

VILLAGE OF DOWNERS GROVE
Report for the Village
10/3/2023

SUBJECT:	SUBMITTED BY:
Adoption of 2021 ICC Building and Fire Codes	Stan Popovich, AICP Director of Community Development

SYNOPSIS

Ordinances have been prepared adopting the International Code Council's (ICC) 2021 series of building and fire codes.

An Ordinance has also been prepared updating Chapter 7 of the Municipal Code concerning general building permit submission requirements.

STRATEGIC PLAN ALIGNMENT

The goals for 2023-2025 include *Exceptional Municipal Services* and *Steward of Financial, Environmental and Neighborhood Sustainability*.

FISCAL IMPACT

N/A

RECOMMENDATION

UPDATE & RECOMMENDATION

This item was discussed at the September 12, 2023 Village Council meeting. Staff recommends approval on the October 3, 2023 Active Agenda.

BACKGROUND

The Village's current building codes were adopted in August, 2017. The building codes which were adopted at that time were the 2015 edition of the International Code Council (ICC) codes. Staff is proposing that the Village update to the 2021 edition of the ICC's building and fire codes. The specific codes targeted for adoption are:

- *2021 International Residential Code (IRC)* – governs construction of one- and two-family residential buildings and townhomes
- *2021 International Building Code (IBC)* – governs construction of all other use types

- *2021 International Property Maintenance Code (IPMC)* – governs maintenance of all existing buildings and properties
- *2021 International Fire Code (IFC)* – governs construction and maintenance of life safety systems in commercial and multi-family buildings
- *2021 International Fuel Gas Code (IFGC)* - governs installation of fuel-gas piping systems and fuel gas appliances
- *2021 International Mechanical Code (IMC)* - governs mechanical systems utilized to provide control of environmental conditions and related processes within buildings
- *2021 International Swimming Pool and Spa Code (ISPSC)* - governs aquatic recreation facilities, pools and spas
- *2020 National Electric Code (NEC)* - governs installation of electrical wiring and equipment
- *2015 NFPA 101 Life Safety Code* – governs existing and new buildings in regard to safety to life.

The Village also follows three State mandated codes:

- 2018 International Energy Conservation Code (IECC) (*currently adopted edition by the State*)
- State of Illinois Plumbing Code
- State of Illinois Accessibility Code

Staff has undertaken an extensive review process to examine the 2021 codes and determine differences between the current 2015 codes and local amendments with the 2021 codes. In exploring the code changes, staff emphasized the following concepts and strategies:

- Protect health, safety and welfare of Downers Grove occupants
- Align with Long Range Plan goals including sustainability
- Create clear and user friendly code requirements
- Reduce the number of local code amendments
- Maintain consistency with existing ordinance provisions
- Maintain and provide code provisions that address local construction practices
- Align Village regulations with comparable communities
- Maintain ISO / BCEGS score to the benefit of resident's insurance rates

In 2017, the Village amended the 2015 base code to eliminate the requirement to install fire sprinklers in newly constructed single family homes. The current proposal maintains this amendment (fire sprinklers in newly constructed single family homes are not required.) Additional information concerning residential sprinklers and a list of communities and fire districts in Illinois requiring sprinklers is attached.

Below is a brief summary of the highlighted changes in the 2021 model codes that are proposed for adoption.

2021 International Residential Code (IRC)

- Includes provisions for building-integrated photovoltaic systems including roof panels and shingles
- Requires radon testing compliance reports for new single family construction only. This is not required for additions or renovations.
- Requires sound transmission compliance testing and reports for new townhome developments as townhomes have similar sound challenges as apartments and condominiums.
- Provides shipping container and tiny house regulations
- Requires solar ready zones for new single family home construction

2021 International Building Code (IBC)

- Distilleries and breweries can be classified as less hazardous
- Added exiting requirements for escape/puzzle rooms
- Updated heavy timber regulations
- Updated required stairwell illumination standards
- Efficiency dwelling sizes have been reduced

2021 International Property Maintenance Code (IPMC)

- A structural analysis for an existing building is further defined.
- Emergency escape and rescue openings required to be maintained.

2021 International Fire Code (IFC)

- Consolidates all fire code requirements into the IFC, for clarity
- Removes restrictive fire sprinkler requirements for Group U structures
- Prohibit indoor fireworks/pyrotechnics
- Require increased fire sprinkler coverage for electric vehicle charging areas

2021 International Fuel Gas Code (IFGC)

- Residential cooking appliances must be approved for domestic use
- All replacement appliances must be vented in accordance with the requirements for new appliances

2021 International Mechanical Code (IMC)

- Requires continuous operation of exhaust system in nail salons
- Updated exiting requirements for machine rooms

2021 International Swimming Pool and Spa Code (ISPSC)

- Proposed Amendment to require a safety barrier fence around all pools

2020 National Electric Code (NEC)

- Surge protective device required for service of all dwelling units
- Emergency disconnects required on exterior of dwelling unit
- Expanded GFCI and AFCI requirements
- Proposed Amendment to delete aluminum and copper-clad aluminum as conductor materials
- Copper only from service point into structure

2015 NFPA 101 Life Safety Code

- Adopting the 2015 version to match the Illinois Office of the State Fire Marshal's code
- Amended fire sprinkler requirements to match the Village's Residential Code

With regard to the three state mandated codes, staff is not proposing any amendments to the State adopted 2018 International Energy Conservation Code or State Accessibility Code. The staff is aware that the State may adopt the 2021 version of the IECC in the near future. Once the State determines the effective date of the 2021 IECC update, the staff will begin administering that code edition.

