

1 **BILL NO. 2014-61**

2 **ORDINANCE NO. 6351**

3 AN ORDINANCE TO ADOPT THE 2012 EDITION OF THE INTERNATIONAL RESIDENTIAL
4 CODE, TOGETHER WITH AMENDMENTS THERETO, AND PROVIDE FOR OTHER RELATED
MATTERS.

5 Sponsored by: Councilman Steven D. Ross

Summary: Adopts the 2012 Edition of the
International Residential Code, together with
6 amendments thereto.

7 THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN AS
8 FOLLOWS:

9 SECTION 1: Title 16, Chapter 4, Section 10, of the Municipal Code of the City of Las
10 Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

11 **16.04.010:** A building code is established and adopted for the City. The building code adopted by this
12 Section, to be known as the City's Building Code, shall consist of the following documents, which are
13 adopted by this reference and copies of which shall be maintained on file in the Office of the City Clerk:

14 (A) The publication entitled "International Building Code, 2009 Edition," as modified
15 herein, including all Appendices, except as otherwise specified. This publication, as modified, is
16 designated as Part 1 of this Chapter.

17 (B) The document entitled "Southern Nevada Amendments to the 2009 International
18 Building Code, which amends, by adding to and deleting from, certain sections of the International
19 Building Code, 2009 Edition. This document is adopted as Part 2 of this Chapter.

20 (C) The publication entitled the ["International Residential Code for One- and Two-
21 Family Dwellings, 2009 Edition" (also known as the "International Residential Code, 2009 Edition"),]
22 "International Residential Code for One- and Two-Family Dwellings, 2012 Edition" (also known as the
23 "International Residential Code, 2012 Edition") as modified herein, including all chapters and Appendices,
24 except as otherwise specified. This publication, as modified, is designated as Part 3 of this Chapter.

25 (D) The document entitled ["Southern Nevada Amendments to the 2009 International
26 Residential Code,"] "Southern Nevada Amendments to the 2012 International Residential Code," which

1 amends, by adding to and deleting from, certain sections of the International Residential Code, [2009] 2012
2 Edition. This document is adopted as Part 4 of this Chapter.

3 SECTION 2: The document entitled “Southern Nevada Amendments to the 2012
4 International Residential Code” referred to in Section 1 of this Ordinance, which is attached hereto, is
5 hereby modified as set forth in Sections 3 to 7, inclusive, of this Ordinance.

6 SECTION 3: The International Residential Code, 2012 Edition, is modified by
7 amending Section R302.2 as follows:

8 **Section R302.2 Townhouses**

9 *Revise the exception to read as follows:*

10 **Exception:** A common 2-hour* fire-resistance-rated wall assembly tested in accordance
11 with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain
12 plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The
13 wall shall be rated for fire exposure from both sides and shall extend to and be tight against
14 exterior walls and the underside of the roof sheathing. Electrical installations shall be
15 installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet
16 boxes shall be in accordance with Section R302.4.

17 *A 1-hour fire-resistance-rated wall assembly is permitted in townhouses in which
18 automatic residential fire sprinkler systems have been installed in accordance with
19 Section R313.1.

20 SECTION 4: The document entitled “Southern Nevada Amendments to the 2012
21 International Residential Code” is modified by amending the entry for Section R313.1 to read as follows:

22 **Section R313.1 Townhouse automatic fire sprinkler systems.**

23 *Revise Subsection R313.1.1, as follows:*

24 **R313.1 Townhouse automatic fire sprinkler systems.** An automatic residential fire sprinkler
25 system shall be installed in *townhouses*.

26 **Exception:** An automatic residential fire sprinkler system shall not be required when

1 *additions* or *alterations* are made to existing *townhouses* that do not have an automatic
2 residential fire sprinkler system installed.

3 **R313.1.1 Design and installation.** Automatic residential fire sprinkler systems for
4 *townhouses* shall be designed and installed in accordance with Section P2904 or
5 NFPA 13D.

