BUILDING AND CONSTRUCTION REGULATIONS CODE OF THE TOWN OF GILBERT, ARIZONA - 2013 EDITION

Section 10-31 BUILDING CODE

Sub Sec. 10-31-1 Adoption of Building Code

Sub Sec. 10-31-2 Must Conform to Zoning Ordinance

Sub Sec. 10-31-3 Amendments to International Building Code Sub Sec. 10-31-4 Amendments to International Residential Code

Sub Sec. 10-31-1 Adoption of Building Code

Those certain documents, three (3) copies of which are on file in the office of the Town Clerk being marked and designated as "International Building Code, 2012 Edition", published by the International Code Council, Inc., together with appendices C, I, and K thereto, and together with the "International Residential Code, 2012 Edition," excluding chapter 11 which is adopted as a voluntary code that when used is deemed to be in compliance with chapter 11 of the 2006 International Residential Code, published by the International Code Council, Inc., together with appendices H and P thereto, as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition" are hereby adopted as the Building Code of the Town, for regulating the erection, construction, enlargement, replacement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, location, height, area and maintenance of all buildings or structures in the Town, and said building code is hereby referred to and made a part hereof as though fully set forth in this section.

NOTE: Chapter 11 of the 2006 International Residential Code was not repealed and remains in force as a mandatory code.

Sub Sec. 10-31-2 Must Conform to Zoning Ordinance

Whenever a building permit is issued and a building inspection performed, such building must conform to the provisions of the Land Development Code, of the Town in addition to the provisions of this chapter.

Sub Sec. 10-31-3 Amendments to International Building Code, 2012 Edition

- **101.1 Title.** Insert the words "Town of Gilbert" as the name of the jurisdiction.
- **101.4 Referenced codes.** Amend to read as follows:
 - 101.4.3 Plumbing. Delete last sentence.
 - **101.4.4 Property Maintenance.** Deleted in its entirety and replaced with the following: **101.4.4 Electrical.** The provisions of the Electrical Code of the Town of Gilbert shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.
- **103 DEPARTMENT OF BUILDING SAFETY.** Delete heading and replace with PLAN REVIEW AND INSPECTION DIVISION.
- **103.1 Creation of Enforcement Agency.** Strike "Department of Building Safety" and replace with "Plan Review and Inspection Division."

- **103.2 Appointment.** Strike "Chief Appointing Authority" and replace with "Development Services Director."
- **103.3 Deputies.** Delete the last sentence.

105.2 Work exempt from permit.

Building:

- 2. Amended to read Fences not over 3 feet (914 mm) high.
- 11. Amended to read Swings and other playground equipment accessory to detached one- and two-family dwellings or exterior installations.
- 14. Added to read Re-roofing not requiring a structural change.
- 15. Added to read Prefabricated non-combustible factory built storage structures not regulated by the Arizona Office of Manufactured Housing, used for the storage of non-hazardous materials provided the floor area does not exceed 160 square feet (11.15m²). The structure shall not be served by utilities and shall not be located closer than five (5) feet (1524 mm) to a real or imaginary property line. Only one structure shall be permitted per individual property or leased space.
- 16. Added to read When installed by an Arizona licensed contractor, solar photovoltaic systems, solar water heating systems, wind turbine systems, and replacements of solar, gas (of equal or less BTU/CFH rating) and electric (of equal or less amperage/voltage rating) water heating systems/appliances (not including tankless systems) that are listed and labeled by a nationally recognized third-party testing agency, indicating that the products are in compliance with nationally accepted applicable building, engineering, and safety standards.

Electrical:

Other: Added to read – See Building exemption #16 above.

Gas

3. Added to read – See Building exemption #16 above.

Mechanical:

8. Added to read – See Building exemption #16 above.

Plumbing:

3. Added to read – See Building exemption #16 above.

105.5 Expiration of permit, extensions. Amended to read as follows:

Every permit issued shall become invalid unless substantial work, as determined by the building official, and authorized by such permit is commenced and required inspections are requested by the permittee and approved by the building official within 180 days after its issuance, or if more than 180 days elapses between approval of required inspections. The building official shall be authorized to grant one or more extension of time for a period not to exceed 180 days. All requests for extensions shall be in writing. In order to renew action on a permit after expiration, a new full permit fee shall be paid based on the current fee schedule adopted by the Town, except as approved by the building official.

- **107.3.1 Approval of construction documents.** Amend the first sentence to read as follows: When the building official issues a permit, the construction documents shall be approved in writing or by stamp.
- **109.4** Work commencing before permit issuance. New sentence added to the end of the paragraph to read as follows:

This fee shall be equal to the amount of the permit fee required by this code.

109.6 Refunds. Subsection added to read as follows:

109.6.1 Refund Policy. The building official shall be permitted to authorize refunding of a fee paid hereunder which was erroneously paid or collected.

The building official shall be permitted to authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The building official shall be permitted to authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any examination time has been expended.

Refunds shall be requested by written application and filed by the original permitee not later than 180 days after the date of fee payment.

109.7 Reinspections. New subsection added to read as follows:

A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This section is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the inspection record card is not posted or otherwise available on the work site, the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the building official.

In instances where reinspection fees have been assessed, no additional inspection(s) of the work will be performed until the required fees have been paid in accordance with the reinspection fee policy established by the building official.

111.2 Certificate issued. Delete number 3.

111.3 Temporary occupancy. Amended to read as follows:

If the building official finds that no substantial hazard will result from occupancy of any building or portion thereof before the same is completed or before all required on-site and off-site improvements are completed, a Temporary Certificate of Occupancy (TCO) may be issued for the use of a portion or portions of a building or structure prior to the completion of the entire building or structure. The TCO will be issued for a finite period of time, but in no event for more than sixty (60) calendar days. The TCO may be renewed if satisfactory progress has been made toward completion of outstanding items. The length of any renewal period will be determined at the sole discretion of the building official based on the amount of work remaining, but the extension shall not exceed sixty (60) additional days.

If the TCO and any extensions expire without completion of all outstanding items, the matter will be referred to Code Compliance for enforcement.

Upon satisfaction of the outstanding items on the TCO, a Certificate of Occupancy will be issued.

113.1 General. Amended to read as follows:

In order to hear and decide appeals of orders, decisions, determinations made by the Building Official or the Fire Code Official relative to the application and interpretation of the Building and Construction Regulations Code of the Town of Gilbert and amendments thereto, (hereinafter this "Code") or suitability of alternate materials and types of

construction, there shall be and is hereby created a Building and Construction Regulations Code Board of Appeals. The Building Official and Fire Code Official shall be ex officio members of and shall act as co-secretaries to said Board and shall have no vote on any matters before the Board. The Board of Appeals shall be appointed by the Council and shall hold office at its pleasure. The Board shall adopt rules of procedure for conducting its business and shall render decisions and findings in writing to the appellant with a duplicate copy to the Building Official and the Fire Code Official.

113.2 Limitations on authority. Last sentence of the section revised to read as follows:

The Board of Appeals shall have no authority relative to interpretations of the administrative provisions of the codes nor shall the Board be empowered to waive requirements of the code.

114.1 Unlawful acts. Amended to read as follows:

It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this code or any code referenced herein, or cause, or allow same to be done, in conflict with or in violation of any of the provisions of this code.

