

# **MEMORANDUM**

TO:	Board of Building Appeals (BOBA) Members
FROM:	Keith Steiskal, Building Commissioner
MEETING DATE:	November 4, 2020
SUBJECT:	Text Amendments to Title 15, Section 150 of Village Code – Building Code

As part of staff's regular review of pertinent codes used to regulate construction, staff is recommending updating the following International Codes from the 2012 to the 2018 versions:

- International Building Code
- International Residential Code
- International Mechanical Code
- International Fuel Gas Code
- International Property Maintenance Code
- International Pool Code

With the adoption of the 2018 International Residential Code, there has been a change pertaining to swimming pools. Private swimming pools was regulated through the International Residential Code (Appendix G), but the 2018 IRC has this Appendix removed and this code language added to the 2018 International Pool Code. Staff has included the recommended ordinance change to reflect this change in Title 15, Chapter 150, Article 27 of the Village ordinances.

These International Codes are developed on a 3-year cycle, but the Village of Lombard has decided to adopt every other code cycle. The updates are recommended in order to stay current with the newest construction technology such as changes in solar, higher wind requirements, etc. This is also recommended to stay current with the already State adopted 2018 International Energy Conservation Code, and the 2018 International Fire Code adopted earlier this year. The International Codes are designed to work as a series and be adopted to work together as each code book references the other codes books for applicable sections.

In addition to the document provided showing the changes proposed in the ordinance, staff will be giving a brief verbal report on some of the substantive changes in the 2018 codes vs the 2012 codes. Staff will also discuss the upcoming codes such as mass timber high rises and other major changes proposed for the future codes.

CHAPTER 150: - BUILDING CODE

#### **ARTICLE I. - GENERAL PROVISIONS**

# § 150.001 - Title.

The hereinafter described regulations shall be known as the Building Code of the village.

# (Ord. 2561, passed 10-28-82)

# § 150.002 - Purpose.

The purpose of the building code is to regulate and control the design, construction, size, use of materials, and occupancy of buildings and to provide minimum standards to protect life safety, health, and welfare and maintenance of all buildings and structures in the village.

# (Ord. 2561, passed 10-28-82)

# § 150.003 - Scope.

The provisions of this Code shall apply to all buildings and structures that shall be constructed, additions thereto, alterations, repairs, removed, raised or demolition, and maintenance, including all mechanical equipment such as central air-conditioning, electrical, elevators, heating, and plumbing installations.

# (Ord. 2561, passed 10-27-82)

#### § 150.004 - Interpretation.

The building code of the village shall be interpreted according to the rules of statutory interpretation. In the event of a conflict, the printed portion of the building code will prevail over codes incorporated by reference.

# (Ord. 2561, passed 10-28-82)

#### § 150.005 - Application and effect.

The regulation of the building code of the village, as herein adopted, shall apply to all matters concerning the erection, construction, alteration, addition, repair, removal, demolition, use, location, occupancy, and maintenance of all buildings and structures, and their service equipment as herein defined, and shall apply to all existing or proposed buildings and structures, and their equipment as herein defined, and shall apply to all existing or proposed buildings and structures in the village.

(Ord. 2561, passed 10-28-82)

§ 150.006 - Building division.

(A) There is hereby established a Building Division designated as a Division of the Community Development Department and operated under the direction and supervision of the Community Development Director. The Community Development Director shall be appointed by the Village Manager on the basis of examination to determine his/her qualifications and will be governed by appropriate state statutes.

(B) The Community Development Director may detail such members of the Community Development Department as inspectors as shall from time to time be necessary.

(Ord. 6602, passed 4/7/11)

§ 150.007 - Definitions; references.

(A) For the purpose of this Chapter the following definitions shall apply unless the context clearly indicates or requires a different meaning.

Attached dwelling. One which is joined to another dwelling at one or more sides by party walls or fire separation assemblies.

Detached dwelling. One which is entirely surrounded by open space on the same lot.

Multi-family dwelling units. A building, or portion thereof, containing three or more dwelling units.

New. Any building constructed after the effective date of this Chapter.

Single-family attached dwelling units. See Use Group R-3.

## (B) References:

- Any reference in the code to jurisdiction or name of jurisdiction shall mean the wean the Village of Lombard.
- (2) Any reference in the code to the chief appointing authority means the Village Manager or Village Board as authorized by ordinance.
- (3) Any penalty or penalties referred to in the 2018 Edition of the International Building Code or the 2018 Edition of the International Residential Code shall be the penalty as provided under this Chapter (§ 150.999).
- (4) Any reference to any sanitary district means the Village of Lombard sewerage system or the Facilities Planning Area (FPA) District, whichever is applicable.
- (5) Any reference to water department shall mean the Village of Lombard water system.
- (6) Any reference to zoning or zoning ordinances shall mean the Village of Lombard zoning ordinances.
- (7) Any reference to Commissioner of Police means the Village of Lombard Chief of Police.
- (8) Any reference to The Fire Department shall mean the Village of Lombard Fire Department.
- (9) Any reference to The Health Department shall mean the DuPage County Health Department.
- (10) Fire District No. 1 shall be all areas of the village excepting therefrom those zoned for single-family use and an R-3 two-family residence district. A fire district map shall be maintained by the Fire Chief and certified copies thereof shall be open to public reference or available by copies at all times during which the office of the Fire Chief is open. When uncertainty exists with respect to the boundaries of the district, as shown on the fire district map, the following rules shall apply:
  - (a) District boundary lines are either right-of-way lines of railroads, highways, streets, alleys, easements, tract or lot lines, or such lines extended unless otherwise indicated.
  - (b) Where a district boundary line divides a lot in single ownership as of the date of adoption of this Chapter, and if more than 50 percent of the lot is located within the district, then the district boundaries shall be extended to include all of the lot.

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- (c) Where a district boundary line divides a lot in single ownership as of the date of adoption of this Chapter, and if less than 50 percent of the lot is located within the district, then the entire lot shall be excluded from the district.
- (11) All advisory or text notes, other than the rules and regulations contained in the International Building Code, 2018, edition and the International Residential Code, 2018, edition are expressly excluded from this Chapter.
- (12) In the event that any provision of the International Building Code, 2018, Edition and the International Residential Code, 2018, edition, is in conflict with any provisions of the zoning code, or any amendment thereto of the village, the latter shall prevail and the conflict shall be of no effect.

(Ord. 2561, passed 10-28-82; Am. Ord. 2672, passed 6-14-84; Ord. 5481, passed 5/6/04; Ord. 6602, passed 4/7/11; Ord. No. 7061, Exh. A, passed 4-2-15)

§ 150.008 - Adoption of certain building codes.

This Chapter adopts and incorporates by reference certain codes. Not less than two copies of each code that is adopted and incorporated by reference shall be available for study at the village hall during normal hall hours.

(Ord. 2561, passed 10-28-82; Ord. 6833, passed 5-16-13)

§ 150.009 - Materials of equivalent strength.

Wherever the building regulations of the ordinances of the village prescribe specifications for materials to be used or methods to be followed, any materials or method which give equivalent strength, utility, and safety may be used in lieu of those specified in the building ordinances provided the materials or methods are approved in writing by the Community Development Director.

(Ord. 2561, passed 10-28-82)

§ 150.010 - Accessible services.

All public buildings, and public places of accommodation or amusement, as defined by Illinois Compiled Statutes, or buildings required to provide accessible services shall meet or exceed all of the provisions of the Environmental Barriers Act (EBA) (410 ILCS 25/1 et seq), the 2018 Illinois Accessibility Code and the 2010 Americans with Disability Act (ADA) Standard.

(Ord. 6710, passed 4/19/12)

§ 150.011 - Design criteria.

For all structures built within the village, the following design criteria shall be followed:

Winter Design Temp	14
Ground Snow Load	25

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Wind Pressure	80			
Seismic Conditions	1			
Weathering	Severe			
Frost Depth	42"			
Termite	Yes			
Radon	Zone 2			

All metal trusses shall be installed with a method approved by the licensed designer that prevents "truss uplift", or the finished ceiling material shall not be directly attached to the metal truss.

(Ord. 6832, passed 5/16/13; Ord. No. 7061, Exh. A, passed 4-2-15)

§§ 150.012-150.014. - Reserved.

§ 150.015 - Retaining walls.

No plans for retaining walls as defined in § 150.030 shall be approved for a permit unless such plans are signed and sealed by a licensed architect, structural engineer, or professional engineer authorized to sign and seal such plans by state statute. If retaining walls are of timber construction, the retaining wall shall meet IDOT requirements for timber and preservation. No used timbers are allowed.

(Ord. 2830, passed 2-27-86; Am. Ord. 2880, passed 9-11-86)

Cross reference- Penalty, see § 150.999

§ 150.016 - Landscape walls.

Landscape walls as defined in § 150.030 of less than three feet shall not be required to be approved for a permit. Landscape walls in excess of three feet shall not be approved for a permit unless such plans are signed and sealed by a licensed architect, structural engineer, or professional engineer authorized to sign and seal such plans by state statute. If landscape walls requiring a permit are of timber construction, the landscape walls shall meet IDOT requirements for timber and preservation. No used timbers are allowed for walls in excess of three feet.

(Ord. 2880, passed 9-11-86)

Cross reference- Penalty, see § 150.999

§ 150.017 - Determination of wall as landscaping or retaining.

When the Community Development Director or his/her designee has determined in writing that plans as submitted may be inadequate or the classification of a landscaping or retaining wall is not the same as requested by the party building said wall, an independent engineer designated by the Community Development Director or his/her designee shall be retained to review the plans. The cost of the independent review shall be paid by the party building said wall.

(Ord. 2880, passed 9-11-86)

ARTICLE II. - INTERNATIONAL BUILDING CODE-2018, EDITION

§ 150.030 - Adoption by reference.

All provisions as listed in the International Building Code, 2018, Edition, are incorporated by reference with the following changes:

Section R101.1 Title: Insert "Village of Lombard"

Section 101.4.3 Plumbing: Add to apply Illinois Plumbing Code, latest edition, most restrictive.

Section 103.1 Delete "Department of Building Safety" and insert "Building Division".

Section 103.2 Delete "shall be appointed by the chief appointing authority of the jurisdiction"; add "to work under the direction of the Community Development Director."

Section 105.2 Work exempt from permit: Delete the following exemption: 1, 2, 4, 5, 6, and 9.

Section 105.5 Expiration: Delete this section entirely and refer to Section 150.142, paragraphs A, B, C and D.

Section 109.2 Add to end of paragraph...See Section 150.141 for fee schedules.

Section 110.3.7 Delete Chapter 13 reference and replace with most current version as adopted by the State of Illinois International Energy Conservation Code.

Section 114.4 Add the following: Penalties for violation of Title XV are established by local ordinance.

Section 115.3 Change the last line to read as follows:...shall be liable for a fine as established by local ordinance.

Section 202 Add the following: Structure. One or more buildings constructed and attached together.

Section 310.2 Swimming Pools—See Sections 150.317 - 150.324 for additional requirements.

Chapter 6: Construction Type Limitations.

Construction Type IIB shall be limited to Use and Occupancy Classification Groups F (Factory), S (Storage) and U (Utility and Miscellaneous).

Construction Type IIIB shall be limited to Use and Occupancy Classification Groups F-2 (Low-hazard factories-assemble non-combustibles), S-2 (Low hazard storage mainly non-combustibles) and U (Utility and Miscellaneous). Furthermore, Type IIIB Construction shall also be limited to structures of two (2) stories or less.

Exception: Type IIB construction can be used for parking garage construction where unprotected structural members support only the parking garage itself.

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Add Section 503.1.4 Type V B construction. Buildings of Type V B construction shall be limited to Townhouse and One and Two Family Dwellings as regulated by the International Residential Code. Refer to Chapter 150.040 Special Residential Requirements.