6 SECTION 5: The document entitled “Southern Nevada Amendments to the 2012 International
7 Residential Code” is modified by amending the entry for Section R313.2 to read as follows:

8 **Section R313.2 One- and two-family dwellings automatic fire systems.**

9 *Revise Section R313.2, as follows:*

10 **R313.2 One- and two-family dwellings automatic fire systems.** Effective upon the
11 commencement date described in this section, an automatic residential fire sprinkler system shall
12 be installed in one- and two-family *dwellings*. The commencement date shall be the July 1st that
13 follows the first calendar year, if any, during which the combined number of building permits
14 issued by the Southern Nevada jurisdictions for single family *dwellings* reaches or exceeds 10,000.
15 For purposes of the preceding sentence, the Southern Nevada jurisdictions means Clark County and
16 the cities of Las Vegas, North Las Vegas and Henderson.

17 **Exception:** An automatic residential fire sprinkler system shall not be required for
18 *additions* or *alterations* to existing buildings that are not already provided with an
19 automatic residential sprinkler system.

20 SECTION 6: The document entitled “Southern Nevada Amendments to the 2012
21 International Residential Code” is modified by deleting the entry for Section R313.2.1, thus restoring the
22 text of that Section as it appears in the International Residential Code, 2009 Edition.

23 SECTION 7: The document entitled “Southern Nevada Amendments to the 2012
24 International Residential Code” is modified by amending the entry for Chapters 11 through 43 to read as
25 follows:

26 *Delete Chapters 11 through 43 in their entirety, except for Section P2904 of Chapter 29, which is*

1 *retained for purposes of Sections R313.1.1 and R313.2.1.*

2 SECTION 8: Nothing in Section 5 of this Ordinance shall be deemed or interpreted to
3 limit the City Council’s authority or ability to adopt in place of Section 5 a different or superseding
4 provision.

5 SECTION 9: Ordinance No. 6176, the “International Residential Code, 2009 Edition,”
6 and the “Southern Nevada Amendments to the 2009 International Residential Code” are hereby repealed in
7 their entirety.

8 SECTION 10: If any section, subsection, subdivision, paragraph, sentence, clause or
9 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
10 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
11 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the City
12 of Las Vegas hereby declares that it would have passed each section, subsection, subdivision, paragraph,
13 sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections,
14 subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional, invalid or ineffective.

15 SECTION 11: Whenever in this ordinance any act is prohibited or is made or declared to
16 be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is required
17 or the failure to do any act is made or declared to be unlawful or an offense or a misdemeanor, the doing of
18 such prohibited act or the failure to do any such required act shall constitute a misdemeanor and upon
19 conviction thereof, shall be punished by a fine of not more than \$1,000.00 or by imprisonment for a term of
20 not more than six months, or by any combination of such fine and imprisonment. Any day of any violation
21 of this ordinance shall constitute a separate offense.

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SECTION 12: All ordinances or parts of ordinances or sections, subsections, phrases, sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada, 1983 Edition, in conflict herewith are hereby repealed.

PASSED, ADOPTED and APPROVED this 17th day of September, 2014.

APPROVED:


By


CAROLYN G. GOODMAN, Mayor

ATTEST:


BEVERLY K. BRIDGES, MMC
City Clerk

APPROVED AS TO FORM:

 8-19-14
Val Steed, Date
Deputy City Attorney

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The above and foregoing ordinance was first proposed and read by title to the City Council on the 3rd day of September, 2014, and referred to a committee for recommendation; thereafter the committee reported favorably on said ordinance on the 17th day of September, 2014, which as a regular meeting of said Council; that at said regular meeting, the proposed ordinance was read by title to the City Council as first introduced and adopted by the following vote:

- VOTING "AYE": Mayor Goodman and Councilmembers Anthony, Tarkanian, Ross, Coffin and Beers
- VOTING "NAY": None
- EXCUSED: None
- ABSTAINED: None
- DID NOT VOTE: Councilmember Barlow

APPROVED:

CAROLYN G. GOODMAN, Mayor

ATTEST:

BEVERLY K. BRIDGES, MMC City Clerk



**SOUTHERN NEVADA
AMENDMENTS**

TO THE

2012 INTERNATIONAL RESIDENTIAL CODE

PREFACE

This document was developed by the Southern Nevada Building Officials' International Residential Code Committee and presents recommended amendments to the 2012 *International Residential Code* (IRC) as published by the International Code Council (ICC).

Participation in the 2012 International Residential Code Committee was open to all interested parties. However, voting on amendment proposals was limited to one vote each for the seven Southern Nevada municipalities (Clark County, Henderson, Las Vegas, North Las Vegas, Boulder City, Pahrump, and Mesquite), the Clark County School District, and three industry representatives. All International Residential Code Committee proceedings were conducted in accordance with Robert's Rules of Order.

