



North Central Texas Council of Governments

# SUMMARY

## Regional Codes Coordinating Committee

Tuesday, July 19, 2016

9:30 AM, Regional Forum Room

NCTCOG Offices, CPII

616 Six Flags Drive, Arlington, Texas 76011

Chair: David Kerr, City of Plano

Vice-Chair: Jack Thompson, Town of Westover Hills

### 1. Welcome and Introductions.

The Chair welcomed everyone and had guests introduce themselves.

## ACTION ITEMS

2. **Summary of the April 12, 2016 Meeting.** The April 12, 2016 draft meeting summary is available online for your review and consideration.

The RCCC reviewed the April 12, 2016 meeting summary and Jack Baxely, TEXO, made a motion to approve the document. David Kerr, City of Plano, seconded and the motion passed unanimously.

3. **Approval sought for Appointment of Advisory Board Members.** Advisory Board Chair(s) will seek approval of advisory board member appointments.

No Advisory Board appointments were recommended. Ed Dryden, City of Dallas and Chair of the Energy and Green Advisory Board, currently has an opening for a public sector member. Gary Jones, International Association of Electrical Inspectors and Chair of the Electrical Advisory Board, has an opening for Vice Chair and requested volunteers. The Advisory Board Chairs requested copies of their board rosters to review in order to double check the membership status. NCTCOG will follow up with the Chair of each board in regards to membership status.

4. **Approval sought for Appointment of RCCC Officers.** Currently, David Kerr, City of Plano is serving as the Chair and Jack Thompson, Town of Westover Hills is serving as Vice Chair.

The RCCC discussed the reappointment process and the categorical structure of membership. A slide was presented by NCTCOG regarding current RCCC members up for reappointment and recommendations for prospective new members to fill vacancies for fiscal year 2017 (FY2017). David Lehde, Dallas Builders Association, made a motion to accept the current members seeking reappointment and the prospective members seeking appointment for FY2017 to serve on the RCCC. Jim Olk, City of Garland, seconded and the motion passed unanimously.

The Chair, David Kerr, City of Plano and Vice Chair, Jack Thompson, Town of Westover Hills, were also up for reelection as the committee's officers for FY2017. Bob Morgan, City of Fort Worth made a motion to approve the officer nominations. Jim Olk, City of Garland seconded and the motion passed unanimously.

616 Six Flags Drive, Centerpoint Two  
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- 5. Approval sought for the Energy Systems Laboratory (ESL) Prescriptive Tradeoff Code Compliance Options for the NCTCOG Region.** The Energy and Green Advisory Board (EGAB) requests that the RCCC approve and distribute the ESL prescriptive tradeoffs and distribute the associated handout.

The Energy and Green Advisory Board Chair, Ed Dryden, City of Dallas, gave an overview of the ESL prescriptive tradeoff options and the group discussed the options. Ed Dryden made a motion to recognize the ESL prescriptive tradeoffs (Attachment 1) as a compliance option for the NCTCOG region and to distribute to participating communities. Jack Baxley, TEXO, seconded and the motion passed unanimously.

- 6. Approval sought for the Regional Residential Energy Code Compliance Path Forms.** The EGAB requests that the RCCC approve the Regional Residential Energy Code Compliance Path Forms.

Mr. Dryden gave an overview of the compliance path forms and their intended purpose. The goal is regional uniformity and that these forms be used as templates by local governments. Stan Folsom, Systemhouse, suggested that for the sake of uniformity, that only the NCTCOG approved form be used, rather than each city adding its own logo. The group agreed to add a footnote to the bottom of the proposed forms saying that if the form was revised, the user must remove the NCTCOG logo because the form would no longer be NCTCOG approved (Attachment 2). The forms will be submitted to the group for final email vote.

## PRESENTATION

- 7. Oncor Electrical Service Guidelines by Craig Robicheaux, Distribution Standards Manager, Oncor.** Follow up presentation from the April 12, 2016 meeting to further discuss questions, solutions, and possible changes.

