

# CHAPTER 144

## BUILDING CODE

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§144.1 **Administrative Provisions.** Administration of this ordinance shall be as provided in this section and in the following sections of the several codes named which are hereby adopted by reference to provide procedures for local enforcement of the codes, constituting the International Codes. The Administrative Official or his/her designee, designated by the City Council, shall be responsible for the enforcement of the International Codes. He or she shall be accountable for the issuance of all applicable permits under this ordinance which shall include building permits issued in compliance with the Zoning Ordinance of the City of Panora. The Administrative Official shall have the power to render interpretations of this code and to adopt and enforce rules and regulations supplemental to this code, subject to approval of the Council of the City of Panora, as he/she may deem necessary in order to clarify the application of the provisions of this code. Such interpretations, rules and regulations shall be in conformity with the intent and purpose of this code.

§144.2 **Adoption of the 2021 International Residential Code.** Pursuant to published notice and public hearing, as required by law, the International Residential Code, 2021 Edition, published by the International Code Council, is hereby adopted in full, including Appendix Chapters except for such portions as may hereinafter be deleted, modified or amended.

§144.3 **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the International Residential Code, 2021 Edition, are hereby made:

A. Insert Section R101.1 to read City of Panora as the applicable jurisdiction.

B. Delete Section R105.2(Building1) and replace as follows:

1. One-story detached accessory structures, provided the floor area does

not exceed 200 square feet; however, site plan approval shall be obtained from the Zoning Department.

- C. Delete Sections R105.2(Building 2), R105.2(Building 4), R105.2(Building 5), and R105.2(Building 10). Replace section R105.2 (5) with the following language: Sidewalks shall be permitted and installed in accordance with approved site plan for individual lot development.
- D. Amend Section R105.6 to include the addition of R105.6.1 Revocation of permit. Insert Section R105.6.1 to read: Revocation of Permit. It is the permit holder's responsibility to schedule the required inspections and obtain final approvals. Failure to schedule the required inspections and receive approval of work authorized by the permit before covering said work or at completion shall result in revocation of the permit and void any associated approvals granted by the City. This failure shall also equate to working without a permit in violation of City ordinance and no future permits shall be issued to any person or company who has outstanding violations of this code or any other laws or ordinances of the City. Failure to contact the City for any inspection or follow-up prior to expiration of a permit shall be deemed a violation of this code section. Failure to contact the City for any inspection or follow-up prior to expiration of a Temporary Certificate of Occupancy shall also be deemed a violation of this code section. Allowing occupancy of a structure, for which a person or company holds a building permit, prior to or without a valid Certificate of Occupancy (temporary or final) shall be deemed a violation of this code section and no future permits shall be issued to any person or company who has outstanding violations of this code or any other laws or ordinances of the City.
- E. Add the following to Section R108.2 Schedule of Permit Fees with the following language:  
Permit fees will be derived from the City of Panora Fee Schedule as adopted.
- F. Add the following to Section R108.3: The Building Valuation will be derived from the construction costs for the total work submitted by the contractor, or the most current Building Valuation Data Schedule published by the International Code Council (ICC). Submitted contractor valuation shall not be less than derived valuation through ICC. Published data is utilized by the Administrative Official in an effort to maintain consistency and fairness for permit fee calculations. It is not intended to reflect actual taxable value.

The method for determining the value of the additional listed residential items will be as follows: The square foot of the listed structure, times the Dwelling - Type V - Wood Frame value, times the % multiplier assigned to each listed item.

1. Open Decks - 8%
2. Screened Porches - 15%
3. In-ground Pools - 17%
4. Above-ground pools - 8%
5. 3 Season Porches - 50%
6. Detached Garages - 50%

- 7. Post Frame Buildings – 50%
- 8. Remodel/Renovation – 30%

G. Amend Section R108.5 to read as follows: Fee Refunds. The administrative official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

The administrative official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The administrative official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done.

The administrative official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment.

H. Amend Section R110.1 to add the following at the end of the paragraph:

On all new construction, all necessary walks, drives and approaches, and all seeding and sodding are to be installed before a final Certificate of Occupancy is issued.

I. Table R301.2 to read as follows:

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
30	SPEED (MPH)	TOPOGRAPHIC EFFECTS	SPECIAL WIND REGION	WINDBORNE DEBRIS ZONE	A	WEATHERING	FROST DEPTH	TERMITE	0	YES	DEC. 2007	2000	48.6
	115	NO	NO	NO		SEVERE	42	MODERATE					

J. Amend Section R301.2.1.3 to add the following:

For purposes of determining wind loads, the minimum basic wind speed shall be considered as 115 miles per hour; except when referenced documents are based on fastest mile wind velocities, Table R301.2(1) shall be used.

K. Amend Section R301.2.3 to add the following:

For purposes of determining snow loads, the minimum ground snow load for design purposes shall be 30 pounds per square foot. Subsequent increases or decreases shall be allowed as otherwise provided in this code, except that the minimum allowable flat roof snow load may be reduced to not less than 80 percent of the ground snow load.

- L. Amend section R302.3 to read:

For purposes of fire-resistive separation, two family dwelling units shall be considered as townhouses and shall be constructed in accordance with R302.2

- M. Modify IRC Table 302.6 and replace with the following table:

TABLE R302.6

DWELLING-GARAGE SEPARATION

SEPARATION		MATERIAL
From the residence and attics		Not less than 5/8-inch "X" gypsum board or equivalent applied to the garage side
From habitable rooms above the garage and structure(s) supporting floor/ceiling assemblies used for separation required by this section		Not less than 5/8-inch "X" gypsum board or equivalent
Garages located less than 5 feet from a dwelling unit on the same lot		Not less than 5/8-inch "X" gypsum board or equivalent applied to the interior side of exterior walls and ceilings within the garage

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

- N. Delete Section R302.13

- O. Amend Section R305.1.1 Exception to read:

Existing basements not having a height as specified in this section are allowed to be finished with a ceiling height that is not decreased more than the minimal measurement created by applying a finished ceiling of gypsum board or acoustical ceiling tiles.

- P. Amend Section R310.2.3 to add the following exception:

A landing may be provided to meet the maximum sill height of forty-four (44) inches above the floor or landing provided. The landing shall be not less than thirty-six (36) inches wide, not less than twelve (12) inches out from the exterior wall, and not more than twenty-four (24) inches in height. The landing shall be permanently affixed to the floor below or the wall under the window it serves.

