

## EXHIBIT B

The International Residential Code (IRC) is adopted by reference, pursuant to this Section of Village Code and referenced as 5-1-14 is amended as set forth in this Village Code (5-1-14). Amendments to Building construction are incorporated into the IRC Chapters 1 through 10 and are used for uniformity purposes throughout the Village. Chapters 11-43 of the IRC Code are also adopted as amended as they relate to Energy, Mechanical, Electrical, Plumbing and similar special trades. The IRC and Village amendments attached shall not conflict with other construction code ordinances adopted in Title 5 of the Village Code. The following Chapter and/or section numbers used in this Village Code section shall refer to the like numbered applications for amended, added or deleted (“DELETE”) sections of the International Residential Code sections (IRC) as referenced. The Village Building Official shall interpret this Code as referenced in Section R103 of these amendments.

This Code makes reference to Village Code 5-1-13 for similar construction regulations which apply. The Sections and Sub-sections listed below are added, amended or deleted in the following respects:

### IRC CHAPTER 1 – SCOPE AND ADMINISTRATION

1. That Section R101.1 be amended to read as follows:

R101.1 TITLE: These provisions shall be known as the Residential Code for detached and Vertically attached single family Dwellings of Village of Orland Park and shall be cited as such and will be referred to herein as "this code.

Adopted and applicable to detached dwellings and multiple, vertically attached single family dwellings not more than 3-stories in height, all buildings and structures or parts thereof and appurtenances thereof, are those rules and regulations set forth with particularity in the booklet entitled “International Building Code/2015” first publication: May 30<sup>th</sup>, 2014, published by International Code Council, INC. 4051 Flossmoor Road, Country Club Hills, Illinois, as amended.

However, in that the following portions indicated as deleted (“DELETE”) Chapters and/or Sections of this code are not hereby adopted, or are hereby amended or added to that code as indicated in either of Village Code Sections 5-1-13 or 5-1-14 where applicable. (Ord. 4614 - 1-17-11; Amd. Ord. 4786, 2-4-13).

2. That Section R101.2 shall read as follows:

101.2 SCOPE: These regulations shall control all matters concerning the construction, alteration, movement, enlargement, replacement, repair, equipment, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with separate means of egress as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Residential Code on file in the office of the Village Clerk are hereby referred to, adopted, and made a part hereof, as if fully

set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in this Code. Deleted chapters and/or sections are located shown in the attached appropriate Sections of this Code, where applicable. The IRC Residential code, Section P2904 shall not apply to require the fire sprinkler requirements in a dwelling or dwelling units. (Ord. 4614, 1-17-11).

101.2.1 APPENDICES: Provisions in the appendices shall not apply unless specifically adopted by the Village.

DELETE - R101.2 exceptions 1 and 2 “SCOPE: LIVE WORK UNITS AND LODGING HOUSES”

3. That Subsection R102.7.1 be amended to read as follows:

**R102.7.1 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 any of the following conditions:

- a. When remodeling or alterations take place in more than 50% of its original building area.
- b. When remodeling increases the original market value by more than 50%.
- c. When remodeling increases the total area of the structure by more than 50%.

The above conditions shall be applicable to all cumulative additions, alterations, and repairs completed within a 36 month consecutive time period.

4. That Subsection R102.7.2 shall be added to Section 102.7 to as follows:

**R102.7.2 REPAIRS TO DAMAGED STRUCTURES:** 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 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 for new construction. 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 or as determined by credible cost data publications.

5. That Sections R103.1 and 103.2 are amended to read as follows:

**R103.1 CREATION OF ENFORCEMENT AGENCY:** The building 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.

**R103.2 GENERAL DUTIES AND POWERS OF THE BUILDING CODE OFFICIAL:** The building code official is hereby authorized and directed to 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.

6. That Section R105.1 is amended to read as follows:

**R105.1 PERMIT REQUIRED:** It shall be unlawful for any owner, or owner's authorized agent 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 and other codes adopted in Title 5 of the Village 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 R105.2 and which do not involve any violation of this code, shall be exempted from this provision. Notice shall also be given to the appropriate Fire Protection District for any fire sprinkler and alarm system work (Orland, Mokena, or the Palos Fire Protection Districts). Existing rental housing units shall be inspected for property maintenance and life safety requirements (rental housing VC 5-8)

7. That the following Section of 105.2 is amended and Subsection R105.2.2 is deleted as follows:

**R105.2 WORK EXEMPT FROM PERMIT** Work exempted from permits shall be as specified under Village Code 5-1-13 Section 105.2 of this ordinance.

