

Ordinance No. 2015-33

**An ordinance amending Chapters 5 and 9 of the Victoria City Code by adopting the 2015 International Building Code series and the 2014 National Electric Code, as amended and modified herein, repealing all conflicting ordinances, providing for enforcement and a penalty upon conviction not to exceed \$2,000.00 respectively, providing for publication, codification, and savings, and declaring an effective date.**

Whereas these changes represent updates to the City's Code of Ordinances to incorporate changes published in the 2015 International Residential code, Commercial Building code, Plumbing code, Mechanical code, Fuel Gas code, Fire code, Energy code, Existing Building code, and the 2014 National Electric code;

**Now therefore, be it ordained by the City Council of the City of Victoria, Texas:**

1. Sections 5-50 through 5-53 of Chapter 5 of the Victoria City Code are amended to read as follows:

**ARTICLE IV. INTERNATIONAL RESIDENTIAL CODE**

**Sec. 5-50. Adoption of published code and controlling law.**

(a) *Adoption of Code.* The City Council hereby adopts, for the purpose of establishing administrative provisions, rules and regulations specific to one and two family dwelling construction, alteration, enlargement, repair, equipment, use, occupancy, maintenance, location, appurtenances, and accessory structures, that certain building code known as the ~~2009~~ **2015** International Residential Code for One and Two Family Dwellings, published by the International Code Council, save and except such portions as are hereinafter deleted, modified, or amended. Copies of the aforesaid code shall be maintained on file with the City Secretary and the Development Services Department. The aforesaid code is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this section shall take effect, the provisions thereof shall be controlling in the construction of all one and two family dwellings and other structures therein regulated within the corporate limits of the city.

(b) *Controlling Law.* Compliance with the provisions of the International Residential Code in the construction or renovation of structures to which said code is applicable shall constitute a defense to a claim of noncompliance with a provision of the building code adopted at Section 5-60 of the City Code, the mechanical code adopted at Section 5-70 of the City Code, the plumbing code adopted at Section 5-80 of the City Code, the fuel gas code at section 5-90, or the electrical code adopted at Section 5-100 of the City Code. Compliance with the provisions of the building code adopted at Section 5-60 of the City Code, the mechanical code adopted at Section 5-70 of the City Code, the plumbing code adopted at Section 5-80 of the City Code, the fuel gas code at section 5-90, or the electrical code adopted at Section 5-100 of the City Code shall constitute a defense to a claim of noncompliance with a provision other than Chapter 11 of the International Residential Code.

**Sec. 5-51. Definition.**

Wherever the term “building official” is used in the International Residential Code, it shall be held to mean the director, as defined in Section 2-80 of the Victoria City Code.

**Sec. 5-52. Deletions to published code.**

The following portions of the International Residential code are hereby deleted:

*Section R103 Department of Building Safety*

*Section R105 Permits*

*Section R106 Construction Documents*

*Section R107 Temporary Structures and uses*

*Section R108 Fees*

*Section R112 Board of Appeals*

**Section R312.2.1 Window sills.**

*Section R313 Automatic Fire Sprinkler Systems*

*Section R322 Flood Resistant Construction*

**Section R325 Mezzanines**

**Section R404.1.1 Design required**

*Section R502.2.2.3 ~~R507.2.4~~ Deck lateral load connection*

*Section R612 ~~R609~~ Exterior Windows and Doors*

*Section 3902.11 ~~Are Fault Circuit Interrupter Protection.~~*

*Section R903.5 ~~Hail exposure.~~*

*Section R903.5.1 ~~Moderate hail exposure.~~*

*Section R903.5.2 ~~Severe hail exposure.~~*

*Section P2723 Macerating Toilet Systems*

*Section E3605.9.2 Service Cable, service head, or gooseneck.*

**Sec. 5-53. Amendments to published code.**

The ~~2009~~ **2015** International Residential Code, as adopted by the City Council of the City of Victoria, is amended as follows:

(1) *Section R112 Board of Appeals* is deleted in its entirety and replaced with the following:

*“Section R112 Right of Appeal and Provisions Inconsistent with the International Residential Code”*

*“R112.1 Right of Appeal. The ~~Building, Electrical, Mechanical and Plumbing~~ Board of Adjustments and Appeals shall hear appeals and requests for variances to the provisions of this code with respect to the trades represented by the provision being appealed or varied. Said appeals and requests for variances shall be heard and recommended in accordance with Sections 2-94 and 2-95 of the City Code.”*

(2) *Chapter 2 Definitions* is amended to add the following definition: “DECORATIVE COATING. A single coat of plaster, cementitious or other approved material applied to a concrete or masonry surface for cosmetic purposes only.”

**(3) Chapter 2 Definitions is amended to add the following definition: Projection Factor. The ratio of the horizontal depth of an overhang, eave, or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave, or permanently attached shading device.**

**(4) Chapter 2 Definitions. Ambulatory Care Facility shall be amended to read: Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals persons who are rendered incapable of self-preservation by the services provided. This group may include but not limited to the following: dialysis centers, sedation dentistry, surgery center, colonic centers, psychiatric centers.**

**(35) Table R301.2(1) Climatic and geographic design criteria is amended by adding the following entries in the appropriate columns:**

Ground Snow Load: Not Applicable

Wind Speed: 85 mph / 105 (fastest mile /3 second gust) Exposure B

Topographic effect: No

**Special Wind Region: No**

**Wind-borne debris zone: No**

Seismic Design Category: 0

Subject To Damage From

Weathering: Negligible

Frost Line Depth: No – 12-inch

Termite: Yes

Winter Design Temperature

For Heating Facilities: None Required

Ice Barrier Underlayment Reqd: No

Flood Hazard: July 21, 1999 (Community Panel # 480638 0005G

August 4, 1987 (Community Panel # 480638 0010E

August 4, 1987 (Community Panel # 480638 0015E

**Flood Insurance Rate Maps (FIRM)**

**City of Victoria**

**Panel Number:**

**480638 0005G Panel Date: July 21, 1999**

**480638 0010E Panel Date: August 4, 1987**

**480638 0015E Panel Date: August 4, 1987**

**City of Victoria Extra Territorial Jurisdiction (ETJ)**

**County of Victoria**

**Panel Number:**

**480637 0125D Panel Date: November 20, 1998**

**480637 0200B Panel Date: September 18, 1987**

**Including all Letter of Map Revisions and/or Letter of Map Amendments after the referenced effective panel dates.**

Air Freeze Index: 1500 or less

**Mean Annual Temp: 70.2**

(46) Section 301.2.1-1 **Wind** design criteria is amended to read “Construction in regions where the adopted basic wind speeds from Figure R301.2(4) equal or exceed 110 miles per hour (49m/s) shall be designed in accordance with one of the following:”

**Buildings and portions thereof shall be constructed in accordance with the wind provisions of this code using the ultimate design speed in Table R301.2(1) as adopted.**

(57) Table 302.1(1). Table 302.1(1) is amended to reduce all requirements of a 5’ separation distance to a 3’ separation distance.

(68) Section R302.1.1 Exterior walls on zero lot lines is added to read as follows:

“The provisions of Section 302.1 shall not apply if the approved and recorded final plat of the subdivision provides an interior side yard setback of a minimum of nine feet on one side of the lot, and the setback contains an easement at least six feet wide running along the length of the side of the lot that prohibits the construction of combustible building material in said easement.”

(7) R302.2 Townhouses Exception is amended to read; “A common 2-hour fire resistant rated wall assembly is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall”.

(79) **R302.5.1 Opening Protection is amended to read: Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35mm) thickness, or 20-minute fire-rated doors.**

(810) R302.6 Dwelling/garage fire separation is amended to add Exception 1, “Exception: Concrete-filled steel lally columns used in the structure supporting the separation shall not require a gypsum board application.”

(911) ~~303.6-1~~ **303.7.1 Light Activation** is amended to read: “The control for activation of the required interior stairway lighting shall be accessible at the top and bottom of each stairway without traversing any steps. The illumination of exterior stairways shall be controlled from inside the dwelling unit.

Exceptions:

2) Interior stairways consisting of less than six steps.”

(1012) R310.1 Emergency escape and rescue **opening** required. The first sentence of the paragraph is amended to read; “Every sleeping room shall have at least one operable emergency escape and rescue opening” No other amendments are made to this section.

(~~413~~) *R311.2 Egress Door* is amended to read; “At least one egress door shall be provided for each dwelling unit. The egress door shall be side-hinged, and shall provide a minimum clear width of 32 inches when measured between the face of the door and the stop, with the door open 90 degrees. The minimum clear height of the door opening shall not be less than 78 inches in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions”.

(~~4214~~) *R312.1 Where required* is amended to read; “Guards shall be located along open-sided walking surfaces of all decks, porches, balconies, stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below. Insect screening shall not be considered as a guard”.

(~~4315~~) *R311.7.4.1 Riser Height* *311.7.5.1 Risers*. The first sentence of the paragraph is amended to read: The maximum riser height shall be 8 inches (203 mm).

(~~4416~~) *R311.7.4.2 Tread Depth* *311.7.5.2 Treads*. The first sentence of the paragraph is amended to read: The minimum tread depth shall be 9 inches (229mm).

(~~4517~~) *R311.7.4.3 Profile*, *311.7.5.3 Nosings*. *Exception: †* is amended to read: “A nosing is not required where the tread depth is a minimum of 10 inches.”

