

ORDINANCE NO. O2018-051

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF YUMA, ARIZONA, AMENDING TITLE 15 OF THE YUMA CITY CODE, CHAPTER 150, SECTIONS 150-180 AND 150-181, ADOPTING BY REFERENCE THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO- FAMILY DWELLINGS, INCLUDING APPENDICES G, H, J, K, O, P, Q, AND S, AND THE AMENDMENTS RECOMMENDED BY THE RESIDENTIAL ADVISORY BOARD DATED JUNE 5, 2018, AND PROVIDING A PENALTY FOR VIOLATIONS THEREOF

WHEREAS, on April 3, 2013, the City Council adopted the *2012 International Residential Code for One- and Two-Family Dwellings*; and,

WHEREAS, Yuma City Council Resolution No. R2018-030 declared a document titled, "2018 *International Residential Code for One- and Two-Family Dwellings*" a public record; and,

WHEREAS, the City Council has considered the recommendation of the Residential Advisory Board based on their actions taken at the meeting of June 5, 2018 recommending adoption of the *2018 International Residential Code for One- and Two-Family Dwellings*, with Appendices G, H, J, K, O, P, Q and S and the amendments herein; and,

WHEREAS, up to date modern codes help protect the built environment from natural disasters and fires, and offer safe environments for the occupants for both residential and commercial structures; and,

WHEREAS, the City of Yuma is desirous of adopting the *2018 International Residential Code for One- and Two-Family Dwellings* and the amendments herein, to keep current with the code cycle and amendments to reflect modern technology, materials and techniques; and,

NOW THEREFORE, BE IT ORDAINED by the City Council of the City of Yuma as follows:

SECTION 1: The Yuma City Code Title 15, Chapter 150, Section 180 is amended to delete the strikethrough text and insert the following underlined text:

§ 150-180 Adoption of the ~~2012~~ 2018 International Residential Code for One-and Two-Family Dwellings.

That certain documents, three copies of which are on file as public record in the office of the City Clerk of the City of Yuma, being marked and titled as the ~~2012~~ 2018 International Residential Code for One-and Two-Family Dwellings, which was made public record by Resolution ~~R2013-07~~ R2018-030, including Appendices ~~A, B, C, D,~~ G, H, J, K, ~~N,~~ O, P, Q, and S of said Residential Code, as amended herein, are hereby adopted by reference and made a part hereof as if fully set out in the entirety herein.

SECTION 2: The Yuma City Code Title 15, Chapter 150, Section 181 is amended to delete the strikethrough text and insert the following underlined text:

§ 150-181. Amendments.

The following amendments, additions, and deletions are hereby made to the ~~2012~~ 2018 International Residential Code for One-and Two-Family Dwellings, as adopted by this subchapter. Paragraph, section numbers refer to the ~~2012~~ 2018 International Residential Code for One-and Two-Family Dwellings number system. Code references not amended in this section shall be enforced as published in the reference document.

(A.) **Section R101.1 Title.** Amend to read, "These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* of the City of Yuma, and shall be cited as such and will be referred to herein as 'this code.'"

(B.) **Section R101.2 Scope. Add to end of Exception:** "Subject to preemption by Arizona Revised Statutes, Title 9, Chapter 7, Article 1, Section 807, Mandated Sprinklers in Certain Residences Prohibited."

(C.) **Section R102.4 Referenced codes and standards.** Add to end of section, "Where reference in this code is made to the *International Fire Code*, it shall be taken to mean the current adopted fire code."

(~~B~~D.) **Section R103.1 Creation of enforcement agency.** Amend to read, "The Department of Community Development, Building Safety Division is hereby created and the official in charge thereof shall be known as the *building official*."

(~~E~~E.) **Section R104.10.1 Flood hazard areas.** Delete section in its entirety in favor of adopted City floodplain ordinances.

(~~F~~F.) **Section R105.1 Required.** Add to end of section, "In addition, Park Models, as defined in ~~the Yuma City Code, Title 15, Chapter 15.4, Section 15.07~~ Chapter 2 of the Code, require a building permit for placement. Electrical connections that are hard-wired to the unit require a separate permit. Mechanical equipment that is external to the unit requires a separate permit. Tie-down anchors are required for park model installations as specified in Chapter 4."

(~~G~~G.) **Section R105.2 Work exempt from permit.** Add new items #11 and #12, under "**Building**":

11. "Window replacements of like size where framing is not altered and any required emergency egress dimensions are not diminished from existing.

12. Replacement of an existing electric water heater in the same location.

Items #11 and #12 apply only to work performed by a licensed contractor or the owner/occupant of the premises."

(~~H~~H.) ~~Create new section,~~ "**R105.10 Toilet facilities on construction sites.** Toilet facilities shall be provided for construction workers and such facilities shall be maintained in a sanitary condition. Construction worker toilets of the non-sewer type shall conform to ANSI Z4.3.