- **305.2 Group E, Daycare facilities.** New section added to read as follows:
 - **305.2.4** More than five children in a dwelling unit. A child care facility within a dwelling unit having more than five (5) but not more than ten (10) children shall be classified as R-3 if all of the following are true:
 - A. The care is for less than 24 hours; and
 - B. The rooms in which the children are cared for are located on the same level as exit discharge; and
 - C. Each child care room has an exit door directly to the exterior; and
 - D. At least one smoke detector shall be located within this child care area and provided with third party monitoring in accordance with section 907.2.11.5.
- **308.3 Institutional Group I-1.** Amended by striking the number "16" in the first sentence and replacing with the number "10".
 - **308.3.1 Five or fewer persons receiving care.** Deleted in its entirety.
 - **308.3.2** Six to sixteen persons receiving care. Amended to read as follows: 308.3.2 Ten or fewer persons receiving care. A facility as described in 308.3 housing ten (10) or fewer persons shall be classified as Group R-4.
 - **308.4.1 Five or fewer persons receiving care.** Amended to read as follows: 308.4.1 Ten or fewer persons receiving care. A facility as described in section 308.4 housing ten (10) or fewer persons shall be classifed as group R-4.
 - **308.6.4** Five or fewer persons receiving care in a dwelling unit. Amended to read: A facility such as the above within a dwelling unit and having five or fewer persons receiving custodial care shall be classified as Group R-4.
- 310.5 Residential Group R-3. Amended to read as follows:
 Residential occupancies that do not contain more than two dewlling units, where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I. Includes Adult and child care facilities that provide accommodations for ten (10) or fewer persons of any age for less than 24 hours, or as approved by the Building Official

and that are not classified as group R-4.

310.6 Residential Group R-4. Amended to read as follows:

Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living homes that provide care for ten (10) or fewer persons excluding staff who reside on a 24 hour basis and that require medical or custodial care. These occupancies shall comply with all the provisions of Section 425.

310.6.1 Five or fewer persons receiving care. New subsection added to read as follows: 310.6.1 Five or fewer persons receiving care. Occupancies as described in Section 310.6 where care is provided for five (5) or fewer persons, excluding staff, shall comply with Sections 425.4.2.5 Emergency Escape and Rescue, 425.5.1 Smoke Alarms and 425.5.2 Sprinkler Systems.

406.3.4 Separation:

- **4.** Added to read A total separation distance of not less than 15 feet (4572mm) shall be provided between any Group U carport and the following occupancy types: Group B, F, M and R2 provided the carport is of wholly non-combustible construction and open on 4 sides. The separation distrance shall be measured from the edge of the horizontal roof projection of the carport and the closest element of the adjacent building.
- **425 Residential Care/Assisted Living Homes.** New section added to read as follows:
- **425.1 Applicability.** The provisions of this section shall apply to a building or part thereof housing with more than five but not more than 10 occupants, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides licensed care services.
- **425.2 General.** Buildings or portions of buildings classified as R-4 occupancies shall meet all the applicable provisions of Group R-3, may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building, and shall not exceed 2000 square feet above the first story except as provided in Section 506.
- **425.3 Special Provisions.** R-4 occupancies having more than 2000 square feet of floor area above the first floor shall be of not less than one-hour fire resistive construction throughout.

425.4 Access and Means of Egress Facilities

425.4.1 Exits

425.4.1.1 Number of Exits. Every story, basement, or portion thereof shall have not less than two exits as provided in Chapter 10.

Exception: Basements and stories above the first floor containing no sleeping rooms or common use areas and provided for staff use only may have one means of egress as provided in Chapter 10.

- **425.4.1.2 Travel Distance to Exits.** The maximum travel distance shall comply with section 1016, except that the maximum travel distance from any point in a sleeping room to an exit shall not exceed 75 feet.
- **425.4.1.3 Emergency Exit Illumination.** In the event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the Electric Code.

425.4.1.4 Exit Signs. Exit signs shall be provided in compliance with section 1011.

425.4.1.5 Emergency Escape and Rescue. R-4 occupancies shall comply with the requirements of Section 1029, except that Exception 1 to Section 1029.1 does not apply to R-4 occupancies.

425.5 Smoke Detectors and Sprinkler Systems

425.5.1 Smoke Alarms. All habitable rooms and hallways in R-4 occupancies shall be provided with smoke alarms installed in accordance with Section 907.2.1.2

425.5.2 Sprinkler Systems. R-4 occupancies shall be provided with a sprinkler system installed in accordance with Fire Code. Sprinkler systems installed under this Section shall be installed throughout including attached garages. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. Such systems shall contain water-flow switches electrically supervised by an approved supervising station, and shall sound an audible and visual signal at a constantly attended location and exterior of the dwelling facing a public way.

507.1 General. New paragraph added to read as follows:

With the building official's approval, a Building Code Compliance Covenant and Reciprocal Easement agreement may be used as an alternate method of compliance with building code property line requirements where a single development such as a shopping center is divided by lot or tract lines for financial purposes while the whole development is built and functions like one building on one undivided lot.

901.1 Scope. New paragraph added to read as follows:

Wherever the words "Building Official or Fire Code Official" appear in Sections 901 through 912 they shall be understood to mean that either the Building Official or Fire Code Official shall be the authority having jurisdictions. Code sections preceded by [F] shall be considered to be maintained and administered under the International Fire Code. Where there is a conflict regarding fire protection systems between this code and the Fire Code, the most restrictive requirement shall prevail.

901.5 Acceptance tests. Delete the last sentence and insert the following:

It shall be unlawful to use or allow use, to occupy or allow occupancy, or to allow to be furnished or stocked, or to furnish or stock any portion of a structure until the fire protection systems of the structure have been tested and approved, and authorization provided by the fire code official to do same.

901.6 Supervisory service. Exception 1 amended to read as follows:

1. A supervising station is not required for automatic sprinkler systems protecting oneand two-family dwellings and dwellings classified as Group R-3.

903 through 908. Deleted in its entirety. Refer to Fire Code as amended.

1001.1 General. Amended by adding the following paragraph at the end of the section to read as follows:

Any reference to accessibility requirements for physically disabled persons or to IBC Chapter 11 shall be deemed to reference the accessibility requirements adopted by the

Town as part of the Building and Construction Regulations Code - 2013 Edition Section 10-39.

- **1008.1.2 Door swing.** Exception 4 is amended to read as follows: Doors within or serving a single dwelling unit in Groups R-2, R-3 and R-4.
- 1008.1.9.3. Locks and latches. Amended by revising sub item 2.2 of item 2 to read as follows: 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR IS TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED, or THIS DOOR MUST REMAIN UNLOCKED DURING BUSINESS HOURS. The sign shall be in letters 1 inch (25.4 mm) high on a contrasting background.
- **1016.2 Limitations.** New subsection added to read as follows:

1016.2.2 Group F-1 and S-1 increase. The maximum exit access travel distance shall be 400 feet (122 m) in Group F-1 and S-1 occupancies where all of the following are met:

- 1. The portion of the building classified as Group F-1 or S-1 is limited to one story in height.
- 2. The minimum height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet (7315 mm); and
- 3. The building is equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1 of the International Fire code.

Chapter 11 ACCESSIBLITY. Deleted in its entirety and replaced with the following: **1101 GENERAL**

- **1101.1 Scope.** Any reference to accessibility requirements for physically disabled persons or to IBC Chapter 11 shall be deemed to reference the accessibility requirements adopted by the Town as part of the Building and Construction Regulations Code 2013 Edition Section 10-39.
- **1609.1.1 Determination of wind loads.** Amended by revising the first paragraph and adding an exception 5 to read as follows:

Wind loads on every building or structure shall be determined in accordance with Chapter 6 of ASCE 7-05 and the amendments to Section 1609. The type of opening protection required, the basic wind speed and the exposure category for a site is permitted to be determined in accordance with Section 1609 or ASCE 7-05 and as amended in Section 1609. Wind shall be assumed to come from any horizontal direction and wind pressures shall be assumed to act normal to the surface considered. Exceptions:

- 5. For design wind loads on solid freestanding walls and solid signs per ASCE 7-05, section 6.5.14, figure 6-20 of ASCE 7-02 may be used.
- **1609.4 Exposure category.** Amended by adding a sentence to the end of the paragraph and an exception to read as follows:

For each wind direction considered, an exposure category that adequately reflects the characteristics of ground surface irregularities shall be determined for the site at which the building or structure is to be constructed. Account shall be taken of variations in ground surface roughness that arise from natural topography and vegetation as well as from constructed features. The minimum exposure category shall be Exposure C.

