

**BOARD OF SUPERVISORS**  
Clerk of the Board  
219 East Cherry Avenue  
Flagstaff, AZ 86001-4695



**ORDINANCE 2014 - 07**

**AN ORDINANCE OF THE COCONINO COUNTY, ARIZONA  
BOARD OF SUPERVISORS ADOPTING THE  
INTERNATIONAL BUILDING CODE  
INTERNATIONAL RESIDENTIAL CODE  
INTERNATIONAL MECHANICAL CODE  
INTERNATIONAL FUEL GAS CODE  
INTERNATIONAL PLUMBING CODE  
INTERNATIONAL ENERGY CONSERVATION CODE  
INTERNATIONAL EXISTING BUILDING CODE  
AND THE NATIONAL ELECTRICAL CODE**

**AN ORDINANCE, ADOPTED PURSUANT TO A.R.S. 11-861, REGULATING THE QUALITY, TYPE OF MATERIAL, AND WORKMANSHIP OF ALL ASPECTS OF CONSTRUCTION OF BUILDINGS OR STRUCTURES, PROVIDING FOR THE ISSUANCE OF PERMITS AND COLLECTION OF FEES THEREFORE, PROVIDING PENALTIES FOR VIOLATIONS, AND ESTABLISHING A BUILDING AND SAFETY ADVISORY BOARD.**

SECTION 1. The Board of Supervisors hereby adopts, by reference, the following Codes: 2012 Editions, published by the International Code Council,

INTERNATIONAL BUILDING CODE  
INTERNATIONAL RESIDENTIAL CODE  
INTERNATIONAL MECHANICAL CODE  
INTERNATIONAL FUEL GAS CODE  
INTERNATIONAL PLUMBING CODE  
INTERNATIONAL ENERGY CONSERVATION CODE  
INTERNATIONAL EXISTING BUILDING CODE

AND

The 2011 Edition, of the NATIONAL ELECTRICAL CODE, published by the National Fire Protection Agency

Amendments are listed in Section 10 below. Three copies of the codes are on file with the Clerk of the Board of Supervisors.

SECTION 2. Ordinance No. 2007-12 adopting the 2006 edition of the International Building Code and other related codes and the 2005 National Electrical Code are hereby repealed.

SECTION 3. These codes shall apply to the unincorporated area of Coconino County excluding State and Federal Lands, including but not limited to Indian Reservations unless an Intergovernmental Agreement (IGA) exists for Building Code Enforcement.

SECTION 4. This ordinance and the building codes shall be administered by the Coconino County Department of Community Development. The administrator shall be the Building Official.

SECTION 5. It shall be unlawful to erect, construct, reconstruct, alter, move, demolish, convert, or use any building or structure covered by the Ordinance contrary to or in violation of any provisions of these codes. Any person, firm, or corporation violating any of the provisions of these codes may be assessed civil penalties of up to \$1,500 per day, per violation, or prosecuted for a class 2 misdemeanor, pursuant to A.R.S. 11-866.

SECTION 6. If any section, subsection, sentence, or phrase of this Ordinance is held to be invalid or unconstitutional, such decision shall not affect the validity of the remainder of the Ordinance. The Board of Supervisors hereby declares that it would have adopted this Ordinance and each section, subsection, sentence, or phrase irrespective of the fact that any one or more section, subsection, sentence or phrase is declared invalid or unconstitutional.

SECTION 7. Pursuant to A.R.S. 11-862, there shall be a Building and Safety Advisory Board to determine the suitability of alternative materials and construction, to permit interpretations of the provisions of the code, and to hear appeals and grant waivers to the codes. There shall be at least one member from each of the following categories: licensed architect, professional engineer, licensed general contractor, representative of the electrical, plumbing or mechanical trade, and representative of the public. The Building Official shall serve as non-voting ex-officio member and shall act as secretary.

SECTION 8. This Ordinance does not supersede any other applicable adopted code or ordinance. Where any provision of the Building Code conflicts with any other applicable code or ordinance, the more restrictive shall apply.

SECTION 9. The Board of Supervisors shall, in a separate action, establish fees for building permits and inspections.

