



## VILLAGE OF SUGAR GROVE BOARD REPORT

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**TO:** VILLAGE PRESIDENT & BOARD OF TRUSTEES

**FROM:** DANIELLE MARION, COMMUNITY DEVELOPMENT DIRECTOR  
CHRIS HECKLINGER, CHIEF BUILDING INSPECTOR

**SUBJECT:** DISCUSSION: BUILDING CODE UPDATE

**AGENDA:** NOVEMBER 4, 2025

**DATE:** OCTOBER 7, 2025

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### ISSUE

Shall the Village Board adopt the 2021 International Code series, the 2020 International Electrical Code, 2018 International Energy Code, 2014 State of Illinois Plumbing Code, and the proposed amendments to said codes.

### DISCUSSION

The Village's current Building Code is the 2015 International Building Code. There are new updates of the Building Code, 2021 and 2024, available and the State recently passed legislation that requires the Village to be current on a code no more than 9 years old. The Village has been working on this update for a while, but due to change over in staffing the update got pushed back.

The Building Division staff has reviewed the 2021 Code and attended training sessions that covered changes between the 2015 and 2021 Code. It is staff's opinion that the differences between the 2015 and 2021 Code are not too great and should not cause too much anguish in the building trades since many communities around Sugar Grove are already applying the 2021 requirements and many building plans our staff is reviewing are in compliance with the 2021 Code.

The Building Division staff has reviewed the 2021 International Building Code and identified several local exceptions or amendments (attached to this report). The following is a list of the codes and versions the Village is looking to adopt, some with exceptions or amendments:

2021 International Residential Code  
2021 International Building Code  
2021 International Fire Code  
2021 International Mechanical Code  
2021 International Fuel Gas Code  
2021 Property Maintenance Code

2021 International Swimming Pool and Spa Code  
2021 International Solar Energy Provision  
2020 National Electrical Code NFPA 70  
2018 International Energy Code  
2014 State of Illinois Plumbing Code

State Mandated EVES Car charging  
State Mandated Gas Leak Detection requirements  
State Mandated Solar Ready Provisions  
State Mandated Heat Detectors requirements

The effective date of the new building codes will be May 1, 2025 not the date of adoption of the Ordinance. This is to give builders notice of the change in codes.

The Village's Building Code is comprised of a suite of specialized codes. Taken together these codes cover all aspects of building construction and property maintenance, including life safety, fire-resistive construction, structural framing and concrete, mechanical equipment and piping, heating, ventilating, air conditioning, fuel gas equipment and piping, energy efficiency, electrical equipment and wiring, and plumbing equipment and piping. The highlights of each code include the following:

- **2021 International Residential Code (IRC)**

The IRC establishes minimum standards for construction of all one and two family dwellings, townhouses, and their accessory structures. The IRC is a stand-alone code that contains the building, mechanical electrical, heating, ventilation, air conditioning, and energy efficiency provisions within one code. These provisions mirror the requirements in the respective separate code editions.

Significant changes to the 2021 IRC include increased energy efficiency standards with higher insulation levels, updated structural requirements for braced walls and seismic zones, and new fire safety rules such as mandatory storm shelter engineering and more specific smoke alarm placement. Other notable updates address accessibility, flood-resistant construction, and new provisions for emerging technologies like 3D printed homes.

- **2021 International Building Code (IBC)**

The IBC establishes minimum standards for construction of all buildings that are not under the scope of the Residential Building Code.

The most significant changes to the 2021 International Building Code (IBC) include the introduction of new [mass timber construction types](#) (up to 18 stories), specific regulations for [puzzle rooms](#), and the adoption of the 2017 edition of [ICC A117.1](#) for accessible design. Other key updates involve new requirements for [fire curtains](#), stair

and ladder fire escapes, structural observations for Risk Category III and above facilities, and clarified waterproofing inspections for weather-exposed balconies.

- **2021 International Fire Code**

Allows the Village to make amendments to the Fire Code for enforcement. By adopting this code it allows the Village of Sugar Grove a level of control for requirements being Sugar Grove is a Fire District and not a Fire Department.

Significant changes to the 2021 International Fire Code (IFC) include updated requirements for refined energy storage systems rules, expanded emergency responder communication systems, new requirements for low-frequency alarms in sleeping areas, and clarification on sprinkler requirements for upholstered furniture and mattresses, other updates focus on specific occupancies and technologies, such as adding regulations for escape rooms and special amusement areas. A new chapter for storing distilled spirits and wines, and stricter rules for high-rise building retrofits.

- **2021 International Mechanical Code (IMC)**

The IMC established minimum installation standards for all heating, ventilation, and air conditioning ductwork, piping, and equipment.

- **2021 International Fuel Gas Code**

The IFGC establishes the minimum installation standards for piping of fuel gas and installation of equipment connected to a fuel gas source.

- **2021 Property Maintenance Code**

This code establishes the minimum standards for maintenance of property, buildings, and structures.

- **2021 International Swimming Pool and Spa Code**

The most significant changes to the 2021 International Swimming Pool and Spa Code (ISPSC) include clarification that flotation tank systems are not within the code's scope, new requirements for hot water storage tanks to be listed and labeled, and new sections for solar thermal water heating systems. Other changes involve updated installation requirements referencing the [International Mechanical Code \(IMC\)](#) and updated slip-resistance standards for various surfaces like decks and coping.

- **2021 International Solar Energy Provision**

The 2021 International Solar Energy Provisions (ISEP) significantly streamlined the solar installation process by consolidating the relevant codes into a single document. Instead of relying on multiple International Code Council (ICC) publications, designers, installers,

and administrators can now access all solar-related provisions from the International Codes and the 2020 National Electrical Code (NEC) in one place.

- **2020 National Electrical Code**

Significant changes in the 2020 National Electrical Code (NEC) include mandatory surge protection devices (SPDs) for all new dwelling units, required outdoor emergency disconnects for one- and two-family homes, and expanded GFCI protection for 125-250V receptacles in various locations. Other key updates include new requirements for arc-fault protection on certain services and clarified rules for receptacle outlets on islands and peninsulas.

- **2018 International Energy Code**

The most significant changes in the 2018 International Energy Conservation Code (IECC) include lower fenestration U-factors for climate zones 3–8, a revised and more stringent air barrier and insulation installation table, and updated requirements for mechanical systems. Other key changes include new rules for lighting, hot water distribution, and a new Energy Rating Index compliance path based on the ICC/RESNET 301 standard.

- **2014 State of Illinois Plumbing Code**

Significant changes to the 2014 Illinois Plumbing Code included updating fixture flow rates to allow for smaller pipes, mandating engineering for storm drainage systems, requiring new fixtures and irrigation controllers to be [Water Sense labeled](#) (when available), and prohibiting certain plastic pipe types like polyethylene (PE) and polybutylene (PB) for potable water systems. Other changes addressed safety and efficiency, such as mandating lead-free solder, requiring overhead sewers for below-grade drains, and allowing specific electrical hookups for sump pumps.

## **COST**

Costs for this would include attorney review and codification.

## **ATTACHMENTS**

Proposed exceptions and amendments to the codes:

2014 State of Illinois Plumbing Code

2018 Illinois State Accessibility Code

2018 International Energy Code

2021 International Solar Energy Provision

2021 International Swimming Pool and Spa Code

2021 International Fire Code

2021 Property Maintenance Code

2021 International Fuel Gas Code  
2021 International Mechanical Code  
2020 National Electrical Code NFPA 70  
2021 International Residential Code  
2021 International Building Code  
State Mandated EVES Car charging  
State Mandated Gas Leak Detection requirements  
State Mandated Solor Ready Provisions  
State Mandated Heat Detectors requirements

**RECOMMENDATION**

Staff recommends that the Village Board discuss the proposed building code update and proposed amendments and provide staff with direction on preparing the needed documents for adoption.

## **2014 ILLINOIS STATE PLUMBING CODE**

The Village of Sugar Grove is obligated to enforce all new versions of updated Illinois State Plumbing Codes. The most recent Illinois State plumbing code is the 2014 Illinois code which became effective on April 24, 2014. Adopt in entirety the Illinois State Plumbing Code.

Amend/Add Irrigation Disconnect, for interior and exterior RPZ. Shall cap the stub at the meter and be less than 2' feet, in accordance with IPC 890.1200 C.

### **Exterior RPZ**

- Disconnect irrigation supply at domestic Supply tee and cap with approved fitting.
- Remove the outlet piping, if possible, to ceiling.
- Remove exterior RPZ, strainer, valves, unions.
- Cap stub at wall penetration and supply at grade with approved fittings.

### **Interior RPZ**

- Disconnect irrigation supply at domestic branch and cap with approved fittings.
- Remove RPZ, strainer, valves, relief discharge piping and connection outlet piping to ceiling.
- Cap stub at wall penetration and supply at grade with approved fittings.

### **Sump pump/Ejector Pits**

- Amend/Add to section IPC 890.110 (E). New construction or remodeled basement(s) with bedroom(s) which are located in the basement shall not have a sump pump/ejector located within the bedroom or a closet within the bedroom for health, safety and sanitation in accordance with the Illinois State Plumbing Code.

## **2018 ILLINOIS ACCESSIBILITY CODE**

The Village of Sugar Grove is obligated to enforce all new versions or updated Accessibility Codes. The most recent Illinois Accessibility Code is the 2018 Illinois Accessibility Code which became effective on October 23, 2018. The State does not allow changes to be made to this code.

## **2018 INTERNATIONAL ENERGY CONSERVATION CODE**

The Village of Sugar Grove is obligated 20 ILCS 3125/1 to enforce the most recently adopted Illinois Energy Conservation Code which follows the ICC international Energy code and the American Society of Heating, Refrigeration and Air Conditioning Engineers (2016 ASHRAE) Standard 90.1 Energy Standards for building except low-rise residential buildings amendments to the Capital Development Board. Adopt in entirety 2021 IECC (Known as the Energy Code) mandated by the State of Illinois. The State does not allow changes to be made.

## **2021 INTERNATIONAL SOLAR ENERGY PROVISION**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois Energy Conservation Code which follows the ICC international Energy code and the American Society of Heating, Refrigeration and Air Conditioning Engineers (2016 ASHRAE) Standard 90.1 Energy Standards for building except low-rise residential buildings amendments to the Capital Development Board.

Change all references from 2018 to 2021 International Solar Energy Provision known as the Code.

Adopt in entirety 2021 ISEP all appendix

Change any reference from the International Plumbing Code to be replaced with the Illinois State Plumbing code.

Adopt International Solar Energy Provision Appendix CA Solar-Ready Zone-Commercial Provisions CS, CA-1, CA-4, and the index CS index-1, and CS index 4.

Adopt Appendix RA Solar-Ready Provisions- Residential detached one-and two-family dwellings and townhomes, RS Appendix RA-1 Scope and General Definitions, RS appendix RA-2 Solar-ready zone, RS appendix RA-4 and Index RS-Index-1, and RS index-4

2021 IRC Adopt Appendix AT (RE)- Solar ready Provision- For all new detached one-and two-family dwellings, rentals, townhouses, commercial properties, Large commercial buildings with 10,000 or more square feet of gross floor area, large multifamily which accommodates 5 families or more, small multifamily resident that accommodates 2 to 4 families. All affordable housing development that is subsidized by federal or state government. Electrical shall be run in ridged conduit.

## **2021 ILLINOIS STATE MANDATED CODE FOR ELECTRIC VEHICLE CHARGING ACT**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois Electric Vehicle Charging Act 765 ILCS 1085 signed into law by the Governor on June 9, 2023 and when into effect on January 1, 2024 Governor of the State of Illinois signed Statute 76 ILCS 1085 Known as the Electric Vehicle Charging Act.

Adopt all sections of the 76 ILCS 1085 as mandated.

765 ILCS 1085/1, 765 ILCS 1085/5, 765 ILCS 1085/10, 765 ILCS 1085/15,

765 ILCS 1085/20, 765 ILCS 1085/25, 765 ILCS 1085/30, 765 ILCS 1085/35,

### **RESIDENTIAL**

Amend the International Residential Code Section N1101.6 to add the following definitions:

**ELECTRIC VEHICLE.** An automotive-type vehicle for on-road use primarily powered by an electric motor that draws current from an onboard battery charged through a building electrical service, electric vehicle supply equipment (EVSE), or another source of electric current.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** The apparatus was installed specifically for the purpose of transferring energy between the premises wiring and the Electric Vehicle.

**EV-CAPABLE SPACE.** A dedicated parking space with electrical panel capacity and space for a branch circuit dedicated to the EV parking space that is not less than 40-ampere and 208/240-volt and equipped with raceways, both underground and surface mounted, to enable the future installation of electric vehicle supply equipment. For two adjacent EV-Capable spaces, a single branch circuit is permitted.

**EV-READY SPACE.** A designated parking space which is provided with a dedicated branch circuit that is not less than 40-ampere and 208/240-volt assigned for electric vehicle supply equipment terminating in a receptacle or junction box located in close proximity to the proposed location of the EV parking space. For two adjacent EV-Ready spaces, a single branch circuit is permitted.

### **R103.2 Information on construction documents.**

- Building Permit
- Contractor Registration
- Electric Vehicle charging details, plans and locations.



- Architectural Standards; Building Codes
- Installation by a qualified contractor- Electrical Contractor

#### **R401.4 (IRC N1101.15) ELECTRIC VEHICLE CHARGING.**

Where parking is provided, new construction shall provide electric vehicle spaces in compliance with Sections R401.4.1 through R401.4.4 (IRC N1101.15.1 through IRC N1101.15.3). Where more than one parking facility is provided on a site, electric vehicle parking spaces shall be calculated separately for each parking facility.

Exception: This section does not apply to parking spaces used exclusively for trucks or delivery vehicles.

##### **R401.4.1 (IRC N1101.15.1) Electric vehicle ready circuit.**

The service panel shall provide sufficient capacity and space to accommodate the circuit and over-current protective device for each EV-Ready Space.

##### **R401.4.2 (IRC N1101.15.2) New single family and two-family dwelling units.**

Single family and two-family dwelling units shall provide not less than [1] of [EVSE-Installed, EV-Ready Spaces and/or EV-Capable Spaces] per dwelling unit.

##### **R401.4.3 New multifamily dwellings (three or more units).**

EVSE-Installed, EV-Ready Spaces and EV-Capable Spaces shall be provided in accordance with Table R401.4.3. Where the calculation of percentage served results in a fractional parking space, it shall round up to the next whole number.

#### **TABLE R401.4.3:**

#### **EVSE-INSTALLED, EV-READY AND EV-CAPABLE SPACE REQUIREMENTS**

##### **R401.4.4 (IRC N1101.15.3) IDENTIFICATION.**

Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EVSE. Construction documents shall also provide information on amperage of future EVSE, raceway methods, wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformers, meet the requirements of this code. Parking spaces equipped with EVSE shall be identified by signage. A permanent and visible “EV-Capable” or “EV-Ready” label shall be posted in a conspicuous place at the service panel to identify each panel space reserved to support EV-

Capable or EV-Ready Spaces, respectively and at the termination point of the raceway or circuit termination point.

There are other important code references to examine in parallel to IRC Chapter 11 requirements. If not consistent with the latest editions, update:

- •Section 625 of the National Electrical Code (NFPA 70)
- •Section E3702.13 of the International Residential Code

See Section R328.10 of the International Residential Code and Section 1207.11.10 of the International Fire Code for provisions on the use of electric vehicles as energy storage systems.

## **COMMERCIAL**

Amend the International Energy Conservation Code Section C202 to include the following definitions:

**ELECTRIC VEHICLE.** An automotive-type vehicle for on-road use primarily powered by an electric motor that draws current from an onboard battery charged through a building electrical service, electric vehicle supply equipment (EVSE), or another source of electric current.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** The apparatus installed specifically for the purpose of transferring energy between the premises wiring and the Electric Vehicle.

**EV-CAPABLE SPACE.** A dedicated parking space with electrical panel capacity and space for a branch circuit that supports the EV parking space that is not less than 40-ampere and 208/240-volt and equipped with raceways, both underground and surface mounted, to enable the future installation of electric vehicle supply equipment. For two adjacent EV-Capable spaces, a single branch circuit is permitted.

**EV-READY SPACE.** A designated parking space which is provided with a dedicated branch circuit that is not less than 40-ampere and 208/240-volt assigned for electric vehicle supply equipment terminating in a receptacle or junction box located in close proximity to the proposed location of the EV parking space. For two adjacent EV-Ready spaces, a single branch circuit is permitted.

Further amend the IECC-Commercial by adding the following sections:

### **C103.2. Information on construction documents.**

14. Electric Vehicle charging details and locations.

### **C401.4 Electric vehicle parking.**

Where parking is provided, new construction shall provide EVSE-installed spaces and facilitate future installation and use of EVSE through the provision of EV-Ready Spaces and EV-Capable Spaces provided in compliance with Sections C401.4.1 through C401.4.2, Where more than one parking facility is provided on a site, EVSE-installed, EV-Ready Spaces and EV-Capable Spaces shall be calculated separately for each parking facility.

#### **C401.4.1 New commercial, multifamily buildings, condominium unit owners and renters.**

EVSE-installed spaces, EV-Ready Spaces and EV-Capable Spaces shall be provided in accordance with Table C401.4.1 for Commercial buildings and Table C401.4.2 for multifamily buildings. Where the calculation of percent served results in a fractional parking space, it shall be rounded up to the next whole number.

The circuit shall have no other outlets. The service panel shall include an over-current protective device and provide sufficient capacity and space to accommodate the circuit and over-current protective device and the termination point shall be located in close proximity to the proposed location of the EV parking spaces.

#### **TABLE C401.4.1**

#### **EVSE-INSTALLED, EV-READY SPACE AND EV-CAPABLE SPACE REQUIREMENTS FOR NEW COMMERCIAL BUILDINGS**

#### **TABLE C401.4.2**

#### **EVSE-INSTALLED, EV-READY AND EV-CAPABLE SPACE REQUIREMENTS FOR NEW MULTIFAMILY BUILDINGS**

#### **C401.4 IDENTIFICATION.**

Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EVSEs. Construction documents shall also provide information on amperage of future EVSE, raceway methods, wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformers, comply with the requirements of this code. Vehicle spaces equipped with EVSE shall be identified by signage. A permanent and visible “EV-Capable” or “EV-Ready” label shall be posted in a conspicuous place at the service panel to identify each panel space reserved to support EV-Capable or EV-Ready Spaces, respectively and at the termination point of the raceway or circuit termination point

## **2021 INTERNATIONAL SWIMMING POOL AND SPA CODE**

Change all references from the 2015 IRC and the 2015 International Swimming Pool and Spa Code to 2021 International Swimming Pool and Spa Code.

Change all references to the International Plumbing Code to be replaced with the Illinois State Plumbing Code.

101.1 Title. These regulations shall be known as the Swimming pool and Spa Code of the Village of Sugar Grove hereinafter referred to as “this code”.

103.1 Creation of agency. Is hereby amended by replacing “(NAME OF JURISDICTION)” with “the building department.

302.1 Electrical. Remove exception as it pertains to internal wiring for portable residential spas and portable residential exercise spas.

### **Plumbing:**

302.3 Pipe, Fittings and Components. Pipe, fittings and components shall be listed in accordance with NSF 50 or NSF 14. Plastic jets, fittings, and outlets used in public spas shall be listed and labeled in accordance with NSF 50.

302.5 Backflow protection. Water supplies shall be protected against backflow in accordance with the Illinois Plumbing Code or the International Residential Code, as applicable in accordance with Section 102.7.1

304.1 Flood Hazard Areas. Remove sub sections of 304.1 General. The provision of section 304 shall control the design and construction of swimming pools, swim spas, spas and hot tubs installed in flood hazard areas. Delete sections 304.2, through 304.5 and not allow swimming pools, spas, swim spas or hot tubs to be built in a flood plain.

### **Barrier:**

305.2 Outdoor swimming pools, swimming spa’s, hot tubs and Jacuzzis. All outdoor aquatic vessels shall be surrounded by a barrier that complies with Section 305.2.1 through 305.7

305.2.1 (Add line 5) Heater, Pumps and Motors. Control system and other service equipment shall be located within the barrier for emergency access and serving proving room in front and sides for filter changes and repairs.

305.2.4 Mesh fence or chain-link, as a barrier. Is hereby amended to delete this section.

305.2.4.1 Setback for mesh fences. Is hereby amended to delete this section.

305.3 Gates Access. Gates shall comply with the requirements of Section 305.3.1 through 305.3.3 and shall be equipped to accommodate a locking device. Pedestrian/homeowner access gates shall open outward away from the vessel and shall be self-closing and have a self-latching device.

305.3.3 Latches. Where the release mechanism of the self-latching device is located less than 54 inches from the grade, the release mechanism shall be located on the vessel side of the gate at least 3 inches below the top of the gate, and the gate and barrier shall not have openings greater than ½ inch within 18 inches of the release mechanism.