- Q. Amend Section R310.6 Exception to read:

New habitable spaces created in an existing basement shall be provided with emergency escape and rescue openings in accordance with Section R310.1.

- R. Amend Section R311.3.2 Exception to read:

A top landing is not required where a stairway of not more than four rises is located on the exterior side of a door, provided the door does not swing over the stairway.

- S. Amend Section R311.7.5.1 to add exception 3 with the following language:

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The dimension of the top and bottom riser of a stair may vary up to 1-inch (25.4 mm) from the stairway riser dimension; however, in no case shall the riser height exceed seven and three-quarter inches.

T. Amend Section R311.7.8.4 to add exception 3 with the following language:

Handrails within a dwelling unit or serving an individual dwelling unit shall be permitted to be interrupted at one location in a straight stair when the rail terminates into a wall or ledge and is offset and immediately continues.

U. Delete Section R313.1 and replace with the following:

313.1 Townhouses automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhouses.

Exceptions:

1. An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.
2. Townhouse structures where the conditioned square footage of the entire building is less than eighteen thousand (18,000) square feet. For purposes of this section, conditioned space shall be defined as space that can be occupied but shall not include garages or attics.
3. Townhouse structures that contain eight (8) or less dwelling units.

V. Delete Section R313.2 and replace with the following:

313.2 One and two-family dwelling automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in one and two-family dwellings.

Exceptions:

1. An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing buildings that are not already provided with an automatic residential fire sprinkler system.
2. One and two-family dwellings containing less than eight thousand (8,000) square feet of floor space, excluding attached garages and other unenclosed areas.

W. Amend Section R317.1 to add the following:

8. Fences. Residential fences shall be chain link, ornamental iron, PVC/Composite, or approved wood. Wood used in fences shall be treated wood, or approved wood of natural resistance to decay.

X. Replace Table R403.1(1),(2), (3)with the following:

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TABLE R403.1  
FOUNDATIONS FOR STUD BEARING WALLS

<b>Number of Stories</b>	<b>Thickness of Foundation Walls</b> <i>Unit</i> <i>Concrete Masonry</i>		<b>Minimum Width of Footing (inches)</b>	<b>Thickness of Footing (inches)</b>	<b>Minimum Depth of Foundation Below Natural Surface of Ground and Finish Grade (inches)</b>
1	8	8	16	8	42
2	8	8	16	8	42
3	10	10	18	12	42

Y. Delete Section R403.1.4.1 Exception 1 and replace with the following:

Accessory structures up to 200 square feet may be constructed on a 4 inch wood deck or 4 inch concrete slab. Protection for detached garages and other accessory structures 1024 square feet or less in size, located more than ten (10) feet from a dwelling, attached garage, or other principal structures, may be accomplished with a floating slab (monolithic). The floating slab shall include a thickened slab edge or a minimum eighteen (18) inches thick. Twelve inches of the thickened slab shall be below grade and six inches shall be above finished grade. The bottom portion of the thickened slab area shall be twelve (12) by twelve (12) inches. Two #4 rebar shall be placed within the thickened edge continuous around the perimeter of the slab. The floor shall be Portland cement concrete not less than four (4) inches thick. Garage floor areas shall have all sod and/or debris removed. For detached garages and accessory structures exceeding 1024 square feet, a frost protected footing and foundation shall be required.

Z. Delete Section R403.1.4.1 Exception 2.

AA. Amend Section R404.1 to add the following:

1. Scope. Notwithstanding other design requirements of Sections R404.1 - R404.1.5.2 of the International Residential Code, foundation retaining walls for one and two family dwelling occupancies of Type V construction may be constructed in accordance with this section, provided that use or building site conditions affecting such walls are within the limitations specified in this section. Concrete foundation walls shall be selected and constructed in accordance with the provisions of Section R404.1.3. Masonry foundation walls shall be selected and constructed in accordance with the provisions of Section R404.1.2. If backfill prior to a poured in place floor slab is desired, one of the following methods to provide bottom lateral support shall be completed: (1) a full depth (minimum 1-1/2") nominal 2" x 4" keyway may be formed into the footings to secure the bottom of the foundation wall -or- (2) 36" long vertical # 4 rebar may be embedded a minimum of 6" into the footings not to exceed 7' on center

spacing.

BB. Amend Code to Add Code Section: IRC R404.1.3.2.3 Insert the following language and Table:

Table R404.1.3.2.3 - 'Foundation Walls for Conventional Light Frame Construction'

Height of Foundation Wall (Net measured from top of basement slab to top of foundation wall)*		Thickness of Foundation Walls		Reinforcement Type and placement within Foundation Wall**	Reinforcement Type and placement within Foundation Wall** (maximum 12' span between corners and supporting cross walls)	Type of Mortar
		Unit				
		Gross	Net			
8	7' 8"	7 1/2"	8"	1/2" horizontal bars, placement in the middle, and near the top & bottom – 1/2" bars @ 6' max. vertically	0.075 square inch bar 8' o.c. vertically in fully grouted cells. If block is 12" nominal thickness, may be unreinforced.	Type M or S. Grout & Mortar shall meet provisions of Chapter 21 IBC
9	8' 8"	8"	See Chapter 18 IBC	1/2" bars 2' o.c. horizontally & 20" vertically o.c.	See Chapter 18 IBC	Same as above
10	9' 8"	8"	See Chapter 18 IBC	(5/8" bars 2' o.c. horizontally & 30" vertically o.c.)	See Chapter 18 IBC	Same as above
*Concrete floor slab to be nominal 4". If such floor slab is not provided prior to backfill, provide 1) 36" vertical embedded in the footing @ maximum 7' O.C. spacing -and/or- 2) full depth nominal 2"depth x 4"width keyway in footing						
** All reinforcement bars shall meet ASTM A6175 grade 40 minimum and be deformed. Placement of bars shall center of wall and meet the provisions of chapters 18, 19, and 21 of the International Building Code.						
NOTE: Cast in place concrete shall have a compressive strength of 3,000 lbs @ 28 days. Footings shall contain reinforcement of minimum 2 – Y2" diameter rebar throughout. Placement of reinforcement and concrete shall requirements of Chapter 19 of the International Building Code.						
NOTE: Material used for backfilling shall be carefully placed granular soil of average or high permeability and drained with an approved drainage system as prescribed in Section 1805.4 of the International Building Code. containing a high percentage of clay, fine silt or similar materials of low permeability or expansive soils are where backfill materials are not drained or an unusually high surcharge is to be placed adjacent to the wall, a designed wall shall be required.						
Note: Foundation plate or sill anchorage shall be installed in accordance with the respective codes as applicable.						