SECTION 10. The Board of Supervisors hereby adopts the following amendments to the International Building Code and related codes:

**PART I: 2012 INTERNATIONAL BUILDING CODE AMENDMENTS**

**1. 105.2 Work exempt from permit**

Add #14. One-story detached agricultural hoop greenhouse; shipping containers used for storage. A greenhouse is a structure for horticulture (growing plants for food and flowers) it is mainly a glazed or translucent structure such as a hoop green house. Additionally, these structures shall have a maximum wall height of eight (8) feet and a maximum overall building height of fifteen (15) feet. All property setbacks, lot coverage limitations, and distances between buildings shall be complied with; accessory structures greater than 3,000 square feet in area may have additional zoning requirements.

2. 107.2.2 Fire protection system shop drawings  
Add the following text: Plans for sprinkler system installations shall be approved by a Certified Third Party Sprinkler Approval Agency and the Third Party shall approve the installation at the Rough Trades Inspection, and at the Final Inspection before the Certificate of Occupancy is issued.
3. (New) Section 303.7., to create a new Occupancy Group entitled Group A, Division 7, Land Art. Adopted by reference; copies are available at the office of the Clerk of the Board of Supervisors and the Department of Community Development.
4. Add 310.1.2. DWELLING UNITS - MINIMUM SIZED DWELLING UNITS  
The minimum size for a single family dwelling unit shall be larger than two hundred (200) square feet in floor area, not including attached garages, decks, or porches.
5. 903.2, adding the following: Plans for sprinkler system installations shall be approved by a Certified Third Party Sprinkler Approval Agency and the Third Party shall approve the installation at the Rough Trades Inspection, and at the Final Inspection before the Certificate of Occupancy is issued.

903.2.8, deleting the text of the provision, and adding the following: When Automatic Fire Sprinkler Systems are installed in Townhouses, One and Two Family Dwelling Units and associated residential accessory structures, plans for the sprinkler system installation shall be approved by a Certified Third Party Sprinkler Approval Agency and the Third Party shall approve the installation at the Rough Trades Inspection, and at the Final Inspection before the Certificate of Occupancy is issued.

6. Add 908.7.2 Carbon Monoxide Alarms. Combination carbon monoxide alarms and smoke detectors are prohibited. Carbon monoxide alarms shall be installed within 24 inches of the finish floor.
7. Chapter 11 Accessibility  
1101.1. Delete the text of the section and replace with the following language: "The provisions of this chapter and ARS Section 41-1492 through 41-1492-12 shall control the design and construction of facilities for accessibility for disabled persons."  
  
1101.2. Delete the text of the Section and replace with the following language: "Buildings and facilities shall be designed and constructed to be accessible in accordance with this code, ICC A117.1, and in accordance with the provisions of the State of Arizona General Administrative Rules R-10-3-401 through R-10-3-404, whichever standard provides the greater degree of accessibility. This dual-reference provision shall apply in all cases where ICC A117.1 is referenced in this chapter."- 8. Add 1505.1.1. No Class C materials are allowed.

9. Add 1604.1.1 Free standing structures. Any free standing structure, generally classified as a Group U Occupancy, including but not limited to towers, antennas, sign structures, walls, fences, silos, and columns when the total height is taller than twelve (12) feet shall be engineered and the plans sealed by the appropriate Arizona Registered Engineer. The engineering shall be inclusive for the foundation, connections, supports, anchors and the structure itself. These structures that are six (6) feet or less in total height do not require a Building Permit. These structures that are taller than six (6) feet and less than twelve (12) feet shall be designed by approved national designed standards or as determined by the Building Official.
10. 1608.2 Ground snow loads. Delete the text of the section and replace with the following language: Snow Loads for roof design shall be required as a non-reducible live load on the roof. When the Ground Snow Load is used to determine a roof snow live load then use the Ground Snow Load values contained herein. In no case shall the roof live load be less than the live loads listed in this section.

Minimum Roof Snow Live Loads and minimum Ground Snow Loads are listed for the following areas:

- A. Fifty (50) pounds per square foot live load;  
Ground Snow Load seventy one (75) pounds per square foot.
  1. Hart Prairie
  2. Kendrick Park
  3. Jacob Lake and the North Rim
  4. Any building site at an elevation of 8000 feet or more above sea level.
- B. Forty (40) pounds per square foot live load;  
Ground Snow Load fifty seven (60) pounds per square foot.
  1. Areas surrounding Flagstaff
  2. Doney Park
  3. Valle
  4. Areas surrounding Tusayan
  5. Parks
  6. Areas surrounding Williams
  7. Clear Creek Pines
  8. Starlight Pines
  9. Happy Jack
  10. Forest Lakes
  11. Mormon Lake
  12. Kachina Village
  13. Mountaineer
  14. Pinewood
- C. Thirty (30) pounds per square foot live load;  
Ground Snow load forty three (45) pounds per square foot.
  1. Cameron

