

#2

JUN 27 2013

ORDINANCE NO. 4452

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, ADOPTING UPDATED VERSIONS OF PREVIOUSLY ADOPTED CODES RELATING TO BUILDING REGULATIONS PURSUANT TO CHAPTER 29, CODE OF THE CITY OF CHANDLER, AMENDING CHAPTER 29, CODE OF THE CITY OF CHANDLER, BY UPDATING THE PROVISIONS INCLUDED THEREIN AND AMENDING SECTION 51-25 OF CHAPTER 51, CODE OF THE CITY OF CHANDLER, TO REFLECT THE ADOPTION OF THE INTERNATIONAL PLUMBING CODE, 2012 EDITION.

WHEREAS, the City of Chandler believes it to be prudent to adopt the updated editions of certain codes previously adopted by reference and to otherwise update the provisions set forth in Chapters 29 and 51, Code of the City of Chandler.

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

SECTION 1: That, effective August 1, 2013, those documents identified below, three (3) copies of each to remain on file in the office of the City Clerk, each are hereby adopted by reference, with the additions, insertions, deletions and changes set forth herein and each are hereby declared to be a public record.

- A. International Building Code, 2012 edition.
- B. National Electrical Code, 2011 edition.
- C. International Plumbing Code, 2012 edition.
- D. International Mechanical Code, 2012 edition.
- E. International Residential Code, 2012 edition.
- F. International Fuel Gas Code, 2012 edition.
- G. International Energy Conservation Code, 2012 edition.
- H. International Existing Building Code, 2012 edition.
- I. 40 Code of Federal Regulations, Part 60, Subpart AAA as in effect on July 1, 1990.

SECTION 2: That, effective August 1, 2013, Article II of Chapter 29, Code of the City of Chandler is hereby amended to read as follows:

ARTICLE II. INTERNATIONAL BUILDING CODE.

29-2. International Building Code adopted.

That certain code designated and known as the "International Building Code," 2012 edition (IBC), inclusive of Appendix C thereto, three (3) copies of which are on file in the office of the

City Clerk, is hereby adopted by reference and made a part hereof as is fully set out in this Chapter with the additions, insertions, deletions and changes set forth herein.

Amend Section 29-2.4 to read as follows:

29-2.4. Section 105.2 of the IBC is hereby deleted in its entirety and replaced with a new Section 105.2 to read as follows:

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.
2. Fences not over 6 feet high.
3. Oil derricks.
4. Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II, or IIIA liquids.
5. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
6. Sidewalks, decks and driveways not more than 30 inches above adjacent grade, and not over any basement or story below and are not part of an accessible route.
7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.
10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
11. Swings and other playground equipment accessory to detached one-and two-family dwellings.
12. Window awnings supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support of Groups R-3 and U occupancies.
13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.
14. Replacement of a roof cover of a R-3 occupancy where the replacement roof covering classification is equal to or greater than the existing roof covering classification and does not increase the loads upon the structural frame.
15. Special cases allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Electrical:

Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Radio and television transmitting stations: The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

Temporary testing systems: A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Motors, Components, Overcurrent Devices and Equipment: A permit shall not be required for repair or replacement of motors, transformers, overcurrent devices or equipment affixed to a Group R-3 occupancy where the replaced or repaired equipment is of the same rating as the existing equipment, is placed in the same location as the existing equipment and is labeled as defined in this code.

Special cases: A permit shall not be required for special cases allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Gas:

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
3. Replacement of gas water heating equipment affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.
4. Replacement of gas pool or spa heating equipment serving a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.
5. Replacement of gas air-conditioning equipment, direct vent equipment, furnaces and log lighters affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as existing equipment.
6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Mechanical:

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds or less of refrigerant and actuated by motors of 1 horsepower or less.