8. That Section R105.3 is amended to read as follows:

**105.3 APPLICATION FOR PERMIT:** To obtain a permit, the applicant shall first file an application therefor 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 R106.1.
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.
9. All permit applications, business inquiries and field inspections shall use the English language as a means of communication

9. That Section R105.5 is amended to read as follows:

R105.5 EXPIRATION: Permits for new single-family detached and attached dwellings must have work authorized by such permit completed within 365 days of issuance. 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 submitted in writing and justifiable cause demonstrated. Prior to extension being granted the permit applicant shall schedule a progress inspection of the permitted work.

10. That Section R105.7 is amended to read as follows:

R105.7 PLACEMENT OF PERMIT: The original building permit card shall be displayed in a conspicuous location visible from the street and kept on the site of the work until the completion of the project.

11. That Section R106.1 and Subsections 106.1.1.1 through 106.1.1.4 are amended and added to read as follows:

R106.1 SUBMITTAL OF CONSTRUCTION DOCUMENTS: The application for a permit shall be accompanied by not less than two sets of construction plans and other required supporting documents necessary to monitor compliance, including a statement of special inspections, geotechnical report and other data necessary for code conformance. 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.

R106.1.1 INFORMATION ON CONSTRUCTION DOCUMENTS: Construction documents

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

R106.1.1.1 PLAT OF SURVEY: A recent 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.

R106.1.1.2 PROPOSED SURVEYS MUST SHOW (PRIOR TO BREAKING GROUND):

1. Accurate foundation location and footprint
2. High/low foundation elevations and locations, and building corners (U.S.G.S. datum)
3. Driveway, and service walk, locations and elevations
4. Driveway grade (must be less than 10%)
5. Top of curb elevations at property lines (extended)
6. Grading: Ground elevations at all lot corners, summits and drainage swales, and any adjacent foundation elevations. Grading must be shown with contour lines
7. Guardrails and handrails in locations required by code.
8. Lot coverage calculations necessary to demonstrate compliance with the Land Development Code.

R106.1.1.3 AS-BUILT SURVEYS MUST SHOW (BEFORE COMMENCEMENT OF FRAMING):

1. Accurate foundation location and footprint
2. High/low foundation elevations and locations, and building corners (U.S.G.S. datum)

R106.1.1.4 FINAL GRADE SURVEYS MUST SHOW (BEFORE CERTIFICATE OF OCCUPANCY):

1. Accurate foundation location and footprint
2. High/low foundation elevations and locations, and building corners (U.S.G.S. datum)
3. Driveway, and service walk, locations and elevations
4. Driveway grade (must be less than 10%)
5. Top of curb elevations at property lines (extended)
6. Grading: Ground elevations at all lot corners, summits and drainage swales, and any adjacent foundation elevations. Grading must be shown with contour lines
7. All permanent exterior improvements
8. Lot coverage calculations necessary to demonstrate compliance with the Land Development Code.

DELETE SECTION R106.3.3 “PHASED APPROVALS OF DOCUMENTS”.

12. That Section R106.6 and 106.7 shall be added to Section 106 to read as follows:

**R106.6 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 and dated with the license expiration and dated by the registered design professional in accordance with the professional registration laws of the State of Illinois. 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. Construction plans for pre-manufactured structure elements 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.

**EXCEPTIONS:** Single-story residential additions less than 600 square feet in total area or detached garages accessory to R-3 Use Group less than 600 square feet in total area utilizing only the prescriptive requirements of the IRC 2015 and where structural engineering is not required.

**R106.7 REVISIONS REQUIRED TO PLANS:** Due to additional Village Code municipal laws and ordinances established, plan review specialists may require changes to be incorporated into the revised set of plans and documents prior to the building permit approval. Revisions submitted from the original plans and documents are to be identified by means of clouding or in a written format to reduce the incurred time needed in the permit approval process. Revised documents not clearly showing these changes may include additional review fees per The Village Code (Section 5-2-7-10 n).

13. That Section R107.5 shall be added to Section 107 to read as follows:

**R107.5 TEMPORARY STRUCTURES AND USES CONFORMANCE:** Temporary uses shall be in conformance with the Village Land Development Code (6-304).

14. That Sections of R108.1 and R108.2 shall be amended to read as follows:

**R108.1 FEE SCHEDULE:** A fee for each plan examination and inspections shall be paid in accordance with the Village of Orland Park's Village Code 5-2-4, and other applicable ordinances.

**R108.2 LICENSING AND BONDING OF CONTRACTORS:** All contractors performing work in the Village of Orland Park shall be licensed and bonded in accordance with the ordinances listed in Village Code 5-1-6.

15. That Section R109.1 shall be amended to read as follows:

**R109.1 TYPES AND REQUIRED INSPECTIONS:** The minimum categories and conditions for required inspection and construction approval, shall be as those specified in VILLAGE CODE 5-1-13, SECTION 110, of this code (as amended by the Village of Orland Park).