Add Section 503.1.5 Type V construction shall have access per Chapter 150.107 of the Building Code, and International Building Code Section 503.7 to each area and level of roof(s), and shall have a maximum roof pitch of 5/12.

Add Section 503.1.6 Type V A construction shall be prohibited in all Occupancy and Use classifications of Group I and Group R-4.

## Add Section 503.4

Section 503.4 Type 5 construction shall only be used for Townhouses and One and Two Family Dwellings. See Section 150.040 Special Residential Requirements.

Add the following to Section 506.2.2: All fire lanes shall be approved by the Fire Chief or his/her designee and shall meet the detailed engineering and construction specifications for public improvements as enumerated in the Village of Lombard specifications Manual. See Section 154.402 for additional requirements.

Section 508.3.3 One hour tenant separation walls required for all occupancy types.

Section 901.6 Fire Protection System Supervision: All required fire protection systems shall be supervised by and terminate with the Village of Lombard Communications Center (DUCOMM), or such other central station monitoring service approved by the Fire Code Official.

Exceptions: Supervisory Service is not required for:

- Single and multiple station smoke alarms required by 907.2.11 of the International Building Code, 2012 Edition.
- (2) Automatic sprinkler systems protecting one and two family dwellings.
- (3) Smoke detectors in GROUP I-3 occupancies.

Section 901.6.1 delete Exception 2

Section 901.6.2 change to read as follows: Fire Protection System Supervision: All required fire protection systems shall be supervised by and terminate with the Village of Lombard Communications Center (DUCOMM), or such other central station monitoring service approved by the Fire Code Official.

Exceptions: Supervisory Service is not required for:

- Single and multiple station smoke alarms required by 907.2.11 of the International Building Code, 2018 Edition.
- (2) Automatic sprinkler systems protecting one and two family dwellings.
- (3) Smoke detectors in GROUP I-3 occupancies.

TABLE 601, Note B shall be changed to "Fire Protection shall not be required for roof construction including columns, beams, girders and trusses supporting roofs only in areas devoted to mercantile use, business group, or the storage, shelter and/or servicing of motor vehicles, provided that the entire structure is protected by an approved, supervised automatic sprinkler system."

Add to Note d Table 601: The 1-hour substitution for fire resistance with an automatic sprinkler system shall not be permitted for buildings of Type V A construction.

Add Section 704.1.2: All lightweight and engineered wood floor/ceiling assemblies in Type V A construction will require a UL Fire Resistance design or equivalent to achieve a one-hour fire resistance rating.

Add Section 704.4.1.3: All lightweight and engineered wood roof ceiling assemblies in Type V A construction will require a UL Fire Resistance design or equivalent to achieve a one-hour fire resistance rating.

Section 903.2 Where required: Shall be changed to read as follows: An approved automatic fire sprinkler system shall be installed and maintained in full operating condition in all parts of all buildings with the following exceptions:

- 1. Residential Dwellings and Townhouses defined and constructed under the scope of the International Residential Code. 2018 Edition.
- 2. Auxiliary structure (i.e.; detached garages, sheds) used in conjunction with residential occupancies, (use).
- 3. One (1) Story Buildings, without basements, having a total area of less than one thousand (1,000) square feet. This requirement shall not be reduced by fire wall separation.
- 4. Buildings or portions of buildings that comply with Section 406.5 Open Parking Garages.
- 5. Existing buildings: (For the purpose of this section, occupancy shall be defined as the purpose for which a building or portion thereof is used or intended to be used in accordance with the International Fire Code, 2018 Edition.
  - a. When an addition or additions of 500 square feet or more in aggregate are added, increasing the total area to 2,500 square feet or more, an automatic sprinkler system shall be installed in the entire building.

Note: A fire alarm system installed in the complete building, to include smoke and or heat detection in accordance with NFPA 72 can be approved in place of a sprinkler system where the addition is less than 1,000 square feet (except for occupancy types A, F, H, I and R) as approved by the Fire Code Official.

b. When the occupancy (use) of a building of 2,000 square feet or more is changed to any of the following uses: assembly, educational, health care, child care, industrial, storage or residential, other than as exempted in Item (1) of this section, an automatic sprinkler system shall be installed in the entire building or in that portion of the building in which the change of occupancy occurred.

Note: A fire alarm system installed in the complete building, to include smoke and or heat detection in accordance with NFPA 72 can be approved in place of a sprinkler system where the proposed occupancy (use) is determined to be of an equal or lessor hazard than the original occupancy (except for occupancy types A, F, H, I and R) as approved by the Fire Code Official.

- c. When the cost of remodeling would be greater than 50% of the market value of a building of 2,000 square feet or more, an automatic sprinkler system shall be installed. Market value of the structure shall be as established by the Township Assessor or by the average of two or more independent appraisals.
- 6. One-story self-service storage facilities of minimum Type IIB construction: no interior corridors, with a one-hour fire barrier separation wall installed between every storage compartment.
- Revise Section 903.2 add the following: Approved automatic sprinkler systems in buildings and structures of Type V A construction shall meet the installation requirements of Section 903.3.1.1

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Add Section 903.3.5.3 Safety Factor: Provide a minimum 10% or 5 psi minimum safety factor in the fire protection system hydraulic calculation. The system demand shall be 5 psi minimum below the seasonal low water flow test supply.

Add Section 903.4.2.1. Visual: Provide a weather resistant visual alarm device installed on the exterior wall of the building above the fire department connection (FDC) to activate upon fire sprinkler system water flow only.

# Add Section 903.6

Section 903.6 A diagram showing areas served by control valves shall be submitted. This diagram shall be placed in the buildings adjacent to the risers.

Add Section 903.2.13—Car Wash Facilities: For structures built to contain self-service car washes that are divided into individual wash area units of not more than three hundred (300) square feet each, with said individual wash area units being divided by solid masonry walls that extend from the floor to the underside of the roof and being open on two (2) sides with no permanently fixed enclosures, a fire resistance rating for the roof construction shall not be required relative to those portions of the roof over the wash area units.

Add Section 907.1.3.1 Equipment: All fire alarm control panels or full function annunciator panels shall be of the addressable type and shall be installed within ten (10) feet of the main entrance or within a location approved by the Fire Code official.

Section 907.6.5 Change to read as follows: Monitoring. All required fire protection systems shall be supervised and monitored by the Village of Lombard communications Center (DU-COMM) in accordance with NFPA 72 and Section 901.6.4 of this Code.

Exceptions: Supervisory Service is not required where:

- Single and multiple station smoke alarms required by 907.2.11 of the International Building Code, 2012 Edition.
- (2) Automatic sprinkler systems protecting one and two family dwellings.
- (3) Smoke detectors in GROUP I-3 occupancies.

Section 1101.1 Change as follows: Scope: The Village Building Official shall require the provisions of the current "Illinois Accessibility Code" as presently in force or as the same may be hereafter amended or modified and the same is hereby incorporated herein by reference and adopted as the standard for the purpose of this Ordinance. Any conflicts concerning the provisions of these codes shall be determined by the strictest standard contained in the code provisions.

Section 2303.1.2 Floor Trusses. Changes to read as follows: Light weight wood truss assemblies and "I" joists are not permitted unless installed in an accessory building, or a building with drywall covering all "open-web" and "I joists" and complete NFPA 13 sprinkler system is installed in the entire building.

Section 2901.1 Scope: To read as follows: The Village Building Official shall require the provisions of the current "Illinois Plumbing Code", 225 ILCS 320/1 et seq., as presently in force or as the same may be hereafter amended or modified and the same is hereby incorporated herein by reference and adopted as the standard for the purposes of this Ordinance. Any conflicts concerning the provisions of these codes shall be determined by the strictest standard contained in the code provisions. Remainder of Chapter text sections 2902.1 thru 2903.3 shall be deleted in their entirety.

Add Section 3001.5—See Lombard Code Section 150.075 for additional elevator requirements.

Change Section 3401.3-Compliance with other codes, delete all references to indicated codes and insert the following: ...in the currently adopted building and fire codes of the Village of Lombard.

Add Section 3401.7 Fire Suppression: Fire Suppression systems shall be installed as outlined in section 903.

Section 3412.2 Insert date January 1, 1950.

(Ord. 4142, passed 3/21/96; Ord. 5210, passed 11/7/02; Ord. 5481, passed 5/6/04; Ord. 6436, passed 2/4/10; Ord. 6602, passed 4/7/11; Ord. 6710, passed 4/19/12; Ord. 6795, passed 2/7/13; Ord. 6832, passed 5/16/13; Ord. No. 7061, Exh. A, passed 4-2-15; Ord. No. 7521, § 1, passed 5-17-18)

ARTICLE III. - INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION

§ 150.035 - Adoption by reference.

All provisions as listed in the International Residential Code, 2018 edition, are hereby adopted and incorporated by reference with the following changes:

Section R101.1 Title: Insert "Village of Lombard"

Section R105.2 Work exempt from permit; Delete the following exemptions: 1, 2, 3, 4, 5, 7 and 10.

Residing a single family home or accessory structure.

Sheds less than 80 square feet and less than 8 feet in height.

Patios less than 100 square feet.

Section R105.5 Expiration: Delete this section entirely and refer to Section 150.042, paragraphs A, B, C, and D.

Table R301.2(1) Ground Snow Load: The following information shall be inserted in the table:

Ground snow load	25
Wind Pressure	80
Seismic Conditions	1
Weathering	severe
Frost Depth	42
Termite	Yes
Winter Design Temp	14
Radon	Zone 2

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Delete note "f" at the bottom of Table R301.2(1)

R302.2 Townhouses-Exception shall be amended to read

"A common 2-hour fire-resistance wall constructed of masonry is permitted for townhouses".

R302.3 Two family dwellings shall be amended to read

"Dwelling units in two-family dwellings shall be separated from each other by a 2-hour masonry wall or a 2-hour floor meeting ASTM E 119 or UL 263".

R302.3 Two family dwellings Exception 1 shall be amended to read "A fire-resistance rating of 1 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13".

# R302.3 Two family dwellings—Delete exception 2

Section R312.1 Delete "more than 30 inches" and insert "more than 16 inches".

#### Delete Section R313

Delete Table R302.6 and replace with "The Minimum distance between a residence and accessory structures shall be 10 feet unless a 1-hour fire resistance wall is installed at the accessory structure". Two (2) feet shall be the minimum separation.

## Change section R309.2 Separation required.

To read as follows: The garage shall be separated from the residence and its attic by means of minimum 5 / 8 " type X Fire Code gypsum board applied to the garage side of the wall and/or ceiling.

Add Section R309.5 Service Doors: All <u>detached</u> garages shall have a service door. The door shall be side-hinged, not less than 2 feet 8 inches in width, not less than 6 feet 8 inches in height and designed for exterior use. A switched electric light and a 3 foot by 3 foot landing are required at all service doors. One switched light, one ceiling mounted receptacle, and one wall mounted receptacle shall be required on the inside of each garage.

## Add Section R309.6

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All garages built after May 1, 2013 shall have gutters installed, or equal as approved by the Community Development Director or his/her designee.

## Add to Section R315 Carbon Monoxide Detectors

R315.4 Provide a minimum of one Carbon Monoxide detector in every dwelling unit. Provide a minimum of one carbon monoxide detector on each story including basements in a multiple story dwelling. All carbon monoxide detectors shall be approved and listed and shall be installed in accordance with the manufacturer's installation instructions.

R315.5 Alterations, repairs and additions. When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the entire building shall be provided with carbon monoxide detectors located as required for new dwellings.

R315.6 Power source; Required carbon monoxide detectors shall receive their primary power from the building wiring when such wiring is served from a commercial source. Wiring shall be permanent and without a disconnecting source other than those required for over-current protection.

Section R325.1 Site Address; Add to end of sentence the following: The minimum size of numbers for addresses shall be 4" high and of a contrasting color to mounting surface.