8. Replacement of evaporative coolers affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser airflow (cfm) and is placed in the same location as the existing evaporative cooler.
9. Special cases as allowed by the Building Official, for work of a similar nature and complexity as those items listed above.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
3. Replacement of water conditioning or treating equipment affixed to Group R-3 occupancy where the replacement equipment is of equal or lesser treatment capacity and is placed in the same location as the existing equipment.
4. Replacement of solar pool and spa heating equipment serving a Group R-3 occupancy where the replacement equipment is of equal or lesser heating capacity and is placed in the same location as the existing equipment
5. Replacement of electric water heating equipment affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser amperage rating and is placed in the same location as the existing equipment.
6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Amend Section 29-2.10 to read as follows:

29-2.10. Subsection 1604.4 of the IBC, entitled "Analysis" is hereby amended by adding a new sentence to the end of the last paragraph of such subsection to read as follows:

Additionally, all buildings, structures and parts thereof shall be designed and constructed to resist the wind load effects of a three (3) second wind gust with a wind speed of ninety (90) miles per hour, exposure B.

SECTION 3. That, effective August 1, 2013, Article III of Chapter 29, Code of the City of Chandler, is hereby amended to read as follows:

ARTICLE III. NATIONAL ELECTRICAL CODE

29-3. National Electrical Code adopted.

That certain code designated and known as the "National Electrical Code," 2011 Edition (NEC), three (3) copies of which are on file in the office of the City Clerk, is hereby adopted by reference and made a part hereof as if fully set out in this Chapter.

SECTION 4. That, effective August 1, 2013, Article IV of Chapter 29, Code of the City of Chandler, is hereby amended to read as follows:

ARTICLE IV. INTERNATIONAL PLUMBING CODE.

29-4. International Plumbing Code adopted.

That certain code designated and known as the "International Plumbing Code," 2012 Edition (IPC), inclusive of Appendices B and E thereof, three (3) copies of which are on file in the office of the City Clerk, is hereby adopted by reference and made a part hereof as if fully set out in this Chapter with the additions, insertions, deletions and changes set forth herein.

SECTION 5. That, effective August 1, 2013, Article V of Chapter 29, Code of the City of Chandler, is hereby amended to read as follows:

ARTICLE V. INTERNATIONAL MECHANICAL CODE.

29-5. International Mechanical Code adopted.

That certain code designated and known as the "International Mechanical Code," 2012 Edition (IMC), three (3) copies of which are on file in the office of the City Clerk, is hereby adopted by reference and made a part hereof as if fully set out in this Chapter with the additions, insertions, deletions and changes set forth herein.

SECTION 6. That, effective August 1, 2013, Article VI of Chapter 29, Code of the City of Chandler, is hereby amended to read as follows:

ARTICLE VI. INTERNATIONAL RESIDENTIAL CODE.

29-6. International Residential Code adopted.

That certain code designated and known as the "International Residential Code," 2012 Edition (IRC), three (3) copies of which are on file in the office of the City Clerk, is hereby adopted by reference and made a part hereof as if fully set out in this Chapter with the additions, insertions, deletions and changes set forth herein.

Amend Section 29-6 by adding new Sections 29-6.4 through 29-6.7 as follows:

29.6.4 Chapter 11 of the IRC is amended by adding a new Section N1101.15.1 as follows:

N1101.15.1 Alternative approach for compliance. A Home Energy Rating System ("HERS") Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified

energy rater may be used in place of the approach described in section N1101.15 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

29.6.5 Chapter 11 of the IRC is amended by adding a new Section N1101.17 to read as follows:

N1101.17 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Standards as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Standards as adopted by the Residential Energy Services Network.

29.6.6 Section N1103.2.1 is hereby deleted in its entirety and replaced with a new Section N1103.2.1 to read as follows:

N1103.2.1 Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. Ducts in floor trusses shall be insulated to a minimum of R-6.

Exceptions:

1. Ducts or portions thereof located completely inside the building thermal envelope.
2. Supply ducts may be insulated to a minimum of R-6 when one or more of the following conditions are met:
 - 2.1. Minimum SEER rating of space heating/cooling system is increased to 15
 - 2.2. Maximum U-factor is decreased to 0.35 and maximum SHGC is decreased to 0.22 for all fenestration products.
 - 2.3. Wall cavity insulation minimum R-value is increased to R-19.
 - 2.4. Residential buildings that meet the requirements of sections N1103.1.1, N1101.15.1 or N1104.
 - 2.5. Residential buildings with attic radiant barriers in accordance with ASTM C1313, installed in accordance with ASTM C1743.

