



CITY OF PLANO COUNCIL AGENDA ITEM

CITY SECRETARY'S USE ONLY				
<input type="checkbox"/> Consent <input type="checkbox"/> Regular <input type="checkbox"/> Statutory				
Council Meeting Date:		03/14/16		
Department:		Building Inspections		
Department Head		Selso Mata		
Agenda Coordinator (include phone #): Diana Casady #5993				
CAPTION				
<p>An Ordinance of the City of Plano, Texas, repealing in its entirety City of Plano Ordinance Nos. 2013-10-29 and 2014-1-5, codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances; and adopting the 2015 Edition of the International Energy Conservation Code, with certain additions, deletions and amendments, as the Energy Conservation Code of the City of Plano; and providing a repealer clause, a severability clause, a savings clause, a penalty clause, a publication clause and an effective date.</p>				
FINANCIAL SUMMARY				
<input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> OPERATING EXPENSE <input type="checkbox"/> REVENUE <input type="checkbox"/> CIP				
FISCAL YEAR:	2015-16	Prior Year (CIP Only)	Current Year	Future Years
		TOTALS		
Budget	0	0	0	0
Encumbered/Expended Amount	0	0	0	0
This Item	0	0	0	0
BALANCE	0	0	0	0
FUND(S): N/A				
COMMENTS: This item has no fiscal impact.				
STRATEGIC PLAN GOAL: Repealing in its entirety City of Plano Ordinance No. 2013-10-29 and 2014-1-5 relates to the City's Goal of a Financially Strong City with Service Excellence and a Safe Large City.				
SUMMARY OF ITEM				
<p>This Ordinance will adopt the most recent version of the International Building Codes published by the International Code Council and includes regional amendments which have been developed by the North Central Texas Council of Governments. The Building Standards Commission held public code review meetings in September, October, November, and December of 2015. At their January 19, 2016 meeting the Commission voted unanimously to recommend the Codes with amendments to the City Council for adoption as the Energy Conservation Code for the City of Plano.</p>				
List of Supporting Documents:			Other Departments, Boards, Commissions or Agencies	
Letter from the Home Builders Association Letter from Council of Governments Letter from the Building Standards Commission				



**CITY OF PLANO
COUNCIL AGENDA ITEM**

Building Department Memo	



Memorandum

Date: March 1, 2016

To: Bruce D. Glasscock, City Manager
Jack Carr, Deputy City Manager

From: Selso Mata, Chief Building Official

Subject: **2015 International Code - Adoption**

Every three years, building codes are promulgated by the International Code Council. Jurisdictions throughout the nation review these codes for their use and adoption. For the past year and half, Plano has continued its established code review process for the 2015 Codes through the North Central Texas Council of Governments. Upon completion of this process, the codes are further vetted through our Building Standards Commission. Our review is now complete. The following 2015 Codes are recommended to the City Council for adoption.

- 2015 International Building Code
- 2015 International Residential Code
- 2015 International Mechanical Code
- 2015 International Plumbing Code
- 2015 International Fuel and Gas Code
- 2015 International Energy Conservation Code
- 2015 International Existing Building Code

A common question at this time is; Are there any changes in the codes? One can imagine with thousands of pages of material and improvements in building products each year that some changes are expected. This is not uncommon at each code cycle. However, the development community is involved with adoption of the codes at the national, state, and regional levels. Many changes in the codes are editorial in nature and consist of relocated information and clarification language and meaning. Yet all building codes remain minimum standards and requirements for building safety in each respective category.

One such change is a new requirement for storm shelters based on geographic locations which have a potential for strong wind storm occurrence. Plano falls within this defined regional area and as a result, storm shelters are now required for new schools, police stations, fire stations, 911 emergency call centers and emergency operation centers. The storm shelter must consist of a building or room large enough to accommodate the occupants of the use with a structural integrity capable of withstanding a 250 M.P.H. wind load. This would only apply to new schools and buildings or additions to a school or building as described. The Plano Independent School District is aware of this requirement for inclusion in future projects.

Please let me know if you need additional information.



Memo

Date: February 16, 2016
To: Bruce D. Glasscock, City Manager
From: Art Stone, Chairman, Building Standards Commission
Subject: **Adoption of the 2015 International Codes with Amendments**

The Building Standards Commission, along with staff, has reviewed the 2015 International Building Codes with amendments at each monthly meeting occurring from August 2015 through January 2016 until completion. In addition, staff has vetted the codes with the North Central Council of Governments and made Plano amendment presentations for each code to our Commission. All code review is now completed.