16. That Sections R110.1, and R110.2 shall be amended to read follows:

**R110.1 CERTIFICATE OF OCCUPANCY AND CHANGE OF USE REQUIRED:** A building or structure shall not be used or occupied, and a change in the existing use or occupancy classification of a building or structure or portion thereof shall not be made, until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other Village Code ordinances. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. See Village Code 5-1-13, Section 111 of this code for additional occupancy regulations applicable to all buildings.

**R110.2 USE CHANGES IN A RESIDENCE:** Construction alterations changing the building's original design shall not begin without Village approvals. When/where the Use and Occupancy Classification of an existing residential space is altered, remodeled or changed, plans must be submitted for approval. Typical changes may include garage, basement and/or attic space improvements from storage spaces into living spaces. It may also include revising existing building interior walls to enlarge or reduce rooms sizes, adding a bedroom or changes from its original design. See Section 110.1 above. Building Permit approvals are required for these major changes.

17. That Section R112 shall be amended with regard to "BOARD OF APPEALS" to read as follows:

**112.1 MEANS OF APPEAL AND REQUIRED APPLICATION:** 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. All conditions for appeals shall include the procedures referenced in 5-1-13, Section 113.2 through 113.4.2 of this code

18. That Section R113.4 shall be amended and Section R114.2 shall be added to Section R114 to read as follows:

**R113.4 VIOLATIONS PENALTIES:** Violations and penalties shall follow the Administrative Chapter of this Village Code 5-1-13, Section 114.4, 115.3 and 116.5, as amended.

R114.2 STOP WORK ORDER NOTICE: Notice of Stop Work shall be issued to the building owner or authorized agent when construction work is continued beyond that approved by the building official of Village enforcement staff. Notices shall use common law procedures and citation of violations for non-conforming construction applications.

19. That Section R202 shall be amended to add “DEFINITIONS” to read as follows:

## IRC CHAPTER 2 – DEFINITIONS

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

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

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

**BUILDING CODE OFFICIAL:** The officer designated by the Village of Orland Park charged with authority to administer, enforce and interpret the building codes.

**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.

**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.

**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.

**CONDOMINIUM:** A multiple tenant, commonly owned building. For this Code’s definition, a condominium building includes residential units which are located above ground based unit(s) and also classified as multifamily units having a horizontal fire separation. This Code Section (5-1-14) does not regulate Condominium units. See 5-1-13.

**DUPLEX:** One building consisting of two separate single-family dwelling units attached vertically with separate means of egress to the public right-of-way for each unit.

**FIRE CODE OFFICIAL:** The Building Code Official for the Village of Orland Park or an official as appointed.

**FIRE WALL:** A fire-resistance rated 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.

**TOWNHOUSE:** One building consisting of more than 2 separate single-family dwelling units attached vertically with separate means of egress to the public right-of-way for each unit.

**USE AND OCCUPANCY CLASSIFICATION:** The purpose for which a building or space is designed for its intended Use. The Building Code has 10 basic use classifications (A, B, E, F, H, I, M, R, S and U) with some having sub-categories (22 total).

See 5-1-13 for other definitions applicable to this Code.

IRC CHAPTER 3 – BUILDING PLANNING

20. That TABLE R301.2(1) shall be revised to read as follows:

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	30 PSF Minimum <sup>a</sup>
WIND DESIGN SPEED	115 mph – 3 second gust ( $V_{ult}$ ) 90 mph – 3 second gust ( $V_{asd}$ )
SEISMIC CATEGORY	A - per Figure R301.2(2)  CALCULATED SDS SEISMIC DESIGN CATEGORY $SDS \leq 0.17g$ (A)
WEATHERING	Severe
FROST LINE DEPTH	42"
TERMITE	Moderate to Heavy
WINTER DESIGN TEMPERATURE	-1 ° F
ICE BARRIER UNDERLAYMENT REQ'D	Yes
FLOOD HAZARDS	Check flood zone map
AIR FREEZING INDEX	1508
MEAN ANNUAL TEMPERATURE	49° F

a. Reductions to snow load for sloped roofs are not permitted

DELETE R302.1 EXCEPTIONS ONLY (Exterior walls for building with fire sprinkler protection)

21. That Table R302.1(1) and footnotes shall be revised to read as follows:

TABLE R302.1(1) EXTERIOR WALLS FOR DETACHED AND ATTACHED DWELLINGS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE "X"
WALLS (DETACHED DWELLINGS)	FIRE – RESISTANCE RATED	2 HOUR – PER ASTM E119 OR UL 263, RATED FOR	< 3 FEET