The staff is proposing amendments to the State Plumbing Code. The amendments require approval from the Illinois Department of Public Health (IDPH) and are not effective until both the Village and IDPH approve them. The proposed amendments are as follows:

- Require plumbing and irrigation controllers to bear the WaterSense label (water efficiency)

- Require water service pipes to be at least 66-inches in depth to match current Village standards
- Require the water meter to be inside the building
- Disallow wet venting
- Disallow PEX tubing as well as CPVC as water distribution piping

Staff is also proposing minor amendments to Chapter 7 of the Municipal Code. These updates are principally related to permit submittal requirements and processes that changed due to the Village's implementation of an online permit system.

ATTACHMENTS

Council Questions

Fire Sprinkler Information Sheet

Ordinances

Council Questions

Question: We currently require heat detectors to be installed in a Garage. Should we consider requiring heat detectors throughout the house? Also, should we consider requiring homeowners to install a heat detector in the garage if pulling a permit, similar to our current approach for smoke detectors?

The best fire safety in residential buildings would be sprinklers, then smoke detectors in the house and a heat detector in the garage. When the Village chose not to require residential sprinklers in 2017, a compromise was made that called for the installation of a heat detector in the garage. Heat detectors are preferable over smoke detectors in the garage due to the possibility of vehicle exhaust causing false alarms in the garage. Smoke detection is preferable in the living portion of the house because it provides an earlier warning to the occupants. While requiring homeowners to install heat detection in an existing garage as part of a permit application would provide additional protection, it would also add additional cost, labor and time. At this time, Staff is continuing to recommend an amendment which requires smoke detection inside the home as part of all residential interior renovation permits.

Question: How will Village staff review new submissions to ensure additional energy efficiency requirements in the 2021 IECC have been met?

The architect or design professional is responsible for providing this documentation to the Village. This documentation can be provided either on the drawings or on an Energy Compliance documentation report.

Question: Why is PEX tubing inferior to copper piping for water distribution?

Pex tubing (cross-linked polyethylene) is inferior to copper as it is less durable and has a shorter lifespan due to the following reasons: 1) The chlorine in the water inside PEX pipes speed-up the brittle oxidative failure of cross-linked polyethylene. This failure can lead to leakage and pipes bursting. 2) PEX cannot be exposed to light or UV for a long period before deteriorating. 3) PEX is vulnerable to rodent attacks within the wall which can cause both leakage and contamination. In addition, the EPA has published studies documenting research noting concerns of PEX piping water distribution quality due to leaching of contaminants and odor. https://hero.epa.gov/hero/index.cfm/reference/details/reference_id/3859182

Question: Which section of current IRC defines solar panels?

The 2015 IRC defines requirements for Solar Energy Systems in Section R324.

Question: Where is a vapor retarder required? What is considered conditioned space?

Vapor retarder is required in all conditioned spaces and per local amendment, in garages, utility buildings and other accessory structures. Conditioned space is an area, room or space that is enclosed within the building thermal envelope and that is directly or indirectly heated or cooled. Vapor retardants are not required for carports, driveways, walks, patios and other unconditioned spaces.

Question: Village staff currently has discretion as to where a 6'-0" construction fence is located on a property. Should we define the requirements for a new home vs. an addition?

The discretion that the ordinance affords allows Village staff to work well. Staff has been able to allow existing fencing to serve as construction fencing as well as better define fencing limits on a case by case basis. Staff's preference is to maintain this discretion to better serve the community.

Residential Fire Sprinkler Information Sheet

- The 2021 International Residential Code requires residential fire sprinklers in newly constructed single-family homes (~ .4% of the Downers Grove housing market)
- In Illinois, 121 communities require that fire sprinklers be installed in newly constructed single family homes. Adjacent communities include Clarendon Hills, Glen Ellyn, Lemont Fire District, Lisle Woodridge Fire District, Oak Brook, Western Springs, Westmont, etc. For a complete list of communities from the Northern Illinois Fire Sprinkler Advisory Board, please visit the following link: <https://firesprinklerassoc.org/13d-communities/>
- Fire sprinklers improve life safety by allowing more time to escape a home fire
- Cost Estimate: ~ 1.5% - 2% of construction costs
 - 4,000 sq ft home ~ \$15,000-\$20,000 assuming a 1.5" incoming water service
- Residential sprinkler coverage requirements are limited compared to commercial sprinkler coverage requirements. In addition, residential sprinklers do not require 24/7 monitoring or annual inspections.

