AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FRISCO, TEXAS, REPEALING ORDINANCE NOS. 13-10-69 AND 13-10-73; AMENDING DIVISION 4 (RESIDENTIAL CODE), ARTICLE IV (TECHNICAL CODES), CHAPTER 18 (BUILDINGS AND BUILDING REGULATIONS), PART II OF THE FRISCO CODE OF ORDINANCES, ORDINANCE NO. 06-03-31, AS AMENDED, ADOPTING THE 2015 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE, INCLUDING APPENDIX J, SAVE AND EXCEPT THE DELETIONS AND ADDITIONS SET FORTH HEREIN; REGULATING THE CONSTRUCTION, ALTERATION, MOVEMENT, ENLARGEMENT, REPLACEMENT, REPAIR, EQUIPMENT, USE AND OCCUPANCY, LOCATION, REMOVAL, AND DEMOLITION OF DETACHED ONE AND TWO-FAMILY DWELLINGS AND MULTIPLE SINGLE-FAMILY DWELLINGS (TOWNHOUSES) NOT MORE THAN THREE STORIES IN HEIGHT WITH A SEPARATE MEANS OF EGRESS AND RELATED ACCESSORY STRUCTURES IN THE CITY OF FRISCO, TEXAS; PROVIDING A PENALTY CLAUSE, SAVINGS/REPEALING CLAUSE, SEVERABILITY CLAUSE AND AN EFFECTIVE DATE; AND PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF.

WHEREAS, the City Council of the City of Frisco, Texas ("City Council") has investigated and determined that it would be advantageous, beneficial and in the best interest of the citizens of the City of Frisco, Texas ("Frisco") to amend Division 4 (Residential Code), Article IV (Technical Codes), Chapter 18 (Buildings and Building Regulations), Part II of the Frisco Code of Ordinances, Ordinance No. 06-03-31, as amended ("Code of Ordinances"), by adopting the 2015 Edition of the International Residential Code, including Appendices G, J and K, save and except the deletions and additions set forth below; and

WHEREAS, the City Council has investigated and determined that in order to most effectively make the deletions and additions necessary to Division 4 (Residential Code), Article IV (Technical Codes), Chapter 18 (Buildings and Building Regulations), Part II of the Frisco Code of Ordinances, it is in the best interest of the citizens of Frisco to repeal, in their entirety, Ordinance Nos. 13-10-69 and 13-10-73, replacing, except as otherwise provided herein, the same with this Ordinance, adopting the 2015 Edition of the International Residential Code, including Appendix J, save and except the deletions and additions set forth below.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FRISCO, TEXAS:

SECTION 1: Findings Incorporated. The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.

SECTION 2: Repeal of Ordinance Nos. 13-10-69 and 13-10-73. Ordinance Nos. 13-10-69 and 13-10-63 are hereby repealed, in their entirety, and replaced by this Ordinance. The effective date of the repeal discussed in this Section shall not occur until the effective date of this Ordinance at which time Ordinance Nos. 13-10-69 and 13-10-73 shall be repealed. Such repeal shall not abate any pending prosecution and/or lawsuit or prevent any prosecution and/or lawsuit

from being commenced for any violation of Ordinance No. 13-10-69 and 13-10-73 occurring before the effective date of this Ordinance.

SECTION 3: Amendment to Division 4 (Residential Code), Article IV (Technical Codes), Chapter 18 (Buildings and Building Regulations), Part II of the Frisco Code of Ordinances. Division 4 (Residential Code), Article IV (Technical Codes), Chapter 18 (Buildings and Building Regulations), Part II of the Frisco Code of Ordinances is hereby amended for the sole purpose of adopting new residential code regulations as set forth in the International Residential Code, copyrighted by the International Code Council, Inc., including Appendix J, save and except the deletions and additions set forth in Exhibit A, attached hereto and incorporated herein for all purposes, regulating the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal, and demolition of detached one-family and two-family dwellings and multiple single-family dwellings (townhouses) not more than three (3) stories in height with a separate means of egress and related accessory structures within Frisco ("2015 International Residential Code"). The 2015 International Residential Code is made a part of this Ordinance as if fully set forth herein. Three (3) copies of the 2015 International Residential Code are on file in the office of the City Secretary of Frisco being marked and designated as the 2015 International Residential Code. The deletions and additions set forth in Exhibit A are located on Frisco's website under Development Services.

SECTION 4: Savings/Repealing. All provisions of any ordinance in conflict with this Ordinance are hereby repealed to the extent they are in conflict; but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall the repeal prevent a prosecution from being commenced for any violation if occurring prior to the repeal of the ordinance. Any remaining portion of conflicting ordinances shall remain in full force and effect.

SECTION 5: Penalty Provision. Any person, firm, corporation or business entity violating this Ordinance shall be deemed guilty of a misdemeanor, and upon conviction therefore, shall be fined a sum not exceeding TWO THOUSAND AND NO/100 DOLLARS ($2,000.00), and each and every day that such violation continues shall be considered a separate offense; provided, however, that such penal provision shall not preclude a suit to enjoin such violation. Frisco retains all legal rights and remedies available to it pursuant to local, state and federal law.

SECTION 6: Severability. Should any section, subsection, sentence, clause or phrase of this Ordinance be declared unconstitutional and/or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. Frisco hereby declares that it would have passed this Ordinance, and each section, subsection, clause or phrase thereof, regardless of whether any one or more sections, subsections, sentences, clauses or phrases is declared unconstitutional and/or invalid.

SECTION 7: Effective Date. This Ordinance shall become effective upon its passage and publication as required by the City Charter and by law.

[The remainder of this page intentionally left blank.]

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF FRISCO, TEXAS, on this 6th day of December, 2016.