305.4 Structure wall as a barrier. Where a wall of a dwelling or structure serves as part of the barrier, doors and operable windows with a sill height of less than 48 inches that provide direct access to the aquatic vessel through the wall, the following shall be equipped to apply:

- An alarm that produces an audible warning of 90 decibel or higher sound, when the door or screen door or window, is opened. The alarm shall be listed and labeled as a water hazard entrance alarm in accordance with UL 2017. The deactivation switch shall be located 54 inches or more above the threshold of the door. The whole house alarm may not be used as the primary alarm due to alarm contracts can be cancelled.
- An automatic closing and opening safety cover that is listed and labeled in accordance with ASTM F 1346
- An approved means of protection, (fence with a minimum height of 48 inches from grade) with a self-closing, self-latching gates, the gates shall swing away from the direction of the pool.
- Privacy fences shall not be approved in drainage or flood easements so as not to impede water flow.

305.4 (1) All openable windows and doors leading into the pool, swim spa, hot tub or spa area having a sill height of less than 48 inches above the finished floor or ground grade, doors, windows and gates shall have an alarm that produces an audible warning of 90 decibel or higher sound when the window(s), door(s) gate(s) or their screens is opened. The alarm is listed and labeled as a water hazard entrance alarm in accordance with UL 2017.

305.5 Pool structure as a barrier. Where an on-ground residential pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, the following shall apply:

- An on-ground pool wall, itself, shall be permitted to be used as a barrier where the pool structure is on grade and the wall is at least 48 inches above grade for the entire perimeter of the pool structure is on grade and the wall is at least 48 inches above grade for the entire perimeter of the pool and complies with the requirements of Section 305.2
- Where the means of access is a ladder or steps, the ladder or steps shall be capable of being secured, locked or removed and stored to prevent access or the ladder or step shall be surrounded by a barrier that meets the requirements of this section.
- When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4 inch diameter sphere.

- The barrier shall be installed in accordance with the manufacturer's instruction or within the code.
- Privacy fences shall not be approved in drainage or flood easements so as not to impede water flow.
- Must comply with section 305.4(1)

## **Decks:**

306.1 Pool Decks. Decks shall be designed and installed in accordance with the International Residential Code or the International Building Code, as applicable in accordance with Section 102.7, except as provided in this section.

306.2 Slip Resistant. Deck, ramps, coping, and similar step surface shall be slip-resistant and cleanable. Special features in or on the decks such as markers, brand insignias, and similar materials shall be slip-resistant.

306.3 Stair Treads and Risers. Stair riser heights shall be in accordance with the International Residential Code or the International Building Code, as applicable in accordance with Section 102.7.1

306.4 Slope. The minimum slope of the deck shall be in accordance with Table 306.4 except where an alternative drainage method is provided that prevents the accumulation or pooling of water.

307.1 General. Remove the exception section 307.3 through 307.6 as it pertains to what covers the general design requirements for all pools and spas

308.1 Floor slope. Remove the exception as it pertains to portable residential spas and portable residential exercise spas.

308.2 Walls. Remove exception #1, as it pertains to residential spas and portable residential exercise spas.

311.1 General. Remove exception #1, as it pertains to residential spas and portable residential exercise spas.

311.2 System design. Remove the exception, as it pertains to separate filtering systems are not required for residential pools and spas.

311.4.1 Fittings. Remove exception 1-3

312.1 General. Remove exception 1, as it pertains to portable residential spas and portable residential exercise spas.

313.1 General. Remove exception 1, as it pertains to portable residential spas and portable residential

313.7 Remove exception for Emergency Shut off, and insert Emergency Shut Off shall be installed within 5' feet of the leading edge of the pool, swim spa, hot tub or jacuzzi or within line of sight from any direction of the pool, swim spa, hot tub or jacuzzi.

314.1 General. Remove exception, as it pertains to portable residential spas and portable residential exercise spas.

316.1 Remove exception, as it pertains to portable residential spas and portable residential exercise spas.

Chapter 5 and 9 Chapter 5 Public Spas and Public Exercise Spas and Chapter 9 Permanent Residential Spa and Permanent Residential Exercising Swim Spa shall be treated with all the requirements in Chapter 3 General Compliance with all the requirements for above grade or below grade swimming pools, swimming spas, hot tubs or jacuzzi.

### **Lighting:**

321 General. The provisions in Section 321 and 321.3 apply to lighting for public aquatic vessels. The provisions of Section 321.4 shall apply to lighting for residential aquatic vessels.

321.2 Artificial lighting required. When a pool is open during periods of low natural illumination, artificial lighting shall be provided so that all areas of the pool, swim spa, hot tub or jacuzzi, including the bottom main drain(s) will be visible.

321.2.1 Pool and deck illumination. Overhead (No lighting allowed overhead any aquatic vessel) or underwater lighting shall be provided to illuminate the pool and adjacent deck areas. Such lighting shall be listed, labeled and installed in accordance with NFPA 70 or the International Residential Code, as applicable in accordance with Section 102.7.1

321.2.2 Illumination intensity. For outdoor pools, the lighting shall provide not less than 3- foot candles of illumination at the water surface, or in accordance with Zoning illumination requirements.

321.3 Emergency Illumination. Public pools and water vessel areas that operate during periods of low illumination shall be provided with sufficient emergency lighting to permit evacuation of the pool or water vessel and securing the area in the event of power failure. The emergency lighting intensity shall be not less than 1 foot-candle at the water surface or vessel and the walking surface of the deck or in accordance with Zoning illumination.

321.4 Residential pool and deck illumination. Where installed in residential pools or aquatic vessels like swim spa, hot tubs or jacuzzi, lighting shall be installed in accordance with NFPA 70 or the international Residential Code, as applicable in accordance with Section 102.7.1 or in accordance with Zoning ordinance.

## **2021 International Fire Code (to make in line with Sugar Grove Fire District and Sugar Grove Zoning Ordinances).**

Change all references from the 2015 International Fire Code to 2021 International Fire Code.

Change all references to the International Plumbing Code to be replaced with Illinois State Plumbing code.

307.4 (1) Remove 15' feet and replace with 10' feet to be in line with the Zoning ordinance residential only

307.4.3 Remove 15' feet and make it 10' feet to be in line with the Zoning ordinance. residential only

307.4.3 Remove the exception.

308.1.4 Remove exception (1) & (3)

312.2 (3) change from 36" to 42" to meet frost line requirements within the State of Illinois

315.7.3 Not to exceed 20' feet and changing to, shall not exceed A-1, BP, OR-2, M-1 & I-1 (8' Feet) and all other use groups of 6' feet or apply for approval through zoning variation.

507.5.1 Fire hydrant systems were required, amend to read 300 feet from the hydrant on a fire apparatus access road, add two hydrants required within 300 feet of all buildings. Except Residential -one and -two family dwellings.

507.5.1.1 Hydrant for standpipe systems is hereby amended by replacing with 100 feet, including the exceptions.

903.2.1.1 Group A-1

1. Change to read Zero square feet.

903.2.1.2 Group A-2

1. Change to read Zero square feet.

903.2.1.3 Group A-3

1. Change to read Zero square feet.

903.2.1.5 Group A-5

1. Change to read Zero square feet.



### 903.2.3 Group E

1, Change to read Zero square feet.

3. Remove exceptions.

### 903.2.4 Group F-1

1. Change to read 5000 square feet.

3. Change to read 5000 square feet.

### 903.2.7 Group M

1. Change to read 5000 square feet.

3. Change to read 5000 square feet.

### 903.2.9 Group S-1

1. Change to read 5000 square feet.

3. Change to read 5000 square feet.

### 903.2.9.1 Repair Garage

1. Change to read 5000 square feet.

3. Change to read 5000 square feet.

### 903.2.10 Group S-2 Enclosed parking garages.

1. Change to read 5000 square feet

Remove exceptions.

905.3 Remove exception R-3 occupancies.

Adopt VI reference standard Chapter 80

Adopt the following Appendix B, C, D, E, F, G, H, I, J, K, L, M, N

## **Fuel Gas Detector and Alarm Act**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois Fuel Gas Detector and Alarm Act Code. Signed by the Governor on June 20, 2023, known as Public Act 103-0120 and HB3652 and became effective January 1, 2026. Village to amend the effective date to the date of approval of this code.

Adopt NFPA 715 “Fuel Gas Detector and Alarm Act”. This adoption becomes active upon approval or codification of these codes. This code would require the installation of fuel gas detectors and alarms in certain buildings, including single family, multi-family, townhomes, condominiums, commercial, institutional structures, residential rental units. This requirement applies to all new construction and buildings undergoing renovations that have appliances that are fueled by propane, natural gas or liquefied petroleum gas. Alarms are required to be hardwired and have a battery backup and shall be interconnected and on its own circuit/breaker. This law further pertains to properties being acquired by sale, exchange or purchased out of foreclosure. Electrical shall be run in ridged conduit/EMT conduit.

## **2021 International Property Maintenance Code**

The International Property Maintenance Code/ 2021, including Appendix A, Boarding, as published by the International Code Council Inc., together with the additions, insertions, deletions and changes prescribed in this article, Is hereby adopted by reference and is made a part of this article, the same as if fully set forth herein, as the standards, rules and regulations for the maintenance of building and structural appurtenances in the city.

Change all references to the 2015 International Property Maintenance Code to 2021 International Property Maintenance Code.

Change all references to the International Plumbing code to the State of Illinois Plumbing Code.

101 Title is hereby amended to replace “(NAME OF JURISDICTION)” with “The Village of Sugar Grove”.

102.3 Application of other codes is hereby amended, by entirely deleting, and replacing with “Repair, additions, or alteration to a structure, or change of occupancy, shall be done in accordance with the procedures and provisions of the International Building Code, International Residential Code, International Energy Conservation Code, International Fire Code, Illinois State Plumbing Code, NFPA 70, and all State and Local Ordinance and amendments. Nothing in this code shall be construed to cancel, modify, or set aside any provision of the Village of Sugar Grove Zoning Ordinance.

” Application of other codes is hereby amended by replacing the word International Plumbing code with “Illinois State Plumbing Code”.

102.5 Workmanship. Amend to read- In construction, workmanship refers to the quality and skill with which a task or project is performed. It encompasses the level of expertise, attention to detail, and care a worker applies to their craft, directly impacting the final product's quality, durability, and aesthetics. Good workmanship is crucial for ensuring safe, functional, and visually appealing structures.

Repairs, maintenance work, alterations or installations that are caused directly or indirectly by the enforcement of this code and the International Building Code, International Residential Code, International Energy Code, International Fuel Gas Code, International Mechanical Code, International Swimming Pool and Spa Code, International Solar Energy Provision, Illinois Accessibility Code, State of Illinois Plumbing Code, and the NFPA 70, State and Local Ordinance and Amendments. Nothing in this code shall be construed to cancel, modify, or set aside any provision of the International Residential Building, Zoning Code, Manufactures installation requirements, and all State and Local Ordinance and amendments

103.2 Appointment. Is hereby amended, by replacing “The Code Official shall be appointed by the chief appointing authority of the jurisdiction.” With “The Director of Community Development or their designee shall serve as the Code Official for the Village of Sugar Grove.”

104.1 Fees. Is hereby amended, by replacing “(JURISDICTION TO INSERT APPROPRIATE SCHEDULE)” with “fee shall be determined by resolution of the Village Board of Sugar Grove.”

108.1.3 Becomes 111.1 Unsafe Structure and Equipment is hereby amended by entirely deleting and replacing with “The designation of a structure as unfit for occupancy or the use and the posting of a placard of such unfit structures shall be carried out in compliance with the following requirements:

A. Any structure which is found by the Code Official to have any of the following defects shall be designated as unfit for occupancy or use and shall be so posted with a placard by Code Official:

1. One which is so decayed, dilapidated, unsanitary, unsafe, vermin infested, or infestation of bedbugs, roaches that it creates a serious hazard to health or safety of the occupants or of the public.
2. One with lacks illumination, ventilation, heat, sanitation facilities, utilities, or other essential equipment required by this code or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.
3. One which has been damaged by fire, wind, or explosion so that it does not provide adequate shelter from the elements or appears to be structurally unsafe.
4. One which through misuse, improper maintenance, or abuse appears to have a preponderance of flagrant noncompliance of the various requirements of the Building Code.

B. Any structure designated as unfit for occupancy or use and so placarded by the code official, the structure shall be vacated within a reasonable time as ordered by the code official. Once vacated, entry shall be allowed only by person(s) directly associated with the repairs or renovations of the structure, the owner or owner's designee for the purpose of inspection, or the Building Official or his designees.

C. No structure which has been designated and placarded as unfit for occupancy or use shall again be occupied or used until written approvals are secured from the code official. The code official shall remove such placard whenever the defect upon which the designation action was based has been corrected or eliminated. Any person or person(s) removing such placard before written approval has been secured for occupancy is subject to a fine of \$750.00 for every day, they are in violation.

D. No person shall deface or remove such placard from any structure which has been designated as unfit for occupancy or use and placard from any structure which has been designated as unfit for occupancy or use and placard as such, except as provided in 111.2 Becomes 108.1 Member of Board use same verbiage.

112.4 Failure to Comply becomes 109.4 is hereby amended, by replacing "a fine of not less than (AMOUNT) dollars or more than (AMOUNT) dollars" with "a fine of not less than \$130.00 for first offence, and up to \$750.00 per day for every day the violation occurred for homeowner(s), and \$250 for first offence, and up to \$750.00 per day for every day the violation occurred for commercial contractors.

301 General. Insert the following below:

301.4 Temporary board-up. The boarding or board-up of any part of a building shall be considered temporary and shall not extend beyond thirty (30) days, unless approved in writing by the Code Official or a permit is issued for the demolition or repair.

302.2 Grading and drainage is hereby amended, by adding the following sentence: "All properties shall maintain grading and drainage in strict conformance with the approved site grading plan."

302.3 Sidewalks and Driveways is amended, by adding the following sentence: "All parking lots, access ways, driveways, sidewalks, potholes, striping including accessible parking spaces and signage shall be maintained, repaired and updated in accordance with all the requirements of the applicable Village of Sugar Grove codes, ordinance and the Illinois Accessibility Code."

302.4 Weeds and Grass- insert, (8") eight inches maximum height for grass within the Village of Sugar Grove

Weeds-As defined by the Illinois Noxious Weed List:

<http://hyg.ipm.illinois.edu/pdf/hygpest202502.pdf> for a list of noxious weeds which is generated by the State of Illinois, or identified through Zoning or Village ordinances.

302.7 Accessory structures, including (garbage) dumpster screening, detached garage, fences, and walls, shall be maintained structurally sound and in good repair. Any graffiti must be removed within 24 hours.

302.8 Add the following paragraph: Unlicensed vehicle, all vehicles parked in a residential zoned district, or on residential or private property within the Village of Sugar Grove shall display a front and rear plate issued to the vehicle which is assigned by the Secretary of the State of Illinois to such vehicle. The rear plate will bear an up to date registration sticker affixed to the rear plate.

Inoperable vehicle is a vehicle not properly licensed in the state of Illinois, flat tires, unable to start, unable to be driven, on jacks or elevated, disassembled or in disrepair.

304.2 add Roof covering shall be maintained in good condition, compatible with material already on the roof and like material and weathertight. Roof shingles shall not be cut in a manner that will compromise the size and proper fit. Shingles are cut during roofing or reroofing or repairing for

Fitting to edges and angles, cutting straight line along roof rakes gables and eaves, proper staggering pattern, ridge caps, around piping.

304.7.1 add Roof covering and Siding repair shall be compatible with like material, same size, and color, as existing on the structure. Mismatched material, mismatched product and different sizing will not be allowed. Cutting the shingle down in size is not an acceptable practice.

304.14 Insect screen insert April 1 to November 1 of each year.

307.1 Stair riser amend (4) four or more to (3) three or more, requires a graspable handrail both side for commercial property and (1) one side for residential properties.

Replace with the following: Every exterior and interior flight of stairs having (3) three or more risers shall have a handrail on one side for residential and a handrail on both sides for commercial and shall be continuous the full length of the stairs. Handrail shall be graspable as outline in section 311.7.8.5 Grip size. Ends shall return or terminate in a newel post or safety terminals for residential and commercial shall follow the code for commercial application and Illinois accessibility code.

Handrails shall not be less than 34” inches high or more than 38” inches measured vertically above the nosing of the treads or above the finished floor of the landing or walking surfaces.

Every open portion of the stairs, landing on the balcony, porch, grades below, shall have a guard. Guards shall not be less than 36” inches high above the floor of the landing, balcony, porch, deck, ramp, or other walking surfaces.”

Every stairwell, inside or exterior shall be illuminated from the start (top) of the run, path of travel and to the (bottom) of the run or landing.

308 Rubbish and Garbage is hereby amended by adding the following subsection: “308.4 Placement at designated pickup area. Rubbish, garbage, garbage cans and/or recycle containers

shall be placed out on the designated pick-up area no earlier than 3:00pm (1500 hours) the day before pickup. Cans and containers shall be removed from the designated pickup area no later than 9:00am (0900 hours) the day after pick-up and removed from public view.

404.3 Minimum ceiling height. Exception #2 is hereby amended by adding “bathroom, toilet room, “after “occupied exclusively for laundry,”

404.4.4 Prohibited occupancy, amend and replace, with Prohibited occupancy within bedrooms without proper egresses window and doors, kitchen, closets, storage rooms, dens, hallways, stairs, utility rooms, laundry rooms, toilet rooms, bathrooms, garage(s), accessory building(s), attics, crawl spaces, uninhabitable spaces, interior public area, and rooms not designated or intended as sleeping rooms or rooms shall not be occupied for sleeping purposes.

404.4.5 Other requirements. is hereby amended by replacing “and the smoke detector and emergency escape requirements of Chapter 7” with the fire safety requirements of Chapter 7.”

501.1 Scope Amend by adding “and the Illinois State Plumbing Code” after “the provision of this, chapter”.

601.1 Scope is hereby amended by adding “the Maintenance provisions of the International Mechanical, and the NFPA 70” after the provisions of this chapter” Code” after “the provisions of this chapter.”

602.2. Amend the International Plumbing with the Illinois State Plumbing code.

602.3 Heat supply is amended by replacing “from (DATE) to (DATE)” with from September 1 to May 1 of each year. Amend by Adding the State of Illinois HB 2562 signed into law, which requires heating and cooling standards for properties that limit their ownership, rental, and occupancy to people 55 years old or older, and must designate an area as a Heating and Cooling Recreational room. Failure to comply could be subject to fines of \$750.00 for each day the violation occurred.

602.4 Occupiable workspaces hereby amended by replacing “from (DATE) to (DATE)” with “from September 1 to May 1”

701.1 Scope Amend by adding “and the Illinois State Plumbing Code” after “the provision of this chapter”.

702.3 Locked Doors, Amend Locked Doors that provide access to sleeping rooms in a dwelling unit shall not have any keyed locks, padlocks, hasps, or other locking device. Remove the word “which are not an integral part of the knob assembly”. Front door egress/screen door shall not have a keyed interior locking deadbolt or integral part of the knob assembly installed.

704.7.1 Add paragraph 7.

New and existing residential, town homes, apartments and condominium property Smoke detectors shall be in every bedroom and on every level of the dwelling, and in common hallways and shall be hard-wired and interconnected and shall have a battery backup.

Carbon monoxide/Smoke detectors combo shall be in a bedroom with gas/propane, fired appliances used for heating such as (Fireplace), (Furnace) or (Water heaters) and shall be hard-wired and interconnected and shall have a battery backup.

#### 704.7.2 Add paragraph 7

New Construction, residential property shall install a combo smoke and carbon monoxide detector in all rooms with a gas/propane fueled furnace, water heater and a wood burning appliance. Shall install a combo smoke and carbon monoxide detector in the hallway outside of the bedroom(s) within 15 feet, and any rooms that have a gas/propane fired or wood burning appliance. Shall have a smoke detector on every level of the dwelling. It shall be hardwired, interconnected with a battery back-up.

Electrical shall be run in ridged (EMT) conduit.

#### 705.2.4 Add paragraph 7

New Construction Multi-family, Town homes, Apartments and Condominiums shall install a sprinkler system required under the Fire Code. If a sprinkler is not required then a heat detector shall be installed in the attached garage and shall not be attached/connected to the existing smoke or carbon monoxide detector and shall be hard-wired, with a battery backup and wired into its own separate breaker. Electrical shall be run in ridged (EMT) conduit.

#### 707.7.3 Add paragraph 7

New construction, Residential property shall install a heat detector in the attached garage and attached garages with living space above. The heat alarm or heat detector shall be rated for ambient environment. Shall be attached/connected to the existing smoke or carbon monoxide detector and shall be hard-wired with a battery backup and wired into its own separate breaker, or shall be connected to an audible occupant notification device located within the dwelling unit or sleeping unit and with 20 feet of the door nearest to the private garage and additional audible occupant notification devices, as necessary, so that occupant notification is clearly audible in all sleeping rooms over background noise levels with all intervening doors closed. Audible Heat alarms subsection C above this section. and heat detectors should be installed in accordance with the manufacturer's instructions.

## **2021 International Fuel Gas Code**

The International Fuel Gas Code 2021 with referenced standards and Appendices A,B, and C, as published by the International Code Council, Inc., together with the additions, insertions, deletion, detection and change prescribed in this article, is hereby adopted by reference and make a part of this article the same as if fully set for the herein as the standards, rules and regulations for the design, construction, alteration, repair, use and maintenance of buildings and structural appurtenances in the village.

