

1 **BILL NO. 2018-30**

2 **ORDINANCE NO. 6635**

3 AN ORDINANCE TO ADOPT THE 2018 EDITION OF THE INTERNATIONAL ENERGY
4 CONSERVATION CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR
OTHER RELATED MATTERS.

5 Proposed by: Scott D. Adams, City Manager

Summary: Adopts the 2018 Edition of the
International Energy Conservation Code, together
with amendments thereto.

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

9 SECTION 1: Title 16, Chapter 52, Section 10, of the Municipal Code of the City of Las
10 Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

11 **16.52.010:** Those certain documents, three copies of which are on file in the Office of the City Clerk
12 and are designated as follows, are adopted by reference as if set forth herein in full:

13 (A) The publication entitled "International Energy Conservation Code, [2009] 2018
14 Edition," as published by the International² Code Council, as Part 1 of this Chapter; and

15 (B) The document entitled "Southern Nevada Amendments to the [2009] 2018
16 International Energy Conservation Code," which adds to, deletes from and amends the "International
17 Energy Conservation Code, [2009] 2018 Edition," as Part 2 of this Chapter.

18 SECTION 2: The document entitled "Southern Nevada Amendments to the 2018
19 International Energy Conservation Code" is attached hereto.

20 SECTION 3: Ordinance Nos. 6069, 6144 and 6256, as well as the 2009 International
21 Energy Conservation Code and the Southern Nevada Amendments to the 2009 International Energy
22 Conservation Code, are hereby repealed in their entirety.

23 SECTION 4: This Ordinance shall be effective as of February 4, 2019.

24 SECTION 5: If any section, subsection, subdivision, paragraph, sentence, clause or phrase
25 in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by
26 any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the

1 remaining portions of this ordinance or any part thereof. The City Council of the City of Las Vegas hereby
2 declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase
3 thereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs,
4 sentences, clauses or phrases be declared unconstitutional, invalid or ineffective.

5 SECTION 6: Whenever in this ordinance any act is prohibited or is made or declared to
6 be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is required
7 or the failure to do any act is made or declared to be unlawful or an offense or a misdemeanor, the doing of
8 such prohibited act or the failure to do any such required act shall constitute a misdemeanor and upon
9 conviction thereof, shall be punished by a fine of not more than \$1,000.00 or by imprisonment for a term of
10 not more than six months, or by any combination of such fine and imprisonment. Any day of any violation
11 of this ordinance shall constitute a separate offense.

12 SECTION 7: All ordinances or parts of ordinances or sections, subsections, phrases,
13 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada, 1983
14 Edition, in conflict herewith are hereby repealed.

15 PASSED, ADOPTED and APPROVED this 15th day of August, 2018.

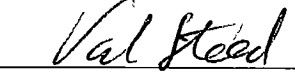
16 APPROVED:

17 By 
18 CAROLYN G. GOODMAN, Mayor

19 ATTEST:

20 
21 LUANN D. HOLMES, MMC
City Clerk

22 APPROVED AS TO FORM:

23  7-9-18
24 Val Steed, Date
Deputy City Attorney

1 The above and foregoing ordinance was first proposed and read by title to the City Council
2 on the 18th day of July, 2018, and referred to a committee for recommendation; hereafter
3 the committee reported favorably on said ordinance on the 15th day of August, 2018,
4 which as a regular meeting of said Council; that at said regular meeting, the proposed
5 ordinance was read by title to the City Council as first introduced and adopted by the
6 following vote:

7 VOTING "AYE": Mayor Goodman and Councilmembers, Tarkanian, Anthony, Coffin
8 Fiore, Seroka and Crear

9 VOTING "NAY": None

10 EXCUSED: None

11 ABSTAINED: None

12
13
14 APPROVED:

15 
16 CAROLYN G. GOODMAN, Mayor

17 ATTEST:

18 
19 LUANN D. HOLMES, MMC City Clerk



**SOUTHERN NEVADA
AMENDMENTS
TO THE
2018 INTERNATIONAL
ENERGY CONSERVATION CODE**

PREFACE

This document was developed by the Southern Nevada Building Officials' International Energy Conservation Code Committee and presents recommended amendments to the 2018 International Energy Conservation Code (IECC) as published by the International Code Council (ICC)

Participation in the 2018 IECC Committee was open to all interested parties. However, voting on amendment proposals was limited to one vote each for six of Southern Nevada municipalities (Clark County, Henderson, Las Vegas, North Las Vegas, Boulder City, and Mesquite), the Clark County School District, and three industry representatives. All 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 C202 Definitions

Add definition of Luminaire, as follows:

LUMINAIRE: A complete lighting unit consisting of a light source, such as a lamp or lamps, together with the parts designed to position the light source and connect it to the power supply. It may also include parts to protect the light source or the ballast or to distribute the light. The individual components of a luminaire (i.e., lamp, ballast, driver, reflector, etc.) do not constitute a luminaire.

Section C301.1 General

Revise Section C301.1 as follows:

C301.1 General. *Climate zones* from Figure C301.1 or Table C301.1 shall be used for determining the applicable requirements from Chapter 4. Locations not indicated in Table C301.1 shall be assigned a *climate zone* in accordance with Section C301.3.

Exception: Areas within Clark County above altitudes of 4000 feet shall be considered in Climate Zone 5B. Areas within Nye County below altitudes of 4000 feet shall be considered in Climate Zone 3B.

Section C402.5

Revise Section C402.5, as follows:

C402.5 Air Leakage – thermal envelope (Mandatory). The *thermal envelope* of buildings shall comply with Sections C402.5.1 through C402.5.8.9, or the building *thermal envelope* shall be tested in accordance with ASTM E 779 at a pressure differential of 0.3 inch water gauge (75 Pa) or an equivalent method approved by the code official and deemed to comply with the provisions of this section when the tested air leakage rate of the building *thermal envelope* is not greater than 0.40 cfm/ft² (2.0 L/s • m²). Where compliance is based on such testing, the building shall also comply with Sections C402.5.5, C402.5.6 and C402.5.7.

Section C402.5.9

Add new section C402.5.9, as follows:

C402.5.9 Air Curtains. Where doorway, passageway or pass-thru openings in the building thermal envelope are intended to be normally open to the exterior environment, an approved air curtain tested in accordance with ANSI/AMCA 220 shall be used to separate conditioned air from the exterior.

Section C405.2.4

Revise section 405 2 4 to add an exception, as follows:

C405.2.4 Specific application controls. (Remains unchanged)

Exceptions:

- 1 Lighting and switched receptacles controlled by card key controls
- 2 Spaces where patient care is directly provided
3. Bathroom lighting within sleeping units

Section C405.3.1

Add new item #20 to the second paragraph of Section C405 3 1, as follows

C405.3.1 Total connected interior lighting power.

- 20 Theme/entertainment elements in theme/amusement parks and casinos

Section C405.4.1

Modify Exception No 11 in Section C405 4.1, as follows.

C405.4.1 Total connected exterior building exterior lighting power. The total exterior connected lighting power shall be the total maximum rated wattage of all lighting that is powered through the energy service for the building

Exception: Lighting used for the following applications shall not be included

- 1 through 10. *(Remains unchanged)*
- 11 Theme/entertainment elements in theme/amusement parks and casinos
- 12 through 14 *(Remains unchanged)*

Section C407.3

Revise the exception in Section C407 3, as follows

C407.3 Performance Based Compliance. (Remains unchanged)

Exception: The energy use based on source energy expressed in Btu or Btu per square foot of *conditioned floor area* shall be permitted to be substituted for the energy cost. The source energy multiplier for electricity shall be 3.16 The source energy multiplier for fuels other than electricity shall be 1.1

Section C408.3.1

Revise 408.3 1, as follows.