Maher Maso, Mayor

ATTESTED AND CORRECTLY RECORDED:

Jenny Page, City Secretary

APPROVED AS TO FORM:

Abernathy, Roeder, Boyd & Hullett, P.C.
Ryan D. Pittman, City Attorneys

Dates of Publication: December 9 & 16, 2016, *Frisco Enterprise*

Exhibit A
CITY OF FRISCO AMENDMENTS/DELETIONS
2015 INTERNATIONAL RESIDENTIAL CODE[1]

The following deletions and additions to the 2015 International Residential Code are hereby approved and adopted (*i.e.* deletions evidenced by ~~strikethrough~~ and additions evidenced by underline)[2]:

Chapter 1. Scope and Administration of the 2015 International Residential Code is amended as follows:

Section R102 Applicability of the 2015 International Residential Code is amended as follows:

R102.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2. Whenever amendments have been adopted by Frisco, as they exist or may be further amended, to the referenced codes and standards, each reference to said codes and standards shall be considered to reference the amendments and any future amendments thereto. ***[Remainder unchanged]***

Section R105 Permits of the 2015 International Residential Code is amended as follows:

R105.2 Work exempt from permit. ***[Paragraph remains unchanged.]***

Building:

~~1. One-story detached accessory structures, provided the floor area does not exceed 200 square feet (18.58 m^2).~~

~~2. Fences not over 7 feet (2134 mm) high.~~

~~5. Sidewalks and driveways.~~

Plumbing:

3. Water heater replacement is not exempt from the permit requirements and inspections provided herein.

Section R106 Construction Documents of the 2015 International Residential Code is amended as follows:

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[1] Unless otherwise expressly provided herein, all phrases, words and/or terms used herein shall have the same meaning ascribed to the same in the 2015 International Residential Code (regardless of whether such phrases, words and/or terms are italicized herein).

[2] Other italicized and bold notations are provided throughout for informational purposes only. By way of example only, "***[Paragraph remains unchanged.]***".

R106.1 Submittal documents. Submittal documents consisting of construction documents, and other data shall be submitted in two or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional. Foundation and framing plans shall be submitted with each application. These plans shall be designed by an engineer licensed by the State of Texas and shall bear that engineers seal. The engineer must also meet all requirements for registration with the City. All Residential Dwellings shall be designed by a registered Professional Engineer in the State of Texas and all drawings and documentation must be signed and sealed. Design Engineers must be registered with Frisco and provide proof of Professional Liability Insurance with a minimum coverage of one million dollars.

Section R107 Temporary Structures and Uses of the 2015 International Residential Code is amended as follows:

R107.1 General. The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause. Such permits shall comply with the provisions of Frisco's Zoning Ordinance and the International Building Code regulations for temporary structures, as they exist or may be amended.

Section R108 Fees of the 2015 International Residential Code is amended as follows:

R108.2 ~~Schedule of permit fees~~ Permit, Inspection and Miscellaneous Consolidated Fee Schedule. ~~On buildings, structures, electrical, gas, mechanical and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.~~ The following Permit, Inspection and Miscellaneous Consolidated Fee schedule shall apply to the construction, alternation, movement, occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple three stories in height with a separate means of egress and related accessory structures within Frisco:

Permit, Inspection and Miscellaneous Consolidated Fee Schedule

Building Permit Fees		
Commercial Building Permit	*%60 of Table Value	Table 1-A
Residential Building Permit		Table 1-A

TABLE 1-A*	
$1 to $500.00	$23.50
$500 .01 to $2,000.00	$23.50 for the first $500 plus $3.05 for each additional $100, or fraction thereof, to and including $2,000.
$2,000.01 to $25,000.00	$69.25 for the first $2,000 plus $14.00 for each additional $1,000.00, or fraction thereof, to and including $25,000.
$25,000.01 to $50,000.00	$391.25 for the first $25,000 plus $10.10 for each additional $1,000, or fraction thereof, to and including $50,000.
$50,000.01 to $100,000.00	$643.75 for the first $50,000 plus $7.00 for each additional $1,000, or fraction thereof, to and including $100,000
$100,000.01 to $500,000.00	$993.75 for the first $100,000 plus $5.00 for each additional $1,000, or fraction thereof, to and including $500,000.
$500,000.01 to $1,000,000.00	$3233.75 for the first $500,000 plus $4.75 for each additional $1,000, or fraction thereof, to and including $1,000,000.
$1,000,000.01 and above	$5,608.75 for the first $1,000,000 plus $3.15 for each additional $1,000 or fraction thereof.
Inspection outside of normal business hours	$150.00

* Commercial building permit fees are assessed on the basis of %60 of the calculated value of Table 1-A

Miscellaneous	
Certificate of Occupancy (Change of business name, ownership or use)	$100.00
Certificate of Occupancy (Non-Conforming Use)	$25.00
Demolition Permit	$50.00
Reroof Permit	$150.00
Detached Accessory Building (<100 sq ft)	$25.00
Detached Accessory Building (≥100 sq ft, <160 sq ft)	$50.00
Detached Accessory Building (≥160 sq ft)	Table 1-A
Duplicate Permit Placard and Reports	$10.00
Commercial Irrigation - Per meter	
Single Meter	$250.00
Second Meter add +	$175.00
Three and Greater Meters	$500.00
Residential Irrigation Permit	$185.00
Reinspection Fee (Residential)	$30.00
Reinspection Fee (Commercial)	$35.00
Spa Permit	$75.00
Structure Move Permit	$50.00
Swimming Pool (Above Ground)	$100.00
Swimming Pool (Below Ground)	$200.00
Swimming Pool (Below Ground w/ spa)	$275.00
Temporary Building Permit	$50.00

Electrical Permit Fees	
For issuance of **each** permit	$30.00
For issuance of **each** supplemental permit	$10.00
All inclusive Residential permit by permit Square Footage	$0.03 / per sqft
All inclusive Commercial permit by permit Square Footage	$0.04 / per sqft
Electrical Meter Release	$45.00
Each Residential Appliance	$4.75
Each Commercial Appliance	$4.75
Each Temporary Services	$23.50
Each Misc Apparatus	$18.20
Motors (Horsepower) ea.	
Up to 1	$4.75
1, not over 10	$12.30
10, not over 50	$24.60
50, not over 100	$49.50
over 100	$74.50
Service Installation Replacement (Amps) ea.	
Up to 200	$65.00
200, up to 1000	$85.00
Over 1000 amps	$150.00