2. Tuba city
  3. Areas between Twin Arrows and Winslow
  4. Oak Creek Canyon
  5. Areas surrounding Ash Fork and Seligman
  6. Areas surrounding Fredonia
  7. Alpine Ranchos and Leupp
- D. Twenty (20) pounds per square foot live load;  
Ground Snow Load twenty nine (30) pounds per square foot.
1. Greenhaven
  2. Marble Canyon
11. (New) 1804.7. Fill material. Add a new Section: Fill material for slab floors in excess of four (4) feet in depth shall be on engineered fill and sustained by a soils report for verification of compaction. Engineered fill and soils reports shall also be required for exterior and interior bearing footings and foundations which do not extend into the undisturbed soil. Fill material which is used in slab floor construction shall be limited to 3/8 inch or less dirty cinder, "ABC" (aggregate base course), or native material when approved by the Building Inspector.
12. 1808.1.1 (Foundations) General, add the following text: Concrete footings shall be a minimum 8" deep by 16" wide.
13. Amend Chapter 23, section 2308 Conventional Light frame Construction by adopting the: WESTERN LUMBER SPAN TABLES FOR FLOOR AND CEILING JOIST AND ROOF RAFTERS (Current Version Published): by Deleting Floor Joist Span: 2308.8 (1), 2308.8 (2). Deleting Ceiling and Rafter Span: 2308.10.2 (1), 2308.10.2 (2), 2308.10.3 (1), 2308.10.3 (2), 2308.10. (3), 2308.10.3 (4), 2308.10.3 (5), 2308.10.3 (6).  
And adding sections 2308.10.2.1 and 2308.10.3.1, with the Western Lumber Span Tables for Floors and Ceilings Joist and Roof Rafters (Version 572/2612/Rev.7-04/2500M

PART II: 2012 INTERNATIONAL RESIDENTIAL CODE AMENDMENTS

1. R102.5 Appendices, add the following paragraph:  
The following appendices are hereby adopted  
Appendix F Radon Control Methods
2. Add R105.1.1 PARK MODEL AND TRAVEL TRAILER RECREATIONAL VEHICLES (RV) Whenever a Park Model, travel trailer, or recreational vehicle is installed as a dwelling unit as part of a permanent home-site when approved by Conditional Use or when installed in a Recreational Vehicle Park and having substantial improvements such as additions or when installed in a floodplain, a Manufactured Home Permit shall be required. Additions to the Park Model, travel trailer, or recreational vehicle shall also require a Building Permit.
3. 105.2 Work exempt from permit

Add #11 One-story detached agricultural hoop greenhouse; shipping containers used for storage. A greenhouse is a structure for horticulture (growing plants for food and flowers) it is mainly a glazed or translucent structure such as a hoop green house. Additionally, these structures shall have a maximum wall height of eight (8) feet and a maximum overall building height of fifteen (15) feet. All property setbacks, lot coverage limitations, and distances between buildings shall be complied with; accessory structures greater than 3,000 square feet in area may have additional zoning requirements

4. R202 Definitions, Add: DWELLING UNITS - MINIMUM SIZED DWELLING UNITS  
The minimum size for a single family dwelling unit shall be larger than two hundred (200) square feet in floor area, not including attached garages, decks, or porches.
5. Table R301.2.(1) Complete the Table with the following values:
 

Ground snow load.....	see (amended) IBC Sec 1608.2
Wind design (speed).....	90 mph, 3 second gust
Seismic Design Category.....	C
Weathering.....	moderate
Frost depth.....	30"
Exception: 24" in Oak Creek Canyon/Sedona, Marble Canyon, Greenhaven, Tuba City	
Termites.....	moderate to heavy
Winter design temperature.....	4 degrees
Air freezing index.....	1013
Mean annual temperature.....	55 degrees
6. Add 315.5 Carbon Monoxide Alarms. Combination carbon monoxide alarms and smoke detectors are prohibited. Carbon monoxide alarms shall be installed within 24 inches of the finish floor.
7. Add R403.1.1 Detached Accessory Structures  
Detached accessory structures of light frame construction such as storage sheds in residential zones for private use, sized 400 (400) square feet or less may be set on pressure treated skids and shall be anchored with approved methods
8. R313 Automatic Fire Sprinkler Systems, Delete R313.2, and replace with the following:  
R313.2 Design and Installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2409 or NFPA 13D. Plans for the sprinkler system installation shall be approved by a Certified Third Party Sprinkler Approval Agency and the Third Party shall approve the installation at the Rough Trades Inspection, and at the Final Inspection before the Certificate of Occupancy is issued
9. R314.4 (Smoke Alarms) Power Source  
R314.4, delete exception #1
10. R403.1.1 (Footings) Minimum Size, revise the text as follows: Minimum sizes for concrete and masonry footings shall be as set forth in R403.1 and Table R403.1(1). The footing