CC. Amend Chapter 11 Energy Efficiency -- Energy Efficiency, of the IRC is hereby

amended by deleting this chapter and inserting the following:

Provisions of the International Energy Conservation Code as currently adopted and amended by the Iowa State Building Code Bureau shall apply to all matters governing the design and construction of buildings for energy efficiency. Administration shall be prescribed in “this code” and the regulations shall be known as the Waukee Energy Code.

DD. Amend Section R1601.4 to add the following:

Section 1601.4 Installation. Duct installation shall comply with sections M1601.4.1 through M1601.4.11

Section 1601.4.11. Air plenum and duct separation. Air plenums and ducts located in floor and wall cavities shall be separated from unconditioned spaces by construction with sufficient insulation to meet energy code requirements. These areas include but are not limited to exterior walls, cantilevered floors, and floors above garages.

EE. Delete Section R G2414.5.2 (403.5.2) and replace with the following:

Section G2415.5.2 (403.5.2): Corrugated Stainless Steel Tubing (CSST). Only CSST with an Arc Resistant Jacket or Covering System listed in accordance with ANSI LC-1 (Optional Section 5.16)/CSA 6.26-2016 shall be installed in accordance with the terms of its approval, the conditions of listing, the manufactures instructions and this code including electrical bonding requirements in Section G2411. CSST shall not be used for through wall penetrations from the point of delivery of the gas supply to the inside of the structure. CSST shall not be installed in locations where subject to physical damage unless protected in an approved manner.

FF. Delete Section R G2414.5.4 (403.5.5) and replace with the following:

Section G2414.5.4 (403.5.5): Corrugated Stainless Steel Tubing. Arc resistant corrugated stainless steel tubing shall be listed in accordance with ANSI LC 1 (Optional Section 5.16)/CSA 6.26.

GG. Amend section P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall not be less than 60 inches below finished grade at the point of septic tank connection or as approved by Guthrie County Environmental Health. Building sewers shall not be less than 60 inches below grade.

HH. Add Code Section IRC E3704.7 and insert the following language:

3704.7 Prohibited Locations. Feeders supplying a townhome shall not cross a property line other than the individual unit served. For the purposes of this provision, the term townhome shall mean a single-family dwelling unit constructed in a group of two or more attached units in which each unit extends from foundation to roof and with a yard or public way on not less than two sides.

Exception: If a recorded easement is established in a concealed space or attic within the townhome unit, feeds are allowed within the easement.



§144.4       **Adoption of the 2021 International Building Code.** Pursuant to published notice and public hearing, as required by law, the International Building Code, 2021 Edition, published by the International Code Council, is hereby adopted in full to include Appendix K except for such portions as may hereinafter be deleted, modified or amended.

§144.5       **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the International Building Code, 2021 Edition, are hereby made:

- A. Insert Section 101.1 to read City of Panora
- B. Delete Sections 105.2(Building 2), 105.2(Building 5), 105.2(Building 6).
- C. Amend Section R105.6 to include the addition of R105.6.1 Revocation of permit. Insert Section R105.6.1 to read: Revocation of Permit. It is the permit holder's responsibility to schedule the required inspections and obtain final approvals. Failure to schedule the required inspections and receive approval of work authorized by the permit before covering said work or at completion shall result in revocation of the permit and void any associated approvals granted by the City. This failure shall also equate to working without a permit in violation of City ordinance and no future permits shall be issued to any person or company who has outstanding violations of this code or any other laws or ordinances of the City. Failure to contact the City for any inspection or follow-up prior to expiration of a permit shall be deemed a violation of this code section. Failure to contact the City for any inspection or follow-up prior to expiration of a Temporary Certificate of Occupancy shall also be deemed a violation of this code section. Allowing occupancy of a structure, for which a person or company holds a building permit, prior to or without a valid Certificate of Occupancy (temporary or final) shall be deemed a violation of this code section and no future permits shall be issued to any person or company who has outstanding violations of this code or any other laws or ordinances of the City.
- D. Add the following to Section 109.2 Schedule of Permit Fees with the following language: Permit fees will be derived from the City of Panora Fee Schedule as adopted.
- E. Add the following to Section R109.3: The Building Valuation will be derived from the construction costs for the total work submitted by the contractor, or the most current Building Valuation Data Schedule published by the International Code Council (ICC). Submitted contractor valuation shall not be less than derived valuation through ICC. Published data is utilized by the Administrative Official in an effort to maintain consistency and fairness for permit fee calculations. It is not intended to reflect actual taxable value.
- F. Delete Section 308.5.4 and replace with the following:

308.5.4 Eight or fewer persons receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having eight or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

Exception:

Day Care facilities that provide custodial care for 16 or fewer persons for less than 24 hours per day in a single family dwelling, and where registered with the State of Iowa Department of Human Services as a child development home are permitted to comply with the International Residential Code.

G. Delete Section 310.4.1 and replace with the following:

310.4.1 Care facilities within a dwelling. Care facilities within a dwelling shall adhere to section 308.5.4.

423.5.1 Required Occupant Capacity. The required occupant capacity of the storm shelter shall include all buildings classified as a Group E occupancy on the campus or site (whichever is larger) and shall be the greater of the following:

1. The total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.
2. The occupant load of any indoor assembly space that is associated with the Group E occupancy.

Exceptions:

1. Where a new building is being added on an existing Group E site, and where the new building is not of sufficient size to accommodate the required occupant capacity of the storm shelter for all of the buildings on-site, the storm shelter shall at a minimum accommodate the required capacity for the new building.
2. Where approved by the code official, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing storm shelters on the campus or site.

423.5.2 Location. Storm shelters shall be located within the buildings they serve, or shall be located where the maximum distance of travel from not fewer than one exterior door of each building to a door of the shelter serving that building does not exceed 1,000 feet.