& DUPLEXES) <sup>a</sup>		EXPOSURE BOTH SIDES	
	FIRE – RESISTANCE RATED	1 HOUR – PER ASTM E119 OR UL 263, RATED FOR EXPOSURE BOTH SIDES	3 FEET ≤ X < 7 FEET
	NOT -RATED	0 HOURS	≥ 7 FEET
WALLS (ATTACHED DWELLINGS / TOWNHOMES) <sup>a, b</sup>	FIRE-RESISTANCE RATED	2 HOURS – PER ASTM E119 OR UL 263, RATED FOR EXPOSURE BOTH SIDES	<5 FEET
	FIRE-RESISTANCE RATED	1 HOUR – PER ASTM E119 OR UL 263, RATED FOR EXPOSURE BOTH SIDES	5 FEET ≤ x < 15 FEET
	NOT -RATED	0 HOURS	≥ 15 FEET
PROJECTIONS (DETACHED DWELLINGS)	NOT ALLOWED	N/A	< 3 FEET
	FIRE-RESISTANCE RATED	1 HOUR ON UNDERSIDE	3 FEET ≤ x < 7 FEET
	NOT -RATED	0 HOURS	≥ 7 FEET
PROJECTIONS (ATTACHED DWELLINGS)	NOT ALLOWED	N/A	< 5 FEET
	FIRE-RESISTANCE RATED	1 HOUR ON UNDERSIDE	5 FEET ≤ x < 15 FEET
	NOT -RATED	0 HOURS	≥ 15 FEET
OPENINGS (DETACHED DWELLINGS)	NOT ALLOWED	N/A	< 3 FEET
	15% MAX. WALL AREA	0 HOURS	3 FEET ≤ X < 7 FEET
	UNLIMITED	0 HOURS	≥ 7 FEET
OPENINGS (ATTACHED DWELLINGS)	NOT ALLOWED	N/A	<5 FEET
	15% MAX. WALL AREA	0 HOURS	5 FEET ≤ x < 15 FEET
	UNLIMITED	0 HOURS	≥ 15 FEET
PENETRATIONS	ALL	PER SECTION R302.4	< 3 FEET
		NONE REQUIRED	≥ 3 FEET

a. Detached and attached dwellings are limited to 7,000 square feet in horizontal projection area per story, and are limited to 2 stories maximum height if using Type 5B construction type. For townhomes the area is the cumulative projection area of the entire building without regard for demising fire walls. A one story increase (3 stories total) will be allowed if using Type 5A construction type as defined in the International Building Code and amended in VC 5-1-13 or if

using an automatic fire sprinkler system installed per NFPA 13D. Area increases to the base 7,000 square feet will be allowed for automatic sprinkler system and street frontage per Chapter 5 of the International Building Code as amended in VC 5-1-13.

b. See section R302.2 for townhomes and duplexes demising fire wall requirements.

22. That Subsections R302.2 through R302.3.1 shall be revised to read as follows:

**R302.2 TOWNHOMES:** 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 of IBC and as required further by this code. The two (2) hour fire resistance rated wall shall not be penetrated.

**R302.2.1 TOWNHOMES IN PLANNED UNIT DEVELOPMENTS:** 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 located within the same P. U. D.

**R302.3 TWO-FAMILY DWELLINGS (DUPLEXES):** Vertically attached dwelling units in two-family dwellings shall be separated by a masonry wall or three (3) wall system, same as required for Townhomes in section R302.2 above. Stacked (horizontally attached) two-family dwelling units must comply with the requirements of IBC as amended in VC-5-1-13.

23. That Table R302.6 shall be revised to read as follows:

**TABLE R302.6 DWELLING GARAGE SEPARATION**

SEPARATION	MATERIAL
FROM RESIDENCE AND ATTICS	NOT LESS THAN 5/8" TYPE X GYPSUM BOARD OR EQUIVELANT APPLIED TO THE GARAGE SIDE
FROM HABITABLE ROOMS ABOVE GARAGE	NOT LESS THAN 5/8" TYPE X GYPSUM BOARD OR EQUIVALENT APPLIED TO THE GARAGE SIDE
STRUCTURE SPPORTING FLOOR/CEILING USED FOR SEPARATION REQUIRED BY THIS SECTION	NOT LESS THAN 5/8" TYPE X GYPSUM BOARD OR EQUIVALENT APPLIED TO THE GARAGE SIDE
DETACHED/PARTIALY DETACHED GARAGES LOCATED LESS THAN 10 FEET FROM DWELLING UNIT ON	NOT LESS THAN 5/8" GYPSUM BOARD APPLIED TO THE INTERIOR SIDE OF GARAGE

SAME LOT	
----------	--

24. That Subsection R303.1.1 shall be revised to read as follows:

**R303.1.1 BASEMENT NATURAL LIGHT:** A minimum natural lighting of 2% of the floor areas is required for basements. Habitable spaces in finished basements must follow section R303.1 for habitable rooms for minimum light and ventilation requirements.

Exception: Portions of basements only housing mechanical equipment not exceeding 200 square are not required to meet the 2% natural light requirement.

25. That Section R303.3 be revised to read as follows:

**R303.3 BATHROOMS:** Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.3 m<sup>2</sup>), and with mechanical ventilation with minimum local exhaust rates determined in accordance with Section M1507. Exhaust air from the space shall be exhausted directly to the outdoors.