Change all references to the 2015 to 2021 Fuel Gas Code.

Change all references from the International Plumbing code to the State of Illinois Plumbing Code.

101.1 Title is hereby amended, by replacing “(NAME OF JURISDICTION)” with “the Village of Sugar Grove.”

102.8 Reference codes and standards is hereby amended, by adding the following sentence: “All reference to the International Plumbing Code shall be deemed to mean the State of Illinois Plumbing Code.”

103.2 Appointment- Remains the same. Same verbiage

106.5.3 Expiration-Remains the same. Same verbiage

106.5.4 Exchange Extension section to 106.5.6 Same verbiage

106.5.4 Fee Schedule section changes to 109.1 and 109.2 Same verbiage

107.1 General section changed to 112.1 & 2 Same verbiage.

108.4 Violation penalties change from section 108.4 to 115.4 and change from \$100.00 to \$130.00 and add up to \$750.00 per day for everyday the violation occurred.

108.5 Stop work order change to section 116.1, change fine amount from \$100.00 to \$130.00 and add up to \$750.00 per day for everyday the violation(s) occurred.

109.2 Membership of Board changes to section 114.1 and leave verbiage the same.

303.3 Prohibited Location remains in the same location and verbiage.

403.4.4 Aluminum remains in place same section number same verbiage.

403.5.3 Aluminum tubing changes to 403.4.4 same verbiage.

403.5.4 Corrugated stainless steel tubing changes to 403.4.5 same verbiage.



404.13 Trenches is amended to section 404.12 is hereby amended by adding the following subsection: 404.12.1 Add trench depth 18” inches below grade and shall be a minimum of 12” inches separation from gas and water lines. Gas and Electric lines shall not cross over one another.

406.7.2.3 Combustible gas detector and alarm. Adopt the verbiage “Fuel Gas Detector and Alarm Act.

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois Fuel Gas Detector and Alarm Act Code. Signed by the Governor on June 20, 2023, known as Public Act 103-0120 and HB3652 and became effective January 1, 2026. Village to amend the effective date to the date of approval of this code.

Adopt NFPA 715 “Fuel Gas Detector and Alarm Act”. This adoption becomes active upon approval or codification of these codes. This code would require the installation of fuel gas detectors and alarms in certain buildings, including single family, multi-family, townhomes, condominiums, commercial, institutional structures, residential rental units. This requirement applies to all new construction and buildings undergoing renovations that have appliances that are fueled by propane, natural gas or liquefied petroleum gas. Alarms are required to be hardwired and have a battery backup and shall be interconnected and on its own circuit/breaker. This law further pertains to properties being acquired by sale, exchange or purchased out of foreclosure. Electrical shall be run in ridged conduit/EMT conduit.

This adoption code requires the installation of fuel gas detectors and alarms in certain buildings, including single family, multi-family, townhomes, condominiums, commercial, institutional structures, and residential rental units. This adoption code applies to all new construction and buildings undergoing renovations that have an appliance that are fueled by propane, natural gas or liquefied petroleum gas. Alarms are required to be hardwired and have a battery backup and shall be interconnected and shall have its own circuit/breaker and shall be run in ridged (EMT) conduit. This code also pertains to properties being acquired by sale, exchange or foreclosure. NFPA 715. This provision will become active at the time these codes are adopted.

411.1 Connection appliances remain in the same location with the same verbiage.

Adopt Appendices A, B, C, and D in entirety and shall be adopted and inserted as part of this code.

Delete Appendices “E” in entirety

## **2021 International Mechanical Code**

The ICC International Mechanical code 2021(excluding appendices), as published by the international Code Council, Inc., together with the additions, insertion, deletions, and changes prescribed in this article, is hereby adopted by reference and made a part of this article the same as if fully set forth herein as the standards, rules and references for the design, construction, alteration, repair, use and maintenance of buildings and structural appurtenances in the city.

Change all references from the 2015 to 2021 International Swimming Pool and Spa Code

101.1 Title-Verbiage to stay the same.

102.8 Reference codes and standards-Verbiage to stay the same, with adding the following sentence: “All references to the International Plumbing Code shall be deemed to mean the State of Illinois Plumbing Code.

103.1 Creation of Agency The (NAME OF DEPARTMENT) Community Development Department.

103.2 Appointment is hereby amended, by replacing “The Code Official shall be appointed by the chief appointing authority of the jurisdiction, “with “The Director of Community Development or their designee shall serve as the Code Official for the Village of Sugar Grove.”

106.5.2 Fee Schedule was moved to 109.2 verbiage to remain the same.

106.5.3 Fee Refund was moved to 109.6 verbiage to remain the same.

107.1 General was moved 112.1 verbiage to remain the same.

107.3 Testing was moved 112.3 verbiage to remain the same.

108.4 Violation Penalties were moved to 115.4 verbiage to remain the same.

108.5 Stop work orders were moved to 116.1 verbiage to remain the same.

109.2 Membership of board were moved to 114.1 verbiage to remain the same.

303.3 Prohibited Location verbiage to remain the same and 303.3.1 Residential occupancies verbiage to stay the same.

305.3 Structural attachment verbiage to stay the same.

501.2 Independent system verbiage to stay the same.

501.3.1 The International Mechanical code provisions for nail salon ventilation are designed to protect both salon workers and clients from the harmful effects of chemical fumes and dust generated during nail services.

The IMC mandates that all new nail salons install source capture systems at each manicure and pedicure station. These systems must capture contaminants at their source, like nail dust and fumes, and exhaust them directly to the outdoors, preventing them from circulating within the salon. Additionally, the IMC requires a minimum exhaust rate of 50 cfm (cubic feet per minute) per station.

- **Source Capture:**

The IMC specifically requires a "source capture system," which is a mechanical exhaust system designed to capture contaminants at their source and exhaust them outside.

- **Exhaust Inlet Location:**

For manicure and pedicure stations not equipped with factory-installed exhaust inlets, the IMC specifies that the inlets must be located within 12 inches horizontally and vertically from the point where chemicals are applied.

- **Minimum Exhaust Rate:**

The code mandates a minimum exhaust rate of 50 cfm per manicure and pedicure station.

- **Outdoor Exhaust Termination:**

The IMC also specifies requirements for the termination of exhaust outlets, including minimum distances from property lines, other building openings, and the ground.

- **Continuous Operation:**

Section 502.20.1 of the IMC was added to require exhaust systems to have controls that operate continuously when the space is occupied, ensuring ongoing ventilation.

602.2.1 Materials within plenums verbiage to stay the same.

602.2.1 Material within plenum. Exception #1 verbiage to stay the same.

603.10 Supports verbiage to stay the same.

801.14 Connections to exhaust verbiage to stay the same.

801.14.1 Automatic Shutoff verbiage to stay the same.

Appendix A shall be adopted and inserted.

Appendix B & C deleted entirely.

## **2020 NFPA 70 National Electric Code**

**SECTION ONE:** That Section, Chapter 1 of the Village Code shall be amended as follows:

Adoption: That a certain document entitled “NFPA 70: The National Electrical Code, 2020 Edition” published by the National Fire Protection Association, One Batterymarch Park, Quincy, Massachusetts, one copy of which is on file at the Building Division of the Community Development Department of the Village of Sugar Grove, is hereby adopted as the “Electrical Code” for the Village of Sugar Grove for regulating the design, construction, quality of materials, quality of workmanship, erection, equipment, installation, alteration, repair, location, relocation, replacement, addition to, use or maintain of electrical systems and equipment in the Village of Sugar Grove as provided; and each and all regulations, provisions, penalties, conditions and terms of said “NFPA 70: National Electrical Code, 2020 Edition” are adopted and made a part hereof, as if fully set out in the Code with the additions, insertions, deletions, and changes prescribed in this ordinance.

**SECTION TWO:** That these sections of said code adopted herein are revised and amended as follows:

Amendments: from the 2014 National Electrical Code to the 2021 National Electrical Code

R101.1 Title Hereby amended, by replacing (NAME OF JURISDICTION)” with “the Village of Sugar Grove.”

R102.4 Reference codes and standards Hereby adding the following sentence: “All references to the International Plumbing Code Shall be deemed to mean the Illinois Plumbing Code”.

110.12 Mechanical Execution of Work. Hereby added the following, Electrical equipment shall be installed in a neat and workmanlike manner is hereby amended, by adding the following subsection: “(D) Unused wiring. All wiring, fittings, and electrical material not in use shall be removed. (Commercial)(Residential)

110.13 (A) Mounting. Hereby adding the following subsection: (C) Electrical Panel Mounting. All electric panel mounting on concrete or masonry wall that are either exterior wall or below grade, shall have a minimum of ½” inch plywood installed behind the panel, or the panel shall be mounted to a structure mounting channel that provides a minimum ½” inch airspace between the panel and the wall, for the purposes of support and to help prevent moisture entering the panel. Such mounting shall allow panel replacement if required.” (Commercial)(Residential)

110.22 (A) Identification of Disconnecting Means. Hereby amended, along with identifying the purpose of a disconnecting means, in other than (Remove exception to one- and two-family dwellings), marking shall include the identification of the circuit source that supplies the disconnecting means. (Commercial)(Residential)

110.26 (C)(2). Large Equipment entrance and egress from the workspace. Hereby adopted that open equipment doors cannot impede the entry to or egress from the working space. (Commercial)

### **Branch Circuit:**

210.8 Ground Fault Circuit- Interrupter Protection for Personnel. Hereby adopted that Ground-fault circuit-interrupter protection for personnel shall be provided as required in 210.8 (A) through (F). Additional items listed in Table 210.1 and see listed examples.

Example's Residential locations: Bathrooms, Bathrooms, Garages, Outdoors, Crawl Space, Attached and Detached garages, Sheds, Three/Four season rooms, Unfinished basements, Mechanical rooms, Balconies, Decks, Porches, Kitchen countertops, Floor outlet, Workstations, Bars (dry or wet), within 6' six feet of sink, laundry rooms, Within 6' six feet of bathtub or shower, Service outlet on a furnace, exterior outlets, etc.

Example Commercial Location: Bathrooms, Kitchens, Roof tops, Furnaces, Outdoors, Sinks, Indoor damp and wet locations, Locker rooms, Shower area, Garages, Service Bay, Crawl Spaces, Unfinished areas, Mechanical rooms, Laundry rooms, Bathtubs and Shower stalls, Eyes wash stations, Exterior outlets, Floor outlets and similar areas, with Exception to: Vehicle exhibition halls and showrooms. (Commercial)(Residential).

210.8(A)1 –(A)(11) Hereby amended, to add all 125-volt through 250- volt receptacles supplied by single-phase branch circuits rated 150-volts or less to ground in eleven locations of a dwelling. Dryer and stove range receptacles, common 250-volt receptacles in a home are required to be GFCI protected. (Residential)

210.8 (B)(1) Through (13) Other than Dwelling Units. Hereby adopted, that GFCI protection is required in kitchens or areas with a sink, countertop(s) and permanent provision for either food preparation or for cooking. (Commercial)

(9) Crawl spaces- at or below grade level

(10) Unfinished basements

Exception No. 1 to (10): Receptacles that are not readily accessible.

Exception No. 2 to (10): A single receptacle or duplex receptable for two appliances located

within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with 2020 National Electrical Code section 400.7 (A)(6), (A)(7), or (A)(8).

Exception No. 3 to (10): A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault-interrupter protection.

(11) All general use receptacles installed within 6' - 0" of the outside edge of a sink or mop basin-excluding critical care areas in health care facilities where the toilet and basin are installed within the patient room."

(12) Bathtubs and shower stalls where receptacles are installed within (6) feet of the outside edge of the bathtub or shower stall.

(13) Floor outlets shall be protected by GFCI, and resettable to a wall outlet within the room it serves (Wet location). (Commercial)(Residential)

210.8 (D). Specific, Appliances & (E) Equipment Requiring Servicing. Hereby adopted that GFCI protection required for receptacles for specific appliances (422.5)(A) when not already protected by one of the methods in 422.5(B), and receptacles specific to the equipment outlined in 210.63 shall be GFCI protected. (Commercial)(Residential)

210.8 (F). Outdoor Outlets. Hereby adopted that all outdoor outlets for dwellings, other than those covered in 210.8 (A)(3), Exception to (3), that are supplied by branch circuits rated 150 volts to ground or less, 50-amp or less, shall have ground fault circuit interrupter protection for personnel. (Example would be A/C units). (Commercial)(Residential)

210.12. Arc-Fault Circuit-Interrupter Protection. Hereby adopted that Arc-Fault circuit-interrupter protection shall be provided as required in 210.12(A), (B), (C), and (D). The Arc-Fault circuit interrupter shall be installed in a readily accessible location. Examples: Residential AFCI Protection, Finished Basement, Bedrooms, Common Rooms, Hallways, Closets, Kitchens, Laundry Areas, etc. (Residential)

210.12(A) Dwelling Units. Hereby amended to read: All 120-volt single phase, 15- and 20-amp branch circuits supply outlets installed in bedrooms shall be protected by listing Arc-fault circuit interrupters, tamper resistant outlets, combination type, installed to provide protection of the branch circuit. (Residential)

210.12(C). Hereby adopted that AFCI protection is required in Guest rooms and Guest Suites, and Patient Sleeping Rooms of Nursing Homes and Limited Care Facilities. (Commercial)

210.12 (D). Branch Circuit Extensions or Modifications- Dwelling Units, Dormitory Units, Guest Rooms, and Guest Suites. Hereby adopted that where the branch circuit wiring for any areas in 210.12(A)(B) or (C) is replaced, modified, or extended it shall be AFI protected. The exception for the extensions not over 6ft in length and not including any additional outlets or devices is still applicable. (Commercial)(Residential)

210.52(C) Island and Peninsular Countertops and work Surfaces. Hereby amended by adding the following sentence: "at least one receptacle outlet shall be installed at each end of the island

countertop and all outlets on each end and over the counter tops shall be GFCI protected.(Commercial) (Residential)

210.52(G)(1) Basement, Garages, and Accessory Buildings. Hereby amended by adding the following sentence” “A minimum of one overhead receptacle shall be installed for each garage door for one-and -two family dwelling, and multifamily dwelling, shall be installed to a convenience resettable receptacle GFCI on the wall within the garage. (Residential)

210.63 (2) Dwelling units Indoor damp and wet. location hereby amended by adding floor outlets shall be protected with a GFCI to a wall outlet in the room it serves. (Commercial)(Residential)

210.70 Lighting Outlets Required. Hereby amend by adding the following subsection: “(D) Illumination of Mechanical Equipment. All occupancies shall have luminaries installed within (6’) feet of the front of all electric panels and within (6’) feet of mechanical heating equipment to enable servicing of the equipment. Wall switch, light outlet shall include adding wall switches for kitchen lighting, and underfloor area attics, equipment spaces and similar areas of other than dwelling units. Dimmer switches shall not be used for indoor our exterior stairways. (Commercial)(Residential)

210.70(A) Dwelling Units. Hereby amended by adding the following subsection: “(4) Ceiling Box Support. All ceiling mounted lighting outlet boxes installed more than (3) three feet from all walls of any room in a dwelling unit shall be listed and shall be marked by the manufacturer as suitable for sole-support of a ceiling -suspended (paddle) fan and shall be secured according to the listing directions. The marking shall include the maximum weight to be supported. Exception: “No ceiling fans shall be located in Dwelling garage, Closets, Bathrooms and Hallways”. (Residential)

210.70(A)(1). Habitable Rooms. Hereby amended that requires a wall mounted control device our wall switch for lighting in habitable rooms and must be located near the entrance on a wall and not behind an openable door. (Commercial)(Residential)

210.70(A)(3) Storage or Equipment Spaces. Hereby amended by adding the following sentence: “When a sump pump or ejector pump is installed in an area not illuminated, a light shall be provided and controlled by a pull cord or a switch on the wall”. (Commercial)(Residential)

210.71 Meeting Rooms. Hereby amended to add the following section: “Commercial occupancies shall install receptacle outlets for meeting rooms, following (6’) six foot and (12’) twelve-foot rule and for all walls minimum of (2’) two feet requires an outlet. The floor outlet shall be GFCI protected to a resettable outlet on the wall. (Commercial)(Residential)

### **Branch-Circuit, Feeder, and Service Load Calculations:**

220.40 General. Hearby adopted, that shall require the install minimum size panel for a single-family residence or service upgrade shall be a single phase, 200-amp, 40 circuit panel, with double ground rods, with one being a minimum of 6’ six feet away from the primary. Exception: Single family homes that were constructed prior to August 16th, 2016, that are under 1,500 square feet are allowed to upgrade to 100amp, 20/30 breaker circuit panel so long as they do not double tap

the breaker of neutral hub. A double ground rod is required with one being a minimum of 6' six feet away from the primary. (Residential)

#### **Outside Branch Circuits and Feeders:**

225.17 Mast as Supports. Hearby adopted that Only feeder or branch-circuit conductors specified within this section shall be permitted to be attached to the feeder and/or branch-circuit mast. Mast used for the support of final spans of feeders or branch circuit shall be installed in accordance with 225.17(A)(B).

225.22 Raceways on Exterior Surfaces of Building or Other Structures. Hearby adopted, that Raceways on exteriors of buildings or other structures shall be arranged to drain and shall be listed or approved for use in wet locations. (Commercial)(Residential)

225.30 Number of Feeder Supplies. Amend and allow, additional feeder supply for one- and -two family dwellings. (Residential)

225.30(B) Common Supply Equipment. Hearby adopted, where feeder conductors originate in the same panel board, switchboard, switchgear, or distribution equipment, and each feeder terminates

in a single disconnecting means, not more than (6) six feeders shall be permitted. Where more than one feeder is installed, the disconnects shall be grouped in the same location. (Commercial)(Residential)

225.35 Access to Occupants. Hereby amend by adding the following sentence: "Each tenant shall have direct access to a main service disconnecting means and all panel boards, etc. that contain breakers or fuses that protect any electrical devices in that tenant unit. (Direct access means a common area that has no locks, or the tenant can get to the panel or switchboard without going through another tenant space.)". (Commercial)(Residential)

230.1 Scope. Hereby amend by adding the following sentence: "Electrical service attachment shall be installed in accordance with the requirements of the electrical utility company, subject to the approval of the Code Official." (Commercial)(Residential)

230.30 Installation. Hereby amended by adding the following subsection: "(C) Service Conductors in Yards. Electrical service for single family homes shall be located on the side of the house closest to the electrical source. The service may only be located at the rear of the home if the garage is located on the side closest to the electrical source. All conductors running from the electrical source shall run parallel to the property line to a point 90 degrees from the electrical service. Conductors shall not run through any portion of the rear yard that would prevent the homeowner from constructing an addition or pool without having to relocate the electrical service conductors. (Residential)

230.44 Cable Trays. shall delete methods (2) and (4).



230.46. Effective January 2023. Spliced and Tapped Conductors. Hearby adopted that all pressure connectors and devices for splices or taps installed on service connectors are Listed and Marked as “Suitable for use on the line side of the service equipment or equivalent”. (Commercial)(Residential)

230.67 (A) through (D). Surge Protection. Hereby amended to add that all new construction residential, single family, townhomes, condominium or apartments and commercial property all services supplying dwelling units shall be provided with a surge protective device (SPD), as an integral part of equipment or located immediately adjacent. The SPD must be a Type 1 or Type 2 SPD. Applies to service equipment being replaced or upgraded. (Commercial)(Residential)

230.70 General. Hereby amended by adding the sentence: “The service disconnecting means shall be installed at a readily accessible location, either outside of a building or structure, or inside at or within 5’ feet of the meter enclosure” and by adding the following subsection: (D) Exterior Disconnect for Service over 400Amps. All buildings with a main service at 400 amps or more shall provide a means of disconnect at the building exterior.” (Commercial)(Residential)

230.71 Maximum Number of Disconnects. Adopted that each service shall have one disconnecting means unless the requirements of 230.71(B) are met. (Commercial)(Residential)

230.70(A)(2) Service Disconnect. Adopted that the service disconnect shall not be installed in bathrooms, closets, or over stairways. (Commercial)(Residential)

230.71(B)(2). Maximum Number of Disconnects (6 Handle Rule). Hearby adopted to show that the change here is that (6) six separate service disconnects are only allowed in separate enclosures or separate compartments.