Information from the **Northern Illinois Fire Advisory Sprinkler Board** is available on-line and summarized below:

- Northern Illinois Fire Advisory Sprinkler Board <https://firesprinklerassoc.org/nifsab/>
- National Fire Protection Association <https://www.nfpa.org/>
- Fire sprinklers, in addition to smoke alarms, reduce the chances of fire death by 80%
- Benefits:
 - Reduced injuries/deaths
 - Reduced water damage from a fire (~10X less)
 - Reduced property damage from a fire (~70% less)
 - Reduced firefighter injuries
- The fire sprinkler(s) closest to the fire activate; in 85-90% of home fires, only a single sprinkler activates

Information from the **National Association of Home Builders** is available on-line and summarized below:

<https://www.nahb.org/advocacy/top-priorities/building-codes/fire-sprinklers/NAHB-Response-to--NFPA-Fire-Sprinkler-Initiative>

- The National Association of Home Builders notes that fires are more likely to occur in older homes, residential fire sprinklers are not designed to save property, smoke alarms work and sprinklers are not cost effective.



VILLAGE OF DOWNTONERS GROVE
COUNCIL ACTION SUMMARY

INITIATED: Village Attorney **DATE:** September 19, 2023
(Name)

RECOMMENDATION FROM: _____ **FILE REF:** _____
(Board or Department)

NATURE OF ACTION: **STEPS NEEDED TO IMPLEMENT ACTION:**

<input checked="" type="checkbox"/> Ordinance	Motion to Adopt "AN ORDINANCE ADOPTING THE 2021 INTERNATIONAL BUILDING CODE AND AMENDMENTS THERETO", as presented.
<input type="checkbox"/> Resolution	
<input type="checkbox"/> Motion	
<input type="checkbox"/> Other	

QH

SUMMARY OF ITEM:

Adoption of this ordinance shall adopt the 2021 International Building Code and amendments thereto.

RECORD OF ACTION TAKEN:

ORDINANCE NO. _____**AN ORDINANCE ADOPTING THE 2021 INTERNATIONAL BUILDING CODE
AND AMENDMENTS THERETO**

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County, Illinois, as follows: (Additions are indicated by redline/underline; deletions by ~~strikeout~~):

Section 1. That Section 7.1101 is hereby amended to read as follows:**Sec 7.1101 20152021 International Building Code Adoption**

The International Code Council International Building Code, as promulgated by International Code Council ("ICC"), being particularly the 20152021 edition thereof, is hereby adopted for the purpose of establishing rules and regulations for the construction, alteration, removal, demolition, equipment, use and occupancy, location and maintenance of buildings and structures, including permits and penalties required for such purposes. The same is adopted in its entirety, save and except such portions as are hereinafter deleted, modified or amended, and is, together with such amendments, incorporated as fully as if set out at length herein, and shall control in the construction of all buildings and structures therein regulated within the Village. Said Building Code, as modified and amended, may be referred to for all purposes as the "Downers Grove Building Code" or the "Building Code". At least one (1) copy of said Code, including such amendments to it as shall be enacted, shall be filed in the office of the Village Clerk, and additional copies shall be available in the Community Development Department of the Village.

(Ord. No. 1281, § 1; Ord. No. 1586, § 1; Ord. No. 2143, § 2; Ord. No. 2584, § 2; Ord. No. 2857, § 2; Ord. No. 3184, § 2; Ord. No. 3391, § 2) (Ord. 5628, Amended, 08/12/2017; Ord. 5076, Renumbered, 10/06/2009; 4801, Amended, 08/01/2006, "code services" to "community development"; Ord. 4661, Amended, 04/05/2005; 4213, Amended, 08/15/2000; 3940, Amended, 06/09/1997; 3662, Amended, 05/01/1994)

Section 2. That Section 7.1102 is hereby amended to read as follows:**Sec 7.1102 International Building Code - Amendments**

The deletions from and modifications and amendments to the 20152021 International Building Code as referred to in this Article are the following:

CHAPTER 1

Section 101.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

Section 101.1 Title. These regulations shall be known as the Building Code of the Village of Downers Grove, hereinafter referred to as "this code".

Section 101.4.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

Section 101.4.3 Plumbing. The provisions of the State of Illinois Plumbing Code, as adopted and amended by the Village, shall apply to the installation, alteration, repair, and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water sewage system and all aspects of a medical gas system. The provisions of the Village of Downers Grove Municipal Code shall apply to private sewage disposal systems.

Section 101.4.7 is amended by deleting the same in its entirety.

Section 102 is amended by deleting the same in its entirety and addressed in DGMC Chapter 7, Article I of the Downers Grove Municipal Code.

Section 102.6 is amended by deleting "the International Existing Building Code".

Section 103 is amended by deleting the same it in its entirety and addressed in DGMC Chapter 7, Article II of the Downers Grove Municipal Code.

Section 104.1 through Section 104.8.1 are amended by deleting the same in their entirety and addressed in DGMC Chapter 7 Article II of the Downers Grove Municipal Code.

Section 104.9.1 is amended by deleting the first sentence.

Section 104.10.1 is amended by deleting the same in its entirety.

Section 105.1.1 is amended by deleting the same in its entirety.

Section 105.1.2 is amended by deleting the same in its entirety.

Section 105.2 is amended by deleting building conditions 1 through 13 in their entirety and by substituting in lieu thereof the following:

Section 105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

(1) One-story detached accessory structures used as tool, storage sheds, and similar uses with a floor area not exceeding one hundred (100) square feet.