Mechanical Permit Fees	
For issuance of **each** permit	$30.00
For New finish-out/alterations	$0.05/gsf
For issuance of **each** supplemental permit	$10.00
Furnaces	
Installation or relocation of **each** forced air unit up to and including 100,000 Btu/h	$13.25
Installation or relocation of **each** forced air unit over 100,000 Btu/h	$16.25
Installation or relocation of **each** floor furnace	$13.25
Installation or relocation of **each** suspended heater, recessed wall heater or floor-n	$13.25
Appliance Vents	
Installation, relocation or replacement of **each** vent	$7.00
Repairs or Additions	
Repair of, Alteration of or Addition of **each** heating or cooling appliance	$12.25
Boiler, Compressor and Absorption Systems	
Installation or relocation of **each** boiler or compressor to including 3 horsepower or up to and including 100,000 Btu/h	$13.25
Installation or relocation of **each** boiler or compressor to including 3 - 15 horsepower or over 100,000 - 500,000 Btu/h	$24.25
Installation or relocation of **each** boiler or compressor to including 15 - 30 horsepower or over 500,000 - 1,000,000 Btu/h	$33.25
Installation or relocation of **each** boiler or compressor to including 30 - 50 horsepower or over 1,000,000 - 1,750,000 Btu/h	$49.50
Installation or relocation of **each** boiler or compressor to over 50 horsepower or over 1,750,000 Btu/h	$82.75
Air Handlers	
Installation or relocation of **each** air-handling to and including 10,000 cubic feet	$9.50
Note: This does not apply to an air handling unit which is a part of a factory assembled appliance	
Installation or relocation of **each** air-handling over 10,000 cubic feet	$16.50
Evaporative Coolers	
Installation or relocation of **each** evaporative cooler other than portable type	$9.50
Ventilation and Exhaust	
Installation or relocation of **each** ventilation van fan connected to a single duct or h	$6.50
Miscellaneous - Installation or relocation of each fuel gas piping systems	
One to Four outlets	$5.00
Each additional outlet exceeding four	$1.00

Plumbing Permit Fees	
For issuance of **each** permit	$30.00
For New finish-out/alterations	$0.09/gsf
For issuance of **each** supplemental permit	$10.00
For **each** plumbing fixture on one trap or a set of fixtures on one trap (including water, drainage piping and backflow protection therefore)	$7.00
For **each** building sewer and each trailer park sewer	$15.00
Rainwater systems - per drain (inside building)	$7.00
For **each** cesspool (where permitted)	$25.00
For **each** private sewage disposal system $	$40.00
For **each** water heater and / or vent $	$7.00
For **each** gas-piping of one to five outlets	$5.00
For **each** additional gas piping system outlet, per outlet	$1.00
For **each** industrial waste pretreatment interceptor including its trap and vent, except kitchen type grease interceptors functioning as fixture traps	$7.00
For **each** installation, alteration or repair of water piping and / or water treating equ	$7.00
For **each** repair or alteration of drainage or vent piping, each fixture	$7.00
For **each** lawn sprinkler system on any one meter including backflow protection dev	$35.00
For atmospheric-type vacuum breakers	
1 to 5	$5.00
over 5, **each**	$1.00
For **each** backflow protective device other than atmospheric type vacuum breakers:	
2 inch (51mm) diameter and smaller	$7.00
over 2 inch (51mm)	$15.00
For **each** graywater system	$40.00
For initial installation and testing for a reclaimed water system	$30.00
For **each** annual cross-connection testing of a reclaimed water system (excluding in	$30.00
For **each** medical gas piping system serving one to five inlet(s) / outlet(s) for a spec	$50.00
For **each** additional medical gas inlet(s) / outlet(s)	$5.00

R108.2.2 Plan review fees. Plan review fees shall be required when, in the judgment of the building official, submitted documents require special review by a third party plan review service. The plan review fee shall be sixty-five percent (65%) of the building permit fee. The plan review fees specified in this section are separate and in addition to the required building permit fees.

R108.5 Refunds. The building official is authorized to establish a refund policy.

The building official may authorize refunding of any fee paid hereunder, which was erroneously paid or collected.

The building official may 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 may 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 plan reviewing is done.

The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment.

Section R109 Inspections of the 2015 International Residential Code is amended as follows:

R109.1.4 Frame and masonry inspection. ***[Paragraph remains unchanged.]***

Design engineer must perform a structural framing inspection and provide the building official with signed and sealed document stating that the house framing has been inspected and approved. This inspection must take place prior to requesting a framing inspection from the building official. The engineer shall physically verify all structural corrections.

The engineer shall provide to the building official a letter of final acceptance stating that the framing has been constructed in compliance with the design prior to the issuance of a Certificate of Occupancy, as defined in Frisco's Zoning Ordinance, as it exists or may be amended.

Section R112 Board of Appeals of the 2015 International Residential Code is amended as follows:

~~**R112.2.1 Determination of substantial improvement in flood hazard areas.**~~ ***[Entire subsection deleted.]***

~~**R112.2.2 Criteria for issuance of a variance for flood hazard areas.**~~ ***[Entire subsection deleted.]***

Section R115 Site Maintenance of the 2015 International Residential Code is added as follows:

R115 Site maintenance. Provisions for sanitation and construction debris shall be provided for all construction sites.

R115.1 Facilities required. Each permitted construction project in Frisco shall be provided with at least one (1) temporary portable toilet facility for use by employees and subcontractors. Builders or contractors with multiple permits in a subdivision shall provide one portable toilet for a maximum five permits. Portable toilet facilities shall be located in the rear portion of lots where alley access is available. Portable toilet facilities shall not be placed in street or alley right-of- ways. The builder or permit holder shall be responsible for ensuring that toilet facilities are maintained in a sanitary condition. The building official may, at his discretion, require that additional toilet facilities be provided if these requirements prove to be insufficient.