Both single-occupancy and multiple-occupancy buildings can be provided with one main service disconnect or up to (6) six main disconnects for each set of service-entrance conductors. Example: Conductors from renewable energy sources, such as photovoltaic systems and wind generators, are feeder conductors (Commercial)(Residential)

230.85 Emergency Disconnects. Hereby added “required for new construction, homes undergoing renovation, and homes having their service replaced or upgraded”. For One-and two-family dwelling units and townhomes, apartment and condominiums, all service conductors shall terminate in disconnecting means having a short-circuit current rating equal to or greater than the available fault current, installed in a readily accessible outdoor location, if more than one disconnects is provided they shall be grouped, each disconnect shall be one of the following: section 1, 2 and 3 markings shall comply with 110.21(B). “Emergency Disconnect; Service Disconnect” (Residential)

230.91 Location. Hereby amended by adding the following sentence: The service overcurrent device shall be connected by no more than (5’) five feet of raceway or service entrance cable from the meter device in the dwelling. (Residential)

### **Overcurrent Protection:**

240.24(B) Occupancy. Hereby amended by adding the following sentence: “Each tenant shall have direct and ready access to a main service disconnecting means and all panel boards, etc. that contain breakers or fuses that protect any electrical devices in the tenant unit. (Direct access means a common area that has no locks, or the tenant can get to the panel or switchboard without going through another tenant space.) (Commercial)(Residential)

240.67. (A) through (C). Arc Energy Reduction (Fuses). Effective January 1, 2020. Hearby adopted to show that Arc Energy Reduction is now required where fuses are employed and rated 1200-amp or higher. (C) is new in the 2020 NEC requiring the arc energy reduction system testing by primary current injection or other approved method when first installed on site. (Some exceptions apply) (Commercial)(Residential)

240.87 (A) through (C). Arc Energy Reduction (Breakers). Hearby adopted to show that breaker’s rate 1200-Amps or higher must utilize one of the methods of reducing arc energy, and documentation shall be provided showing the method chosen to reduce the clearing time is set to operate at a level below the available arcing current. Temporary adjustment of the instantaneous trip setting to achieve arc energy reduction system testing by primary current injection or other approved method when first installed on site. (Some exceptions apply) (Commercial)(Residential).

### **Grounding and Bonding:**

250.68 (C)(3). Grounding Electrode Conductor and Bonding Jumper Connections to Grounding Electrodes. The change here is that rebar (UFER) cannot be used as a conductor to connect other electrode in system. (Commercial)

250.122(B). Sizing Equipment Grounding Conductors. Hearby adopted to show that when ungrounded conductors are increased in size for any reason other than as required by 310.15 (B) or 310.15(C), wire type EGC’s shall be increased in size proportionately to the increase in circular mil area of the ungrounded conductors. (Commercial)

### **General Requirements for Wiring Methods and Material:**

300.1(A) All wiring Installations. Hereby amended by adding the following subsection: “(1) Non-residential Uses. Except for, one- and two- family dwellings and townhomes, all current carrying conductors exceeding 50 volts shall be installed in ridged metal conduit, intermediate metallic conduit, electrical metallic tubing, or flexible metallic tubing with the exception that PVC conduit can be used for corrosive or other special application areas.” (Commercial)

300.05 Minimum Cover Requirements. Hereby amended by adding Direct-buried cable, conduit, or other raceways shall be installed to meet cover requirements of Table 300.5 or not less than (18”) eighteen inches or as required/or approved by the AHJ. Shall have a gravel base of a minimum of (2”) two inches and be covered with a minimum of (2”) two inches of gravel before backfilling.

300.11 Securing and Supporting. Hereby amended by adding the following subsection: “(E) Independent Supporting Methods. All lighting fixtures, panel boards, switchgear, and/ or

supporting devices for conduit systems, installed in buildings or structures shall be installed and supported by the building structural components, completely independent of the roof or floor deck, piping or ductwork, drywall, or ceiling tiles. Lighting fixtures (in the ceiling grid systems) shall be supported in accordance with manufacturer's requirements."

300.25. Exit Enclosures (Stair Towers). Hearby adopted to show that where an exit enclosure is required to be separated from the building, only electric wiring methods serving equipment permitted by the authority having jurisdiction in the exit enclosure shall be installed within the exit enclosure. (Example: Cannot run conduit in the stairwell, except as needed for stairwell lighting, exit signs, or as permitted by the AHJ). (Commercial)

### **Conductors for General Wiring:**

310 Changes. Revised with new table designations. MV cable and conductors have been relocated to new Article 311. Table 310.15 (B) (16) has been renamed Table 310.16, and New Table 310.12 for dwelling unit ampacities for services and feeders is back when no-de-rating is required. (Commercial)(Residential)

### **Outlet, Device, Pull, Junction Boxes; Conduit Bodies; and Handhole Enclosures**

314.3 Nonmetallic Boxes. Hereby amended by adding the following sentence: "The use of non-metallic boxes is prohibited except for low voltage applications." And entirely deleting exception #1 and #2. (Residential)

314.27 (C) Boxes at Ceiling Suspended Paddle Fan Outlets. Hearby adopted to show that outlet boxes in the ceilings of habitable rooms in a location acceptable for the installation of a suspended paddle fan shall be either: 1) Listed for the sole support of a suspended paddle fan, or 2) a standard outlet box provided access to structural framing capable of supporting a suspended paddle fan bracket or equivalent.(Residential)

### **Metal-Clad Cables (Type MC):**

330.6 Listing Requirements. Hearby adopt to show that Type MC cable shall be listed. Fittings used for connecting Type MC cables to boxes, cabinets, or other equipment shall be listed and identified for such use.

330.15 Expose Work. Delete 330.15 but leave exception as provided in 300.11(B),

### **Nonmetallic-Sheathing Cable (types NM and NMC):**

334.10 Uses Permitted. Hereby amended by adding the following sentence: "Type NM, Type NMC, and Type NMS cable wiring methods shall be permitted to be used in one- and two- family dwellings and townhomes only." (Residential)

334.15 Exposed Work. Shall be amended by adding the following subsection “(D) All Unfinished Areas. Any exposed cable (7’) seven feet (213.36cm) or closer to the floor must be protected with durable building material or sleeved in an approved manner. (Commercial) (Residential)

334.40(A) Boxes of Insulating Material. Hereby amended by entirely deleting.

**Liquid-tight Flexible metal conduit (Type LFMC):**

352.10(G) PVC underground Installation. Delete sentence “See 300.50” and replace as follows: PVV shall not be permitted to emerge from concrete, earth, or another solid surface. Any portion of the raceway emerging from the concrete or earth shall be installed in ridged metal conduit to a point not less than (18”) eighteen inches above or below emergence.

394 Concealed Knob-and-Tube Wiring. Hereby amended by adding the following subsection: 394.10 Uses prohibited. Is hereby amended by adding the use of concealed knob-and-tube wiring is prohibited. Existing installation shall not require removal, alteration, or abandonment of, nor prevent the continued utilization and maintenance of properly maintained knob-and-tube wiring lawfully in existence at the time of adoption of this code. Such installation may only be repaired and shall not be expanded.” As provided by 393.23 and 394.12 and with AHJ permission.

**Switches:**

404.8(A) Location. Hereby amended by adding the following sentences: “The required wall switch for lighting outlets at each habitable room, bathrooms, accessible attic, underfloor spaces, utility rooms, each area of an unfinished basement, and equipment spaces shall be installed at the usual entry point of entry to these spaces.” (Commercial)(Residential)

**Receptacles, Cord Connectors, and attachment Plugs (Caps):**

406.5 (G) (1) & (2) Receptacle Orientation. Hearby adopted to show that (1) Receptacles shall not be installed in a face up position in countertops or work surfaces unless listed for countertop and workspace applications. (2) under sinks. Receptacles shall not be installed in a face up position in the area below the sink. (Commercial)(Residential)

406.9(C). Bathtub and Shower Space. Hearby adopted to show that receptacles shall not be installed within a zone measured 900 mm (3ft) three feet horizontally and 2.5 m (8ft) eight feet vertically from the top of the tub rim or shower stall threshold. This is all encompassing and shall include the space directly over the tub or shower. Exception: In bathrooms with less than the required zone the receptacle(s) shall be permitted to be installed opposite the bathtub or shower stall on the farthest wall within the room. (Commercial)(Residential)

406.12 (1-8) Tamper Resistant Devices. Hearby adopted to show that TR devices for all 15 and 20-amp 125- and 250-volt non-locking-type receptacles are now required to be installed in common areas of multifamily dwellings, attached and detached garages, accessory buildings, common areas as listed in 406.12 (1-8), or as the AHJ requires. (Commercial)(Residential)

## **Switchboards, Switchgear, and Panelboards:**

408.6. Short Circuit Current Rating. Hearby adopted to show that In other than one- and two-family dwellings, the available fault current and the date the calculation shall be field marked on each switchboard, switchgear, and panelboard. The marking shall comply with 110.21(B)(3). (Commercial)

408.36 Exception 1. Overcurrent Protection. Deleted. This was a companion section to 230.71 dealing with the 6-handle rule. (Commercial)

410.116 (C). Installation in Fire Resistive Construction. Hearby add the following section: Recessed luminaires not listed in Fire Resistant Rated Construction shall not be installed in fire resistive rated construction unless it satisfies one of the following conditions:

- 1) Shall be listed for use in Fire Resistant Rated Construction.
- 2) The luminaire shall be installed in or used with luminaire enclosure that is listed for use in a Fire-Resistant Rated Construction.
- 3) The luminaire is listed and shall be installed in accordance with the tested Fire-Resistant Rated Assembly.(Commercial)

410.118. Access to other Boxes. Hearby adopted to show that luminaires recessed in ceilings, floors, or walls, shall not be used to access outlet, pull or junction boxes or conduit bodies unless the box or conduit body is an integral part of the listed luminaire. (Commercial)(Residential)

410.170 New Part XVI. Special Provisions for Horticultural Lighting Equipment. Hearby adopted to show this new part has requirements for the listing, installation and use of luminaires that are listed and identified for horticultural use to include locations not permitted, types of connections, fittings, GFCI protection etc. (Commercial)

## **Appliances:**

422.5 (A). Ground Fault Circuit Interrupter (GFCI) Protection for Personnel.

Amend this section, the listing of appliances requiring GFCI protection has been increased and is required regardless of being cord and plug connected or hard wired. (Commercial)(Residential)

422.16(B)(2). Built in Dishwasher and Trash Compactors. Hearby adopt to show the cord of a dishwasher or trash compactor passing through an opening shall be protected by a bushing, grommet, or other approved means. (Bushing or grommet required) (Commercial)(Residential)

422.16(B)(4). Range Hoods and Microwave Oven/Range Hood Combinations. Hearby Adopt to show range hoods and microwave oven/range hood combinations shall be permitted to be cord plug connected with flexible cord identified as suitable for use on range hoods in the manufacture's installation instructions of the appliance where all the following conditions are met. It is important

to note the receptacle must be supplied by an individual branch circuit and be accessible. (Commercial)(Residential)

### **Air-Conditioning and Refrigeration Equipment:**

440.9. Grounding and Bonding. Hearby adopt to show where HVAC equipment is located outdoors on a roof, an equipment grounding conductor of the wire type shall be installed in outdoor portions of metallic raceway systems that use compression fittings. (Commercial)

### **Generators:**

445.18(D). Emergency Shutdown in One and Two-Family Dwelling Units. Hearby adopted for other than cord and plug connected portable generators, an emergency shutdown device shall be located outside the dwelling unit at a readily accessible location. (Residential)

450.9 Ventilation. Hearby adopted to show transformer top surfaces that are horizontal and readily accessible shall be marked to prohibit storage. (Commercial)

### **Storage Batteries:**

480.3 Equipment. Hearby adopt to show storage batteries and battery management equipment shall be listed. This requirement shall not apply to lead-acid batteries.

480.4 Battery and cell terminations. Hereby amended by adding the following subsections 480.4 shall comply with (A through D) or as required by the AHJ.

480.7 (B), (C), & (G). DC Disconnect Methods. Hearby amended to add these new requirements for disconnecting stationary battery systems. (B) specifically for single family and two-family dwellings, a disconnect or remote control for a stationary battery system shall be located at a readily accessible location outside of the building for emergency use and shall be labeled "Emergency Battery Disconnect". (C) deals with disconnecting means exceeding 240-volts dc, and (G) is specific to the labeling and Identification of Power Sources on the premises. (Commercial)(Residential)

480.9 Battery Support Systems. Hearby add these new requirements for battery chemistries with corrosive electrolytes, the structure that supports the battery shall be resistant to deteriorating action by the electrolyte. Metallic structures shall be provided with nonconducting support members for the cells or shall be constructed with a continuous insulation material. Painting alone shall not be considered as an insulating material. (Commercial)(Residential)

### **Special Occupancies:**

#### **Commercial Garages, Repair, and Storage**

511.12 Ground Fault Circuit Interrupter Protection for Personnel. Hearby adopt to show GFCI for personnel shall be in accordance with 210.8(B). (Commercial Garages).

513.12 Ground Fault Circuit Interrupter Protection for personnel. Hearby adopt to show GFCI for personnel shall be in accordance with 210.8(B). (Aircraft Hangers). (Commercial)

518.6 Illumination. Hearby Adopt to show Illumination shall be provided for all working spaces about fixed service equipment, switchboards, switchgear, panelboards, motor control centers

installed outdoors that serve assembly occupancies. Control by automatic means only shall not be permitted. (Commercial)

545 Part II. Relocatable Structures. Completely new section dealing with Relocatable Structures. Outlines requirements for power supplies, disconnecting means, grounding, identification, GFCI protection etc. (Commercial)(Mobile home)

### **Electric signs and Outdoor Lighting:**

600.4 (B). Signs with retrofitting Illumination Systems. Hearby adopt to show signs with a retrofitted illumination system shall contain the following:

(1) Sign shall be marked that the illumination system has been replaced

(2) The marking shall include the kit providers and installers name, logo, or unique identifier

(3) Signs with tubular LED lamps powered by the existing sign sockets shall include a label alerting the service personnel that the sign has been modified. The label shall meet the requirements of 110.21(B). The label shall also include a warning not to install fluorescent lamps and shall also be visible during re-lamping. (Commercial)

600.6(A)(4) Remote Location. Hearby adopt to show the disconnecting means, if located remote from the sign, sign body, or pole, shall be mounted at an accessible location available to first responders and service personnel. The location of the disconnect shall be marked with a label at the sign location as the disconnect for the sign or outline lighting system. The label shall be protected by a listing bushing or raceway. (This applies to Class 2 wiring on the load side of a driver or transformer). (Commercial)

600.33 (C). Protection Against Physical Damage. Hearby adopt to show If subject to physical damage, conductors shall be protected and installed in accordance with 300.4. All through the wall penetrations shall be protected by a listed bushing or raceway. (This applies to Class 2 wiring on the load side of a driver or transformer). (Commercial)

### **Elevators, Escalators, and Moving Walks:**

620.62. Selective Coordination. Hearby adopted to show where more than one driving machine disconnecting means is supplied by the same source, the overcurrent protective devices in each

disconnecting means shall be selectively coordinated with any other supply side over current protective devices. (Commercial)

620.65. Signage. Hearby adopt to show equipment enclosures containing selectively coordinated overcurrent devices shall be legible marked in the field to indicate that the overcurrent devices are selectively coordinated. The markings shall meet the requirements of 110.21 (B), and shall be readily visible, and shall state the following:

Caution: Overcurrent devices in the enclosure are selectively coordinated. Equivalent replacements and trip setting are required. (Commercial)

Swimming Pools, Spas, Hot Tubs, Fountains, and similar Installations:

680.6 Bonding and Equipment Grounding. Adopt to show electric equipment shall be bonded in accordance with Part V of Article 250 and shall meet the equipment grounding requirements of Parts VI and VII of Article 250. The equipment shall be connected by the wiring methods in Chapter 3, except as modified by this article. Equipment subject to these requirements shall include the following items listed in 680.6 (1 through 7)

680.11 Underground Wiring. Adopt to show underground wiring shall comply with 680.11(A) through (C).

1. All trenches must be a minimum of 36" inches deep

2. If trenches cannot be achieved, the contractor or owner shall notify the Building Official or Building Department.

3. If the trench is to be joint trench (shared with other utilities) the following separations must be maintained:

- 24 inches between gas and electric lines
- 12 inches between water and electric lines.
- 24 inches between sewer and electric lines
- 12 inches between communications and electric lines

4. Underground wiring shall not be installed under or within the area extending 5 feet horizontally from the inside walls of the pools, and outdoor hot tubs, jacuzzi, spa, and swim spa where wiring is installed to supply pools, spa, hot tubs jacuzzi or swim spa equipment. Underground wiring shall be installed in ridged metal conduit, intermediate metal conduit, rigid polyvinyl chloride conduit, reinforced thermosetting resin conduit, or jacketed type MC cable that is listed for burial use. Refer to the covering depth above.

680.13 Maintenance Disconnect Means. Revise the section to include the word (Emergency Shut Off Switch) One or more means to simultaneously disconnect all underground conductors shall be provided for all utilization equipment and within sight from its equipment and shall be located at least 1.5 M (5 ft) horizontally from the inside walls of (Add these new requirements) swimming



pools, spas, jacuzzi, fountains, hot tub, and swim spa pools. Delete any reference to single family residence.(Residential)(Commercial)

680.21 (C). GFCI Protection. Adopt to show outlets supplying all pool motors on branch circuits rated 150 volts or less to be grounded and 60-amperes or less, single or 3 phase, shall be provided with GFCI protection. (Commercial)(Residential)

680.21 (D). Pool Pump Motor Replacement. Adopt to show where a pump motor in 680.21 (C) is replaced for maintenance or repair, the replacement pump motor shall be provided with GFCI protection.(Commercial)(Residential)

680.22 (A) (5). Pool Equipment Room. Adopt to show at least one GFCI protected 125-volt 15 or 20 -amp receptacle on a general-purpose circuit shall be located within a pool equipment room, and all other receptacles supplied by a branch circuit rated 150-volts or less to ground within a pool equipment room shall be GFCI protected. (Commercial)(Residential)

680.22 (E). Other Equipment. Adopt to show other equipment with ratings exceeding the low voltage contact limit shall be located at least 5' feet horizontally from the inside walls of the pool unless separated from the pool by a solid fence, wall, or other permanent barrier. (other equipment would include but not be limited to meter sockets, panels, disconnects, A/C units or generator). (Commercial)(Residential)

680.35 (A) through (G). Storage and Portable Immersion Pools. This is a new section with all the specific requirements for storable and portable Immersion Pools. Shall additionally comply with 680.35 (A through (G). (Commercial)(Residential)

680.41 Emergency Switch for Swimming Pools, Swim Spa, Spas and Hot Tubs. Hearby adopt to show a clearly labeled emergency shutoff or control switch for the purpose of stopping the motor(s) that provide power to the recirculation system and jet system shall be installed at a point readily accessible to the users and not less than 1.5 m (5' feet) away, adjacent to, and within sight of the swimming pool, swim spa, or hot tub. Delete the wording "This requirement shall not apply to one-family dwellings.

690.1 Solar Photovoltaic (PV) System. Hearby adopt the NEC 2020 Article 690.1 through 690.72 and ANSI National Electric Safety Code.

690.1 Large-Scale Photovoltaic (PV) Electric Supply Stations. Hearby adopt NEC 2020 chapters 691.1 through 691.11.

## **Fire Pumps:**

695.3(B) Multiple Sources. Hereby amended by adding the following subsection: “(3) Signage. Where a generator provides a secondary source for a fire pump, and the generator feeds other systems, clearly marked “key operated shunt trip switch/es must be provided at the fire panel allowing Fire Department the ability to open main breakers to panels not feeding the fire pump.”

695.6 (A)(1) Exception. Supply Conductors. Hearby adopt, showing the supply conductors within the fire pump room shall not be required to meet 230.6(1) or (2) (Commercial)

## **Special Conditions:**

700.16 Emergency Illumination. Hearby amended by adding the following section: Emergency lighting shall be provided in the following locations: Mechanical room/Electric Room, Sprinkler/Fire suppression systems rooms, toilet and bathrooms, any rooms containing fire alarm panel, hallways, breakrooms, locker rooms/changing rooms, baby feeding rooms or as directed by the Village of Sugar Grove Fire District or Building Official. (Commercial)

## **Legally Required Standby Systems:**

701.5 Transfer equipment. Hereby amended by adding the following subsection:

“701.5 (C.1) Transfer Equipment Requirements. Open type transfer switches are only approved method for connection of standby systems. All transfer switch connections shall be “break before make” to insure the complete separation from the utility system and the generator supply. No parallel operation with the utility system shall be allowed. A minimum time delay of three (3) seconds and a maximum of ten (10) seconds after loss of utility power should be established before starting the generator. Utilization of Kirk Key systems or other mechanical means of isolation generating source from the utility source are not allowed.”

705.10 Identification of Power Sources. Hearby adopt to show a label indicating multiple power sources located on the premises is required to be located at each service equipment location or at an approved readily visible location. The plaque or directory shall denote the location of each power source disconnecting means for the building or structure. The plaques or directory shall be marked with the wording “CAUTION: Multiple Sources of Power”. And then list the other sources and their location. If a diagram is used it must be correctly oriented with respect to the location of each power source disconnecting means. (Commercial)(Residential)

705.11(A) through (E). Supply Side Source Connections. Hearby adopt this is a new section splitting out line side taps from the load connections or interconnected power sources and has new requirements for conductor size, overcurrent protection, connections, and ground fault protection.(Commercial)(Residential)

705.13 (A) through (E). Power Control Systems. Hearby adopt this new section pertaining to Power Control System (PSC's) that limits the current on conductors and busbars and the

requirements for monitoring, settings, Overcurrent protection, and access to settings.  
(Commercial)(Residential)

705.20 (1 through 8) Disconnecting Means, Source. Hearby adopt this new section which combines what was 705.20, 705.21, and 705.22 into one section for the disconnecting means and all the requirements they must comply with. (Commercial)(Residential)

705.25 (A) through (C). Wiring Methods. Hearby adopt this new section which outlines the wiring methods that can be used (A) General, (B) Flexible Cords and Cables, (C) Multiconductor Cable Assemblies.(Commercial)(Residential)

705.28 (A) through (C). Circuit Sizing and Current. Hearby adopt this new section and requirements for determining (A) Maximum Circuit Current, (B) Conductor Ampacity, (C) Neutral Conductors.(Commercial)(Residential)

705.30 (A) through (D). Overcurrent Protection. Hearby revise this section with new requirements for overcurrent protection of (A) Circuit and Equipment, (B) Overcurrent Device Ratings, (C) Power Transformers, (D) Generators.(Commercial)(Residential)

705.32 Ground Fault Protection. Hearby adopt to show where protection is installed in accordance with 230.95, the output of an interactive system shall be connected to the supply side

of the ground-fault protection. Exception: Connection shall be permitted to be made to the load side of the ground-fault protection if there is ground-fault protection for equipment from all ground-fault current sources. (Commercial)(Residential)

### **SECTION THREE: Miscellaneous**

A. That if any section, subsection, sentence, clause, or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The Village of Sugar Grove hereby declares that it would have passed this ordinance, and each section, subsection, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentence, clause, and phase be declared unconstitutional.