Exception:

Group R-3 occupancy and their associated accessory structures any of which are three stories or less in height may be designed to Exposure B where otherwise permitted.

1612.3 Establishment of flood hazard areas. Deleted in its entirety.

1704.2.1 Special inspector qualifications. Amended to read as follows.

The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted to act as the approved agency and their personnel are permitted to act as the special inspector for the work designed by them.

1809.4 Depth and width of footings. Amended to read as follows:

The minimum depth of footings below the undisturbed ground surface shall be 18 inches (457 mm). The minimum footing width shall be 12 inches (305mm).

2209.1 Storage Racks. Amended by adding a second paragraph to read as follows:

All racking systems specified in this section shall be required to be secured or anchored in place when in use or permanently installed. The design of such securement or

anchorage shall be designed by a registered design professional, or shall follow the manufactures installation guidelines.

Table [P] 2902.1. Footnote (h) added applicable to the entire table to read as follows:

- h. The number of fixtures required shall be as stated unless rational submitted by the permit applicant and approved by the building official indicates a different requirement. A minimum of one unisex restroom shall be provided.
- **3006.6 Plumbing systems.** Amended by adding a second sentence at the end of the subsection to read as follows:

Hydraulic fluids contained in pits or sumps and pumps as required by any federal, state or local jurisdiction shall be conveyed through a sand/oil interceptor to the sanitary sewer or shall be collected in tanks or drums sized to capture three times the volume of the hydraulic system.

- **3109 SWIMMING POOL ENCLOSURES AND SAFETY DEVICES.** Deleted in its entirety.
- **3411** ACCESSIBILITY FOR EXISTING BUILDINGS. Deleted in its entirety.
- **3412.2 Applicability.** Insert the date 9-8-58 in the first sentence.
- C102.2 One-story unlimited area. Amended to read as follows:

The area of a one-story Group U agricultural building shall not be limited if the building is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width and is provided with an approved automatic sprinkler system throughout in accordance with Section 903.3.1.1.

- **K103.1 Types of permits.** The last four (4) words of the exception deleted and replaced with "Development Services Department".
- **K103.2 Work Exempt from permit.** Exceptions 6 and 7 added as follows:
 - 6. A permit shall not be required for the installation, alteration, or repair of electrical wiring, apparatus or equipment for the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of

intelligence by a serving agency in the exercise of its function as a serving utility. In addition a permit shall not be required for area lighting and associated wiring installed and maintained under contract with the serving agency.

7. Refer to amendments to International Building Code, 2012 edition, Section 105.2 number 16.

K105.5 Construction documents. Amended to read as follows:

The registered design professional shall submit to the building official two (2) or more complete sets of signed and sealed construction documents for the alternative engineered design. The construction documents shall include floor plans and a diagram of the work.

K107 PREFABRICATED CONSTRUCITON. Deleted in its entirety.

K108.1 Testing. Add the following to the last sentence:

....or an approved agency.

K111.4 Nonmetallic – sheathed cable. Deleted.

K111.6 Smoke Alarm Circuits. Deleted.

Sub Sec. 10-31-4 Amendments to International Residential Code, 2012 Edition

R101.1 Title. Insert the words "Town of Gilbert" as the name of the jurisdiction.

R102.4. Referenced codes and standards. Add the following sentence after the first paragraph and before the exception.

See also amendments to International Building Code 2012 edition section 101.4 Referenced Codes.

R105.2 Work exempt from permit. Amended as follows:

Building:

- 2. Amended to read Fences not over three feet (914 mm) high.
- 11. Added to read Flag poles not over 30 feet (6096 mm) in height.
- 12. Added to read Equipment screen walls not over 5 feet (1524 mm) high and not utilized as a perimeter/property line fence.
- 13. Added to read Window replacement with same style window in same opening. Egress requirements must be maintained.
- 14. Added to read Re-roofing not requiring a structural change.
- 15. Added to read Water softeners
- 16. Added to read When installed by an Arizona licensed contractor, solar photovoltaic systems, solar water heating systems, wind turbine systems, and replacements of solar, gas (of equal or less BTU/CFH rating) and electric (of equal or less amperage/voltage rating) water heating systems/appliances (not including tankless systems) that are listed and labeled by a nationally recognized third-party testing agency, indicating that the products are in compliance with nationally accepted applicable building, engineering, and safety standards.

Electrical:

6. Added to read – See Building exemption #16 above.

Gas

4. Added to read – See Building exemption #16 above

Mechanical:

9. Added to read – See Building exemption #16 above.

Plumbing:

Added to read – See Building exemption #16 above.

R108.5 Refunds. Refer to Building Code amendment, IBC section 109.6.

R108.7 Reinspections. Added. Refer to Building Code amendment, IBC section 109.7.

R109.1.2 Plumbing, mechanical, gas and electrical systems inspections. Amended to read as follows:

Rough inspection of plumbing, mechanical, gas and electrical systems shall be made prior to covering or concealment and before fixtures or appliances are set or installed.

R109.1.4 Frame and masonry inspection. Amended to read as follows:

Inspection of framing and masonry construction shall be made after the roof, masonry, all framing, firestopping, draftstopping and bracing are in place and after the rough plumbing, mechanical and electrical are complete.

R112 BOARD OF APPEALS. Deleted in its entirety and revised to read as follows:

R112. BOARD OF APPEALS.

R112.1 General. Refer to Building Code as amended. IBC Section 113.1.

R112.2 Limitations on authority. Refer to Building Code as amended. IBC Section 113.2.

R113.1 Unlawful acts. Amended to read as follows:

It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this code or any code referenced herein, or cause, or allow same to be done, in conflict with or in violation of any of the provisions of this code.

R115 UNSAFE STRUCTURES. New section added to read as follows:

R115.1 General. Refer to Building Code, IBC Section 116.

Table R301.2(1). Insert the following:

Ground Snow Load: N/A

Wind speed: 90 mph, Exposure B, 3 second gust

Topographic effects: No Seismic Design Category: B Weathering: NEGLIGIBLE

Frost Line Depth: 12"

Termite: MODERATE TO HEAVY

Decay: NONE TO SLIGHT

Winter Design Temperature: 34 degrees F Ice Shield Under-Layment Required: N/A

Flood Hazards: (a) January 16, 1980, (b) July 19, 2001

Air Freezing Index: 0 Mean Annual Temp.: 0

Table R302.6 Dwelling/garage separation. Amended by adding footnote (a) as follows:

From all habitable room above the	Not less than 5/8-inch type X gypsum			
garage	board or equivalent (a)			

a. In buildings with an automatic fire sprinkler system, including the private garage, the separation shall be permitted to be limited to a minimum ½-inch gypsum board applied to the garage side.

R308.4.5 Glazing and Wet Surfaces. Add the following to the exception:

This exception does not apply to any of the aforementioned amenities located in a bathroom. All glazing in bathrooms must comply with R308.4.5 above.

R310.1 Emergency escape and rescue required. Amend 3rd sentence to read as follows: Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) measured from the finished floor. (The rest of section to remain the same)

R310.2.2 Drainage. Deleted in its entirety.

R313 Automatic Sprinkler Systems. Deleted in its entirety. Refer to Town of Gilbert Fire Code for fire sprinkler requirements.

R315.3 Where required in existing dwellings. Amend to read as follows:

When alterations, repairs or additions requiring a permit occur in existing dwellings that have attached garages or in existing dwellings within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in accordance with section R315.1. Exception:

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.

R401.3 Drainage. New exception 2 added. Re-number existing exception as exception 1: Exception:

- 1. (text unchanged)
- 2. Added to read Where drainage design is part of an overall subdivision design prepared by a registered professional engineer in conformance to acceptable design standards.

R502.11.4 Truss design drawings. The 1st sentence is deleted.

The International Residential Code, **2006 Edition**, Chapter 11, ENERGY EFFICIENCY, shall be amended as follows:

N1101.2 Compliance. Shall be amended by adding a new section after the first sentence to read as follows:

Field verification/inspection shall be the responsibility of the owner/builder.