Section R502.1.4 Prefabricated Wood I-Joists: Change to read as follows: Lightweight wood truss assemblies and "I" joists are not permitted unless installed in accessory structure or in any structure with 5/8 " type-x drywall covering all "open web joists" or "I-Joists", and a complete NFPA 13 sprinkler system is installed in the entire building.

Add 802.11.2-Wood roof trusses must have metal gusset plates covered with  $\frac{1}{2}$ " plywood, glued and screwed. Plywood must extend 6" beyond each side of the metal gusset plate (3 sides if 4th side is obstructed by roof sheathing or drywall ceiling).

Delete the plumbing and electric sections of this code, except Chapter 25, Plumbing Administration and Chapter 26, General Plumbing Requirements.

Appendix E: Delete all sections and replace with the following: Manufactured housing units shall comply with all sections of this code and all other applicable Village Ordinances denoted in Title XV as they apply to the construction for all single family detached dwellings.

(Ord. 5481, passed 5/6/04; Ord. 6217, passed 8/21/08; Ord. 6602, passed 4/7/11) (Ord. 6832, passed 5/16/13; Ord. No. 7061, Exh. A, passed 4-2-15)

# ARTICLE IV. - RESIDENTIAL USE SPECIAL REQUIREMENTS

§ 150.040 - Special residential requirements.

- (A) Applies to all uses residential uses.
  - (1) Closets. If a light is installed in a closet, it must be one of the following types:
    - a. Globe encased
    - b. Fluorescent
    - c. Recessed types
    - d. LED
  - (2) Interior doors. Minimum width for basement doors shall be two feet, six inches.
  - (3) Asphalt shingles-Stapling.
    - (a) Stapling will not be permitted for any roofs.
    - (b) Minimum 240-pound weight shingles with a 20 / 25 year warranty depending on material type of either asphalt or fiberglass shall be required.
  - (4) Reroofing.
    - (a) Re-roofing shall be allowed, but in no event shall more than two concurrent layers of shingles be allowed on any roof. The original roof unless removed shall count as one layer applied.
    - (b) Ice/Water shield or an equivalent product shall be installed as part of the roofing and/or reroofing of any conditioned residential building, other than buildings with flat or low sloped roofs. Installed a minimum of 24" up from the outside wall of the building and must start at the outside edge of the eaves and 18" up on each side of valleys.
  - (5) *Chimneys.* Flashing at chimneys shall be flashed into raked mortar joints in a step fashion and then remortared.

Ventless fireplaces are not allowed within the corporate limits of the Village of Lombard.

## (6) Gutters and downspouts.

- (a) Gutters and downspout shall drain free-fall onto splash blocks directed away from adjacent property, or to storm sewer where available with approval of Public Works Director.
- (7) Attached and built-in garages.
  - (a) Doors (minimum 20 minute fire rated) shall be equipped with a self-closer. The common wall to the residence shall be protected with 5 / 8 inch fire rated gypsum board or equivalent on the garage side to the underside of the roof sheathing or common wall and garage ceiling. If habitable rooms exist over any part of the garage, the complete interior of the garage shall be protected with 5 / 8 inch fire rated (one hour) gypsum board. Central heating and/or air conditioning equipment may not be exposed in a garage area. Such equipment must be separated from the garage by one hour fire rated walls. Garage floor surfaces shall be of approved noncombustible materials.
  - (b) Floors will be reinforced with six inch by six inch wire reinforcing material.
- (8) Duct systems.
  - (a) All heat supply systems for forced air heating shall be of metal ducts except as permitted in subsection (c).
  - (b) Warm air supply ducts will not run between studs on exterior walls to upper floors. The common wall between the house and the garage is considered as an exterior wall. Exterior and common walls shall be furred out to accommodate insulation and duct work. Warm air supply ducts in one story buildings shall terminate not more than 12 inches above floor.
  - (c) Flexible duct: U.L. listed 181-Class 1, NFPA 90A and 90B, min. eight inch water gauge and max. six foot length.
- (9) Concrete.
  - (a) When placing of concrete is suspended, it will be necessary to add reinforcing bars to footing or walls to prevent separation.
  - (b) All window openings in foundation walls shall have a minimum of two reinforcing bars embedded in the concrete directly above such openings and they shall extend a minimum of three feet on each side of the opening.
  - (c) Dry calcium chloride: In no way or manner shall dry calcium chloride be added to as an admixture to accelerate the setting time of poured-in-place concrete, except as provided hereinafter.
    - At no time shall calcium chloride be used if the temperature is 34 degrees F. and rising temperature is expected.
    - (2) If and when calcium chloride is used, said calcium chloride shall not exceed one percent by weight of concrete as set forth in the American Concrete Manual of Concrete Practice (1970-Part I 202-5) and provided such admixture is introduced into the mixture at the concrete batch plant.
- (10) Drain tile. Footing drain tile shall be connected to a sump basin with cast iron pipe or plastic pipe with appropriate manufacturer's fittings (minimum four-inch diameter). Provide sump pump to eject to front or rear of property, within 15 feet of residence, but away from any adjacent properties. Connection to Village of Lombard storm sewer system requires approval from the Director of Public Works.
- (11) Foundation.

Section R404: Delete all references to wood foundations.

For one-story frame additions only, a trench foundation will be permitted when the concrete is placed monolithically at a minimum depth of 42 inches below grade and minimum trench width of eight inches.

Construction site fencing. Residential construction site fencing when a permit authorizes (12)demolition or authorizes construction of a new principal structure or any other construction as determined by the Community Development Director or his/her designee, then the applicant, owner or general contractor shall cause a "safety fence" (fencing) to be installed around the area of construction, in a location and manner approved by the Community Development Director or his/her designee. The fencing shall be installed not more than seven days nor less than four days prior to the commencement of any demolition and/or new construction of a proposed structure on the subject property. The fencing shall consist of six foot high chain link fencing with driven posts to secure the chain link. The chain link fencing shall consist of #9 or #11 gauge metal and maximum mesh size of four inches or as approved by the Community Development Director or his/her designee. The fencing shall also include removable panels or type of hinged gates, (25 percent maximum area of fencing) for construction/utility access, only on the street side where the utilities are entering the subject property. Removable panels (or type of hinged gate) shall be latched where there is no construction activity being performed on the construction site. The latch may be of wire composition or of other means as approved by the Community Development Director or his/her designee. The fencing shall remain in place on the subject property until the structure is made weather tight and safe and secure from unauthorized entry and until the beginning stages of final site improvements (i.e. final grading, sodding or seeding of the subject property).

The applicant, owner or general contractor shall cause tree fencing to be installed around the trees in the public right-of-way (parkway) abutting the subject property. Such tree fencing shall be located, if possible, at the drip line of the tree or as directed by the Community Development Director or his/her designee. The parkway tree fence shall remain in place until final inspection of the construction projects has been approved by the village. The required types of tree fencing protection shall be four foot high orange vinyl fencing or chain link fencing.

- (13) Sanitation facilities. Any portable toilet on said property construction site may be located in the front area of the construction site, away from any sidewalks, and as close to the principal structure as possible, so as not to cause a blight in the neighborhood. One such toilet shall be provided at every construction site of a new principal structure no later than after the completion of the foundation excavation for the new structure. The portable toilet facility shall remain in place until the construction of the principal structure in nearly complete and the plumbing in the principal structure is functional. Improperly placed portable toilet facilities shall cause a "stop work order" to be issued and not lifted until the portable toilet has been moved to a satisfactory location as determined by the Building Division.
- (14) Site restoration guidelines. If the application includes demolition of a principal structure and if commencement of the construction of a new principal structure does not occur within 30 days after completion of demolition, then the application shall include a detailed site restoration plan depicting all work require to restore the subject property, within 30 days after completion of the demolition, to a safe, clean condition until construction of a new principal structure has commenced, including without limitation backfilling of any excavation, grading, seeding, sodding, fencing, stormwater management and the like.

Additional fee for late work: If the applicant, or owner or general contractor shall fail to commence construction within 30 days or shall fail to complete site restoration within 30 days, as provided in this section, then the applicant, owner or general contractor shall be subject to a special late work permit fee of \$250.00 per day until such work is completed. The village shall deduct such fee from the construction deposit provided by this Code.

The Community Development Director or his/her designee may, at his discretion, extend the 30day time limit to an additional 30 days upon special written request from the applicant, owner or general contractor.

Village right to enforce: Every permit authorizing demolition of a dwelling or structure issued pursuant to this Code, shall be conditioned on the agreement of the applicant, owner or general contractor of the subject property that if any work pursuant to a permit authorizing demolition of a dwelling or structure is undertaken in violation of any provision of this Code, then the village shall have the right at all times, but not the obligation, to enter onto the subject property and to cause any and all work to be done and actions to be taken to cure such violation. The applicant, owner or general contractor of the subject property shall be jointly and severally responsible for all costs and expenses incurred by the village, including without limitation attorney's fees and administrative expenses, in causing such cure. The village shall have the right, at its option, to draw on the construction deposit provided by this Code, or to demand payment directly from the applicant, owner or general contractor, for the cost of such village work, including without limitation legal fees and administration expenses, based either on costs actually incurred by the village or on the village's reasonable estimates of costs to be incurred. The village shall give a written or oral 24-hour notice and an opportunity to cure to the applicant or owner/general contractor before taking such action; provided, however, that no such notice and opportunity to cure shall be required in the event of repeated violations or in the event that a condition on or near the subject property poses, in the determination of the village, a threat of any kind to the public health and safety.

(15) Public sidewalks. The public sidewalk shall not be removed unless required for construction purposes or if the public sidewalk can be replaced and open to foot traffic within 30 days. When a public sidewalk is removed for construction purposes such as utility or driveway, only the area of the public sidewalk requiring the work shall be removed. This area shall be replaced with compacted stone (three-inch base and CA6 top—six inches) within seven days of the completion of the utility or driveway work and shall have a new public sidewalk installed within 90 days of removal, weather permitting.

Whenever a public sidewalk is closed to pedestrian traffic the area shall be marked by barricades on both sides of the area where work is being performed. If, in the opinion of the Community Development Director (or designee), pedestrians need to be informed of the closure, additional barricades with signage will be erected at locations selected by the Community Development Director (or designee).

(16) *Construction site signage.* Construction signage shall be placed on all new residential construction.

The builder or developer shall place a construction information sign on the jobsite inside the construction fence on private property clear of any clear line of sight areas. The sign face shall be a minimum of 20 inches tall and 28 inches long and no larger than 48 inches tall and 96 inches long. This informational sign shall have lettering large enough to be read from the street curb. This sign is to be erected prior to the start of any construction and shall come down at issuance of the certificate of occupancy or completion. This sign shall have the following minimum information:

# Address of site

Name of builder and/or developer Twenty-four hour telephone contact number of builder.

The second sign shall be provided by the Village of Lombard and sold to the builder at the village's cost, rounded to the next whole ten dollars. The sign is to be attached to the construction safety fence on the street side clear of any clear line of site areas and facing the street. The sign is to be attached prior to demolition or construction and will be removed at the time the safety fence is removed. The sign is the property of the builder and may be reused until the information on the sign is no longer valid or legible. From the time the builder is notified he/she will have 30 days to replace the obsolete sign. The sign will have the following information:

Construction code of conduct Village of Lombard's Building Division telephone number Village of Lombard's website Twenty-four hour village contact number Emergency contact number

(17) Hours of construction.

See § 93.02(B) of the Lombard Village Code.

(B) Applies to townhouses (attached single family residences) and use group R-3.