The installation of portable buildings for utilization on the campus or site for educational purposes is considered new construction and classified as Group E occupancies.

Exception: Existing schools undergoing alterations, additions, or construction of new accessory buildings.

H. Delete Code Section: IBC 502.1 (Correlation IFC 505.1) and replace with the following language:

502.1 Address identification. New and existing buildings shall have *approved* address numbers, building numbers or *approved* building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall be black or white and shall contrast with their background. Where required by the

*fire code official*, address numbers shall be provided in greater dimension or additional *approved* locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers and letters shall be a minimum height and a minimum stroke width as dictated by Table 502.1. Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

**Table 502.1  
Minimum Height and Stroke Width**

Distance from the centerline of the Public Way (ft)		Minimum Height (in)	Minimum Stroke Width (in)
Less than 100		4	1/2
100	199	6	3/4
200	299	8	1
For each additional 100		Increase 2	Increase 1/2

<sup>a</sup> Exterior suite identification, minimum height shall be 4 inches and stroke width shall be 1/2 inch.

<sup>b</sup> Interior suite identification, minimum height shall be 2 inches and stroke width shall be 1/4 inch.

I. Modify IBC Section 716.2.6.1 to add the following language after the last sentence:  
Automatic, self-closing, UL listed hinges may only be installed on the dwelling room entry door.

J. Add Section 902.1.1.1 (Correlation IFC 901.4.6.1) to include the following language:

902.1.1.1 Fire Sprinkler Riser Room. A fire sprinkler riser room shall be separated from the electrical room. The riser room shall have no electrical panels, devices, or apparatus inside the room other than the outlets or support equipment (lighting, air compressor, and heater) required for the use of the fire sprinkler system and/or the fire alarm panel. The sprinkler riser room shall not be accessed from the electrical room, but the electrical room may be accessed from the fire riser room.

K. Add new code section IBC 902.1.5 (Correlation IFC 901.4.6.5 K) to include the following language:  
902.1.5 Temperature Sensor. Provide a low temperature sensor in the fire sprinkler riser room. Low Temperature Sensor shall be monitored to prevent freezing.

L. Delete Section 903.2.11.1.3 and replace with the following:

903.2.11.1.3 Basements. Where any portion of a basement is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, the basement shall be equipped throughout with an approved automatic sprinkler system.

M. Delete Section 903.4.2 and replace with the following:

- 903.4.2 Alarms. An approved weather proof audible device suitable for outdoor use with 110 candela visual signal shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.
- N. Amend Section 1008.3.3. to add the following locations with sequential numbering:
5. Public restrooms containing more than one water closet/urinal or that are accessible.
  6. Meeting and conference rooms with an area greater than 400 square feet.
  7. Classrooms in an E occupancy with an area greater than 400 square feet.
- O. Amend Section 1009.2 to add the following:
11. Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.
- P. Add Section 1010.1.6.1 with the following language:
- 1010.1.6.1 For landings required by Section 1010.1.5 to be at the same elevation on each side of the door, exterior landings at doors shall be provided with frost protection.
- Q. Amend Section 1010.2.2 to add the following:
- Thumb Turn Locks shall not be allowed.
- R. Add the following Section 1013.1.1:
- 1013.1.1 Additional Exit Signs. Exit signs may be required at the discretion of the Administrative Official to clarify an exit or exit access.
- S. Delete Sections 1013.5 and 1013.6 including 1013.6.1, 1013.6.2 and 1013.6.3.
- T. Add the following Section 1028.5.1:
- 1028.5.1 Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.
- U. Modify Code Section: IBC 1301.1 and replace with the following language:
- Section 1301.1 Scope. The provisions of the International Energy Code as currently adopted and amended by the Iowa State Building Code Bureau shall apply to all matters governing the design and construction of buildings for energy efficiency. Administration shall be as prescribed in chapter 1 of the currently State adoption of the IECC and these regulations shall be known as the Panora Energy Code.

- V. Amend Section 1608.2 to add the following: For purposes of determining snow loads, the minimum ground snow load for design purposes shall be 30 pounds per square foot. Subsequent increases or decreases shall be allowed as otherwise provided in this code, except that the minimum allowable flat roof snow load may be reduced to not less than 80 percent of the ground snow load.
- W. In Section 1609.1.1 add the following: For purposes of determining wind loads, the minimum basic wind speed shall be considered as 115 miles per hour; except when referenced documents are based on fastest mile wind velocities, Table 1609.3(1) shall be used.
- X. Add the following to Section 1807.1 Foundation Retaining Walls for Group R Occupancies:
1. Scope. Notwithstanding other design requirements of Chapters 18, 19 and 21 of the International Building Code, foundation retaining walls for Group R occupancies of Type V construction may be constructed in accordance with this section, provided that use or building site conditions affecting such walls are within the limitations specified in this section.
  2. Specifications. General specifications for such foundation retaining walls shall be as follows:

Table - 'Foundation Walls for Conventional Light Frame Construction'

Height of Foundation Wall (Net measured from top of basement slab to top of foundation wall)*		Thickness of Foundation Walls		Reinforcement type and placement within Foundation Wall**	Reinforcement type and placement within Foundation Wall** (maximum 12' span between corners and supporting cross walls)	Type of Mortar
		Unit				
Gross	Net	Concrete	Masonry	Concrete	Masonry	Masonry
8	7' 8"	7 1/2"	8"	1/2"horizontal bars, placement in the middle, and near the top & bottom – Y2" bars @ 6' max. vertically	0.075 square inch bar 8' o.c. vertically in fully grouted cells. If block is 12" nominal thickness, may be unreinforced.	Type M or S. Grout & Mortar shall meet provisions of Chapter 21 IBC
9	8' 8"	8"	See Chapter	1/2" bars 2' o.c. horizontally & 20"	See Chapter 18 IBC	Same as above
10	9' 8"	8"	See Chapter	(5/8" bars 2' o.c. horizontally & 30" vertically o.c.)	See Chapter 18 IBC	Same as
			18 IBC			

\*Concrete floor slab to be nominal 4". If such floor slab is not provided prior to backfill, provide 1) 36"

embedded in the footing @ maximum 7' O.C. spacing -and/or- 2) full depth nominal 2"depth x 4"width keyway in footing

\*\* All reinforcement bars shall meet ASTM A6175 grade 40 minimum and be deformed. Placement of center of wall and meet the provisions of chapters 18, 19, and 21 of the International Building Code.