Craig Robicheaux, Oncor, revisited the items of concern that the committee had from their April 12, 2016 meeting and discussed supply chain vetting, tariffs, multi-meter issues with disconnect, Oncor's "2014 Electrical Service Guidelines", and how Oncor is looking into different implementation of connections. Oncor will give forewarning before implementing service disconnect but are still working to finalize the new criteria and guidelines. The committee requested that Oncor come back to a future meeting to provide an update.

## DISCUSSION

- 8. Work Program Discussion** (David Kerr) – The committee will discuss initiation of the work program to handle committee activities.

David Kerr, City of Plano, Tamara Cook, NCTCOG, and Edith Marvin, NCTCOG, explained to the group the purpose of a Work Program and suggested getting a small brainstorming group together to generate ideas that would be valuable to the group and which should be incorporated into the Work Program which would help prepare for the next Code cycle. Volunteers were requested for the brainstorming group; NCTCOG will follow up to coordinate volunteers and schedule a brainstorming meeting.

- 9. 2015 International Wildland - Urban Interface Code Review** (David Kerr) – Committee will discuss potential review of the 2015 International Wildland – Urban Interface Code.

Mr. Kerr informed the group that the US Forest Service requested that he review the Wildland-Urban Interface (WUI) Code. He suggested that it go to the Fire Advisory Board for review with



## North Central Texas Council of Governments

the intent to recognize the WUI code as a code that should be adopted, not necessarily to produce code amendments. David Lehde, Dallas Builders Association, noted some concerns with the WUI. Cyndi Lewis, International Code Council, mentioned that City of Austin is adopting the WUI. The group discussed the next steps and agreed to add the WUI code to a future RCCC agenda for consideration and decided not to assign it to an advisory board at this time.

### 10. Advisory Board Updates

- Review and Consideration of the 2015 Swimming Pool and Spa Code Regional Recommended Amendments (Selso Mata)
- Special Inspection Discussion and Revised Forms Discussion (Selso Mata)

Selso Mata, Chair of the Building and Residential Advisory Board, gave the group an overview of the progress being made on the Pool and Spa Code Amendments and the Special Inspection Form Revisions. The group also discussed a suggestion put forward by Paul Ward, City of Southlake, and Jack Thompson, Town of Westover Hills to produce a plan review checklist that could be used as guidance for new reviewers and smaller communities. The group ultimately decided that considering all of the guidance resources and checklists already available, the best way to reach smaller communities would be through networking and outreach and providing answers to questions as they come up.

## OTHER BUSINESS AND ROUNDTABLE DISCUSSION

### 11. Future Agenda Items.

### 12. Roundtable Topics/Other Business.

RCCC members and NCTCOG may share additional items of interest as time allows.

Tamara Cook, NCTCOG, shared with the group information regarding the recent solar trainings that were provided for fire professionals and the RCCC was interested in receiving more information. Ms. Cook also informed the group that Bill Fay of the Energy Efficient Codes Coalition (EECC) offered to come speak on the International Energy Conservation Code (IECC) to the RCCC or any advisory boards that are interested. The Building Officials Association of Texas (BOAT) is hosting their annual conference in Sugar Land, Texas from August 2 through 5, 2016.

### 13. Schedule for the Next RCCC Meeting.

The next meeting date is to be determined.

### 14. Adjournment.

If you have any questions regarding the meeting or agenda items, please contact Cassidy Campbell by phone at (817) 608-2368, or by email at [ccampbell@nctcog.org](mailto:ccampbell@nctcog.org).

If you plan to attend this public meeting and you have a disability that requires special arrangements at the meeting, please contact Asher Hallman by phone at (817) 695-3231 or by email at [a.hallman@nctcog.org](mailto:a.hallman@nctcog.org), 72 hours in advance of the meeting. Reasonable accommodations will be made to assist your needs.