- (1) All dwelling units shall have attached garages and constructed above curb grade.
  - (2) Dwelling units shall be separated vertically by an accepted two hour wall assembly similar to UL Design U 301 and as approved by the Building Division.
  - (3) Dwelling units shall be separated horizontally by an accepted two hour floor-ceiling assembly similar to UL Design L 518 and as approved by the Building Division.
  - (4) Attic space shall be separated vertically by an accepted one-hour wall assembly similar to UL Design U 305 and as approved by the Building Division.
  - (5) Garage doors, common with dwelling units shall be equipped with a closer.
  - (6) The requirement of attached garages may be waived by the Community Development Director or his/her designee when approved on-site parking facilities are provided.
- (C) Reserved.
- (D) One-story frame detached garages and accessory structures.
  - (1) Construction to follow Chapters 4, 6, 7, 8 and 9 and Village of Lombard minimum construction specification and detail sheet.
  - (2) Delete Section 403.1.4 Minimum depth, for single story detached garages only.

(Ord. 5290, passed 5/15/03; Ord. 5481, passed 5/6/04; Ord. 6439, passed 2/4/10; Ord. 6602, passed 4/7/11; Ord. 6710, passed 4/19/12) (Ord. 2561, passed 10-28-82; Ord. No. 7061, Exh. A, passed 4-2-15)

Cross reference— Penalty, see Section 150.999.

§ 150.041 - Exceptions to special residential requirements.

Provided that the construction of the building meets all of the following requirements, the restrictions set forth in § 150.040 (C) (1) and (2) shall be amended to read:

- (A) Access for emergency vehicles is provided to both the front and rear of the building;
- (B) A minimum eight-inch diameter watermain is looped around the building, with fire hydrants spaced as approved by the Fire Chief;
- (C) The building is constructed of non-combustible materials (i.e. masonry construction using metal studs);
- (D) The building is protected by an approved automatic sprinkler system designed to meet, at a minimum, NFPA 13R;
- (E) Each townhome unit within the building is separated by a two-hour rated masonry firewall, from the foundation to the underside of the roof deck, with factory fire retardant treated decking;
- (F) A place of refuge shall be provided from the third floor of the buildings.

# (Ord. 4828, passed 6/15/00)

# ARTICLE V. - INTERNATIONAL ENERGY CONSERVATION CODE

§ 150.045 - Adoption by reference; amendments.

(A) There is hereby adopted by the village a certain code known as The International Energy Conservation Code, latest edition as adopted by the State of Illinois, developed by International Code of Council is hereby adopted by reference. The terms and conditions of the latest edition are hereby to be in full force and effect as adopted by the village in its entirety and subject to any amendments made thereto.

ARTICLE VI. - ILLINOIS STATE PLUMBING CODE

# § 150.050 - Adoption by reference; amendments.

(A) The Illinois State Plumbing Code. There is hereby adopted a certain code known as the "Illinois State Plumbing Code, latest edition as adopted by the Illinois Department of Health, for the purpose of prescribing regulations for plumbing fixtures, materials, and design and installation methods as minimum standards for plumbing in the Village of Lombard. Said "Illinois State Plumbing Code, latest edition" is hereby adopted by reference in its entirety, subject to those sections not adopted or amended pursuant to the provisions herein stated below of the Lombard Municipal Code.

Page 7 Appendix A Table A (Water Service)

Eliminate all material except: Type K copper

#### Ductile Iron

Page J 2 Section 890.1320 A 12 foot "suds zone" shall be installed at all commercial/multi-family buildings where a laundry stack is present. Suds zone shall tie in a minimum of 12 foot from closest fixture.

Section 890. Appendix A Approved Materials for Building Sewer. The approved materials are the following items: 3) Cast Iron Soil 7) Polyvinyl Chloride (PVC) Pipe Specifically; SDR 26 PVC (Green. AWWA C900 (Blue), ASTM D2241 (White) 12) Identification of Piping Systems

Delete items: 1, 2, 4, 5, 6, 8, 9, 10, and 11

Amends Section 890. Appendix A. Table A of the ILPC

Pursuant to 17 III. Admin Code 3730.307(c)(4) and subject to the Illinois Plumbing Code (77 III. Adm. Code 890) and the Lawn Irrigation Contractor and Lawn Sprinkler System Registration Code (77 III Adm. Code 892). all new and replacement plumbing fixtures and irrigation controllers installed after the effective date of this ordinance shall bear the WaterSense label (as designated by the U.S. Environmental Protection Agency WaterSense Program) when such labeled fixtures are available.

a. All grease interceptors shall be sized based on one hundred (100) percent of the connected fixtures' liquid-holding capacity. To determine the liquid holding capacity of the connected fixtures, the fixture basin length is multiplied by the width then by the height in inches, then divided by 231. then divided by a 1-minute drain time. When two or more sinks or receptacles are connected to an interceptor the liquid-holding capacity shall be based on the combined volume of all the fixtures served as calculated above in addition to the flow rate of other fixture types per Section 890.TABLE R of the Illinois Plumbing Code as modified below multiplied by a one-minute drain time. For the purpose of sizing a hydro mechanical grease interceptor the resulting units are taken as gallons per minute, and for the purpose of sizing a gravity grease interceptor, as gallons.

All hydro mechanical grease interceptors shall bear a permanently affixed nameplate issued by a testing laboratory acceptable to the authority having jurisdiction which shall serve as the manufacturer's certification that the interceptor has been tested and certified for the specified flow rate. The nameplate shall be permanently marked with the manufacturer's name, the flow rate in gallons per minute. the grease capacity in pounds or the actual retained grease at breakdown, and the inlet and outlet sizes.

This code shall not prohibit the installation of two grease interceptors installed in a parallel system as long as each interceptor is properly sized as required in Section 890.510 (a)(2)(i) for the connected fixture holding capacity.

Each FSE shall have a control manhole or sampling chamber installed and located at a point downstream of the GRS.

All kitchen drains and any other drains that may carry grease-laden waste shall be connected to this GRS, this includes but is not limited to: vegetable sinks, prep sinks, pre-rinse sinks, wok lines hand sinks, mop basins, floor drains, and bar sinks. No domestic sewage shall be routed to the GRS.

If a Commercial Dishwasher is to be connected to a grease interceptor, it must either be a separate grease interceptor with no other fixture connected to it and sized for the dishwasher, or a grease interceptor that is 500 gallons or larger.

The Illinois Plumbing Code Section 890.510(a)(3) prohibits as interceptor from accepting waste from a food waste disposal, therefore, food waste disposals are prohibited from being installed in FSE's as all fixtures and drains that may waste fats, oils, and grease must be connected to an interceptor.

(Ord. 6602, passed 4/7/11; Ord. No. 7138, 1, passed 10-15-15; Ord. No. 7348, § 1, passed 4-6-17)

ARTICLE VII. - [STORM WATER DRAINAGE FOR BUILDINGS][1]

Footnotes:

---- (1) ----

Editor's note— Ord. No. 7138, 1, passed Oct. 15, 2015, repealed the former Art. VII, § 150.055, in its entirety. The former Art. VII, § 150.055 pertained to International Plumbing Code—2012 Edition and derived from Ord. No. 6710, 1, passed 4-19-12 and Ord. No. 7061, Exh. A, passed 4-2-15.

Editor's note— Due to a duplication of the section number 150.070 in this chapter, this § 150.070 was renumbered as § 150.055, at the editor's discretion, as part of Supplement 3, update 3.

§ 150.055 - Storm water drainage for buildings.

1101.1 Scope.

The provisions of this chapter shall govern the materials, design, construction and installation of storm drainage.

1101.2 Where required.

All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal. For one- and two-family dwellings, and where approved, storm water is permitted to discharge onto flat areas, such as streets or lawns, provided that the storm water flows away from the building.

# 1101.3 Prohibited drainage.

Storm water shall not be drained into sewers intended for sewage only.

# 1101.4 Tests.

The conductors and the building storm drain shall be tested in accordance with Section 312 of the 2012 International Plumbing Code.

# 1101.5 Change in size.

The size of a drainage pipe shall not be reduced in the direction of flow.

## 1101.6 Fittings and connections.

All connections and changes in direction of the storm drainage system shall be made with approved drainage-type fittings in accordance with Table 706.3 of the International Plumbing Code. The fittings shall not obstruct or retard flow in the system.

# 1101.7 Roof design.

Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked.

# 1101.8 Cleanouts required.

Cleanouts shall be installed in the storm drainage system and shall comply with the provisions of this code for sanitary drainage pipe cleanouts.

Exception: Subsurface drainage system.

#### 1101.9 Backwater valves.

Storm drainage systems shall be provided with backwater valves as required for sanitary drainage systems in accordance with Section 715 of the 2012 International Plumbing Code.

# 1102 Materials.

## 1102.1 General.

The materials and methods utilized for the construction and installation of storm drainage systems shall comply with this section and the applicable provisions of Chapter 7 of the International Plumbing Code.

#### 1102.2 Inside storm drainage conductors.

Inside storm drainage conductors installed above ground shall conform to one of the standards listed in Table 702.1 of the 2018 International Plumbing Code.

Deleted: 2

1102.3 Underground building storm drain pipe.

Underground building storm drain pipe shall conform to one of the standards listed in Table 702.2 of the 2018 International Plumbing Code.

1102.4 Building storm sewer pipe.

Building storm sewer pipe shall conform to one of the standards listed in Table 1102.4 of the 2012 International Plumbing Code.

Table 1102.4 Building Storm Sewer Pipe					
Material	Standard				
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D 2661; ASTM D 2751; ASTM F 628; CSA B181.1; CSA B182.1				
Asbestos-cement pipe	ASTM C 428				
Cast-iron pipe	ASTM A 74; ASTM A 888; CISPI 301				
Concrete pipe	ASTM C 14; ASTM C 76; CSA A257.1M; CSA A257.2M				
Copper or copper-alloy tubing (Type K, L, M or DWV)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 306				
Polyethylene (PE) plastic pipe	ASTM F 2306/F 2306M				
Polyvinyl chloride (PVC) plastic pipe (Type DWV, SDR26, SDR35, SDR41, PS50 or PS100)	ASTM D 2665; ASTM D 3034; ASTM F 891; CSA B182.4; CSA B181.2; CSA B182.2				
Vitrified clay pipe	ASTM C 4; ASTM C 700				
Stainless steel drainage systems, Type 316L	ASME A112.3.1				

# 1102.5 Subsoil drain pipe.

Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the standards listed in Table 1102.5 of the 2018 International Plumbing Code.

Table 1102.5 Subsoil Drain Pipe		
Material	Standard	
Asbestos-cement pipe	ASTM C 508	
Cast-iron pipe	ASTM A 74; ASTM A 888; CISPI 301	

Deleted: 2

Polyethylene (PE) plastic pipe	ASTM F 405; CSA B182.1; CSA B182.6; CSA B182.8				
Polyvinyl chloride (PVC) Plastic pipe (type sewer pipe, PS25, PS50 or PS100)	ASTM D 2729; ASTM F 891; CSA B182.2; CSA B182.4				
Stainless steel drainage systems, Type 316L	ASME A 112.3.1				
Vitrified clay pipe	ASTM C 4; ASTM C 700				

# 1102.6 Roof Drains.

Roof drains shall conform to ASME A112.6.4 or ASME A112.3.1.

# 1102.7 Fittings.

Pipe fittings shall be approved for installation with the piping material installed, and shall conform to the respective pipe standards or one of the standards listed in Table 1102.7. The fittings shall not have ledges, shoulders or reductions capable of retarding or obstructing flow in the piping. Threaded drainage pipe fittings shall be of the recessed drainage type.

