

B-43

David Timberlake, P.E.
Chairman



Mary Fallin
Governor

Oklahoma Uniform Building Code Commission

PUBLIC COMMENT FORM FOR THE ADOPTION OF BUILDING/CONSTRUCTION CODES PROPOSED CHANGE TO THE INTERNATIONAL RESIDENTIAL CODE®

INSTRUCTIONS: Please type or print clearly. Form must be signed. Any form not signed or filled out completely, may not be considered. Each requested change must be on a separate form.

1. **Submitters Contact Information:**

Name: Greg Clark Date: 8/5/15
Company: _____
Address: 2315 Lindenwood
City: Norman State: OK Zip: 73071
Phone: 405-588-2785 Ext: _____ Fax: _____
Email: gclark76@gmail.com

2. Do you feel this proposed change will increase the cost of construction? Yes No

3. Which are of the code needs revision?

Section: Chapter 11, Chapter 2, Chapter 3 Table: _____ Figure: _____ Page No: _____

4. Please check the appropriate box:

Revise as follows Delete as follows Add new text as follows Delete with substitute

Show the proposed NEW, REVISED, OR DELETED TEXT in legislative format, (line through text to be deleted and underline text to be added or revised).

Delete Chapter 11 from the 2015 IRC in its entirety. Replace with the 2009 IRC Chapter 11. See attached amendments to the text of the 2009 IRC Chapter 11. Underlined texted are additions to the 2009 IRC Chapter 11 and strikethrough's are text to be deleted from the 2009 Chapter 11 IRC. Additionally as a part of this proposal are changes to Chapter 2 definitions, and Chapter 3 to provide for continuity between the 2009 IRC language and the 2015 IRC.

Supporting Information: State purpose and reason for the change and provide substantiation to support proposed change.

The amendment effectively brings forward the 2009 IRC Chapter 11 Energy Efficiency and in some instances strengthens it. The 2009 IRC Chapter 11 has proven to be a very effective, quality and prescriptive code for Oklahoma. Many of the requirements in the 2015 IRC will be real cost additions with limited proven evidence for reducing energy use in our climate zone.

Greg Clark

5. Signature: _____

Send completed "Public Comment Form" to:
Oklahoma Uniform Building Code Commission, PO Box 12540, Oklahoma City, OK 73157
Email to: Shawnta.Mitchell@oubcc.ok.gov or Fax to: 405-521-6504

Modify from Chapter 2 DEFINITIONS the following:

~~[RE] HIGH EFFICACY LAMPS. See Section N1101.6 for definition applicable in Chapter 11.~~

Replace with.

HIGH EFFICACY LAMPS. Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps or lamps with a minimum efficacy of:

1. 60 lumens per watt for lamps over 40 watts.
 2. 50 lumens per watt for lamps over 15 watts to 40 watts.
 3. 40 lumens per watt for lamps 15 watts or less.
-

Delete from Chapter 2

~~[RE] INSULATING SHEATHING. An insulating board having a thermal resistance of not less than R-2 of the core material.~~

~~For definition applicable in Chapter 11, see Section N1101.6.~~

Delete from Chapter 2

~~[RB] REROOFING. The process of recovering or replacing an existing roof covering. See "Roof recover"~~

~~For definition applicable in Chapter 11, see Section N1101.6.~~

Delete from Chapter 2

~~[RB] ROOF RECOVER. The process of installing an additional roof covering over a prepared existing roof covering without removing the existing roof covering.~~

~~For definition applicable in Chapter 11, see Section N1101.6.~~

Delete from Chapter 2

~~[RE] SKYLIGHT. See Section N1101.6 for definition applicable in Chapter 11.~~

Delete from Chapter 2

~~[RE] SLEEPING UNIT. See Section N1101.6 for definition applicable in Chapter 11.~~

Delete from Chapter 2

~~[RB] SUNROOM. A one-story structure attached to a dwelling with a glazing area in excess of 40 percent of the gross area of the structure's exterior walls and roof.~~

~~For definition applicable in Chapter 11, see Section N1101.6.~~

Delete from Chapter 2

[RB] THERMAL ISOLATION. Physical and space conditioning separation from *conditioned space(s)* consisting of existing or new walls, doors and/or windows. The *conditioned space(s)* shall be controlled as separate zones for heating and cooling or conditioned by separate *equipment*.