B. Savings: That nothing in this ordinance or in the code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 3 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

C. Repealed: All ordinance or provisions of ordinances which conflict with this ordinance are hereby repealed.

D. Effective Date: This ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form as provided by law and after (DATE).

## **2021 International Residential Code.**

**SECTION ONE:** Title 9, Chapter 1 of the Village code shall be amended as follows:

Adoption: That a certain document entitled “The International Residential Code, 2021 Edition” published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, one copy of which is on file at the Building Division of the Community Development Department of the Village of Sugar Grove, is hereby adopted as the “Residential Building Code” for the Village of Sugar Grove for regulating the design, construction, quality of materials, quality of workmanship, erection, equipment, installation, alteration, repair, location, relocation, replacement, addition to, and use or occupying of One-and-two family dwellings and townhouses not more than (3) three stories above-grade in height with a separate means of egress and their accessory structures in the Village of Sugar Grove as provided; and each and all of the regulations, provisions, penalties, conditions and terms of said “International Residential Code 2021 Edition” are adopted and made a part hereof, as if fully set out in the Code with the additions, insertions, deletions, and changes prescribed in this ordinance.

**SECTION TWO:** That this section of said codes adopted, herein are revised and amended as follows:

### **Amendments: Amended the 2015 International Residential Code to the 2021 International Residential Code**

R101.1 Title. Hereby amended by replacing (NAME OF JURISDICTION)” with “the Village of Sugar Grove.”

R102.4 Reference codes and standards. Hereby amended by adding the following sentence: “All references to the International Plumbing Code Shall be deemed to mean the Illinois Plumbing Code”.

R103.1 Creation of enforcement agency. Hereby amended by replacing “building official” with “Building and Code Official” and adding the following sentence: “All reference to building official in the 2021 International Residential Code shall be construed to refer to the Building and Code Official”.

103.2 Appointment. Hereby amended by replacing “The building and code official shall be appointed by the jurisdiction.” with “The Director of Community Development or his designee shall serve as the Building and Code Official for the Village of Sugar Grove”.

R104.10.1 Flood Hazard areas. Hereby amend by entirely deleting.

R105.2 Work exempt from permit. Hereby amend by entirely deleting items number building

- Building: 6,7,8.
- Electrical: 1,2,4,5.
- Gas: 1,2,3.

- Mechanical: 1-8
- Plumbing: 1 & 2

R105.2.3 Public Service agencies. Deleting the requirements for a permit is not required.

R105.5 Expiration. Hereby amended by adding the following sentence: “Every permit shall expire and become invalid after a period of one year from the date of issuance, homeowner/contractor has 6 months to start the project before the permit is considered abandon. Invalid and expired permits shall be subjected to additional plan review including new fees for such review as well as administrative fees for issuing said permit.”

R105.7 Placement of Permit. Hereby amended by entirely deleting and replacing with “The building permit card shall be kept on the site of the work and posted so it is visible from the street or sidewalk until such time as a certificate of occupancy permit is issued, or a final inspection has been performed and approved.”

R106.1 Submitted documents. Hereby amended by adding the following sentence: “construction documents shall be signed and stamped by an Illinois registered design professional for all new one- and -two family dwellings, townhouses, condominiums, apartments and all additions or alterations that require additional or change to structure design.” The Building Official shall have the right to require the Illinois registered design professional to be an architect or engineer, or registered design professional registered in the state of Illinois. Minimum number of plans to be submitted is 4 hard copies plus a PDF.

R106.1.4 Information for construction in flood hazard areas. Hereby amended by entirely deleting and replacing with “For buildings and structures located in whole or in part in flood hazard areas, as established on local floodway rate maps, or table R301.2 construction documents shall include #1- 4, and the locally adopted flood plain ordinance shall apply.

R106.3.1 Approval of Construction documents. Hereby amended by entirely deleting and replacing with “When the Building and Code Official issues a permit, the construction documents shall be approved in writing or by a stamp. One set of approved construction documents is reviewed and shall be retained by the Building Department. The other set shall be returned to the applicant and shall be kept on site of the project and shall be open to inspection by the Building and Code Official or his/her authorized agent or representative.

R108.1 Payment of Fees. A permit shall not be valid until the fees prescribed by law have been paid, nor shall an amendment to a permit be released until additional fee, if any, has been paid.

Exception: In accordance with State Law bill 2751 signed by the Governor on July 1, 2024. That waives local building permit fees for disabled veterans needing to modify their homes for accessibility. New law went into effect January 1, 2025. The fee only applies to the building permit fee itself, but disabled veterans or their caregivers still need to submit the necessary paperwork and provide proof of veteran’s disability status and the need for the home modification due to the veterans’ disability.

R108.5 Refunds. Hereby amended by entirely deleting and replacing with “The Building and Code Official” shall authorize the refund of fees on a case-by-case basis. Only half the fee will be refunded if it has gone through a review and permit process.

**R109.1 Types of Inspections. Hereby amend by adding the following sentence:**

“Construction or work for which a permit is required shall be subject to inspection by the Building and Code Official or his/her authorized agent or representative and such construction work shall remain accessible and exposed for inspection purposes until approved”. Approval, as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall be liable for expense entailed in removal or replacement of any material required to allow inspection.”

R112.1 General is hereby amended by replacing “The building official shall be an ex officio member of said board but shall have no vote on any matter before the board. The board of appeals shall appoint by the governing body and shall hold office at pleasure. “with “the Board of Appeals shall consist of the Village Board of the Village of Sugar Grove or their designees.

R112.3 Qualifications are hereby amended by entirely deleting.

R113.4 Violation penalties. Hereby amend by replacing “shall be subject to penalties as prescribed by law.” With “shall be guilty of a petty offense, punishable by fine for first offence \$130 for resident and \$250 for contractors, for first offense and the fines shall not exceed of not more than \$750.00 per day for each day the violation occurred or by imprisonment not exceeding 180 days, or both such fines and imprisonment. Each day that the violation continues after the due notice has been served shall be deemed a separate offense.

R114.1 Stop Work Order. Where the building official finds any work regulated by this code being performed in a manner contrary to the provision of this code or in a dangerous or unsafe manner the building official is authorized to issue a stop work order. Hereby amend by adding “Homeowner or their contractor(s) shall be subject to penalties as prescribed by law.” And shall be guilty of a petty offense, punishable by fines from first offence \$130 for residents and \$250 for contractors, and the fines shall not exceed, more than \$750.00 per day for each day the violation occurred or by imprisonment not exceeding 180 days, or both such fines and imprisonment. Each day that the violation continues after the due notice has been served shall be deemed a separate offense.

R114.3 Emergency. Where an emergency exists, or a safety concern exists the Building and Code official, or his/her agent or representative shall not be required to give written notice prior to stopping the work.”

R114.4 Unlawful continuance. Hereby amend by replacing “shall be subject to penalties as prescribed by law.” With “shall be guilty of a petty offense, punishable by fine for first offence \$130 for resident and \$250 for contractors, and the fines shall not be more than \$750.00 per day for each day the violation occurred or by imprisonment not exceeding 180 days, or both such fines and imprisonment. Each day that the violation continues after the due notice has been served shall be deemed a separate offense.

R202 Definitions. Hereby amend by entirely deleting and replacing the stated definition for Accessory Structure with “Accessory Structure. A use or structure which is subordinate to and serves a principal building or principal use; is subordinate in area, extent or purpose to the principal building or principal use served; and is located on the same zoning lot as the principal building or principal use served. All accessory structures shall conform to all area, height, setback requirements set forth in the Village of Sugar Grove ordinances.”

R202 Definitions. Hereby amend entirely deleting and replacing the stated definition for Manufactured Home with “Manufactured Home”. A movable or portable unit, which is (8’) eight body feet or more in width and (32’) thirty-two body feet or more in length, and constructed to be towed on its own chassis (comprised of frame and wheels) for the place of construction to the location or subsequent locations, subject to the provisions of chapter 15 of the Illinois Vehicle code, and designed to be used without a permanent foundation and connected to utilities for year round occupancy with or without a permanent foundation. The term shall include: (1) units containing parts that may be folded, collapsed, or telescoped when being towed and that may be expanded to provide additional cubic capacity, and (2) two units composed of two or more separately towable components designed to be joined into one integral unit capable of being separated again into components for repeated towing. The term shall exclude recreational vehicles. A mobile home shall be considered a manufactured home.”

Table R301.2(1) Climatic and Geographic Design Criteria is hereby revised to read as follows:

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDER- LAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	SPEED (MPH)	TOPOGRAPHIC EFFECTS	SPECIAL WIND REGIONS	WIND- BORNE DEBRIS ZONE		WEATHERING	FROST LINE DEPTH	TERMITE					
25	115	NO	NO	NO	B	SEVERE	42"	MODERATE TO HEAVY	-4	YES	LOCAL/ COUNTY ORDINANCE	2000	50

See captions under Table R301.2(1) in the book for exceptions and conditions of approvals.

Change Ground Snow Load from 25 to 30,

Change Winter Design Temp from -4 to -5

Change Mean Annual Temp from 50 to 48.5

R301.2.4 Floodplain Construction. is hereby amended by adding the following: The Kane County Storm Water ordinance, FEMA, Village of Sugar Grove flood plain Ordinance, and all applicable federal, state, and locally adopted flood plain ordinance.”

R302 Fire-resistant Construction.

R302.1 Exterior walls: Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1); or dwellings equipped throughout with automatic sprinkler system installed in accordance with Section P2904 Shall comply with Table 302.1.(2).

**Exceptions:**

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the fire separation distance.
2. Wall of dwellings and accessory structures located on the same lot.
3. Detached tool sheds and storage sheds, playhouse and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.
4. Detached garage accessories to a dwelling located with 2 feet of the lot line are permitted to have a roof eave projection not to exceed 4 inches. Not allowed in easements or within 5 of the lot line, and 10 feet from the principal structure per the Zoning code.
5. Foundation vents installed in compliance with this code are permitted.

**TABLE R302.1(1)**

**EXTERIOR WALLS**

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING
Walls	Fire-resistance rated	1 hour—tested in accordance with <a href="#">ASTM E119</a> , <a href="#">UL 263</a> or <a href="#">Section 703.3</a> of the <i>International Building Code</i> with exposure from both sides



	Not fire-resistance rated	0 hours
Projections	Not allowed	NA
	Fire-resistance rated	1 hour on the underside, or heavy timber, or fire-retardant-treated wood <sup>a, b</sup>
	Not fire-resistance rated	0 hours
Openings in walls	Not allowed	NA
	25% maximum of wall area	0 hours
	Unlimited	0 hours
Penetrations	All	Comply with <a href="#">Section R302.4</a>
		None required

For SI: 1 foot = 304.8 mm.

NA = Not Applicable.

1. a. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
2. b. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the rake overhang where gable vent openings are not installed.

**TABLE R302.1(2)****EXTERIOR WALLS—DWELLINGS WITH FIRE SPRINKLERS**

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING
Walls	Fire-resistance rated	2 hour-tested in accordance with <a href="#">ASTM E119</a> , <a href="#">UL 263</a> or <a href="#">Section 703.2.2</a> of the <i>International Building Code</i> with exposure from the outside
	Not fire-resistance rated	0 hours
Projections	Not allowed	NA
	Fire-resistance rated	2 hour on the underside, or heavy timber, or fire-retardant-treated wood <sup>b, c</sup>
	Not fire-resistance rated	0 hours
Openings in walls	Not allowed	NA
	Unlimited	0 hours
Penetrations	All	Comply with <a href="#">Section R302.4</a>
		None required

For SI: 1 foot = 304.8 mm.

NA = Not Applicable.

1. a. For residential subdivisions where all dwellings are equipped throughout with an automatic sprinkler system installed in accordance with [Section P2904](#), the fire separation distance for exterior walls not fire-resistance rated and for fire-resistance-rated projections shall be permitted to be reduced to 0 feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining lot provides an open setback yard that is 6 feet or more in width on the opposite side of the property line.
2. b. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhang if fire-blocking is provided from the wall top plate to the underside of the roof sheathing.
3. c. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the rake overhang where gable vent openings are not installed.

R302.2 Townhomes. Each townhome shall be considered a separate building and shall be separated by the fire-resistance-rated wall assemblies meeting the requirements of Section R302.1. Hereby amend by replacing "Common walls" separating townhouse shall be assigned a fire-resistance rating in accordance with section R302.2.2 item 1 or 2." "Common walls separating townhomes shall not be less than 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL263 or Section 703.2.2 of the International Building code." There shall not be any penetrations in the 1 or 2-hour fire rated walls, and all openings at the top and bottom of the wall to the roof decking, and to the floor shall be completely sealed using approved and listed fire foam sealer.

302.2.2.3 Continuity. The fire-resistance-rated wall or assembly separating townhomes shall be continuous from the foundation to the underside of the roof sheathing, deck or slab. The fire-resistance rating shall extend the full length of the wall or assembly, including wall extensions through and separating attached enclosed.

R302.2.4 Parapets for townhomes. Parapets construction in accordance with Section R302.2.3 shall be constructed for townhomes as an extension of exterior walls or common walls in accordance with the following:

1. Where roof surface adjacent to the wall or walls are the same elevation, the parapet shall extend not less than 30 inches above the roof surfaces.
2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches above the lower roof, the parapet shall extend not less than 30 inches above the lower roof surface.

Exception: A parapet is not required in the two cases shown above when the roof is covered with a minimum class "C" roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire-retardant-treated wood for a distance of (4) four feet on each side of the wall or walls, or one layer of 5/8- inch type "X" gypsum board is installed directly beneath the roof decking or sheathing, supported by a minimum of nominal 2-inch ledgers attached to the sides of the roof framing members, for a minimum distance of (4) four feet on each side of the wall or walls and there is no openings or penetrations in the roof within (4) four feet of the common walls.

3. A parapet is not required where roof surfaces are adjacent to the wall or walls at different elevations and the higher roof is more than 30 inches above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall not have less than a 2-hour fire resistance rating, The wall shall be rated for exposure from both sides.

R302.2.5. Parapet construction. Parapets shall have the same fire-resistance rating as that required for supporting wall or walls. On any side adjacent to the roof surface, the parapet shall have noncombustible faces for the uppermost 18 inches to include counterflashing and coping materials. Where the roof slopes toward a parapet at slopes greater than 2 units vertical in 12 units horizontal

the parapet shall extend to the same height as any portion of the roof within a distance of 3 feet, but in no case shall the height be less than 30-inches.

R302.2.6 Structural independence. Each individual townhome shall be structurally independent.

Exception:

1. Foundations supporting exterior walls or common walls.
2. Structural roof and wall sheathing from each unit may be fastened to the common wall frame.
3. Nonstructural wall and roof coverings.
4. Flashing at termination of roof covering over common wall.
5. Townhomes separated by a common 2- hour fire-resistance-rated wall as provided in Section R302.2

R302.3 Two-Family Dwellings. Hereby amend by replacing “1-hour fire-resistance rating” with “2-hour fire-resistance rating” “and allow the reduction to a 1-hour fire-resistance rating” only if the two-family dwelling has a sprinkler system. Entirely deleting Exceptions #1 and #2.

302.3.1 Supporting construction. When floor assemblies are required to be fire-resistance rated by Section 302.3, the supporting construction of such assemblies shall have an equal or greater fire-resistance rating.

302.4 Dwelling unit rated penetrations. Penetrations of wall or floor/ceiling assemblies required to be fire resistance rated in accordance with section R302.2 or R302.3 shall be protected in accordance with this section.

302.4.1 Through penetrations. Through penetrations of fire-resistance-rated wall or floor assemblies shall comply with section R302.4.1 or R302.4.1.2

Exception: Where the penetrating items are steel, ferrous or copper pipes, tubes or conduits, the annular space shall be protected as follows:

1. In concrete or masonry wall or floor assemblies, concrete, grout or mortar shall be permitted where installed to the full thickness of the wall or floor assembly or the thickness required to maintain the fire-resistance rating, provided:

- 1.1. The nominal diameter of the penetrating item is a maximum of 6” inches; and 1.2. The area of the opening through the wall does not exceed 144 square inches.

2. The material used to fill the annular space shall prevent the passage of flame and hot gases sufficient to ignite cotton waste where subjected to ASTM E 119 or UL 263-time temperature fire conditions under a positive pressure differential of not less than 0.01 inches of water (3Pa) at the location of the penetration for the time-period equivalent to the fire-resistance rating of the construction penetrated.

R302.4.1.1 Fire-resistance-rated assembly. Penetrations shall be installed as tested in the approved fire-resistance-rated assembly.

R302.4.1.2 Penetration firestop system. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E 814 or UL 1479, with a minimum positive pressure differential of 0.01 inch of water (3 Pa) and shall have an F rating of not less than the required fire-resistance rating of the wall or floor/ceiling assembly penetrated.

R302.4.2 Membrane penetrations. Membrane penetrations shall comply with Section R302.4.1. Where walls are required to have a fire-resistance rating, recessed fixtures shall be installed so that the required fire-resistance rating will not be reduced.

1. Membrane penetrations of maximum 2-hour fire-resistance-rated walls and partitions by steel electric boxes that do not exceed 16 square inches in area provided the aggregate area of the openings through the membrane does not exceed 100 square inches in any 100 square feet of wall area. The annular space between the wall membrane and the box shall not exceed 1/8 inch. Such boxes on opposite sides of the wall shall be separated by one of the following:

1.1 By a horizontal distance of not less than 24 inches where the wall or partition is constructed with individual non communicating stud cavities.

1.2 By the horizontal distance of not less than the depth of the wall cavity filled with cellulose loose-fill, rockwool or slag mineral wood insulation.

1.3 By solid fire blocking in accordance with Section R302.11;

1.4 By protecting both boxes with listed putty pads; or

1.5 By other listed materials and methods.

2. Membrane penetrations by listed electrical boxes and any materials provided the boxes have been tested for use in fire-resistance-rated assemblies and are installed in accordance with the instructions included in the listing. The annular space between the wall membrane and the box shall not exceed 1/8 inch unless listed otherwise. Such boxes on opposite sides of the wall shall be separated by one of the following:

2.1 By the horizontal distance specified in the listing of the electrical boxes;

2.2 By solid fire-blocking in accordance with section 302.11;

2.3 By protecting both boxes with listed putty pads or;

2.4 By other listed material and methods.

3. The annular space created by the penetration of a fire sprinkler provided it is covered by a metal escutcheon plate.

R302.5 Dwelling/garage opening/penetration protection. Openings and penetrations through the wall or ceilings separating the dwelling from the garage shall be in accordance with Section R302.5.1 through 502.5.3.

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8" inches thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches thick, or 20-minute fire-rated doors, equipped with self-closing devices.

R302.5.2 Duct penetration. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No# 26 gage sheet steel or other approved material and shall have no openings into the garage.

R302.5.3 Other penetrations. Penetrations through the separation required in Section R302.6 Shall be protected as required by Section R302.11, item 4.

R302.6 Dwelling-Garage Fire Separation. Hereby amend by entirely deleting "The wall separation provisions of Table R702.6 shall not apply to garage walls that are perpendicular to the adjacent dwelling unit wall." And add the following sentence: All gypsum board applied to the dwelling unit wall. "And adding the following sentence: All gypsum board applied to the garage side shall be taped with a minimum one coat of approved joint tape and compound and all penetrations shall be sealed with an approved fire-caulk or fire-foam."

Table R302.6 Dwelling- Garage Separation. Hereby amend by replacing all references to material being 1/2" inch gypsum board" replace with "5/8" inches rated "X" gypsum board" taped with a minimum of one coat of approved joint compound has no openings or open penetrations.

**TABLE R302.6**

**DWELLING-GARAGE SEPARATION**

SEPARATION	MATERIAL
From the residence and attics	Not less than 5/8-inch Type X gypsum board or equivalent applied to the garage side
From habitable rooms above the garage	Not less than 5/8-inch Type X gypsum board or equivalent

Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than 5/8-inch Type X gypsum board or equivalent
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than 5/8-inch Type X gypsum board or equivalent applied to the interior side of exterior walls that are within this area

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

R302.7 Under-Stair Protection. Hereby amend by replacing “1/2” inch gypsum board with 5/8” inch type “X” gypsum board, taped with a minimum of one coat of approved joint compound has no openings or open penetrations.