R115.2 Trash receptacles. Each permitted construction project in Frisco shall be provided with receptacles of a sufficient size and number to contain jobsite trash and debris, including, but not limited to, food wrappers and containers from workers lunches. Trash receptacles shall be maintained on site at all times during construction activities. The builder or permit holder shall be responsible for ensuring that trash receptacles are utilized by all employees and subcontractors, and that all trash is removed at intervals adequate to maintain a clean job site. In addition to the required receptacles, each lot shall be provided with screen fencing to prevent windblown trash and debris from adjacent lots. Other methods of construction debris containment may be approved if compliance can be demonstrated and maintained.

Chapter 2. Definitions of the 2015 International Residential Code is amended as follows:

Section R202 Definitions of the 2015 International Residential Code is amended as follows:

~~**ACCESSORY STRUCTURE.** A structure that is accessory to and incidental to that of the dwelling(s) and that is located on the same lot.~~

ACCESSORY STRUCTURE or ACCESSORY BUILDING. Any structure, either attached or detached from the main dwelling, the use of which is incidental to that of the main structure and located on the same lot. Accessory structures include, but are not limited to patio covers, arbors, gazebos, cabanas, outdoor kitchens and/or recreational fire enclosures, trellis, and structures/sheds or the like. A permit is required for all accessory structures.

TOWNHOUSE. A single-family dwelling unit designed for occupancy by one household and constructed in a group of ~~three or more~~ three (3) to eight (8) attached dwelling units separated by property lines in which each unit extends from foundation to roof and with a yard or public way on at least two sides.

Chapter 3. Building Planning of the 2015 International Residential Code is amended as follows:

Section 301 Design Criteria of the 2015 International Residential Code is amended as follows:

R301.2 Climatic and geographic design criteria. ***[Paragraph remains unchanged.]***

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

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY[f]
	Speed[d] (mph)	Topographic effects[k]	Special wind region[l]	Wind-borne debris zone[M]	
5 lb/ft^2	115 (3-sec-gust)/76 fastest mile	NO	NO	NO	A

SUBJECT TO DAMAGE FROM		
Weathering[a]	Frost line depth[b]	Termite[c]
moderate	6”	very heavy

WINTER DESIGN TEMP[e]	ICE BARRIER UNDERLAYMENT REQUIRED[h]	FLOOD HAZARDS[g]	AIR FREEZING INDEX[i]	MEAN ANNUAL TEMP[j]
22ºF	YES	local code	150	64.9ºF

R302.2 Townhouses. ~~Common walls separating townhouse shall be assigned a fire-resistive rating in accordance with Section 302.2 Item 1 or 2. The common wall shared by two townhouse shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in accordance with Chapters 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section 302.4.~~ Each individual townhouse shall be structurally independent in accordance with Section R302.2.4. Each townhouse roof shall be covered with a minimum class C roof covering. The roof decking or sheathing shall be of noncombustible materials or approved fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of 5/8-inch (15.9 mm) Type X gypsum board installed directly beneath the roof decking or sheathing and supported by a minimum of nominal 2-inch (51 mm) ledgers attached to the sides of the roof framing members, for a minimum distance of 4 feet (1219 mm) on each side of the wall or walls. Openings or penetrations in the roof are not permitted within 4 feet (1219 mm) of the common walls.

R302.2.4 Structural independence. Each individual townhouse shall be structurally independent.

Exceptions:

~~5. Townhouses separated by a common wall as provided in Section R302.2, Item 1 or 2.~~

R302.3 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by wall and/or floor assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E 119 or UL263. Fire-resistance rated floor-ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend to the underside of the roof sheathing. Two family dwelling units that are also divided by a property line through the structure shall be separated as required in Section R302.2 for townhouses.

Exceptions: ***[Exceptions remain unchanged.]***

R302.5.4 Drywall penetrations. Drywall penetrations in the separation required by Section R302.6 between the garage and habitable rooms shall have a tight fitting, non-combustible latching cover or separated by solid fireblocking when in excess of 16 square inches (0.0103 m^2) in area.

R302.6 Dwelling/garage fire separation. ***[Paragraph remains unchanged.]***

TABLE R302.6
DWELLING/GARAGE SEPARATION

SEPARATION	MATERIAL
From the residence and attics	Not less than ½-inch gypsum board or equivalent applied to the garage side at attics and not less than 5/8-inch Type X gypsum board or equivalent applied to the garage side separating the garage from habitable space.
From all habitable rooms above the garage	Not less than 5/8-inch Type X gypsum board or equivalent
Structures(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than ~~½~~5/8-inch Type X gypsum board or equivalent
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than 5/8-inch Type X gypsum board or equivalent applied to the interior side of exterior walls that are within this area

R302.7 Under stair protection. Enclosed accessible space under stairs shall have walls, under-stair surface and any soffits protected on the enclosed side with 5/8 ~~1/2~~ inch (15.9 ~~12.7~~ mm) Type X gypsum board or construction equal to a 1 hour fire-resistance-rating.

Section R313 Automatic Fire Sprinkler Systems of the 2015 International Residential Code is amended as follows:

R313.2 One- and two-family dwelling automatic fire systems. As allowed by State law, ~~A~~an automatic residential fire sprinkler system shall be designed and

installed in one- and two-family dwellings in accordance with Section P2904 or NFPA 13D.

