BEFORE THE NEVADA ENERGY COMMISSIONER

COMMENT/REPLY COMMENT INFORMATION FORM

Rulemaking to adopt, amend, or repeal regulations pertaining to Chapter 701 of the Nevada Administrative Code related to the conservation of energy in buildings, including manufactured homes, adoption of 2009 IECC pursuant to Nevada Revised Statutes 701.220.	))))))))

Please complete the following information and submit this form along with your comments[1]:

Date of Filing: June 8, 2011

Method of Filing: via Email [x] U.S. Postal Mail [ ] Fax [ ]

Name of Person Commenting: Mike McCullogh

Name of Organization (if applicable): Washoe County Building and Safety Dept

Address:

Phone Number: 775-328-2021

Fax Number: 775-328-6132

Email address: mmccullogh@washoecounty.us

Do you wish to be placed on the email service list for this matter to receive any further notices? (Mark One)

Yes [ ] **No [ ]**

Note: Submitted comments are part of the public record for the rulemaking and may be posted on the web.

[1] Please refrain from making any changes to this form. Thank you.

From: McCullogh, Mike [mailto:MMcCullogh@washoecounty.us]
Sent: Wednesday, June 08, 2011 1:48 PM
To: Emily Nunez
Cc: Ken Baker
Subject: RE: 2009 IECC Proposed Language

Hi Emily,

Yes my earlier comments apply with some additional amendments. I've included the vapor retarder definition which does not appear in the IECC. The residential sealing requirements have been moved from the IECC to the IRC. 403.2.2 and 403.2.2.1 address that. The commercial sealing requirements were moved to the IMC. 503.2.7 adds the requirements back into the IECC. The commercial amendment 503.2.5.1 can be changed to work regardless of which mechanical code you have adopted. The ventilation rates are the same and both the IMC and the UMC use chapter 4 for ventilation. I've modified our amendment to make it less specific and allow either mechanical code to work.

I've attached our Northern Nevada amendment forms (503.2.5.1 modified) that apply to the above issues. We will be voting on the last amendments in our package at the end of June.

Let me know if you have any questions. You might have Ken Baker look these over. I've included him in this email.

Mike

Mike McCullogh M.C.P.
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From: Emily Nunez [mailto:enunez@renewable.nv.gov]
Sent: Tuesday, June 07, 2011 3:35 PM
To: McCullogh, Mike
Subject: 2009 IECC Proposed Language

Hi Mike,

If I can recall, the comments you made at our workshop recently were consistent with your comments submitted in November 2010. Is that correct?

http://renewableenergy.state.nv.us/documents/Comments/WashoeCountyReplyComment.PDF

Thank you,

Emily H. Nunez
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NORTHERN NEVADA
2009 CODE AMENDMENT JUSTIFICATION FORM

State proposed amendment

Include the entire text of the code section to be amended. ~~Strike out~~ portions amended or deleted. Underline added text.

09 IECC SECTION 202 GENERAL DEFINITIONS

VAPOR RETARDER CLASS. A measure of a material or assembly's ability to limit the amount of moisture that passes through that material or assembly. Vapor retarder class shall be defined using the desiccant method of ASTME 96 as follows:
Class I: 0.1 perm or less.
Class II: 0.1 < perm ≤ 1.0 perm.
Class III: 1.0 < perm ≤ 10 perm.

Supporting statement

Indicate if this amendment is:

X Omission ___Local environment condition
X Compatibility ___Area standard practice

Section 402.2.9 in the 09 IECC references a Class I vapor retarder as defined by the IBC. This is a new definition that does not exist in the 06 IBC. Adding the definition to the 09 IECC and eliminating the reference to the IBC in section 402.2.9 of the IECC allows the 06 IBC to remain unchanged. See the companion amendment for IECC section 402.2.9.

Documentation

Provide statistics, studies or supporting documents.

See chapter 2 (definitions) of the 06 IBC.

Cost analysis

State if amendment will increase or decrease building costs. Industry member should supply approximate cost (increase or decrease) of amendment.

No increase.

NORTHERN NEVADA
2009 CODE AMENDMENT JUSTIFICATION FORM

State proposed amendment

Include the entire text of the code section to be amended. ~~Strike-out~~ portions amended or deleted. Underline added text.