The recommended amendments contained herein are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternates have been approved and their use authorized by the Building Official. This document may be copied and used in whole or in part without permission or approval from the organizations listed on the cover page.

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Section R101 General

Delete Chapter 1 in its entirety except Section R101. Revise Sections R101.1 and R101.2, as follows:

R101.1 Title. These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* and shall be cited as such and will be referred to herein as “this code”.

R101.2 Scope.

The provisions of the *International Residential Code for One- and Two-family Dwellings*, shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures*. Where this code refers to codes not adopted by the jurisdiction, the applicable code adopted by the jurisdiction shall govern.

Exceptions:

1. Live/work units complying with the requirements of Section 419 of the *International Building Code* shall be permitted to be built as one- and two-family dwellings or townhouses. Fire suppression required by Section 419.5 of the *International Building Code* when constructed under the *International Residential Code for One- and two-family Dwellings* shall conform to Section P2904.
2. Owner-occupied lodging houses with five or fewer guestrooms shall be permitted to be constructed in accordance with the *International Residential Code for One- and two-family Dwellings* when equipped with a fire sprinkler system in accordance with Section P2094.

R101.3 Intent. The purpose of this code is to establish minimum requirements to safeguard the public safety, health and general welfare through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation, energy conservation and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations.

Section R202 Definitions

Revise the definitions of *Building Thermal Envelope* and *Townhouse*, as follows:

BUILDING THERMAL ENVELOPE. The building’s, exterior walls, floor(s), ceilings, roof(s) and any other building elements that define a thermal barrier (heat gain/loss) between the interior and exterior environments. The building thermal envelope includes the air barrier being in direct contact with insulation and is enclosed by, but is not limited to, the following combination of elements: thermal insulation, air barrier, framing/structural members, glazing, doors and other components between the conditioned interior and unconditioned exterior environments.

TOWNHOUSE. A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from foundation to roof and with a yard or public way on at least two sides, and as recorded on a final map or major subdivision map.

Table R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Revise Table R301.2 (1), as follows:

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

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			DESIGN DRY BULB TEMP ^e	ICE BARRIER UNDERLAYMENT 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<2000'	90	No	D ₀	Negligible	1'<5000'	Moderate To Heavy	Winter 27°F	No	*	1500	66.3°F
5<3600'	90	No	D ₀	Negligible	1'<5000'			No	*	1500	66.3°F
10<4500'	90	No	D ₀	Negligible	1'<5000'		Summer 112°F	No	*	1500	66.3°F

Spring Mountain Range

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			DESIGN DRY BULB TEMP ^e	ICE BARRIER UNDERLAYMENT 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					
10<4500'	90	No	D ₀	Severe	1'<5000'		Winter 5°F	YES	*	2000	48.1°F
15<6000'	90	No	D ₀	Severe	3'>5000'	Moderate To Heavy	Summer 92°F	YES	*	2000	48.1°F
IBC for Elevations >6000'	IBC	IBC	IBC	IBC	IBC			IBC	*	IBC	IBC

For SI: 1 pound per square foot = 0.0479 kN/m², 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., “negligible,” “moderate” or “severe”) for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 97 1/2-percent values for winter from Appendix D of the *International Plumbing Code*. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- * g. September 27, 2002. “The Flood Insurance Study for Clark County, Nevada and Incorporated Areas”, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall fill in this part of the table with “NO.”
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table “Air Freezing Index- USA Method (Base 32°)” at www.ncdc.noaa.gov/fpsf.html.
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table “Air Freezing Index-USA Method (Base 32°F)” at www.ncdc.noaa.gov/fpsf.html.

k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

Table R301.5 Minimum Uniformly Distributed Live Loads

Revise Table R301.5 by changing the live load figure for sleeping rooms and by adding footnote "i", as follows:

**Table R301.5
MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS
(in pounds per square foot)**

USE	LIVE LOAD
Uninhabitable attics without storage ^b	10
Uninhabitable attics with limited storage ^{b,g}	20
Habitable attics and attics served with fixed stairs	40
Balconies (exterior) and decks ^e	40
Fire escapes	40
Guardrails and handrails ^d	200 ^h
Guardrail in-fill components ^f	50 ^h
Passenger vehicle garages ^a	50 ^a
Rooms other than sleeping room	40
Sleeping rooms	40 ⁱ
Stairs	40 ^c

i. Where it can be determined in designing the floor that the actual live load will be greater than the value shown in Table R301.5, the actual live load shall be used in the design of such buildings or portions thereof. Special provisions shall be made for machine and apparatus loads.