Exception: The glazed areas shall not be required where artificial light is provided per section R303.1.

26. That Section R303.10 shall be added to read as follows:

**R303.10. SOUND TRANSMISSION:**

**R303.10.1 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. This requirement shall not apply to dwelling unit entrance doors; however, such doors shall be tight fitting to the frame and sill. Masonry walls shall be calculated in accordance with TMS 0302 or as determined by through testing in accordance with ASTM E 492. A reduction is allowed to be reduced to an STC of 45 when the assembly is field tested by approved methods.

**R303.10.2 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. A reduction is allowed to be reduced to an IIC of 45 when the assembly is field tested by approved methods.

27. That Section R304.4 and its Subsections shall be added to Section R304 to read as follows:

**R304.4 MINIMUM FLOOR AREA FOR DWELLINGS:** 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 R304.4.1 through R304.4.5.

**R304.4.1 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.

R304.4.2 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.

R304.4.3 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.

R304.4.4 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 and Townhouses):
  - 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.

R304.4.5 DISTRICT R-4 (SINGLE FAMILY ATTACHED AND DETACHED AND MULTI-FAMILY):

1. Detached:
  - a. See Section R304.4.4
2. Attached (Duplex):
  - a. See Section R304.4.4
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.

28. That Section R309.1 shall be revised to read as follows:

**GARAGE AND CARPORTS – FLOOR SURFACE**

**R309.1 MAXIMUM GARAGE SIZE:**

1. Attached garages shall not exceed 50% of first floor gross area of the entire building including the garage, with the maximum size of the garage not to exceed 1,500 square feet.
2. Detached garages shall be limited in size based on zoning district as follows:
  - a. In Zoning Districts R4, R3, R2, detached garage shall not exceed 720 square feet.
  - b. In Zoning District R1, detached garage shall not exceed 800 square feet.
  - c. In Zoning District E1, detached garage shall not exceed 1,000 square feet.

R309.1.1 FLOOR SURFACE: Garage floor shall be constructed of concrete 5” thick with welded wire mesh or fiber reinforcement, and sloped to facilitate movement of liquids towards garage entry door.

DELETE SECTION R309.5 – (for residential fire sprinkler required)

DELETE SECTION R310.5 EXCEPTION 1 ONLY – (basement addition exception for emergency escape)

DELETE SECTION R310.6 – (ALTERATIONS AND REPAIRS)

DELETE SECTION R313 – (required fire sprinkler protection)

29. That Section R320 shall be revised to read as follows:

R320 ACCESSIBILITY: Buildings and Facilities shall be designed and constructed to meet the Illinois Accessibility Code.

DELETE SECTION R326 (swimming pools and hot tubs, See Land Development Code)

#### IRC CHAPTER 4 – FOUNDATIONS

DELETE SECTION R402.1 – (“WOOD FOUNDATIONS” in its entirety). Also referenced in 5-1-13 Chapter 18

DELETE SECTION R402.4 – (“MASONRY FOUNDATIONS” in its entirety). Also referenced in 5-1-13 Chapter 18

30. That Section of R403.1 shall be revised to read as follows:

R403.1 FOOTINGS - GENERAL: All exterior walls shall be supported on continuous solid concrete footings, or other approved structural system which shall be of sufficient design to accommodate loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill.

R403.1.1 PRESCRIPTIVE FOOTINGS FOR LIGHT FRAME CONSTRUCTION: Footings supporting light frame construction shall be 20” wide and 10” thick minimum, with soil bearing capacity 3000 psf or greater. Footings placed on soil with bearing capacity of less than 3000 psf

shall be engineered and designed by a registered design professional and plans submitted for review to the building official. All basement walls shall be designed by a licensed design professional

DELETE TABLES R403.1(1) through Table R403.1(3) for “MINIMUM WIDTH AND THICKNESS FOR CONCRETE FOOTINGS”. (See revised Sections 403.1 as noted)

#### R403.1.1.1: PORCH, DECK ADDITION FOUNDATION EXCEPTION:

Trench Foundations: are allowed for small, less than 400 square foot, 1-story additions which may include enclosed Porches (see definitions below). Concrete walls are required to be 10 inches for supporting exterior walls which may include glass and/or brick veneer. A foundation's frost depth is to be at least 42 inches below exterior grade level. Trench foundations must be flared or belled at the bottom to a minimum width of 12 inches and connected to the existing foundation walls with re-bar pins of 5/8-inch diameter to form a continuous foundation. These pins are to be placed 12 inches from the top and 12 inches from the bottom of the new foundation.

Post Foundations: Are permitted for open decks and porches. Minimum diameter piers shall be 8” for decks and 12” for roofed over decks, at least 42 inches below grade. Pier foundations shall not be located within the existing foundation's over-dig unless adequate bearing is achieved for soil bearing needs.