NOTE: Cast in place concrete shall have a compressive strength of 3,000 lbs @ 28 days. Footings shall reinforcement of minimum 2 – 1/2" diameter rebar throughout. Placement of reinforcement and requirements of Chapter 19 of the International Building Code.

NOTE: Material used for backfilling shall be carefully placed granular soil of average or high drained with an approved drainage system as prescribed in Section 1805.4 of the International Building Code containing a high percentage of clay, fine silt or similar materials of low permeability or expansive soils where backfill materials are not drained or an unusually high surcharge is to be placed adjacent to the designed wall shall be required.

Note: Foundation plate or sill anchorage shall be installed in accordance with the respective codes as applicable.

Y. Replace Table 1809.7 with the following:

TABLE 1809.7  
FOUNDATIONS FOR STUD BEARING WALLS

Number of Stories	Thickness of Foundation Walls <i>Unit</i> <i>Concrete Masonry</i>		Minimum Width of Footing (inches)	Thickness of Footing (inches)	Minimum Depth of Foundation Below Natural Surface of Ground and Finish Grade (inches)
1	8	8	16	8	42
2	8	8	16	8	42
3	10	10	18	12	42

§144.6 **Adoption of the 2021 International Existing Building Code.** Pursuant to published notice and public hearing, as required by law, the International Existing Building Code, 2021 Edition, published by the International Code Council, is hereby adopted in full except for such portions as may hereinafter be deleted, modified or amended.

§144.7 **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the International Existing Building Code, 2021 Edition, are hereby made:

- A. Add the following to Section 108.2 Schedule of Permit Fees with the following language:  
Permit fees will be derived from the City of Panora Fee Schedule as adopted.

B. Add New Code Section: IEBC 302.6 with the following language:  
Section 302.6 Fire Protection. Existing buildings containing R-2 occupancies shall be made to comply with the International Building Code Section 903.2.8 within two (2) years of any of the following situations:

1. Fire damage to three or more dwelling units, not including smoke or water damage or other damage from fire-fighting operations.

2. Issuance of a building permit for a Level III alteration as identified in Chapter 6 of the International Existing Building Code.

§144.8 **Adoption of the 2018 International Mechanical Code.** Pursuant to published notice and public hearing, as required by law, the International Mechanical Code, 2021 Edition, published by the International Code Council, is hereby adopted in full except for such portions as may hereinafter be deleted, modified or amended.

§144.9 **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the International Mechanical Code, 2021 Edition, are hereby made:

A. The City of Panora interprets “NFPA 54 and NFPA 58” as equivalent alternatives for design to meet the intent of the 2021 International Fuel Gas Code

B. Amend Section 109.5 to add the following:  
Permit fees will be derived from the City of Panora Fee Schedule as adopted.

C. Amend Section 306.5 to add the following:

If the tenants of a multiple tenant building have, or are allowed to have, mechanical facilities on or which penetrate the roof, then roof access ladders must be provided for use by all such tenants and their agents and contractors in a manner that does not require accessing space under the control of another tenant.

D. Delete Section 307.2.4.1 and replace with the following:

307.2.4.1 Ductless mini-split system traps. Ductless mini-split equipment that produces condensate shall be installed per manufacturer’s instructions.

E. Amend Section 603.1 to add the following:

Air plenums and ducts located in floor and wall cavities shall be separated from unconditioned space by construction with insulation to meet energy code requirements. These areas include but are not limited to exterior walls, cantilevered floors, and floors above garages.

§144.10 **Adoption of the 2021 Uniform Plumbing Code.** Pursuant to published notice and public hearing, as required by law, the Uniform Plumbing Code, 2021 Edition, published by the International Association of Plumbing and Mechanical Officials and amended by the State of Iowa, is

hereby adopted in full except for such portions as may hereinafter be deleted, modified or amended.

§144.11 **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the Uniform Plumbing Code, 2021 Edition, are hereby made:

The City of Panora interprets the 2021 International Plumbing Code as published by the International Code Council as an equivalent alternative to the 2018 Uniform Plumbing Code.

- A. UPC Section 104.5: Delete Table 104.5 and insert the following language: permit fees will be derived from the City of Panora Fee Schedule as adopted.
- B. Amend Section UPC 407.3 to include the following language at the end of the Code section:  
Tempering devices shall be installed at or as close as possible to the point of use.
- C. Amend Section UPC 418.3 to include location #5 with the following language:  
Rooms containing a water heater.
- D. Amend Section UPC 609.1 to add the following language:  
  
Water service piping shall have no less than five feet (5') of soil cover.
- E. Amend Section UPC 701.2 to add the following language:  
  
(7) The use of SDR 23.5 is an acceptable material for exterior building sewers.
- F. Amend Section UPC 717.1 to add the following language:  
  
717.1.1 Size of Drainage Piping. The main building drain shall be a minimum four inch (4") diameter.
- G. Amend Section UPC 718.3.1 to add the following language:  
  
718.3.1 Protection from damage. Building sewers less than 42 inches below grade shall be cast iron pipe or be protected with an engineered system to prevent damage from freezing and frost heave.
- H. Amend Section UPC 1014.1 to add the following language:  
  
Notwithstanding provisions of section 1014.1, regulations of Fat Oil and Grease (FOG) and sizing of FOG removal devices where connected to Wastewater Reclamation Authority (WRA) system shall be in accordance with WRA regulations for the regulations of industrial wastewater and commercial wastewater.
- I. Delete Section UPC 1101.12.2.2.2 Combined System.



J. Amend Section UPC 1208.6.4.4 to add the following language:

1208.6.4.4 Corrugated Stainless Steel Tubing. Only CSST with an Arc Resistant Jacket or Covering System listed in accordance with ANSI LC-1 (Optional Section 5.16)/CSA 6.26-2016 shall be installed in accordance with the terms of its approval, the conditions of listing, the manufactures instructions and this code including electrical bonding requirements in Section 1211.2. CSST shall not be used for through wall penetrations from the point of delivery of the gas supply to the inside of the structure. CSST shall not be installed in locations where subject to physical damage unless protected in an approved manner.