~~For definition applicable in Chapter 11, see Section N1101.6.~~

Delete from Chapter 2

~~[RE] U-FACTOR, THERMAL TRANSMITTANCE. See Section N1101.6 for definition applicable in Chapter 11.~~

Replace with

U-FACTOR, THERMAL TRANSMITTANCE. The coefficient of heat transmission (air to air) through a building envelope component or assembly, equal to the time rate of heat flow per unit area and unit temperature difference between the warm side and cold side air films (Btu/h * ft² * °F).

Delete from Chapter 2

VENTILATION. The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, any space.

~~For definition applicable in Chapter 11, see Section N1101.6.~~

Delete from Chapter 2

WHOLE HOUSE MECHANICAL VENTILATION SYSTEM. An exhaust system, supply system, or combination thereof that is designed to mechanically exchange indoor air for outdoor air where operating continuously or through a programmed intermittent schedule to satisfy the whole-house ventilation rate.

~~For definition applicable in Chapter 11, see Section N1101.6.~~

Delete from Chapter 3 Section R303.1 Exception #1 and replace with

1. The glazed areas need not be openable where the opening is not required by Section R310 and an *approved mechanical ventilation system capable of producing 0.35 air change per hour in the room is installed or a whole-house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 15 cubic feet per minute (cfm) per occupant computed on the basis of two occupants for the first bedroom and one occupant for each additional bedroom.*

Delete from Chapter 3 Section R303.4.

Modify N1101.2 to state the following.

N1101.2 Compliance. Compliance shall be demonstrated by either meeting the requirements of the 2009 *International Energy Conservation Code* or meeting the requirements of this chapter. Climate zones from Figure N1101.2 or Table N1101.2 shall be used in determining the applicable requirements from this chapter.

Delete N1101.9 from the code.

Modify Table N1102.1 as follows.

In Climate zone 3 Fenestration U-Factor delete 0.50 and replace with 0.40.
In Climate zone 3 Skylight U-Factor delete 0.65 and replace with 0.55.
In Climate zone 3 Mass Wall R-Value delete 5/8 and replace with 8/13.

Modify Section N1102.2.2 to state the following.

N1102.2.2 Ceilings without attic spaces. Where Section N1102.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section N1102.1 shall be limited to 500 ft² (46 m²) or 20 percent of the total insulated ceiling area, whichever is less. Where Section N1102.1 would require insulation level R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-19. This reduction of insulation from the requirements of Section N1102.1 shall be limited to 500 ft² (46 m²) or 20 percent of the total insulated ceiling area, whichever is less.

Modify N1102.4.2.2 to state the following.

N1102.4.2.2 Visual inspection option. The items listed in Table N1102.4.2, applicable to the method of construction, are field verified. Where required by the code official, an *approved party* independent from the installer of the insulation, or contractor shall inspect the air barrier and insulation. Where no *approved party* inspects these items the air barrier components shall be viewed as a part of the frame inspection or insulation inspection by the Authority having Jurisdiction.

Modify N1102.4.3 Fireplaces to state the following.

N1102.4.3 Fireplaces. New wood-burning fireplaces shall have ~~gasketed doors and~~ outdoor combustion air.

Modify N1103.2.2 to state the following.

N1103.2.2 Sealing. Ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section M1601.4. Duct tightness shall be verified by either of the following:

Exception: Visual inspection by an *approved party* or the Authority having Jurisdiction may be used instead of the rough-in test and post construction test.

Modify N1103.8.3 Pool Covers to state the following.

N1103.8.3 Pool covers. ~~Heated pools shall be equipped with a vapor retardant pool cover on or at the water surface.~~ Pools heated to more than 90°F (32°C) shall have a pool cover with a minimum insulation value of R-12.

Modify N1104.1 Lighting equipment to state the following.

N1104.1 lighting equipment. A minimum of 50 percent of the lamps in permanently installed lighting fixtures shall be *high-efficacy lamps*.

Exception: Can or recessed lights are exempt from this section of the code.

Add text to table N1102.4.2 in the Criteria column for the Component "Air barrier and thermal barrier" to state the following.

Exterior thermal envelope insulation for framed walls in installed in substantial contact and continuous alignment with building envelope air barrier.

Breaks or joints in the air barrier are filled or repaired.

Air-permeable insulation is not used as a sealing material.