Toilet facilities shall be required at a ratio of at least one toilet for a maximum of 15 lots under construction.”

(~~G~~.) ~~Create new section,~~ “**R105.11 Construction Debris.** Construction sites shall be kept reasonably clean of construction debris during the course of construction. Construction debris shall be removed or retained on the lot and not be at risk to be displaced from the lot by wind. Debris shall not be allowed to transfer to adjacent lots or City Rights of Way.”

If the *Building Official* determines that the construction site is not in compliance with this section or the debris presents a safety hazard for inspection personnel, inspections shall not be performed until the construction site is cleaned.”

(~~H~~.) **Section R106.1.4 Information for construction in flood hazard areas.** Delete item 4 in its entirety.

(~~K~~.) **Section R106.4 Amended Construction documents.** Add to end of section, “Changes may be made without resubmittal that are not affecting code-related items, or when otherwise approved by the *building official*.”

(~~J~~.) **Section R108.2 Schedule of permit fees.** Amend by adding Building Permit Fee Table 1-A.

TABLE 1-A: BUILDING PERMIT FEES

Schedule of Building Permit Fees	
Total Valuation	Fee
\$1 to \$500	\$50.00
\$501 to \$2,000	\$50.00 for the first \$500 plus \$4 for each additional \$100, or fraction thereof, to and including \$2,000
\$2,001 to \$25,000	\$110.00 for the first \$2,000 plus \$16 for each additional \$1,000, or fraction thereof, to and including \$25,000
\$25,001 to \$50,000	\$478.00 for the first \$25,000 plus \$12 for each additional \$1,000, or fraction thereof, to and including \$50,000
\$50,001 to \$100,000	\$780.00 for the first \$50,000 plus \$8 for each additional \$1,000, or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$1,180.00 for the first \$100,000 plus \$6 for each additional \$1,000, or fraction thereof, to and including \$500,000
\$500,001 to \$1,000,000	\$3,580.00 for the first \$500,000 plus \$6 for each additional \$1,000, or fraction thereof, to and including \$1,000,000
\$1,000,001 and up	\$6,580.00 for the first \$1,000,000 plus \$4 for each additional \$1,000, or fraction thereof

Other Inspections and Fees:

1. Permit fees for mechanical, plumbing and electrical shall be as indicated per applicable fee tables of the respective ordinances.
2. Inspections outside of normal business hours, \$50 per hour* (minimum charge – 2 hours)
3. Reinspection fees of \$50 per hour*, for work not ready for inspection.
4. Inspections on Weekends and Holidays, \$100 per hour* (minimum charge – 2 hours)
- 4 5. Inspection fees for which no fee is specifically indicated, \$50 per hour* (minimum charge – one-half hour)
- 5 6. Additional plan review required by changes, additions or revisions to plans, \$50 per hour* (minimum charge – one-half hour)
- 6 7. For use of outside consultant. For plan checking and inspections, or both Actual Costs**

*Or the total hourly cost to the jurisdiction, whichever is the greatest. This shall include supervision, hourly wages and fringe benefits of the employee involved.

** Actual costs include administrative and overhead costs.

~~(K.M.)~~ Create new section, “**R108.2.1 Plan review fees.** When submittal documents are required by Section R106.1, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. Said plan review fee shall be 65 percent of the building permit fee as shown in Table 1-A.

The plan review fees specified in this section are separate fees from the permit fees specified in Section R108.2 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in Table 1-A.”

~~(L.N.)~~ **Section R108.5 Refunds.** Amend to read, “The *building official* shall authorize the refunding of fees as follows:

1. The full amount of any fee paid hereunder that was erroneously paid or collected.
2. 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.
3. 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 review effort has been expended.

The *building official* shall not authorize the refunding of any fee paid except upon written application filed by the original permittee or applicant not later than 180 days after the date of fee payment.”

~~(M.O.)~~ **Section R108.6 Work commencing before permit issuance.** Add to end of section, “An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be determined by the *building official*, based on the circumstances, nature, and severity of the infraction. The minimum investigation fee shall be \$50.00 and the maximum shall be an amount up to the same as the fee set forth in Table 1-A.”

(NP.) **Section R109.4 Approval required.** Add to end of section, "Inspection comments shall include code section references, when requested."

(OQ.) **Section R110.3 Certificate issued.** Amend to read, "After the *building official* inspects the building or structure and ~~finds no~~ does not find violations of the provisions of this code or other laws that are enforced by the ~~jurisdiction~~ jurisdiction, the *building official* may issue a certificate of occupancy upon request, containing the following:

1. The building *permit* number.
2. The address of the structure.
3. The name and address of the owner or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code.
6. The name of the *building official*.
7. The edition of the code under which the *permit* was issued.
8. If an automatic sprinkler system is provided and whether the sprinkler system is required.
9. Any special stipulations and conditions of the building *permit*."

