.1.10.1 INSTALLATION: Where panic or 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).
3. Each door in a means of egress from an occupancy of Group A, I-2 or E having an occupant load of 50 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.

91. That Subsection 1008.4 shall read as follows:

1008.4 DOORS LEADING TO HAZARDOUS AREAS: See Illinois Accessibility Code (400.310 t), 2).

92. That Subsection 1010.1 shall read as follows:

1010.1 RAMPS: Ramps used as a means of egress shall meet this code and the State of Illinois Accessibility Code listed in Chapter 35.

93. That Sections 1011.1 and 1011.2 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 from any direction of egress travel. 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.

1011.2.1 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.

1011.2.2 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.

1011.2.3 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).

94. That Section 1013.1 shall be revised to read as follows:

1013.1 GUARDS WHERE REQUIRED: Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, stairs, ramps and landings that are located more than 18 inches (762 mm) measured vertically to the floor or grade below at any point

within 36 inches (914 mm) horizontally to the edge of the open side. Guards shall be adequate in strength and attachment in accordance with Section 1607.7.
"Exception" per the IBC Code shall apply.

95. 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 perimeter benches at least 18 inches in height in lieu of guardrails.

96. 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.

97. 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.

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.

IBC Code Subsections 1014.2.1 through 1014.2.7 apply, where no conflict exists with the above.

98. That Subsection 1014.3 shall read as follows:

1014.3 COMMON PATH OF EGRESS TRAVEL: Common and Single paths of exit access shall follow the requirements of Table 1015.1 as amended. For common path of egress travel in Group A occupancies and assembly occupancies accessory to Group E occupancies having fixed seating, see Section 1028.8. Specifications for this section of the model code shall apply where no conflicts exist.

99. 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, E	49	50	1000
B	49	75	3000
F	30	75	3000
H-1, H-2 & H-3	3	25	1000
H-4 & H5	10	50	1000
I*	10*	50*	2000*
M	49	75	2000
R-1 & R-2	10	75 or 125 w/fire sprinkler protection	2000
R-3	10	125	3000
S,U	29	100	3000

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

100. That Subsection 1021.2 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 1021.2 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 1021.2

BUILDINGS WITH ONE EXIT *see footnotes #1& 2*

Use Group	Maximum Height Above Grade* or Basements	Size	Maximum Exit Access Travel Distance	Minimum Fire Resistance Rating of Exit Enclosure	Minimum Fire Resistance Rating of Opening Protection
B, M & S see footnote #3	2 Story with 800 sf max 2nd floor	2000 square feet total	75 feet	0-hour	0-hour
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

1. No Basements or Cellars are allowed with a single exit except as may be allowed for an R-3 Use
2. Also see Table 1015.1 for Rooms and Spaces allowing only one (1) means of egress.
3. Applies only in the Orland Park Historic District.

101. That Subsection 1022 shall read as follows:

1022.1 INTERIOR EXIT ENCLOSURES: Interior exit stairways and interior exit ramps shall be enclosed with fire barriers constructed in accordance with Section 708 or horizontal assemblies constructed in accordance with Section 712, 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. Exit enclosure shall lead directly to the exterior of the building or extend to the exterior with an exit passageway conforming to Section 1023 except as permitted in Section 1027.1. 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.

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 do not exit into another fire rated enclosure.

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 408.3.8, are not required to be enclosed.

7. Means of egress stairways as required by Section 410.5.3 and 1015.6.1 are not required to be enclosed.

102. That Subsection 1022.9 shall read as follows:

1022.9 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).

1022.9.1 Termination for enclosure exit. A smokeproof enclosure or pressurized stairway shall terminate at an exit discharge or 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.

103. That Subsection 1026.2. shall read as follows:

1026.2. EXTERIOR EXIT RAMPS AND STAIRWAY USE IN A MEANS OF EGRESS. Exterior exit ramps and 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 1026.3.