#### Definitions - Additions:

Porch: An exterior Porch is a roofed over deck or patio attached to the dwelling and is open or screened as an exterior accessory use. An exterior porch may have exterior walls no higher than 18 inches above the floor, with the remainder of the perimeter open. Open porches are exterior structures allowing the use of concrete piers and posts sized to support the deck, roof and uplift loads only. When windows, glass and doors are placed in exterior walls, the porch is classified as an enclosed interior addition for the purpose of foundation design regulations.

Interior (Enclosed) Additions: An enclosed porch is classified an interior addition (such as sunrooms, 3-season room, cold porch etc.) and requires a footing/foundation to be continuous for perimeter walls. Smaller single story additions allow the use of a trenched or formed foundation when additions are considered an enclosed structure (see Trench Foundation below). Note; glass installation is governed as part of exterior walls.

Open decks: are level floor surface structures built-up above the ground levels having no roof or walls for enclosures. Decks typically include guardrails around open perimeter of the deck surface and steps leading to grade. Decks with more than 30 inches in height above grade require guardrails, which shall be at least 36 inches in height measured vertically above the walking surface. Guardrail opening must have spacing such that a 4 inch sphere cannot pass (B 1021.2 & 1021.3). Open porch/decks are an exterior structure allowing the use of concrete piers and posts sized to support deck, roof loads and uplift only.

Patios: are classified as exterior finished ground walking surfaces without walls or a roofed over structure and do not require foundation walls. Patios typically are paved with brick, tiles or even stone and open to the sky. Patios are ground coverings for the purposes of lot coverage. A roof covered patio would be classified as a Porch when attached to a residence or Gazebo when detached. Gazebos are limited to 200 square feet.

31. That Subsection R403.1.4 shall be revised to read as follows:

**R403.1.4 FOOTINGS – MINIMUM DEPTH BELOW GRADE:** Exterior footings, foundation walls, piers, and other permanent supports of buildings and structures shall be protected from frost by placement at not less than 42 inches below the undisturbed ground surface.

Exceptions:

1. Detached garages less than 720 square feet in area, not exceeding 13 feet to mean height of roof may use monolithic pour downturned footing, extending 12” below grade, 8” wide, with 5” thick welded wire reinforced concrete slab.
2. Detached storage sheds not exceeding 200 square feet may be erected on floating concrete slab. See Land Development Code for maximum areas due to lot sizes.
3. Foundation erected on solid rock.

DELETE SECTION R403.2 in its entirety (“FOOTINGS FOR WOOD FOUNDATIONS”)

DELETE SECTION R403.3 in its entirety (“FROST PROTECTED SHALLOW FOUNDATIONS”)

DELETE SECTION R404.1.2 in its entirety (“DESIGN OF MASONRY FOUNDATION WALLS”)

DELETE SECTION R404.1.5.3 in its entirety (“PIER AND CURTAIN WALL FOUNDATIONS”)

DELETE SECTION R404.2 in its entirety (“WOOD FOUNDATION WALLS”)

32. That Section R408.4 shall be replaced to read as follows:

**R408.4 CRAWLSPACE ACCESS:** 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.

**IRC CHAPTER 5 – FLOORS**

33. That Section R502.7.1 shall be revised to read as follows:

**R502.7.1 LATERAL BRIDGING:** In all floors, 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. Attic ceiling joists and roof framing shall include bridging for each 8 feet of span when framing members are 2x10 or larger.

34. That Section R506.1 and R508.1 shall be revised to read as follows:

**R506.1 CONCRETE FLOORS ON GROUND - GENERAL:** Concrete slab-on-ground floors shall be designed and constructed in accordance with the provisions of this section or ACI 332. Floors shall be a minimum 4 inches thick except for crawl space floors which are allowed to be 2

inches minimum (for expansive soils, see Section R403.1.8). The specified compressive strength of concrete shall be as set forth in Section R402.

**R508.1 SIZE OF DECKS PERSCRIPTIVE:** Decks which are more 500 square feet, or measure more than 9 feet in height from finished grade to the deck level shall be designed by a licensed architect or structural engineer/design professional.

#### IRC CHAPTER 6 – WALL CONSTRUCTION

35. That Subsection R602.1.8.1 shall be added to Subsection R602.1.8 to read as follows:

**R602.1.8.1 WOOD STRUCTURAL PANELS:** Exterior wall sheathing shall be 7/16” thick min.

36. That Table R602.3(5) shall add the following footnote to read as follows:

Table R602.3(5) “SIZE, HEIGHT, AND SPACING OF WOOD STUDS” footnote “d”:

d. Stud spacing exceeding 16” O.C. shall utilize 2x6 studs minimum.