(PR.) **Section R112.1 General.** Add to end of section, "The membership of the Residential Advisory Board, as prescribed in Section 150-175 of the Yuma City Code, will be the ~~h~~Board of ~~a~~Appeals."

(Q.) **Section R112.2.1 Determination of Substantial Improvement in areas prone to flooding.** ~~Delete section in its entirety in favor of adopted City floodplain ordinances.~~

(R.) **Section R112.2.2 Criteria for issuance of a variance for areas prone to flooding.** ~~Delete section in its entirety in favor of adopted City floodplain ordinances.~~

(S.) **Section R112.3 Qualifications.** Delete section in its entirety.

(T.) **Section R113.4 Violation penalties.** Amend to read, "Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the *approved construction documents* or directive of the *building official*, or of a *permit* or certificate issued under the provisions of this code, shall be subject to the penalty and fine described in this ordinance."

(U.) **Section R114.2 Unlawful continuance.** ~~Amend to read,~~ "Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to the penalty and fine described in this ordinance."

(V.) **Section R202 DEFINITIONS.** ~~Create new definition,~~ "**Park Model.** Any factory assembled portable unit, to which is affixed on Arizona recreational vehicle seal, mounted on a chassis and wheels, not more than 12 feet in width and no greater than 400 square feet nor less than 320 square feet in total area, and permanently connected to utilities that are necessary for the operation of the installed park model with no holding tank."

(W.) **TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA.**
Amend table to add values applicable to this jurisdiction:

**TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^e	ICE BARRIER UNDER-LAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^d (mph)	Topographic effects ^k		Weathering ^a	Frost line depth ^b	Termite ^c					
0	90 115	No	D ₀	Negligible	12"	Mod. to Heavy	39	No	1980, 1987, 2004, 2006	0	70 73.9
Manual J Design Criteria^a											
<u>Elevation</u>	<u>Latitude</u>	<u>Winter Heating</u>	<u>Summer Cooling</u>	<u>Altitude Correction Factor</u>	<u>Indoor Design Temp</u>	<u>Design Temp Cooling</u>	<u>Heating Temp Diff</u>				
207	33	45	109	0.9925	72	75	20				
<u>Cooling Temp Diff</u>	<u>Wind Velocity Heating</u>	<u>Wind Velocity cooling</u>	<u>Coincident Wet Bulb</u>	<u>Daily Range</u>	<u>Winter humidity</u>	<u>Summer Humidity</u>					
23.7	21	7.7	73	M	9.2	127.1					

(X.) **Table R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA.** Add to end of footnote f, "All locations in City of Yuma shall be classified as Seismic Design Category D₀."

(Y.) **Section R301.2.2.6 Irregular buildings.** Add exception to Item 6. **Perpendicular shear wall and wall bracing.** "Exception: Angled walls, per provisions of Section R602.10.1.4."

(XZ.) **Section R302.1 Exterior walls.** Add exceptions 6, 7, and 8 6 and 7 to section:

6. "In mobile home parks and other applicable zoning districts, ~~attached nonhabitable structures including patio covers, carports, and sheds are permitted to have a fire separation distance of 3 feet (914 mm), with unlimited unprotected openings, and no projections allowed.~~ (such as MHS, MHP, RVS, RV Co-Op) that are existing at time of this code adoption, dwelling units and their attached accessory structures are permitted to maintain their prior approved fire separation distance, subject to compliance with other City codes, but in no case shall the fire separation distance be less than 3 feet (914 mm), with unlimited unprotected openings, and no projections allowed.

7. ~~In mobile home parks and other applicable zoning districts that are existing at time of this code adoption, replacement dwelling units are permitted to maintain their prior existing fire separation distance, subject to compliance with other city codes, but in no case shall the fire separation distance be less than 3 feet (914 mm), with unlimited unprotected openings, and no projections allowed.~~

87. For existing *dwelling*s and other *structures* having legal, nonconforming setbacks at time of this code adoption, where *approved* by the zoning administrator and the *building official*, attached additions are permitted to comply with the existing nonconforming setbacks, provided the minimum *fire separation distance* is 3 feet (914 mm), with unlimited unprotected openings, and no projections allowed.”

(AA.) **Section R304.1 Minimum area.** Add to end of section, “Every *dwelling unit* shall have at least one habitable room that shall have not less than 120 square feet (11 m²) of gross floor area.”

(BB.) Create new section, “**R304.4 Access from bedrooms.** *Bedrooms shall not constitute the only means of access to other bedrooms or habitable spaces and shall not serve as the only means of egress from other habitable spaces.*”

Exception: Units that contain fewer than two *bedrooms*.”

(YCC.) **Section R313.2 One- and two-family dwellings automatic fire systems.** Delete section in its entirety. (Preemption by ARS § 9-807).

(ZDD.) **Section R313.2.1 Design and installation.** Clarification: This section is to remain.

(AAEE.) **Section R317.3.1 Fasteners for preservative-treated wood.** Add fourth exception to section:

4. “Fasteners for preservative-treated wood in areas not normally subjected to high moisture.”