104. That Section 1026.3 shall read as follows:

1026.3 EXTERIOR EXIT STAIRWAYS AND RAMPS OPEN SIDES: Exterior exit ramps and stairways serving as an element of a required means of egress shall be open on at least one side. An open side shall have a minimum of 35 square feet (3.3m2) of aggregate open area adjacent to each floor level and the level of each intermediate landing. The required open area shall be located not less than 42 inches (1067 mm) above the adjacent floor or landing level.
In occupancies other than Use Group R-3, treads, platforms and landings which are part of the exterior stairways and ramps and are subject to snow and ice shall be protected to prevent accumulation of same. The protection of exterior stairways and ramps 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.

105. That Subsection 1027.1.1 shall be added to Section 1027.1 and read as follows:

1027.1.1 EXIT DISCHARGE LANDING: The grade level 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.

106. That in Section 1029.1.1 shall be added to read as follows:

1029.1.1 EMERGENCY ESCAPE APPLICABILITY.
Emergency escape and rescue required for Use Groups R and I-1 occupancies shall apply to new and existing structures as specified in Sections 101.2 and 102.1 of this code.

107. That Section 1028.5.3 shall be added to read as follows:

1028.5.3 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 1029.2 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.

108. That Chapter 11 Accessibility, 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. Due to the State of

Illinois regulations, IBC Code Sections 1103 through 1109 are deleted per Section 5-1-12 of this 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)

1102 ACCESSIBILITY DEFINITIONS
1102.1 DEFINITIONS: As referenced by the State of Illinois Accessibility Code.

1110 SIGNAGE FOR ACCESSIBILILTY:
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.

109. 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)

110. That Section 1203.5.1 is added to Section 1203.5 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.

111. That Section 1203.6 shall be added to 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.

112. 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 1205.2) is required 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 1205.2.

113. 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.
See Section 709.3 Exceptions for restrictions

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.
See Section 709.3 Exceptions for restrictions

114. 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.

115. That Section 1209 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 APPPLIANCES 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.

116. That Subsection 1211 shall read as follows:

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.

117. That Subsection 1301.1.1 and 1302 shall read as follows:
(Ord. 4534 – 12-21-09)

1301.1.1 CRITERIA:
Buildings shall be designed and constructed in accordance with Sections 1301.1, 1302 and the 2009/IECC (International Energy Conservation Code/2009 Edition), 1st printing and as regulated by the State of Illinois with the following amendments:

The 2009 International Energy Conservation Code (IECC) Sections shall be added to the Village Code with amended Subsections below to read as follows:

That Sub-section 101.1 of the IECC shall be revised to read as follows:

101.1 Title. This code shall be known as the International Energy Conservation Code of Orland Park, Illinois and shall be cited as such. It is referred to herein as "this code."

That Sub-section 101.4.7 of the IECC shall be added to read as follows:

101.4.7 Conflicts. When a conflict occurs between the Building Code and the Energy Conservation Code, the Building Code shall take precedence.

That Sub-section 104.2 of the IECC shall read as follows:

104.2 Required approvals. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent

wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

Approved thermal envelope insulation and equipment shall be inspected prior to the enclosure of products. See required energy inspections in Subsection 110.3.6.1 of this code.

That Sub-section 104.4 of the IECC shall read as follows:

104.4 Re-inspection. A building shall be re-inspected when determined necessary by the code official. See Village Code Title 5 Chapter 2 for re-inspections fees when required.

That Sub-section 107.2 of the IECC shall read as follows:

107.2 Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with the schedule as established in the Village Code Title 5 Chapter 2.

That Sub-section 107.3 of the IECC shall read as follows:

107.3 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary permits shall be subject to an additional fee established by the Village Code, which shall be in addition to the required permit fees.

That Section 109 of the IECC shall read as follows:

Section 109 Means of Appeals: See Village Code 5-1-13 Section 112 for means of appeals.