(~~4618~~) *R311.7.7* *311.7.8 Handrails*. All of section *R311.7.7* is amended to read as follows: “Handrails shall be provided on at least one side of stairways consisting of three or more risers. Handrails shall have a minimum height of 34 inches (864mm) and a maximum height of 38 inches (965mm) measured vertically from the nosing of the treads. All required handrails shall be continuous the full length of the stairs from a point directly above the top riser to a point directly above the lowest riser of the stairway. The ends of the handrail shall be returned into a wall or shall terminate in newel posts or safety terminals. A minimum clear space of 1-1/2 inches (38 mm) shall be provided between the wall and the handrail.”

**(19) R312.2 Window fall protection shall be amended to read: Where window fall protection devices are provided, the device shall be installed in accordance with Sections R312.2.2.**

(~~4720~~) *R403.1.6 Foundation anchorage* is amended to read; “Where wood sill and sole plates and cold-formed steel framed walls are supported directly on continuous foundation walls or monolithic slabs with integral footings, they shall be anchored to the foundation in accordance with this section.

Wood sole plates at all exterior walls, wood sole plates of *braced wall panels* at building interiors on monolithic slabs with integral footings, and all wood sill plates shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet (1829 mm) on center. Bolts shall be at least 1/2 inch (12.7 mm) in diameter and shall extend a minimum of 7 inches (178 mm) into concrete or grouted cells of concrete masonry units. A nut and washer shall be tightened on each anchor bolt. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches (305 mm) or less than seven bolt diameters from each end of the plate section. *Approved* foundation anchorage spaced as required to provide equivalent anchorage

to 1/2-inch-diameter (13 mm) anchor bolts shall be permitted. Interior bearing wall sole plates on monolithic slab foundations with integral footings that are not part of a *braced wall panel* shall be positively anchored with *approved* fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Sections R317 and R318. ~~Cold-formed steel framing systems shall be fastened to wood sill plates or anchored directly to the foundation as required in Section R505.3.1 or R603.3.1.~~

**Exceptions:**

1. Walls 24 inches (610 mm) total length or shorter connecting offset *braced wall panels* shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section and shall be attached to adjacent *braced wall panels* ~~per Figure R602.10.4.4(1)~~ at corners **as shown in Item 9 of Table R602.3(1).**

2. Walls 12 inches (305 mm) total length or shorter connecting offset *braced wall panels* shall be permitted to be connected to the foundation without anchor bolts. The wall shall be attached to adjacent *braced wall panels* ~~per Figure R602.10.4.4(1)~~ at corners **as shown in Item 9 of Table R602.3(1).**

**3. Exception 3 shall be added to read: Where the basic wind speed in accordance with Figure R301.2(4)A does not exceed 115 miles per hour (51m/s), the seismic design category is A or B and Method GB in accordance with Section R602.10 is used for a braced wall line on the interior of the dwelling, anchor bolts shall not be required for the wood sole plates of the braced wall panels. Positive anchorage with approved fasteners shall be provided.**

~~(18) R404.1 Concrete and masonry foundation walls is amended to read “Concrete and masonry foundation walls shall be selected and constructed in accordance with the provisions of Section R404 or in accordance with ACI 318, ACI 332, NCMATR68 A or ACI 530/ASCE 5/TMS 402 or other approved structural standards. When ACI 318, ACI 332 or ACI 530/ASCE 5/TMS 402 or the provisions of Section R404 are used to design concrete or masonry foundation walls, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority”.~~

~~(1921)~~ “R502.3.3 *Floor Cantilevers*” is amended to read: “Floor cantilever spans shall not exceed the nominal depth of the wood floor joist. Floor cantilevers constructed in accordance with Table R502.3.3 and shall be permitted when supporting a light-frame bearing wall and roof only. The ratio of backspan to cantilever span shall be at least 3 to 1.”

~~(2022)~~ Add new table “*Table R502.3.3 Cantilever Spans For Floor Joists Supporting Light-Frame Exterior Bearing Wall And Roof Only*” (see attached table).

~~(2123)~~ R602.8 *Fireblocking required, subsection(1)* is amended to read: “In concealed spaces of stud walls and partitions, including furred spaces, at the ceiling

and floor level. Batts or blankets of mineral or glass fiber or other approved non-rigid materials shall be allowed as fireblocking in walls constructed using parallel rows of studs or staggered studs or in accordance with Section R302.11”.

~~(2224)~~ ~~R703.6.2~~ **703.7.2** *Plaster* is amended to add the following sentence at the end of first paragraph: “Decorative coatings applied to a concrete or masonry surface shall be installed in accordance with the manufacturer’s installation instructions and are not required to comply with Table 702.1(1).”

~~(2325)~~ ~~R907.3~~ ~~Re-covering versus replacement~~ **Section R908.3 Roof replacement** is amended to read; “New roof coverings shall not be installed without first removing existing roof coverings where any of the following conditions occur:

1. Where the existing roof or roof covering is water-soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.
4. ~~For asphalt shingles, when the building is located in an area subject to moderate or severe hail exposure according to Figure R903.5.~~

**Exceptions:**

1. Complete and separate roofing systems, such as standing-seam metal roof systems, that are designed to transmit the roof loads directly to the building’s structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
2. Metal panel, metal shingle, and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section R907.4.
3. The application of new protective coating over existing spray polyurethane foam roofing systems shall be permitted without tear-off of existing roof coverings.”

~~(2426)~~ *N1101.2 Compliance* is amended to read; “Compliance shall be demonstrated by either meeting the requirements of the International Energy Conservation Code, or meeting the requirements of this chapter, or meeting the requirements as set forth under Senate Bill 5 as mandated by the 77<sup>th</sup> Texas Legislature.

**(27) N1102.3.2.1 Glazed fenestration SHGC exception, In climate Zone 2, permanently shaded vertical fenestration shall be permitted to satisfy the SHGC requirements. The projection factor of an overhang, eave, or permanently attached shading device shall be greater than or equal to the value listed in table N1102.2.3.1(see attached) for the appropriate orientation. The minimum projections shall extend beyond each side of the glazing a minimum of 12 inches (0.3m). Each orientation shall be rounded to**

the nearest cardinal orientation (+/-45 degrees or 0.79 rad) for purposes of calculation and demonstrating compliance.

(28) N1101.4 Above code programs shall be amended to read: The building official or other authority having jurisdiction shall be permitted to deem a national, state or local energy-efficiency program to exceed the energy efficiency require by the this code. Buildings approved in writing by such an energy-efficiency program shall be considered in compliance with this code.

(29) N1102.4 Air leakage shall be amended to read: The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections N1102.4.1 through N1102.4.4

Exception: Two family dwelling units and townhouses shall be permitted to comply with IECC Section C402.5.

(30) N1102.4.1.1 Installation shall be amended to read: (Mandatory). The components of the building thermal envelope as listed in Table N1102.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table N1102.4.1.1, as applicable to the method of construction. Where required by the building official, an approved third party shall inspect all components and verify compliance.

(31) N1102.4.1.2 Testing. The first sentence of the paragraph shall be amended to read: (Mandatory). The building or dwelling unit shall be tested for air leakage.

(32) N1102.4.1.3 Leakage rate (Prescriptive) shall be added to read: The building or dwelling unit shall have an air leakage rate not exceeding 5 air changes per hour in Climate Zone 2 when tested in accordance with Section N1102.4.1.2.

~~(2533)M1502.4.4.1~~ 1502.4.5.1 Specified length is amended to read; “The maximum length of the exhaust duct shall be 35 feet (10,668mm) from the connection to the terminus of the transition duct from the dryer to the outlet terminal. Where fittings are utilized, the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.4.1.

~~(2634)~~ Table M1502.4.4.1 is amended to read;

Table M1502.4.4.1

<b>Maytag dryers:</b>	<b>Amana/ Speed Queen dryers</b>	<b>OLDER MODELS:</b>
65 feet with 0 elbows	44 feet with 0 elbows	<b>Maytag, 1990</b>
54 feet with 1 elbow	34 feet with 1 elbows	50 feet with 0 elbows
44 feet with 2 elbows	26 feet with 2 elbows	42 feet with 1 elbow
36 feet with 3 elbows	20 feet with 3 elbows	34 feet with 2 elbows
28 feet with 4 elbows		26 feet with 3 elbows
<b>Whirlpool dryers</b>	<b>Fridgidare / Westinghouse / Tappen / Gibson</b>	<b>Whirlpool, 1991</b>
64 feet with 0 elbows	60 feet with 0 elbows	58 feet with 0 elbows
54 feet with 1 elbow	52 feet with 1 elbow	48 feet with 1 elbow
44 feet with 2 elbows	44 feet with 2 elbows	38 feet with 2 elbows

34 feet with 3 elbows 27 feet with 4 elbows	32 feet with 3 elbows	29 feet with 3 elbows
<b>Kenmore dryers</b> 64 feet with 0 elbows 54 feet with 1 elbow 44 feet with 2 elbows 34 feet with 3 elbows 27 feet with 4 elbows	<b>Magic Chef/Admiral/Norge</b> 45 feet with 0 elbows 35 with 1 elbows 25 with 2 elbows	<b>Kenmore, 1988</b> 22 feet with 3 elbows
<b>General Electric dryers:</b> 90 feet with 0 elbows 60 feet with 1 elbow 45 feet with 2 elbows 35 feet with 3 elbows	<b>Camco/Moffat/McClary</b> 45 feet with 0 elbows 35 feet with 1 elbow 25 feet with 2 elbows	<b>Throm</b> 55 feet with 0 elbows 47 feet with 1 elbow 41 feet with 2 elbows

**(2735)** *Section E3401.1 Applicability* is amended to read: “The provisions of Chapters 34 through 43 shall establish the general scope of the electrical system and equipment requirements of this code. Chapters 34 through 43 cover those wiring methods and materials most commonly encountered in the construction of one- and two-family dwellings and structures regulated by this code. Other wiring methods, materials and subject matter covered in the most currently adopted version of the National Electrical Code (NFPA 70) as amended in Chapter 5 Buildings, Construction and Related Activities, Article IX Electrical Code, Victoria City Code, are also allowed by this code.”