(BBFF.) **Section R318.1 Subterranean termite control methods.** Add to end of section, “Method 3 or 4 shall be incorporated per Section R317.1, regardless of other methods or combination of methods utilized.”

(EEGG.) **SECTION R322 FLOOD-RESISTANT CONSTRUCTION.** Delete section in its entirety in favor of adopted City floodplain ordinances.

(HH.) **Section R324.2 Solar thermal systems.** Amend to read, “Solar thermal systems shall be designed and installed in accordance with Chapter 23 and the current adopted fire code.”

(DDII.) **Section R401.2 Requirements.** Add to end of section, “Engineered fill building pads shall be placed in 12-inch lifts, compacted to not less than 95% Maximum Density, per ASTM D698 or D1557. The building pads shall extend a minimum of 3-feet beyond the footprint of the building at an elevation level not less than 10-inches below the finished floor.

Park Model installations shall be provided with tie-downs using *approved* manufactured housing tie-down anchors. As a minimum, tie-down anchors shall be installed at each corner of the unit and intermediately spaced at maximum 12 feet (3658 mm) on-center.”

(EEJJ.) **Section R401.2 Requirements.** Add exception to section: “**Exception:** Fills depths 12-inches or less may not require testing subject to determination by the *building official*.”

~~(FFKK.)~~ **Section R403.1.2 Continuous footing in Seismic Design Categories D₀, D₁ and D₂.** Amend to read, “The *braced wall panels* at exterior walls of buildings located in Seismic Design Categories D₀, D₁ and D₂ shall be supported by continuous footings. Interior *braced wall panels* shall be supported by continuous footings at intervals not exceeding 60 feet (18288 mm) in both directions.

Amend third sentence to read, “Required interior *braced wall panels* at buildings located in Seismic Design Categories D₀, D₁ and D₂ shall be supported by continuous solid or fully grouted masonry or concrete footings in accordance with Section R403.1.3.4 at intervals not exceeding 60 feet (18288 mm) in both directions.”

~~(LL.)~~ **Section R403.1.3 Footing and stem wall reinforcing in Seismic Design Categories D₀, D₁ and D₂.** Add to end of section, “The reinforcing steel requirements of this section and subsections shall also be applicable in Seismic Design Category C for unincorporated areas in Yuma County.”

~~(MM.)~~ **Section R403.1.3.4 Interior bearing and braced wall panel footings in Seismic Design Categories D₀, D₁ and D₂.** Amend to read, “In Seismic Design Categories D₀, D₁ and D₂ interior footings supporting bearing walls or *braced wall panels* with a foundation, and cast monolithically with a slab on *grade*, shall extend to a depth not less than 12 inches (305 mm) below the top of the slab.”

~~(GGNN.)~~ **Section R403.1.4 Minimum depth.** Amend first sentence to read, “All exterior footings shall be placed at least 12 inches (305 mm) below the undisturbed ground surface, or 12 inches (305 mm) into engineered pad.”

~~(HHOO.)~~ **Section R403.1.6.1 Foundation anchorage in Seismic Design Categories C, D₀, D₁ and D₂.** Add item 7 to section:

7. “Interior *braced wall panels* when not supported by a continuous foundation shall be attached to the concrete slab on ground using ½ inch (12.7 mm) diameter anchor or expansion bolts spaced at not more than 6 feet (1829 mm) on center, or an equivalent method such as approved pneumatic anchor pins as per manufacturer requirements. Cut nails or adhesives shall not be permitted.”

~~(HPP.)~~ **Section R408.7 Flood Resistance.** Delete section in its entirety in favor of adopted City floodplain ordinances.

~~(JJQQ.)~~ **Section R506.1 General.** Add to end of section, “Control joints in unreinforced concrete slab-on-ground floors shall be provided at maximum 12 feet (3658 mm) on center in both directions.”

~~(KKRR.)~~ **Section R506.2.3 Vapor retarder.** Delete Section in its entirety. Amend section title to read, “**Section R506.2.3 Vapor retarder (Optional).**”

~~(LL.)~~ **Section R602.3.2 Top Plate.** Amend exception to section:

~~“Exception: A single top plate may be installed in stud walls, provided the plate is adequately tied at joints, corners and intersecting walls by a minimum 2 ½ inch by 16 inch by a 0.036 inch thick (64 mm by 406 mm by 0.914 mm) galvanized steel strap or plate that is nailed to each wall or segment of wall by six 10d nails on each side, provided the rafters or~~

joists are centered over the studs with a _____ tolerance of no more than 1 inch (25 mm). The top plate may be omitted over lintels that are adequately tied to adjacent wall sections with steel straps or plates or equivalent as previously described.”