C408.3.1 Functional Testing. Prior to passing final inspection, the *registered design professional* or other agency or means approved by the jurisdiction shall provide evidence that the lighting control systems have been tested to ensure that control hardware and software are calibrated, adjusted, programmed and in proper working condition in accordance with the *construction documents* and manufacturer's instructions. Functional testing shall be in accordance with Sections C408 3 1 1 through C408 3 1 3 for the applicable control type.

Section C503.6

Revise section C503 6 to add an exception, as follows

C503.6 Lighting systems. New lighting systems that are part of the *alteration* shall comply with Section C405

Exceptions:

- 1 *Alterations* that replace less than 10 percent of the luminaires in a space, provided that such *alterations* do not increase the installed interior lighting power
- 2 *Alterations* that replace only the bulb and ballast within the existing luminaires in a space, provided that the *alteration* does not increase the installed interior lighting power

Chapter 6

Revise the referenced standards to identify the correct referenced code section for AMCA standard 220-08, as follows

AMCA	Air Movement and Control Association International 30 West University Drive Arlington Heights, IL 60004-1806
220-08 (R2012): Laboratory Methods for Testing Air Curtain Units for Aerodynamic Performance Rating C402 5 67	

Revise the referenced standards to include the IAPMO codes and updates to standards used in Southern Nevada, as follows.

IAPMO	International Association of Plumbing and Mechanical Officials 5001 E Philadelphia Street Ontario, CA 91761
UMC-18: Uniform Mechanical Code ® C201 3, C403 2 2, C403 6, C403 6 6, C403 7 1, C403 7 2, C403 7 4, C403 7 5, C403 7 7, C403 11.1, C403 11 2 1, C403 11 2 2, C406 6, C501 4	
UPC-18: Uniform Plumbing Code ® C201 3, C501 4	

Revise the referenced standards to include ICC standards, as follows:

ICC	International Code Council 500 New Jersey Avenue NW 6 th Floor Washington, DC 20001
IBC-18: International Building Code® C201 3, C303 1.1, C303.2, C402 5.3, C402 5 4, C501 4	

Section R301.1

Add exception to section, as follows.

R301.1 General. *Climate zones* from Figure R301.1 or Table R301 1 shall be used for determining the applicable requirements from Chapter 4. Locations not indicated in Table R301 1 shall be assigned a *climate zone* in accordance with Section R301 3.

Exception: Areas within Clark County above altitudes of 4000 feet shall be considered in Climate Zone 5B. Areas within Nye County below altitudes of 4000 feet shall be considered in Climate Zone 3B.

Section R402.4.1.2

Revise section and add exception to section, as follows:

R402.4.1.2 Testing. The *building* or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour in *Climate Zones* 1 and 2, and four air changes per hour when nonsprinklered, or 4.5 air changes per hour when sprinklered or attached, in *Climate Zones* 3 through 8 (...)

Exception: For residential tract developments using an approved above code program, testing shall be allowed to conform to the program requirements when the following documentation is submitted to the jurisdiction by the developer.

1. Approved software per Section R406.6 1.
2. A copy of the contractual agreement between the developer and a certified HERS rater to perform all mandatory field testing, sampling protocols and program verifications.
3. Additional documentation as may be deemed necessary by the jurisdiction.

Section R403.6

Add exception to the section, as follows:

R403.6 Mechanical ventilation (Mandatory). The *building* shall be provided with ventilation that complies with the requirements of the *International Residential Code* or *International Mechanical Code*, as applicable, or with other *approved* means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

Exception: Where clothes dryer exhaust vents terminate vertically at the roof, back draft dampers are not permitted.

Section R406.2

Revise Section R406.2 to add language at the end of the paragraph, as follows

R406.2 Mandatory Requirements. Compliance with this section requires that the provisions identified in Sections R401 through R404 indicated as "Mandatory" and Section R403.5.3 be met. The *building thermal envelope* shall be greater than or equal to levels of efficiency and *Solar Heat Gain Coefficients* in Table 402.1.1 or 402.1.3 of the 2009 *International Energy Conservation Code*. The mandatory thermal envelope requirements referenced in this section and Section R406.4 may be met by utilizing the Total UA Alternative referenced in Section R402.1.5.