That Chapter 6 of the IECC immediately after ICC Referenced Standards shall read as follows:

ICC International Code Council Inc.
500 New Jersey Ave, NW
6th Floor, Washington DC.
IBC - 2006
IFC - 2006
IMC - 2006
IRC -- 2006

1302: RESIDENTIAL INSULATION REQUIREMENTS:
(Ord. 4534, 12-21-09)

1302.1 Minimum R Values

The IECC classifies Cook County in Climate Zone 5 for minimum insulation values. Using the IECC as a referenced standard, the minimum R-values for insulating components shall be as follows:

LOCATION	MINIMUM R-VALUE
Exterior walls of wood framing Wood Frame Crawl Space Walls	2"x 6" w/R-19 or 2"x4" R-13 cavity insulation with exterior wall sheathing of R-5. See footnotes in IECC Table 402.1.1 details
All Ceilings, flat and sloped	R-38. *See Section 402.2.2 for no attic spaces*.
Steel Frame Ceiling Wall and Floor Insulation	See Table 402.2.5
Heated floor slab on grade	R-10 - 2 feet below grade
Floors above unheated areas (crawl spaces).	R-30 or insulation sufficient to fill cavity, R-19 min.
Exterior foundation walls for basement spaces below grade.	R-10 continuous on interior or exterior or R-13 with cavity wall framing on the interior side.

See Table 402.1.1 of the International Energy Conservation Code for specific minimum requirements.

118. 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.

119. 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 for required masonry and minimum thicknesses for solid and anchored masonry.

120. 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.

121. That Table 1405.2 shall read as follows:

TABLE 1405.2

MINIMUM THICKNESS OF WEATHER COVERINGS d.

COVERING TYPE	MINIMUM THICKNESS (inches)
Anchored masonry veneer d. (see Section 501.3)	2.625 *depth*
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[b]
Unit masonry	0.625[b]
Cast-in-place or precast concrete	0.625[b]
Two-coat work over:	
Unit masonry	0.5[b]
Cast-in-place or precast concrete	0.375[b]
Terra cotta (anchored)	1
Vinyl siding	0.035
Wood shingles	0.375
Wood siding (without sheathing)[a]	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.

122. That Subsection 1405.6.3 is added to Section 1405.6 and shall read as follows:

1405.6.3 MASONRY ANCHORED TO 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 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 1404.2.

123. That Subsection 1405.6.4 is added to Section 1405.6 and shall read as follows:

1405.6.4 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 1404.2

124. That Subsection 1405.6.5 is added to Section 1405.6 and shall read as follows:

1405.6.5 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.

125. That Section 1405.9 shall read as follows:

1405.9 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.

126. That Section 1408.6.1 shall be added to 1408.6 to read as follows:

1408.6.1 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.

127. That 1503.4.3 shall read as follows:

1503.4.3 Gutters: Add the requirement (for gutters required on residential building) of Section 1401.2 as amended to this existing sub-section.

128. 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 (Pf) 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.

129. That Section 1612.1 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.

130. That Subsection 1802 shall add the following:

1802 DEFINITIONS: The following words and terms, for the purposes of this section and as used elsewhere in this code, shall be included and have the meanings shown herein:

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 1807.1.5.

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

131. That Subsection 1804.2.1 shall read as follows:

1804.2.1 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.

132. That Sections 1805.2 and 1805.2.2.1shall be revised to read as follows:

1805.2 DAMPPROOFING REQUIRED: Where hydrostatic pressure will not occur as determined by Section 1803.5.4 floors and walls shall be damp proofed in accordance with this section.

1805.2.2.1 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.

133. That Subsection 1805.3.2 shall read as follows:

1805.3.2 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.

1805.3.2.1 SURFACE PREPARATION OF WALLS: Prior to the application of waterproofing materials on concrete walls, the walls shall be prepared in accordance with Section 1805.2.2.1.