R302.8 Foam Plastics. For requirements for foam plastic refer to section R316.

R302.8.1 Interior finish. Foam plastic used as interior finishes shall comply with section R316.5.10.

R302.9 Flame spread index. Flame spread and smoke index for wall and ceiling finishes shall be in accordance with section R302.9 through R302.9.4

R309.1 Flame spread index. Wall and ceiling finishes shall have a flame spread index or not greater than 200.

Exception: Flame spread index requirements for finishes shall not apply to trim defined as picture molds, chair rails, baseboards and handrails; to doors and windows or frames; or to materials that are less than 1/28 inch in thickness cemented to the surface of walls or ceilings if these materials exhibit flame spread index values no greater than those of paper of this thickness cemented to a noncombustible backing.

R302.9.2 Smoke-developed index. Wall and ceiling shall have a smoke-developed index of not greater than 450.

R302.9.3 Testing. Tests shall be made in accordance with ASTM E 84 or UL 723.

R302.9.4 Alternative test method. As an alternative to have a flame spread index of not greater than 200 and a smoke-developed index of not greater than 450 when tested in accordance with ASTM E 84 or UL 723, wall and ceiling finishes shall be permitted to be tested in accordance with NFPA 286. Material tested in accordance with NFPA 286 shall meet the following criteria:

The interior finish shall comply with the following.

1. During the 40 kW exposure, flames shall not spread to the ceiling.
2. The flame shall not spread to the outer extremity of the sample on any wall or ceiling.
3. Flashover, as defined in NFPA 286, shall not occur.
4. The peak heat release rate throughout the test shall not exceed 800 kW.
5. The total smoke released throughout the test shall not exceed 1,000m (2).

R302.10 Flame spread index and smoke developed index for insulation. Flame spread index and smoke developed index for insulation shall be in accordance with Section R302.10.1 through R302.10.5

R302.10.1 Insulation. Insulation materials, including facings, such as vapor retarders and vapor-permeable membranes installed within floor/ceiling assemblies, roof/ceiling assemblies, wall assemblies, crawl spaces and attics shall have a flame spread index not to exceed 25 with an accompanying smoke-developed index not to exceed 450 when tested in accordance with ASTM E 84 or UL 723.

**Exceptions:**

1. When such materials are installed in concealed spaces, the flame spread index and smoke-developed index limitations do not apply to the facings, provided that the facing is installed in substantial contact with the exposed surface of the ceiling, floor or wall finish.
2. Cellulose loose-fill insulation, which is not spray applied, complying with the requirements of Section 302.10.3, shall only be required to meet the smoke-developed index of not more than 450.
3. Foam plastic insulation shall comply with section R316.

R302.10.2 Loose-fill insulation. Loose-fill insulation material that cannot be mounted in the ASTM E84 or UL 723 apparatus without a screen or artificial supports shall comply with the flame spread and smoke-developed limits of Section R302.10.1 when testing with CAN/UL S103.2.

**Exception:**

1. Cellulose loose-fill insulation shall not be required to be tested in accordance with CAN/ULC S102.2, provided such insulation complies with the requirements of Section R302.10.1 and Section R302.10.3

R302.10.3 Cellulose loose-fill insulation. All exposed insulation shall comply with CPSC 16 CFR, Parts 1209 and 1404. Each package of such insulating material shall be clearly labeled in accordance with CPSC 16 CFR, Parts 1209 and 1404.

R302.10.4 Exposed attic insulation. All exposed insulation material installed on the attic floor shall have a critical radiant flux not less than 0.12 watt per square centimeter.



R302.10.5 Testing. Test for critical flux shall be made in accordance with ASTM E 970.

R302.11. Fire-blocking. In combustible construction, fire-blocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between a top story and the roof space. Fire-blocking shall be provided in wood-frame construction in the following locations:

1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs, as follows:
  - 1.1 Vertically at the ceiling and floor levels.
  - 1.2 Horizontally at intervals not exceeding 10' feet.
2. At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and covered ceilings.
3. In concealed spaces between stair stringers at top and bottom of the run. Enclosed spaces under the stairs shall comply with Section R302.7
4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor.
5. For the fire-blocking of chimneys and fireplaces, See Section R1003.19.
6. Fire-blocking of cornices of a two-family dwelling is required at the line of dwelling unit separation.

R302.11.1 Fire-blocking material. (No change stays the same)

302.11.1.1 Batts or Blankets of mineral or glass fiber. Batts or blankets of mineral or glass fiber or other approved nonrigid materials shall be permitted for compliance with the 10'-foot horizontal fire-blocking in walls constructed using parallel rows or staggered studs.

302.11.1.2 Unfaced fiberglass. Unfaced fiberglass batt insulation used as fire-blocking shall fill the entire cross section of the wall cavity to a minimum height of 16 inches measured vertically. When piping, conduit or similar obstructions are encountered, the insulation shall be packed tightly around the obstruction.

302.11.1.3 Loose fill insulation material. Loose-fill insulation material shall not be used as fire-block unless specifically tested in the form and manner intended for use to demonstrate its ability to remain in place and to retard the spread of fire and hot gases.

302.12 Draft-stopping. In combustible construction where there is usable space both above and below the concealed space of floor/ ceiling assembly, draft-stops shall be installed so the area of the concealed space does not exceed 1,000 square feet. Draft-stopping shall divide the concealed space into approximately equal areas. Where the assembly is enclosed by the floor membrane above and the ceiling membrane below, draft-stopping shall be provided in floor/ceiling assembly under the following circumstances:

R302.12.1 Materials. Draft-stopping material shall not be less than ½ -inch gypsum board, 3/8-inch wood structural panels or other approved materials adequately supported. Draft-stopping shall be installed parallel to the floor framing members unless otherwise approved by the Building Official. The integrity of the draft stops shall be maintained.

R302.14 Combustible insulation clearance. Combustible insulation shall be separated a minimum of 3" inches recessed luminaires, fan motors and other heat-producing devices.

Exception: Where heat-producing devices are listed for lesser clearances, combustible insulation complying with the listing requirements shall be separated in accordance with the conditions stipulated in the listing. Recessed luminaires installed in the building thermal envelope shall meet the requirements of Section N1102.4.4 of this code.

R302.15 Mold resistance. All gypsum used in construction of fire-resistance rated wall assemblies shall be mold/moisture resistance.

R303.3 Bathrooms. Hereby amended by entirely deleting the exception and add the glazing area shall not be required where artificial light and mechanical ventilation system is provided. The minimum ventilation rates shall be 50 cfm for intermittent ventilation or 20 cfm for continuous ventilation. Ventilation air from the space shall be exhausted directly to the exterior of the structure by means of either the soffit area with an approved connection to the soffit or through the roof with an insulation (R-3) duct and approved roof fitting."

R309.1 Floor Surface. Hereby amend by adding the following sentence: "The garage floor shall be poured a minimum of 4" inches below the top of the foundation to form a gas curb at all walls of the garage abutting the house and detached from the house". If a stairwell occurs in a garage, a 4" inch minimum gas curb shall be provided around the stairwell. The floor shall be pitched in the direction of the overhead door and shall be of noncombustible material.

R310.1 Emergency escape and rescue openings required. Basements, habitable attics and every sleeping room shall have not less than one operable emergency eascape and rescue opening. Where basement contains one or more sleeping rooms, and emergency escape and rescue openings shall be required in each sleeping room. Emergency escape and rescue opening shall open directly into a public way, or to a yard or court having a minimum width of 36" inches that opens to a public way. **With exceptions: 1-3**

R310.2.2 Minimum dimensions window-sill height. Hereby amend by adding the following sentence: "All emergency escape and rescue windows provided as a means of egress from the basement or basement bedroom(s) shall have a sill height of not more than 36" inches above the finished floor and shall have a clear opening of 9 square feet.

R310.2.4.2 Ladder and Steps. Hereby amend by replacing "44" inches" with "36 inches". In existing construction of a single-family dwelling where the window is greater than 36" from finished floor to window- sill, (1) one step which is permanently installed, that is not greater than 7 3/4" inch rise maximum by 36" inches in width and 10" step depth, in an effort to achieve the 36" inches requirement from grade to window-sill will be allowed.

R311.2 Egress door. Hereby amend by adding the following subsection: R311.2.1 Second Exit egress door. A minimum of one other door, other than the door used to comply with 311.2 (32" inches) shall be provided and that meets all the requirements for an exit door in 311.2 except door type. All such exits shall be discharged to grade. The required exit doors shall not pass through a garage or the use of an overhead door.

R311.7.8 Handrails. Handrails shall be provided on not less than one side of each flight of stairs with 4 or more risers.

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhomes.

**Exceptions:**

1. An automatic residential fire sprinkler system shall not be required in any town home constructed on a lot that has a final approved plot of survey as of the effective date of this ordinance.
2. An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing townhomes that do not have an automatic residential fire sprinkler system installed.
3. An automatic residential fire sprinkler system shall not be required where, as determined, and certified by an approved fire protection engineer, the existing domestic water service system cannot meet the standard set forth for the installation of such system. The applicant shall reimburse the Village for the actual cost of service invoiced to the Village by the fire protection engineer.

Subsection R313.1.1 Design and installation. Shall not to be modified and is in full force as written.

R313.2 One-and Two-Family Dwellings automatic fire sprinkler systems. Hereby amend by entirely deleting one family (single family dwelling) is not required to be sprinkler and replacing with "An automatic residential fire sprinkler system shall be installed in two-family dwellings and townhomes.

**Exceptions:**

4. An automatic residential fire sprinkler system shall not be required in any detached one-family dwelling. (Single Family)
5. An automatic residential fire sprinkler system shall not be required in any existing two-family dwelling constructed on a lot that has a final approved plat as the effective date of this ordinance.
6. An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.
7. An automatic residential fire sprinkler system shall not be required where, as determined, and certified by an approved fire protection engineer, the existing domestic water system cannot meet the standards set forth for the installation of such a system. The applicant

shall reimburse the Village for the actual cost of service invoiced to the Village by the Fire protection engineer.

Subsection R313.1.1 Design and installation. Hearby, is not to be modified and is to remain in full force as written.

#### Section R314—Smoke alarms and heat detection.

R314.1 General. Smoke alarms, heat detectors, and heat alarms shall comply with NFPA 72, and Section 314, and the Illinois smoke detector act (425 ILCS 60) and (Public Act 100-200) or this ordinance, or whichever is more restrictive.

R314.1.1 Listings. Smoke alarms shall be listed in accordance with UL 217. Heat detectors and heat alarms shall be listed for the intended application in accordance with NFPA 72. Combination smoke and carbon monoxide alarms shall be listed in accordance with UL 217 and UL 2034.

R314.2 Where required. Smoke alarms, heat detectors, and heat alarms shall be provided in accordance with this section.

1. New Construction
2. When access is available to the attic and basement space during alterations, additions or remodeling.
3. Smoke detector location R314.3 or Illinois smoke detector act which every is more restrictive
4. Heat Detectors in Kitchens, Garages, Basements and Utility rooms

R314.2.1 New construction. Smoke alarms shall be provided in dwelling units. A heat detector or heat alarm shall be provided in the attached garages and shall be installed in garages with dwelling unit(s) above it/them, and it shall be located at each overhead garage door opening. Ridged conduits shall be used.

R314.2.2 Alterations, repairs, and additions. Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, or where an accessory dwelling unit is created within an existing dwelling unit, each dwelling unit shall be equipped with smoke alarms as required for new dwellings.

#### **EXCEPTIONS:**

1. 1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck are exempt from the requirements of this section.
2. Installation, alteration, or repairs of plumbing, electrical or mechanical systems are exempt from the requirements of this section.

R314.2.3 New attached garages. A heat detector or heat alarm rated for the ambient outdoor temperatures and humidity shall be installed in new garages that are attached to or located under new dwellings. Heat detectors and heat alarms shall be installed in a central location and in accordance with the manufacturer's instructions.

**EXCEPTION:** Heat detectors and heat alarms shall not be required in dwellings without commercial power or detached garages.

R314.3 Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. Smoke alarms shall be installed not less than 3 feet (914 mm) horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by Section R314.3.
5. Smoke alarms shall be installed in bedrooms with gas fired appliances or fireplaces.
6. In napping areas in a family home childcare.
7. In the hallway and in the room open to the hallway in dwelling units where the ceiling height of a room opens to a hallway serving bedrooms exceeds that of the hallway by 24" inches (610 mm) or more.
8. Within the room to which a loft is open, in the immediate vicinity of the loft.

R314.4 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R314.2, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all the alarms in the individual dwelling unit. Where an accessory dwelling unit is created within an existing dwelling unit all required smoke alarms, in the accessory dwelling unit and the primary dwelling unit, shall be interconnected in such a manner that the actuation of one alarm will activate all alarms in both the primary dwelling unit and the accessory dwelling unit.

**EXCEPTION:** Smoke alarms and alarms installed to satisfy Section R314.4.1 shall not be required to be Interconnected to existing smoke alarms where such existing smoke alarms are not interconnected or where such a new smoke alarm or alarm is not capable of being interconnected to the existing smoke alarms or power source.

R314.4.1 Heat detection interconnection. Heat detectors and heat alarms in the garage shall be connected to an alarm or a smoke alarm that is located and installed in the dwelling.

R314.6 Power source. Smoke alarms, heat alarms, and heat detectors shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery backup. The wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

R315.1 General. Hereby amended by adding “Illinois Carbon Monoxide Alarm detector act (public act 094-0741) or shall comply with NFPA 72 and or this ordinance, or whichever is more restrictive.

R315.4 Combination Alarms. Combination carbon monoxide and smoke alarm shall be permitted to be used in lieu of single carbon monoxide alarms.

R317.1.2 Ground Contact. Hereby amended by entirely deleting and replacing with “supports for permanent structures intended for human occupancy and which come in contact with the earth or are embedded in concrete exposed to the weather are prohibited.”

R317.1.4 Wood Columns. Hereby amended by entirely deleting and replacing with “Post, poles, and columns supporting structures that are embedded in concrete, in direct contact with the earth, or are embedded in concrete exposed to the weather are prohibited.”

R319.1 Address identifications. Hereby amended by adding the following: “Site addresses shall comply with the Village of Sugar Grove ordinance.” Shall be located on the principal structure, be a minimum of 6” inches in height, contrast to the background and visible from the street or sidewalk at all times.

R323.1 Storm Shelter and Safe Rooms. This section applies to storm shelters were constructed as separate detached buildings or were constructed as safe rooms within buildings for the purpose of providing refuge, and refuge from storms that produce high winds, such as tornados and hurricanes and shall be engineered designed drawings bearing the engineer stamp, seal and signature and shall be constructed to meet the design criteria of ICC 500 ICC/NSSA Chapter 7 of Standard for Design and Construction of Storm Shelters. ICC 500 provides requirements for the design and construction of shelters to protect people from the violent winds of hurricanes and tornadoes. The standard includes special requirements for structural design, including wind loads that are considerably higher than the wind loads required by Section 301.2.1 for all structures. Wind loads for storm shelters will be based upon wind speed contour maps developed especially for this standard. The wind load design requirements are relatively severe when compared to the wind speed maps in Chapter 3. Contour maps for wind speeds in hurricane prone regions were determined based upon a 10,000-year mean return period. The map shows 200 mph (88 m/s) wind speeds on the coast of Florida and the Carolinas, and wind speeds higher than 200 mph (88 m/s) in some locations. These are wind speeds associated with a Category 5 hurricane. Shelter design wind speeds in the central part of the United States (a region called “tornado alley”) are as high as 250 mph (110 m/s). Such high wind speeds, of course, produce flying debris, turning construction materials into deadly missiles. The standard contains specific test methods and pass-fail criteria for window and door protection from flying debris.

R401.1 Application. Hereby amend by entirely deleting and replacing with “The provisions of this chapter shall control the design and construction of the foundation and foundation spaces of all buildings and structures. Wood Foundations are prohibited.”

R402.1 Wood Foundation. and all subsections are hereby amended by entirely deleting.

R403.1 General. Hereby amended by deleting the words “wood foundation” in the first sentence.

R403.1.1 Minimum. The size is hereby amended by entirely deleting and replacing with “Minimum size concrete and masonry footings shall be as follows.” Footing width shall be a minimum of twice the width of the wall it is supporting, or a minimum of 18-inches, whichever is greater. Unless soil conditions warrant a greater width or so designed and certified by a license design professional, footing projections shall be equal to  $\frac{1}{4}$  the width of the footing and the wall must fit center on the footing. Single story structures may be placed 12-inch wide by 42-inch-deep trench footing. Footing thickness shall be a minimum of 8-inches or the same depth as the wall thickness, whichever is greater, or as designed by a licensed design professional. See amended Figure R403.1(1) for illustration.”

R403.1(2) Permanent Wood Foundation Basement Wall Section. Hereby amend by entirely deleting.

R403.1(3) Permanent Wood Foundation Crawl Space Section. Hereby amend by entirely deleting.

R403.2 Footings for wood foundations. Hereby amend by entirely deleting.

R404.2 Wood Foundation walls. and all subsections are hereby amended by entirely deleting.

R405.1 Foundation Drainage. Hereby amend by deleting the Exceptions.

R405.2 Wood foundations. All subsections are hereby amended by entirely deleting.

R406.3 Damp Proofing of Wood Foundation. and all subsections are hereby amended by entirely deleting R406.3.1 and R406.3.2 and R406.3.3 entirely.

R407.1 Wood Column Protection. shall be deleted.

R408.4.1, Crawl Space Floor. new section shall be inserted.

(1) 408.4.1, Crawl Space Floor. In all crawl spaces a minimum of two (2) inch thick slush coat of pour concrete shall be installed over a minimum of four (4) inches of stone in the crawl space, with a minimum of a six (6) mil-thick polyethylene film moisture barrier with all joints lapped a minimum of six (6) inches.

R502 Wood Foundations. shall be deleted.

R502.1.8 Amend to add new section. Prefabricated wood I-Joist and Wood trusses: When there is usable space above and below a floor ceiling assembly, the assembly shall be protected in accordance with the 2021 International Residential Code.

1. A minimum of 5/8" rated "X" drywall and draft stop is to be used per the 2021 International Residential Code.
2. An approved fire suppression system.
3. Or a product tested by ICC and approved by the AHJ or Fire Department.

R502.3 Allowable spans; R502.3.1 Sleeping Areas and attics; and R502.3.2 other floor joists, shall be deleted and inserted, therefore.

502.3 Allowable joist span, Domestic lumber spans for floor joists shall be in accordance with the most recent edition of the Western Wood Products association, Western Lumber Span Tables, based upon the following values: Decks and habitable rooms in private dwellings with a 40# Live Load and a 10# Dead Load, L/360. Also, for sleeping rooms with a 30# Live Load and a 10# Dead Load, L/360

R502.7.1 Bridging. is hereby amended by entirely deleting and replace with "joist shall be supported laterally by solid blocking, or diagonal bridging (wood or metal) at intervals not exceeding 8-feet. The Code Official may approve alternative methods "The exception is not modified and is in full force as written".

R502.11.4 Truss Design Drawings. Hereby amended by adding to number 4,1:", including snow load and adding "13 Layout design."

R504 Pressure Preserved Treated Wood Floors. (on ground) And all subsections are hereby amended by entirely deleting.

R506.1 General. Hereby amend by replacing "3.5 inches thick" with "5 inches thick" and adding the following sentence: Concrete slab-on-ground floors for garage floors shall include a minimum of 6x6x10x10 welded wire fabric embedded in the mid cross section of the slab or the use of fiber mesh reinforcing.

R506.2.1 Fill. Hereby amend by adding the following subsection: "R506.2.1.1 Back-fill under concrete floor at attached garage. The sub-base for pouring concrete garage floor shall be undisturbed inorganic soil. All fill material shall be clean, compactable graded sand. Crushed stones, or gravel placed in compacted lifts. The use of any soil(s) as fill material is prohibited. **Exception:** Compacted non-organic material as a fill shall be permitted when #4 rebar are doweled into the foundation wall a minimum of 4 inches extended into the garage floor area a minimum of (3) three feet. Placed (24) twenty-four inches on center around the (3) three walls forming the garage area. Any practice of soaking the soils with the area will be done in strict conformance with the locally applicable water conservation ordinance and shall be metered."

R506.2.2 Base. Hereby amend by replacing "consisting of clean" with "consisting of compacted clean".



R507.1 Decks. Wood-framed decks shall be in accordance with this section. Decks shall be designed for live load required in Section R301.5 or the ground snow load indicated in Table

R301.2, whichever is greater. For decks using materials and conditions not prescribed in this section, refer to Section R301.

#### R602.10.2.2 Locations of braced wall panels.

A braced wall panel shall begin within 10 feet (3810 mm) from each end of a braced wall line as determined in Section R602.10.1.1. The distance between adjacent edges of braced wall panels along a braced wall line shall be not greater than 20 feet (6096 mm) as shown in Figure R602.10.2.2.