Air-permeable insulation is inside of an air barrier.

David Timberlake, P.E.
Chairman



B-43
revised
Mary Fallin
Governor A

Oklahoma Uniform Building Code Commission

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INSTRUCTIONS: Please type or print clearly. Form must be signed. Any form not signed or filled out completely, may not be considered. Each requested change must be on a separate form.

1. **Submitters Contact Information:**

Name: Greg Clark, Kelly Parker, Richard Morgan, Todd Booze Date: 9/3/15
Company: _____
Address: _____
City: Norman State: OK Zip: 73069
Phone: 405-588-2785 Ext: _____ Fax: _____
Email: greg.clark@normanok.gov

2. Do you feel this proposed change will increase the cost of construction? Yes No

3. Which are of the code needs revision?

Section: _____ Table: N1102.1 as approved from Comment Form B-43 Figure: _____ Page No: _____

4. Please check the appropriate box:

Revise as follows Delete as follows Add new text as follows Delete with substitute

Show the proposed NEW, REVISED, OR DELETED TEXT in legislative format, (line through text to be deleted and underline text to be added or revised).

Modify Language on the approved Comment Form B43.

Add footnote "m" behind the word Component in the Table Heading as follows "BY COMPONENT^{a, m}"

On Table N1102.1 add a new footnote m. Footnote m is to state.

" m. In addition to the requirements in Table N1102.1 two of the following improvements are required:

1. Fenestration U Factors to be .35
2. Wood Frame Wall R-Value to be R15
3. Slab R-Value and Depth to be 5, 2ft
4. Ceiling R-Value to be R38
5. In section N1104.1 a minimum of 75 percent of the lamps in permanently installed luminaries shall be high-efficay lamps.

Exception: If duct testing is performed and passed in accordance with N1103.2.2 by either the Post-construction test or Rough-in test no further upgrade is required from the Values in Table N1102.1.

Supporting information: State purpose and reason for the change and provide substantiation to support proposed change.

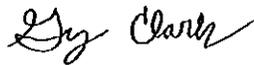
After modeling and evaluating the Approved Comment Form B-43 It was determined that the proposal did not quite meet equivalency with of the 2009 IECC. Being proposed in this amendment is a flexible method builders can model to there homes while not readily effecting the cost and design elements.

Some of the items for consideration were increased U-Values for windows from .40 to .35. .35 windows or better are already on the market and have been for a while. Window manufacturers have largely responded to the national codes and are providing products in excess of this standard.

R-15 Wall insulation is often achieved by installations where the walls have blown in insulation. In the case of Batt insulation most all manufactures do produce these batts and they can be used in a 3.5" wall. In markets that require R-15 the product is readily available.

Slab insulation provides a good form of insulation creating a thermal break associated with exterior stem and slabs and is a cost effective measure to install.

All of these options will provide a code that meets or very slightly exceeds equivalency with the 2009 IECC but it must be noted that the biggest impact, in efficiency, comes from duct testing. Duct testing is twice as effective as any of the other two options put together. This is why the exception is written as is.



5. Signature: _____

Send completed "Public Comment Form" to:
Oklahoma Uniform Building Code Commission, PO Box 12540, Oklahoma City, OK 73157
Email to: Shawnta.Mitchell@oubcc.ok.gov or Fax to: 405-521-6504

David Timberlake, P.E.
Chairman



Revised 2
Mary Fallin
Governor

Oklahoma Uniform Building Code Commission

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Company: _____
Address: _____
City: Norman State: OK Zip: 73069
Phone: 405-588-2785 Ext: _____ Fax: _____
Email: greg.clark@normanok.gov

2. Do you feel this proposed change will increase the cost of construction? Yes No

3. Which are of the code needs revision?

Section: N1104.1 from Approved Comment form B-43 Table: _____ Figure: _____ Page No: _____

4. Please check the appropriate box:

Revise as follows Delete as follows Add new text as follows Delete with substitute

Show the proposed **NEW, REVISED, OR DELETED TEXT** in legislative format, (line through text to be deleted and underline text to be added or revised).

Modify Language voted for on the approval from Comment Form B43 and a subsequent in committee vote to reflect the following.

N1104.1 lighting equipment. A minimum of 50 75 percent of the lamps in permanently installed lighting fixtures luminaries shall be high-efficacy lamps.