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## **ATTACHMENT 1**

# Memorandum



DATE July 14, 2016

CITY OF DALLAS

TO Members of the RCCC

SUBJECT Recommendation from the Energy and Green Advisory Board

On Friday, July 8, 2016, the Energy and Green Advisory Board voted to recognize the *Prescriptive Tradeoff Code Compliance Option for the NCTCOG Region* as published by the Energy Systems Laboratory (ESL).

Additionally, the Energy and Green Advisory Board has approved two forms: *Residential Buildings Compliance Path* and the *Residential Buildings Compliance Certificate*. The first to be submitted with a permit application and the second to be submitted at completion of a project. The forms are provided for use as templates by cities in the NCTCOG regions.

The Energy and Green Advisory Board forwards all three documents to the RCCC with a recommendation that the RCCC forward these forms to the City Managers and Building Officials in the NCTCOG region.

A handwritten signature in blue ink, appearing to read 'Ed Dryden'.

Ed Dryden, CBO  
Assistant Building Official  
Sustainable Development & Construction

Cc: David Kerr, Chair, Regional Codes Coordinating Committee



July 8, 2016

## Determination of Prescriptive Tradeoff Code Compliance Options for the NCTCOG Region

In accordance with the Health and Safety Code, Section 388.003, subsection (e), the Energy Systems Laboratory of the Texas A&M University System has analyzed tradeoff code compliance options for the North Central Texas Council of Government (NCTCOG) Region to meet the requirements of the *2015 International Energy Conservation Code (IECC)* and the *2015 International Residential Code (IRC)*.

These tradeoff options are deemed to be not less stringent than the residential provisions of the *2015 IECC* and the *2015 IRC*. The tradeoff relaxes the required 3ACH<sup>50</sup> per Sections R402.4.1.2 (N1102.4.1.2) of the residential provisions of the *2015 IECC* and the *2015 IRC*. The tradeoff will permit houses that test to less than or equal to 4ACH<sup>50</sup> as outlined in Options #1 and #2 below. The tradeoff is limited as follows:

1. Limited to one- and two- family residences with a conditioned floor area between 1,000 and 6,000 square feet.
2. Limited to one- and two-family residences containing between 2 to 6 bedrooms.
3. Assumes all ductwork and mechanical equipment is located in the unconditioned attic.
4. Assumes typical wood framing in the walls and roof.
5. Assumes one of the following heating/cooling systems:
  - a. All electric system with a heat pump for heating, or
  - b. A system with electric cooling and natural gas heating.
 (Note: electric resistance strip heating does not qualify for this tradeoff.)

### ESL 4ACH<sup>50</sup> Prescriptive Tradeoff Code Equivalency Compliance<sup>a</sup>

Envelope Component	Option #1	Option #2
R402.4 Air Leakage	$\leq 4ACH^{50}$	$\leq 4ACH^{50}$
Wall Insulation R-value	$R13 + R3^b$	$R13 + R3^b$
Fenestration U-factor	$\leq 0.32$	$\leq 0.32$
Fenestration SHGC	$\leq 0.25$	$\leq 0.25$
Ceiling R-value	$\geq R49$	$\geq R49$
Duct Insulation R-value	R8	R6
Radiant Barrier Required	No	Yes

<sup>a</sup> Except for the values listed in the table, all other mandatory code provisions are applicable.

<sup>b</sup> The first value listed is the R-value of cavity insulation, the second value is the R-value of the continuous insulation or insulated siding.

# Memorandum



CITY OF DALLAS

DATE July 14, 2016

TO Members of the RCCC

SUBJECT Efforts of the Energy Systems Laboratory

On Friday, July 8, 2016, the Energy Systems Laboratory (ESL) published the findings of a Prescriptive Tradeoff Code Compliance Options for the NCTCOG's region. Those findings are the result of many hours of ESL staff providing computer based analysis on various sized houses with various options. The results of those findings provide residential builders yet another code compliance option path that will result in energy efficient homes as builders work toward satisfying ever increasing energy code requirements. On behalf of the Energy and Green Advisory Board, the regional stakeholders, the efforts of ESL are appreciated and recognized for their continuing efforts to work with the stakeholders in the NCTCOG region.