N1103.2.1 Insulation. Shall be amended by adding a new exception 2 to read as follows and re-numbering existing exception as exception 1:

Exception:

- 1. (text unchanged)
- 2. The use of Table N1103.2.1

TABLE N1103.2.1

Trade-off Options for R-8 Duct Insulation

AC, Insulation and Fenestration Requirements by Component (a)

		Duct Insulation (R-Value)		Fenestration (c)		Insulation R-Value	
Climate	SEER	Unconditioned	Floor	III .	GHCC	Wall	0.11
Zone 2	Rating	Space	Trusses (d)	U Factor	SHGC	Cavity	Ceiling
IECC (b)	13	8	6	.75	.40	13	30
Requirement	15	· ·		.73	.40	13	30
Ontion A	1.4			7.5	40	12	20
Option A	14	6	6	.75	.40	13	30
			_	- 1		-10	20
Option B	13	6	6	.64	.35	13	30
		_	_				
Option C	13	6	6	.75	.40	19	30
	National energy efficiency programs such as Energy Star, Energy Star Plus, Engineered for Life.						
0 1 1		ments for Living,					
Option D	404.4 of the 2	ds shall be approv 2004 IECC.	ea by the Buil	aing Official ti	nrougn moaiii	cation, as state	ea in Section
					mbination of f		
Option E	13	6	6		ere the annual	•	
				_	annual energy t. (See IECC S		
		Requirement. (See IECC Section 404)					

- a. R-values are minimums. U-factors and SHGC are maximums. R-19 shall be permitted to be compressed into a 2x6 cavity.
- b. From Table 402.1 in the 2004 IECC Supplement and Table 402.1.1 in the 2006 IECC.
- c. The fenestration U-factor column includes skylights. The SHGC column applies to all glazed fenestration.
- d. Per the Exception to 403.2.1 uninsulated ducts are permitted when they are located completely inside the building envelope.

The International Residential Code, **2012 Edition**, Chapter 11, ENERGY EFFICIENCY, shall be amended as follows:

Note: Chapter 11 of the 2012 IRC is voluntary. Chapter 11 of the 2006 IRC is a minimum requirement. The following energy amendments apply only if the **2012** version is selected for use.

N1101.15 (**R401.2**) **Compliance.** Amended by adding the following:

Field verification/inspection shall be the responsibility of the owner/builder.

N1101.15.1 (R401.2.1) New subsection added to read as follows:

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.

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.

N1101.17 (R401.4) New section added to read as follows:

All mandatory 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.

N1103.2.1 (**R403.2.1**) **Insulation.** Exception 2 added. Re-number existing exception as exception 1:

Exception:

- 1. (text unchanged)
- 2. Added to read 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 .035 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 (R103.1.1), N1101.15.1 (R401.2.1), or N1104 (R404).

N1103.2.2.1 (R403.2.2.1) Sealed air handler. Deleted.

M1307 APPLIANCE INSTALLATION. New subsection added to read as follows:

M1307.7 Liquefied petroleum gas appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

M1411.6 Locking access port caps. Deleted.

M1503.4 Makeup air required. Amended to read as follows:

Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m3/s) shall be mechanically or naturally provided with makeup air at a rate approximately equal to the difference between the exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception: Where all appliances located within the conditioned space of the dwelling are of sealed combustion, power vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute shall be provided with a makeup air at a rate approximately equal to the difference between the exhaust air rate and 600 cubic feet per minute. Such makeup air shall not be required to be automatically controlled to start and operate simultaneously with the exhaust system.

G2406.2.1 (303.3.1) New subsection to read as follows:

Liquefied Petroleum Gas Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2407.6.1 (304.6.1) Two-Permanent-Openings Method. Amended by adding the following after the 1st paragraph:

For LPG appliances, any duct serving the lower opening shall be at floor level and slope to the outdoors without traps or pockets.

G2415.8 (404.8) Piping in solid floors. New sentence added after the last sentence of the subsection to read as follows:

These installations shall be limited to the use of corrugated stainless steel tubing installed without joints.

G2415.12 (404.12) Minimum burial depth. Deleted in its entirety and revised to read as follows:

Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

G2415.17.3 (**404.17.3**) **Tracer.** Amended to read as follows:

An insulated copper tracer wire or other approved conductor shall be installed adjacent to underground nonmetallic piping. Access shall be provided to the tracer wire or the wire shall terminate above ground at each end of the nonmetallic piping. The tracer wire shall be not less than 18 AWG.

G2417.4 (406.4) Test pressure measurement. Deleted in its entirety and revised to read as follows:

This inspection shall be made after all piping authorized by the permit has been installed and prior to concealment. An additional inspection is required after all portions thereof which are to be covered or concealed are so concealed and before any fixtures or appliances have been attached thereto. This inspection shall include an air, Co2 or nitrogen pressure test, at which time the gas piping shall stand a pressure of not less than ten (10) pounds per square inch (68.9 kPa) gauge pressure, or at the discretion of the Administrative Authority, the piping and valves may be tested at a pressure of at least six (6) inches (152.4mm) of mercury, measured with a manometer or slope gauge. Test pressures shall be held for a length of time satisfactory to the Administrative Authority, but in no case for less than fifteen (15) minutes, with no perceptible drop in pressure. For welded piping, and piping carrying gas at pressures in excess of fourteen (14) inches (0.4m) water column pressure, the test pressure shall not be less than sixty (60) pounds per square inch (413.4 kPa) and shall be continued for a length of time satisfactory to the Administrative Authority, but in no case for less than thirty (30) minutes. These tests shall be made using air, Co2, or nitrogen pressure only and shall be made in the presence of the Administrative Authority. All necessary apparatus for conducting tests shall be furnished by the permit holder.

P2503.5.1 Rough plumbing. Exception added after 1st paragraph to read as follows:

Exception: Air testing of plastic pipe shall be permitted if specifically allowed by manufacturer's specifications.

(The rest of section to remain the same)

P2503.7 Water-supply system testing. Exception added to read as follows:

Exception:

Air testing of plastic pipe shall be permitted if specifically allowed by manufacturer's specifications.

P2801.5 Required pan. Amended to read as follows:

Where a storage tank-type water heater or a hot water storage tank is installed in an attic or furred space where water leakage from the tank will cause damage, the tank shall be installed in a galvanized steel pan having a material thickness of not less than 0.0236 inch (0.6010 mm) (No. 24 gage), or other pans approved for such use. Listed pans shall comply with CSA LC3.

P2803.6.1 Requirements for discharge pipe. Item number 2 deleted and items number 5 and 10 are revised to read as follows:

- 5. Discharge to an indirect waste receptor or to the outdoors.
- 10. Shall terminate not less than 6 inches (152 mm) and not more than 24 inches (610 mm) above the adjacent ground surface.

P3009 Gray Water Recycling Systems. Deleted in its entirety.

Table E3603.1. Service conductor and grounding electrode conductor sizing. New column added as follows:

CONDUCTOR TYPES AN (Parallel sets of 1/0 and lar raceway or in separate raceway	Service or Feeder Rating (Amperes)		
Copper	Aluminum and copper-clad	≤30°C (86°F)	> 30°C (86°F)
(AWG)	aluminum	,	, ,
	(AWG)		
4	2	100	
3	1	110	
2	1/0	125	100
1	2/0	150	125
1/0	3/0	175	150
2/0	4/0	200	175
	or two sets of 1/0		
3/0	250 kcmil	225	200
	or two sets of 2/0		
4/0	300kcmil	250	225
or two sets of 1/0	or two sets of 3/0		
250 kemil	350 kcmil	300	250
or two sets of 2/0	or two sets of 4/0		
350 kemil	500	350	300
or two sets of 3/0	or two sets of 250 kcmil		
400 kcmil	600	400	350
or two sets of 4/0	or two sets of 300 kcmil		
500 kcmil	750 kcmil		400

(Minimum grounding electrode conductor size and footnotes to remain)

E3609.3 Bonding for other systems. Deleted in its entirety.