Section R301.6 Roof Load.

Revise Section R301.6, as follows:

R301.6 Roof load. The roof shall be designed for the live load indicated in Table R301.6 or the snow load indicated in Table R301.2(1), whichever is greater. Roof live loads in accordance with Section 1607.12 of the 2012 International Building Code may be used in place of the loads in Table R301.6.

Section R302.1 Exterior Walls.

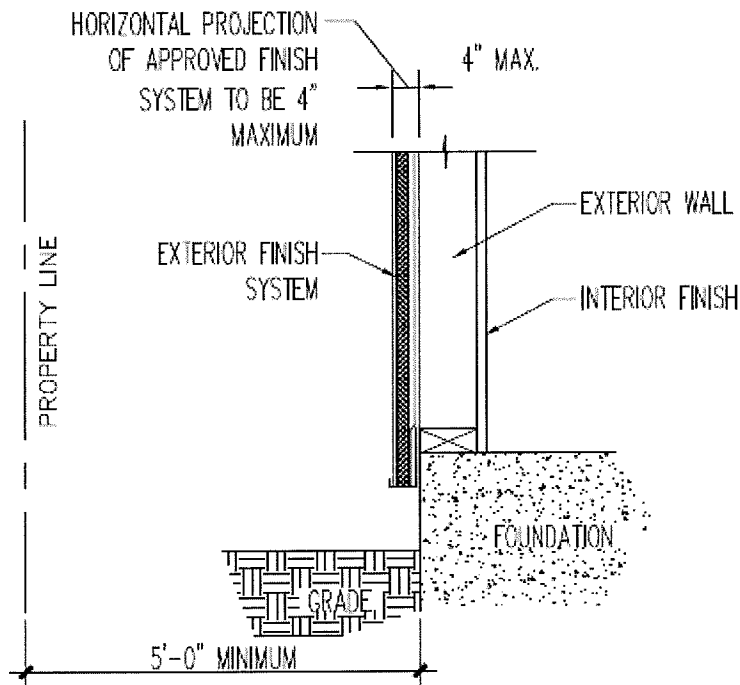
Revise Section R302.1, as follows:

R302.1 Exterior Walls. Construction, projections, openings and penetrations of *exterior walls* of dwellings and accessory buildings shall comply with Table R302.1 (1); or *dwellings* equipped throughout with an *automatic sprinkler system* installed in accordance with Section P2904 or IFC shall comply with Table R302.1(2). To determine when protection is required by Table R302.1(1), the minimum fire separation distance shall be determined from property line to the finish face of the wall except where the foundation distance from property line is 5 feet or greater, the foundation distance will be used for that wall only in accordance with Figure R302.1.

Foam plastics as specified in Section R316.3 may be used as an interior component of exterior walls or projection.

Exceptions:

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the *fire separation distance*.
2. Walls between *dwellings* and *accessory structures* located on the same *lot*. Garages shall comply with Section R302.6.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the *lot*. Projections beyond the *exterior wall* shall not extend over the *lot line*.
4. Detached garages accessory to a *dwelling* located within 2 feet (610 mm) of a *lot line* are permitted to have roof eave projections not exceeding 4 inches (102 mm).
5. Foundation vents installed in compliance with this code are permitted.
6. Exterior decorative trim shall not project more than 4 inches (102 mm) into the minimum fire separation distance and shall not exceed ten percent (10%) of the aggregate wall area on which it is located.
7. When there are no eave, attic or gable-end vent openings, the unprotected eave is limited to a maximum of 12 inches (305 mm) beyond the wall construction into the minimum fire separation distance. The unprotected eave projection is further limited to a maximum depth of 24 inches (610 mm) from the roof sheathing to the bottom of the projection.



NOTE: INTERIOR AND EXTERIOR WALL FINISH SHALL CONTINUE TO FULL HEIGHT OF WALL.

FIGURE R302.1
MINIMUM FIRE SEPARATION DISTANCE DETAIL

Section R311.7.3 Vertical Rise.

Revise Section R311.7.3, as follows:

R311.7.3 Vertical rise. A flight of stairs shall not have a vertical rise larger than 12 feet 6 inches (3810mm) between floor levels or landings.