width, W, shall be based on the load-bearing value of the soil in accordance with Table R401.4.1, except that minimum 16" width is required in all conditions. Spread footings shall be at least 6 8 inches in thickness. No other changes

11. Add R404.1.1.2 Foundation Reinforcing and design

A minimum of two (2) No. 4 rebar shall be installed within the bottom three (3) inches of each footing and one (1) No. 4 rebar shall be installed within the top three (3) inches of each stem-wall.

Any C.M.U stem-wall or masonry wall shall have one (1) No. 4 rebar vertical at four feet on center, at each corner, at all beam pockets, and at each side of openings.  
The minimum width for piers and columns shall be twelve (12) inches.

Engineered steel structures sized one thousand (1000) square feet or larger shall have the design and plans stamped by an engineer licensed in the State of Arizona for the structure and foundation. Structures less than 1000 square feet may also be require to comply with this section based on the complexity of the design.

12. Amend Chapter 23, section 2308 Conventional Light frame Construction by adopting the: WESTERN LUMBER SPAN TABLES FOR FLOOR AND CEILING JOIST AND ROOF RAFTERS (Current Version Published): by Deleting Floor Joist Span: 2308.8 (1), 2308.8 (2). Deleting Ceiling and Rafter Span: 2308.10.2 (1), 2308.10.2 (2), 2308.10.3 (1), 2308.10.3 (2), 2308.10. (3), 2308.10.3 (4), 2308.10.3 (5), 2308.10.3 (6).

And adding sections 2308.10.2.1 and 2308.10.3.1, with the Western Lumber Span Tables for Floors and Ceilings Joist and Roof Rafters (Version 572/2612/Rev.7-04/2500M

13. R702.2. Vapor retarders, delete the reference to climate zone 5.

14. Add R902.1.1. Roof covering materials. Class A and B roofing required by this section shall be tested in accordance with UL 790, ASTM D2898, or ASTM E108. In Coconino County No Class C materials are allowed.

15. M1306.1 Appliance Clearance. Appliances shall be installed with the clearances from unprotected combustible materials as indicated on the appliance label and in the manufacturer's installation instructions. Add: In the absence of a minimum woodstove clearance a minimum of 36 inches to combustibles when unprotected is required.

16. Delete the text of the section, and replace with the following: P2603.5.1: Exterior sewer lines shall have a minimum of twelve (12) inches of cover where the sewer line extends out below grade through the foundation wall to the point of connection to the sewage disposal system.

17. (New) E3601.2.1 (Number of Services), Add a new Section: Electric service permits and the approval of such equipment will not be allowed on vacant land with the exception of electric equipment for the service of a well and in commercial zones when approved by the Building

Official. Electric services are only allowed to be placed on structures with a permanent foundation of an area of two hundred (200) square feet or larger.

18. (New)E3601.2.2 Add a new Section: Only one (1) electric service is allowed for any parcel of land zoned AR (Agricultural Residential), General (10 acre minimum parcel size), RS (Residential Single Family Dwelling), RR (Rural Residential) and PRD (Planned Residential Development), which are zones for Single Family Dwellings only. Upon approval of the Building Official and where deemed necessary due to site conditions, a second electric service may be authorized for an accessory structure.
19. (New)E3601.2.3 Add a new Section, Temporary Services: Temporary power electric service permits are allowed in conjunction with building permits for new construction. Not including Manufactured Housing. These services shall supply a minimum load of at least one (1) or more fifteen (15) or twenty (20) amperes, one hundred twenty (120) volt duplex receptacles that are a weather resistant GFCI protected device in a weather-proof "in service enclosure" for construction purposes. The services shall meet all installation requirements of the electric utility supplier. The electric service shall be rated one hundred (100) amperes minimum. Approval of temporary power will be given only after the issuance of a building permit.