#### IRC CHAPTER 7 – WALL COVERING

37. That Section R703.2 shall be revised to read as follows:

**R703.2 WATER-RESISTIVE BARRIER:** One layer of No. 15 asphalt felt, free from holes and breaks, complying with ASTM D 226 for Type 1 felt or other approved water-resistive barrier shall be applied over sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51 mm). Where joints occur, felt shall be lapped not less than 6 inches (152 mm). The felt or other approved material shall be continuous to the top of walls and terminated at penetrations and building appendages in a manner to meet the requirements of the exterior wall envelope as described in Section R703.1.

38. That Section R703.3 shall be revised to read as follows:

**R703.3 NOMINAL THICKNESS AND ATTACHMENTS FOR EXTERIOR COVERINGS:** The nominal thickness and attachment of exterior wall coverings shall be in accordance with Table R703.3(1), the wall covering material requirements of this section, and the wall covering manufacturer’s installation instructions. Cladding attachment over foam sheathing shall comply with the additional requirements and limitations of Sections R703.15 through R703.17. Nominal material thicknesses in Table R703.3(1) are based on a maximum stud spacing of 16 inches (406 mm) on center. Where specified by the siding manufacturer’s instructions and supported by a test report or other documentation, attachment to studs with greater spacing is permitted. Fasteners for exterior wall coverings attached to wood framing shall be in accordance with Section R703.3.2 and Table R703.3(1). Exterior wall coverings shall be attached to cold-formed steel light frame construction in accordance with the cladding manufacturer’s installation instructions, the requirements of Table R703.3(1) using screw fasteners substituted for the nails specified in accordance with Table R703.3(2), or an approved design. All types of veneers shall have a backing surface unless approved by the building code official.

39. That Section R703.8 shall be revised to read as follows:

**R703.8 ANCHORED STONE AND MASONRY VENEER:** All single family attached and detached residences shall contain anchored brick, stone or masonry veneer, with a minimum 2.625" thickness on a minimum of 90% of their first floor and walk out area/ground level elevations, and a minimum of 50% of all elevations. Any other material exceeding the 10% for the remaining ground level wall surfaces shall be approved by the code official.

**EXCEPTIONS:**

Existing residential developments constructed where original buildings were of non-masonry exterior finishes may permit the use of other code approved materials under the following conditions:

- a. Where the building's total floor area is not being increased by more than 50% of the existing building's floor area.
- b. Where the building's 50% floor area allowance is regarded as the total combined floor areas of all additions made to the residence within a 36 month consecutive time period.
- c. As may be permitted per the Land Development code for the Historic Preservation Standards.

40. That Subsection R703.9.2.1 shall be added to Section R703.9.1 to read as follows:

**R703.9.2.1 EIFS WITH DRAINAGE:** Special inspection shall be required for any EIFS installations having a total area greater than 1,000 square feet.

**IRC CHAPTER 8 – ROOF-CEILING CONSTRUCTION:**

41. That Section R803.2.4 shall be added to Section R803.2 to read as follows:

**R803.2.4 MINIMUM THICKNESS FOR ROOF SHEATHING:** Roof sheathing shall be at least 7/16" thick and shall have permanent grade mark specifying grade and performance category. Roof sheathing spans shall not exceed values set forth in Table R503.2.1.1(1).

**IRC CHAPTER 9 – ROOF ASSEMBLIES**

(NO CHANGES)

**IRC CHAPTER 10 – CHIMNEYS AND FIREPLACES**

(NO CHANGES)

**IRC CHAPTER 11 – ENERGY EFFICIENCY**

42. That Chapter 11 shall be revised in its entirety to read as follows:

**R1101.1 SCOPE:** Buildings shall be designed and constructed in accordance with the 2015 International Energy Conservation Code (Climate Zone 5A), as regulated by the State of Illinois with the following Village of Orland Park amendments.

R1101.2 MANDATORY MINIMUM R-VALUES: The building thermal envelope shall meet the prescriptive requirements of Table R1101.2 (R402.1.2 IECC) as amended below. Simulated Performance Alternative method of compliance is not permitted in lieu of minimum R-values for specific components listed in the amended Table R1101.2

TABLE R1101.2 (IECC R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT a.

FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE
0.32 b.	0.55 b.	49	20 13+5CI h.	13/17 i.	30 g.	10/13 c.	10/15 d. 2ft	10/19 c.

a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.

b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in climate zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.

c. “15/19” means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. “15/19” shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. “10/13” means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.

e. There are no SHGC requirements in the Marine Zone. (Not Applicable)

f. Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and Table R301.1. (Not Applicable)

g. Or insulation sufficient to fill the framing cavity, R-19 minimum.

h. The first value is cavity insulation, the second value is continuous insulation, so “13+5” means R-13 cavity insulation plus R-5 continuous insulation.

i. The second R-value applies when more than half the insulation is on the interior of the mass wall.