(MMSS.) **Section R602.10.1.3 Spacing of braced wall lines.** Add exception to section:

“**Exception:** As an exception to *braced wall line* spacing of Table R602.10.1.3, in detached one- and two-story *dwelling*s, for seismic bracing, spacing between *braced wall lines* may be up to 30 feet (9144 mm) x 45 feet (13716 mm) for one single room and one attached garage, each not exceeding 1,350 square feet (125.42 m²) per *dwelling unit*. When this exception is taken all the following shall apply:

1.1 Wall bracing at *braced wall lines* surrounding the single room and one attached garage shall be Method WSP of Section R602.10.4.

1.2 *Braced wall panel* locations shall be as per Sections R602.10.2.2 and R602.10.2.2.1, and length of bracing provided as per Sections R602.10.3 and R602.10.5.

1.3 The entire length of *braced wall lines* surrounding the single room and garage shall be continuously sheathed with wood structural panel sheathing (WSP).

1.4 *Braced wall panel* locations at the single room and garage shall have a maximum 3 1/2:1 height-width ratio, except for methods ABW and PFH of Section R602.10.4.

1.5 *Braced wall lines* surrounding the single room and garage shall be supported by continuous foundations around the entire *braced wall lines*.

1.6 Spacing of all other interior braced wall lines shall not exceed 25 feet.”

(~~NNTT~~.) **Section R602.10.2.2.1 Location of braced wall panels** **Braced wall panel location in Seismic Design Categories D₀, D₁ and D₂.** Add exception 23 and 34 to section:

23. Interior *braced wall panels* shall begin within 10 feet (3810 mm) from each end of a braced wall line as determined in Section R602.10.1.1.

34. For *braced wall panel* construction Method WSP of Section R602.10.4, the *braced wall panel* shall be permitted to begin no more than 12.5 feet (3810 mm) from each end of the *braced wall line*, where a designed collector is provided. See sketches SK1, SK2, and SK3 for designed collectors and applicable conditions.”

(~~ΘΘUU~~.) **Section R602.10.7 Ends of braced wall lines with continuous sheathing.** Add exception to section:

“**Exception:** The first *braced wall panel* shall be permitted to begin 12.5 feet (3810 mm) from each end of the *braced wall line* in Seismic Design Category D₀, where a designed collector is provided. See sketches SK1, SK2, and SK3 for designed collectors and applicable conditions.”

(~~PPVV~~.) **Section R602.10.8 Braced wall panel connections.** Add to end of section, “This section also applies for connections of interior *braced wall panels* to roof trusses and rafters.”

(~~QQWW~~.) **TABLE R702.3.5 MINIMUM THICKNESS AND APPLICATION OF GYPSUM BOARD AND GYPSUM PANEL PRODUCTS.** Amend last sentence of footnote “d” of table to read, “Where applying a water-based texture material, the minimum

gypsum board thickness shall be increased from 3/8 inch to 1/2 inch for 16-inch on center framing.”

(RR.) ~~Section N1101.8 (R103.2) Information on construction documents.~~ Amend last sentence to read, “Details shall include, but are not limited to, as applicable, insulation materials and their *R*-values; fenestration *U*-factors and SHGC’s; area-weighted *U*-factor and SHGC calculations; mechanical system design criteria; duct sealing; duct insulation and location; and air sealing details.”

(SSXX.) ~~Section N1101.16 (R401.3) Certificate (Mandatory).~~ Amend section title to read, “Section N1101.1614 (R401.3) Certificate (Optional).”

(TT.) ~~TABLE N1102.1.1 (R402.1.1) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT.~~ Amend values under Climate Zone 2, as follows:

~~TABLE N1102.1.1 (R402.1.1)
INSULATION AND FENESTRATION REQUIREMENTS BY
COMPONENT^a~~

Climate Zone	Fenestration <i>U</i> -Factor ^b	Skylight ^b <i>U</i> -Factor	Glazed Fenestration SHGC ^{b,e}	Ceiling <i>R</i> -Value	Wood Frame Wall <i>R</i> -Value	Mass Wall <i>R</i> -Value ⁱ	Floor <i>R</i> -Value	Basement ^e Wall <i>R</i> -Value	Slab ^d <i>R</i> -Value & Depth	Crawl Space ^e Wall <i>R</i> -Value
2	0.65	0.75	0.35	30	13	4/6	13	0	0	0

(UU.) ~~TABLE N1102.1.1 (R402.1.1) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT.~~ Delete exception in footnote “b” of table.