09 IECC 402.2.9 Crawl space walls. As an alternative to insulating floors over crawl spaces, crawl space walls shall be permitted to be insulated when the crawl space is not vented to the outside. Crawl space wall insulation shall be permanently fastened to the wall and extend downward from the floor to the finished grade level and then vertically and/or horizontally for at least an additional 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder ~~in accordance with the International Building Code~~. All joints of the vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (153 mm) up the stem wall and shall be attached to the stem wall.

Supporting statement

Indicate if this amendment is:

X Omission ___Local environment condition
X Compatibility ___Area standard practice

The 2006 IBC does not have a definition of a Class I vapor retarder. The companion amendment, section 202, adds that definition to the 09 IECC.

Documentation

Provide statistics, studies or supporting documents.

See chapter 2 (definitions) of the 06 IBC.

Cost analysis

State if amendment will increase or decrease building costs. Industry member should supply approximate cost (increase or decrease) of amendment.

No increase.

NORTHERN NEVADA
2009 CODE AMENDMENT JUSTIFICATION FORM

State proposed amendment

Include the entire text of the code section to be amended. ~~Strike-out~~ portions amended or deleted. Underline added text.

09 IECC 403.2.2 Sealing (Mandatory). All ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section 403.2.2.1 ~~M1601.4.1 of the International Residential Code.~~

Duct tightness shall be verified by either of the following:

1. Postconstruction test: Leakage to outdoors shall be less than or equal to 8 cfm (226.5 L/min) per 100 ft² (9.29 m²) of *conditioned floor area* or a total leakage less than or equal to 12 cfm (12 L/min) per 100 ft² (9.29 m²) of *conditioned floor area* when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.

2. Rough-in test: Total leakage shall be less than or equal to 6 cfm (169.9 L/min) per 100 ft² (9.29 m²) of *conditioned floor area* when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the roughed in system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 ft² (9.29 m²) of *conditioned floor area*.

Exceptions: Duct tightness test is not required if the air handler and all ducts are located within *conditioned space*.

Supporting statement

Indicate if this amendment is:

X_ Omission
___ Compatibility
___Local environment condition
___Area standard practice

Duct sealing in the 06 IRC does not contain all of the language that has been incorporated into the 09 IRC. Adding the modified section from the 09 IRC to the 09 IECC details the new requirements, which are mostly newly added exceptions, and makes them available to installers without amending the existing 06 IRC.

See companion amendment 403.2.2.1.

Documentation

Provide statistics, studies or supporting documents.

See 06 IRC M1601.3.1 vs. 09 IRC M1601.4.1.

Cost analysis

State if amendment will increase or decrease building costs. Industry member should supply approximate cost (increase or decrease) of amendment.

No increase.

NORTHERN NEVADA
2009 CODE AMENDMENT JUSTIFICATION FORM

State proposed amendment

Include the entire text of the code section to be amended. ~~Strike out~~ portions amended or deleted. Underline added text.

09 IECC 403.2.2.1 Joints and seams. Joints of *duct systems* shall be made substantially airtight by means of tapes, mastics, liquid sealants, gasketing or other *approved* closure systems. Closure systems used with rigid fibrous glass ducts shall comply with UL181A and shall be marked 181A-P for pressure-sensitive tape, 181A-M for mastic or 181 A-H for heat-sensitive tape. Closure systems used with flexible air
ducts and flexible air connectors shall comply with UL 181B and shall be marked 181B-FX for pressure-sensitive tape or 181B-M for mastic. Duct connections to flanges of air distribution system *equipment* or sheet metal fittings shall be mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metal ducts shall have a contact lap of at least 1½ inches (38 mm) and shall be mechanically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint. Closure systems used to seal metal ductwork shall be installed in accordance with the manufacturer' installation instructions. Joints between plastic ducts and plastic fittings shall be made in accordance with the manufacturer's installation instructions.

Exceptions:

1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. Continuously welded and locking type longitudinal joints and seams in ducts operating at static pressures less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.

Supporting statement

Indicate if this amendment is:

X_ Omission
___ Compatibility
__Local environment condition
__Area standard practice

Duct sealing in the 06 IRC does not contain all of the language that has been incorporated into the 09 IRC. Adding the modified section from the 09 IRC to the 09 IECC details the new requirements, which are mostly newly added exceptions, and makes them available to installers without amending the existing 06 IRC.

See companion amendment 403.2.2.

Documentation

Provide statistics, studies or supporting documents.

See 06 IRC M1601.3.1 vs. 09 IRC M1601.4.1.

Cost analysis

State if amendment will increase or decrease building costs. Industry member should supply approximate cost (increase or decrease) of amendment.

No increase.