134. That Subsections 1805.4 and 1805.4.3 shall be revised to read as follows:

1805.4 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.
Model Code Sections 1805.4.1 and 1805.4.2 apply where there is no conflict occurs with the Village Code.

1805.4.3 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.

135. That Section 1807 Subsections shall be revised to read as follows:

1807.1 FOUNDATION WALLS: Concrete foundation walls shall be designed in accordance with Chapter 19. Foundation walls that are laterally supported at the top and bottom and within the parameters of Table 1807.1.6.2 is permitted to be designed and constructed in accordance with Section 1807.1.6.

136. That Subsection 1807.1.5 shall read as follows:

1807.1.5 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 1807.1.6 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 1807.1.6.2 or shall comply with the following: (Ord. 3910, 7-19-04)

1. The size and spacing of vertical reinforcement shown in Table 1807.1.6, 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, db [$d = t - (1.25 + db/2)$].

The reinforcement shall be placed within a tolerance of ± 3/8 inch (9.5 mm) where d is less than or equal to 8 inches (203 mm) or±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, fc , 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 tfc , where t is the specified wall thickness in inches.

137. That Section 1807.1.6 shall read as follows:

1807.1.6 FOUNDATION WALL THICKNESS: The minimum thickness of concrete foundation walls that are laterally supported at the top and bottom shall comply with Sections 1807.6.1, 1807.6.1.2 and 1807.1.5 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 1807.1.6.2 shall be designed in accordance with ACI 530/ASCE 5/TMS 402 (masonry walls not permitted as building foundations) or ACI 318 listed in Chapter 35.

1807.6.1 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 1807.6.1 are met.

1807.1.6.2 THICKNESS BASED ON SOIL LOADS, UNBALANCED BACKFILL HEIGHT AND WALL HEIGHT: The thickness of foundation walls shall comply with the requirements of Table 1807.1.6.2 for plain concrete walls.

Table 1807.1.6.2
PLAIN CONCRETE FOUNDATION WALLS[a]

Wall height (feet)	Depth of unbalanced backfill height (feet)	Minimum wall thickness (inches)		
		Soil classes and lateral soil load[a] (pounds per square foot per foot of depth)		
		GW, GP, SW and SP soils 30	GM, GC, SM, SM-SC and ML soils 45	SC, MH, ML-CL and inorganic CL soils 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
	8	10	10	12
9	4 (or less)	10	10	10
	5	10	10	10
	6	10	10	10
	7	10	10	12
	8	10 c.	12	12
	9	Notes b,c	Notes b,c	Notes b,c

Note a. For design lateral soil loads and description of soil classes, see Section 1610. 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.
Note c. Foundation walls shall be structurally designed by a State of Illinois licensed professional architect or structural engineer.

138. That Section 1807.2 and its Subsections shall read as follows:

1807.2 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. A safety factor shall be used as describe in subsection 1807.2.3 of the model code adopted by this ordinance.

1807.2.1 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.

139. That Subsection 1808.8.1 shall be revised to read as follows:

1808.8.1 PLAIN CONCRETE: The thickness of concrete foundation walls shall not be less than required in Table 1807.1.6.2 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 ACI 318 listed in Chapter 35.

140. That Subsection 1809.3.1 shall be added to read as follows:

1809.3.1 STEP FOOTINGS: Step footings shall be tied to foundation walls with reinforcement using a minimum of 2 #4 reinforcing bars or as designed by an architect or structural engineer.

141. That Section 1809.5 shall read as follows:

1809.5 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.

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 construction.

142. That Sections 1809.7 and 1909.8 shall read as follows:

1809.7 PRECRIPTIVE FOOTINGS FOR LIGHT FRAME CONSTRUCTION: See Section 1909.8 of this code as amended.

1809.8 PLAIN CONCRETE FOOTING: In plain concrete footings, the edge thickness shall not be less than 10 inches (203 mm) for footings on soil.