§144.12 **Adoption of the 2020 National Electrical Code.** Pursuant to published notice and public hearing, as required by law, the currently adopted by the State of Iowa Edition of the National Electrical Code, published by the National Fire Protection Association, is hereby adopted in full except for such portions as may hereinafter be deleted, modified or amended.

§144.13 **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the National Electrical Code, as currently adopted by the State of Iowa, are hereby made:

A. Amend Section 90.2 to add the following language:

90.2(D) Scope. Permits required. Permits shall be required for work contained within the scope of this article. Permit fees will be derived from the City of Panora Fee Schedule as adopted.

B. Delete section 210.8(A). and insert in lieu thereof the following new section:

210.8 (A) Dwelling Units.

All 125-volt receptacles installed in locations specified in 210.8 (A)(1) through 210.8 (A)(11) shall be ground-fault circuit-interrupter protection for personnel.

(1) Bathrooms

(2) Garages and also accessory buildings that have floor located at or below grade level not intended to be habitable rooms and limited to storage areas, work areas, or similar use

(3) Outdoors

Exception to (3) Receptacles that are not readily accessible and are supply branch circuits dedicated to electrical snow-melting, deicing, or pipeline and Bessel heating equipment shall be permitted to be installed in accordance with 426.28m or 427.22, as applicable

(4) Crawl spaces – at or below grade level

(5) Basements

Exception to (5): A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

Informational Note: See 760.41B and 760.121(B) for power supply requirements for fire alarm systems.

Receptacles installed under the exception to 210.8 (A) (5) shall not be considered as meeting the requirements of 210.52(G).

(6) Kitchens – Where the receptacles are installed to serve the countertop surfaces

(7) Sinks – Where receptacles are installed within 1.8 m (6 ft) from the top inside edge of the bowl of the sink

(8) Boathouses

(9) Bathtubs or shower stalls – Where receptacles are installed within 1.8 m (6 ft) of the outside edge of the bathtub or shower stall

(10) Laundry areas

Exception to (1) through (3), (5) through (8), and (1): Listed locking support and mounting receptacles utilized in combination with compatible attachment fittings installed for the purpose of serving a ceiling luminaire or ceiling fan shall not be required to be ground-fault circuit-interrupter protected. If a general-purpose convenience outlet is integral to the ceiling luminaire or ceiling fan, GFCI protection shall be provided.

(11) Indoor damp and wet locations

C. Delete section 210.8(F)

D. Add Code Section NEC 215.13 Prohibited Locations with the following language:

NEC 215.13 Prohibited Locations. Feeders supplying townhomes shall not extend through any townhome unit other than the unit served. For the purpose of this provision, the term townhome shall mean a single-family dwelling unit constructed in a group of two or more attached units in which each unit extends from the foundation to roof with a yard or public way on not less than two sides.

Exception: If a recorded easement is established in a concealed space or attic within a townhome unit, feeders are allowed within that easement.

§144.14 **Adoption of the 2021 International Fuel Gas Code.** Pursuant to published notice and public hearing, as required by law, the International Fuel Gas Code, 2021 Edition, published by the International Code Council, is hereby adopted in full except for such portions as may hereinafter be deleted, modified or amended.

§222.15 **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the International Fuel Gas Code, 2021 Edition are hereby made:

A. Amend Section 106.6.2 to include the following language: Permit fees will be derived from the City of Panora Fee Schedule as adopted.

B. Delete Section 5.6.3.4 and replace with the following:

5.6.3.4 Corrugated Stainless Steel. Only CSST with an Arc Resistant Jacket or Covering System listed in accordance with ANSI LC-1 (Optional Section 5.16)/CSA 6.26-2016 shall be installed in accordance with the terms of its approval, the conditions of listing, the manufacturer's

instructions and this code including electrical bonding requirements in Section 7.13.2. CSST shall not be used for through wall penetrations from the point of delivery of the gas supply to the inside of the structure. CSST shall not be installed in locations where subject to physical damage unless protected in an approved manner.

§144.16       **Adoption of the 2021 International Property Maintenance Code.** Pursuant to published notice and public hearing, as required by law, the International Property Maintenance Code, 2021 Edition, published by the International Code Council, is hereby adopted in full except for such portions as may hereinafter be deleted, modified or amended.

§144.17       **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the International Property Maintenance Code, 2021 Edition, are hereby made:

- A. Amend Section 101.1 Title to insert Panora as the jurisdiction referenced.
- B. Amend Section 103.5 Fees to include the following language: Permit fees will be derived from the City of Panora Fee Schedule as adopted.
- C. Amend Section 302.4 to delete [JURISDICTION TO INSERT HEIGHT IN INCHES] and replace with “X inches in height on developed properties and X inches in height on undeveloped properties.”
- D. Amend Section 304.14 to read as follows:

During the period from April 15<sup>th</sup> to October 15<sup>th</sup>, every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored, shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every swinging door shall have a self-closing device in good working condition.
- E. Amend Section 602.3 by deleting “[DATE] to [DATE]” and replacing with September 1 to May 30.
- F. Amend Section 602.4 by deleting “[DATE] to [DATE]” and replacing with September 1 to May 30.
- G. Insert new sentence prior to last sentence of paragraph in Section 605.2 with the following language:

Any accessible receptacle within 6 feet of a water source shall be provided with Ground-Fault Circuit-Interrupter Protection.
- H. Amend Section 705.1 to add the following language to the end of the paragraph: In addition, carbon monoxide alarms and detectors shall be installed in accordance with Iowa Code Section 661—Chapter 211.
- I. Add new Section 705.3 with the following language:

705.3 Installation Locations. Installation locations shall be in conformance with the

International Fire Code, the International Residential Code, Iowa Code, and at the location closest to the hazard of an attached garage or fuel-fired appliance.

§144.18 **Adoption of the 2012 International Energy Conservation Code.** Pursuant to published notice and public hearing, as required by law, the International Energy Conservation Code, 2012 Edition, published by the International Code Council, is hereby adopted in full except for such portions as may hereinafter be deleted, modified or amended.