~~**Exception:**~~ ***[Entire exception deleted.]***

~~**R313.2.1 Design and installation**~~ ***[Entire subsection deleted.]***

R313.3 Applicability of Ordinance No. 08-01-12, Exhibit "A", Section R325. Until State law allows Section R313.2 to apply and pursuant to §1301.551, TEX. OCC. CODE, Frisco restates, reaffirms and ratifies the following regulation contained in Exhibit "A" of Ordinance No. 08-01-12:

SECTION R325 AUTOMATIC FIRE PROTECTION

Section R325.1. Automatic fire protection required: Automatic fire protection systems in accordance with NFPA 13D or NFPA 13R shall be provided in all one and two-family dwellings with a gross floor area 6000 square feet (1830 m²) or greater. For the purposes of this section, gross floor area means conditioned space and attached garage areas. Unenclosed covered areas, such as porches and balconies, are not included. Automatic fire protection systems shall be provided in all buildings containing three (3) or more dwelling units. In the event that an addition or alteration increases the gross floor area from less than 6000 square feet to equal to or greater than 6000 square feet the entire dwelling shall be retro fitted with an automatic fire protection system in accordance with NFPA 13D or NFPA 13R.

Where requirements in this section conflict with requirements found in the International Fire Code, adopted by Frisco, the most stringent requirements shall apply.

Exception: This Section R313.3 shall be automatically repealed and deleted if State law allows Section R313.2 to apply.

Section R315 Carbon Monoxide Alarms of the 2015 International Residential Code is amended as follows:

Section R315.2.2 Alterations, repairs and additions. ***[Paragraph remains unchanged.]***

Exception:

2. Installation, alteration or repairs of electrical powered. ***[Remainder unchanged]***

R315.3 Location. Carbon monoxide alarms in dwelling units shall be installed outside of each separate sleeping area in the immediate vicinity of bedrooms and in the immediate vicinity of attached garage entrances. ***[Remainder unchanged]***

Section R319 Site Address of the 2015 International Residential Code is amended as follows:

R319.1 Address identification. Buildings or structures shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property and from alleyway, fire lanes and other vehicular entrances to the rear of the building. Address identification characters shall contrast with their background. All letters or numbers shall be permanently attached to the building. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) height with a stroke width of not less than 0.5 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

Section R322 Flood-resistant Construction of the 2015 International Residential Code is amended as follows:

R322.1 General. Buildings and structures, when permitted to be constructed in whole or in part in flood hazard areas, including A or V Zones and Coastal A Zones, as established in Table R301.2(1), and substantial improvement and restoration of substantial damage of building and structures in flood hazard areas, shall be designed and constructed in accordance with the provisions contained in this section and by local provisions as applicable. Building and structures that are located in more than one flood hazard area shall comply with the provisions associated with the most restrictive flood hazard area. Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24.

Chapter 4. Foundations of the 2015 International Residential Code is amended as follows:

Section 401 General of the 2015 International Residential Code is amended as follows:

R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection so as to not create a hazard. Lots shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048 mm). The slope at any spot on any residential lot shall not exceed 1 vertical unit in 3 horizontal units (*i.e.* 33%).

Section R403 Footings of the 2015 International Residential Code is amended as follows:

R403.1.8 Foundations on expansive soils. Foundation and floor slabs for buildings located on expansive soils shall be designed as drought tolerant

and in accordance with Section 1808.6 of the International Building Code, The American Society of Civil Engineers Texas Section Recommended Practice for the Design of Residential Foundations Version 2 as it currently exists or may be amended, or other accepted industry standards that may be acceptable to the building official. All foundations shall be designed by a registered Professional Engineer in the State of Texas and all drawings and documentation must be signed and sealed. Design Engineers must be registered with Frisco and provide proof of Professional Liability Insurance with a minimum coverage of one million dollars. Documentation shall include:

1. Design letter referencing soils report number, date of report, and soils engineer name; specific location including lot, block, and subdivision; specific design criteria including soil bearing capacity, plasticity index, and potential vertical rise. The engineer shall also approve a concrete mix design with performance criteria based on soils and seasonal conditions.

2. Signed and sealed drawings clearly indicating strand and reinforcement placement, pier size, depth, location, and reinforcing, beam size and location, and special details. Design calculations must be included. One ledger size copy of plans and calculations will be included in the permanent permit file for each project.

3. Design engineer must perform a pre-pour inspection and provide the building official with signed and sealed document stating that the foundation has been inspected and approved. This inspection must take place prior to requesting a foundation inspection from the building official. The engineer shall verify concrete mix design and seasonal conditions during placement, and verify tensioning and elongation of cables.

4. Rough grading of lot after form removal to maintain drainage away from foundation during the construction process.

5. Prior to receiving a Certificate of Occupancy, a final survey indicating final grade elevations and verifying positive drainage away from the foundation.

6. The engineer must provide to the building official a letter of final acceptance stating that the foundation has been placed in compliance with the design prior to the issuance of a Certificate of Occupancy.

Chapter 7. Wall Covering of the 2015 International Residential Code is amended as follows:

Section R703 Exterior Covering of the 2015 International Residential Code is amended as follows:

R703.6 Wood shakes and shingles. ~~Wood shakes and shingles shall conform to CSSB Grading Rules for Wood Shakes and Shingles~~. Wood shakes and shingles are prohibited as exterior wall covering.

Chapter 9. Roof Assemblies of the 2015 International Residential Code is amended as follows:

Section R902 Fire Classification of the 2015 International Residential Code is amended as follows:

R902.3. Minimum Roof Class. All roof coverings shall be a minimum Class C. All individual replacement shingles or shakes shall be a minimum Class C.

Exception: Non-classified roof coverings shall be permitted on buildings of U occupancies having not more than 120 square feet (37.5 m²) of projected roof area. When exceeding 120 square feet (37.5 m²) of projected roof area, buildings of U occupancies may use non-rated non-combustible coverings.

Section R907 Reroofing of the 2015 International Residential Code is amended as follows:

R907.1 General. Materials and methods of application used for re-covering or replacing an existing roof covering shall comply with the requirements of Chapter 9. All individual replacement shingles or shakes shall comply with Section R902.2.

Chapter 11. [RE] Energy Efficiency of the 2015 International Residential Code is deleted in its entirety and replaced with the following:

Section N1101 General of the 2015 International Residential Code is added as follows:

N1101.1 Scope. This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

N1101.2 Compliance. Compliance shall be demonstrated by meeting the requirements of the residential provisions of 2015 International Energy Conservation Code as adopted.