Section R313.1.1 Design and Installation.

Revise Section 313.1.1, as follows:

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section P2904 or the International Fire Code.

Section R313.2.1 Design and Installation.

Revise Section 313.2.1, as follows:

R313.2.1 Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or the International Fire Code.

Section R314 Smoke alarms and carbon monoxide detectors.

Revise Section R314, as follows:

R314.1 Smoke detection and notification. All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

R314.1.1 Smoke detection systems. Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detector and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner. The system shall be monitored by an approved supervising station and be maintained in accordance with NFPA 72.

Exception: Where smoke alarms are provided meeting the requirements of Section R314.4

R314.2 Carbon Monoxide Alarms. Carbon monoxide alarms shall be listed as complying with UL2075 and shall be installed in accordance with this code and the manufacturer's installation instructions. Carbon Monoxide detection systems shall be installed and maintained in accordance with NFPA 720.

A combination of smoke and carbon monoxide alarm shall be permitted.

Exception: Where carbon monoxide alarms are provided meeting the requirements of Section R314.4

R314.3.1 Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

R314.3.2 Carbon monoxide alarms. Carbon Monoxide alarms outside of sleeping area in the immediate vicinity of the bedrooms in dwellings units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

R314.4.1 Alterations, repairs and additions. When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings,

the individual dwelling unit shall be equipped with smoke and carbon monoxide alarms located as required for new dwellings.

Exceptions:

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

R314.5 Power source. Smoke and carbon monoxide alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke and carbon monoxide alarms shall be interconnected.

Exceptions:

1. Smoke and carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power.
2. Interconnection and hard-wiring of smoke and carbon monoxide alarms in existing areas shall not be required where the alteration, addition or remodel does not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring and interconnection without the removal of interior finishes.

R314.6 Interconnection. Where more than one smoke or carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke or carbon monoxide alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

Exception: Interconnection of smoke and carbon monoxide alarms in existing areas shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which provide access for interconnection without the removal in interior finishes.

Section R315 Carbon Monoxide Alarms

Delete Section R315 in its entirety.

Section R401.3 Drainage.

Delete Section R401.3 in its entirety and replace, as follows:

R401.3 Drainage. The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than one unit vertical in 20 units horizontal (5-percent slope) for a minimum distance of 10 feet (3048 mm) measured perpendicular to the face of the wall. If physical obstructions or lot lines prohibit 10 feet (3048mm) of horizontal distance, a 5-

percent slope shall be provided to an approved alternative method of diverting water away from the foundation. Swales used for this purpose shall be sloped a minimum of 1 percent along the flow line where located within 10 feet (3048mm) of the building foundation. Impervious surfaces within 10 feet (3048mm) of the building foundation shall be sloped a minimum of 2 percent away from the building.

Exception: Where low expansive, low collapsible, low soluble soil conditions occur or where an exterior asphalt or concrete surface abuts a building, the slope of the ground away from the building foundation is permitted to be reduced to not less than one unit vertical in 48 units (2-percent slope).

The procedure used to establish the final ground level adjacent to the foundation shall account for additional settlement of the backfill.

Section R401.4 Soil Tests.

Delete Sections R401.4, R401.4.1, R401.4.2, and Table R401.4.1 in their entirety and replace with a new Section R401.4, as follows:

R401.4 Soil tests. All structures or additions shall have a geotechnical reports complying with the 2012 IBC Chapter 18.

Exception: Projects listed in the 2012 IBC Section 1803.2. All projects shall comply with 2012 IBC Section 1803.1.

Section R401.5 Grading Plan.

Add a new section R401.5, as follows:

R401.5 Grading Plan. All projects that require grading shall have a grading plan prepared, stamped, and signed by a registered design professional in accordance with 2012 IBC chapter 18 and appendix J.

Section R406.2 Concrete and Masonry Foundation Waterproofing.

Revise Section R406.2, as follows:

R406.2 Concrete and masonry foundation waterproofing. When the approved geotechnical report indicates there is a high water table or other severe soil-water conditions are known to exist, exterior foundation walls that retain earth and enclose interior spaces and floors below grade shall be waterproofed from the top of the footing to the finished grade. Walls shall be waterproofed in accordance with one of the following:

1. Two-ply hot mopped felts.
2. Fifty five pound (25 kg) roll roofing.
3. 10-mil (0.254 mm) polyvinyl chloride.
4. 10-mil (0.254 mm) polyethylene.