(2) Retaining walls that are not over three (3) feet in height measured from grade to the top of the wall.

(3) Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.

(4) Nonfixed and movable fixtures, cases, racks, counters, and partitions not over five (5) feet nine (9) inches in height.

Section 105.3 through Section 105.7 are amended by deleting the same in their entirety and addressed in DGMC Chapter 7 Article III of the Downers Grove Municipal Code.

Section 106.1 through Section 106.5106.3 are amended by deleting the same in their entirety and addressed in DGMC Chapter 7, Article IV of the Downers Grove Municipal Code.

Section 108.1 Temporary Structures and Uses is amended as follows: 108.1 General. The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than one hundred eighty (180) days, except in conjunction with the operation of an Outdoor Café provided for in Chapter 4 of the DGMC, in which case it may be permitted for up to two hundred forty-six (246) days. The building official is authorized to grant extensions for demonstrated cause.

Section 109.1 through Section 109.6 are is amended by deleting the same in their entirety and addressed in DGMC Chapter 7, Article VII of the Downers Grove Municipal Code.

Section 110.1 through Section 110.2 are amended by deleting the same in their entirety and addressed in DGMC Chapter 7, Article VI of the Downers Grove Municipal Code.

Section 110.3.8.10 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

Section 110.3.10110.3.8 Other Inspections. In addition to the inspections specified above, the Building Official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this Code and other laws that are enforced by the Village. Additional inspections may include, but are not limited to, the following as applicable to the project:

- (1) Foundation and drain tile prior to backfill
- (2) Underground and rough utilities
- (3) Plumbing stack test
- (4) Insulation
- (5) Electrical services prior to activation
- (6) Rough ceilings
- (7) All fire and life safety systems as required by the Code Official.

Section 111 is amended by deleting the same in its entirety and addressed in DGMC Chapter 7, Article VII of the Downers Grove Municipal Code.

Section 113 is amended by deleting the same in its entirety and addressed in DGMC Chapter 7, Article IX of the Downers Grove Municipal Code.

Section 114 is amended by deleting the same in its entirety and addressed in DGMC Chapter 7, Article X of the Downers Grove Municipal Code.

Section 116 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

Section 116 Unsafe structures and equipment. The provisions of the International Property Maintenance Code as adopted and amended by the Village shall apply.

CHAPTER 2

Section 202 is amended as follows:

Section 202 Definitions.

The definition for **HIGH-RISE BUILDING** is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

HIGH-RISE BUILDING. A building with an occupied floor located more than fifty-five (55) feet above the lowest level of Fire Department vehicle access as measured from grade to the floor elevation of the top occupied floor.

CHAPTER 4

Section 403.3 is amended by deleting the exceptions thereto in their entirety.

Section 403.5.3.1 shall be amended by deleting the same in its entirety and by substituting in lieu thereof the following:

Section 403.5.3.1 Stairway communications system. See Section 907.2.12.3 for requirements.

Section 403.5.4 shall be amended by deleting the same in its entirety and by substituting in lieu thereof the following:

Section 403.5.4 Smokeproof exit enclosures. Every required stairway serving floors more than fifty-five (55) feet above the lowest level of Fire Department vehicle access measured from grade to the floor elevation of the top occupied floor shall comply with Sections 909.20 and 1023.12~~1023.14~~.

Section 406.7.2 shall be amended by deleting the first paragraph in its entirety and by substituting in lieu thereof the following:

Section 406.7.2 Canopies. Canopies under which fuels are dispensed shall have a clear, unobstructed height of not less than thirteen (13) feet six (6) inches to the lowest projecting element in the vehicle drive-through area. Canopy structures and their supports over pumps shall be of noncombustible materials. Plastic facing material shall comply with the following:

All exceptions shall remain, however, Exception #1 shall be deleted in its entirety.

CHAPTER 5

Table 504.3 is amended as follows:

(1) Type V-A and V-B is not permitted for all use groups governed by this Code in all zoning districts. Exception: Restoration or remodeling for existing non-conforming structures of type V-A, V-B shall be permitted when the project area does not exceed thirty-five percent (35%) of the total building square footage.

Table 504.4 is amended as follows:

(1) Type V-A and V-B is not permitted for all use groups governed by this Code in all zoning districts. Exception: Restoration or remodeling for existing non-conforming structures of Type V-A and V-B shall be permitted when the project area does not exceed thirty-five percent (35%) of the total building square footage.

Table 506.2 is amended as follows:

(1) Type V-A and V-B is not permitted for all use groups governed by this Code in all zoning districts. Exception: Restoration or remodeling for existing non-conforming structures of Type V-A and V-B shall be permitted when the project area does not exceed thirty-five percent (35%) of the total building square footage.

Section 507.3 is amended by deleting the same in its entirety.

Section 507.4 Exception #2 is deleted in its entirety.

CHAPTER 6

Table 601 is hereby amended to read as follows:

Table 601 Fire-Resistance Rating Requirements for Building Elements (hours).
See Table 504.3, 504.4 and 506.2, as amended, for construction type restrictions.

Table 602 is hereby amended to read as follows:

Table 602 Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance.

See Table 604.3, 504.4 and 506.2, as amended, for construction type restrictions.