**(2836)** *Section E3401.2 Scope* is amended to read: “Chapters 34 through 43 shall cover the installation of electrical systems, equipment and components indoors and outdoors that are within the scope of this code, including services, power distribution systems, fixtures, appliances, devices and appurtenances. Services within the scope of this code shall be limited to 120/240 volt, 0- to 400-ampere, single-phase systems. These chapters specifically cover the equipment, fixtures, appliances, wiring methods and materials that are most commonly used in the construction or alteration of one- and two-family dwellings and accessory structures regulated by this code. The omission from these chapters of any material or method of construction provided for in the referenced standard NFPA 70 shall not be construed as prohibiting the use of such material or method of construction. Electrical systems, equipment or components not specifically covered in these chapters shall comply with the applicable provisions of the most currently adopted version of the National Electrical Code (NFPA 70), as amended in Chapter 5 Buildings, Construction and Related Activities, Article IX Electrical Code, Victoria City Code.”

**(2937)** *Section E3406.3 Minimum size of conductors* is amended to read: “The minimum size of conductors for feeders and branch circuits shall be No. 12 copper and No. 6 aluminum. The minimum size of service conductors shall be as specified in Chapter 36.”

**(3038)** *Section E3406.8 Aluminum and copper connections* is amended by adding the following sentence: “If aluminum conductors are installed, they must be terminated according to the manufacturer's recommendations and have a coating of oxidation inhibitor applied.”

**(3139)** *Section E3601.1 Scope* is amended by adding the following sentence:

“Meter installation and service requirements of local electric utilities may be more stringent than described herein. It is recommended that requirements be verified with the appropriate electric utility before proceeding with service installation work.”

~~(3240)~~ *Section E3601.6.2 Service disconnect location* is amended to read: “The service disconnecting means shall be installed at a readily accessible location outside of a building nearest the point of entrance of the service conductors. Each occupant shall have access to the disconnect serving the dwelling unit in which they reside.”

~~(3341)~~ *Section E3603.2 Ungrounded service conductors for accessory buildings and structures, Exception #3* is added to read: “For limited loads of a single branch circuit, the minimum size shall be No. 12 copper or No. 6 aluminum or copper-clad aluminum, but in no case smaller than the branch-circuit conductors.”

~~(3442)~~ *Section E3604.2.2 Vertical clearance from grade* is amended by adding item 4 to read: “Where electric utility service installation requirements are more restrictive than those shown in items 1, 2, or 3 of this section, the more restrictive requirement for service drop conductor height shall apply.”

~~(3543)~~ *Section E3604.5 Service masts as supports* is amended to read: “Where a service mast is used for the support of service drop conductors, it shall be of adequate strength or be supported by braces or guys to withstand the strain imposed by the service drop. Only raceway-type service masts shall be used, all raceway fittings shall be identified for use with service masts. Where a service mast extends through the roof, such mast shall be flashed so as to make the roof penetration watertight. In addition to the aforementioned provisions, a minimum of two (2) inch rigid conduit shall be used for service mast, which is the sole support of the service entrance conductors. Only power service drop conductors shall be permitted to be attached to a service mast.”

~~(3644)~~ *Section E3605.7 Mounting supports* is amended to read: “Cables shall be supported by straps or other approved means within 12 inches (305 mm) of every service head or connection to a raceway or enclosure and at intervals not exceeding 30 inches (762 mm).”

~~(3745)~~ *Section E3605.9.3 Service head location* is amended to read: “Service heads shall be located above the point of attachment of the service-drop conductors to the building or other structure.

*Exception:* Where it is impracticable to locate the service head above the point of attachment, the service head location shall not be more than 24 inches (610 mm) from the point of attachment.”

~~(3846)~~ *Section E3608.1 Grounding electrode system* is amended by adding the following sentence: “All new or rebuilt building services shall have installed a driven ground rod as described in Section E3608.1.4.1”

~~(3947)~~ *Section E3611.1 Methods of grounding conductor connection to electrodes* is amended by adding item 5 to read: “All new or rebuilt services shall have a listed acorn type set screw clamp of cast bronze or brass used to clamp the grounding

electrode conductor to the grounding electrode (ground rod) as required by Sections E3608.1, E3608.1.4.”

(4048) ~~Table E3702.13~~ **E3702.14** *Branch-circuit requirements - summary* is amended by deleting the entire 15 amp circuit rating column.

(4149) *Section E3703.2 Kitchen and dining area receptacles* is amended by adding the following sentence: “The branch circuits serving kitchen countertop receptacles shall comply with the maximum loads specified in Section E3702, but in no case shall such circuits have more than three (3) duplex receptacles per circuit.”

(4250) *Section E3703.5 Number of branch circuits* is amended by adding the following sentence: “In addition to the limitations contained herein, no general purpose branch circuit shall have more than ten (10) outlets per circuit.”

(4351) *Section E3704.1 Conductor Size* is amended to read: “The size of feeder conductors shall not be less than No. 10 copper or No. 6 aluminum where the load supplied consists of any of the following number and types of circuits: (1) two or more two-wire branch circuits supplied by a two-wire feeder; (2) three or more two-wire branch circuits supplied by a three-wire feeder; or (3) two or more three-wire branch circuits supplied by a three-wire feeder.”

(4452) *Table E3801.4 Allowable Applications For Wiring Methods* is amended by adding to the Services line a footnote L to read: “See Chapter 36 for specific service wiring method limitations.”

(4553) *Section E4002.14 Tamper Resistant Receptacles Exception 1* is amended to read: ~~“In all areas specified in Section E3901.1 that are less than 42 inches above the finished floor in habitable spaces, all 125 volt, 15 and 20 amp receptacles shall be listed tamper resistant receptacles.~~

**1. Receptacles located more than 42” above the finished floor.**

2. Sections 5-60 through 5-66 of Chapter 5 of the Victoria City Code are amended to read as follows:

**ARTICLE V. INTERNATIONAL BUILDING CODE**

**Sec. 5-60. Adoption of published code.**

The City hereby adopts, 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, the International Building Code, ~~2009~~ **2015** Edition, published by the International Code Council, Inc., save and except such portions as are hereinafter deleted, modified, or amended, of which a copy is on file with the City Secretary and the City’s Department of Development Services. Said code is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this article shall take effect, the provisions thereof shall be controlling in the construction of all buildings and other structures therein regulated within the limits of the city.

**Sec. 5-61. Building Official.**

Wherever the term “Building Official” is used in the International Building Code, it shall be held

to mean the person designated as the “Building Official” by the director, as defined in section 2-80 of the Victoria City Code.

**Sec. 5-62. Deletions to published code.**

The following portions of the building code are hereby deleted:

- (1) *Section 103 Department of Building Safety*
- (2) *Section 105 Permits*
- (3) *Section 106 Floor and Roof Design Loads*
- (4) *Section 107 ~~Construction~~ **Submittal** Documents*
- (5) *Section 108 Temporary Structures and uses*
- (6) *Section 109 Fees*
- (7) *Section 113, Board of Appeals*
- (8) *Section 116 Unsafe structures and equipment.*
- (9) *Chapter 11, Accessibility*
- (10) *Chapter 27 Electrical*
- (11) *Chapter 31 Special Construction*
- ~~(12)~~ *Chapter 35 Existing Structures*
- ~~(13)~~ *Section 715.5.1 **716.6.1** Testing under positive pressure*
- ~~(14)~~ *Chapter 17, ~~Structural Tests and Special Inspections~~ **and Tests***
- ~~(15)~~ ***Section 1504.8 Aggregate***
- (15) *Section 3109, Swimming Pool Enclosures and Safety Devices*

**Sec. 5-63. Amendments to published code.**

(1) *Sec. 1612 Flood Loads.* All sections in this code referencing flood hazard requirements shall be amended to reference the requirements as determined by the City of Victoria Flood Plain Administrator.

**(2) Sec. 901.6.2.2 Reports: Shall be added to read: Inspection, test and maintenance records shall be submitted to the fire code official using an approved method.**

**(23) Sec. 903.2.7 Group M (4) shall be amended to read: A group M occupancy used for the display storage or sale of upholstered furniture and/or mattresses exceeds 5000 square feet.**

**(4) Section 903.2.9.3 Self-Service storage facility: shall be added to read: An automatic sprinkler system shall be installed throughout all self-service storage facilities.**

**Exception: One-story self-service storage facilities that have no interior corridors, with a one-hour fire barrier separation wall installed between every storage compartment.**

**(5) Section 903.4.2 Alarms shall be amended to read: An approved audible visual device, located on the exterior of the building in an approved location, shall be connected to each 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. Where a fire alarm system installed, actuation of an automatic sprinkler system shall actuate the building fire alarm system. An interior audible/visual device shall be located**

**inside the protected occupancy. It is not the intent of this section to imply the audible/visual device(s) must comply with NFPA 72 or American with Disabilities Act when the only requirement for audible/visual devices is caused by this section.**

**(6) Section 907.5.2.4 Security Gates. shall be added to read: Fire alarm systems within gated facilities shall be connected in such a manner that the security gate(s) open(s) upon fire alarm activation.**

*(27) Appendix D, Fire Districts. Appendix D, Fire Districts shall be adopted in its entirety and amending Section D101.2 Establishment of Area to read as follows:*

D101.2 Establishment of area. The Fire District shall include all of the areas within blocks 84, 86,100,112,113,114,115,125,126,127,128,129,130,142,143,144, and 158, Main Town, City of Victoria; all of the blocks commonly known as Academy Block, City Hall Block, and Court House Block, all in Main Town, City of Victoria; and all of that block bounded on the north by Forrest Street, on the east by Liberty Street, on the south by Constitution Street, and on the west by Main Street, within Main Town, City of Victoria.