E3902.2 Garage and accessory building receptacles. Amend by adding the following: Exceptions:

- 1. Receptacles that are not readily accessible.
- 2. A single receptacle or a duplex receptacle for 2 applications located within dedicated space for each appliance that in normal use is not easily moved from one place to another, and that is cord-and-plug connected.

Section 10-32 ELECTRICAL CODE

Sub Sec. 10-32-1 Adoption of Electrical Code

Sub Sec. 10-32-2 National Electrical Code Amendments

Sub Sec. 10-32-1 Adoption of Electrical Code

That certain document, three (3) copies each of which are on file in the office of the Town Clerk, being marked and designated as the "National Electrical Code, 2011 Edition" published by the National Fire Protection Association, as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition" is hereby adopted as the Electrical Code of the Town, for regulating the installation, alteration and maintenance of all electrical installations in the Town, and is hereby referred to, and made a part hereof as though fully set forth in this Section.

Sub Sec. 10-32-2 Amendments to National Electrical Code, 2011 Edition

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel. Amend as follows:

- (A) Dwelling Units
- (2) Exceptions added as follows:

Exceptions:

- 1. Receptacles that are not readily accessible.
- 2. A single receptacle or a duplex receptacle for 2 applications located within dedicated space for each appliance that in normal use is not easily moved from one place to another, and that is cord-and- plug connected.
- 230.11 Performance Testing. All service entrance equipment and associated equipment rated 1000 amperes or more, or where otherwise required by the servicing utility company, or registered design professional shall be performance tested (high potential testing) when first installed on site. The test shall be conducted in accordance with instructions that shall be provided with the equipment. A written record of the test shall be made and shall be available to the authority having jurisdiction.

250.94 Bonding for other systems. Deleted in its entirety.

Table 310-15(B)(7). Conductor Types and Sizes for 120/240-Volt and 120/208-Volt, 3-Wire, Single-Phase Dwelling Services and Feeders. Conductor Types RHH, RHW, RHW-2, THHN, THHW, THW-2, THWN, THWN-2, XHHW, XHHW-2, SE, USE, USE-2 – New column added as follows:

Conductor (AWG or kcmil)				
Copper	Aluminum or Copper-Clad Aluminum	Service or Feeder Rating (Amperes)		
		$\leq 30^{\circ} (86^{\circ} \text{ F})$	> 30° C (86° F)	
4	2	100		
3	1	110		
2	1/0	125	100	
1	2/0	150	125	
1/0	3/0	175	150	
2/0	4/0	200	175	
3/0	250	225	200	
4/0	300	250	225	
250	350	300	250	
350	500	350	300	
400	600	400	350	
500	750		400	

Section 10-33 MECHANICAL CODE

Sub Sec. 10-33-1 Adoption of Mechanical Code Sub Sec. 10-33-2 Amendments to Mechanical Code

Sub Sec. 10-33-1 Adoption of Mechanical Code

That certain document, three (3) copies of which are on file in the office of the Town Clerk, being marked and designated as the "International Mechanical Code, 2012 Edition" published by the International Code Council, Inc., as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition", is hereby adopted as the Mechanical Code of the Town, for regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of heating, ventilating, cooling, refrigeration systems, incinerators, and other miscellaneous heat-producing appliances in the Town, and is hereby referred to and made a part hereof as though fully set forth in this Section.

Sub Sec. 10-33-2 Amendments to Mechanical Code, 2012 Edition

101.1 Title. Insert the words "Town of Gilbert" as the name of the jurisdiction.

102.8 Referenced codes and standards. Amended by adding the following at the end of the paragraph:

See also amendments to International Building Code 2012 edition section 101.4 Referenced Codes.

- **106.2 Permits not required**. Number 9 added:
 - 9. Added to read refer to amendments to International Building Code, 2012 edition, section 105.2, number 16.
- **106.4.1 Approved construction documents.** Amend the first sentence to read as follows: When the code official issues the permit where construction documents are required, the construction documents shall be approved in writing or by stamp. (The rest of the section remains the same).
- **106.4.4 Extensions.** Deleted in its entirety. Refer to International Building Code 2012 edition section 105.5
- **106.5 Fees.** Deleted in its entirety.
- **108.4 Violation penalties.** Deleted in its entirety. Refer to International Building Code 2012 edition section 114.4
- **108.5 Stop work orders.** Deleted in its entirety. Refer International Building Code 2012 edition section 115.
- **109 MEANS OF APPEAL** Deleted in its entirety. Refer to International Building Code 2012 edition section 113.

Section 10-34 PLUMBING CODE

Sub Sec. 10-34-1 Adoption of Plumbing Code Sub Sec. 10-34-2 Amendment to Plumbing Code

Sub Sec. 10-34-1 Adoption of Plumbing Code

That certain document, three (3) copies of which are on file in the office of the Town Clerk, being marked and designated as the "International Plumbing Code, 2012 Edition" published by the International Code Council, Inc. together with appendix B, as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition", is hereby adopted as the Plumbing Code of the Town, for regulating and controlling the design, construction, quality of materials, erection, installation, alteration, repair, location, replacement, addition to, operation and maintenance or use of plumbing systems in the Town, and is hereby referred to, and made part hereof as though fully set forth in this Section.

Sub Sec. 10-34-2 Amendments of Plumbing Code, 2012 Edition

101.1 Title. Insert the words "Town of Gilbert" as the name of the jurisdiction.

102.8 Referenced codes and standards. Amended by adding the following at the end of the paragraph:

See also International Building Code 2012 edition section 101.4 Referenced Codes.

- **106.2 Exempt Work.** Number 3 added as follows:
 - 3. Added to read Refer to International Building Code, 2012 edition, section 105.2, number 16.
- **106.5.1 Approved construction documents.** Amend the first sentence to read as follows: When the code official issues the permit where construction documents are required, the construction documents shall be approved in writing or by stamp. (The rest of the section remains the same).
- **106.5.4 Extensions.** Deleted in its entirety. Refer to International Building Code 2012 edition section 105.5
- **106.6 Fees.** Deleted in its entirety.
- **Table 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES.** Footnote "e" added applicable to the entire table to read as follows:

The number of fixtures required shall be as stated unless rational submitted by the permit applicant and approved by the building official indicates a different requirement. A minimum of one unisex restroom shall be provided.

410.3 Substitution. The last sentence of the section revised to read as follows:

In other occupancies, where drinking fountains are required, bottled water dispensers or water coolers shall be permitted to be substituted.

- **504.6 Requirements for discharge pipe.** Item number 2 deleted and items number 5 and 10 revised to read as follows:
 - 5. Discharge to an indirect waste receptor or to the outdoors.
 - 10. Shall terminate not less than 6 inches (152 mm) and not more than 24 inches (610 mm) above the adjacent ground surface.
- **504.7.2 Pan drain termination.** Exception added to read as follows:

Exception:

Where structural conditions do not permit extending the drain to the exterior the drain may extend to and terminate not less than 6 inches (152 mm) and not more than 24 inches (610 mm) above the adjacent garage floor surface sloped to drain to the exterior.

- **903.1 Roof extension.** Amended by inserting the number 6 as the number of inches and 152 as the number of mm.
- Chapter 13, Gray Water Recycling Systems. Deleted in its entirety.
- **APPENDIX B, RATES OF RAINFALL FOR VARIOUS CITIES.** Amended to read as follows: Arizona: Gilbert...........6.0

Section 10-35 FUEL GAS CODE

Sub Sec. 10-35-1 Adoption of Fuel Gas Code Sub Sec. 10-35-2 Amendments to Fuel Gas Code

Sub Sec. 10-35-1 Adoption of Fuel Gas Code

That certain document, three (3) copies of which are on file in the office of the Town Clerk, being marked and designated as the "International Fuel Gas Code, 2012 Edition" published by the International Code Council, Inc., as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition", is hereby adopted as the Fuel Gas Code of the Town, for regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of fuel gas systems and gas-fired appliances in the Town, and is hereby referred to and made a part hereof as though fully set forth in this section.