Section 602.5 Type V. is amended by adding:

Type V-A and V-B is not permitted for all use groups governed by this code in all zoning districts. Exception: Restoration or remodeling for existing non-conforming structures of Type V-A, V-B shall be permitted when the project area does not exceed thirty-five percent (35%) of the total building square footage.

CHAPTER 7

Table 705.5 is hereby amended to read as follows:

Table 705.5 Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance.

See Table 504.3, 504.4 and 506.2, as amended, for construction type restrictions.

CHAPTER 9

Section 901.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following: All fire protection systems shall comply with the requirements of the 2021 International Fire Code and DGMC Chapter 17, Articles V and VI.

~~Section 901.6 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

901.6 Supervisory Service.

~~All fire protection systems shall be supervised by a connection to the Village Operations Center in the manner specified by Section 17.58 of the Municipal Code. All alarm and detection services shall transmit alarm, supervisory, and trouble signals.~~

~~Section 901.6.2 is amended by deleting Exception #1 and Exception #2 in their entirety.~~

~~Section 901.9 is hereby added as follows:~~

~~901.9 NFPA Standard editions.~~ The following NFPA standards editions including all appendices and hereby adopted:

~~NFPA 13, the most current edition~~

~~NFPA 13-D, the most current edition~~

~~NFPA 13-R, the most current edition~~

~~NFPA 14, the most current edition~~

~~NFPA 20, the most current edition~~

~~NFPA 25, the most current edition~~

~~NFPA 96, the most current edition~~

~~NFPA 30B, the most current edition~~

~~NFPA 72, the most current edition~~

~~NFPA 2001, the most current edition~~

~~Section 903.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~903.2 Where Required.~~ Automatic sprinkler systems shall be installed and maintained in full operating condition, as specified in this code, in all buildings and structures, including open parking structures which have a total area in excess of the applicable square footage listed in Table 903.

TABLE 903

Total area square footages above which installation of automatic sprinkler systems is required:

Types of Construction					
Use Group	Type 1A, 1B	Type 2A, 2B	Type 3A, 3B	Type 4	Type 5A, 5B
A-1 Assembly, theaters	0	0	0	0	Not Permitted
A-2 Assembly, nightclubs and similar uses	0	0	0	0	Not Permitted
A-3 Assembly (lecture halls, recreation centers, terminals, restaurants other than night clubs)	0	0	0	0	Not Permitted

A-4 Assembly, churches	0	0	0	0	Not Permitted
A-5 Assembly	0	0	0	0	Not Permitted
B-Business	0	0	0	0	Not Permitted
E-Educational	0	0	0	0	Not Permitted
F-1 Factory and industrial, moderate	0	0	0	0	Not Permitted
F-2 Factory and industrial, low	0	0	0	0	Not Permitted
H-1 High hazard, denotation hazards	0	0	0	0	Not Permitted
H-2 High hazard, deflagration hazards	0	0	0	0	Not Permitted
H-3 High hazard, physical hazards	0	0	0	0	Not Permitted
H-4 High hazard, health hazards	0	0	0	0	Not Permitted
I-1 Institutional, residential care	0	0	0	0	Not Permitted
I-2 Institutional, incapacitated	0	0	0	0	Not Permitted
I-3 Institutional, restrained	0	0	0	0	Not Permitted
I-4 Institutional,	0	0	0	0	Not Permitted
M-Merchantile	0	0	0	0	Not Permitted

R-1, 2, 3, 4 (except detached one and two-family)	0	0	0	0	Not Permitted
S-1 Storage, moderate	0	0	0	0	Not Permitted
S-2 Storage, low	0	0	0	0	Not Permitted
U Utility, misc.	0	0	0	0	Not Permitted

~~Section 903.2.1 through Section 903.2.10.1~~ are hereby deleted in their entirety.

~~Section 903.2.11.1~~ is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

~~903.2.11.1 Stories without openings.~~ An automatic sprinkler system shall be installed throughout every story and basement of all buildings in accordance with Table 903.

~~Section 903.2.11.1.2~~ is hereby deleted in its entirety.

~~Section 903.2.11.1.3~~ is hereby deleted in its entirety.

~~Section 903.2.11.3~~ is amended by deleting in its entirety.

~~Section 903.3~~ shall be deleted in its entirety and substituting in lieu thereof the following:

~~903.3 Installation requirements.~~ Automatic sprinkler systems shall be designed and installed in accordance with Section 903.3.1 through Section 903.3.8. In addition, a check valve shall be provided in all sprinkler risers.

~~Section 903.3.1~~ is amended by adding the following at the end of the paragraph: "The use of XL thin-wall pipe is prohibited."

~~Section 903.3.1.1.1~~ is amended by deleting exempt locations #1, #3 and #4.

~~Section 903.3.1.2~~ is amended by deleting the first paragraph and substituting in lieu thereof the following: Automatic sprinkler systems in Group R occupancies up to and including four stories in height in buildings of Type I & Type II construction shall be permitted to be installed throughout in accordance with NFPA 13R.

~~Section 903.3.5.3.~~ is amended by adding the following section:

~~903.3.5.3 Post Indication Valve Prohibited.~~ The use of post indicator valves and wall post indicator valves is prohibited.