**Sec. 5-64. - Adoption of published code.**

The City hereby adopts, for the purpose of establishing rules and regulations for the construction, alteration, removal, demolition, equipment, use and occupancy, location and maintenance of existing buildings and structures, the International Existing Building Code, ~~2006~~ **2015** Edition, published by the International Code Council, Inc., save and except such portions as are hereinafter deleted, modified, or amended, of which a copy is on file with the City Secretary and the City's Department of Development Services. Said code is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this article shall take effect, the provisions thereof shall be controlling in the construction of all existing buildings and other existing structures therein regulated within the limits of the city.

**Sec. 5-65. - Code Official.**

Wherever the term "Code Official" is used in the International Existing Building Code, it shall be held to mean the person designated as the "Building Official" by the director, as defined in section 2-80 of the Victoria City Code.

**Sec. 5-66. - Deletions to published code.**

The following portions of the International Existing Building Code are hereby deleted:

- (1) Section 103 Department of Building Safety
- (2) Section 105 Permits
- (3) Section 106 Construction Documents
- (4) Section 107 Temporary Structures and Uses
- (5) Section 108 Fees
- (6) Section 110 Certificate of Occupancy

- (7) Section 111 Service Utilities
- (8) Section 112 Board of Appeals
- (9) Section 113 Violations
- (10) Section 114 Stop Work Order
- (11) Section 115 Unsafe Buildings and Equipment
- (12) Section 116 Emergency Measures
- (13) Section 117 Demolition
- (14) Sections referencing seismic design requirements at ~~302.2.3, 302.2.3.1, 302.2.3.2, 305.4, 506, 606.2.2, 707.4.2, 807.5, 807.5.1, 807.5.2, 807.5.3, 807.7, 907.3, 907.3.1, 907.3.2, 1003.3.3, 1101.2, 1202.4.~~

**Sec. 5-67. - Amendments to published code.**

The following sections of the International Existing Building Code are amended to read as follows:

- (1) Section 101.2. Scope. The provisions of the International Existing Building Code shall apply to the repair, alteration, change of occupancy, addition and relocations of existing buildings. The provisions as prescribed in Chapter 5, Section 5-4 Existing Buildings of the City of Victoria Municipal Code shall be an alternative acceptable method of compliance.
- (2) Section 102.4 Referenced codes and standards.
  - (a) The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.
  - (b) Where this code references the ICC Electrical Code, it shall be amended to reference the most currently adopted National Electrical Code.
  - (c) Where this code references the ICC A117.1 Guidelines for Accessible and Usable Buildings and Facilities, it shall be amended to reference the Texas Accessibility Standards adopted by the Texas Department of Licensing & Regulation.

**Secs. 5-68, 5-69. - Reserved.**

- 3. Sections 5-70 through 5-72 of Chapter 5 of the Victoria City Code are amended to read as follows:

**ARTICLE VI. INTERNATIONAL MECHANICAL CODE**

**Sec. 5-70. Adoption of published code.**

There is hereby adopted by the city, for the purpose of establishing rules and regulations for the safe installation and maintenance of all mechanical equipment and systems, that certain code known as the International Mechanical Code, ~~2009~~ **2015** edition, published by the International Code Council Inc., save and except such portions as are hereinafter deleted, modified, or amended, of which a copy is on file with the City Secretary and a copy is on file with the Building Inspection Department, and the same is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this section shall take effect, the

provisions thereof shall be controlling in the installation of mechanical systems therein contained within the corporate limits of the city.

**Sec. 5-71. Definition.**

Wherever the term “Code Official” is used in the mechanical code, it shall be held to mean director, as defined in Section 2-80.

**Sec. 5-72. Deletions to published code.**

The following portions of the mechanical code are hereby deleted:

- (1) *Section 103 Department of Mechanical Inspection*
- (2) *Section 106 Permits*
- (3) *Section 108 Violations*
- (4) *Section 109 Means of Appeal*

4. Sections 5-80 through 5-83 of Chapter 5 of the Victoria City Code are amended to read as follows:

**ARTICLE VII. INTERNATIONAL PLUMBING CODE**

**Sec. 5-80. Adoption of published code.**

There is hereby adopted by the city, for the purpose of establishing rules and regulations for the safe installation and maintenance of all plumbing equipment and systems, that certain code known as the International Plumbing Code, ~~2009~~ **2015** edition, published by the International Code Council Inc., save and except such portions as are hereinafter deleted, modified, or amended, of which a copy is on file with the City Secretary and a copy is on file with the Building and Environmental Inspection Department and the same is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this section shall take effect, the provisions thereof shall be controlling in the installation of plumbing systems therein contained within the corporate limits of the city.

**Sec. 5-81. Definition.**

Wherever the term “Code Official” is used in the plumbing code, it shall be held to mean director, as defined in section 2-80.

**Sec. 5-82. Deletions to published code.**

The following portions of the plumbing code are hereby deleted:

- (1) *Section 103 Department of Plumbing Inspection*
- (2) *Section 106 Permits*
- (3) *Section 108 Violations*
- (4) *Section 109 Means of Appeal*

**Sec. 5-83. Amendments to published code.**

The following portions of the 2009 International Plumbing Code are hereby amended:

- (1) *Section 1003.3.4.1 Grease Interceptor Capacity* is amended to read as follows:  
Section 1003.3.4.1 Grease Interceptor Capacity. Grease Interceptor shall have the

grease retention capacity indicated by total fixture units from Table 1003.3.4.1 and in accordance with the following:

$$\text{Total DFU's} \times 7.5 \text{ GPM} \times 12 \text{ MRT} = \text{IC/g}$$

Where:

DFU's = Drainage Fixture Units as indicated by footnote (b) in Table 1003.3.4.1

GPM = Flow rate of Gallons per minute

MRT = Minutes retention time

IC/g = Interceptor Capacity in gallons

(2) Table 1003.3.4.1 is amended as follows:

**TABLE 1003.3.4.1  
CAPACITY OF GREASE  
INTERCEPTOR (a)**

Description (b)	Fixture units each
1,2, or 3 compartment sink	3
dishwasher	6
garbage grinder	4
wok-stove	4
floor drains	3
floor sinks	3

a. Grease interceptors shall be minimum 250 gallon and maximum 2000 gallon per individual unit or by an approved engineer design.

b. Only those fixtures in use in the food preparation/clean up area shall be counted.

5. Sections 5-90 through 5-92 of Chapter 5 of the Victoria City Code are amended to read as follows:

**ARTICLE VIII. INTERNATIONAL FUEL GAS CODE**

**Sec. 5-90. Adoption of published code.**

There is hereby adopted by the city, for the purpose of establishing rules and regulations for the safe installation and maintenance of all natural gas piping and appliances, that certain code known as the International Fuel Gas Code, ~~2009~~ **2015** edition, published by the International Code Council Inc, save and except such portions as are hereinafter deleted, modified, or amended, of which a copy is on file with the City Secretary and a copy is on file with the Building Inspection Department and the same is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this section shall take effect, the provisions thereof shall be controlling in the installation of gas piping systems therein contained within the corporate limits of the city.

**Sec. 5-91. Definition.**

Wherever the term "Building Official" is used in the gas code, it shall be held to mean director, as defined in section 2-80.

**Sec. 5-92. Deletions to published code.**

The following portions of the gas code are hereby deleted:

- (1) *Section 103 (IFGC) Department of Inspection*
- (2) *Section 106 (IFGC) Permits*
- (3) *Section 108 (IFGC) Violations*
- (4) *Section 109 (IFGC) Means of Appeal*

6. Sections 5-100 through 5-105 of Chapter 5 of the Victoria City Code are amended to read as follows:

## **ARTICLE IX. NATIONAL ELECTRICAL CODE**

### **Sec. 5-100. Adoption of published code.**

There is hereby adopted by the city, for the purpose of establishing rules and regulations for the safe installation and maintenance of electrical equipment and systems, that certain code known as the National Electrical Code, ~~2011~~ **2014** edition, published by the National Fire Protection Association, save and except such portions as are hereinafter deleted, modified, or amended of which a copy is on file with the City Secretary and a copy is on file with the Building Inspection Department and the same is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this section shall take effect, the provisions thereof shall be controlling in the installation of electrical systems therein contained within the corporate limits of the city.

- (a) *Standards and requirements.* All electrical construction and all materials and appliances used in connection with the installation, maintenance, and operation of electrical wiring, apparatus or equipment for utilization of electrical energy for light, heat, or power inside the city limits of Victoria, Texas, shall conform to the rules and regulations of the National Electrical Code and the meter installation specifications of the electrical utility company as the latter two (2) exist and as they may be adopted from time to time. In the event of a conflict between this Code and other codes adopted or referenced, the preference will proceed in the following order:
  1. Director.
  2. National Electrical Code.
  3. Specifications for electric service and meter installation, utility companies.
  4. Electrical Board of Adjustments and Appeals.
- (b) *Unused electrical equipment.* All unused electrical equipment within or on public or private building premises shall be removed if any such equipment, in the opinion of the director, constitutes a hazard or danger to life or property.