#### **Exceptions:**

1. Braced wall panels in Seismic Design Categories D0, D1 and D2 shall comply with Section R602.10.2.2.1.
2. Braced wall panels with continuous sheathing in Seismic Design Categories A, B and C shall comply with Section R602.10.7.

R703.9 Exterior insulation and finish system (EIFS)/EIFS with drainage. Hereby amended by adding the following sentence: “All exterior insulation finish systems (EIFS) installed on any portion of a one-and-two family dwelling or accessory structure shall be installed only on masonry or metal substructure components. EIFS shall be installed over, next to, or in contact with wood materials.”

R703.9.1 Exterior insulation and finish system (EIFS)/EIFS with drainage. Hereby amended by adding the following subsection: “R703.9.3 EIFS special inspections. All exterior insulation finish system (EIFS) installed on any portion of a one-or two-family dwelling for an exterior covering requires a certification or proper installation be submitted as a special inspection. Before a permit issuance, a statement of special inspection prepared by the registered design professional shall be submitted detailing the individuals and approved agencies intended to be retained for conducting these inspections. This report and signed certification shall be submitted to the village before occupancy will be granted.

R802.10.1 Truss design drawings. Hereby amended by adding to number 4.1:”, including snow load” and adding “number 13. Layout design.”

R903 Weather Protection. Hereby amended by adding the following subsection: “R903.5 Gutters and Down-spouts. All one- and two-family dwellings, townhomes, apartments and condominiums, All garages attached or detached, pavilions, 3-4 Season rooms, and covered decks shall have gutters and down-spouts, unless omission is specifically permitted by the Building and Code Official. All garages attached or detached shall have gutters and down spouts.

R904.2 Compatibility of materials. Roof assemblies shall be of like materials that are compatible with each other and with the building or structure to which the material is applied. The roof covering shall be the same size and color as existing on the structure. Mismatched material, mismatched product and different sizing and color will not be allowed. If this cannot be achieved then it will require a complete roof tear off and full replacement.

R1003.9 Termination. Hereby amended by adding the following sentence: All interior and exterior wood or solid fuel burning fireplaces and stoves shall be equipped with approved spark arrestor.”

Chapter 11 Energy Efficiency. Hereby entirely delete and replaced with “The Energy Conservation Code” must currently edition adopted by the State of Illinois shall be adopted by Village of Sugar Grove to include all amendments.

N1104.3 Dark Sky Compliant Fixtures. For any permanently installed exterior lighting with a total power greater than 30 Watts, the code requires automatic shutoff controls. This can be a manual switch that allows for automatic shutoff actions or a control that automatically turns off the light during daylight hours. Egress and stairway Illumination shall comply with E3903.3 and R303.8

M1201 General. Hereby amended by adding the following subsection: M1201.3 Compliance. The installation of all mechanical appliances, systems, and equipment in one-and two-family dwellings shall comply with the applicable provision of chapter 12 through chapter 23 inclusive, the International Mechanical Code, and all Village of Sugar Grove amendments to the International Mechanical Code.”

M1307.3 Elevation or ignition sources. Hereby amended by adding the following subsection: “M1307.3.2 Heating units in garages. Units designed to condition habitable spaces of the home shall not be located in the garage, except as permitted by the 2021 International Mechanical Code section 303.3 exception #3. The installation shall comply with section 1307.3 Elevation of ignition source.”

1602.2 Return Air Openings. Hereby amended by adding the following subsection: “M1602.2.1 Return Air Vents. Return air vent connected to the heating and cooling system, shall be located in every habitable room of the house, except as prohibited in Section M1602.2 of the code.”

**Chapter 22 Special piping and storage system. Hereby amended by entirely deleting.**

G2401 General. Hereby amended by adding the following subsection: “G2401.2 Compliance.

The installation of fuel-gas piping systems, fuel-gas utilization equipment and related accessories, venting systems and combustion air configurations in one- and two- family dwellings shall comply with the applicable provisions of chapter 24, the International Fuel Gas Code, and all of the Village of Sugar Grove amendments to the International Fuel Gas Code.”

**Add subsection G2401.3 Fuel Gas Detector Adopt NFPA 715 and Illinois House bill 3652 “Fuel Gas Detector and Alarm Act”.**

This adoption becomes active upon approval or codification of these codes. This code would require the installation of fuel gas detectors and alarms in certain buildings, including single family, multi-family, townhomes, condominiums, commercial, institutional structures, residential rental units. This requirement applies to all new construction and buildings undergoing renovations that have appliances that are fueled by propane, natural gas or liquefied petroleum gas. Alarms are required to be hardwired and have a battery backup and shall be interconnected and on its own circuit/breaker. This code further pertains to properties being acquired by sale, exchange or purchased out of foreclosure. Electrical shall be run in ridged conduit.

**Chapter 25 through 32 Plumbing.** Hereby entirely deleted and replaced with “The most current State of Illinois Plumbing Code, Kane County Health Department private sewage disposal system requirements, and any applicable adopted Village of Sugar Grove ordinances and amendments.”

**Chapter 29 Dwelling Unit Fire Sprinkler system.** Delete single family dwelling automatic fire sprinkler in section 313.2 is hereby amended by entirely deleting and replacing with “an automatic residential sprinkler system shall be installed in two-family dwellings. For residential (single family is exempt from sprinkler requirements) subdivisions where all dwellings are equipped throughout with an automatic sprinkler systems installed in accordance with Section P2904, the fire separation distance for nonrated exterior walls and rated projections shall be permitted to be reduced to “0” zero feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining lot provides an open setback yard that is 6 feet or more in width on the opposite side of the property line.

**Chapter 36 through 40.** Hereby deleted and replaced with the 2020 NFPA 70 known as the National Electric Code.

**Chapter 42.** Hereby deleted and replaced with the 2021 International Pool and Spa Code.

The following Appendices are adopted and inserted as part of this code:

- Appendix A – Sizing and Capacities of Gas Piping
- Appendix B – Sizing of Venting Systems Serving Appliances
- Appendix C – Exit Terminals of Mechanical Venting Systems
- Appendix D – Procedure for Safety Inspection of Existing Appliances
- Appendix F – Radon Control Methods
- Appendix H– Patio Covers
- Appendix K – Sound Transmissions
- Appendix N – Venting Methods

## **ILLINOIS STATE MANDATED CODE FOR ELECTRIC VEHICLE CHARGING ACT**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois Electric Vehicle charging act. Signed by the Governor on June 9, 2023

Statute 76 ILCS 1085 Known as the Electric Vehicle Charging Act.. Adopt all sections of the 76 ILCS 1085 as mandated. 765 ILC 1085/1, 765 ILC 1085/5, 765 ILC 1085/10, 765 ILC 1085/15, 765 ILC 1085/20, 765 ILC 1085/25, 765 ILC 1085/30, 765 ILCS 1085/35,

### **RESIDENTIAL:**

Amend the International Residential Code Section N1101.6 to add the following definitions:

**ELECTRIC VEHICLE.** An automotive-type vehicle for on-road use primarily powered by an electric motor that draws current from an onboard battery charged through a building electrical service, electric vehicle supply equipment (EVSE), or another source of electric current.

**Service Panel Capacity:** The service panel must have sufficient capacity to accommodate the circuits and over-current protective devices needed for each EV-Ready space.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** The apparatus was installed specifically for the purpose of transferring energy between the premises wiring and the Electric Vehicle.

**EV-CAPABLE SPACE.** A dedicated parking space with electrical panel capacity and space for a branch circuit dedicated to the EV parking space that is not less than 40-ampere and 208/240-volt and equipped with raceways, both underground and surface mounted, to enable the future installation of electric vehicle supply equipment. For two adjacent EV-Capable spaces, a single branch circuit is permitted.

**EV-READY SPACE.** The code requires new construction to provide EV-Ready spaces, which are parking spaces with the necessary electrical infrastructure to support future EV charging, and EV-Installed spaces, which have the charging equipment already installed. A designated parking space which is provided with a dedicated branch circuit that is not less than 40-ampere and 208/240-volt assigned for electric vehicle supply equipment terminating in a receptacle or junction box located in close proximity to the proposed location of the EV parking space. For two adjacent EV-Ready spaces, a single branch circuit is permitted.

R103.2 Information on construction documents.

- Electric Vehicle charging details, plans and locations.
- Building Permit
- Contractor Registration
- Architectural Standards; Building Codes
- Installation by a qualified contractor- Electrical Contractor

#### **R401.4 (IRC N1101.15) ELECTRIC VEHICLE CHARGING.**

Where parking is provided, new construction shall provide electric vehicle spaces in compliance with Sections R401.4.1 through R401.4.4 (IRC N1101.15.1 through IRC N1101.15.3). Where more than one parking facility is provided on a site, electric vehicle parking spaces shall be calculated separately for each parking facility.

**Exception:** This section does not apply to parking spaces used

##### **R401.4.1 (IRC N1101.15.1) Electric vehicle ready circuit.**

The service panel, shall provide sufficient capacity and space to accommodate the circuit and over-current protective device for each EV-Ready Space.

##### **R401.4.2 (IRC N1101.15.2) New single family and two-family dwelling units.**

Single family and two-family dwelling units shall provide not less than [number] of [EVSE-Installed, EV-Ready Spaces and/or EV-Capable Spaces] per dwelling unit.

##### **R401.4.3 New multifamily dwellings (three or more units).**

EVSE-Installed, EV-Ready Spaces and EV-Capable Spaces shall be provided in accordance with Table R401.4.3. Where the calculation of percentage served results in a fractional parking space, it shall round up to the next whole number.

#### **TABLE R401.4.3:**

#### **EVSE-INSTALLED, EV-READY AND EV-CAPABLE SPACE REQUIREMENTS**

##### **R401.4.4 (IRC N1101.15.3) IDENTIFICATION.**

Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EVSE. Construction documents shall also provide information on amperage of future EVSE, raceway methods, wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformers, meet the requirements of this code. Parking spaces equipped with EVSE shall be identified by signage. A permanent and visible “EV-Capable” or “EV-Ready” label shall be posted in a conspicuous place at the service panel to identify each panel space reserved to support EV-Capable or EV-Ready Spaces, respectively and at the termination point of the raceway or circuit termination point.

#### **NOTES:**

There are other important code references to examine in parallel to IRC Chapter 11 requirements. If not consistent with the latest editions, update:

- Section 625 of the National Electrical Code (NFPA 70)
- Section E3702.13 of the International Residential Code

See Section R328.10 of the International Residential Code and Section 1207.11.10 of the International Fire Code for provisions on the use of electric vehicles as energy storage systems.

## **COMMERCIAL:**

Amend the International Energy Conservation Code Section C202 to include the following definitions:

**ELECTRIC VEHICLE.** An automotive-type vehicle for on-road use primarily powered by an electric motor that draws current from an onboard battery charged through a building electrical service, electric vehicle supply equipment (EVSE), or another source of electric current.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** The apparatus, installed specifically for the purpose of transferring energy between the premises wiring and the Electric Vehicle.

**EV-CAPABLE SPACE.** A dedicated parking space with electrical panel capacity and space for a branch circuit that supports the EV parking space that is not less than 40-ampere and 208/240-volt and equipped

with raceways, both underground and surface mounted, to enable the future installation of electric vehicle supply equipment. For two adjacent EV-Capable spaces, a single branch circuit is permitted.

**EV-READY SPACE.** A designated parking space which is provided with a dedicated branch circuit that is not less than 40-ampere and 208/240-volt assigned for electric vehicle supply equipment terminating in a receptacle or junction box located in close proximity to the proposed location of the EV parking space. For two adjacent EV-Ready spaces, a single branch circuit is permitted.

Further amend the IECC-Commercial by adding the following sections:

C103.2. Information on construction documents.

14. Electric Vehicle charging details and locations.

C401.4 Electric vehicle parking.

Where parking is provided, new construction shall provide EVSE-installed spaces and facilitate future installation and use of EVSE through the provision of EV-Ready Spaces and EV-Capable Spaces provided in compliance with Sections C401.4.1 through C401.4.2, Where more than one

parking facility is provided on a site, EVSE-installed, EV-Ready Spaces and EV-Capable Spaces shall be calculated separately for each parking facility.

C401.4.1 New commercial, multi-family buildings, and condominium unit owners and renters.

EVSE-installed spaces, EV-Ready Spaces and EV-Capable Spaces shall be provided in accordance with Table C401.4.1 for Commercial buildings and Table C401.4.2 for multifamily buildings. Where the calculation of percentage served results in a fractional parking space, it shall be rounded up to the next whole number.

The circuit shall have no other outlets. The service panel shall include an over-current protective device and provide sufficient capacity and space to accommodate the circuit and over-current protective device, and the termination point shall be located in close proximity to the proposed location of the EV parking spaces.

#### **TABLE C401.4.1**

#### **EVSE-INSTALLED, EV-READY SPACE AND EV-CAPABLE SPACE REQUIREMENTS FOR NEW COMMERCIAL BUILDINGS**

#### **TABLE C401.4.2**

#### **EVSE-INSTALLED, EV-READY AND EV-CAPABLE SPACE REQUIREMENTS FOR NEW MULTIFAMILY BUILDINGS**

#### **C401.4 IDENTIFICATION.**

Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EVSEs. Construction documents shall also provide information on amperage of future EVSE, raceway methods, wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformers, comply with the requirements of this code. Vehicle spaces equipped with EVSE shall be identified by signage. A permanent and visible “EV-Capable” or “EV-Ready” label shall be posted in a conspicuous place at the service panel to identify each panel space reserved to support EV-Capable or EV-Ready Spaces, respectively and at the termination point of the raceway or circuit termination point

The following Appendices are adopted or deleted as part of this code:

- Part IV – Chapter 44 Reference Standards
- Appendix AA– Sizing and Capacities of Gas Piping or refer to the State of Illinois Plumbing Code or
- Whichever is more restrictive.
- Appendix AB – Sizing of Venting Systems Serving Appliances
- Appendix AC – Exit Terminals of Mechanical Venting Systems
- Appendix AD – Procedure for Safety Inspection of Existing Appliances

- Appendix AE – Manufactured Housing used as Dwellings.
- Appendix AF – Radon Control Methods.
- Appendix AG – Piping Standards for Various Applications or refer to the State of Illinois Plumbing Code
- or whichever is more restrictive.
- Appendix AH – Patio Covers
- Appendix AI – Private Sewage Disposal
- Appendix AJ – Existing Building and Structures
- Appendix AK – Sound Transmissions
- Appendix AL – Permit Fees entirely delete and refer to the Village of Sugar Grove approved Fee
- schedule and ordinance.
- Appendix AP – Sizing of water piping system or reference the State of Illinois Plumbing Code.
- Appendix AQ – Tiny Houses
- Appendix AM – Home Day Care- Amended for R-3 Occupancy to include R1, R2.
- Appendix AN – Venting Methods
- Appendix AT (RE)- Solar ready Provision- detached one-and two-family dwellings, townhouses
- **Delete the following Appendix**
- **Appendix AR – Light Clay Construction Delete Entirely This Section.**
- **Appendix AS- Strawbale Construction Delete Entirely This Section.**
- **Appendix AU- Cob Construction (Monolithic Adobe) Delete Entirely This Section.**
- **Appendix AW- 3D Printed Building Construction Delete Entirely This section**



## **2021 International Building Code.**

**SECTION ONE:** Title 9, Chapter 1 of the Village Code shall be amended as follows:

Adoption: That a certain document entitled "The International Building Code, 2021 Edition" published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, one copy of which is on file at the Building Division of the Community Development Department of the Village of Sugar Grove, is hereby adopted as the "Building Code" for the Village of Sugar Grove for regulating the design, construction, quality of materials, quality of workmanship, erection, equipment, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of every building or structure or any appurtenances connected or attached to such buildings or structures in the Village of Sugar Grove as provided; and each and all of the regulations, provisions, penalties, conditions and terms of said "International Building Code 2021 Edition" are adopted and made a part hereof, as if fully set out in the Code with the additions, insertions, deletions, and changes prescribed in this ordinance.

**SECTION TWO:** That these sections of said code adopted herein are revised and amended as follows:

Amendments: 2015 to the 2021 International Building Code

101.1 Title. Hereby amended by replacing (NAME OF JURISDICTION)" with "the Village of Sugar Grove."

101.4.3 Plumbing. Hereby amended by replacing "The provisions of the International Private Sewage Disposal Code shall apply to private sewage disposal systems" with "Private sewage disposal systems shall comply with the most current State of Illinois Plumbing Code, Kane County Health Department private sewage disposal system requirements, and any applicable adopted Village of Sugar Grove ordinance and amendments." And by adding the following sentence: "All references to the International Plumbing Code shall be deemed to mean the Illinois Plumbing Code."

101.4 Reference codes and standards. Hereby amended by adding the following subsection: Section 101.4.8. Flood Plain. For buildings and structures located in whole or part in flood hazard areas. As established on local floodway rate maps, the Kane County Storm Water Ordinance, FEMA, Village of Sugar Grove flood plain ordinance, and all applicable federal, state, and locally adopted flood plain ordinances shall apply to floodplain construction."

102.7 Workmanship. Amend to read- In construction, workmanship refers to the quality and skill with which a task or project is performed. It encompasses the level of expertise, attention to detail, and care a worker applies to their craft, directly impacting the final product's quality, durability, and aesthetics. Good workmanship is crucial for ensuring safe, functional, and visually appealing structures. Repairs, maintenance work, alterations or installations that are caused directly or indirectly by the enforcement of this code and the International Building Code, International Residential Code, International Energy Code, International Fuel Gas Code, International

Mechanical Code, International Swimming Pool and Spa Code, International Solar Energy Provision, Illinois

Accessibility Code, State of Illinois Plumbing Code, and the NFPA 70, State and Local Ordinance and Amendments. Nothing in this code shall be construed to cancel, modify, or set aside any provision of the International Residential Building, Zoning Code, Manufactures installation requirements, and all State and Local Ordinance and amendments.

102.9 Dumping and Obstruction. Amended by adding this section: 102.9 Dumping and Obstruction: "It shall be unlawful for any person to cause, create or maintain (except as by ordinance may be provided) illegal dumping or any obstruction of any construction material, or artifice on any street, alley, sidewalk, right of way, parkway, or other public property. Where the Public Works Director or Building and Code Official or his/her designee finds any violation regulated by this code. The Public Works Director or the Building and Code Official or his/her designee is authorized to issue a ticket/fine in the amount of \$250.00 for the first offense and up to \$750.00 per day for everyday violation has occurs, up to 30 days."

103.1 Creation of enforcement agency. Hereby amended by replacing "building official" with "Building and Code Official" and adding the following sentence: "All reference to Building Official in the 2021 International Building Code shall be construed to refer to the "Building and Code Official".

103.2 Appointment. Hereby amended by replacing "The Building and Code official shall be appointed by the jurisdiction." with "The Director of Community Development or his designee shall serve as the Building and Code Official, for the Village of Sugar Grove".

105.2 Work exempt from permit. Hereby amended by entirely deleting items numbered Building 1, 2, 3, 4, 5, 6, 9, 10, and 12.

105.2 Work exempted from permit Building:

1. Amend building Exemption #1 as follows: One-story detached accessory structures used a tool and storage sheds, playhouses, and similar uses provided the floor area not greater than 50 square feet.
2. Amend building exemption #2 as follows: Delete provision in its entirety and replace with "Existing permitted gates, fences not exceeding 20% of the existing linear length, provided repairs or replacement is fabricated with materials of the same size and dimension."

105.3(8) Proposed Grading and Final Grading requirements. Amended by adding this section: 105.3(8) Proposed Grading and Final Grading requirements. "Any permitted work that requires the disturbance of the existing grade, shall have a stamped survey, signed by a licensed surveyor or professional engineer submitted to the building department along with the permit application. It shall indicate proposed new grades andproposed improvement such as a pool, spa, hot tub, retaining walls above and below grade, storm shelter, etc. The homeowner shall post a cash bond of \$2500.00 at the time of permit pickup which will be refunded after the as-built grading survey

has been submitted and approved. The requirement for this grading survey is at the discretion of the Building Official on a case-by-case basis".

105.5 Expiration. Hereby amended by adding the following sentence: "Every permit shall expire and become invalid after a period of one year from the date of issuance. Invalid and expired permit shall be subject to additional plan review including new fees for such review as well as administrative fees for issuing said permit."

105.7 Placement of Permit. Hereby amended by entirely deleting and replacing with "The building permit card shall be kept on the site of the work and be visible from the street until such time as a certificate of occupancy permit has been issued, or a final inspection has been performed and approved."

107.3.1 Approval of construction documents. Approval of construction documents is hereby amended by entirely deleting and replacing with "When the building and code official issues a permit, the construction documents shall be approved in writing or by stamp. One set of the approved construction documents as reviewed shall be retained by the Building and Code Official. The other set shall be returned to the applicant and shall be kept on the site of the project and shall be open to inspection by the building and code official or his or her designee. Additional copies may be required at the discretion of the Building and Code Official."

109.6 Refunds . Hereby amended by entirely deleting and replacing with "The building and code official shall authorize the refunding of fees on a case-by-case basis.