Table 1102.7 Pipe Fitting					
Material	Standard				
Acrylonitrile butadiene styrene (ABS) plastic	ASTM D 2661; ASTM D 3311; CSA B181.1				
Cast-iron	ASME B16.4; ASME B16.12; ASTM A 888; CISPI 301; ASTM A 74				
Coextruded composite ABS and drain DR-PS in PS35, PS50, PS100, PS140, PS200	ASTM D 2751				
Coextruded composite ABS DWV Schedule 40 IPS pipe (solid or cellular core)	ASTM D 2661; ASTM D 3311; ASTM F 628				
Coextruded composite PVC sewer and drain DR-PS in PS35, PS50, PS100, PS140, PS200	ASTM D 2665; ASTM D 3311; ASTM F 891				
Coextruded composite PVC sewer and drain DR-PS in PS35, PS50, PS100, PS140, PS200	ASTM D 3034				
Copper or copper alloy	ASME B16.15; ASME B16.18; ASME B16.22; ASME B16.23; ASME B16.26; ASME B16.29				
Gray iron and ductile iron	AWWA C110/A21.10				

Malleable iron	ASME B16.3				
Plastic, general	ASTM F 409				
Polyethylene (PE) plastic pipe	ASTM F 2306/F 2306M				
Polyvinyl chloride (PVC) plastic	ASTM D 2665; ASTM D 3311; ASTM F 1866				
Steel	ASME B16.9; ASME B16.11; ASME B16.28				
Stainless steel drainage systems, Type 316L	ASME A112.3.1				

# 1103 Traps.

# 1103.1 Main trap.

Leaders and storm drains connected to a combined sewer shall be trapped. Individual storm water traps shall be installed on the storm water drain branch serving each conductor, or a single trap shall be installed in the main storm drain just before its connection with the combined building sewer or the public sewer.

# 1103.2 Material.

Storm water traps shall be of the same material as the piping system to which they are attached.

## 1103.3 Size.

Traps for individual conductors shall be the same size as the horizontal drain to which they are connected.

# 1103.4 Cleanout.

An accessible cleanout shall be installed on the building side of the trap.

## 1104 Conductors and Connections.

## 1104.1 Prohibited use.

Conductor pipes shall not be used as soil, waste or vent pipes, and soil, waste or vent pipes shall not be used as conductors.

# 1104.2 Combining storm with sanitary drainage.

The sanitary and storm drainage systems of a structure shall be entirely separate except where combined sewer systems are utilized. Where a combined sewer is utilized, the building storm drain shall be connected in the same horizontal plane through a single-wye fitting to the combined sewer not less than 10 feet (3048 mm) downstream from any soil stack.

# 1104.3 Floor drains.

Floor drains shall not be connected to a storm drain.

# 1105 Roof Drains.

# 1105.1 General.

Roof drains shall be installed in accordance with the manufacturer's instructions. The inside opening for the roof drain shall not be obstructed by the roofing membrane material.

# 1105.2 Roof drain flashings.

The connection between roofs and roof drains which pass through the roof and into the interior of the building shall be made water-tight by the use of approved flashing material.

# 1106 Size of Conductors, Leaders and Storm Drains.

# 1106.1 General.

The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on the 100-year hourly rainfall rate indicated in Figure 1106.1 (3 inches in one hour for Lombard) or on other rainfall rates determined from approved local weather data.

# 1106.2 Vertical conductors and leaders.

Vertical conductors and leaders shall be sized for the maximum projected roof area, in accordance with Table 1106.2(1) and Table 1106.2(2).

Diameter of Leader (inches) <sup>a</sup>	Horizontally Projected Roof Area (square feet)											
	Rainfall rate (inches per hour)											
	1	2	3	4	5	6	7	8	9	10	11	12
2	2,880	1,440	960	720	575	480	410	360	320	290	260	240
3	8,800	4,400	2,930	2,200	1,760	1,470	1,260	1,100	980	880	800	730
4	18,400	9,200	6,130	4,600	3,680	3,070	2,630	2,300	2,045	1,840	1,675	1,530
5	34,600	17,300	11,530	8,650	6,920	5,765	4,945	4,325	3,845	3,460	3,145	2,880
6	54,000	27,000	17,995	13,500	10,800	9,000	7,715	6,750	6,000	5,400	4,910	4,500
8	116,000	58,000	38,660	29,000	23,200	19,315	16,570	14,500	12,890	11,600	10,545	9,600

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m2.

Dimensions of Common	Horizontally Projected Roof Area (square feet)											
Leader Sizes width × length	Rainfall rate (inches per hour)											
(inches) <sup>a, b</sup>	1	2	3	4	5	6	7	8	9	10	11	12
1¼ × 2½	3,410	1,700	1,130	850	680	560	480	420	370	340	310	280
2 × 3	5,540	2,770	1,840	1,380	1,100	920	790	690	610	550	500	460
2¾ × 4¼	12,830	6,410	4,270	3,200	2,560	2,130	1,830	1,600	1,420	1,280	1,160	1,060
3 × 4	13,210	6,600	4,400	3,300	2,640	2,200	1,880	1,650	1,460	1,320	1,200	1,100
3½ × 4	15,900	7,950	5,300	3,970	3,180	2,650	2,270	1,980	1,760	1,590	1,440	1,320
3½ × 5	21,310	10,650	7,100	5,320	4,260	3,550	3,040	2,660	2,360	2,130	1,930	1,770
3¾ × 4¾	21,960	10,980	7,320	5,490	4,390	3,660	3,130	2,740	2,440	2,190	1,990	1,830
3¾ × 5¼	25,520	12,760	8,500	6,380	5,100	4,250	3,640	3,190	2,830	2,550	2,320	2,120
3½ × 6	27,790	13,890	9,260	6,940	5,550	4,630	3,970	3,470	3,080	2,770	2,520	2,310
4 × 6	32,980	16,490	10,990	8,240	6,590	5,490	4,710	4,120	3,660	3,290	2,990	2,740
5½ × 5½	44,300	22,150	14,760	11,070	8,860	7,380	6,320	5,530	4,920	4,430	4,020	3,690
7½ × 7½	100,500	50,250	33,500	25,120	20,100	16,750	14,350	12,560	11,160	10,050	9,130	8,370

a. Sizes indicated are the diameter of circular piping. This table is applicable to piping of other shapes, provided the cross-sectional shape fully encloses a circle of the diameter indicated in this table. For rectangular leaders, see Table 1106.2(2). Interpolation is permitted for pipe sizes that fall between those listed in this table.

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m2.

a. Sizes indicated are nominal width x length of the opening for rectangular piping.

b. For shapes not included in this table, Equation 11-1 shall be used to determine the equivalent circular diameter, De, of rectangular piping for use in interpolation using the data from Table 1106.2(1).

De = [width × length]<sup>1</sup>/<sub>2</sub> (Equation 11-1)

# where:

# De = equivalent circular diameter and De, width and length are in inches.

1106.3 Building storm drains and sewers.

The size of the building storm drain, building storm sewer and their horizontal branches having a slope of one-half unit or less vertical in 12 units horizontal (4-percent slope) shall be based on the maximum projected roof area in accordance with Table 1106.3. The slope of horizontal branches shall be not less than one-eighth unit vertical in 12 units horizontal (1-percent slope) unless otherwise approved.

Size of Horizontal	Horizontally Projected Roof Area (square feet)							
Piping (inches)	Rainfall rate (inches per hour)							
	1	2	3	4	5	6		
1/8 unit vertical in	12 units l	l norizontal	 (1-percer	nt slope)				
3	3,288	1,644	1,096	822	657	548		
4	7,520	3,760	2,506	1,800	1,504	1,253		
5	13,360	6,680	4,453	3,340	2,672	2,227		
6	21,400	10,700	7,133	5,350	4,280	3,566		
8	46,000	23,000	15,330	11,500	9,200	7,600		
10	82,800	41,400	27,600	20,700	16,580	13,800		
12	133,200	66,600	44,400	33,300	26,650	22,200		
15	218,000	109,000	72,800	59,500	47,600	39,650		
¼ unit vertical in 1	l 2 units ho	 rizontal (2	-percent	slope)	<u> </u>			
3	4,640	2,320	1,546	1,160	928	773		
4	10,600	5,300	3,533	2,650	2,120	1,766		
5	18,880	9,440	6,293	4,720	3,776	3,146		

6	30,200	15,100	10,066	7,550	6,040	5,033
8	65,200	32,600	21,733	16,300	13,040	10,866
10	116,800	58,400	38,950	29,200	23,350	19,450
12	188,000	94,000	62,600	47,000	37,600	31,350
15	336,000	168,000	112,000	84,000	67,250	56,000
½ unit vertio	al in 12 units ho	izontal (4	-percent	slope)	1	Concessioner 1
3	6,576	3,288	2,295	1,644	1,310	1,096
4	15.040	7,520	5,010	3,760	3,010	2,500
4	15,040	7,520	5,010	3,700	5,010	2,500
	26,720	13,360	8,900	6,680	5,320	4,450
5						
5	26,720	13,360	8,900	6,680	5,320	4,450
5	26,720 42,800	13,360 21,400	8,900 13,700	6,680	5,320 8,580	4,450 7,140
5 6 8	26,720 42,800 92,000	13,360 21,400 46,000	8,900 13,700 30,650	6,680 10,700 23,000	5,320 8,580 18,400	4,450 7,140 15,320

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m2.

1106.4 Vertical walls.

In sizing roof drains and storm drainage piping, one-half of the area of any vertical wall that diverts rainwater to the roof shall be added to the projected roof area for inclusion in calculating the required size of vertical conductors, leaders and horizontal storm drainage piping.

1106.5 Parapet wall scupper location.

Parapet wall roof drainage scupper and overflow scupper location shall comply with the requirements of Section 1503.4 of the International Building Code.

1106.6 Size of roof gutters.

The size of semicircular gutters shall be based on the maximum projected roof area in accordance with Table 1106.6.

Diameter of	Horizo	ntally Pr	ojected	Roof Are	a (squar	e feet		
Gutters (inches)	Rainfall rate (inches per hour)							
	1	2	3	4	5	6		
1/16 unit ver	tical in 1	l 2 units h	norizonta	il (0.5-pe	rcent sl	ope)		
3	680	340	226	170	136	113		
4	1,440	720	480	360	288	240		
5	2,500	1,250	834	625	500	416		
6	3,840	1,920	1,280	960	768	640		
7	5,520	2,760	1,840	1,380	1,100	918		
8	7,960	3,980	2,655	1,990	1,590	1,32		
10	14,400	7,200	4,800	3,600	2,880	2,40		
1/8 unit verti	cal 12 ur	 nits horiz	ontal (1	-percent	slope)			
3	960	480	320	240	192	160		
4	2,040	1,020	681	510	408	340		
5	3,520	1,760	1,172	880	704	587		
6	5,440	2,720	1,815	1,360	1,085	905		
7	7,800	3,900	2,600	1,950	1,560	1,30		
3	11,200	5,600	3,740	2,800	2,240	1,87		
10	20,400	10,200	6,800	5,100	4,080	3,40		
4 unit vertica	l in 12 u	nits hori:	l zontal (2	-percent	slope)			
3	1,360	680	454	340	272	226		

4	2,880	1,440	960	720	576	480
5	5,000	2,500	1,668	1,250	1,000	834
6	7,680	3,840	2,560	1,920	1,536	1,280
7	11,040	5,520	3,860	2,760	2,205	1,840
8	15,920	7,960	5,310	3,980	3,180	2,655
10	28,800	14,400	9,600	7,200	5,750	4,800
½ unit v	ertical in 12 u	nits hori	zontal (4	-percent	slope)	
3	1,920	960	640	480	384	320
3	1,920 4,080	960 2,040	640 1,360	480 1,020	384 816	320 680
						680
4	4,080	2,040	1,360	1,020	816	
4	4,080	2,040 3,540	1,360 2,360	1,020	816	680 1,180 1,850
4 5 6	4,080 7,080 11,080	2,040 3,540 5,540	1,360 2,360 3,695	1,020 1,770 2,770	816 1,415 2,220	680 1,180

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m2.

# 1107 Siphonic Roof Drainages Systems.

1107.1 General.

Siphonic roof drains and drainage systems shall be designed in accordance with ASME A112.6.9 and ASPE 45.

# 1108 Secondary (Emergency) Roof Drains.

1108.1 Secondary (emergency overflow) drains or scuppers.

Where roof drains are required, secondary (emergency overflow) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

1108.2 Separate systems required.

Secondary roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location that would normally be observed by the building occupants or maintenance personnel.