1809.8.1 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.

143. 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. (See 5-1-9-2 of this ordinance for required curing)

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.

144. That Section 1906.5 shall be added to read as follows:

1906.5 SLEEVES: When a structural column is to be installed through a concrete slab, 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 structural steel column shall not sit on a poured concrete floor.

145. That Section 1909.4.1 shall be revised to read as follows:

1909.4 STRUCTURAL PLAIN CONCRETE: Design. Structural plain concrete walls, footings and pedestals shall be designed for adequate strength in accordance with ACI 318, Sections 22.4 through 22.8.

Exception: For Group R-3 occupancies and accessory buildings of light-frame construction, the required edge thickness shall comply with Section 1807.1.6 (see exceptions for smaller sheds and garages not required to have frost protection (1809.5) as permitted in this code).

146. 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 m2) 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.

147. 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).

148. 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.

149. 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.

150. 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	1/2 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	½ inch	16 inches on center
Gypsum wallboard	½ inch	16 inches on center
Reinforced cement mortar	1 inch	16 inches on center

For SI: 1 inch = 25.4 mm

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

TABLE 2304.7(3)
ALLOWABLE SPANS AND LOANS FOR WOOD STRUCTURAL PANEL SHEATHING AND SINGLE-FLOOR GRADES CONTINUOUS OVER TWO OR MORE SPANS WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS[a,b]

SHEATHING GRADES		ROOF[c]			
Panel span rating roof/floor span	Panel thickness (inches)	Maximum span (inches)		Load[e] (psf)	
		With edge support[f]	Without edge support	Total load	Live load
12/0	½	12	12	40	30
16/0	½	16	16	40	30
20/0	½	20	20	40	30
24/0	½	24	20[g]	40	30
24/16	½	24	24	50	40
32/16	15/32, ½, 5/8	32	28	40	30
40/20	19/32, 5/8, 3/4, 7/8	40	32	40	30
48/24	23/32, 3/4, 7/8	48	36	45	35
54/32	7/8, 1	54	40	45	35
60/32	7/8, 1 1/8	60	48	45	35
SINGLE FLOOR GRADES		ROOFc			
Panel span rating	Panel thickness (inches)	Maximum span (inches)		Load[e] (psf)	
		With edge support[f]	Without edge support	Total load	Live load
16 oc	½, 19/32, 5/8	24	24	50	40
20 oc	19/32, 5/8, 3/4	32	32	40	30
24 oc	23/32, 34	48	36	35	25
32 oc	7/8, 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^2.

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 ¼- inch minimum thickness underlayment or 1 ½ 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 ½-inch panel, maximum span shall be 24 inches.

152. That Subsection 2308.8.5 shall read as follows:

2308.8.5 LATERAL 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.

153. 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 using 2 X 4 studs and 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 to be more restrictive.

2308.9.1.1 NON-STURUCTURAL 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.

154. 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.

155. 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.

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

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

TABLE 2308.9.3(2)
EXPOSED PLYWOOD PANEL SIDING

MINIMUM THICKNESS[a] (inch)	MINIMUM NUMBER OF PLIES	STUD SPACING (inches) Plywood siding applied directly to studs or over sheathing
½	3	16
½	4	16

For SI: 1 inch = 25.4 mm
a. Thickness of grooved panels is measured at bottom of grooves.

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

2308.9.3(3)
WOOD STRUCTURAL PANEL WALL SHEATHING

MINIMUM THICKNESS (inch)	PANEL SPAN RATING	STUD SPACING (inches)		
			Sheathing under coverage specified in Section 2308.9.3	
		Siding nailed to studs	Sheathing parallel to studs	Sheathing perpendicular to studs
½	12/0, 16/0, 20/0 Wall-16" o.c.	16	-	16
½	16/0, 20/0, 24/0, 32/16 Wall-24" o.c.	16	16	16
½	24/0, 24/16, 32/16 Wall-24" o.c.	16	16[a]	16

For SI: 1 inch = 25.4 mm.
a. Plywood shall consist of four or more plies.