110.1 General. Hereby amended by adding the following sentence: Construction or work for which a permit is required shall be subject to inspection by the building and code official and such construction or work shall remain accessible and exposed for inspection purposes until approved. The Contractor/homeowner shall provide and have a ladder or lift in place, have a clear path of travel, tarp or plastic on floor and stairs to protect floor and carpet. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of the other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building and code official or his/her designee nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection."

113.1 General. Hereby amended by replacing "The board of appeals shall be appointed by the governing authority and shall hold office at its pleasure." with "The Board of Appeals shall consist of the Village Board of the Village of Sugar Grove.

Section 113.3 Qualification is hereby amended by entirely deleting.

114.4 Violation penalties. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements of the approved construction documents or directive of the

building and code official or his/her designee, or of a permit or certificate issued under the provisions of this code, shall be guilty of a petty offense, punishable by a fine of minimum \$250.00 and up to \$750.00 per day for everyday the violations occurred, up to 30 days or by imprisonment not to exceed 180 days, or both such fines and imprisonment.

115.1 Stop Work order. Where the building and code official or his/her designee find any work regulated by this code being performed in a manner contrary to its provisions of this code or in a dangerous or unsafe manner, the building and code official or his/her designee is authorized to issue a stop work order and issue a ticket/fine in the amount " \$130.00" For resident and \$250.00 for contractors for first offence and up to \$750.00 per day for everyday the violation occurred, up to 30 days ."

115.3 Emergency. Where an emergency exists, the building and code official or his/her designee shall not be required to give written notice prior to stopping work."

115.4 Failure to comply unlawful continuance. Hereby amended by replacing "shall be subject to penalties as prescribed by law. "with "a petty offense, punishable by a fine of minimum \$130.00 for resident and \$250.00 for contractors and up to \$750 .00 per day for everyday the violation occurred, up to 30 days or by imprisonment not to exceed 180 days, or both such fines and imprisonment."

202 Definitions Townhomes. Hereby amended by entirely deleting and replacing the stated definition of a townhouse with "Townhouse" a single-family dwelling unit is constructed in a group of two to six attached units in which each unit extends from the foundation to the roof and with a yard or public way on not less than two sides. Building where more than six dwelling units are attached in this manner shall be governed by code provisions applicable to multiple family dwellings, rather than the provisions of this one-and two-family dwelling code."

404.10 Exit stairways in an atrium. Where an atrium contains an interior exit stairway all the following sections, subsections (1-5) shall be met.

404.11 Interior exit stairway discharge. Discharge of interior exit stairways through an atrium shall be in accordance with Section 1028.

406.1.1 Vehicle Barriers. Bollards are in the news as business owners, municipalities and consumers look for solutions to protect pedestrians, store fronts, customers, medical facilities from intentional and accidental vehicle collisions. Carbon and steel bollards are available in several styles and configurations to meet diverse safety and architectural requirements. Safeguards offer the following types: Fixed Steel Bollards are permanently installed in concrete to create visual deterrents and some better protections from just concrete vehicle stops. Fixed bollards give higher protection around gas meters, trash corrals, commercial overhead doors, outdoor seating, fire hydrants, parking lots, high hazard material such as propane tanks and cages and other infrastructure or high-risk areas.

Fixed bollards are specifically required to protect the structure from vehicular impact and ensure accessibility. Bollards should be designed to resist specific impact loads. For passenger vehicles

the load is a minimum of 6,000 lbs., in accordance with ASTM Standards AFTM F 2656, Section 4.5 of ASCE 7, the 2018 Illinois accessibility code, 2021 Fire Code sections 312 & 507.5.6 and the 2021 IBC. Bollards shall be installed at all new construction, to include high hazard buildings.

1. Bollards shall be placed in front of any parking space facing a building and door.
2. Bollards shall not be less than 4" inches in diameter and concrete filled.
3. Bollards shall be spaced appropriately to prevent vehicles from passing through, typically 3' to 5' feet apart.
4. Bollards shall be tall enough to be visible to a driver but not so tall as to obstruct pedestrian visibility 36" to 48".
5. Bollard's depth shall be installed 42" inch hole.
6. Bollards must not obstruct accessible routes or accessible means of egress.
7. Bollards shall be installed around outdoor seating area(s), gas meters, trash corrals, commercial overhead doors, fire hydrants, parking lots, high hazard material such as propane tanks and cages and other infrastructure or high-risk areas or in accordance with the Sugar Grove AHJ and the Sugar Grove Fire Department.
8. Bollards do not replace the requirements for the installation of curbs or vehicle stops.
9. Bollards can be used as part of the base for handicapped parking signs and EVES charging stations.
10. Bollards shall be installed at Automatic gate closures.
11. Bollards shall be installed to protect exterior outdoor stairs.
12. Bollards shall not prevent emergency personnel from accessing the building area.
13. Bollards shall be installed around any high hazard area identified by Village Engineer, Zoning Administrator, Building Official or the Sugar Grove Fire District.
14. Crash Rated Bollards are required to be ASTM certified and tested to meet rigorous impact standards, these bollards are used to prevent low or high-speed vehicle intrusions in locations such as storefronts, municipalities, medical facilities, sidewalks, stadiums and airports.
15. Removable bollards are designed for flexibility, removable bollards can be unlocked and taken out when access is needed, such as in loading zones or for emergencies or maintenance.
16. Retractable Bollards, these bollards retract into the ground when not in use, offering a convenient solution for areas that require controlled vehicle access.
17. Collapsible Bollards are used in parking areas, driveways and places where temporary access control is required, these bollards can be locked upright to restrict vehicle access or folding down to allow access such as for bike trails.

406.3.2.1 Dwelling unit separation. Hereby amended by replacing all references to "1/2- inch gypsum board" with "5/8- inch type "X" gypsum board."

406.6.4 Mechanical -access enclosed parking garage.

- Shall be in accordance with section 406 .6.4.1 through 406 .6.4.4.

407.2.7 Domestic cooking appliances. In Group 1-2 occupancies, installation of cooking appliances used in domestic cooking facilities shall comply with all items listed (1 through 6) of this section. **Exception: 1&2**

411.1. Special amusement areas. Special amusement area having an occupant load of 50 or more shall comply with the requirements for Group A occupancy and comply with all sections 4.11.1 through 411.7. Special amusement areas having an occupant load of less than 50 shall comply with the requirements for a Group B occupancy and section 411.1 through 411.7. Special amusement areas shall comply with the requirement for proper floor drains in the Illinois Plumbing code and proper ventilation in accordance with the International Mechanical code.

420.8 Group 1-1 cooking facilities. In Group I-1 occupancies, rooms or spaces that contain a cooking facility with domestic cooking appliances shall be permitted to be open to the corridor when all of the following criteria in 1 through 4 are met.

420.9 Domestic cooking appliances. In Group I-1 occupancies, installation of cooking appliance used in domestic cooking facilities shall comply with all of the following criteria in 1 through 6 to include the exception 1 and 2.

423.3.1 Dedicated storm shelters. A facility designed to be occupied solely as a storm shelter shall be classified as a Group A-3 for the determination of requirements other than those covered in ICC 500.

**Exceptions:**

- The occupancy for dedicated storm shelters with an occupancy of fewer than 50 persons as determined in accordance with ICC 500 shall be in accordance with section 303.
- The occupancy category for a dedicated residential storm shelter shall be the Group R occupancy served.

423.3.2 Storm shelter within host buildings. Where designated storm shelters are constructed as a room or space within the host building that will normally be occupied for other purposes, the requirements of this code for the occupancy of the building, or the individual rooms or spaces thereof, shall apply unless otherwise required by ICC 500.

601 & 602 & 603 New fire resistance requirements for mass wood type 4 (A, B, C) construction type. Chapter 601 & 602 Fire resistance requirements for mass wood establishes five types of construction in which each building must be categorized. These chapters look at the material used in the building (combustible or noncombustible) and the extent to which building elements such as the building frame, roof, walls and floor can resist fire. Depending on the type of construction and the specific building element, fire resistance of 1 to 3 hours is specified.

717.4 Access and identification of fire and smoke dampers. Access and identification of fire and smoke dampers shall comply with Sections 717.4.1 through 717.4.2

903.2 Where required. Hereby amended by adding the following sentences: "an automatic sprinkler system shall be provided throughout all buildings or structures where a fire area of any use or occupancy classification or combination of uses or occupancy exceeds 5,000 square feet."

903.2.1.1 Group A-1

1. Change to read Zero square feet.

903.2.1.2 Group A-2

1. Change to read Zero square feet.

903.2.1.3 Group A-3

1. Change to read Zero square feet.

903.2.1.4 Group A-4

1. Change to read Zero square feet.

903.2.1.5 Group A-5

1. Change to read Zero square feet.

903.2.3 Group E

- 1, Change to read Zero square feet.

3. Remove exceptions.

903.2.4 Group F-1

1. Change to read 5000 square feet.

3. Change to read 5000 square feet.

903.2.7 Group M

1. Change to read 5000 square feet.

3. Change to read 5000 square feet.

903.2.9 Group S-1

1. Change to read 5000 square feet.

3. Change to read 5000 square feet.

#### 903.2.9.1 Repair Garage

1. Change to read 5000 square feet.

3. Change to read 5000 square feet.

#### 903.2.9.2 Bulk storage of tires

1. Change to read 5000 square feet

#### 903.2.10 Group S-2 Enclosed parking garages.

1. Change to read Zero square feet Remove exceptions.

903.2.13. Hereby amended by adding the following section: Group U. An automatic sprinkler system shall be provided throughout buildings containing a Group U Occupancy where the following condition exists: Where the building exceeds five thousand (5,000) square feet.

903.2 .14. Hereby amended by adding the following section: Group B. An automatic sprinkler system shall be provided throughout buildings containing a Group B occupancy where one (1) of the following conditions exist: (1) Where the building exceeds five thousand (5,000) square feet; (2)The building has an occupant load of one hundred (100) or more; or, (3) The building exceeds two (2) stories in height.

903.3.1.1.1 NFPA 13 Sprinkler systems. **Exempt Locations.** Delete items #3 and item #4.

903.6 Valve Room. Main water supply control valves for fire suppression or standpipe systems regulated by this code shall be enclosed in an approved valve room.

903.6.1 Construction. Valve rooms shall be enclosed with fire barriers and fire door assemblies having a fire resistance of at least one hour. Valve rooms shall be large enough to enclose all equipment to be protected plus at least three feet of service access around the equipment.

903.6.3 Heat and Ventilation, Valve rooms shall be equipped with ventilation as required for utility rooms/special areas in the mechanical code as listed in the referenced standards. Fixed heating equipment shall be provided in accordance with the mechanical code as listed in the reference standards and shall be capable of maintaining a minimum ambient temperature of 40 degrees Fahrenheit within the valve room. Electrical fixed heating equipment, if used, shall be powered from a dedicated branch circuit equipped with a breaker lock.

903.6.4 Drainage. Valve rooms shall be equipped with a floor drain in accordance with the Illinois plumbing code as listed in the reference standards,



905.3 Required Installations. **Remove Exception** R-3 occupancies.

905.3.1 Height. Height hereby amended to read as follow: Class 2 standpipe systems shall be installed throughout buildings when the following conditions exist in (1-3) and where the floor level of the highest story is (3) stories with corridors more than twenty-five (25) feet and all buildings which are four (4) or more stories in height, including penthouses.

905.12 Additional Standpipe. Hereby amended by adding the following section: Additional standpipe connections where required. Additional standpipe connections shall cover all areas of the building with one hundred (100) feet of hose and a thirty (30) foot spray of water.

907.2.9.1 Manual fire alarm system. Hereby amended by deleting the exceptions.

907.2.24. Hereby amended add the following section: An automatic fire alarm detection system shall be installed in accordance with NFPA 72 and section 907.2 as amended, in multiple attached single -family dwellings (i.e., townhouses dwellings, condominiums, apartments) if the building contains three (2) or more units.

1009.2.1 Elevators. required is hereby amended to add the following exception:

(1) In buildings where the corridor is greater than 25' feet in length on the 2nd or 3rd story exit.

1013.1 Where required. Hereby amended by entirely deleting exception #1 and replacing it with #1 Exit signs are not required in rooms or area where only one exit or exit access are provided and it is obviously and clearly identifiable as an exit."

1102.1 Design. Add the language: Compliance with the current edition of the Illinois Accessibility Code is required."

1110.2.2 Water closets design for assisted toileting. Water closets designed for assisted toileting shall comply with Sections 1110.2.2.1 through 1110.2.2.6.

1505.9 New roofing fire classification for solar PV panels of roofs.

1505.9. Roof top mounted photovoltaic (PV) panel systems. Roof top mounted photovoltaic (PV) panel systems shall be tested, listed, and identified with a fire classification in accordance with UL 2703. The listed systems shall be installed in accordance with the manufacturer's installation instructions and their listing. The fire classification shall comply with Table 1505.1 and 1507.15 and shall be installed in accordance with ANSI/SPRI VF-1.

1605 I 1606 I 1607 New structural load details. Hereby adopted in it entirely.

1605.1 Structural Design General. Buildings and other structures and portions there of shall be designed to resist the strength load combinations specified in ASCE 7, Section 2, 3, the allowable stress design load combination of Section 1605.1.1 and 1605.2.

1606.1 Dead Loads General. Dead Loads are those loads defined in Chapter 2 of this code. Dead loads shall be permanent loads and shall comply with 1602.2 and 1606.3 with exceptions.

1607.1 Live Loads General. Live loads are those loads defined in Chapter 2 of this code and therefore be designed to comply with section 1607.2 through 1607.8.2.

1608 Snow Loads Hereby amended by adding the following subsection: "1608.4 Snow Load minimum. All structural designs in the Village of Sugar Grove shall meet or exceed a 30-pound ground snow load minimum with no reductions."

1612.3 Establishment of flood hazard areas. Hereby amended by replacing "(INSERT NAME OF JURISDICTION)" with "the Village of Sugar Grove" and "(INSERT DATE OF ISSUANCE)" with "most recent."

1612.4 Design and construction. Hereby amended by adding the following", the Kane County storm water ordinance, FEMA, Village of Sugar Grove flood plain ordinance, and all applicable federal, state, and locally adopted flood plain ordinances."

1807.1 Foundation wall. Are hereby amended by adding the following sentence: "Buildings and structures and walls enclosing habitable or occupiable rooms shall be provided with a continuous foundation."

1807.1.4 Permanent wood foundation systems. Are hereby amended by entirely deleting.

1809.12 Timber footings. Are hereby amended by entirely deleting.

1810.3.2.4 Timber. Are hereby amended by entirely deleting.

## **2209 New steel storage rack requirements.**

2209.1 Steel storage racks. The design, testing and utilization of steel storage racks made of cold formed, or hot-rolled steel structures shall be in accordance with Sections 2209.2, 2209.3 and with RMI ANS/MH 16.1 Where required by ASCE 7, the seismic design of steel storage racks shall be in accordance with Section 15.5.3 of ASCE 7.

## **2303.4 New truss diagonal bracing requirements.**

2303.4 Wood trusses shall comply with Sections 2303.4.1 through 2303.4.7.

## **2304.10 Update to wood fastener schedule.**

2304.10 Connectors and fasteners. Connectors and fasteners shall comply with the applicable provisions of Sections 2304.10.1 through 2304.10.8.

2308.4.2 Floor joists. Hereby amended by adding the following subsection: 2308.4.2.5 Fire protection of floors. Floor assemblies in buildings without an automatic sprinkler system that are not required elsewhere in this code to be fire-resistance rated, shall be provided with 5/8-inch type "X" gypsum wallboard membrane, 5/8-inch structural panel equivalent on the underside of the floor framing member.

**Exceptions:**

- Floor assemblies that are located directly over a space protected by an automatic sprinkler system.
- Wood floor assemblies using dimension lumber or structural composite lumber equal to or greater than 2-inch by 10-inch (50.8mm by 254 mm) nominal dimension, or other approved floor assemblies demonstrating equivalent fire performance.

Chapter 29 Plumbing systems. Delete this chapter in its entirety, the provisions of the Illinois Plumbing Code shall govern the erection, installation, alteration, repairs, relocations, replacement, addition to use or maintenance of plumbing equipment and systems.

Section 3000. Elevators and conveying systems and all other sections and referenced codes regarding elevators and related equipment, if applicable.

Section 3002.4 Elevator Car to Accommodate ambulance Stretcher is hereby amended to read. "Where elevators are provided in buildings, not fewer than one elevator, shall be provided for the fire department emergency access to all floors regardless of rise. Such elevator cars shall be of such size and arrangement to accommodate a minimum 24" inch by 84" inch ambulance stretcher in the horizontal open position and shall be identified by the International Symbol for emergency medical services (Star of Life}. The symbol shall not be less than 3x3 inches high and wide (76 mm x 76 mm) and shall be placed inside on both sides of the main lobby hoist way door frames.

**Note: As per the IBC, this is required for buildings which are 4 floors or higher. This change would be required regardless of floors.**

3004.4 Personnel and material hoists. Hereby amended by adding the following sentence: All miscellaneous hoisting and elevating equipment shall be subject to testing and inspection as required by the State Fire Marshal or the AHJ to ensure safe operation.

3005.1 Access is hereby amended by adding the following: " This means is not to be used as a passageway through the space to other areas of the building."

3115 New requirements for shipping containers used as buildings.

3115.1 intermodal Shipping Containers General. The provisions of Section 3115 and other applicable sections of this code shall apply to intermodal shipping containers that are repurposed for use as buildings or structures, or as a part of buildings or structures.

**Chapter 32 Encroachment into the public Right-of-away. Hereby amended by entirely deleting.**

3313 / 3314 New water supply requirements during construction for firefighting.

3313.1 Water Supply for Fire Protection were required.

An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible building materials arrive on the site, on commencement of vertical combustible construction, and on installation of a standpipe system in buildings under construction, in accordance with Section 3313.2 through 3313.5 with exceptions

3314.1 Fire Watch during Construction. A fire watch shall be provided during nonworking hours for construction that exceeds 40 feet in height above the lowest adjacent grade at any point along the building perimeter, for new multistory construction with an aggregate area exceeding 50,000 square feet per story or as required by the Fire Code Official or the AHJ.

Adopt the Referenced Standards and the Appendix of the 2021 International Building Code.

**2021 ILLINOIS STATE MANDATED CODE FOR ELECTRIC VEHICLE CHARGING ACT**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois Electric Vehicle Charging Act 765 ILCS 1085 signed into law by the Governor on June 9, 2023 and when into effect on January 1, 2024 Governor of the State of Illinois signed Statute 76 ILCS 1085 Known as the Electric Vehicle Charging Act.

Adopt all sections of the 76 ILCS 1085 as mandated.

765 ILC 1085/1, 765 ILC 1085/5, 765 ILC 1085/10, 765 ILC 1085/15,

765 ILC 1085/20, 765 ILC 1085/25, 765 ILC 1085/30, 765 ILCS 1085/35,

**ALLY'S LAW**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois State law known as the Alley law." The Ally's Law, was signed into law August of 2005 also known as the Restroom Access

What it does: This law requires retail establishments to allow individuals with certain medical conditions, such as inflammatory bowel disease (IBD), to use an employee restroom if no public restroom is available. The law is named after Ally Bain, a teenager with Crohn's disease who was denied access to a restroom at a store and had an accident.

### **PROPERTY TEMP CONTROLS-Seniors**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois State law known as the Property-Temp control-Seniors which was signed into law on June 30, 2023 Public Act 103-0161 for Seniors 55 and older

### **GAS LEAK DETECTOR BILL**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois State law known as the Gas Leak Detector Act, Public Act 103-0120 also known as House Bill 3652 which was passed in 2025 to take effect on January 1, 2026 or at the time of codification of the 2021 IRC and IBC

### **SMOKE DETECTOR ACT**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois State law known as the Smoke Detector Act , the new "detector" laws. Effective January 1, 2023, an update to Illinois's Smoke Detector Act requires residents to replace old alarms with new ones that have a sealed, 10-year battery. This applies to older units that use removable batteries and are not hardwired.

### **FUEL GAS DETECTOR AND ALARM ACT**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois Fuel Gas Detector and Alarm Act Code. Signed by the Governor on June 20, 2023, known as Public Act 103-0120 and HB3652 and became effective January 1, 2026. Village to amend the effective date to the date of approval of this code.

Adopt NFPA 715 “Fuel Gas Detector and Alarm Act”. This adoption becomes active upon approval or codification of these codes. This code would require the installation of fuel gas detectors and alarms in certain buildings, including single family, multi-family, townhomes, condominiums, commercial, institutional structures, residential rental units. This requirement applies to all new construction and buildings undergoing renovations that have appliances that are fueled by propane, natural gas or liquefied petroleum gas. Alarms are required to be hardwired and have a battery backup and shall be interconnected and on its own circuit/breaker. This law further pertains to properties being acquired by sale, exchange or purchased out of foreclosure. Electrical shall be run in ridged conduit/EMT conduit.

## **2021 INTERNATIONAL SOLAR ENERGY PROVISION**

The Village of Sugar Grove is obligated to enforce the most recently adopted Illinois Energy Conservation Code which follows the ICC international Energy code and the American Society of Heating, Refrigeration and Air Conditioning Engineers (2016 ASHRAE) Standard 90.1 Energy Standards for building except low-rise residential buildings amendments to the Capital Development Board.