29.6.7 Section N1103.2.2.1 shall be deleted in its entirety.

SECTION 7. That, effective August 1, 2013, Article VII of Chapter 29, Code of the City of Chandler, is hereby amended to read as follows:

ARTICLE VII. INTERNATIONAL FUEL GAS CODE.

29-7. International Fuel Gas Code adopted.

That certain code designated and known as the "International Fuel Gas Code," 2012 Edition (IFGC), three (3) copies of which are on file in the office of the City Clerk, is hereby adopted by

reference and made a part hereof as if fully set out in this Chapter with the additions, insertions, deletions and changes set forth herein.

SECTION 8. That, effective August 1, 2013, Article VIII of Chapter 29, Code of the City of Chandler, is hereby amended to read as follows:

ARTICLE VIII. INTERNATIONAL ENERGY CONSERVATION CODE.

29-8. International Energy Conservation Code adopted.

That certain code designated and known as the "International Energy Conservation Code," 2012 Edition (IECC), three (3) copies of which are on file in the office of the City Clerk, is hereby adopted by reference and made a part hereof as if fully set out in this Chapter with the additions, insertions, deletions and changes set forth herein.

Amend Section 29-8 by deleting Section 29-8.1 and replacing it with the following:

29-8.1. Section C101.2 of the IECC, entitled "Scope" is hereby amended by adding the following sentence:

Group R-2 when defined as a Commercial Building by section C202, shall have the option of complying under the Residential Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

Amend Section 29-8 by deleting Section 29-8.2 and replacing it with the following:

29-8.2 Section C107.2 of the IECC entitled "Schedule of permit fees" is hereby deleted in its entirety and replaced with a new Section C107.2 to read as follows:

C107.2. Schedule of permit fees. Permit fees, if any, shall be adopted by the City by resolution.

Amend Section 29-8 by adding Sections 29-8.3 through 29-8.10 as follows:

29-8.3 Section C108 entitled "Stop Work Order" and Section C109 entitled "Board of Appeals" of the IECC are hereby deleted in their entirety and Section Numbers C108 and C109 are hereby reserved.

29-8.4 Section R101.2 "Scope" is hereby amended by adding the following sentence:

Group R-2 when defined as a Commercial Building by section C202, shall have the option of complying under the Residential Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

29-8.5 Section R107.2 of the IECC entitled "Schedule of permit fees" is hereby deleted in its entirety and replaced with a new Section R107.2 to read as follows:

R107.2. Schedule of permit fees. Permit fees, if any, shall be adopted by the City by resolution.

29-8.6 Section R108 entitled "Stop Work Order" and Section R109 entitled "Board of Appeals" of the IECC are hereby deleted in their entirety and Section Numbers R108 and R109 are hereby reserved.

29-8.7 Chapter 4 [RE] of the IECC is amended by adding a new Section R401.2.1 as follows:

R401.2.1 Alternative approach for compliance. A Home Energy Rating System ("HERS") Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in section R401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

29-8.8 Chapter 4 [RE] of the IRC is amended by adding a new Section R401.4 to read as follows:

R401.4 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Standards as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Standards as adopted by the Residential Energy Services Network.

29-8.9 Section R403.2.1 is hereby deleted in its entirety and replaced with a new Section R403.2.1 to read as follows:

R403.2.1 Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. Ducts in floor trusses shall be insulated to a minimum of R-6.

Exceptions:

1. Ducts or portions thereof located completely inside the building thermal envelope.
2. Supply ducts may be insulated to a minimum of R-6 when one or more of the following conditions are met:
 - 2.1. Minimum SEER rating of space heating/cooling system is increased to 15
 - 2.2. Maximum U-factor is decreased to 0.35 and maximum SHGC is decreased to 0.22 for all fenestration products.
 - 2.3. Wall cavity insulation minimum R-value is increased to R-19.
 - 2.4. Residential buildings that meet the requirements of sections R103.1.1, R401.2.1 or R404.
 - 2.5 Residential buildings with attic radiant barriers in accordance with ASTM C1313, installed in accordance with ASTM C1743.