Thank you ESL!

A handwritten signature in blue ink, appearing to read 'Ed Dryden'.

Ed Dryden, CBO  
Assistant Building Official  
Sustainable Development & Construction

Cc: David Kerr, Chair, Regional Codes Coordinating Committee

## **ATTACHMENT 2**



Insert City Seal

Project Address: \_\_\_\_\_

Permit Number: \_\_\_\_\_

**DUCT LEAKAGE TESTING VERIFICATION**

Rough-In Test Option (R403.3.3)

Post Construction Option (R403.3.3)

System #1 - \_\_\_\_\_ CFM25 System #2 - \_\_\_\_\_ CFM25 System #3 - \_\_\_\_\_ CFM25

System #4 - \_\_\_\_\_ CFM25 System #5 - \_\_\_\_\_ CFM25 System #6 - \_\_\_\_\_ CFM25

I certify that I have conducted a duct leakage test and it has passed the requirements of the 2015 International Energy Conservation Code. I further certify that I am certified to perform duct leakage testing certified by national or state organizations as approved by the building official. I certify I am an independent third-party entity, and have not installed the HVAC system; nor am I employed or have any financial interest in the company that constructs the structure.

Agency and Certification Number: \_\_\_\_\_

Signature of Responsible Party: \_\_\_\_\_

Printed Name and Title of Responsible Party: \_\_\_\_\_

**BUILDING THERMAL ENVELOPE LEAKAGE TESTING VERIFICATION**

Building Thermal Envelope Leakage Testing (R402.4.1.2): \_\_\_\_\_ ACH50

I certify that I have conducted an air leakage test and it has passed the requirements of the 2015 International Energy Conservation Code. I further certify that I am certified to perform air infiltration testing certified by national or state organizations as approved by the building official. I certify I am an independent third-party entity, nor am I employed or have any financial interest in the company that constructs the structure.

Agency and Certification Number: \_\_\_\_\_

Signature of Responsible Party: \_\_\_\_\_

Printed Name and Title of Responsible Party: \_\_\_\_\_

**COMPLIANCE STATEMENT**

We have concluded all inspections, testing and plan reviews of the above project and hereby declare it in compliance with the residential provisions of the 2015 IECC, as amended, for the selected compliance approach.

- Option 1(a) **Prescriptive:** Sections N1101.14 (R401) through N1104 (R404)
- Option 1(b) **Prescriptive: REScheck™ UA Approach Only:** Sections N1101.14 (R401)-N1104 (R404) (attach report)
- Option 2 **Performance:** Section N1105 (R405) Performance Approach (attach report)
- Option 3 **ENERGY STAR Certified Homes® (attach certificate)**
- Option 4 **Energy Rating Index Compliance Alternative (ERI):** Section N1106 (R406) ERI: \_\_\_\_\_
- Option #5 **ESL 4ACH<sup>50</sup> Tradeoff Code Equivalency Compliance**

Agency and Certification Number: \_\_\_\_\_

Agency Contact Information: \_\_\_\_\_

Signature of Responsible Party: \_\_\_\_\_

Printed Name and Title of Responsible Party: \_\_\_\_\_

If this template form is modified, the NCTCOG logo must be removed as it is no longer a NCTCOG approved template.

Insert City  
Seal

City of \_\_\_\_\_  
Residential Energy Compliance Path  
Energy Code Requirements of the 2015 IRC (IECC)  
*Submit with application for a building permit*

Project Address: \_\_\_\_\_

N1101.13 (R401.2) – Projects shall comply with one of the following:

**Option #1a – Prescriptive: Sections N1101.14 (R401) through N1104 (R404):**

N1102 (R402) Building Thermal Envelope. {Using table N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT}

N1103 (R403) Systems.