~~Section 903.4~~ is amended by deleting Exception #2 through Exception #5.

~~Section 905.3.1~~ is amended by deleting the same in its entirety and substituting in lieu thereof the following:

905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where any one of the following apply: (1) the building is three stories or more in height, measured from the lowest level of fire department vehicle access; (2) where the floor level of the highest story is located more than thirty (30) feet above the lowest level of fire department vehicle access; (3) where the floor level of the lowest story is located more than thirty (30) feet below the highest level of fire department vehicle access.

~~Section 905.4~~ is amended by deleting location #6.

~~Section 905.4~~ is further amended by adding the following:

7. The number of risers for multi-story buildings shall be such that all parts of every floor area can be reached by one hundred fifty (150) feet of hose connected to a riser outlet. Standpipe hose connections shall be required to be located in enclosed stairways at each level in multi-story buildings.

8. In all warehouse storage areas where storage exceeds twelve (12) feet in height, provide 2-1/2" fire hose valves with 1-1/2" reducer to a 1-1/2" connection. Locate the valves at each door entrance to the warehouse and/or storage area. Provide additional 2-1/2" fire hose valves throughout the space so that no portion of the warehouse/storage area is more than one hundred fifty (150) feet maximum travel distance to a fire hose valve.

~~Section 905.7.3~~ is amended by adding a new section as follows:

905.7.3 Hose connection within the cabinet. The hose connection shall be not more than five (5) feet above the floor and consist of a 2-1/2" size, with valves and threads in conformance with Village standards.

~~Section 907.1.3.1~~ is hereby added as follows:

907.1.3.1 Addressable fire alarm systems. All new fire alarm systems shall be of the addressable type.

~~Section 907.2~~ is amended by adding the following at the end of the paragraph:

907.2 General Requirements for Manual and Automatic Fire Detection Systems in the Village. In all new buildings, additions, and buildings constructed under the 2015 International Building & Fire Codes, except in one- and two-family dwellings, a complete manual and automatic fire alarm detection system, connected to the Village's fire alarm board, shall be installed throughout the building in accordance with NFPA 72.

Exception: Fully sprinkled buildings. Fully sprinkled buildings shall have limited detection; the following locations shall have detection installed in all cases:

1. corridors
2. storage rooms seventy-five (75) square feet or more
3. copy rooms
4. top of stairways
5. boiler rooms
6. electrical rooms
7. open office areas nine hundred (900) square feet or more
8. elevator lobbies
9. all mechanical rooms
10. above all fire alarm control units
11. under raised flooring
12. all other open areas and locations deemed necessary by the Fire Code Official

13. server/IT rooms seventy five (75) square feet or more

~~Section 907.2.1 through Section 907.2.10~~ are amended by deleting the same in their entirety.

~~Section 907.6.6~~ is amended by adding the following section:

~~907.6.6.3 Connection to Village~~. All fire alarm systems shall be supervised by connection to the Village fire alarm receiving panel in the manner specified by the Municipal Code and shall transmit alarm, trouble, and supervisory signals. In lieu of connecting to the Village's alarm receiving panels as set forth above, any property within the municipal limits of Downers Grove which is under the jurisdiction of a fire protection district organized pursuant to state law shall instead connect to the alarm receiving panels of the fire protection district. Such alternative connection shall be according to the fire protection district's rules and regulations for connection. The Fire Code Official is authorized to require the installation of wireless fire alarm monitoring for existing installations as follows:

- (1) If a fire alarm panel needs replacement;
- (2) When phone lines have been disconnected or are causing nuisance alarms or monitoring outages.

~~Section 907.6.6~~ is amended by deleting Exception #1 and Exception #2.

~~Section 911.1.6~~ is amended by adding the following:

19. Handsets for any required communication system
20. A key box containing all building keys

~~Section 912~~ is amended by deleting the same in its entirety and substituting in lieu thereof the following:

~~9.12 Installation~~. Fire Department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with all applicable requirements of the Municipal Code.

~~Section 912.1.1~~ is hereby added as follows:

~~912.1.1 Yard hydrants~~. A fire hydrant shall be located within one hundred (100) feet of the fire department connection on the fire protection water supply to the building. All locations are subject to review and approval by the code official for site specific conditions.

~~Section 912.1.1.1~~ is hereby added as follows:

~~912.1.1.1 Hydrant testing~~. Yard hydrants shall be tested annually and a report must be submitted to the Fire Department for review and approval.

~~Section 912.1.1.1.1~~ is hereby added as follows:

~~912.1.1.1.1 Stortz connections~~. A minimum of a five (5) inch STORTZ connection is required.

~~Section 913.6~~ is hereby added as follows:

~~913.6 Fire pump automatic operation~~. When a fire pump is installed, it shall operate automatically at all times by connection to an automatically switched emergency power generator sized per the requirements of the National Electrical Code.

~~Section 913.7~~ is hereby added as follows:

~~913.7 Fire rating for valve room and fire pump room~~. All rooms containing sprinkler valve equipment and fire pumps shall be separated from adjoining spaces with a minimum of 2-hour rated assemblies.