29.8.10 Section R403.2.2.1 shall be deleted in its entirety.

SECTION 9: That, effective August 1, 2013, Article IX is of Chapter 29, Code of the City of Chandler, is hereby amended to read as follows:

ARTICLE IX. INTERNATIONAL EXISTING BUILDING CODE.

29-9. International Existing Building Code adopted.

That certain code designated and known as the "International Existing Building Code", 2012 Edition (IEBC), three copies of which are on file in the office of the City Clerk, is hereby adopted by reference and made a part hereof as if fully set out in this Chapter with the additions, insertions, deletions and changes set forth herein.

Amend Section 29-9.1 to read as follows:

29-9.1. Section 105.2 of the IEBC is hereby deleted in its entirety and replaced with a new Section 105.2 to read as follows:

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.
2. Fences not over 6 feet high.
3. Oil derricks.
4. Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II, or IIIA liquids.
5. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
6. Sidewalks, decks and driveways not more than 30 inches above adjacent grade, and not over any basement or story below and are not part of an accessible route.
7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.
10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
11. Swings and other playground equipment accessory to detached one-and two-family dwellings.

12. Window awnings supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support of Groups R-3 and U occupancies.
13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.
14. Replacement of a roof cover of a R-3 occupancy where the replacement roof covering classification is equal to or greater than the existing roof covering classification and does not increase the loads upon the structural frame.
15. Special cases allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Electrical:

Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Radio and television transmitting stations: The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

Temporary testing systems: A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Motors, Components, Overcurrent Devices and Equipment: A permit shall not be required for repair or replacement of motors, transformers, overcurrent devices or equipment affixed to a Group R-3 occupancy where the replaced or repaired equipment is of the same rating as the existing equipment, is placed in the same location as the existing equipment and is labeled as defined in this code.

Special cases: A permit shall not be required for special cases allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Gas:

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
3. Replacement of gas water heating equipment affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.
4. Replacement of gas pool or spa heating equipment serving a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.
5. Replacement of gas air-conditioning equipment, direct vent equipment, furnaces and log lighters affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as existing equipment.

6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Mechanical:

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds or less of refrigerant and actuated by motors of 1 horsepower or less.
8. Replacement of evaporative coolers affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser airflow (cfm) and is placed in the same location as the existing evaporative cooler.
9. Special cases as allowed by the Building Official, for work of a similar nature and complexity as those items listed above.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
3. Replacement of water conditioning or treating equipment affixed to Group R-3 occupancy where the replacement equipment is of equal or lesser treatment capacity and is placed in the same location as the existing equipment.
4. Replacement of solar pool and spa heating equipment serving a Group R-3 occupancy where the replacement equipment is of equal or lesser heating capacity and is placed in the same location as the existing equipment
5. Replacement of electric water heating equipment affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser amperage rating and is placed in the same location as the existing equipment.
6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

SECTION 10. That, effective August 1, 2013, Section 51-25 of Chapter 51, Code of the City of Chandler is hereby amended to read as follows:

51-25. Enforcement responsibility for industrial/commercial interceptor/separator requirements. It shall be the responsibility of the building official to enforce provisions relating to grease, sand

and oil interceptors as required in Chapter 10 of the 2012 International Plumbing Code, which has been adopted by reference pursuant to Section 29-4 of this Code.

INTRODUCED AND TENTATIVELY APPROVED by the City Council of the City of Chandler, Arizona, this ___ day of _____, 2013.

ATTEST:

CITY CLERK

MAYOR

PASSED AND ADOPTED by the City Council of the City of Chandler, Arizona this ____ day of _____, 2013.

ATTEST:

CITY CLERK

MAYOR

Approved as to form:

CITY ATTORNEY

(KB)