§144.19 **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the International Energy Conservation Code, 2012 Edition, are hereby made:

- A. The provisions of the International Energy Code as currently adopted and amended by the Iowa State Building Code Bureau shall apply to all matters governing the design and construction of buildings for energy efficiency.
- B. Delete Sections 101.1, 101.2, 103.3.1, 103.3.2, 103.3.3, 103.4, 103.5, and all of Sections 104, 107, 108 and 109.
- C. All energy code compliance inspections shall be completed by a third party certified to do such inspections with a report submitted to the Administrative Official showing compliance with the State adopted energy code.
- D. Add Code Section C402.1.1.1 Seasonal Structures with the following language:

C402.1.1.1 Seasonal Structures. The following seasonal type structures are exempt from meeting the provisions of this code. (These facilities are allowed to have heating and/or cooling equipment for temporary comfort of patrons and employees during operating hours.)

- 1. Food Service Buildings that serve patrons at amusement parks, water parks, and outdoor sporting facilities. The buildings can only be occupied by employees, must not be able to allow patrons to be served within the facility and must have its sole means of servicing customers, an operable exterior serving window.
  - 2. Restroom Facilities that serve amusement parks, water parks, and outdoor sporting facilities.
- E. Delete Section C408.2 and replace with the following:

Mechanical systems and service water-heating systems commissioning and completion requirements. Prior to the final mechanical and plumbing inspections, the registered design professional or approved agency shall provide evidence of mechanical systems commissioning and completion in accordance with the provisions of this section. The Commissioning Agent shall be in no way affiliated with the project's design, installation or sale of products, to avoid any conflict of interest. The Commissioning Agent shall be accredited by an industry-recognized certification program, to be determined by the AHJ.

§144.20       **Adoption of the 2021 International Fire Code.** Pursuant to published notice and public hearing, as required by law, the *International Fire Code*, 2021 edition, including Appendix Chapters **B, C, D, I, K, and N** (see *International Fire Code* Section 101.2.1, 2021 edition), as published by the International Code Council, is hereby adopted in full as the Fire Code of City of Panora, for regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this legislation, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this resolution.

§144.21       **Amendments, Modifications, Additions and Deletions.** The following amendments, modifications, additions and deletions to the International Fire Code, 2021 Edition, are hereby made:

- A. Section 101.1. Insert: **[City of Panora]**
- B. Code Section 109: Refer to Panora Board of Appeals.
- C. Delete Code Section: IFC 308.1.4 Replace with the following language:

**308.1.4 Open-flame cooking devices.** Charcoal burners, other open-flame cooking devices, and other devices that produce ashes or embers shall not be operated on balconies or within 20 feet (3048 mm) of combustible construction. Location of LP containers shall comply with Section 6104.  
**Exceptions:**

- 1. One- and two-family *dwelling*s, constructed in accordance with the *International Residential Code*.
- 2. LP-gas cooking devices having LP-gas container with a water capacity not greater than 20 pounds.

- D. Insert New Code Section:

**319.11 Location.** Mobile food vehicles shall not be located within 20 feet (6096 mm) of buildings, tents, canopies or membrane structures.

- E. Insert New Code Section: IFC 503.1.4 Insert the following language:

**503.1.4 Outdoor Venue Access.** A 10 ft. wide emergency access roads designed to support 36,000 lb. weight load shall be provided within 350-feet of all portions of an outdoor venue (e.g. soccer complex, park, skate park, sports fields) to facilitate emergency vehicle access.

**Exception:** The fire code official is authorized to increase the dimension of 350 feet where emergency access roads cannot be installed because of location on property, topography, waterway, nonnegotiable grades, or other similar conditions, and an approved alternative means of emergency access is provided.

F. Delete Code Section: IFC 505.1 Replace with the following language:

**505.1 Address identification.** New and existing buildings shall have *approved* address numbers, building numbers or *approved* building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall be black or white and shall contrast with their background. Where required by the *fire code official*, address numbers shall be provided in greater dimension or additional *approved* locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers and letters shall be a minimum height and a minimum stroke width as dictated by Table 505.1. Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

**Table 505.1**  
**Minimum Height and Stroke Width**

Distance from the centerline of the Public Way (ft)		Minimum Height (in)	Minimum Stroke Width (in)
Less than 100		4	1/2
100	199	6	3/4
200	299	8	1
For each additional 100		Increase 2	Increase 1/2

<sup>a</sup> Exterior suite identification, minimum height shall be 4 inches and stroke width shall be ½ inch.

<sup>b</sup> Interior suite identification, minimum height shall be 2 inches and stroke width shall be ¼ inch.

G. Modify Code Section: IFC 508.1 Replace with the following language:

**508.1 General.** Where required by other sections of this code, Table 508.1, and in all buildings classified as high-rise buildings by the *International Building Code*, a *fire command center* for fire department operations shall be provided and shall comply with [Sections 508.1.1 through 508.1.6](#).

H. Add Code Section: IFC Table 508.1 Add the following language:

**Table 508.1 Fire Command Center Thresholds**

Occupancy	Threshold Requiring a Fire Command Center
Group A	1,000 occupants
Group E	100,000 gross square feet
Group F	200,000 gross square feet
Group H	100,000 gross square feet
Group I-2 or I-3	100,000 gross square feet
Group M	100,000 gross square feet
Group R1	Greater than 200 <i>dwelling units</i> or <i>sleeping units</i>
Group S	200,000 gross square feet

- I. Modify Code Section IFC 705.2.4 and replace with and add the following language:

**705.2.4 Door Operation.** Swinging fire doors shall close from the full open position and latch automatically. The door closer shall:

1. Exert enough force to close and latch the door from any partially open position.
2. Be UL listed and of hydraulic type, spring type shall not be allowed.

- J. Insert New Code Section: IFC 901.4.6.1.1 (correlation: IBC 902.1.1.1) Insert the following language:

**901.4.6.1.1 Fire Sprinkler Riser Room.** A fire sprinkler riser room shall be separated from the electrical room. The riser room shall have no electrical panels, devices, or apparatus inside the room other than the outlets or support equipment (lighting, air compressor, and heater) required for the use of the fire sprinkler system and/or the fire alarm panel. The sprinkler riser room shall not be exclusively accessed from the electrical room, but the electrical room may be accessed from the fire riser room.