On any structure which is renovated, remodeled, or relocated, the director shall have the right of inspection as set out elsewhere herein, and if, upon inspection, the director shall discover electrical conditions hazardous to health, safety or welfare, he may cause corrections to be made.

### **Sec. 5-101 Reserved.**

**Sec. 5-102. Deletions to published code.**

The following portions of the electrical code are hereby deleted:

- (1) *Section 100-1 Definitions, Qualified Person*, Informational Note
- ~~(2) *Section 210.12, Arc Fault Circuit Interrupter Protection*~~
- ~~(3) *Section 440.65, Leakage Current Detector Interrupter and Arc Fault Circuit Interrupter*~~

**Sec. 5-103. Amendments to published code.**

The National Electrical Code, ~~2011~~ **2014** edition, as adopted by the City Council of the City of Victoria, is amended as follows:

(a) *Section 110.8 Wiring Methods* is amended by adding the following subparagraphs:

1. The following types of occupancies as defined in the Building Code adopted by Section 5-60 of the City Code may use any wiring method recognized as suitable by this code:
  - a. Group R-2 occupancies (Multiple dwellings - not transient - and their accessory uses) that are not more than two (2) stories tall with no more than ten (10) dwelling units each.
  - b. Group R-3 occupancies (1 & 2 family dwellings and their accessory uses).
  - c. Group R-4 occupancies (Residential Care/Assisted Living Facilities).
  - d. Group U occupancies ( Utility and Miscellaneous )
  - e. Group B occupancies (Business) (Single Occupancy Buildings under 5000 square foot that are not more than 2 stories)
2. The following types of occupancies as defined in the Building Code adopted by Section 5-60 of the City Code may use any wiring method recognized as suitable by this code, except those methods provided by:

Article 398 - *Open Wiring on Insulators*,

Article 394 - *Concealed Knob-And-Tube Wiring*,

Article 334 *Nonmetallic-Sheathed Cable*, Type NM,NMC,NMS

Article 338 *Service-Entrance Cable* Type SE,USE

Article 340 *Underground Feeder and Branch-Circuit Cable*: Type UF

- a. Group B occupancies (Business) (other than single occupancy buildings under 5000 square foot that are not more than 2 stories)
- b. Group F occupancies (Factory-Industrial).
- c. Group M occupancies (Mercantile).
- d. Group R-1 occupancies (Residential - transient).
- e. Group S occupancies (Storage).

If approved by the director and conducted in compliance with any conditions imposed by him, minor repairs and extensions of not

more than 10% of the existing wiring methods may be made to the aforementioned five types of occupancies, with the same wiring methods existing at the time of construction.

3. The following occupancies as defined in the Building Code adopted by Section 5-60 of the City Code may use any wiring method recognized as suitable by this code, except those methods provided by;

Article 398- *Open Wiring on Insulators*,  
Article 394- *Concealed Knob-And-Tube Wiring*,  
Article 362 Type ENT - *Electrical Nonmetallic Tubing*, Type ENT  
Article 334 *Nonmetallic-Sheathed Cable*, Type NM,NMC,NMS  
Article 338 *Service-Entrance Cable*, Type SE,USE  
Article 340 *Underground Feeder and Branch-Circuit Cable*: Type UF

- a. Group A occupancies (Assembly).
- b. Group E occupancies (Educational).
- c. Group H occupancies (Hazardous).
- d. Group I occupancies (Institutional).

If approved by the director and conducted in compliance with any conditions imposed by him, minor repairs and extensions of not more than 10% of the existing wiring methods may be made to the aforementioned four types of occupancies, with the same wiring methods existing at the time of construction.

- (b) *Section 110.14 Electrical Connections* is amended by adding the following sentence at the end of the-second paragraph, prior to the Informational Note (IN):  
If aluminum conductors are installed, they must be terminated according to manufacturer's recommendations and have a coating of oxidation inhibitor applied.

- (c) *Section 210.19(A)(4) Other Loads* is amended in the first paragraph to read as follows:  
Branch-circuit conductors supplying loads other than cooking appliances as covered in Section 210.19(A)(2) and as listed in Section 210.2 shall have an ampacity sufficient for the loads served and shall not be smaller than No. 12 copper or No. 6 aluminum or copper clad aluminum.

- (d) *Table 210.24 ~~Summary of Branch Circuit Requirements~~ **Branch-Circuit Requirements - Summary*** is amended to replace all references to size 14 (AWG) conductors with size 12 (AWG).

- (e) *Section 210.25(B) Common Area Branch Circuits* is amended by adding the following sentence to the end of the first paragraph:

In addition to the limitations contained herein, no general purpose branch circuit shall have more than ten (10) outlets per circuit.

- (f) *Section 210.52(B)(1) Receptacle Outlets Served* is amended by adding the

following sentence to the end of the first paragraph:

The branch circuits serving kitchen counter top receptacles shall comply with the maximum loads specified in Section 210.23, but in no case shall such circuits have more than three (3) duplex receptacles per circuit.

(g) *Section 230.28 Service Masts as Supports* is amended to read as follows:

Where a service mast is used for the support of service-drop conductors, it shall be of adequate strength or be supported by braces or guys to withstand the strain imposed by the service drop. Only raceway-type service masts shall be used; all raceway fittings shall be identified for use with service masts. Where a service mast extends through the roof, such mast shall be flashed so as to make the roof penetration watertight. In addition to the aforementioned provisions, a minimum of two (2) inch rigid conduit shall be used for service mast, which is the sole support of the service entrance conductors. Only power service-drop conductors shall be permitted to be attached to a service mast. (Note: See Article IX, Section 5-100(a) for additional information).

(h) *Section 230.31(A) Size and Rating, General* is amended to read as follows:

Service-lateral conductors shall have sufficient ampacity to carry the current for the load as computed in accordance with Article 220 of this electrical code and shall have adequate mechanical strength. Service-lateral conductors located in the "Original Townsite" and served by the "Downtown Electrical Service Network", shall have copper conductors rated as required by the utility company, but in no case less than that required by the utility company, or Article 220 of this electrical code.

(i) *Section 230.43 Wiring Methods for ~~600~~ **1000** Volts, Nominal, or Less* is amended to read as follows:

**Section 230.43 Wiring Methods for 600 Volts, Nominal, or Less.**

Service-entrance conductors shall be installed in accordance with the applicable requirements of this Code covering the type of wiring method used and limited to the following methods:

1. rigid metal conduit;
2. intermediate metal conduit;
3. electrical metallic tubing;
4. electrical nonmetallic tubing (ENT);
5. auxiliary gutters;
6. rigid non-metallic conduit;
7. mineral-insulated, metal-sheathed cable;
8. Type MC cable;
9. liquidtight flexible metal conduit not over 6 ft (1.83 m) long between raceways, or between raceway and service equipment, with equipment bonding jumper routed with the flexible metal conduit or the liquidtight flexible metal conduit according to the provisions of Section 250.102 (A), (C), and (D);

10. or liquidtight flexible nonmetallic conduit.

- (j) *Section 230.70(A) (1)(2)(3)VI Service Equipment - Disconnecting Means, General* is amended to read as follows:

*230-70 (A) Location.* The service disconnecting means shall be installed at a readily accessible location outside of a building or structure.

- (k) *Section 250.50 Grounding Electrode System* is amended by adding the following paragraph at the end of the Exception and prior to Section 250.52.

All new or rebuilt services shall have a driven ground rod as described in Section 250.52 (A)(5)(b) and 250.53 (G).

- (l) *Table 310.106(A) Minimum Size of Conductors* is amended to have the 0 through 2000 Voltage Rating and the 2001 to 8000 Voltage Rating read as follows:

<u>Voltage Rating of Conductor</u>	<u>Minimum Conductor Size - AWG</u>
0 through 2000	12 Copper 6 Aluminum or Copper-Clad Aluminum
2001 through 8000	8 Copper 6 Aluminum or Copper-Clad Aluminum

- (m) *Section 406.12 Tamper Resistant Receptacles in Dwelling Units, Exception (1)* is amended to read;

(1) Receptacles located more than 42" above the finished floor.

- (n) *Section 406.13 Tamper Resistant Receptacles in Guest Rooms and Guest Suites* is amended to read;

*All nonlocking type 125-volt, 15 and 20-ampere receptacles located in guest rooms and guest suites less than 42' above the finished floor shall be listed tamper-resistant receptacles.*

- (o) *Section 514.8 Underground Wiring* is amended by adding the following paragraph after the first paragraph and preceding Exception No. 1:

In addition to the requirements contained in this Article, a separate raceway shall run to each dispenser and fuel pump from the controller and power sources or approved box (enclosure).

#### **Section 5-104. Inspections.**

Amend section 5-104 (b) to read;

- (b) *Inspections, required.* A person required by Section 5-41(c) of the City Code to obtain a permit shall allow an authorized agent of the City of Victoria to inspect:

1. temporary power poles, as provided for in Article 590 of the ~~2011~~ 2014 National Electrical Code;

2. underground raceways, prior to the covering of an electrical raceway (such as those contained in a buried ditch or beneath a concrete slab-on-grade foundation);
3. rough-in, prior to covering wiring within a wall, floor or ceiling spaces;
4. any electrical raceway within a wall, floor or ceiling, prior to covering it;
5. temporary power, prior to connecting any electrical system to an energizing source, such as a utility provider or individual electrical generating system;
6. all electrical work when the electrical system is completed and ready for connection to an energized source of electricity; and
7. anytime after any portion of an electrical system has been found to be in non-compliance with the ~~2011~~ **2014** National Electrical Code as amended herein.