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

2308.9.3(4)
PARTICLE BOARD WALL SHEATHING

Table 2308.9.3(4)

ALLOWABLE SPANS FOR PARTICLEBOARD WALL SHEATHING[a]

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

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

160. 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 [a,b,d]	NAIL SPACING	
				General	Bracing Panels[c]
1. Lap siding					
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
2. Square edge panel siding					
Direct to studs	½	16" o.c.	6d	6" o.c. edges; 12" o.c. at intermediate supports	4" o.c. edges; 8" o.c. intermediate supports
Over sheathing	½	16" o.c.	8d	6" o.c. edges; 12" o.c. at intermediate supports	4" o.c. edges; 8" o.c. intermediate supports
3. Shiplap edge panel siding					
Direct to studs	½	16" o.c.	6d	6" o.c. edges; 12" o.c. at intermediate supports	4" o.c. edges; 8" o.c. intermediate supports
Over sheathing	½	16" o.c.	8d	6" o.c. edges; 12" o.c. at intermediate supports	4" o.c. edges; 8" o.c. intermediate supports

For SI: 1 inch = 25.4 mm.
(3/07)
a. Nails shall be corrosion resistant.
b. Minimum acceptable nail dimension.

	Panel Siding (inch)	Lap Siding (inch)
Shank diameter Head diameter	0.092 0.225	0.099 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.

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

2308.10.4.1.1CATHEDRAL 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.

162. 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.

163. 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.

164. 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 2702.2.20 of this IBC Code.

165. 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.

166. 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 into another section of the Village Code).

167. 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 in Title 5 Chapter 4 of the Village Code.

168. 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.

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

3001.2.1 ELEVATOR 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 AMBULANACE 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-FIGHERS’ 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.

170. That Sections 3009, 3010, 3011, 3012, 3013 and 3014 shall be added to read as follows:

3009: EXISTING ELEVATORS
3009.1 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)

3010 ELEVATOR MAINTENANCE AND ACCIDENTS
3010.1 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.

3010.2 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.

3010.3 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.

3010.4 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.

3010.4.1 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.

3010.4.2 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.

3010.4.3 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.

3010.5 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.

3010.5.1 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. (Ord. 4284, 9-4-07)

3010.6 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.

3011 CERTIFICATE OF COMPLIANCE

3011.1 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.

3011.2 POSTING CERTIFICATES OF COMPLIANCE: The owner or lessee shall post the current-issued certificate of compliance in a conspicuous place inside the elevator.

3012 CONSTRUCTION DOCUMENTS AND PERMITS

3012.1 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

3012.2 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.

3013 TESTS AND INSPECTIONS

3013.1 TESTING AND INSPECTIONS 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.

3013.2 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 done on all equipment. All such tests shall be made in 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.

3013.3 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.

3013.3.1 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.

3013.3.2 PERIODIC INSPECTIONS: Periodic inspections shall be made b 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.

3013.3.3 FREQUENCY OF TESTS AND INSPECTONS: 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.

3014 MISCELLANEOUS HOISTING AND ELEVATING EQUIPMENT

3014.1 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.

3014.2 CONVEYORS: Conveyors and related equipment shall be inspected and tested in accordance with ASME B20.1 listed in Chapter 53.

171. 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 Sections 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.

172. 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.

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.

173. That Section 3108.1 shall read as follows:

3108: TELECOMMUNICATION AND BROADCAST TOWERS:

3108.1 TOWER LOADS: Towers shall be designed to resist wind loads in accordance with TIA-222. Consideration shall be given to conditions involving wind load on ice-covered sections in localities subject to sustained freezing temperatures.