#### PART III: 2012 INTERNATIONAL PLUMBING CODE AMENDMENTS

1. Delete the text of the section, and replace with the following: 305.4.1: Exterior sewer lines shall have a minimum of twelve (12) inches of cover where the sewer line extends out below grade through the foundation wall to the point of connection to the sewage disposal system.

#### PART IV: 2012 INTERNATIONAL ENERGY CONSERVATION CODE

1. Table R402.1.1 Insulation and fenestration Requirements by Components. Footnote d. R-5 shall be added to the required slab edge R-values for heated slabs. (delete the following) ~~Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.~~ (add): A thermal break is required where any slab meets the exterior foundation wall. Insulation shall extend from the slab to a minimum depth of 12 inches below adjacent grade, with a minimum of two feet.  
Add: Footnote j: The R-value of 20 under the column "Wood frame Wall R-Value" will be allowed to be substituted with an R-value of 19 until such time that availability of the R-20 is market available.  
Add: Footnote k: Passive solar design will be allowed to be designed with less restrictive requirements, subject to approval by the building official.

2. Table C301.1 and Table R301.1 designate Coconino County into Climate Zone 5B add:

The following areas are classified as Climate Zone 6B: Hart Prairie, Kendrick Park, Jacob Lake and the North Rim, and any building site at an elevation of 8000 feet or more above sea level.



The following areas are classified as Climate Zone 4B: Cameron, Tuba City, Areas between Twin Arrows and Winslow, Oak Creek Canyon, Areas surrounding Ash Fork and Seligman, Areas surrounding Fredonia, Alpine Ranchos and Leupp.

The following areas are classified as Climate Zone 3B: Greenhaven, Marble Canyon

2. R402.4.1.2. Change the text to read: The building or dwelling unit shall may be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in climate zones 1 and 2, and 3 air changes per hour in climate zones 3 through 8.

#### PART V: 2012 INTERNATIONAL FIRE CODE

The International Fire Code is not adopted. However, the following Articles are adopted as amendments to the International Building Code:

- Chapter 23 Motor Fuel-Dispensing and Repair Garages
- Chapter 31 Tents, Canopies and other Membrane Structures
- Chapter 57 Flammable and Combustible Liquids
- Chapter 61 Liquefied Petroleum Gases

#### PART VI: ROAD STANDARDS

See also Coconino County Ordinance 95-01 adopted January 3, 1995.

Amend IBC Chapter 33 by adding 3301.3 to read as follows:

##### 3301.3 Fire Protection Access Roads

1. For new land divisions where the resulting parcels are 2 ½ acres or smaller and where the access easement exceeds one-hundred fifty (150) feet in length, an all-weather road at least twenty (20) feet in unobstructed width must be constructed on the property being split. The road must be constructed prior to initiation of combustible material on the building site.

An all-weather road is defined as a road capable of carrying a forty-two thousand (42,000) pound vehicle. In a "typical" rural area, this is a built-up or raised roadbed constructed with material bladed from the side ditches, with six (6) inches of ABC (aggregate base coarse).

2. For new land divisions where the resulting parcels are over 2 ½ acres and less than 10 acres, an all-weather road at least sixteen (16) feet in width must be constructed. The road must be constructed prior to initiation of combustible material on the building site.
3. Easements less than one-hundred fifty (150) feet in length, measured from the nearest road to the farthest point of the house, are defined as driveways. The standards for driveways are minimum ten (10) feet width, minimum thirteen (13) feet six (6) inches vertical clearance, and maximum fifteen (15) percent slope.
4. Bridges on private easements or on driveways exceeding one-hundred fifty (150) feet in length must be engineered to carry a forty-two thousand (42,000) pound load.

5. For parcels where topography or physical obstruction prevents road standards from being met and prevents any possible access by fire equipment (such as a railroad pass or an exceptionally steep grade), either the house shall be sprinklered or a document shall be recorded indicating a potential inability for firefighting apparatus to reach the site.

SECTION 11. This ordinance shall be in effect 30 days from this date of final approval.


PASSED and ADOPTED this 17 day of June 2014 by the Coconino County Board of Supervisors by the following roll call vote:

AYES: 5                      NOES: 0                      ABSTENTIONS: 0                      ABSENT: 0

**COCONINO COUNTY BOARD OF SUPERVISORS**

  
\_\_\_\_\_  
Matt Ryan, Chairman

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Deputy County Attorney

ATTEST:

  
\_\_\_\_\_  
Wendy Escoffier, Clerk of the Board