Chapter 13. General Mechanical System Requirements of the 2015 International Residential Code is amended as follows:

Section M1305 Appliance Access of the 2015 International Residential Code is amended as follows:

M1305.1.3 Appliances in attics. Attics containing appliances shall be provided with an opening and a clear and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length measured along the center

line of the passageway from the opening to the appliance. The passageway shall have continuous unobstructed solid flooring in accordance with Chapter 5 not less than 24 inches (610 mm) wide. A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present along all sides of the appliance where access is required. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest appliance. At a minimum, access to the attic space shall be provided by one of the following:

1. Permanent stairs or ladder fastened to the building.

2. A pull down stair with a 300 lb. (136 kg) rating.

3. An access door from an upper floor.

Exceptions: ***[Exceptions remain unchanged.]***

Chapter 14. Heating and Cooling Equipment and Appliances of the 2015 International Residential Code is amended as follows:

Section M1411 Heating and Cooling Equipment of the 2015 International Residential Code is amended as follows:

M1411.3.1 Auxiliary and secondary drain systems. In addition to the requirements of Section M1411.3, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components will occur as a result of overflow from the equipment drain pan or stoppage in the condensate drain piping. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8 unit vertical in 12 units horizontal (1-percent slope). Methods 3 and 4 below may not be used for cooling or evaporator coils located in attics. Drain piping shall be a minimum of ¾-inch (19 mm) nominal pipe size. One of the following methods shall be used: ***[Remainder unchanged]***

Chapter 15. Exhaust Systems of the 2015 International Residential Code is amended as follows:

Section M1502 Clothes Dryer Exhaust of the 2015 International Residential Code is amended as follows:

M1502.4.6 Length identification. Where the exhaust duct equivalent length exceeds 35 feet (10 668 mm) the equivalent length of the exhaust duct shall be identified on a permanent label or tag. The label or tag shall be located ~~within 6 feet (1829 mm) of~~ at the exhaust duct connection.

~~M1502.4.4 Dryer exhaust duct power ventilator,~~ is deleted in its entirety]

~~M1502.4.5.3 Dryer exhaust duct power ventilator,~~ is deleted in its entirety]

Section M1503 Range Hoods of the 2015 International Residential Code is amended as follows:

M1503.4 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m^3/s) shall be mechanically or naturally provided with makeup air at a rate approximately equal to the difference between exhaust air rate and 400 cubic feet per minute (0.19 m^3/s). Such makeup air systems shall be equipped with not less than one damper. Each damper shall be a gravity damper or an electrically operated damper that automatically opens when the exhaust system operates. Dampers shall be accessible for inspection, service, repair and replacement without removing permanent construction or any other ducts not connected to the damper being inspected, serviced, repaired or replaced.

Exception: Where all appliances within the building envelope are of sealed combustion, direct power-vented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute (0.28 m^3/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m^3/s) 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.

Section M1506 Exhaust Ducts and Exhaust Openings of the 2015 International Residential Code is amended as follows:

M1506.1 Ducts. Where exhaust duct construction is not specified in this chapter, construction shall comply with Chapter 16. All exhaust ducts shall be metallic.

Chapter 24 Fuel Gas of the 2015 International Code is amended as follows:

Section G2411 Electrical Bonding of the 2015 International Residential Code is amended as follows:

G2411.1 (310.1) Pipe and tubing other than CSST. Each above-ground portion of a gas piping system other than corrugated stainless steel tubing (CSST)~~that is likely to become energized~~ shall be electrically continuous and bonded to the service equipment enclosure, the grounded conductor at the service, the grounding electrode conductor where sufficient size, or to one or more of the grounding electrodes used. The bonding jumper(s) shall be sized in accordance with Table E3908.12. The points of attachment of the bonding jumper(s) shall be accessible. Steel gas piping systems shall be bonded at the point of service entry into the dwelling.~~ an effective ground-fault current path. Gas piping, other than CSST, shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance.~~ In addition, bonding is required for all metal air ducts, metal chimneys, appliance vents and other metal structures that are likely to become energized.

Section G2412 General of the 2015 International Residential Code is amended as follows:

G2412.5 (401.5) Identification. ***[Paragraph remains unchanged.]***

Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an approved tag. The tags shall be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"Warning: ½ to 5psi gas pressure. Do Not Remove!"

Section G2415 Piping System Installation of the 2015 International Residential Code is amended as follows:

G2415.12 (404.12) Minimum burial depth. Underground piping systems shall be installed a minimum depth of ~~12~~ 18 inches (~~305~~ 458 mm) below grade~~, except as provided for in Section G2415.12.1~~.

~~**G2415.12.1 (404.12.1) Individual outside appliances.**~~ ***[Entire section deleted.]***

G2415.17.2 (404.17.2) Connections. Connections outdoors and underground between metallic and plastic piping shall be made only with transition fittings conforming to ASTM D 2513 Category I or ASTM F 1973. Compression-type mechanical joints are not permitted below ground.

Section G2417 Inspection, Testing and Purging of the 2015 International Residential Code is amended as follows:

G2417.4 (406.4) Test pressure measurement. Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. ~~Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure.~~

G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall ~~not less than one and one-half times the proposed maximum working pressure, but not less than 3 psig (20 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.~~ be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½"), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14)

inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing.

Section G2427 Venting of Appliances of the 2015 International Residential Code is amended as follows:

G2427.6.9 Support of gas vents. Gas vents shall be supported and spaced in accordance with the manufacturer's installation instructions. Supports shall be installed at every offset and at the vent pipe where it extends through the roof flashing, roof jack, or roof thimble. Adjustable fittings shall not be used as lateral support for roof penetration.

Section G2439 Clothes Dryer Exhaust of the 2015 International Residential Code is amended as follows:

~~G2439.7.4.3 Dryer exhaust duct power ventilator length,~~ is deleted in its entirety]

G2439.7.5 Length identification. Where the exhaust duct equivalent length exceeds 35 feet (10 668 mm) the equivalent length of the exhaust duct shall be identified on a permanent label or tag. The label or tag shall be located ~~within 6 feet (1829 mm) of~~ at the exhaust duct connection.