Supporting information: State purpose and reason for the change and provide substantiation to support proposed change.

Per the recommendation from the chair of the Electrical Technical Committee Ross Barrick this form is being generated to present his recommendation regarding chapter 11.

5. Signature: *Greg Clark*

Send completed "Public Comment Form" to:
Oklahoma Uniform Building Code Commission, PO Box 12540, Oklahoma City, OK 73157
Email to: Shaynta.Mitchell@oubcc.ok.gov or Fax to: 405-521-6504

B-53

David Timberlake, P.E.
Chairman



Mary Fallin
Governor

RECEIVED

SEP 04 2015

Oklahoma Uniform
Building Code Commission
Uniform Building Code Commission
PUBLIC COMMENT FORM FOR THE ADOPTION OF BUILDING/CONSTRUCTION CODES
PROPOSED CHANGE TO THE INTERNATIONAL RESIDENTIAL CODE®

INSTRUCTIONS: Please type or print clearly. Form must be signed. Any form not signed or filled out completely, may not be considered. Each requested change must be on a separate form.

1. Submitters Contact Information:

Name: OUBCC ELECTRICAL TECHNICAL COMMITTEE Date: 09/03/2014
Company: OUBCC
Address: 2401 NW 23RD STREET SUITE 2F
City: OKLAHOMA CITY State: OK Zip: 73107
Phone: 405.521.6501 Ext: _____ Fax: _____
Email: _____

2. Do you feel this proposed change will increase the cost of construction? Yes No

3. Which are of the code needs revision?
Section: N1101 through N1111 Table: _____ Figure: _____ Page No: 437 to 470

4. Please check the appropriate box:
 Revise as follows Delete as follows Add new text as follows Delete with substitute

Show the proposed NEW, REVISED, OR DELETED TEXT in legislative format, (line through text to be deleted and underline text to be added or revised).

** Retain all language of IRC-2015 Chapter Eleven. Review Sections of Chapter individually and revise as deemed necessary.

Supporting information: State purpose and reason for the change and provide substantiation to support proposed change.

The Residential Electrical Technical Committee feels that PCF B-43 with its amendments did not address all the sections of IRC-2015 Chapter Eleven adequately. Second, the Committee feels that Deleting Chapter Eleven is not the correct action, that Chapter Eleven text should be revised, deleted, added to, or deleted with substitution. Once the IRC-2015 Chapter is deleted, can it be replaced? Placed in "Reserve" would retain the IRC-2015 Chapter.

5. Signature: [Signature] Commission Liaison for Residential Electrical Technical Committee

Send completed "Public Comment Form" to:
Oklahoma Uniform Building Code Commission, PO Box 12540, Oklahoma City, OK 73157
Email to: Kathy.Hehnly@oubcc.ok.gov or Fax to: 405-521-6504

B-57

David Timberlake, P.E.
Chairman

SEP 04 2015



Mary Fallin
Governor

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PUBLIC COMMENT FORM FOR THE ADOPTION OF BUILDING/CONSTRUCTION CODES PROPOSED CHANGE TO THE INTERNATIONAL RESIDENTIAL CODE®

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1. Submitters Contact Information:

Name: OUBCC ELECTRICAL TECHNICAL COMMITTEE Date: 09/03/2014
Company: OUBCC
Address: 2401 NW 23RD STREET SUITE 2F
City: OKLAHOMA CITY State: OK Zip: 73107
Phone: 405.521.6501 Ext: _____ Fax: _____
Email: _____

2. Do you feel this proposed change will increase the cost of construction? Yes No

3. Which are of the code needs revision?

Section: N1101.6 Table: _____ Figure: _____ Page No: 437 & 438

4. Please check the appropriate box:

Revise as follows Delete as follows Add new text as follows Delete with substitute

Show the proposed NEW, REVISED, OR DELETED TEXT in legislative format, (line through text to be deleted and underline text to be added or revised).

HIGH-EFFICACY LAMPS. Compact fluorescent lamps, Light Emitting Diode (L.E.D.) type lamps, T-8 or smaller diameter linear fluorescent lamps, or lamps with a minimum efficacy of:

****In 2009 IRC, this would be a change to Chapter 2 Definitions, R201.4; HIGH-EFFICACY LAMPS.**

Supporting information: State purpose and reason for the change and provide substantiation to support proposed change.