3108.1.1 Dead load. Towers shall be designed for the dead load plus the ice load in regions where ice formation occurs.

3108.1.2 Wind load. Adequate foundations and anchorage shall be provided to resist the calculated wind load.
(Ord. 4396, 8-4-08)

174. That Section 3109.1 shall read as follows:

3109.1 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.

Fencing barriers shall comply with Sections 6-310 item H. and 6-310.1. of the Land Development Code

175. 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.

176. That Section 3403.1 shall read as follows:

3403.1 EXISTING BUILDING OR STRUCTURES: An addition and/or 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 addition and/or alteration shall meet the requirements of this Chapter, Chapter 1 (includes amended in Section 102) and Chapter 5 for height and area provisions

177. That Section 3408.1 shall read as follows:

3408.1 CHANGE OF OCCUPANCY APPROVAL: No change of occupancy shall be made to any structure which will subject the structure to any provisions that would place the building in a different division of the same use group of occupancies or in a different group of occupancies unless the building is made to comply with this code for such a division or group of occupancies. 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.

178. 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

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

Rental Housing
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

179. 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, 3rd 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

IBC APPENDICES
180. That in chapter 35 Appendix C, Section C101 shall add items 9 and 10 to read:

APPENDIX C
GROUP U–AGRICULTURAL BUILDINGS

SECTION C101- GENERAL
C101.1 SCOPE: The provisions of this appendix shall apply exclusively to agricultural buildings. Such buildings shall be classified as Group U and shall include the following uses:

1. Livestock shelters or buildings, including shade structures and milking barns.
2. Poultry buildings or shelters.
3. Barns.
4. Storage of equipment and machinery used exclusively in agriculture.
5. Horticultural structures, including detached production greenhouses and crop protection shelters.
6. Sheds.
7. Grain silos.
8. Stables.
9. A canopy structure of less than 8,000 square feet in area that is used to cover the sales area of horticultural landscaping plantings only; may be considered an “Agricultural Canopy” when horticultural sales are the principal use of the property. Allowing an agricultural building for a limited amount of retail (M use group), will not allow the lesser restrictions of the agricultural use sections to apply were conflicts may occur with other code requirements or amendments.
Example: Allowable Height and Area, Mixed Uses, Exiting (C102 -C104).

10. See ICC model Building Code and Village Code amended Sections 202, 312.1, 501.3.2, 907.2., and The Fire Code (VC 5-5-2), Chapter 24 for additional regulations

(Ord. 4342, 3-3-08)

181. That in chapter 35 Appendix C, Section C105 is added to read:

SECTION C105- AGRICULTURAL CANOPY
C105.1 REQUIREMENTS. Agricultural Canopies shall meet the following requirements.

1. An agricultural canopy shall be permanent.
2. The Village Land Development Code has a separate review process for Tent and Canopy structures. The Planning Division's approval is required prior to the issuance of a building permit for agricultural canopies.
3. The agricultural canopy shall not be erected over any existing public parking spaces.
4. An accessible route from the accessible parking area to the agricultural canopy shall be provided with a minimum thirty-six (36") accessible aisle inside the agricultural canopy.
5. Smoking shall not be permitted inside the agricultural canopy. Approved "No Smoking" signs shall be conspicuously posted.
6. Open flame or other devices emitting flame, fire or heat or any flammable or combustible liquids, gas, charcoal or other cooking device shall not be permitted inside or located within twenty feet (20') of the agricultural canopy.
7. 4A60BC portable fire extinguishers shall be provided for every 2,000 square feet inside the agricultural canopy.
8. No business transactions inside the canopy.
9. Any electrical shall be per Village Code.
10. Exits shall be defined with an exit sign.
11. No permanent signs permitted on the agricultural canopy.
12. Temporary signs shall be permitted per Land Development and Village Codes.

(Ord. 4342, 3-3-08)
(Entire Chapter redone - Ord. 3723, 1-20-03; Amd. Ord. 4223, 2-19-07; Amd. Ord. 4342, 3-3-08)