# 1108.3 Sizing of secondary drains.

Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 based on the rainfall rate for which the primary system is sized in Tables 1106.2(1), 1106.2(2), 1106.3 and 1106.6. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall have an opening dimension of not less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

# 1109 Combined Sanitary and Storm System.

#### 1109.1 Size of combined drains and sewers.

The size of a combination sanitary and storm drain or sewer shall be computed in accordance with the method in Section 1106.3. The fixture units shall be converted into an equivalent projected roof or paved area. Where the total fixture load on the combined drain is less than or equal to 256 fixture units, the equivalent drainage area in horizontal projection shall be taken as 4,000 square feet (372 m2). Where the total fixture load exceeds 256 fixture units, each additional fixture unit shall be considered the equivalent of 15.6 square feet (1.5 m2) of drainage area.

These values are based on a rainfall rate of 1 inch (25 mm) per hour.

#### 1110 Values For Continuous Flow.

#### 1110.1 Equivalent roof area.

Where there is a continuous or semicontinuous discharge into the building storm drain or building storm sewer, such as from a pump, ejector, air conditioning plant or similar device, each gallon per minute (L/m) of such discharge shall be computed as being equivalent to 96 square feet (9 m2) of roof area, based on a rainfall rate of 1 inch (25.4 mm) per hour.

# 1111 Controlled Flow Roof Drain Systems.

## 1111.1 General.

The roof of a structure shall be designed for the storage of water where the storm drainage system is engineered for controlled flow. The controlled flow roof drain system shall be an engineered system in accordance with this section and the design, submittal, approval, inspection and testing requirements of Section 105.4. The controlled flow system shall be designed based on the required rainfall rate in accordance with Section 1106.1.

# 1111 Controlled Flow Roof Drain Systems.

## 1111.1 General.

The roof of a structure shall be designed for the storage of water where the storm drainage system is engineered for controlled flow. The controlled flow roof drain system shall be an engineered system in accordance with this section and the design, submittal, approval, inspection and testing requirements of Section 105.4. The controlled flow system shall be designed based on the required rainfall rate in accordance with Section 1106.1.

## 1111.2 Control devices.

The control devices shall be installed so that the rate of discharge of water per minute shall not exceed the values for continuous flow as indicated in Section 1109.1.

## 1111.3 Installation.

Runoff control shall be by control devices. Control devices shall be protected by strainers.

## 1111.4 Minimum number of roof drains.

Not less than two roof drains shall be installed in roof areas 10,000 square feet (929 m2) or less and not less than four roof drains shall be installed in roofs over 10,000 square feet (929 m2) in area.

# 1112 Subsoil Drains.

1113 Building Subdrains.

# 1113.1 Building subdrains.

Building subdrains located below the public sewer level shall discharge into a sump or receiving tank, the contents of which shall be automatically lifted and discharged into the drainage system as required for building sumps. The sump and pumping equipment shall comply with Section 1114.1.

## 1114 Sumps and Pumping Systems.

# 1114.1 Pumping system.

The sump pump, pit and discharge piping shall conform to Sections 1114.1.1 through 1114.1.4.

# 1114.1.1 Pump capacity and head.

The sump pump shall be of a capacity and head appropriate to anticipated use requirements.

# 1114.1.2 Sump pit.

The sump pit shall not be less than 18 inches (457 mm) in diameter and not less than 24 inches (610 mm) in depth, unless otherwise approved. The pit shall be accessible and located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, steel, plastic, cast-iron, concrete or other approved material, with a removable cover adequate to support anticipated loads in the area of use. The pit floor shall be solid and provide permanent support for the pump.

# 1114.1.3 Electrical.

Electrical service outlets, when required, shall meet the requirements of NFPA 70.

# 1114.1.4 Piping.

Discharge piping shall meet the requirements of Section 1102.2, 1102.3 or 1102.4 and shall include a gate valve and a full flow check valve. Pipe and fittings shall be the same size as, or larger than, pump discharge tapping.

Exception: In one- and two-family dwellings, only a check valve shall be required, located on the discharge piping from the pump or ejector.

(Ord. No. 7138, 1, passed 10-15-15)

## ARTICLE VIII. - NATIONAL ELECTRICAL CODE-2017

§ 150.060 - Establishment of rules and regulations of electrical installation.

The National Electrical Code (2017 edition), as hereby amended and as modified by this Chapter, shall establish the rules and regulations of electrical installations in the village.

(Ord. No. 7137, 1, passed 10-15-15; Ord. No. 7793, § 1, passed 3-5-20)

§ 150.061 - Definition.

For the purpose of this Chapter the following definitions shall apply unless the context clearly indicates or requires a different meaning.

*Communications contractor* is one that installs only Class 2 or Class 3 type wiring as defined in Articles 725.1 and 725.2 of the National Electrical Code (2017 Edition) (NEC), and only that portion of the wiring system between the load side of a Class 2 or Class 3 power source and the connected equipment.

*Electrical contractor* as used in this Chapter means any person, firm or corporation engaged in the business of installing or altering, by contract or otherwise, electrical equipment for the utilization of electricity supplied for light, heat or power or other installations covered in Article 90.2, Scope of the National Electrical Code (2017 Edition); but "electrical contractor" does not include employees of such contractor who perform or supervise such work.

(Ord. 5481, Passed 5/6/04; Ord. 6522, passed 9/16/10; Ord. No. 7137, 1, passed 10-15-15; Ord. No. 7793, § 1, passed 3-5-20)

§ 150.062 - Electrical contractors and communications contractors must be registered; certificate of insurance.

It is unlawful for any person, firm or corporation to engage in the business of electrical contractor or communications contractor within the Village of Lombard, without being registered in the manner hereinafter set forth.

- (A) Registration. Any person, firm or corporation desiring to engage in the business of an electrical contractor or communications contractor shall:
  - (1) Furnish a copy of current registration or license issued by any city, village or town in the State of Illinois that was obtained only after the passage of a recognized written test.
  - (2) Homeowner. A homeowner shall be registered by application to the village. Said registration shall be restricted to allow work only on the homeowners' personal and primary residence. A qualification test shall be passed in order to secure this registration and permits to install, modify or revise an electrical service or service conductors. No electrical work shall be allowed under this provision in commercial, industrial or multifamily residential occupancies. Work done on these type occupancies shall be performed only by a registered electrical contractor.
- (B) Use of permit issued to another. It shall be unlawful for any person to install, alter or repair any electrical wires or apparatus by authority of a permit issued to and for the use of some other person.
- (C) Permit for person not entitled to one. It shall be unlawful for any registered Electrical or Communications Contractor to secure or furnish a permit for the installation, alteration, and repair of electrical wires and apparatus to any person not entitled to such permit under the regulations of this Chapter.
- (D) Revocation of permits. The Community Development Director or his/her designee is authorized to revoke any permit or certificate obtained by fraud, misrepresentation, or in any way contrary

to the provisions of the electrical regulations of this Chapter, for installation, alteration, repair and use of any electrical conductors, electrical equipment, signaling & communications conductors and equipment, and fiber optic cables and raceways.

(E) Certificate of insurance. Refer to contractor registration and insurance requirements §150.143.

(Ord. 6522, passed 9/16/10; Ord. 6832, passed 5/17/13; Ord. No. 7137, 1, passed 10-15-15)

# § 150.063 - Permit required.

No person shall install any electrical conduits, electrical wires, electrical equipment, apparatus or communications, data, computer or fiber optics cables, conduits, equipment or apparatus in any building or structure, for which a permit is required, until such permit shall have been secured. In case any work is begun without a permit authorizing said work, the Community Development Director or his/her designee shall have the power to stop said work and order all persons engaged therein to stop and desist until the proper permit is secured.

Underground installations in the parkway area require an additional permit (right-of-way permit) from the Village of Lombard Public Works Department.

# (Ord. 6522, passed 9/16/10)

§ 150.064 - Disconnection of electrical services.

- (A) If any person violates the provisions of this Chapter or maintains any electrical wiring or apparatus or communication, data, computer, or fiber optic cable or equipment found to be dangerous to life and property, the Community Development Director or his/her designee is hereby empowered to cutoff or otherwise disconnect current to said electrical wires or apparatus.
- (B) Any person having been stopped from installing electrical work as outlined in § 150.063 shall, when securing the permit to continue, pay double the permit fees as a penalty.

(Ord. 6522, passed 9/16/10; Ord. No. 7137, 1, passed 10-15-15)

## § 150.065 - Permit fees.

All fees for inspection shall be in accordance with schedules under § 150.140.

- § 150.066 Adoption by reference amendments, additions, and deletions.
- (A) The National Electrical Code (2017 edition), as amended, is adopted by reference as modified by this Chapter.

In the event any provisions, Articles, wording, and the like, of the National Electrical Code (2017 edition), as amended, are in conflict with any ordinances, amendments, and/or addendums, as recognized and approved by the Electrical Commission of the Village of Lombard and/or as adopted by the Village of Lombard, or in conflict with the state law, the most restrictive provisions, Articles, wording, and the like, shall prevail.

Wiring methods and/or materials listed by the National Electrical Code (2017 Edition), but amended, deleted, prohibited or requiring special expressed written permission (SEWP) by this Chapter as noted in subsections (B), (C), (D) below shall be considered to be amended, deleted, prohibited or requiring special expressed written permission (SEWP) where ever and there after mentioned or referenced in the National Electrical Code (2017 edition).

(B) The following Articles, or portions thereof, of the National Electric Code (2017 Edition) shall be deleted for the purpose of this Chapter:

# Section 230.41. Ex.(4)

Aluminum wire is not allowed, except AA-8000 series electrical grade aluminum conductors are approved for outside use to feed an electric meter only.

Article 320 Armored Cable: Type AC

Article 322 Flat Cable Assemblies: Type FC

Article 324 Flat Conductor Cable: Type FCC

Article 334 Nonmetallic Sheathed Cable: Type NM, NMC, & NMS

Article 338 Service Entrance Cable: Type SE & USE

<u>Article 362</u> Electrical Nonmetallic Tubing: Type ENT

Article 394 Concealed Knob & Tube

Article 330

Metal Clad Cable: Type MC when extended a length of greater twenty (20) feet per circuit.

- (C) Certain constructions recognized by the National Electrical Code (NEC) shall only be permitted with the special expressed written permission (SEWP) of the Building Division of the Community Development Department.
- (D) The following Articles or Sections of the National Electric Code (2017 Edition) are amended as follows:

Section 110.14 Electrical Connections. (Add the following:)

- (A) Terminals. The use of stab type screwless pressure terminals of the conductor push-in type is prohibited.
- (B) Splices. The use of device terminals for splicing is strictly prohibited.

Section 110.26 Spaces About Electric Equipment. (Add the following:)

(A) Dead Front Assemblies—When in the judgment of the Electrical Inspector or his/her designee, the conditions of the installation or the equipment being installed or modified require additional clearances at front, sides or rear of electrical equipment, such additional clearances shall be provided.

Section 210.19 Conductors-Minimum Ampacity and Size. (Add the following:)

(1) General. All branch circuits shall be wired with copper conductors only.

Article 210

III. Required Outlets

Section 210.52

(G) (3) Where an installation includes a sump pump or pumps and an ejector pump or pumps, each pump shall be provided an Individual Branch Circuit (dedicated circuit) compliant with Section 210.21(B)(1), (2) and (3). That is, a receptacle with a rating of not less than the branch circuit rating (usually 20 amperes) and compliant with Section 210.8, (GFCI protected) and with Section 406.11, TR (Tamper Resistant). Where in wet locations Section 406.9(B) WR (Weather Resistant) outlets are required in addition to "In Use" covers.

Exception: A single receptacle (Simplex type and rated for the branch circuit ampacity) installed exclusively for sump pump or pumps and ejector pump or pumps, no GFCI protection is required, amending 210.8.