5. Forty-mil (1 mm) polymer-modified asphalt.
6. Sixty-mil (1.5 mm) flexible polymer cement.
7. One-eighth inch (3 mm) cement-based, fiber-reinforced, waterproof coating.
8. Sixty-mil (1.5 mm) solvent free liquid-applied synthetic rubber.

Exception: Organic-solvent-based products such as hydrocarbons, chlorinated hydrocarbons, ketones and esters shall not be used for ICF walls with expanded polystyrene form material. Use of plastic roofing cements, acrylic coatings, latex coatings, mortars and parings to seal ICF walls is permitted. Cold-setting asphalt or hot asphalt shall conform to type C of ASTM D 449. Hot asphalt shall be applied at a temperature of 200°F (93°C).

All joints in membrane waterproofing shall be lapped and sealed with an adhesive compatible with the membrane.

Section R506.2.3 Vapor Retarder.

Revise Subsection R506.2.3, as follows:

R506.2.3 Vapor retarder. A 10 mil (0.010 inch; 0.254 mm) polyethylene or approved vapor retarder conforming to ASTM E 1745 Class A requirements with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists.

Exception: The vapor retarder may be omitted:

1. From garages, utility buildings and other unheated accessory structures. For unheated storage rooms having an area of less than 70 square feet (6.5m²) and carports.
2. From driveways, walks, patios and other flatwork not likely to be enclosed and heated at a later date.
3. Where approved by the building official, based on local site conditions.

Section R613.1 General.

Revise Section R613.1, as follows:

R613.1 General. Structural insulated panel (SIP) walls shall be designed in accordance with the provisions of this section. The design and installation shall be per approved listing requirements.

Section R806.2 Minimum Vent Area.

Revise Section R806.2, as follows:

R806.2 Minimum vent area. The minimum net free ventilation area shall be 1/150 of the area of the space.

Exception: The minimum net free ventilation area shall be 1/300 of the vented space provided one or more of the following conditions are met:

1. In Climate Zones 6, 7, and 8, a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.
2. At least 40 percent and not more than 50 percent of the required ventilating area is provided by ventilators located in the upper 1/3 portion of the attic or rafter space. Upper ventilators shall be located no more than 3 feet below the ridge or highest point of the space, measured vertically, with the balance of the required ventilation shall be located in the bottom 1/3 of the attic space. Where the location of wall or roof framing members conflicts with the installation of upper ventilators, installation more than 3 feet below the ridge or highest point of the space shall be permitted.

Section R807.1 Attic Access.

Revise Section 807.1, as follows:

R807.1 Attic access. Buildings with combustible ceiling or roof construction shall have at least one attic access opening. Additional access openings shall be provided to attic areas that have electrical, plumbing, or mechanical fixtures or equipment that require access for periodic maintenance.

Exception: Access openings are not required for non-contiguous enclosed attic spaces that do not have plumbing, mechanical, or electrical components that require access for periodic maintenance.

The rough-framed opening shall not be less than 22 inches by 30 inches (559 mm by 762 mm) and shall be located in a hallway or other readily accessible location. When located in a wall, the opening shall be a minimum of 22 inches wide by 30 inches high (559 mm wide by 762 mm high). When the access is located in a ceiling, minimum unobstructed headroom in the attic space shall be 30 inches (762 mm) at some point above the access measured vertically from the bottom of ceiling framing members. See Section M1305.1.3 for access requirements where mechanical equipment is located in attics.

Section R905.7 Wood Shingles.

Delete Section R905.7 in its entirety and replace, as follows:

R905.7 Wood shingles. Not permitted.

Section R905.8 Wood Shakes.

Delete Section R905.8 in its entirety and replace, as follows.

R905.8 Wood shakes. Not permitted.

Section R1007 Fireplaces and Appliances.

Add a new Section R1007, as follows:

R1007 Fireplaces and Appliances.

R1007.1 Types of fireplaces.

Add a new section R1007.1, as follows:

R1007.1 Types of fireplaces. No solid fuel burning fireplace shall be constructed in any residential dwelling in Boulder City or the Las Vegas Valley Hydrographic Basin at an elevation of less than 4000 feet (1220 m) above sea level unless it is one of the following:

R1007.1.1 A dedicated solid fuel burning factory-built enclosed fireplace or factory-built heater that conforms to the "Phase II Environmental Protection Agency, Standards of Performance for New Stationary Sources, New Residential Heaters" as prescribed in 40 CFR Part 60, Subpart AAA, as verified by a nationally recognized listing approved by the Building Official.