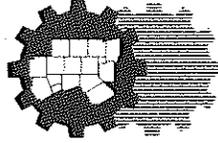
It is my pleasure to inform you that the Building Standards Commission unanimously recommends the following codes with amendments to the City Council for approval and adoption;

- 2015 International Building Code
- 2015 International Residential Code
- 2015 International Plumbing Code
- 2015 International Mechanical Code
- 2015 International Fuel and Gas Code
- 2015 International Energy Conservation Code
- 2015 International Existing Building Code

Sincerely,

A handwritten signature in black ink that reads "Art Stone". The signature is written in a cursive, slightly stylized font.

Art Stone
Chairman
Building Standards Commission



North Central Texas Council Of Governments

TO: Local Governments throughout
North Central Texas

DATE: September 21, 2015

FROM: Mike Eastland
Executive Director

David Kerr
Chair, Regional Codes Coordinating Committee

SUBJECT: 2015 International Codes and Regional Code Amendments for North Central Texas

The North Central Texas Council of Government's (NCTCOG) Executive Board, upon the recommendation of the Regional Codes Coordinating Committee (RCCC) and its Advisory Boards, endorsed the most recent regional amendments to the 2015 International Codes on September 17, 2015. Furthermore, the Executive Board encourages your jurisdiction to adopt the following 2015 International Codes and regional amendments by January 31, 2016:

- International Building Codes
- International Energy Conservation Code
- International Existing Building Code
- International Fire Code
- International Fuel Gas Code
- International Mechanical Code
- International Plumbing Code
- International Residential Code

Regional amendments to the 2015 International Codes can be found at the following website: www.nctcog.org/envir/codes. In addition, the Executive Board previously endorsed the 2014 National Electrical Code and regional amendments which are available for adoption.

Please Note:

In review of local government's adoption of code amendments, there is a wide range in the fire-fighting philosophies/capabilities of cities across the region; the consensus of the RCCC has been to include both an OPTION "A" and an OPTION "B" in the fire, building and residential code amendments. Jurisdictions should choose one or the other based on their fire-fighting philosophies/capabilities when adopting code amendments.

Notice of Codes Workshop

On November 5, 2015, a free 2015 International Building and Fire Code Workshop will be offered to cover the regional code review process, results of a recent Regional Code Adoption Survey, presentations from Texas A&M Energy Systems Laboratory and South-central Partnership for Energy Efficiency as a Resource, a summary of the 2015 recommended amendments, and upcoming building code training. Register for the workshop at <http://www.nctcog.org/envir/events.asp>.

Regional Code Amendments Background

NCTCOG has actively promoted the standardization of model construction codes since 1967 in an effort to simplify the construction process, advance the safety of building systems, promote common code interpretation, facilitate the mobility of contractors, and reduce training and construction costs. The ultimate goal is regional uniformity in the model construction codes for the North Central Texas region. NCTCOG feels strongly that municipalities, contractors, architects, builders, and manufacturers will benefit from the positive economic results coming from achievement of that goal.

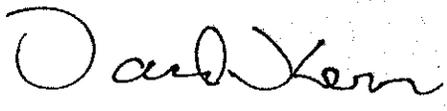
In 2014, the NCTCOG's RCCC directed its Advisory Boards to review the International Code Council's 2015 family of model construction codes. The Advisory Boards, comprised of over 100 code professionals representing local jurisdictions and professional associations, held open meetings to consider the codes and achieve consensus on any needed regional amendments.

As a follow-up measure, the RCCC intends to submit some of the regional amendments as proposed changes during the next international code change cycle. In the past, several NCTCOG regional amendments have been incorporated into the codes at the national level.

NCTCOG appreciates your local government's support of our continued efforts toward regional code uniformity. For more information regarding regional codes, contact Sandra Barba, Senior Planner, Department of Environment and Development, at sbarba@nctcog.org, or 817.608.2368. Please send a copy of your adopted ordinance(s) to NCTCOG including any amendments. Your ordinance will help us to document the effectiveness of the codes coordination effort in our region and may be used to provide a model to other jurisdictions.



Mike Eastland, Executive Director



David Kerr, Chair
Regional Codes Coordinating Committee

February 18, 2016

Selso Mata, Chief Building Official
City of Plano
1520 Avenue K
Plano, Texas 75086-0358

Dear Mr. Mata:

The Dallas Builders Association appreciates the role building codes play in maintaining the integrity of home construction in our area. As such, the Association conducts a detailed review of each International Code Council (ICC) code that pertains to the residential construction industry. This review emphasizes health and safety as well as housing affordability concerns.

As it has for many years, the Association was an active participant in reviewing the 2015 ICC codes serving on the North Central Texas Council of Governments Regional Codes Coordinating Committee (RCCC). Our members and staff were provided an opportunity during that process to convey the industry's concerns and many of those concerns were incorporated into the amendments that are now being considered for adoption by the City of Plano.