Section 913.8 is hereby added as follows:

913.8 Access for valve room and fire pump room. A minimum of 2, 3 foot wide, 1-hour rated exterior doors and a minimum of 1, 3 foot wide, 1-hour rated interior door shall provide access to the valve and fire pump room.

Section 913.9 is hereby added as follows:

913.9 Fire pump test headers and valves. Where fire pumps are installed, an outside test header and an OS & Y control valve is required.

CHAPTER 10

Section 1002.11001.3 is amended by adding the words "and the International Property Maintenance Code, as amended and adopted by the Village", at the end of the sentence.

Section 1003.5 is amended by deleting the exceptions therein and substituting in lieu thereof the following:

Exceptions:

(1) A single step with a maximum riser height of seven (7) inches is permitted at exterior doors not required to be accessible by the State of Illinois Accessibility Code.

(2) Steps and stairs are permitted at locations as permitted by the State of Illinois Accessibility Code.

Section 1008.3.4 is amended by adding the following at the end of the section:

"Where emergency lighting is powered by a generator, a minimum of twenty percent (20%) of the emergency light fixtures shall be provided with battery back-up. In addition for multi-story buildings, battery powered units shall be provided in enclosed stairways at every other landing with no fewer than one (1) provided. "

Section 1009.1 is amended by adding at the end of the first sentence "and all applicable provisions of the State of Illinois Accessibility Code".

Section 1009.1 is further amended by deleting the exceptions.

Section 1009.2 is amended by deleting Condition #1 in its entirety and substituting in lieu thereof the following:

(1) Accessible routes complying with the State of Illinois Accessibility Code.

Section 1009.2.1 is deleted in its entirety and substituting in lieu thereof the following:

Section 1009.2.1 Elevators required. In buildings where a required accessible floor is above or below a level of exit discharge, an elevator shall be provided per the State of Illinois Accessibility Code.

Section 1009.2.1 is further amended by deleting the exceptions.

Section 1010.1.1 is amended by deleting Exception #2

CHAPTER 11

Chapter 11 is amended by deleting the same in its entirety; see State of Illinois Accessibility Code.

CHAPTER 15

Section 1502.21503.4.1 is amended by deleting the words "~~and Sections 1106 and 1108, as applicable~~" of the International Plumbing Code" and substituting in lieu thereof the following: "State of Illinois Plumbing Code as adopted and amended by the Village."

CHAPTER 16

Section 1612.3 shall be deleted in its entirety and substituting in lieu thereof the following:

Section 1612.3 Establishment of flood hazard areas. To establish flood hazard areas, local flooding data shall apply.

CHAPTER 17

Section 1705.3 is amended by deleting the exceptions.

Section 1705.4 is amended by deleting the exceptions.

CHAPTER 18

Section 1805.1 is amended by deleting the first paragraph in its entirety and substituting in lieu thereof the following:

Section 1805.1 Where required. Walls or portions thereof that retain earth and enclose interior spaces and floor below grade shall be waterproofed and dampproofed in accordance with this section.

Section 1805.1.2.1 is hereby deleted in its entirety and substituting in lieu thereof the following:

Section 11805.1.2.1 Flood hazard areas. For buildings and structures in flood hazard areas as established by local flooding data, the finished ground level of an under-floor space shall be determined by the provisions of the Downers Grove Municipal Code.

Section 1805.2.1 is hereby deleted in its entirety and substituting in lieu thereof the following:

Section 1805.2.1 Floors. Dampproofing materials for floors shall be installed between the floor and the base course required by Section 1805.4.1.

Section 1805.4.31807.4.3 is further amended by deleting the exception.

CHAPTER 23

Section 2303.1.2 shall be amended to add the following:

Floor/roof assemblies utilizing wood I-joists, or similar products, shall require a minimum 1-hour UL fire resistance rating design or equivalent.

Section 2303.4.1 shall be amended to add the following: Floor/roof assemblies utilizing wood trusses shall require a minimum 1-hour UL fire resistance rating design or equivalent.

CHAPTER 29

Chapter 29 is amended by deleting the same in its entirety and substituting in lieu thereof the following: See the State of Illinois Plumbing Code as adopted and amended by the Village.

CHAPTER 30 Section 3001.33001.2 is hereby deleted in its entirety and substituting in lieu thereof the following:

Section 3001.33001.2 Referenced standards. The design, construction, installation, alteration, repair, and maintenance of elevators and conveying systems and their components shall conform to the current State of Illinois Elevator Safety and Regulation Act and to the following State mandated elevator codes, current adopted editions, as determined by the office of the State Fire Marshal, division of elevator safety: Safety Code for Elevators and Escalators (ASME A17.1/CSA, B44); Performance-Based Safety Code for Elevators and Escalators (ASME A17.1.7/CSA-B44.7); Safety Code for Existing Elevators and Escalators (ASME A17.3) but only as required under Section 35(h) and (i) of the Act and subsection (d) of this Section; Safety Standard for Platform Lifts and Stairway Chairlifts (ASME A18.1); Standard for the Qualification of Elevator Inspectors (ASME QEI-1); Safety Requirements for Personnel Hoists and Employee Elevators on Construction and Demolition Sites (ANSI/ASSP A10.4); Automated People Mover Standards (ANSI/ASCE/T&DI 21); Modification and Exclusion to the Safety Code for Elevators and Escalators (ASME A17.1/CSA B44). Non-Mandatory Guidance Per the current State of Illinois Safety and Regulation Act, it is recommended that all conveyances be inspected and tested in accordance with the following recommended practices. The following list should not be interpreted as excluding other practices recommended by equipment manufacturers: Guide for Inspection of Elevators, Escalators and Moving Walks (ASME A17.2).