Sub Sec. 10-35-2 Amendments to Fuel Gas Code, 2012 Edition

- **101.1 Title.** Insert the words "Town of Gilbert" as the name of the jurisdiction.
- **102.8 Referenced codes and standards.** Amended by adding the following at the end of the paragraph:

See also International Building Code 2012 edition section 101.4 Referenced Codes.

- **106.2 Permits not required.** Number 3 added as follows:
 - 3. Added to read Refer to International Building Code, 2012 Edition, Section 105.2, number 16.
- **106.5.1 Approved construction documents.** Amend the first sentence to read as follows: When the code official issues the permit where construction documents are required, the construction documents shall be approved in writing or by stamp. (The rest of the section remains the same).
- **106.5.4 Extensions.** Deleted in its entirety. Refer to International Building Code 2012 edition section 105.5
- **106.6 Fees.** Deleted in its entirety.
- **303.3 Prohibited locations.** New subsection added to read as follows:
 - **303.3.1.** Liquefied Petroleum Gas Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.
- **404.8 Piping in solid floors.** New sentence added after the last sentence of the subsection to read as follows:

These installations shall be limited to the use of corrugated stainless steel tubing installed without joints.

404.12 Minimum burial depth. Deleted in its entirety and revised to read as follows: Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

404.12.1 Individual outside appliances. Deleted in its entirety.

404.17.3 Tracer. Amended to read as follows:

An insulated copper tracer wire or other approved conductor shall be installed adjacent to underground nonmetallic piping. Access shall be provided to the tracer wire or the wire shall terminate above ground at each end of the nonmetallic piping. The tracer wire shall be not less than 18 AWG.

406.4 Test pressure measurement. Amended to read as follows and subsections 406.4.1 and 406.4.2 shall be deleted in their entirety:

This inspection shall be made after all piping authorized by the permit has been installed and prior to concealment. An additional inspection is required after all portions thereof which are to be covered or concealed are so concealed and before any fixtures or appliances have been attached thereto. This inspection shall include an air, Co2 or nitrogen pressure test, at which time the gas piping shall stand a pressure of not less than ten (10) pounds per square inch (68.9 kPa) gauge pressure, or at the discretion of the Administrative Authority, the piping and valves may be tested at a pressure of at least six (6) inches (152.4mm) of mercury, measured with a manometer or slope gauge. Test pressures shall be held for a length of time satisfactory to the Administrative Authority, but in no case for less than fifteen (15) minutes, with no perceptible drop in pressure. For welded piping, and piping carrying gas at pressures in excess of fourteen (14) inches (0.4m) water column pressure, the test pressure shall not be less than sixty (60) pounds per square inch (413.4 kPa) and shall be continued for a length of time satisfactory to the Administrative Authority, but in no case for less than thirty (30) minutes. These tests shall be made using air, Co2, or nitrogen pressure only and shall be made in the presence of the Administrative Authority. All necessary apparatus for conducting tests shall be furnished by the permit holder.

Section 10-36 ENERGY CONSERVATION CODE

Sub.Sec. 10-36-1 Adoption of Energy Conservation Code Sub.Sec. 10-36-2 Amendments to Energy Conservation Code

Sub.Sec. 10-36-1 Adoption of Energy Conservation Code

That certain document, three (3) copies of which are on file in the office of the Town Clerk, being marked and designated as the "International Energy Conservation Code, 2006 Edition" published by the International Code Council, Inc., as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition", is hereby adopted as the Energy Conservation Code of the Town, for regulating and governing energy efficient building envelopes and installation of energy efficient mechanical, lighting, and power systems of all buildings or structures in the Town, and is hereby referred to and made a part hereof as though fully set forth in this section. The 2012 International Energy Conservation Code is also adopted as a voluntary code that when used is deemed to be in compliance with the 2006 International Energy Conservation Code.

Sub.Sec 10-36-2 Amendments of Energy Conservation Code

A. The International Energy Conservation Code, **2006 Edition**, Chapter 1, ADMINISTRARTION, shall be amended as follows:

- **101.1 Title.** Insert the words "Town of Gilbert" as the name of the jurisdiction.
- **101.5 Compliance.** Shall be amended to read as follows:

Residential buildings shall meet the provisions of Chapter 4 and the provisions of the International Residential Code as applicable. Commercial buildings shall meet the provisions of Chapter 5.

- **105.1 General.** Shall be amended to read as follows: Field verification/inspection shall be the responsibility of the owner/builder.
- **105.2 Required approvals.** Shall be deleted in its entirety.
- **105.3 Final Inspection.** Shall be deleted in its entirety.
- **105.4 Reinspection.** Shall be deleted in its entirety.

B. The International Energy Conservation Code, **2006 Edition**, Chapter 4, RESIDENTIAL ENERGY EFFICIECY, shall be amended as follows:

- **403.2.1 Insulation.** Shall be amended by adding a new exception 2 to read as follows and renumbering existing exception as exception 1: Exception:
 - 1. (remain unchanged)
 - 2. The use of Table N1103.2.1

TABLE N1103.2.1

Trade-off Options for R-8 Duct Insulation

AC, Insulation and Fenestration Requirements by Component (a)

		Duct Insulation (R-Value)		Fenestration (c)		Insulation R-Value	
Climate Zone 2	SEER Rating	Unconditioned Space	Floor Trusses (d)	U Factor	SHGC	Wall Cavity	Ceiling
IECC (b) Requirement	13	8	6	.75	.40	13	30
Option A	14	6	6	.75	.40	13	30
Option B	13	6	6	.64	.35	13	30
Option C	13	6	6	.75	.40	19	30
Option D	National energy efficiency programs such as Energy Star, Energy Star Plus, Engineered for Life. And Environments for Living, shall be deemed as meeting the requirements for energy compliance. Other methods shall be approved by the Building Official through modification, as stated in Section 404.4 of the 2004 IECC.						
Option E	13	6	6	Any other combination of fenestration and insulation R-Values where the annual energy cost is less than or equal to the annual energy cost of the IECC Requirement. (See IECC Section 404)			

- a. R-values are minimums. U-factors and SHGC are maximums. R-19 shall be permitted to be compressed into a 2x6 cavity.
- b. From Table 402.1 in the 2004 IECC Supplement and Table 402.1.1 in the 2006 IECC.
- c. The fenestration U-factor column includes skylights. The SHGC column applies to all glazed fenestration.
- d. Per the Exception to 403.2.1 uninsulated ducts are permitted when they are located completely inside the building envelope.

Sub.Sec 10-36-2 Amendments to Energy Conservation Code, 2012 Edition

Note: The 2012 IECC is voluntary. The 2006 IECC is a minimum requirement. The following amendments apply only if the **2012** version is selected for use.

A. Chapter 1, ADMINISTRARTION, shall be amended as follows:

C101.1 Title. Insert the words "Town of Gilbert" as the name of the jurisdiction.

C101.2 Scope. Amend by adding the following:

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.

C103.3.1 Approval of construction documents. Amend the first sentence to read as follows:

When the Code Official issues the permit where construction documents are required, the construction documents shall be approved in writing or by stamp. (The rest of the section to remain the same)

C104 Inspections. Deleted in its entirety and amended to read as follows:

Field verification/inspection shall be the responsibility of the owner/builder.

C108.4 Failure to Comply. Deleted in its entirety.

C109 Board of Appeals. Refer to International Building Code 2012 edition section 113 including amendments.

R101.1 Title. Insert the words "Town of Gilbert" as the name of the jurisdiction.

R101.2 Scope. Amend by adding the following:

Group R-2 when defined as a Residential Building by section R202, shall have the option of complying under the Commercial Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Commercial Provisions shall be followed.