Thanks to the RCCC process and for the advanced notice that you have provided the Association to review Plano's local amendments, the Dallas Builders Association is comfortable with the residential provisions of Plano's 2015 code amendments package as presented. As you know, the state's energy code is changing this year and alternative compliance strategies are now under review by Texas A&M Energy Systems Laboratory. We hope that you will accept, through your power to do so in these Amendments, any additional compliance strategies approved by the Laboratory. Doing so will give the industry needed flexibility without detracting from the code's resource conservation objectives.

We appreciate your proactive efforts to seek our input and we look forward to being a continued resource for housing in the City of Plano and throughout the Dallas area.

Sincerely,



Executive Officer
Dallas Builders Association

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2016 INDUSTRY INVESTORS

The Bath & Kitchen Showplace
Dow Building Solutions
Fox Energy Specialists
Hotchkiss Insurance Agency
Johnson Supply
STELLAR Home Theater and Beyond
StrucSure Home Warranty
The Thompson Group at Classic
Chevrolet

AFFILIATED WITH:

Texas Association of Builders
National Association of Home Builders

An Ordinance of the City of Plano, Texas, repealing in its entirety City of Plano Ordinance Nos. 2013-10-29 and 2014-1-5, codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances; and adopting the 2015 Edition of the International Energy Conservation Code, with certain additions, deletions and amendments, as the Energy Conservation Code of the City of Plano; and providing a repealer clause, a severability clause, a savings clause, a penalty clause, a publication clause and an effective date.

WHEREAS, on October 28, 2013, by Ordinance No. 2013-10-29, the City Council of the City of Plano established an Energy Conservation Code and provided regulations thereunder, and such Ordinances were codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances of the City of Plano (“City”); and

WHEREAS, on January 13, 2014 by Ordinance 2014-1-5, the City Council of the City of Plano amended the Energy Conservation Code and such Ordinances were codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances of the City of Plano, and

WHEREAS, on November 17, 2015 the Building Standards Commission held a public hearing to discuss the adoption of the 2015 Edition of the International Energy Conservation Code, a publication of the International Code Council (I.C.C.), and to receive input from the general public and all persons who may be affected by the proposed adoption; and

WHEREAS, upon recommendation of the Building Standards Commission and upon full review and consideration of all matters attendant and related thereto, the City Council is of the opinion that the 2015 Edition of the International Energy Conservation Code, and the additions, deletions, and amendments thereto, should be approved and adopted as the Energy Conservation Code of the City.

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

Section I. Ordinance No. 2013-10-29, duly passed and approved by the City Council of the City of Plano on October 28, 2013 and Ordinance No. 2014-1-5 duly passed and approved by the City Council of the City of Plano on January 14, 2015 are hereby repealed in their entirety.

Section II. A new Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances of City of Plano is hereby adopted and shall read in its entirety as follows:

“ARTICLE XVIII. ENERGY CONSERVATION CODE

DIVISION 1. GENERALLY

Section 6-684. Penalty.

Any violation of the provisions or terms of this ordinance by any person, firm or corporation shall be a misdemeanor offense and shall be subject to a fine in accordance with Section 1-4(a) of the City Code of Ordinances for each offense. Every day a violation continues shall constitute a separate offense.

Section 6-685 Adopted.

The 2015 Edition of the International Energy Conservation Code, a publication of the International Code Council (I.C.C.), along with the Appendices of such Code, is hereby adopted and designated as the Energy Conservation Code of the City to the same extent as if such Code were copied verbatim in this Article, subject to deletions, additions, and amendments prescribed in this Article. A copy of the 2015 Edition of the International Energy Conservation Code is on file in the office of the City Secretary.

DIVISION 2. AMENDMENTS

Section 6-686. Deletions, Additions, Amendments.

The following deletions, additions, and amendments to the International Energy Conservation Code adopted herein are hereby approved and adopted:

Section C102/R102; *add Section C102.1.2 and R102.1.2 to read as follows:*

C102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

R102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance. Regardless of the program or the path to compliance, each 1- and 2-family dwelling shall be tested for air and duct leakage as prescribed in Section R402.4 and R403.3.3 respectively.

Section C202 and R202; *add the following definition:*

PROJECTION FACTOR. The ratio of the horizontal depth of the overhang, eave or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave or permanently attached shading device.

Section R202; *add the following definition:*

DYNAMIC GLAZING. Any fenestration product that has the fully reversible ability to change its performance properties, including *U*-factor, solar heat gain coefficient (SHGC), or visible transmittance (VT).