Section G2445 Unvented Room Heaters of the 2015 International Residential Code is amended as follows:

G2445.2 (621.2) Prohibited use. ~~One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.~~ Unvented room heaters shall not be used interior to dwelling units regulated by this code.

Chapter 25. Plumbing Administration of the 2015 International Residential Code is amended as follows:

Section P2503 Inspection and Test of the 2015 International Residential Code is amended as follows:

P2503.8.2 Testing. Reduced pressure principle, double check, double check detector and pressure vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and at ~~least annually~~ regular intervals as required by applicable state or local provisions.

Chapter 26. General Pluming Requirements of the 2015 International Residential Code is amended as follows:

Section P2603 Structural and Piping Protection of the 2015 International Residential Code is amended as follows:

P2603.5.1 Sewer depth. ~~Building sewers that connect to private sewage disposal systems shall be a minimum of [12] inches (304mm) below finished grade at the point of septic tank connection.~~ Building sewers shall be a minimum of 12 inches (304 mm) below grade.

Section 2713.3 Bathtub and whirlpool bathtub valves. ***[Paragraph remains unchanged]*** Temperature limiting devices shall be located where accessible and without removal of a tub skirt that is permanently affixed.

Chapter 28. Water Heaters of the 2015 International Residential Code is amended as follows:

Section P2801 General of the 2015 International Residential Code is amended as follows:

P2801.9 Water heaters installed in attics or with living space below. Water heaters other than tankless, when located in attic space or a space located above living space, shall be equipped with a WAGS, FLOODSTOP™ or other approved device to automatically shut off the water supply if a water leak is detected.

Exception: Replacement of water heaters that were permitted on or before 12/31/2013, shall not be required to be equipped with an automatic shut off device.

Section P2804 Relief Valves of the 2015 International Residential Code is amended as follows:

P2804.6.1 Requirements for discharge pipe. The discharge piping serving a pressure-relief valve, temperature relief valve or combination valve shall:

2. Discharge through an air gap. ~~located in the same room as the water heater.~~

5. Discharge to ~~the floor, to the pan serving the water heater or storage tank, to a~~ an indirect waste receptor or to the outdoors.

Chapter 29. Water Supply and Distribution of the 2015 International Residential Code is amended as follows:

Section P2902 Protection of Potable Water Supply of the 2015 International Residential Code is amended as follows:

P2902.5.3 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by ~~an atmospheric vacuum breaker, a pressure vacuum breaker assembly~~ a double check valve assembly or a reduced pressure principle backflow preventer assembly. ~~A valve shall not be installed downstream from an atmospheric vacuum breaker.~~ Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer installed above grade.

Section P2903 Water-supply System of the 2015 International Residential Code is amended as follows:

P2903.3.1 Maximum pressure. The static water pressure shall be not greater than 80 psi (551 kPa). ~~When main pressure exceeds 80 psi (551 kPa), an approved pressure-reducing valve conforming to ASSE 1003 or CSA B356 shall be installed on the domestic water branch main or riser at the connection to the water service pipe.~~ An approved water pressure reducing valve conforming to ASSE 1003 or CSA B356 with strainer shall be installed on all water distribution systems to protect the system from excessive pressure in the public water mains. Pressure shall be adjusted to a minimum of 40 psi and a maximum of 80 psi. When the pressure reducing valve is installed indoors, it shall be located in the garage, and installed in an insulated wall separating the garage and living space of the dwelling. Unions shall be provided to allow for service and replacement when located indoors. When installed outdoors it shall be installed in an accessible location in a minimum 12”W x 18”L x 12”D valve box and be provided with minimum 12” of porous rock below it to aid in drainage. A permanent marker identifying the location of the PRV shall be placed on the exterior veneer of the structure.

P2903.8.3 Support and Protection. Manifolds shall be installed between parallel rows of studs, or in a chase that allows piping to connect freely to manifold without creating stresses on the connections. [Remainder unchanged]

P2903.8.4 Valving. Fixture valves, ~~when installed~~ shall be located ~~either~~ at the fixture ~~or~~ and at the manifold. ~~If~~ Valves ~~are~~ installed at the manifold, ~~they~~ shall be labeled indicating the fixture served.

Chapter 30. Sanitary Drainage of the 2015 International Residential Code is amended as follows:

Section P3005 Drainage system of the 2015 International Residential Code is amended as follows:

P3005.4 Drain pipe sizing. Drain pipes shall be sized according to drainage fixture unit (d.f.u.) loads. The size of the drainage piping shall not be reduced in size in the direction of flow. No building sewer, including cleanouts, shall be less

than 4 inches (102 mm) or smaller than the building drain. The following general procedure is permitted to be used:

Chapter 31. Vents of the 2015 International Residential Code is amended as follows:

Section P3111 Combination Waste and Vent System of the 2015 International Residential Code is deleted in its entirety.

Section P3112 Island fixture Venting of the 2015 International Residential Code is amended as follows:

P3112.3 Vent installation below the fixture flood level rim. ~~The vent located below the flood level rim of the fixture being vented shall be installed as required for drainage piping in accordance with Chapter 30, except for sizing. The vent shall be sized in accordance with Section P3113.1.~~ Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drain board height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest exterior wall location and then through the roof to the open air or may not be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9mm/m) back to the drain shall be maintained. The return bend used under the drain board shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 radius), a ninety (90) degree (1.6 radius) and forty-five (45) degree (0.79 radius) elbow in the order named. Pipe sizing shall be as elsewhere required in this code. The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent. The lowest point of the island fixture vent shall connect full size to the drainage system. The connection shall be to a vertical drain pipe or to the top half of a horizontal drain pipe. Cleanouts shall be provided in the island fixture vent to permit rodding of all vent piping located below the flood level rim of the fixtures. Rodding in both directions shall be permitted through a cleanout.