Section 230.1 Scope (Add the following:)

Whenever a service is revised or replaced, all current pertinent provisions of this Chapter shall apply.

All service and feeder conductors shall be copper. It is intended that all electrical conductors be copper.

Section 230.43 Wiring Methods for 600 Volts, Nominal, or Less. (Delete the following methods:)

 Open Wiring on insulators; (2) TYPE IGS Cable; (5) Electrical metallic tubing; (6) Electrical Nonmetallic Tubing; (7) Service-entrance cables; (13) Type MC cable; (14) Mineral-insulated, metal-sheathed cable; (15) Flexible metal conduit and LFMC, Liquidtight flexible metal conduit; (16) Liquid tight flexible nonmetallic conduit; (17) High density polyethylene conduit (HDPE); (18) Nonmetallic underground conduit with conductors (NUCC); (19) Reinforced thermosetting resin conduit (RTRC).

Section 230.70 General.

(A) Location.

(1) Readily Accessible Location. (Amend to read as follows:) The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure, or inside nearest the point of entrance of the service conductors, in any case within five (5) feet of conduit and conductor entrance to the building.

Section 230.71 Maximum Number of Disconnects. (Replace NEC text with the following:)

- (A) General. The service disconnecting means for each service permitted by Section 230.2, or for each set of service-entrance conductors permitted by Section 230.40, Exception Nos. 1, 3, 4 or 5, shall consist of one main switch or circuit breaker. There shall be no more than six (6) main disconnects grouped in any one location. For the purpose of this Section, disconnecting means installed as part of listed equipment and used solely for the following shall not be considered a service disconnecting means:
  - (1) Power monitoring equipment
  - (2) Surge-protective device(s)
  - (3) Control circuit of the ground-fault protection system
  - (4) Power-operable service disconnecting means

Section 250.64 Grounding Electrode Conductor Installation. (Delete (A) and (B) and replace with the following:)

(A) Only Copper grounding and bonding conductors are allowed.

(B) Securing and Protection from Physical Damage. A grounding electrode conductor or its enclosure shall be securely fastened to the surface on which it is carried. All grounding electrode conductors shall be in an approved raceway. The following raceways shall be approved: rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit (Schedule 80) for exterior use; electrical metallic tubing or cable armor for interior use. (C), (D), (E), & (F), (Retain NEC text.)

# Article 340 (Add the following:)

# UF & BC Cable: Type UF

Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 340 otherwise applies entirely.

# Article 348 (Add the following:)

Flexible Metal Conduit: Type FMC

Not approved for use as a general wiring method. Article 348 otherwise applies entirely.

Article 350 (Add the following:)

Liquidtight Flexible Metal Conduit: Type LFMC

Not approved for use as a general wiring method. Article 350 otherwise applies entirely.

# Article 352 (Add the following:)

Rigid Nonmetallic conduit: Type RNC

Not approved for use as a general wiring method. Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require (SEWP). Article 352 otherwise applies entirely.

#### Article 366 (Add the following:)

Auxiliary gutters: Metal only are allowed. Article 366 otherwise applies entirely.

# Section 410.2 Definitions.

Closet Storage Space: (Add the following:)

In residential occupancies, all clothes closets over six (6) square feet shall have an approved (listed for use) luminaire installed.

Section 545.4 Manufactured Building-Wiring methods.

(Replace (A) and (B) with the following):

Only wiring methods and materials previously approved by this Chapter shall be authorized for use in manufactured buildings, except that those constructions which require Special Expressed Written Permission (SEWP) for use may be considered on a case by case basis.

Section 600.21 Ballasts, Transformers and Electronic Power Supplies.

# (A) Accessibility. (Add the following:)

A code approved enclosure designed for that purpose including a self-contained disconnecting means or a disconnecting means installed within (3) three feet and in sight is required.

Exception: A single receptacle (Simplex type and rated for the branch circuit ampacity) installed exclusively for sump pump or pumps and ejector pump or pumps, no GFCI protection is required, amending 210.8.

(Ord. 3267, passed 6/21/90; Ord. 5481, passed 5/6/04; Ord. 6522, passed 9/16/10; Ord. 6832, passed 5/17/13; Ord. No. 7137, 1, passed 10-15-15; Ord. No. 7284, § 1, passed 10-20-16; Ord. No. 7793, § 1, passed 3-5-20)

ARTICLE IX. - INTERNATIONAL MECHANICAL CODE-2018, EDITION

§ 150.070 - Adoption by reference; amendments.

- (A) There is hereby adopted by the village a certain code known as "The International Mechanical Code, 2018, edition developed by International Code of Council is hereby adopted by reference. The terms and conditions of the 2018, edition are hereby to be in full force and effect as adopted by the village in its entirety and subject to any amendments made thereto.
- (B) The International Mechanical Code, 2018, edition, adopted pursuant to division (A) above, is amended as follows:

101.1 Insert: The Village of Lombard

103.1 Delete "Department of Mechanical Inspection" and insert "Building Division".

106.5.2 Insert: See the Village of Lombard Ordinances, Section 150.141, Permit Fees.

106.5.3 Fee Refunds: Delete entire Section and insert: See section 150.142, Division (B) for fees.

108.4 Insert: misdemeanor, \$750.00, and 0 days

108.5 Insert: \$50.00 and \$750.00

109.0 Means of Appeal; Delete this Section entirely.

201.3 Insert the following at the end of paragraph: All references to the ICC Electrical Code shall be deleted and replaced with the National Electric Code and all references to the International Plumbing Code shall be deleted and replaced with the Illinois State Plumbing Code.

Maximum Fixture Flow: Closed System Air Conditioning Units. Installation of closed system air conditioning units shall be required when the builder specifies air conditioning on all new construction and in all new remodeling

Underground HVAC and Duct and Fittings: All underground air ducts and fittings constructed are used within the Village are to be manufactured and tested to meet the requirements contained in the Underwriters Laboratories 181, Standard for Factory Made Air Ducts and Connectors

Flexible Duct: Any flexible duct used or constructed within the Village shall be Underwriters Laboratories listed 181-Class 1, NFPA 90A and 90B, with a minimum six-inch water gauge and a maximum six foot

Length

306.3.2 Any furnace placed in an attic shall be installed in an enclosed area with insulation meeting the current energy code, ½" drywall on all sides and ceiling, a ¾" plywood floor, a floor drain, a light, a GFI receptacle, and a smoke detector. Access to the furnace shall be made with a minimum of pull down stairs.

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Appendix B:

Delete "Recommended Permit Fee Schedule" and insert: See the Village of Lombard, permit fees, Section 150.141.

(Ord. 2830, passed 2/27/86) (Ord. 3221, passed 3/1/90; Ord. No. 7061, Exh. A, passed 4-2-15)

ARTICLE X. - INTERNATIONAL FUEL GAS CODE-2018, EDITION

§ 150.071 - Reserved.

§ 150.072 - Adoption by reference, amendments.

(A) There is hereby adopted by the village a certain code known as "The International Fuel Gas Code, 201<u>§</u> edition developed by International Code of Council is hereby adopted by reference. The terms and conditions of the 201<u>§</u> edition are hereby to be in full force and effect as adopted by the village in its entirety and subject to any amendments made thereto.

101.1 Insert: "Village of Lombard"

(Ord. No. 7061, Exh. A, passed 4-2-15)

ARTICLE XI. - ASME/ANSI ELEVATOR CODE

§ 150.075 - Adoption by reference; amendments.

The adoption of the Elevator Code. ASME/ANSI Safety Code for Elevators and Escalators (ASME A17.1 2007/CSA B44-07 as amended by ASME A17.1a-2008/CSA B44a-08 and ASME A17.1b-2009/CSA B44-b-09 and performance base Safety Code for Elevators and Escalators (ASME a17.7/CSA B44.7-07) as adopted by the State of Illinois, shall hereby govern the design, construction, installation, operation, inspection, testing, maintenance, alteration, and repair, is adopted by reference with the following amendments:

# HOISTWAYS, HOISTWAY ENCLOSURES AND RELATED CONSTRUCTION FOR ELECTRIC ELEVATORS.

Section 104 Guarding of exposed auxiliary equipment, Rule 104.1 Guarding. In machine rooms and secondary machinery spaces, exposed gears, sprockets, tape or rope sheaves or drums of selectors, floor controllers, signal machines or driving machines and their ropes...shall be guarded to be protected against accidental contact.

Section 111 Hoistway—Door Locking Devices, Rule 11.9b Location and Design of Hoistway Access Switches (1) The switch shall be installed only at the access landings top floor, and bottom floor. Access switch may only be operable after a transfer switch located on fact or car operating panel and operable by a cylinder type lock is turned on. The lock shall not be operable by any other key used for the elevator of building. Lock to be identified by markings off/Insp.

#### MACHINERY AND EQUIPMENT FOR ELECTRIC ELEVATORS

Section 204 Car Enclosures, Car Doors and Gates, and Car Illumination, Rule 204.7a Illumination and Outlets Required (3) passenger and freight elevators shall be provided with a standby (emergency) lighting power source...

Section 210 Operating Devices and Control Equipment, Rule 210.2 Electrical Protective Devices (S) Car Top and Side—Exit Door Contact Switches.

Deleted: 2

Deleted: 2 Deleted: 2 Section 211 Emergency Operation and Signaling Devices, Rule 211.3b Smoke Detectors. Smoke detectors shall be installed in each elevator lobby at each floor, associated machine room and shaft in accordance with N.F.P.A. No. 72 E. Chapter 4. The activation of a smoke detector in any elevator lobby or associated machine room or hoistway, other than at the designated level...

Section 300 Hoistways, Hoistway Enclosures and Related Construction, Rule 300.2 Machine Rooms and Machinery Spaces. Where pumps, motors, valves and electric control equipment are located in spaces separated from the hoistway...by enclosures conforming to the requirements of Rule 101.1a...

Section 304 Valves, Supply Piping, and Fittings, Rule 303.3d Supply Line Shut Off Valve...The shutoff valve shall be located in the machine room with a permanent handle to be attached to the valve for shutoff purposes.

Section 306 Operating Devices and Control Equipment, Rule 306.2 Top-Of-Car Operating Devices. Top-Of-Car operating devices shall be provided and shall conform with the requirements of Rule 210.1d., (Except for uncounterweighted elevators having a rise of not more than 15 feet; Delete Exception).

# PRIVATE RESIDENTIAL ELEVATORS

Section 500 Hoistways, hoistway Enclosures and Related Construction, Rule 501.5 Light in Car...Emergency lighting to be provided as per Section 204.7a (3).

Section 509 Emergency Signal Devices, Rule 509.1 Emergency Signal...Emergency signaling device to comply with Section 211.1a (3).

# INCLINED STAIRWAY CHAIRLIFTS AND INCLINED AND VERTICAL WHEELCHAIR LIFTS

Section 2100 Private Residence Vertical Wheel Chair Lifts, Rule 2100.11 Emergency Signal Devices. Emergency signal device shall be provided and comply with Rules 211.1 a (1), 211.1 a (2), 211.1 a (3) Emergency Operation and Signaling Devices and Rule 204.7 a (3) Illumination and Outlets Required.

#### ASME/ANSI A17.1a-1988 ADDENDA

Rule 102.2, Installation of Pipes or Ducts Conveying Gases, Vapors or Liquids in Hoistways, Machine Rooms or Machinery Spaces; paragraph (C) be amended by adding sub-paragraph (6) as follows:

(6) Automatic Sprinklers installed in hoistway pits shall not be subject to the restrictions delineated in paragraph (C), sub-paragraphs (1) through (5) inclusive. Ord. 3244, passed 4/19/90.