Section 3001.43001.3 is hereby deleted in its entirety and substituting in lieu thereof the following:

Section 3001.43001.3 Accessibility. Passenger elevators shall conform to the requirements of the State of Illinois Accessibility Code.

Section 3002.4 is amended by deleting the word "four or more stories above grade plane or four or more stories below grade plane" and by substituting in lieu thereof the following: "three or more stories, including stories below grade"

CHAPTER 31

Section 3103.1 Temporary Structures is amended as follows:

Section 3103.1 General. The provisions of Sections 3103.1 through 3103.4 shall apply to structures erected for a period of less than one hundred eighty (180) days. Tents and other membrane structures erected for a period of less than one hundred eighty (180) days, and those erected in accordance with Chapter 4 of the DGMC, up to two hundred forty-six (246) days shall comply with the International Fire Code. Those erected for a longer period of time shall comply with applicable sections of this code.

Section 3109.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

Section 3109.1 General. Swimming pools shall comply with the all applicable sections of this code, the Municipal CodeDGMC, the International Swimming Pool and Spa Code as adopted and amended by the Village, and the State of Illinois Swimming Pool Code.

CHAPTER 32

Chapter 32 is amended by deleting the same in its entirety.

CHAPTER 33

Section 3305.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

Section 3305.1 Facilities required. Sanitary facilities shall be provided during construction, remodeling, or demolition activities in accordance with the Downers Grove Municipal Code and the State of Illinois Plumbing Code.

CHAPTER 35

Chapter 35 Referenced Standards is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following: "Current Illinois State Plumbing Code as adopted by the Village."

APPENDIX H

Section H 101.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

Section H 101.1 General. For any provisions not covered by this Code the provisions of DGMC Chapter 28, Article 9 of the Downers Grove Municipal Code shall apply.

Section H 101.2 is deleted in its entirety.

Section H 102 is deleted in its entirety.

Section H 106.1 is amended by deleting the words "NFPA 70ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

Section H 106.2 is amended by deleting the words "NFPA 70ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

Section H 108 through Section H 110 are deleted in their entirety.

Section H 112.1 is amended by deleting the following words from the first sentence:

"constructed entirely of metal or other noncombustible material and" Section H 112.4 is deleted in its entirety.

Section H 114 is deleted in its entirety.

Section H 115 is amended by deleting the words "National Electrical CodeICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

APPENDIX I

Section I101.1.1 is hereby added as follows:

Section I101.1.1 Construction Standards. Patio covers shall be constructed of materials and installations as approved by the provisions of this code.

(Ord. No. 1281, § 15; Ord. No. 1370, § 1; Ord. No. 1586, §§ 2, 3, 6; Ord. No. 1747, § 1; Ord. No. 1846, § 1; Ord. No. 2020, § 1; Ord. No. 2089, §§ 1, 2; Ord. No. 2116, § 2; Ord. No. 2122, § 1; Ord. No. 2143, § 4; Ord. No. 2151, §§ 1, 2; Ord. No. 2208, § 1; Ord. No. 2209, § 1; Ord. No. 2397, § 1; Ord. No. 2547, § 2; Ord. No. 2563, § 1; Ord. No. 2584, § 3; Ord. No. 2608, § 2; Ord. No. 2709, § 1; Ord. No. 2768, § 1; Ord. No. 2857, § 3; Ord. No. 3118, § 2; Ord. No. 3184, § 3; Ord. No. 3193, § 1; Ord. No. 3391, § 3) (Ord. 5628, Amended, 08/12/2017; Ord. 5486, Amended, 12/01/2015; 5392, Amended, 06/15/2014, Updates due to Zon Ord re-write; Ord. 5305, Amended, 12/18/2012; Ord. 5271, Amended, 07/17/2012; Ord. 5076, Renumbered, 10/06/2009; Ord. 4852, Amended, 02/20/2007, his to his/her(s); 4801, Amended, 08/01/2006, "community service" to "community development"; Ord. 4661, Amended, 04/05/2005; Ord. 4533, Amended, 09/16/2003; Ord. 4517, Amended, 06/17/2003; 4149, Amended, 08/09/1999; 3940, Amended, 06/09/1997; 3615, Amended, 12/13/1995; 3792, Amended, 10/23/1995; 3662, Amended, 08/01/1994; 3627, Amended, 02/07/1994; 3432, Amended, 07/27/1992; 3495, Amended, 07/27/1992; 3469, Amended, 06/01/1992)

HISTORY

Amended by Ord. 5877 Amends Chapter 30 provisions for elevator safety standards on 8/17/2021

Amended by Ord. 5919 IBC & FC (tents) on 4/5/2022

Section 3. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

Section 4. That this ordinance shall be in full force and effect on January 1, 2024.

Mayor

Passed:

Published:

Attest: _____
Village Clerk