- K. Insert New Code Section: IFC 901.4.6.5 (correlation IBC 902.1.5) Insert the following language:

**901.4.6.5 Temperature Sensors.** Provide a low temperature sensor in the fire sprinkler riser room. Low Temperature Sensor shall be monitored to prevent freezing.

- L. Insert New Code Section IFC 903.3.1.1.3 (correlation: IBC 903.3.1.1.3)

**903.3.1.1.3 Sprinkler installed under exterior projections.** A canopy covering a door that is required to be marked as an exit shall be required to have fire sprinklers installed outside that door if the canopy extends more than 4 feet out from the door and is 12 feet or less in height from the ground regardless of whether the canopy is combustible or non-combustible. Canopies that have vehicle access under them with door openings shall be required to have fire sprinklers installed under the total canopy regardless of whether the canopy is combustible or non-combustible.

- M. Modify Code Section IFC 903.3.1.2 (correlation: IBC 903.3.1.2) and replace with the following language:

**903.3.1.2 NFPA 13R sprinkler systems.** Automatic sprinkler systems in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet (18288 mm) in height above grade plane shall be permitted to be installed throughout in accordance with NFPA 13R. Attics shall be protected throughout with an *automatic sprinkler system* installed in accordance with NFPA 13.

- N. Modify Code Section: IFC 903.2.11.1.3 (correlation: IBC 903.2.11.1.3) Replace with the following language:

**903.2.11.1.3 Basements.** Where any portion of a *basement* is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, the *basement* shall be equipped throughout with an *approved automatic sprinkler system*.

- O. Modify Code Section: IFC 903.4.2 (correlation: IBC 903.4.2) Replace with the following language:

**903.4.2 Alarms.** *An approved weather proof audible device suitable for outdoor use with 110 candela visual signal shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.*

- P. Modify Code Section: IFC 1008.3.3 (correlation: IBC 1008.3.3) Replace with the following language:

**1008.3.3 Rooms and spaces.** In the event of a power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. Electrical equipment rooms
2. Fire command centers
3. Fire pump rooms
4. Generator rooms
5. Public restrooms that contain more than one water closet/urinal or that are accessible
6. Meeting/conference rooms with an area greater than 400 square feet.
7. Classrooms in an E occupancy with an area greater than 400 square feet.

- Q. Modify Code Section: IFC 1009.2 (correlation: IBC 1009.2) Insert item # 11 with the following language:

**11. Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.**

- R. Add Code Section: IFC 1010.1.6.1 (correlation: IBC 1010.1.6.1) Insert the following language:

**1010.1.6.1 Frost Protection.** Landings required by Section 1010.1.5 to be at the same elevation on each side of the door exterior landings at doors shall be provided with frost protection.

- S. Modify Code Section: IFC 1010.1.9.1 (correlation: IBC 1010.1.9.1) Replace with the following language:

**1010.1.9.1 Hardware.** Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 of the International Building Code shall not require tight grasping, tight pinching or twisting of the wrist to operate. This includes thumb turn locks.

- T. Insert Code Section: IFC 1013.1.1 (correlation: IBC 1013.1.1) Language:



**1013.1. 1 Additional Exit Signs.** Exit signs may be required at the discretion of the Code Official to clarify an exit or exit access.

- U. Modify Code Section: IFC 1014.4 (correlation: IBC 1014.4) Insert item # 6 with the following language:

Handrails within a dwelling unit or serving an individual dwelling unit of groups R-2 and R-3 shall be permitted to be interrupted at one location in a straight stair when the rail terminates into a wall or ledge and is offset and immediately continues.

- V. Add Code Section: IFC 1015.9 (correlation: IBC 1015.9) Insert the following language:

**1015.9 Walking surfaces.** A guard shall be provided along retaining walls where a finished walking surface such as sidewalks, patios, driveways and parking lots or similar is located on the top side of a retaining wall. The guard shall be installed along any portion of the wall measuring 30 inches or greater in height measured at any point within 36 inches horizontally to the edge of the open side. A guard shall not be required along portions of the retaining wall where the horizontal distance between the edge of the finished walking surface and the face of the wall is greater than 72 inches.

- W. Insert Code Section: IFC 1028.5.1 (correlation: IBC 1028.5.1) Insert the following language:

**1028.5.1 Hard Surfaces.** Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.

- X. Insert Code Section: IFC 1031.5.3 (correlation: IBC 1030.4.3) Insert the following language:

**1031.5.3 Window wells drainage.** All window wells shall be provided with approved drainage.

- Y. Insert New Code Section: IFC 1203.7 Insert the following language:

**Section 1203.7 Shutdown of Emergency and Standby Power Systems.** In addition to the requirements of NFPA 110 for a remote manual stop, a switch of an approved type shall be provided to shut down the generator. The switch shall be provided at an approved location.

- Z. Insert New Code Section: IFC 1203.8 Insert the following language:

**Section 1203.8 Emergency Generator Signs.** Main electrical disconnects and main breaker panels supplied by the generator shall be provided with approved signs.

Additionally, doors accessing emergency and standby power systems shall be provided with approved signs. When approved switches for emergency power shut-down are located remote from the fire alarm annunciator, an approved sign shall be provided at fire alarm annunciator. Approved signs shall contain the word CAUTION in black letters at least 2 inches (50 mm) high on a yellow background. Such warning signs shall be placed so as to be readily discernible.

- AA. Insert New Section 3106.3.1

**3106.3.3 Occupancy and means of egress.** The number and location of emergency egress and escape routes shall be approved by the fire code official. Exits shall comply with Chapter 10 and be as remote from each other as practical and shall be provided as follows:

Occupant Load	Minimum Number of Exits
1 to 500	2
501 to 1,000	3
1,001 or 1,500	4
each additional 500 persons	36 additional inches of exit width

**3106.3.4 Width.** The aggregate clear width of exits shall be a minimum of 36 inches wide (914mm) for each 500 persons to be accommodated.

**3106.3.5 Signs.** Exits shall be identified with signs that read “EXIT”. The signs shall be weather-resistant with lettering on a contrasting background. The lettering shall be of sufficient height and brush stroke to be immediately visible from 75 feet (22,860mm). Placement of the exit signs shall be approved by the fire code official.

BB. Insert Code Section: IFC 6104.3.3 Insert the following language:

**6104.3.3 LP Gas Containers in Group R Occupancies.** LP Gas shall not be stored or used inside of a building.