R103.3.1 Approval of construction documents. Amend the first sentence to read as follows:

When the Code Official issues the permit where construction documents are required, the construction documents shall be approved in writing or by stamp. (The rest of the section to remain the same)

R104 Inspections. Deleted in its entirety and amended to read as follows: Field verification/inspection shall be the responsibility of the owner/builder.

R108.4 Failure to Comply. Deleted in its entirety.

R109 Board of Appeals. Refer to International Building Code 2012 edition section 113 including amendments.

R401.2.1 Alternative approach for compliance. New subsection added to read as follows: 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. 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.

R401.4 New section added to read as follows:

All mandatory 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.

R403.2.1 Insulation (Prescriptive). New exceptions added to read as follows and existing exception renumbered as exception 1.

Exception:

- 1. (text unchanged)
- 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 .035 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.

R403.2.2.1 Sealed air handler. Deleted

Section 10-37 FIRE CODE

Sub. Sec. 10-37-1 Adoption of Fire Code Sub. Sec 10-37-2 Amendments to Fire Code

Sub. Sec. 10-37-1 ADOPTION OF FIRE CODE

That certain document, three (3) copies of which are on the file in the office of the Town Clerk, being marked and designated as the "International Fire Code, 2012 Edition, published by the International Code Council, Inc., together with appendices B through J and standards there as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition", is hereby adopted as the Fire Code of the Town to regulate and govern the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life and property in the occupancy of buildings and premises, and is hereby referred to and made a part hereof as though fully set forth in this section .

Sub. Sec. 10-37-2 AMENDMENTS TO INTERNATIONAL FIRE CODE, 2012 EDITION

101.1 Title. Insert the words "Town of Gilbert" as the name of the jurisdiction.

105.4.2.2 Electronic Construction Documents. Added as follows:

Construction documents shall be provided in an approved electronic file format upon request by the fire code official.

105.6.8.1 Carbon Dioxide. Added as follows:

Carbon Dioxide (inert and simple asphyxiate) shall require a permit for 200 cubic feet at normal temperature and pressure (NTP).

105.7.17 Limited Access Gates. Added as follows:

A construction permit is required to install or alter all gates, which obstruct a fire apparatus access road.

105.7.18 Smoke control system(s) and equipment. Added as follows:

A construction permit is required to install, extend or alter smoke control system(s) and equipment.

108 Board of Appeals – Deleted in its entirety. Refer to Building Code IBC Section113, as amended.

109.4 Violation Penalties. Insert the following:

Class One Misdemeanor (as the offense), \$2,500 (as the fine) and 6 months (as the amount of time)

109.4.2 Abatement cost recovery. Added as follows:

The cost of abatement shall be assessed against the property owner pursuant to the provisions of Chapter 42 of the Gilbert Town Code.

111.4 Failure to Comply. Insert \$1,000 in first bracket and \$2,500 in second bracket.

202 GENERAL DEFINITIONS

AIRBORNE LANTERNS. Added as follows:

A device or any similar device designed to carry an open flame such as a small <u>candle</u> or fuel cell composed of <u>flammable</u> material as an airborne light. When lit, the <u>flame</u> heats the air inside the lantern, lowering its density and causing the lantern to rise into the air.

FIRE CODE OFFICIAL. Amended as follows:

The fire chief or fire marshal and their designees charged with the administration and enforcement of the code.

OCCUPANCY CLASSIFICATION definitions for the purposes of this code shall be deleted and the Building Code occupancy classifications as amended shall be used as reference.

MODIFIED 13D and 13R SPRINKLER SYSTEM. Added as follows:

The provisions and requirements of NFPA 13D, 13R and the IFC shall apply as appropriate to include fire sprinkler coverage in bathrooms, closets, garages, attached carports, attached covered patios, entry porches and attics.

308.1.2.1 Airborne Lanterns. Added as follows.

The lighting and the release of airborne lanterns shall be prohibited.

308.1.4 Open Flame Cooking Devices. Amended as follows:

Charcoal burners, chimineas, barbecues fixed or portable, and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

- 1. One- and two- family dwellings.
- 2. Deleted in its entirety.
- 3. Deleted in its entirety.

311.2.2 Fire Protection. Exceptions deleted in their entirety.

(The rest of the section to remain the same)

503.6.1 Electric Gates. Added as follows:

An approved key switch and pre-emption sensor shall be required on all new electric gates installed across a fire apparatus access road. The key switch and pre-emption sensor shall be installed in a location as approved by the fire code official. Exception:

1. A pre-emption sensor is optional for a one and two family dwelling.

503.6.2 Manual Security Gates. Added as follows:

An approved dual padlock locking system shall be required on all manual gates installed across a fire apparatus access road. An approved Fire Department pad lock shall be installed on one side and the owner/operator pad lock on the other side.

507.2.3 Water Supply. Added as follows:

Sprinkler water supply shall be a separate connection to looped public water supply and shall not serve domestic water service supply lines or fire hydrants.

Exception:

Detached one and two family dwellings and their accessory structures.

507.2.4 Operation of Valves. Added as follows:

Operation of sprinkler control valves, fire hydrants or street control valves shall be allowed only by properly authorized personnel and shall be accompanied by notification of duly designated parties. When the sprinkler protection, hydrant water is being regularly turned off and on to facilitate connection of newly completed segments, the sprinkler control valves, fire hydrants and street control valves shall be checked at the end of each work period to ascertain that protection is in service, this is the responsibility of the fire prevention program superintendent and recorded and maintained on daily logs until such time the project is completed. Fire department personnel may request access to logs at any time to verify valve control, failure to control or record valves status will constitute a fire code violation for failure to obey orders and notices as required by this code.

507.3 Fire flow. Amended as follows:

Appendix B shall be used to determine fire flow requirements for buildings or portions of buildings and facilities. Open storage areas or yards are subject to approval of the fire code official.

901.2.2 Plan certification for all other fire protection systems. Added as follows:

Plan certification for all other fire protection systems shall be accompanied by a certification of competence when required.

901.2.3 Minimum Design Requirements. Added as follows:

Where an automatic sprinkler system is required in a building of undetermined use, the system design criteria shall meet the maximum use of the occupancy. Use is considered undetermined or speculative if the quantity and combustibility of contents, expected rates of heat release, total potential for energy release, height of stock piles and the presence of flammable and combustible liquids are not available at the time of plan submission.

901.2.4 Water supply hydraulic calculations. Added as follows:

Data for hydraulic calculations shall be based on 90 percent of the available water supply as determined by flow test information taken within the previous 120 days.

901.4.6 Pump and Riser Room Size. Amended as follows:

At the time of construction, a dedicated interior fire pump and automatic sprinkler system riser room shall be provided with adequate space for all equipment necessary for the installation, as defined by the manufacturer, with sufficient working space around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly. Fire pump and automatic sprinkler riser rooms shall have a minimum dimension of 5 feet (1524mm) by 5 feet (1524mm). Access shall be provided through direct exterior access side hinged door(s) with a minimum 32 inch (813mm) clear width and a minimum height of 80 inches (2031mm).

Exception:

- 1. One and two family dwellings and Groups R-2, R-3 and R-4 with 13D and 13R as approved by the fire code official.
- 2. Accessory buildings and structures to one and two family dwellings, R-3 and R-4 occupancies located on the same property and as approved by the fire code official.

901.6.3 Certification. Added as follows:

The building owner shall be responsible for assuring that each fire protection system is maintained in an operable condition at all times. Companies and service personnel providing or conducting inspections, testing, repair, maintenance or installation of fire protection systems and equipment shall possess an appropriate and valid license and/or certificate issued by the Arizona Registrar of Contractors for the type of system and work performed and approved by the fire code official.

Exception:

Detached one and two family dwellings

Sections 903.2 through 903.2.11.3 Deleted in their entirety and replaced with the following: **903.2 Where required.** Added as follows:

An approved automatic sprinkler system shall be installed throughout all levels of all buildings or structures in excess of zero (0) square feet.