(VV.) ~~TABLE N1102.1.3 (R402.1.3) EQUIVALENT *U*-FACTORS.~~ Amend values under Climate Zone 2, as follows:

~~TABLE N1102.1.3 (R402.1.3)
EQUIVALENT *U*-FACTORS^a~~

Climate Zone	Fenestration <i>U</i> -Factor	Skylight <i>U</i> -Factor	Ceiling <i>U</i> -Factor	Frame Wall <i>U</i> -Factor	Mass Wall <i>U</i> -Factor ^b	Floor <i>U</i> -Factor	Basement Wall <i>U</i> -Factor	Crawl Space Wall <i>U</i> -Factor
2	0.65	0.75	0.035	0.082	0.165	0.064	0.360	0.477

(YY.) Section N1102.3 (R402.3) Fenestration (Prescriptive). Add exception to section:

“Exception: Standard insulated garage doors shall be permitted at conditioned garages and are not subject to the fenestration air leakage requirements of Section N1102.4.3. For use of this exception the garage conditioning shall be a dedicated mechanical system. Register/diffuser openings at the garage ceiling shall include ceiling radiation dampers or ducts shall be constructed of minimum No. 26 gage (0.48 mm) sheet steel.”

~~(WWZZ.)~~ **Section N1102.4 (R402.4) Air Leakage (Mandatory).** Add to end of section, "Building envelope air tightness and insulation installation shall be demonstrated to comply with one of the following options given by Section N1102.4.1.2 or N1102.4.1.3."

~~(XXAAA.)~~ **Section N1102.4.1.2 (R402.4.1.2) Testing.** Amend section title to read, "N1102.4.1.2 (R402.4.1.2) Testing option."

~~(YYBBB.)~~ Create new section, "N1102.4.1.3 Visual inspection option. The components listed in Table N1102.4.1.1, applicable to the method of construction, are field verified. Where required by the *building official*, an *approved* party independent from the installer of the insulation, shall inspect the *air barrier* and insulation."

~~(ZZCCC.)~~ **Table N1102.4.1.1 (R402.4.1.1) AIR BARRIER AND INSULATION INSTALLATION.** Amend as follows:

- a. "COMPONENT, 'Shower/tub on exterior wall.' Delete in its entirety.
- b. COMPONENT, 'Electrical/phone box on exterior walls.' Delete in its entirety."
- c. ~~CRITERIA under COMPONENT 'Fireplace.'~~ Delete sentence, "Fireplaces shall have gasketed doors."

~~(AAA.)~~ **Section N1103.2.2 (R403.2.2) Sealing (Mandatory).** Amend second sentence to read,

"Duct tightness shall be verified by either of the following:

1. ~~Post construction test: Total leakage shall be less than or equal to 8 cfm (226.8 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.~~

2. ~~Rough in test: Total leakage shall be less than or equal to 6 cfm (169.8 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 4 cfm (113.4 L/min) per 100 square feet (9.29 m²) of conditioned floor area.~~

~~(BBB.)~~ **Section N1103.4 (R403.4) Circulating hot water systems.** Delete section and subsections in their entirety.

~~(CCC.)~~ Create new section "N1103.4 Circulating hot water systems (Mandatory). All circulating service hot water piping shall be insulated to at least R-2. Circulating hot water systems shall be provided with an automatic or readily *accessible* manual switch that can turn off the hot water circulating pump when the system is not in use."

~~(DDD.)~~ **Section N1103.5 (R403.5) Service hot water systems.** Amend section title to read, "Service hot water systems (Optional)."

(EEE.) ~~Section N1103.5.1 (R403.5.1) Whole-house mechanical ventilation system fan efficacy.~~ Delete section in its entirety. Section N1103.5.1 (R403.5.1) Heated water circulation and temperature maintenance systems (Mandatory). Amend section title to read, "Heated water circulation and temperature maintenance systems (Optional)."

(DDDDFF.) ~~Section N1103.5 (R403.5) Mechanical ventilation (Mandatory).~~ "Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilating system is not operating." Section N1103.6 (R403.6) Mechanical Ventilation. Amend to section title to read, "Section N1103.6 (R403.6) Mechanical ventilation (Optional)."

(FFFGGG.) ~~Section N1103.9.3 (R403.9.3) Covers.~~ Delete section in its entirety. Section N1103.10.3 (R403.10.3) Covers. Amend section title to read, "Section N1103.10.3 (R403.10.3) Covers (Optional)."

(HHH.) ~~TABLE N1105.5.2(1) [R405.5.2(1)] SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS.~~ Delete BUILDING COMPONENT, "Air exchange rate" in its entirety. Section N1103.12 (R403.12) Residential pools and permanent residential spas. Delete section in its entirety.

(GGGIII.) ~~Section N1104.1 (R404.1) Lighting equipment (Mandatory).~~ Delete section in its entirety. Amend section title to read, "Section N1104.1 (R404.1) Lighting equipment (Optional)."

(JJJ.) Section M1602.2 Return Air Openings. Amend Exception 5 to read:

"5. For other than dedicated HVAC systems, return air shall not be taken from indoor swimming pool enclosures and associated deck areas."

(JJJKKK.) Section G2406.2 (303.3) Prohibited locations. Delete items 3 and 4 in their entirety.

(KKKLLL.) Section G2407.5 (304.5) Indoor combustion air. Add to beginning of section, "Indoor *combustion air* shall not be used in new construction within the building envelope. Garages of minimum 400 square feet in area may use combination of *infiltration* and partial exterior *combustion air* for one standard water heater fuel gas *appliance* up to 50,000 *Btu/h* total input capacity."