N1104 (R404) Electrical Power and Lighting Systems (Mandatory).

Plus all mandatory provisions

**Option #1b – Prescriptive-Using REScheck™ UA approach Only: Sections N1101.14 (R401) through N1104 (R404):**

N1102 (R402) Building Thermal Envelope.

N1103 (R403) Systems.

N1104 (R404) Electrical Power and Lighting Systems (Mandatory).

Plus all mandatory provisions

**Option #2 – Section N1105 (R405) Performance Approach**

Plus all mandatory provisions

**Option #3 – ENERGY STAR Certified Homes®**

**Option #4 – Section N1106 (R406) Energy Rating Index Compliance Alternative**

Minimum envelope requirements  $\geq$  Table 402.1.2 or 402.1.4 – 2009 IECC

Plus all mandatory provisions

**Option #5 – ESL 4ACH<sup>50</sup> Tradeoff Code Equivalency Compliance<sup>a</sup>**

Envelope Component	Option #1	Option #2
R402.4 Air Leakage	$\leq 4ACH^{50}$	$\leq 4ACH^{50}$
Wall Insulation Value	$R13 + R3^b$	$R13 + R3^b$
Fenestration U-factor/SHGC	$\leq 0.32/0.25$	$\leq 0.32/0.25$
Ceiling R-value	$\geq R49$	$\geq R49$
Duct Insulation	R8	R6
Radiant Barrier Required	No	Yes

<sup>a</sup> Except for the values listed in the table, all other mandatory code provisions are applicable.

<sup>b</sup> First value is cavity insulation, second is continuous insulation or insulated siding.

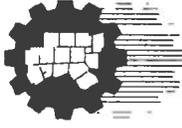
NOTE: Attach appropriate compliance option “compliance report”

I certify that I have reviewed the construction documents including, but not necessarily limited to, insulation materials and R-values; fenestration U-factors and SHGC values; area-weighted average U-factor and SHGC calculations; mechanical system design criteria; mechanical and service water heating system and equipment types, sizes and efficiencies; equipment and system controls; duct sealing, duct and piping insulation and location; and air sealing details; and that the project as designed satisfies the minimum requirements for the compliance approach selected above.

**Print Name:** \_\_\_\_\_ **Sign Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**If this template form is modified, the NCTCOG logo must be removed as it is no longer a NCTCOG approved template.**

Prepared July 2016 by the Energy and Green Advisory Board of the Regional Codes Coordinating Committee, a committee of the North Central Texas Council of Governments (NCTCOG). [www.nctcog.org/envir/codes](http://www.nctcog.org/envir/codes).



## Regional Codes Coordinating Committee

9:30am – Tuesday, July 19, 2016

Regional Forum Room

### MEMBER SIGN IN SHEET

NAME	SIGNATURE	ORGANIZATION
Judy Armstrong		Ellis County
Larry Bartlett		TDIndustries
Joe Bass		Hillwood
Jack Baxley		TEXO
Paul Coker		City of Mansfield
Steve Covington		City of Frisco
Greg Contreras		City of Duncanville
Ed Dryden		City of Dallas
Stan Folsom		Systemhouse
Tommy Ford		Tommy Ford Construction Company
Allison Gray		City of Fort Worth
Danny Hartz		Town of Flower Mound
Gary Jones		G.W. Jones Consulting
David Kerr		City of Plano
David Lehde		Dallas Builders Association
Selso Mata		City of Plano
Gary Miller		City of Irving
Bob Morgan		City of Fort Worth
Jim Olk		City of Garland
Ted Padgett		City of Dallas
Amy Porter		UT Dallas
Bruce Rachel		Hensley Lamkin Rachel, Inc.
Rick Ripley		City of Arlington
Keith Smith		City of Mesquite
Jack Thompson		Town of Westover Hills
Gilbert Urvina		City of Frisco
Scott Williams		City of Grapevine
Richard Wright		City of Mansfield
Bahman Yazdani		Texas A&M Energy Systems Laboratory