Exceptions:

- 1. Detached one family dwellings, Group R-3 and their associated detached accessory structures not including Group R-4.
- 2. Detached telecommunication buildings not exceeding 600 square feet in floor area and not intended for occupancy other than maintenance purposes.
- 3. Detached accessory use structures such as gazebos, ramadas, guardhouses, restroom buildings at golf courses, parks and similar uses.
- 4. Detached canopies of type I or II construction not exceeding 3000 square feet in roof area located a minimum of 10 feet from buildings, structures and property lines.
- 5. Fire rated fabric shade canopies of type I or II framing construction not in excess of 3000 square feet in roof area located a minimum of 10 feet from buildings, structures and property lines.
- 6. Portable storage containers of type I or II construction not in excess of 360 square feet located a minimum of 10 feet from buildings structures, property lines and other containers, with no hazardous materials storage.
- 7. Factory built buildings less than 1,500 square feet used as temporary offices for real estate leasing or construction management and not to exceed 12 months from installation date.

- 8. Detached U occupancies of less than 3,000 square feet and located a minimum of 10 feet from buildings, structures and property lines.
- 9. Covered walkways of type I or II construction with no combustible storage underneath and approved by the fire code official.

903.2.1 Additions to Existing Buildings and Structure. Added as follows:

All additions to existing buildings or structures and all buildings or structures that are expanded by an addition(s) shall be provided with an approved automatic fire sprinkler system throughout all levels complying with section 903.2 Exception:

The maximum aggregate fire area of an addition (s) is less than 1,000 square feet or 10% of the floor area of the existing building or structure, whichever is less.

903.2.2 Change of Occupancy within hazard level 1. Added as follows:

An automatic fire sprinkler system shall be installed when a building, regardless of the building area, under goes a change of occupancy within hazard level 1 as defined by table 903.2.5

903.2.3 Change of Occupancy Classification over 5,000 square feet. Added as follows:

An automatic fire sprinkler system shall be installed in any building 5,000 square feet or greater that under goes any change of occupancy classification.

903.2.4 Change of Occupancy Classification less than 5,000 square feet. Added as follows:

An automatic fire sprinkler system shall be installed in any building less than 5,000 square feet that under goes a change of occupancy classification to a higher Level as defined by Table 903.2.5

Table 903.2.5
Existing Building Hazard Levels

Hazard Level	Building Occupancy Type*
1 (highest)	A, H, I, R-1, R-2, R-4
2	F-1, S-1
3	E, F-2, S-2
4 (lowest)	B, M, R-3, U

^{*}Occupancies as defined in the Town of Gilbert Building Code.

903.3.1.3 NFPA 13D or 13R sprinkler systems. Amended as follows:

Automatic sprinkler systems installed in one and two-family dwellings and Group R-3 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or 13R.

903.3.1.4 NFPA 13D or 13R Modified sprinkler system. Added as follows:

An automatic sprinklers system installed in Group R-4 shall be permitted to be installed throughout in accordance with NFPA 13D or 13R modified sprinkler system.

903.4.4 Sprinkler System Supervision, Alarms and Monitoring R-4. Added as follows:

All valves controlling the water supply for automatic sprinkler systems and water flow switches on sprinkler systems installed in R-4 occupancies shall be electronically supervised by a listed fire alarm control unit. Alarm, supervisory and trouble signals shall

be automatically transmitted to an approved supervising station. Sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system.

907.1.3.1 Fire Alarm Control Panel Location. Added as follows:

The fire alarm control panel shall be installed in the automatic sprinkler system riser room or a system controlling fire alarm annunciation panel shall be installed in the automatic sprinkler system riser room. When an annunciation panel is present in the automatic sprinkler system riser room, a map indicating the location of the main fire alarm control panel shall be present.

907.2.11.5 Group R-3 Child care – Special Systems. Added as follows:

A child care facility that provides care for 6 to 10 children of any age for less than 24 hours when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group R-3. At least one smoke detector shall be located within this child care area and provided with third party monitoring.

5003.4.1 Electronic filing. Added as follows:

The fire code official is hereby authorized to establish procedures for the electronic submittal of hazardous materials information. The format shall be determined by the fire code official.

Chapter 80 REFERENCED STANDARDS

Add NFPA 96 - 2011

Figure D103.1 96-Foot Diameter Cul-De-Sac. Amended as follows:

The minimum turning radius shall be 35 feet inside and 55 feet outside face of curb.

D104.2 Buildings exceeding 62,000 square feet in area. Exception deleted.

D106.1 Projects having more than 100 dwelling units. Exception deleted.

Section 10-38 ENFORCED REMOVAL OR ABATEMENT OF PROHIBITED CONDITIONS CODE

Sub Sec. 10-38-1 Failure to Act Sub Sec. 10-38-2 Payment of Costs

Sub Sec. 10-38-3 Addition to Other Powers

Sub Sec. 10-38-1 Failure to Act

If any person fails to take action to remove or abate a prohibited condition as specified in the Building Code, Electrical Code, Plumbing Code, Mechanical Code or Fire Code, as adopted and amended, within 15 days after receiving written notice and demand for removal or abatement thereof, the Town, through the Town Manager, Code Compliance Officer or Town Attorney is hereby empowered to take whatever

steps are necessary to remove or abate such prohibited condition including, but not limited to, entry onto the premises, prohibiting entry onto the premises, issuing a stop order, filing an action at law or in equity for relief in the Superior Court of Maricopa County, or obtaining an order from the Magistrate Court of the Town pending prosecution.

Sub Sec . 10-38-2 Payment of Costs

The person who commits, continues, permits or allows such prohibited condition shall bear all costs and fees of removal or abatement including, but not limited to, towing charges, equipment rental, use or purchase, Town employee time, and Attorney's fees as actually incurred by Town for such removal or enforcement. If such costs are not paid to the Town within thirty (30) days of assessment, the costs may be collected against the person as in civil proceedings.

Sub Sec. 10-38-3 Addition to Other Powers

The enforcement powers for removal or abatement set forth in this section shall be in addition to any other powers or remedies provided for by law, and in addition to any criminal penalties provided for by this code.

Section 10-39 ARIZONANS WITH DISABILITIES ACT

Sub Sec.10-39-1 Adoption of Arizonans with Disabilities Act
Sub Sec.10-39-2 Amendments to Arizonans with Disabilities Act

Sub Sec.10-39-1 Adoption of Arizonans with Disabilities Act

That certain document, three (3) copies of which are on file in the office of the Town Clerk being marked and designated as the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4), which incorporates The federal "2010 ADA Standards for Accessible Design,", as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition", is hereby referred to, adopted and made a part hereof as though fully set forth in this section, as the Arizonans with Disabilities Act of the Town, and shall apply to new construction and alterations and are not required in buildings or portions of existing buildings that do not meet the standards and specifications.

Sub Sec.10-39-2 Amendments to Arizonans with Disabilities Act

A. The Arizonans with Disabilities Act § 41-1492.07 "Exemptions for private clubs and religious organizations." Reserved.

Section 10-40 GREEN CONSTRUCTION CODE

Sub Sec. 10-40-1 Adoption of Green Construction Code as a voluntary code

Sub Sec. 10-40-2 Amendments to Green Construction Code

Sub Sec.10-40-1 Adoption of Green Construction Code as a voluntary code

That certain document, three (3) copies of which are on file in the office of the Town Clerk being marked and designated as the "International Green Construction Code 2012 edition" published by the International Code Council, Inc., as amended by the "Building and Construction Regulations Code of the Town of Gilbert, Arizona – 2013 Edition", is hereby adopted as the Green Construction Code of the Town as a voluntary code to encourage regulation of the impact of buildings and structures on the environment and is hereby referred to and made a part hereof as though fully set forth in this section.

Sub Sec.10-40-2 Amendments to Green Construction Code, 2012 Edition

101.1 Title. Insert the words "Town of Gilbert" as the name of the jurisdiction.

301.2 Jurisdictional Requirements. Deleted in its entirety.

302 Jurisdictional Requirements. Deleted in its entirely.