(LLLMMM.) Section G2407.7 (304.7) Combination indoor and outdoor combustion air. Add to beginning of section, "Combination indoor and outdoor *combustion air* shall not be used in new construction within the building envelope. Garages of minimum 400 square feet in area may use combination of *infiltration* and partial exterior *combustion air* for one standard water heater fuel gas *appliance* up to 50,000 *Btu/h* total input capacity."

(NNN.) Section G2413.2 (402.2) Maximum gas demand. Add to end of section, "Where an input rating is not indicated, the gas supplier, *appliance* manufacturer or a qualified agency shall be contacted, or the rating from Table G2413.2 may be used for estimating the volumetric flow of gas to be supplied."

TABLE G2413.2 (402.2)
APPROXIMATE GAS INPUT FOR TYPICAL APPLIANCES

APPLIANCE	INPUT BTU/H (Approx.)
Space Heating Units	
Hydronic boiler	
Single family	100,000
Multifamily, per unit	60,000
Warm-air furnace	
Single family	100,000
Multifamily, per unit	60,000
Space and Water Heating Units	
Hydronic boiler	
Single family	120,000
Multifamily, per unit	75,000
Water Heating Appliances	
Water heater, automatic instantaneous	
Capacity of 2 gal./minute	142,800
Capacity of 4 gal./minute	285,600
Capacity of 6 gal./minute	428,400
Water heater, automatic storage, 30- to 40-gal. tank	35,000
Water heater, automatic storage, 50-gal. tank	50,000
Water heater, domestic, circulating or sub-atm.	35,000
Cooking Appliances	
Built-in oven or broiler unit, domestic	25,000
Built-in top unit, domestic	40,000
Range, free-standing, domestic	65,000
Other Appliances	
Barbecue	40,000
Clothes dryer, Type I (domestic)	35,000
Gas fireplace, direct vent	40,000
Gas light	2,500
Gas log	80,000
Refrigerator	1,000

1 Btu = 1 British thermal unit per hour = 0.293 W. 1 gallon = 3.785 L.
1 gallon per minute = 3.785 L/min.

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(MMMMOO.) **Section G2414.5.23 (403.5.23) Copper or copper-alloy tubing.** Add to end of section, "Copper or copper-alloy tubing shall not be used in natural gas piping systems, due to hydrogen sulfide content which cannot be guaranteed to be delivered from the serving utility provider to meet the code acceptable levels."

(NNNPPP.) **Section G2415.12 (404.12) Minimum burial depth.** Amend to read, "Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade, except as provided for in Section G2415.12.1."

(QQQ.) **Section G2415.12.1 (404.12.1) Individual outdoor appliances.** Delete section in its entirety.

(OOORRR.) **Section G2415.17.1 (404.17.1) Limitations.** Amend exception 3 to read:

"3. Plastic pipe shall be permitted under uncovered outdoor patio, walkway and driveway slabs provided that the burial depth complies with Section G2415.12."

(PPSSSS.) **TABLE G2427.10.2.4 (503.10.2.4) MINIMUM THICKNESS FOR GALVANIZED STEEL VENT CONNECTORS FOR LOW-HEAT APPLIANCES.** Amend table to add metal gauge equivalent for minimum thickness indicated:

"Thickness	Gauge
0.019 inch	28 Ga.

0.023 inch	26 Ga.
0.029 inch	24 Ga.
0.034 inch	22 Ga.
0.056 inch	18 Ga.”

~~(TTT.)~~ **Section P2603.2.1 Protection against physical damage.** Amend first sentence to read, “In concealed locations, where piping, other than cast iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1 ¼ inches (32 mm) from the nearest edge of the member, the pipe shall be protected by steel shield plates.”

~~(QQQTTT.)~~ **Section G2445.4 (621.4) Prohibited Locations.** Add to end of section, “Unvented room heaters shall not be installed in bedrooms or bathrooms.”

~~(RRRUUU.)~~ **Section P2503.4 Building sewer testing.** Delete section in its entirety.

~~(SSSVVV.)~~ **Section P2503.5.2 Finished plumbing.** Delete item 2 in its entirety.

~~(UUUWWW.)~~ **Section P2603.5.1 Sewer depth.** Amend to read, “Building sewers that connect to private sewage disposal systems shall be at not less than 12 inches (305 mm) below finished *grade* at the point of septic tank connection. *Building sewers* shall be not less than 12 inches (305 mm) below *grade*.”

~~(XXX.)~~ **Section P2804.6.1 Requirements for discharge pipe.** Amend Item #5 to read:

“5. Discharge to the floor of the garage (where the garage floor is sloped and below the floor level of the dwelling), to a waste receptor or to the outdoors.”