**Section 5-105. Certificate of approval.**

Upon satisfactory completion of the final inspection of an electrical permit project, the director shall issue a certificate of approval for the work authorized in the electrical permit. Electrical service shall not be connected/commenced or reinstated in a permanent manner at the project site (applicable permit location), until all required certificates of approval have been issued.

**Section 5-106 - 5-109. Reserved.**

7. Sections 9-1 through 9-9 of Chapter 9 of the Victoria City Code are amended to read as follows:

**ARTICLE I. - IN GENERAL**

**Sec. 9-1. - International Fire Code—Adopted.**

There is hereby adopted by the City for the purpose of prescribing regulations governing conditions hazardous to life and property from fire and explosion, that certain code known as the International Fire Code, ~~2009-2015~~ Edition, published by the International Code Council, save and except such portions as are deleted, modified, or amended by this article, of which a copy is on file with the City Secretary and the Victoria Fire Department, and the International Fire Code, ~~2009-2015~~ Edition, is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this section shall take effect, the provisions thereof shall be controlling within the limits of this city.

**Sec. 9-2. - Same—Definitions.**

- (a) Whenever the words "fire code official" are used in the International Fire Code they shall be held to mean the Fire Chief ~~Chief~~ **Marshal** of the City of Victoria.
- (b) Whenever the words "chief of the fire department" are used in the International Fire Code, they shall be held to mean the Chief of the Victoria Fire Department or that Chief's authorized representative.
- (c) ~~Section 302 Definitions. RECREATIONAL FIRE of the International Fire Code is amended to read; An outdoor fire burning materials other than rubbish where the fuel being burned is not contained in an incinerator, outdoor fireplace, barbeque grill, chiminea, or barbeque pit and has a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height for pleasure, religious, ceremonial, cooking, warmth or similar purposes.~~

(d) ~~Section 202 General Definitions. BULK STORAGE of the International Fire Code is added to read; Storage of material(s) in a specific area in excess of the following aggregate quantity limits:~~

~~Liquids: 500 gallons~~

~~Solids: 2,000 pounds~~

~~Gas: 12,000 cubic feet~~

(e) ~~Section 202 General Definitions. PERMANENT STORAGE of the International Fire Code is added to read; Storage for a period of over 30 days.~~

**Sec. 9-3. - Deletions to published code.**

The following sections of the International Fire Code are hereby deleted:

Section 105.6.1 Aerosol products

~~Section 105.6.2 Amusement buildings~~

Section 105.6.3 Aviation facilities

Section 105.6.4 ~~Carnivals and fairs~~ **Carbon dioxide systems used in beverage dispensing applications.**

~~Section 105.6.5 Cellulose nitrate film~~

Section 105.6.6 ~~Combustible dust producing operations~~ **Cellulose nitrate film.**

Section 105.6.7 ~~Combustible fibers~~ **Combustible dust-producing operations.**

Section 105.6.8 ~~Compressed gasses~~ **Combustible fibers.**

Section 105.6.9 ~~Covered mall buildings~~ **Compressed gasses.**

Section 105.6.10 ~~Cryogenic fluids~~ **Covered and open mall buildings.**

Section 105.6.11 ~~Cutting and welding~~ **Cryogenic fluids.**

~~Section 105.6.12 Dry cleaning plants~~

Section 105.6.13 ~~Exhibits and trade shows~~ **Dry cleaning.**

**Section 105.6.14 Exhibits and trade shows**

~~Section 105.6.15 Fire hydrants and valves~~

Section 105.6.16 ~~Flammable and combustible liquids~~ **Fire hydrants and valves**

Section 105.6.17 ~~Floor finishing~~ **Flammable and combustible liquids.**

Section 105.6.18 ~~Fruit and crop ripening~~ **Floor finishing.**

Section 105.6.19 ~~Fumigation and thermal insecticidal fogging~~ **Fruit and crop ripening**

Section 105.6.20 ~~Hazardous materials~~ **Fumigation and insecticidal fogging.**

Section 105.6.21 ~~HPM facilities~~ **Hazardous materials.**

Section 105.6.22 ~~High-piled storage~~ **HPM facilities.**

**Section 105.6.23 High-piled storage**

~~Section 105.6.24 Industrial ovens~~

Section 105.6.25 ~~Lumber yards and woodworking plants~~ **Industrial ovens.**

Section 105.6.26 ~~Liquid or gas fueled vehicles or equipment in assembly buildings~~ **Lumber yards and woodworking plants.**

~~Section 105.6.27 LP-gas~~

Section 105.6.28 ~~Magnesium-LP-gas~~

Section 105.6.29 ~~Miscellaneous combustible storage~~ **Magnesium**

**Section 105.6.30 Miscellaneous combustible storage**

**Section 105.6.31 Motor fuel-dispensing facilities**

Section 105.6.35 ~~Private fire hydrants~~ **Organic coatings**

Section 105.6.37 ~~Pyroxylin plastics~~

Section 105.6.38 ~~Refrigeration equipment~~

Section 105.6.39 ~~Repair garages and motor fuel-dispensing facilities~~ **Pyroxylin plastics.**

~~Section 105.6.40 Rooftop heliports~~**Refrigeration equipment.**  
 Section 105.6.41 ~~Spraying or dipping~~**Repair garages and motor fuel-dispensing facilities.**  
 Section 105.6.42 ~~Storage of scrap tires and tire byproducts~~**Rooftop heliports.**  
 Section 105.6.43 ~~Temporary membrane structures and tents.~~ **Spraying or dipping.**  
~~Section 105.6.44 Tire rebuilding plants~~  
~~Section 105.6.45 Waste handling~~  
~~Section 105.6.46 Wood products~~  
**Section 105.6.47 Waste handling.**  
**Section 105.6.48 Wood products.**  
~~Section 307.4.1 Bonfires~~  
~~Section 3801.2 Permits~~  
**Section 5601.1.3 Fireworks Exception Items 2 and 4**

**Sec. 9-4. - Amendments to the Fire Code.**

The following sections of the International Fire Code are hereby amended as hereinafter indicated:

- (1) ~~Section 105.6.27 to include “Exception: Floor cleaning appliances”~~
- (2) Section 105.6.34 to include “Exception: Places of Worship”
- (3) Section 108.1 to include “The duties of the board of appeals may be delegated to the City of Victoria Board of Adjustments and Appeals”
- (4) Section 109.3 Violation Penalties is amended to read: Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or shall erect, install, repair, or do work in violation of the approved construction documents or directive of the fire code official, or a permit or certificate used under the provisions of this code shall be subjected to the penalties as defined in Section 1-8 of the Code of Ordinances of the City of Victoria.  
  
The transmission of a false or nuisance alarm is a violation of this code. Facilities transmitting more than two nuisance alarms within a 12 month period shall be subject to a \$100 fee for each subsequent nuisance alarm. Individuals causing a false alarm shall be subject to the Violation penalties listed above, and/or any provisions listed in the Texas Penal Code.
- (5) Section 111.2 Issuance to read: “ A stop work order shall be in writing and shall be given to the owner of the property, or to the owner’s authorized agent, or to the person doing the work. If no one is present at the time of issuance, a stop work order shall be posted on the front entrance of the structure, or on the fire protection system where work shall stop. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work is authorized to resume.”
- (6) Section 202 Ambulatory Care Facility. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided. This group may include but not limited to the following: dialysis centers, sedation dentistry, surgery centers, colonic centers, psychiatric centers.
- (2) Section 304.3.3 Capacity exceeding 1.5 cubic yards is amended to read: Dumpsters and containers with an individual capacity of 1.5 cubic yards (40.5 cubic feet) (1.15 m<sup>3</sup>) or more shall not be stored in buildings or placed within 10 feet (1524 mm) of combustible walls, openings or combustible roof eave lines.

Exceptions:

1. ~~Dumpsters or containers in areas protected by an approved automatic sprinkler system complying with Chapter 9~~
  2. ~~Storage in a structure shall not be prohibited where the structure is of Type I or Type II-A construction, located not less than 10 feet (3048 mm) from other buildings and used exclusively for dumpster or container storage.~~
- (7) **Section 311.5 Placards. Any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards may be marked as required by Sections 311.5.1 through 311.5.5.**
- (8) **Section 505.1 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 6 inches high with a minimum stroke width of 1 inch. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. 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 identification shall be maintained.**
- (9) **Section 609.3.3.3: Records. Records for inspections shall state the individual and company performing the inspection, a description of the inspection and when the inspection took place. Records for cleaning shall state the individual and company performing the cleaning and when the cleaning took place. Such records shall be completed after each inspection or cleaning and maintained. Inspection and cleaning reports shall be submitted to the fire code official using an approved method.**
- (10) **Section 903.2.7 Group M Item 4: A Group M occupancy used for the display, storage, or sale of upholstered furniture and/or mattresses exceeds 5,000 square feet.**
- (311) ~~Section 903.3.6-7 Hose threads is amended to read: Fire hose threads and fittings used in connection with automatic sprinkler systems shall be National Standard Hose Thread.~~
- (412) ~~Section 903.3.7 Fire department connections is amended to read as follows: Fire department connections shall be either valve pit or wall mounted connections. These connections must meet [cov1] the requirements for Public Works Construction and N.F.P.A. 13. The fire official must approve the style and location of these connections prior to installation and the connection must be near, but not greater than a distance of 100' from a fire hydrant of sufficient capacity.~~
- (513) **Section 3301.2.45601.2.4 Financial responsibility is amended to read: Before a permit is issued, as required by Section 3301.25601.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of \$1,000,000 or a public liability insurance policy for the same amount, for personal injuries and \$500,000 for property damage the purpose of the payment of all damages to persons or property that arise from, or are caused by, the conduct of any act authorized by the permit**

upon which any judicial judgment results. The policy shall be current and shall name the City of Victoria as an additional insured for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The fire code official is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this bond requirement.