Section P3114 Air Admittance Valves of the 2015 International Residential Code is amended as follows:

P3114.3 Where permitted. Individual vents, branch vents, circuit vents and stack vents ~~shall~~ may be permitted to terminate with a connection to an air admittance valve. Individual and branch type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain. Air admittance valves shall only be installed with the prior approval of the building official.

Chapter 34. General Requirements of the 2015 International Residential Code is amended as follows:

Section E3406 Electrical conductors and Connections of the 2015 International Residential Code is amended as follows:

E3406.2 Conductor material. Conductors used to conduct current shall be of copper ~~except~~ as ~~otherwise~~ provided in Chapters 34 through 43. Where the conductor material is not specified, the material and the sizes given in these chapters shall apply to copper conductors. Where other materials are used, the conductor sizes shall be changed accordingly.

E3406.3 Minimum size of conductors. The minimum size of conductors for feeders and branch circuits shall be 12 ~~14~~ AWG copper~~ and 12 AWG aluminum~~. The minimum size of service conductors shall be as specified in Chapter 36. The minimum size of class 2 remote control, signaling and power-limited circuits conductors shall be as specified in Chapter 43.

Section E3609 Bonding of the 2015 International Residential Code is amended as follows:

E3609.7 Bonding other metal piping. Where installed in or attached to a building or structure, metal piping systems, including gas piping, capable of becoming energized shall be bonded to the service equipment enclosure, the grounded conductor at the service, the grounding electrode conductor where of sufficient size, or to the one or more grounding electrodes used. The bonding conductor(s) or jumper(s) shall be sized in accordance with Table E3908.12 using the rating of the circuit capable of energizing the piping. The equipment grounding conductor for the circuit that is capable of energizing the piping shall be permitted to serve as the bonding means. The points of attachment of the bonding jumper(s) shall be accessible. <u>If a steel manifold is used, a bonding clamp shall be attached to the steel manifold. The corrugated stainless steel tube portion of a CSST gas piping system shall not be used as the bonding attachment point. In addition, bonding is required for all metal air ducts, metal chimneys, appliance vents and other metal structures that are likely to become energized.</u>

Chapter 37. Branch Circuit and Feeder Requirements of the 2015 International Residential Code is amended as follows:

Section E3702 Branch Circuit Ratings of the 2015 International Residential Code is amended as follows:

E3702.5 Branch circuits serving multiple loads or outlets. General-purpose branch circuits shall supply lighting outlets, appliances, equipment or receptacle outlets, and combinations of such. Multi-outlet branch circuits serving lighting or receptacles shall be limited to a maximum branch-circuit rating of 20 amperes. <u>The maximum number of receptacle outlets connected to general purpose branch circuits shall be ten (10) for 15-amp circuits, and thirteen (13) for 20 amp circuits.</u>

Chapter 44. Swimming Pools, Spas and Hot Tubs of the 2015 International Residential Code is amen as follows:

CHAPTER 44

SWIMMING POOLS, SPAS AND HOT TUBS

SECTION 4401
GENERAL

4401.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

4401.2 Pools in flood hazard areas. Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Section AG101.2.1 or AG101.2.2.

> **Exception:** Pools located in riverine flood hazard areas which are outside of designated floodways.

4401.2.1 Pools located in designated floodways. Where pools are located in designated floodways, documentation shall be submitted to the building official which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the jurisdiction.

4401.2.2 Pools located where floodways have not been designated. Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

SECTION 4402
DEFINITIONS

4402.1 General. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool."

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See "Swimming pool."

IN-GROUND POOL. See "Swimming pool."

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling, or a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE. See "Swimming pool."

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water more than 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION 4403
SWIMMING POOLS

4403.1 In-ground pools. In-ground pools shall be designed and constructed in compliance with ANSI/APSP/ICC-5.

4403.2 Above-ground and on-ground pools. Above-ground and on-ground pools shall be designed and constructed in compliance with ANSI/APSP/ICC-4.

4403.3 Pools in flood hazard areas. In flood hazard areas established by Table R301.2(1), pools in coastal high-hazard areas shall be designed and constructed in compliance with ASCE 24.

SECTION 4404
SPAS AND HOT TUBS

4404.1 Permanently installed spas and hot tubs. Permanently installed spas and hot tubs shall be designed and constructed in compliance with ANSI/APSP/ICC-3.

4404.2 Portable spas and hot tubs. Portable spas and hot tubs shall be designed and constructed in compliance with ANSI/APSP/ICC-6.

SECTION 4405
BARRIER REQUIREMENTS

4405.1 Application. The provisions of this appendix shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to

provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

4405.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa, shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

2. Openings in the barrier shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions, except for normal construction tolerances and tooled masonry joints.

4. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 13/4 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 13/4 inches (44 mm) in width.

5. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 13/4 inches (44 mm) in width.

6. Maximum mesh size for chain link fences shall be a 21/4-inch (57 mm) square, unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 13/4 inches (44 mm).

7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 13/4 inches (44 mm).

8. Access gates shall comply with the requirements of Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool, and shall be self-closing and have a self-latching device. Gates, other than pedestrian access gates, shall have a self-

latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:

8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate; and

8.2. The gate and barrier shall have no opening larger than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

9. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:

9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346;

9.2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or

9.3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described herein.

10. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:

10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access; or

10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

4405.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Item 9 of Section AG105.2.

4405.4 Prohibited locations. Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them. There shall be a minimum of 36 inches from the barrier and permanent structures, equipment or similar structures that would aid in climbing over the barrier.

4405.5 Barrier exceptions. Spas or hot tubs with a safety cover which comply with ASTM F 1346 shall be exempt from the provisions of this appendix.

SECTION 4406
ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

4406.1 General. Suction outlets shall be designed and installed in accordance with ANSI/APSP/ICC-7.

Exception. The use of single blockable or unblockable main drains shall not be permitted.

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(The Index is provided for informational purposes only to note the location of the deletions/additions in the 2015 International Residential Code as set forth in this Ordinance)

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