~~(YYY.)~~ **Section P2902.5.3 Lawn irrigation systems.** Rename section/title to read, “Section P2902.5.3 Landscape irrigation systems.” Add to beginning of section, “A landscape irrigation system shall be provided for all new dwellings, consisting of a stub-out, electric valve (or valves) and backflow protection.”

~~(ZZZ.)~~ **Section P2904.1 General.** Add item #5 to end of section:

“5. The system is integral with the domestic water piping system. See Section P2902.5.4 for protection of separate/independent sprinkler piping systems.”

~~(VVVAAAA.)~~ **Section P2905.5 Water distribution pipe.** Add to end of section, “Use of copper at inaccessible water piping under slabs shall be limited to Type K, with no joints.”

~~(WWWBBBB.)~~ **Section E3406.3 Minimum size of conductors.** Amend first sentence to read, “The minimum size of conductors for feeders and branch circuits shall be 12 AWG copper and 1 AWG aluminum or copper-clad aluminum for current carrying conductors (shall not apply for grounding conductor).”

~~(XXXCCCC.)~~ **Section E3601.1 Scope.** Add to end of section, “Local utility company installation regulations may exceed/supersede installation requirements of this chapter.”

(YYYDDDD.) **Section E3604.2.2 Vertical clearance from grade.** In item 1, amend 10 feet (3048 mm) to 12 feet 6 inches (3810 mm). In item 2, amend 12 feet (3658 mm) to 12 feet 6 inches (3810 mm).

(EEEE.) **Section E3607.3 .2 Grounded conductor, existing premises.** Add exception to section:

“Exception: If the Load Center or Panel Board does not have provisions for a Main Disconnect and an approved fastening method, a permanent placard shall be installed on the Main Service to indicate the location of the detached Panel on the property. The over current protective device shall also have a lock-out device installed.”

(ZZZFFFF.) **TABLE E3702.4314 (Table 210.24) BRANCH-CIRCUIT REQUIREMENTS-SUMMARY.** Amend table to delete 14 AWG conductors.

(AAAAGGGG.) **Section E3901.12 HVAC outlet.** Amend exception to read:

“Exception: A receptacle outlet shall not be required for the servicing of evaporative coolers or rooftop HVAC equipment.”

(BBBHHHH.) **Section E3902.2 Garage and accessory building receptacles.** Add exception to section:

“Exception: GFCI protection shall not be required for single receptacle outlets dedicated for a specific use (such as a freezer) and single receptacle outlets for garage door openers.”

(CCCC.) ~~**Section AG105.2 Outdoor swimming pool.**~~ Amend subsections as follows:

- a. — ~~“Amend first sentence in item 1 to read, “The top of the barrier shall be at least 60 inches (1524 mm) above grade measured on the side of the barrier which faces away from the swimming pool.”~~
- b. — ~~Add to end of item 1, “The barrier shall include a concrete ribbon curb or other approved material around the entire perimeter.”~~
- c. — ~~Item 9. Add new subsection, “9.4. Secondary barrier provided at minimum 48” (1219 mm) above grade and installed per standards in paragraphs 1 through 7.”~~

(DDDD.) ~~**Section AH 103.2 Light, ventilation and emergency egress.**~~ In last sentence, amend reference of Section R310 to R311.

SECTION 3: All ordinances or parts of ordinances in conflict with the provisions of this Ordinance are hereby repealed, effective thirty (30) days from the adoption hereof. All ordinances or parts of ordinances not amended or repealed by the provisions of this Ordinance shall remain in full force and effect.

SECTION 4: This Ordinance does not affect the rights and duties that matured, penalties that were incurred, or proceedings that were begun before the effective date of this Ordinance.


SECTION 5: If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

SECTION 6: Violations of this Ordinance are subject to the following penalties:

It shall be unlawful for any person, firm or corporation to violate, or cause the violation of, any provision of this ordinance. Any person, firm or corporation violating any of the provisions of this ordinance shall be deemed guilty of a class 1 misdemeanor and shall be punished by a fine not to exceed \$1,000, or by imprisonment for not more than ten days, or by both fine and imprisonment. Each separate day or part thereof during which any violation of this ordinance occurs or continues shall be deemed to constitute a separate offense, and upon conviction thereof, shall be punishable as herein provided.

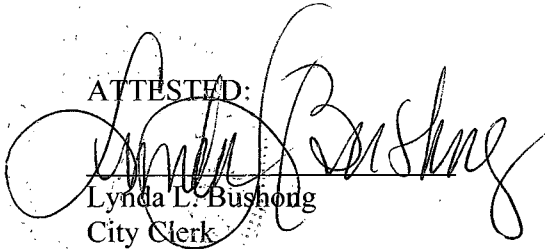
Adopted this 5th day of December, 2018.

APPROVED:




Douglas J. Nicholls
Mayor

ATTESTED:



Lynda L. Bushong
City Clerk

APPROVED AS TO FORM:



Richard W. Files
City Attorney