(6) Section 3301, General, is amended to add Section 3301.9, which will read as follows:

~~3301.9 Fireworks Prohibited in or within 5,000 feet of City Limits. Unless possessed pursuant to a permit issued under Section 3308.2, it shall be unlawful for any person to manufacture, possess, store, transport, offer for sale, expose for sale, sell or use or explode any fireworks within the city or within 5,000 feet of the limits of the City of Victoria.~~

~~Unless possessed pursuant to a permit issued under Section 3308.2, the presence of any fireworks within the city or within 5,000 feet of the limits of the City of Victoria in violation of this chapter is hereby declared to be a nuisance. The fire marshal is hereby directed and required to seize and cause to be destroyed any fireworks found within the jurisdiction in violation of this division and any member of the fire prevention division of the fire department of the City of Victoria or any police officer of the City of Victoria or any other peace officer is empowered to stop the transportation of and detain any fireworks found being transported illegally or to close any building where any fireworks are found stored illegally until the fire marshal can be notified in order that said fireworks may be seized and destroyed in accordance with the terms of this section. Notwithstanding any penal provision of this division, the City Attorney is authorized to file suit on behalf of the city or the fire marshal or both for such injunctive relief as may be necessary to prevent unlawful storage, transportation, keeping or using of fireworks within the jurisdiction of the City of Victoria and to aid the fire marshal in the discharge of such official's duties and to particularly prevent any person from interfering or attempting to interfere with the seizure and destruction of such fireworks, but it shall not be necessary to obtain any such injunctive relief as a prerequisite to such seizure and destruction. The fire marshal or any member of the fire prevention division of the fire department of the city is hereby authorized to enter any building where the unlawful presence of fireworks is suspected in order to inspect the same for the presence of such fireworks.~~

~~In any instance where the fire marshal or any other duly authorized member of the fire department has probable cause to believe that fireworks are being stored in a building they shall promptly enter the building for the purpose of inspection and it shall be the duty of the owner or lessee, or their agents, to open and permit the entry to the building.~~

(7) ~~14~~ Section 3308.2.1 5608.2.1 Outdoor Fireworks Displays is amended to read:

~~It shall be lawful for a person to conduct a fireworks display in the city or within 5,000 feet of the limits of the city provided a permit has been obtained for such purposes from the fire marshal. An application for a permit shall be made in writing at least 10 days in advance of the date of display. After such privilege shall be granted, possession and use for such display shall be lawful for that purpose only. No permit granted hereunder shall be transferable.~~

The following requirements must be met by an applicant in order to obtain a permit approval of the fire marshal code official for a fireworks display. The applicant shall

~~1. Furnish a certificate of insurance to the city showing liability insurance coverage in the minimum amount of \$300,000.00 per occurrence for personal injuries and \$100,000.00 per occurrence for property damage arising out of the permitted display and arising from any acts of the permittee, or permittee's agents or employees. If the permittee is to conduct the fireworks display on City property, then the insurance certificate shall name the city as an additional insured.~~

~~21.~~ Furnish written permission from the property owner where the display is to be located.

~~32.~~ Provide a qualified pyrotechnic technician who will be present at all times during the display.

~~43.~~ Employ a sufficient amount of fire department staff to enforce the fire codes for public safety during the display.

~~54.~~ Allow only persons who are under the direct supervision of the pyrotechnic technician to discharge the fireworks.

~~(815)~~—Appendices C and D are amended to provide that the provisions of said appendices are not mandatory, but may be used as a basis for the exercise of discretion by the fire official.

~~(9)~~ Section 3404.2.11.2 Location is amended to read: Flammable and combustible liquid storage tanks located underground, either outside or under buildings, shall be in accordance with all of the following:

~~1. Tanks shall be located with respect to existing foundations and supports such that the loads carried by the latter cannot be transmitted to the tank.~~

~~2. The distance from any part of a tank storing liquids to the nearest wall of a basement, pit, cellar or lot line shall not be less than 3 feet (914 mm).~~

~~3. A minimum distance of 2 feet (610 mm), shell to shell, shall be maintained between underground tanks.~~

~~(4016)~~ Section 3804.26104.2. Maximum capacity within established limits is amended to read: The storage of LP gas in aggregate quantities greater than 2000 gallons (7571 L) water capacity is not permitted within the city. The storage of LP gas in aboveground or below ground containers, greater than 24 gallons (91 L) water capacity and up to a maximum of 2000 gallons (7571 L) water capacity, is prohibited outside of Major Industry (MI) or Light Industry (LI) districts.

Exceptions:

1. 1.—The fire chief may approve the placement of aboveground or below ground containers for single family residential, multi-family residential or commercial occupancies on a case-by-case base provided the container and appurtenances are listed and installed in accordance with that listing and issues such as zoning and fire exposures are addressed adequately.

**(17) Appendices B, C and D are amended to provide that the provisions of said appendices are not mandatory, but may be used as a basis for the exercise of discretion by the fire official.**

**Sec. 9-5. - Arson and false fire alarm; reward for conviction.**

- (a) The mayor is hereby authorized to offer a standing reward of two hundred fifty dollars (\$250.00), payable to any person furnishing information leading to the arrest and conviction of one or more persons guilty of arson in connection with any one fire, and when information is given by more than one person leading to the arrest and final conviction of any person guilty of arson, then the reward of two hundred fifty dollars (\$250.00) will be prorated.
- (b) No officer in the employ of the city, county or state, whose duty it is to detect violations of the law or make arrests in connection therewith, shall be entitled to any reward for information leading to the arrest or conviction of any person guilty of arson.
- (c) The city does hereby offer a reward of one hundred dollars (\$100.00) to be paid to any person furnishing information leading to the arrest and conviction of any person giving a false fire alarm, that is, giving an alarm of fire when there is no fire, falsely and maliciously, by any means whatsoever in the city, or making any attempt to commit such criminal act.

**Sec. 9-6. - Opening, adjusting fire hydrants.**

No person other than an employee of the City or a duly authorized independent contractor of the City shall open, adjust or attempt to repair any fire hydrant within the city limits.

**Sec. 9-7. - Reserved.**

**Editor' note**— Ord. No. 2013-11, § 1, adopted May 21, 2013, repealed § 9-7 in its entirety, which pertained to burning of garbage and trash—conditions and derived from Ord. No. 2011-23, § 1, adopted Aug. 2, 2011.

**Sec. 9-8. - Installations not to be located in fire district.**

- (a) Liquefied petroleum gas installations shall not be located in the fire district.

**Sec. 9-9. - Additions to published code.**

The following sections of the International Fire Code are hereby added:

**(1) Section 102.7.3 Alternative editions of referenced codes and standards. The fire code official is authorized to utilize more current editions of the referenced codes and standards.**

- (+2) Section 103.1.1 Enforcement of adopted codes shall be added to read: The City of Victoria hereby establishes a fire prevention division as described in Section 103 of the International Fire Code, ~~2009~~**2015** edition. This division shall be referred to as the Fire Marshal's Office. The Fire Marshal's Office is charged with enforcement of the International Fire Code, as amended, as well as other ordinances and laws over which the Fire Marshal's Office has responsibility. The Fire Marshal's Office has the authority to enforce any life safety provision of the current adopted Building Code, ~~Plumbing Code~~, Fuel Gas Code, Mechanical Code, Electrical Code, or Existing Building Code. Any interpretation of the Building, ~~Plumbing~~—Mechanical, Electrical, or Existing Building Codes are the sole responsibility of the Authority Having Jurisdiction over the code in question. Corrective notices, citations, or other corrective actions as allowed by law may be issued for violations of the reference codes.
- (23) Section 311.3.1 Securing and removing burned structure after fire is added to read: Whenever any structure in the City of Victoria is damaged or destroyed by fire, the owner thereof or the person in charge of or in control of the property shall secure the property to prevent unauthorized entry within ten (10) days after the fire, and shall remove from the premises all refuse, debris, charred lumber, destroyed or damaged portions of the structure

and any materials damaged or destroyed by fire within ten (10) days after receipt of notice from the Fire Marshal's Office. It is a defense to prosecution under this section for failure to remove refuse, debris, charred lumber, damaged portions of the structure or any materials damaged or destroyed by fire that there is a need to preserve the scene for further investigation or evaluation.