Table R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT; Amend by changing the WOOD FRAME WALL R-VALUE for CLIMATE ZONE 3 to read as follows:

13ⁱ

ⁱ This amendment expires on August 31, 2016 and the code requirements revert to the code as published

Table R402.1.4 EQUIVALENT U-FACTORS; Amend by changing the WOOD FRAME WALL U-FACTOR for CLIMATE ZONE 3 to read as follows:

0.082^d

^d This amendment expires on August 31, 2016 and the code requirements revert to the code as published

Section R402.3.2 Glazed fenestration SHGC; amend by adding a paragraph and table following the exception to read as follows:

Where vertical fenestration is shaded by an overhang, eave, or permanently attached shading device, the SHGC required in Table R402.1.2 shall be reduced by using the multipliers in Table R402.3.2 SHGC Multipliers for Permanent Projections.

Table R402.3.2 SHGC Multipliers for Permanent Projections ^a

Projection Factor	SHGC Multiplier (all Other Orientation)	SHGC Multiplier (North Oriented)
0 - 0.10	1.00	1.00
>0.10 – 0.20	0.91	0.95
>0.20 – 0.30	0.82	0.91
>0.30 – 0.40	0.74	0.87
>0.40 – 0.50	0.67	0.84
>0.50 – 0.60	0.61	0.81
>0.60 – 0.70	0.56	0.78
>0.70 – 0.80	0.51	0.76
>0.80 – 0.90	0.47	0.75
>0.90 – 1.00	0.44	0.73

^a North oriented means within 45 degrees of true north.

Section R402.4.1.2 Testing; modify the first paragraph to read as follows:

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in Climate Zone 3. {Remainder of text unchanged}

This amendment expires on August 31, 2016 and the code requirements revert to the code as published

R402.4.1.2 Testing; *add a last paragraph to read as follows:*

Mandatory testing shall only be performed by individuals that are certified to perform air infiltration testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure.

R403.3.3 Duct Testing (Mandatory); *add a last paragraph to read as follows:*

Mandatory testing shall only be performed by individuals that are certified to perform duct testing leakage testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure.

Section C402.2. /R402.2; *add Section C402.2.7 and R402.2.14 to read as follows:*

Section C402.2.7/R402.2.14 Insulation installed in walls. To insure that insulation remains in place, insulation installed in walls shall be totally enclosed on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting or other equivalent material approved by the building official.

Section R405.6.2; *add the following sentence to the end of paragraph:*

Acceptable performance software simulation tools may include, but are not limited to, REM Rate™, Energy Gauge and IC3. Other performance software programs accredited by RESNET BESTEST and having the ability to provide a report as outlined in R405.4.2 may also be deemed acceptable performance simulation programs and may be considered by the building official.

TABLE R406.4 MAXIMUM ENERGY RATING INDEX; *amend to read as follows:*

**TABLE R406.4¹
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
3	65

¹ This table is effective until August 31, 2019.

**TABLE R406.4²
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
3	63

² The table is effective from September 1, 2019 to August 31, 2022.

TABLE R406.4³
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	59

³ This table is effective on or after September 1, 2022.”

Section III. All provisions of the Code of Ordinances of the City of Plano in conflict with the provisions of this Ordinance are hereby repealed, and all other provisions of the Code of Ordinances of the City of Plano, not in conflict with the provisions of this Ordinance, shall remain in full force and effect.

Section IV. It is the intention of the City Council that this Ordinance, and every provision thereof, shall be considered severable, and the invalidity or unconstitutionality of any section, clause, provision or portion of this Ordinance shall not affect the validity or constitutionality of any other portion of this Ordinance.

Section V. The repeal of any Ordinance or part of Ordinances effectuated by the enactment of this Ordinance shall not be construed as abandoning any action now pending under or by virtue of such Ordinance or as discontinuing, abating, modifying or altering any penalty accruing or to accrue, or as affecting any rights of the municipality under any section or provisions of any Ordinances at the time of passage of this Ordinance.

Section VI. Any violation of the provisions or terms of this ordinance by any person, firm or corporation shall be a misdemeanor offense and shall be subject to a fine in accordance with Section 1-4(a) of the City Code of Ordinances for each offense. Every day a violation continues shall constitute a separate offense.

Section VII. This Ordinance shall become effective April 1, 2016, and after its passage and publication as required by law.

DULY PASSED AND APPROVED this the 14th day of March, 2016.

Harry LaRosiliere, MAYOR

ATTEST:

Lisa C. Henderson, CITY SECRETARY

APPROVED AS TO FORM:

Paige Mims, CITY ATTORNEY