#### § 150.076 - Inspection required.

Every elevator, movable stage, movable orchestra floor, platform lift, dumbwaiter, or escalator now in operation, or which may hereafter be installed, together with the hoistway and all equipment thereof shall be inspected under and by the authority of the Community Development Director at least once every six months, and in no case shall any new equipment be placed in operation until an inspection of the same has been made. It shall be the duty of every owner, agent, lessee, or occupant of any building wherein any such equipment is installed, and of the person in charge or control of any such equipment to permit the making of a test and inspection of such elevator, dumbwaiter, or escalator, and all devices used in connection therewith upon demand being made by the Community Development Director, or by his authorized elevator inspector within five days after such demand has been made.

(Ord. 2561, passed 10-28-82)

Cross reference- Penalty, see § 150.999

§ 150.077 - Certificate of inspection.

- (A) Whenever any elevators, movable stage, movable orchestra floor, platform lift, dumbwaiter, or escalator has been inspected and the tests herein required shall have been made of all safety devices with which such equipment is required to be equipped, and the result of such inspection and tests shows such equipment to be in good condition, and that such safety devices are in good working condition and in good repair, it shall be the duty of the Community Development Director to issue or cause to be issued a certificate setting forth the result of such inspection and tests containing the date of inspection, the weight which such equipment, including safety devices, comply with all applicable provisions of § 150.075, upon the payment of the inspection fee required by the building provisions of the building.
- (B) It shall be the joint and several duty of the owner, agent, lessee, or occupant of the building in which such equipment is located and of each person in charge or control of such equipment to frame the certificate and plat the same in a conspicuous place in each elevator and near such dumbwaiter, movable stage, movable orchestra floor, platform lift, or escalator. The words safe condition in this section means that it is safe for any load up to the approved weight named in such certificate.

(Ord. 2561, passed 10-28-82)

Cross reference— Penalty, see § 150.999

§ 150.078 - Improper safety devices.

Where the result of such inspection of such tests shall show that such elevator, movable stage, movable orchestra floor, platform lift, dumbwaiter, or escalator is in any unsafe condition or bad repair, or shall show that any of the safety devices which are required by the building provisions in § 150.075, have not been installed, or if installed, are not in good working order or not in good repair, such certificate shall not be issued until such elevator, its hoistway, and its equipment, or such dumbwaiter, movable stage, movable orchestra floor, platform lift, or escalator, or such device or devices shall have been put in good working order.

(Ord. 2561, passed 10-28-82)

Cross reference— Penalty, see § 150.999

§ 150.079 - Suspension of operation.

Whenever any elevator inspector finds any elevator or dumbwaiter, its equipment and hatchway, including doors or any escalator, movable stage, movable floor, or platform lift in an unsafe condition, he shall immediately report the same to the elevator inspector in charge, who shall report it to the Community Development Director together with a statement of all the facts relating to the condition of such equipment. It shall be the duty of the Community Development Director, upon receiving from the elevator inspector in charge a report of the unsafe condition of such equipment and hatchway, including doors, to order the operation of such equipment to be stopped and to remain inoperative until it has been placed in a safe condition, and it shall be unlawful for any agent, owner, lessee, or occupant of any building, wherein any such equipment is located, to permit or allow the same to be used after the receipt of a notice, in writing that such equipment is in an unsafe condition, and until it has been restored to a safe and proper condition as required by the building provisions of the building code.

(Ord. 2561, passed 10-28-82)

Cross reference— Penalty, see § 150.999

§ 150.080 - Accessibility requirements.

Accessibility Requirements. All passenger elevators shall comply with the "Environmental Barriers Act" (EBA) (410 ILCS 25/1 et seq.). January 3, 1997.

One elevator in any building having one or more elevators shall be designed to accommodate a Fire Department stretcher (cab size shall be a minimum of 6'8" in width and 4'3" in depth and have a side opening door of 3'6" min in width). The above is not applicable to one and two family residences.

(Ord. 3244, passed 4/19/90; Ord. 5481, passed 5/6/04.)

ARTICLE XII. - FEDERAL ADA STANDARD-CURRENT

§ 150.085 - Adoption by reference.

ARTICLE XIII. - ILLINOIS ACCESSIBILITY CODE-CURRENT

§ 150.088 - Adoption by reference.

ARTICLE XIV. - INTERNATIONAL PROPERTY MAINTENANCE CODE-2018 EDITION

§ 150.090 - Title; scope.

This subchapter shall be known as the Basic Minimum Property Maintenance Code and shall apply to all structures and properties, including all dwelling units for human occupancy.

(Ord. 2561, passed 10-28-82)

§ 150.091 - Adoption by reference.

The International Property Maintenance Code, 2018 edition as published by the International Code Council, is hereby adopted by reference as the Minimum Property Standards Code of the village, subject to any amendments made thereto and as enumerated in § 150.092 hereof.

(Ord. 2561, passed 10-28-82; Ord. 5481, passed 5/6/04; Ord. 6603, passed 4/7/11; Ord. No. 7061, Exh. A, passed 4-2-15)

§ 150.092 - Additions and deletions.

The provisions of this section shall supersede and amend the provisions of the code hereby adopted in § 150.091:

- (A) All words and terms used in said International Property Maintenance Code shall be defined pursuant to the provisions of the village zoning ordinance; provided, however, that a word or term not defined in said zoning ordinance shall be defined as per Article 2 of said International Property Maintenance Code. The Board of Appeals of the village shall constitute the Appeal Board designated in Section PM-111.2, et seq.
- (B) Section 101.1 Insert; The Village of Lombard.
- (C) Section 103.1 Delete "Department of Property Maintenance Inspection" and insert Building Division".
- (D) Section 106.4; See the fee and penalty sections of these ordinances.

Deleted: 2

- (E) Sections 110.1 to 110.1 inclusive and entitled "Demolition" are hereby deleted. Refer to §150.206 for demolition provisions.
- (F) Section PM-304.14 Add the following dates: June 1 through November 1.
- (G) Section PM-304.4.1 All property owners that have elevated parking structures constructed prior to 2002 shall have the parking structure and its supporting structural components inspected under the direction of an Illinois Licensed Structural Engineer by December 31, 2012, and shall be inspected every 10 years thereafter. All property owners that have elevated parking structures constructed in or after 2002 shall have the parking structure and its supporting structural components inspected under the direction of an Illinois Licensed Structural Engineer and the Engineer's report submitted to the Village no later than ten (10) years from the date the construction of the structure was completed. Or by December 31, 2012, whichever is last. The cost of the inspection shall be at the expense of the building owner
- (H) Sections PM-304.4.2 All property owners that have buildings constructed using wood "bowstring-roof-trusses" shall have the trusses inspected under the direction of an Illinois Licensed Structural Engineer by December 31, 2011, and shall be inspected every 10 years thereafter. The engineers report will need to be submitted to the Lombard Building Division by December 31, 2011. The cost of the inspection shall be at the expense of the building owner.
- (I) Section PM-602.3 Add the following dates: September 15 through June 1.
- (J) Section PM-602.4 Add the following dates: November 1 through June 1.

(Ord. 5481, passed 5/6/04; Ord. 6603, passed 4/7/11; Ord. 6710, passed 4/19/12)

#### ARTICLE XV. - NFPA 101 LIFE SAFETY CODE

## § 150.102 - Title; scope.

This subchapter shall be known as the Life Safety Code and shall apply to the function, design, operation, and maintenance of all existing buildings and structures for safety to life from fire and similar emergencies.

#### § 150.103 - Adoption by reference.

- (A) The village hereby adopts the 2009 version of the "The Life Safety Code", NFPA 101 as published by the National Fire Protection Association for the purpose of regulating and governing the safeguarding of life and property from fires and explosion hazards arising from the storage, handling, and use of hazardous substances, materials, and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises. The terms and conditions of the 2009 edition are hereby to be in full force and effect as adopted by the village and subject to any amendments made thereto.
- (B) Not less than three copies of the code hereby adopted in subsection (A) above, in book form, have been filed in the office of the Village Clerk for use and examination by the public at least 30 days prior to the adoption of this Chapter, and that not less than three copies of said code are now filed in the office of the Village Clerk.
- (C) Where differences occur between the provisions of this Code, the International Fire Code and the referenced standards, the most restrictive shall apply.

Section 1.3.1 Change to read as follows: Existing Buildings and Structures. The code shall apply to existing buildings and structures.

(Ord. 2709, passed 4/19/12; Ord. No. 7061, Exh. A, passed 4-2-15)

# ARTICLE XXVII. - PRIVATE SWIMMING POOLS

§ 150.317 - Definitions.

These requirements are in addition to those in the State of Illinois Swimming Pool Code and the 2018 International <u>Pool Code</u>.

(Ord. 2561, passed 10-28-82; Ord. 6602, passed 4/7/11; Ord. No. 7061, Exh. A, passed 4-2-15)

§ 150.318 - Permit required.

- (A) No private pool or appurtenances thereto shall be constructed, installed, enlarged, or altered until a permit therefor has been obtained from the Community Development Department.
- (B) Application for a permit shall be in writing in the form prescribed by the Community Development Department. Such application may require plans for the construction or erection of the pool proposed by the applicant.
- (C) Plans shall accurately show dimensions and construction of the pool and appurtenances, and properly establish the distances to lot lines, buildings, walks and fences, details of water supply system, drainage and water disposal systems, and all appurtenances pertaining to the pool. Reasonably detailed plans of their structure, including vertical elevations, may be required by the Building Division and the Zoning Department.

(Ord. 2561, passed 10-28-82)

Cross reference— Penalty, see § 150.999

§ 150.319 - Permit and inspection fees in accordance with § 150.140.

A fee in accordance with § 150.140 shall be required for all applications which show electrical connections. Notice to the Building Division will be required upon completion of electrical construction and before such construction is covered up by any other work.

(Ord. 2561, passed 10-28-82)

§ 150.320 - Location.

- (A) Pools shall be permitted on any residential property.
- (B) All pools shall comply with the regulations of the village zoning ordinance.

(Ord. 2561, passed 10-28-82, Ord. 4065, passed 8/3/95)

Cross reference— Penalty, see § 150.999

§ 150.321 - Fences and walls around pools.

(A) All pools must be enclosed by a fence or wall either around the periphery of the yard containing the pool or around the pool itself. The fence or wall shall be not less than four feet in height. The fence or wall shall also meet the requirements of the Lombard Zoning Ordinance. Deleted: 2

Deleted: Residential Code, Appendix G

(B) Pools that have an overall height of at least four feet above grade and are only accessible by means of folding or otherwise removable ladder so as to make unauthorized entry into the pool difficult shall be exempt from the fence requirements as set forth above.

(Ord. 2561, passed 10-28-82; Ord. 4699, passed 9/2/99)

Cross reference- Penalty, see § 150.999

§ 150.322 - Water supply and control.

- (A) No source of water, other than that secured from the village waterworks distribution system, shall be used in private pools.
- (B) If a hose connection is to be used for supplying make-up water or for filling purposes, then an approved vacuum breaker shall be installed between the sillcock or control valve at the fixture on the hose connection.
- (C) All backwash water and effluents shall be discharged to the sewer through an indirect connection. Drainage of any pool shall be carefully controlled and provided for so that such drainage shall not cause flooding or damage to adjacent property.

(Ord. 2561, passed 10-28-82; Ord. 6602, passed 4/7/11)

Cross reference- Penalty, see § 150.999

§ 150.323 - Electrical requirement.

Any and all electrical construction involved in the construction, operation, or maintenance of pools or appurtenances shall be in conformity with the electrical code of the village.

(Ord. 2561, passed 10-28-82)

§ 150.324 - Prior existing pools.

- (A) The provisions of § 150.320 shall not apply to pools which have been constructed prior to the effective date of this Chapter and for which a permit or license was obtained, pursuant to Ordinance 828.
- (B) Pools of a demountable or portable nature which are dismounted or demantled for any reason whether it be for the winter season, change of location, or the like, upon their re-erection or reconstruction, shall conform to the requirements of this Chapter.

(Ord. 2561, passed 10-28-82)

Cross reference— Penalty, see § 150.999