- (34) Section 503.3.1 Striping. Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six (6) inches in width to show the boundaries of the fire apparatus access road. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four (4) inch white letters at 25 feet intervals on the red border markings along both sides of the fire apparatus access roads.
- (5) Section 901.6.2.2 Reports: Inspection, test and maintenance records shall be submitted to the fire code official using an approved method.
- (6) Section 903.2.9.3 Self-service storage facility: An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Exception: One-story self-service storage facilities that have no interior corridors, with a one-hour fire barrier separation wall installed between every storage compartment.
- (7) Section 907.5.2.4 Security Gates: Fire alarm systems within gated facilities shall be connected in such a manner that the security gate(s) open(s) upon fire alarm activation.
- (8) Section 912.2.3 Hydrant distance: An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.
- (9) Section 1103.11 Fire protection systems.
- (10) Section 1103.11.1 Spray booths and rooms: Existing spray booths and rooms shall be protected by an approved automatic fire extinguishing system in accordance with Section 2404. Automatic fire extinguishing systems shall be installed within 12 months of the adoption of this code.
- (11) Section 1103.11.2 Existing commercial kitchen operations: Existing commercial kitchen operations shall be protected by an approved automatic fire extinguishing system in accordance with Section 609. Automatic fire extinguishing systems shall be installed within 12 months of the adoption of this code.
- (12) Section 3104.15.6.1 Outdoor cooking during festivals and events. Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 4 feet of a tent or membrane surface during a festival or event where the operation is required to be covered by the Health Department.
- (13) Section 3404.1.14.1-5704.2.14.1 (7) Tanks shall not be dismantled or disassembled on site is added to read: Underground storage tanks for flammable or combustible products shall not be dismantled or disassembled on site. Underground storage tanks for flammable or combustible products shall be removed from the site prior to dismantling or disassembling and disposed of in accordance with Section 3404.2.14.2-5704.2.14.2.
- (14) Section 6103.2.1.8 Jewelry repair, dental labs and similar occupancies, Where natural gas is not available, portable LP-gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20-pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 40-

**pound (18.0 kg) water capacity. Each container shall be separated from other containers by a distance of not less than 20 feet.**

**Secs. 9-10—9-19. - Reserved.**

8. Tables N11.05.5.2(1), N1102.2.3.1, N1102.1.2, and N1102.1.4, attached hereto together as Exhibit "A," are hereby incorporated into Article IV, the International Residential Building Code, Section 5-53.

9. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined any sum not to exceed \$2,000 for violations of the Building Code as provided in Section 1-8 of the Victoria City Code.

10. In addition to any other remedy provided by law, the city and its officers shall have the right to enjoin any violation of this article by injunction issued by a court of competent jurisdiction.

11. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

12. If any portion of this ordinance is held invalid or unconstitutional by a court of competent jurisdiction, the same remaining provisions hereof shall nevertheless be valid just as if the unconstitutional portion had not been adopted.

13. The Code of the City of Victoria, Texas, as amended, shall remain in full force and effect, save and except as amended by this ordinance.

14. It is the intention of the City Council that this ordinance shall become a part of the Code of the City of Victoria, Texas, and it may be renumbered and codified therein accordingly.

15. The City Secretary shall publish the caption or a descriptive title of this ordinance one time within 10 days after passage of the ordinance in a newspaper of general circulation in the City of Victoria in accordance with the provisions of Article II, Section 10 of the Charter of the City of Victoria.

16. The provisions of this ordinance shall become effective ten (10) days after final passage and approval by the City Council of the City of Victoria, Texas.

**Passed first reading**, this the 1<sup>st</sup> day of December, 2015

Ayes: 7

Nays: 0

Abstentions: 0

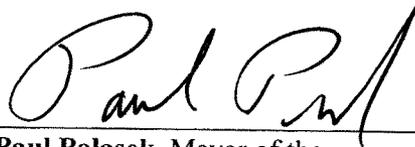
**Passed second and third reading**, this the 15<sup>th</sup> day of December, 2015

Ayes: 7

Nays: 0

Abstentions: 0

**Approved and adopted**, this the 15<sup>th</sup> day of December, 2015



**Paul Polasek**, Mayor of the  
City of Victoria, Texas



Attest:

Approved as to Legal Form:

*Scarlet Swoboda*  
Scarlet Swoboda, City Secretary

*Thomas A. Gwosdz*  
Thomas A. Gwosdz, City Attorney

Distribution: Legal Department  
Development Services  
Fire Department

Copies Sent: December 16, 2015

# Exhibit "A"

TABLE N1105.5.2(1)  
SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS

BUILDING COMPONENT	STANDARD REFERENCE DESIGN	PROPOSED DESIGN
Vertical fenestration other than opaque doors	Total area <sup>b</sup> = Orientation:equally distributed to four cardinal compass orientations(N,E,S,&W) U-factor: from Table R402.1.3 SHGC: From Table R402.1.1 except that for climates with no requirement (NR)SHGC=0.40 shall be used. Interior shade fraction: 0.92-(0.21×SHGC for the standard reference design) External shading:none	Asproposed As proposed As proposed 0.92-(0.21×SHGC as proposed) As proposed
Heating Systems <sup>d, e</sup>	Fuel type:same as proposed design Efficiencies: Electric: air-source heat pump with prevailing Federal minimum standards Non electric furnaces:natural gas furnace with prevailing federal minimum standards Non electric boilers: natural gas boiler with prevailing federal minimum standards Capacity: sized in accordance with Section N1103.7	As proposed As proposed As proposed As proposed
Cooling Systems <sup>d, f</sup>	Fuel type : Electric Efficiency: in accordance with prevailing federal minimum standards Capacity: sized in accordance with Section N1103.7	As proposed As proposed
ServiceWater Heating <sup>d, e, f</sup>	Fuel type: same as proposed design Efficiency: in accordance with prevailing federal minimum standards Use: gal/day=30+10×Nbr Tank temperature: 120°F	As proposed Same as standard reference Same as standard reference

Footnotes remain unchanged

TABLE N1102.2.3.1

MINIMUM PROJECTION FACTOR REQUIRED BY ORIENTATION FOR SHGC EXCEPTION

ORIENTATION	PROJECTION FACTOR
North	$\geq 0.40^a$
South	$\geq 0.20$ -
East	$\geq 0.50$
West	$\geq 0.50$

*a. For the north orientation, a vertical projection located on the west-edge of the fenestration with equivalent PF  $\geq 0.15$  shall also satisfy the minimum projection factor requirement.*

**TABLE N1102.1.2  
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT<sup>a</sup>**

CLIMATE ZONE	FENESTRATION U-FACTOR <sup>b</sup>	SKYLIGHT <sup>b</sup> U-FACTOR	GLAZED FENESTRATION SHGC <sup>b, e</sup>	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE <sup>f</sup>	FLOOR R-VALUE	BASEMENT <sup>c</sup> WALL R-VALUE	SLAB <sup>d</sup> R-VALUE & DEPTH	CRAWL SPACE <sup>e</sup> WALL R-VALUE
1	1.20	0.75	0.30	30	13	3 / 4	13	0	0	0
2	0.65 <sup>j</sup>	0.75	0.30	30	13	4 / 6	13	0	0	0
3	0.50 <sup>j</sup>	0.60	0.30	30	13	5 / 8	19	5/13 <sup>f</sup>	0	5/13
4 except Marine	0.35	0.60	NR	38	13	5 / 10	19	10/13	10, 2ft	10/13
5 and Marine 4	0.35	0.60	NR	38	20 or 13+5 <sup>h</sup>	13 / 17	30 <sup>g</sup>	10/13	10, 2ft	10/13
6	0.35	0.60	NR	49	20 or 13+5 <sup>h</sup>	15 / 19	30 <sup>g</sup>	15/19	10, 4ft	10/13
7 and 8	0.35	0.60	NR	49	21	19 / 21	38 <sup>g</sup>	15/19	10, 4ft	10/13

For SI: 1 foot = 304.8 mm.

- a. R-values are minimums. U-factors and SHGC are maximums. R-19 batts compressed into a nominal 2 x 6 framing cavity such that the R-value is reduced by R-1 or more shall be marked with the compressed batt R-value in addition to the full thickness R-value.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- c. "15/19" means R-15 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulated sheathing on the interior or exterior of the home. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zones 1 through 3 for heated slabs.
- e. There are no SHGC requirements in the Marine Zone.
- f. Basement wall insulation is not required in warm-humid locations as defined by Figure 301.1 and Table 301.1.
- g. Or insulation sufficient to fill the framing cavity, R-19 minimum.
- h. "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, insulating sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25 percent of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.
- i. The second R-value applies when more than half the insulation is on the interior of the mass wall.
- j. For impact rated fenestration complying with Section R301.2.1.2 of the *International Residential Code* or Section 1608.1.2 of the *International Building Code*, the maximum U-factor shall be 0.75 in Zone 2 and 0.65 in Zone 3.

**TABLE N1102.1.4 EQUIVALENT U-FACTORS<sup>a</sup>**

Climate Zone	Fenestration U-Factor	Skylight U-Factor	Ceiling U-Factor	Frame Wall U-Factor	Mass Wall U-Factor <sup>b</sup>	Floor U-Factor	Basement Wall U-Factor	Crawl Space Wall U-Factor
1	1.20	0.75	0.035	0.082	0.197	0.064	0.360	0.477
2	0.75	0.75	0.035	0.082	0.165	0.064	0.360	0.477
3	0.65	0.65	0.035	0.082	0.141	0.047	0.360	0.136
4 except Marine	0.40	0.60	0.030	0.082	0.141	0.047	0.059	0.065
5 and Marine 4	0.35	0.60	0.030	0.057	0.082	0.033	0.059	0.065
6	0.35	0.60	0.026	0.057	0.060	0.033	0.050	0.065
7 and 8	0.35	0.60	0.026	0.057	0.057	0.033	0.050	0.065

- a. Non-fenestration U-factors shall be obtained from measurement, calculation or an approved source.
- b. When more than half the insulation is on the interior, the mass wall U-factors shall be a maximum of 0.17 in Zone 1, 0.14 in Zone 2, 0.12 in Zone 3, 0.10 in Zone 4 except Marine, and the same as the frame wall U-factor in Marine Zone 4 and Zones 5 through 8.
- c. Basement wall U-factor of 0.360 in warm-humid locations as defined by Figure 301.1 and Table 301.2.
- d. Foundation U-factor requirements shown in Table 402.1.3 include wall construction and interior air films but exclude soil conductivity and exterior air films. U-factors for determining code compliance in accordance with Section 402.1.4 (total VA alternative) of Section 405 (Simulated Performance Alternative) shall be modified to include soil conductivity and exterior air films .