## IRC CHAPTER 12 – MECHANICAL ADMINISTRATION

(NO CHANGES)

## IRC CHAPTER 13 – GENERAL MECHANICAL SYSTEM REQUIREMENTS

43. That Section M1309.1 is added to Chapter M13 to read as follows:

**M1309.1 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.

## IRC CHAPTER 14 – HEATING AND COOLING EQUIPMENT AND APPLIANCES

(NO CHANGES)

## IRC CHAPTER 15 – EXHAUST SYSTEMS

44. That Sections M1503.1 and M1503.2 are revised to read as follows in Sections M1503.1:

### **M1503.1 KITCHEN EXHAUST:**

Kitchen shall be provided with mechanical exhaust ventilation. Mechanical ventilation shall be provided in accordance with the mechanical code as referenced in Title 5, Chapter 6 of the Village Code. Residential kitchen range hood and exhaust duct must be of a smooth hard non-combustible material such as galvanized sheet metal, stainless steel, aluminum or copper. All range hood exhaust shall be vented to the exterior with the joints sealed using a material that is suitable for a long time exposure. Backdraft dampers are required to prevent infiltration of outdoor air when the exhaust system is not operating. Kitchen exhaust duct shall not terminate within the building.

45. That Section M1507.2 is revised to read as follows:

### **M1507.2 MECHANICAL VENTILATION AND THE RECIRCULATION OF AIR:**

Recirculation of air from kitchens, toilet rooms, bathrooms, restrooms, locker rooms, storage areas, laboratories, garages and similar rooms shall not be permitted.

## IRC CHAPTER 16 – DUCT SYSTEMS

**DELETE ITEMS #5 AND #7 OF SUBSECTION M1601.1.1:** (Illinois Energy Code does not permit gypsum board and building cavities to be used as part of the ductwork system)

## IRC CHAPTER 17 – COMBUSTION AIR

(NO CHANGES)

## IRC CHAPTER 18 – CHIMNEYS AND VENTS

(NO CHANGES)

## IRC CHAPTER 19 – SPECIAL APPLIANCES, EQUIPMENT, AND SYSTEMS

(NO CHANGES)

## IRC CHAPTER 20 – BOILERS AND WATER HEATERS

(NO CHANGES)

## IRC CHAPTER 21 – HYDRONIC PIPING

(NO CHANGES)

## IRC CHAPTER 22 – SPECIAL PIPING AND STORAGE SYSTEMS

(NO CHANGES)

## IRC CHAPTER 23 – SOLAR THERMAL ENERGY SYSTEMS

(NO CHANGES)

## IRC CHAPTER 24 – FUEL GAS

46. That Section G2422.1 shall be revised to read as follows:

G2422.1 APPLIANCE CONNECTIONS: Appliances shall be connected to the piping system by one of the following:

1. Rigid metallic pipe and fittings Corrugated stainless steel tubing (CSST), where installed in accordance with the manufacturer's instructions and by an approved installer.
2. Listed and labeled appliance connectors in compliance with ANSI Z21.24 installed in accordance with the manufacturer's instructions. Appliance connectors are only allowed for appliances requiring the flexible connection for installation, servicing, or removal of the appliance. Appliance connectors are not allowed for permanent appliances such as water heaters, furnaces, boilers, fireplaces.
3. Listed and labeled outdoor appliance connectors in compliance with ANSI Z21.75/CSA 6.27 and installed in accordance with the manufacturer's instructions.

DELETE SECTION G2425.8 ITEMS # (5), (6), (7) ONLY ("Appliances not required to be vented")

DELETE SECTION G2445 IN ITS ENTIRTEY ("UNVENTED ROOM HEATERS").

## IRC CHAPTERS 25-32 – PLUMBING CODE

47. That ICC Chapters 25-32 are deleted (ICC - PLUMBING CODE) and Section added to read as follows:

P2505.1 VILLAGE PLUMBING CODE: 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 the 2014 Illinois Plumbing Code as amended by the Village of Orland Park in section 5-1-4 of Village Code. (ordinance 5002)

#### IRC CHAPTER 33 – STORM DRAINAGE

48. That Section P3302.1 and Subsection P3303.1.2 shall be added to Chapter 33 and read as follows:

P3302.1 SUBSOIL DRAINS: Subsoil drains shall discharge no closer than 10 feet from any property line, and shall not create a nuisance to adjacent properties or the public right of way.

P3303.1.2 SUMP PIT: Sump pit shall be 30” deep and top of sump pit shall extend 2” above adjacent floor finish.

#### IRC CHAPTERS 34-43– ELECTRICAL CODE

49. That ICC Chapters 34-43 are deleted with revised Sections to read as follows:

R3401.1 ELECTRICAL CODE: The design and installation of electrical systems and equipment, including services, power distribution systems, fixtures, appliances, devices and appurtenances, shall comply with the requirements of the 2014 National Electrical Code as amended by the Village of Orland Park in section 5-1-3 of Village Code.