R1007.1.2 A masonry fireplace or masonry heater constructed in accordance with 2012 IRC Chapter 10, Sections R1001, R1002 and R1003 or a factory-built fireplace shall include one of the following;

1. The installation of a wood-burning insert which meets the standards described in R1007.1.1 of this subsection and which shall be installed in accordance with the manufacturer's instructions.
2. The installation of gas logs with a nationally recognized listing and approved by the Building Official.

The fireplace opening shall be completely enclosed with a cover of solid glass, steel, or cast iron. The covering may be either solid or openable.

A caution sign shall be permanently installed and maintained where it is readily visible at all times. The sign shall state: "Caution: approved for fuel gas use only. Damper shall remain permanently blocked open."

The letters on the sign shall be a minimum of 3/8 inches in height.

Section R1007.2 Types of Appliances.

Add a new section R1007.2, as follows:

R1007.2 Types of appliances

The following appliances shall be provided with a nationally recognized listing approved by the Building Official prior to installation:

1. Decorative electrical appliance
2. Decorative vented gas appliance
3. Decorative un-vented gas appliance or heater

Section R1008 Special Fireplace and Appliance Requirements.

A new section R1008 is added to read as follows:

R1008.1 Installation within a dwelling unit.

All fireplace or appliance installations within a dwelling unit shall comply with the following requirements:

1. If the fireplace or gas appliance is located in a sleeping room or an adjacent bathroom, then a permanent, unobstructed fresh air supply shall be provided directly from the exterior of the structure to the fire box.
2. The supply duct shall be a minimum 4" (102mm) or as directed in the manufacturer's listing.

Exception:

1. A decorative electrical appliance
 2. Un-vented heater that is specifically listed for sleeping rooms
3. All decorative gas or electrical appliances shall comply with their listing and the manufacturer's installation instructions.

Chapters 11 thru 43

Delete chapters 11 through 43 in their entirety, excluding section P2904.

Appendices A thru Q

Delete All Appendices in their entirety with the following exceptions;

- H – Patio Covers
- K – Sound Transmission

Section P2904.2.3 Freezing Areas.

Revise Section P2904.2.3, as follows:

P2904.2.3 Freezing areas. Piping in unconditioned spaces shall be protected from freezing with a minimum of R-2 insulation. Where sprinklers are required in areas that are subject to freezing, dry-sidewall or dry-pendent sprinklers extending from a nonfreezing area into a freezing area shall be installed.

Affidavit of Publication

STATE OF NEVADA)
COUNTY OF CLARK) SS:

**LV CITY CLERK
495 S MAIN ST
LAS VEGAS NV 89101**

**Account # 22515
Ad Number 0000301742**

Stacey M. Lewis, being 1st duly sworn, deposes and says: That she is the Legal Clerk for the Las Vegas Review-Journal and the Las Vegas Sun, daily newspapers regularly issued, published and circulated in the City of Las Vegas, County of Clark, State of Nevada, and that the advertisement, a true copy attached for, was continuously published in said Las Vegas Review-Journal and / or Las Vegas Sun in 1 edition(s) of said newspaper issued from 09/05/2014 to 09/05/2014, on the following days:

09 / 05 / 14

BILL NO. 2014-61
AN ORDINANCE TO ADOPT THE 2012 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE, TOGETHER WITH AMENDMENTS THERETO, AND PROVIDE FOR OTHER RELATED MATTERS.
Sponsored by: Councilman Steven D. Ross
Summary: Adopts the 2012 Edition of the International Residential Code, together with amendments thereto.
At the City Council meeting of September 3, 2014
BILL NO. 2014-61 WAS READ BY TITLE AND REFERRED TO A RECOMMENDING COMMITTEE
COPIES OF THE COMPLETE ORDINANCE ARE AVAILABLE FOR PUBLIC INFORMATION IN THE OFFICE OF THE CITY CLERK, 2ND FLOOR, 495 SOUTH MAIN STREET, LAS VEGAS, NEVADA
PUB: September 5, 2014
LV Review-Journal

Stacey M. Lewis
181 _____
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 5th day of September, 2014

Notary *Mary Lee*

