

# SOUTHERN NEVADA

# AMENDMENTS

# TO THE

# 2009 INTERNATIONAL RESIDENTIAL CODE

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#### PREFACE

This document was developed by the Southern Nevada Building Officials' International Residential Code Committee and presents recommended amendments to the 2009 *International Residential Code* (IRC) as published by the International Code Council (ICC).

Participation in the 2009 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.

# **TABLE OF CONTENTS**

Section R101 General.	. 1
Section R202 Definitions	. 1
Section R301.1.2 Construction Systems.	. 1
Table R301.2 Climatic and Geographic Design Criteria.	. 2
Section R301.2.2 Seismic Provisions.	. 2
Table R301.5 Minimum Uniformly Distributed Live Loads	. 3
Section R301.6 Roof Load	. 4
Section R302.1 Exterior Walls.	. 4
Table R302.1 Exterior Walls.	. 5
Section R311.7.5 Landings for stairways.	. 5
Section R313.1 Townhouse automatic fire sprinkler systems.	. 5
Section R313.2 One- and two-family dwellings automatic fire systems	. 6
Section R313.2.1 Design and installation.	. 6
Section R314 Smoke Alarms and Carbon Monoxide detectors	. 6
Section R401.3 Drainage.	. 7
Section R 401.4 Soil Tests	. 8
Section R403.1.3 Seismic reinforcing.	. 8
Section R406.2 Concrete and masonry foundation waterproofing	. 8
Section R506.2.3 Vapor retarder.	. 9
Figure R606.11(1)	10
Section R613.1 General.	11
Section R806.2 Minimum Area.	12
Section R807.1 Attic Access	12
Section R905.7 Wood shingles.	12
Section R905.8 Wood Shakes	12
Section R1006.1 Exterior air	12
Section R1007.1 Types of fireplaces.	13
Chapters 11 through 43	13
Appendices A, B, C, D, E, F, G, I, J, L, M, N, O, P and Q	13
Appendix H	13
Appendix K	13

### Section R101 General.

### Revise Section R101.1 Title, as follows:

**R101.1 Title** These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* of the City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Pahrump Regional Planning District and Clark County, and shall be cited as such and will be referred to herein as "this code".

### Revise Section R101.2 Scope, as follows:

**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.

**Exception**: 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. The Fire suppression required by Section 419.5 of the *International Residential Code* when constructed under the *International Residential Code for One- and two-family Dwellings* shall conform to Section 903.3.1.3 of the *International Building Code*.

Delete Sections R102 through R114 in their entirety.

### Section R202 Definitions.

#### Revise the definition of Townhouse, as follows:

**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 open space on at least two sides, and as recorded on a final map or major subdivision map.

#### Section R301.1.2 Construction Systems.

#### Revise Section R301.1.2, as follows:

**R301.1.2 Construction systems.** The requirements of this code are based on platform and balloon-frame construction for light-frame buildings. The requirements for concrete and masonry buildings are based on a balloon framing system. Other framing systems must have equivalent detailing to ensure force transfer, continuity and compatible deformations. All structural plain (unreinforced) concrete shall be designed in accordance with the 2009 IBC. All plain (unreinforced) masonry, and rubble stone masonry construction is prohibited. All tables, figures and references for these unreinforced systems shall be deleted.

### Table R301.2 Climatic and Geographic Design Criteria.

*Revise Table R301.2, as follows:* 

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

WIND DESIGN				SUBJECT TO DAMAGE FROM				ICE BARRIER			
GROUND SNOW LOAD (PSF)	SPEED <sup>d</sup> (MPH)	TOPO- Graphic Effects <sup>k</sup>	SEISMIC DESIGN Category <sup>f</sup>	WEATHER- Ing®	FROST LINE Depth⁵	TERMITE°	DESIGN DRY BULB TEMP®	UNDERLAY- Ment Required <sup>1</sup>	FLOOD Hazards	AIR FREEZING INDEX <sup>i</sup> (ºF-days)	MEAN ANNUAL TEMP <sup>i</sup>
0 < 2000'	90	ND	Do	Negligible	1'<5000'			NO	g	1500	66.3ºF
5 < 3600'	90	ND	Do	Negligible	1'<5000'	Moderate to Heavy	Winter 27ºF Summer	ND	g	1500	66.3ºF
10 < 4500'	90	ND	Do	Negligible	1'<5000'		112°F	ND	g	1500	66.3ºF

## **Spring Mountain Range**

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	WIND DESIGN			SUBJECT TO DAMAGE FROM							
GROUND SNOW LOAD (PSF)	SPEED⁴ (MPH)	TOPOGRAPHI C EFFECTS <sup>k</sup>	SEISMIC DESIGN Category <sup>f</sup>	WEATHERING®	FROST LINE Depth⁵	TERMITE°	DESIGN DRY BULB TEMP®	ICE BARRIER UNDERLAYMENT REQUIRED <sup>h</sup>	FLOOD HAZARDS	AIR FREEZING INDEX <sup>i</sup> (°F-days)	MEAN Annual Temp <sup>;</sup>
10<4500'	90	No	Do	Severe	1'<5000'		Winter	YES	g	2000	48.1ºF
15<6000'	90	No	Do	Severe	3'>5000'	Moderate to	5º F Summer	YES	g	2000	48.1ºF
See IBC for Elevations >6000'	IBC	IBC	IBC	IBC	IBC	Heavy	92º F	IBC	g	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 weather 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 C34, C55, C62, C73, C90, C128, C145, C216 or C652.

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 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 temperature shall be permitted to reflect local climate 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° Fahrenheit)" at <u>www.ncdc.noaa.gov/fpsf.html</u>.

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° Fahrenheit)" at <a href="http://www.ncdc.noaa.gov/fpsf.html">www.ncdc.noaa.gov/fpsf.html</a>.

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.

#### Section R301.2.2 Seismic Provisions.

Delete the Exception in Subsection R301.2.2, as follows:

**R301.2.2 Seismic provisions.** The seismic provisions of this code shall apply to buildings constructed in Seismic Design Categories C, D0, D1 andD2, as determined in accordance with this section.