This PCF is submitted to provide to give code language more clarity, without referring to items 1 through 3. PCF-E12 was submitted to the Electrical Technical Committee. The proposed change was discussed and passed unanimously. The wording submitted here is exactly the same as PCF E8. *LED lamps were not readily available to consumers when the 2009 IRC was published. Dimmable compact fluorescent lamps were not readily available either. Both are now readily available at electrical wholesales, home improvement stores, and the internet.*

5. Signature:  Commission Liaison for Residential Electrical Technical Committee

Send completed "Public Comment Form" to:
Oklahoma Uniform Building Code Commission, PO Box 12540, Oklahoma City, OK 73157
Email to: Kathy.Hehnlly@oubcc.ok.gov or Fax to: 405-521-6504

B-48

David Timberlake, P.E.
Chairman



Mary Fallin
Governor

Oklahoma Uniform Building Code Commission

PUBLIC COMMENT FORM FOR THE ADOPTION OF BUILDING/CONSTRUCTION CODES PROPOSED CHANGE TO THE INTERNATIONAL RESIDENTIAL CODE®

INSTRUCTIONS: Please type or print clearly. Form must be signed. Any form not signed or filled out completely, may not be considered. Each requested change must be on a separate form.

1. **Submitter's Contact Information:**

Name: Todd Booze Date: 8/31/15
Company: OUBCC Technical Committee
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Ext: _____ Fax: _____
Email: _____

2. Do you feel this proposed change will increase the cost of construction? Yes No

3. Which are of the code needs revision?

Section: _____ Table: N1102.1.2 Figure: _____ Page No: _____

4. Please check the appropriate box:

Revise as follows Delete as follows Add new text as follows Delete with substitute

Show the proposed **NEW, REVISED, OR DELETED TEXT** in legislative format, (line through text to be deleted and underline text to be added or revised).

Add Footnote:

E. If foundation/slab insulation is used and slab ledge exist, 1/2" insulation in vertical position is allowed as thermal break between slab edge and foundation wall so that slab can still bear on horizontal ledge.

Supporting information: State purpose and reason for the change and provide substantiation to support proposed change.

Due to foundation designs that are non monolithic a slab ledge of 1-1/2" is formed on stem wall for slab to bear and where steel often is extended from Stem wall into slab. Meeting the R-5 requirement of slab insulation (1") would not leave sufficient bearing width. This will have minimal impact of reducing that 3-1/2" area around foundation only having R-3.

5. Signature: _____

Send completed "Public Comment Form" to:
Oklahoma Uniform Building Code Commission, PO Box 12540, Oklahoma City, OK 73157
Email to: Shawnta.Mitchell@oubcc.ok.gov or Fax to: 405-521-6504

B-49

David Timberlake, P.E.
Chairman



Mary Fallin
Governor

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PUBLIC COMMENT FORM FOR THE ADOPTION OF BUILDING/CONSTRUCTION CODES PROPOSED CHANGE TO THE INTERNATIONAL RESIDENTIAL CODE®

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1. **Submitters Contact Information:**

Name: Todd Booze Date: 8/31/15
Company: OUBCC Technical Committee
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Ext: _____ Fax: _____
Email: _____

2. Do you feel this proposed change will increase the cost of construction? Yes No

3. Which are of the code needs revision?

Section: _____ Table: N1102.4.2 Figure: _____ Page No: _____

4. Please check the appropriate box:

Revise as follows Delete as follows Add new text as follows
 Delete with substitute

Show the proposed **NEW, REVISED, OR DELETED TEXT** in legislative format, (line through text to be deleted and underline text to be added or revised).

Add Text under "Air Barrier Criteria" column & "Wall Component" row:
Corners and Headers are insulated "when not affecting the structural capacity of framed corners or header system"

Supporting Information: State purpose and reason for the change and provide substantiation to support proposed change.

This is an impractical requirement if framing with 2x4 walls as space between header components are filled with OSB or Plywood for structural and dimension purposes. This can be achieved if walls are built from 2x6 having a 2-1/2" gap between header members. There are provisions in code to allow for single header components that can be insulated if structurally appropriate.

5. Signature: Todd Booze

Send completed "Public Comment Form" to:
Oklahoma Uniform Building Code Commission, PO Box 12540, Oklahoma City, OK 73157