Section R406.3

Delete last sentence of the section in its entirety, as follows:

R406.3 Energy Rating Index. The Energy Rating Index (ERI) shall be determined in accordance with RESNET/ICC 301 except for buildings covered by the *International Residential Code*, the ERI Reference Design Ventilation rate shall be in accordance with Equation 4-1.

Ventilation rate, CFM = $(0.01 \times \text{total square foot area of house}) + [7.5 \times (\text{number of bedrooms} + 1)]$

(Equation 4-1)

Section Chapter 6 – Referenced Standards (Residential)

Revise as follows:

Revise the referenced standards to include the IAPMO codes and updates to standards used in Southern Nevada, as follows

IAPMO	International Association of Plumbing and Mechanical Officials 5001 E. Philadelphia Street Ontario, CA 91761
UMC – 18: Uniform Mechanical Code ® R201.3, R403.3.2, R403.3.6, R403.6, R501.4	
UPC – 18: Uniform Plumbing Code ® R201.3, R501.4	

Revise the referenced standards to include ICC standards, as follows

ICC	International Code Council 500 New Jersey Avenue NW 6 th Floor Washington, DC 20001
IBC – 18: International Building Code ® R201.3, R303.1.1, R303.2, R402.1.1, R402.2.11, R501.4	
IRC – 18: International Residential Code ® R201.3, R303.1.1, R303.2, R402.1.1, R402.2.11, R402.4.4, R403.3.2, R403.3.6, R403.6, R406.3, R501.4	

AFFIDAVIT OF PUBLICATION

STATE OF NEVADA)
COUNTY OF CLARK) SS.

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LAS VEGAS NV 89101

Account # 22515
Ad Number 0000995905

2018 JUL 24 P 12:08

Leslie McCormick, 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 07/19/2018 to 07/19/2018, on the following days:

07 / 19 / 18

BILL NO. 2018-30
AN ORDINANCE TO ADOPT THE
2018 EDITION OF THE
INTERNATIONAL ENERGY
CONSERVATION CODE,
TOGETHER WITH AMENDMENTS
THERE TO, AND TO PROVIDE FOR
OTHER RELATED MATTERS.
Proposed by: Scott D. Adams,
City Manager
Summary: Adopts the 2018
Edition of the International
Energy Conservation Code,
together with amendments
thereto.
At the City Council meeting of
July 18, 2018
BILL NO. 2018-30 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: July 19, 2018
LV Review-Journal

IS/ 
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 19th day of July, 2018

Notary 



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 0001001641

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CITY CLERK

2018 AUG 23 A 11:55

Leslie McCormick, 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 08/18/2018 to 08/18/2018, on the following days.

08 / 18 / 18

BILL NO. 2018-30
ORDINANCE NO. 6635
AN ORDINANCE TO ADOPT THE
2018 EDITION OF THE
INTERNATIONAL ENERGY
CONSERVATION CODE
TOGETHER WITH AMENDMENTS
THERE TO, AND TO PROVIDE FOR
OTHER RELATED MATTERS.

Proposed by:
Scott D. Adams, City Manager

Summary: Adopts the 2018
Edition of the International
Energy Conservation Code,
together with amendments
thereto.

The above and foregoing
ordinance was first proposed
and read by title to the City
Council on the 18th day of July,
2018, and referred to a
committee thereafter for
recommendation; thereafter
the committee reported
favorably on said ordinance on
the 15th day of August, 2018,
which was a regular meeting of
said City Council; and 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
Tarkanian, Anthony, Coffin,
Seroka, Fiore and Crear
VOTING "NAY": NONE
EXCUSED: NONE

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: August 18, 2018
LV Review-Journal

/s/

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 20th day of August, 2018

Notary

