



ICYNENE^{INC.}

To: Icynene Licensed Dealers

From: Ed Reeves, P. Eng

Cc: Regional Sales Managers, Manufacturer's Representatives

Date: June 22, 2004

Re: Amendments to the 2006 edition of the International Energy Conservation Code (IECC) and the International Residential Code (IRC) .

Yes! We have code approval for the unvented attic system.

To date, many building code officials have approved the unvented attic and Icynene@ insulation combination because they recognize the superior performance of this approach. In such instances, the local code officials have had to over-ride the current code requirements for ventilation. In those instances where the code officials refuse to over-ride the code provision for attic and crawlspace ventilation, additional help is on the way.

On Monday May 17, 2004, the International Code Committee (ICC) held a public hearing for final consideration of the code changes proposed to the current IECC and IRC. At this meeting, the International Code Committee approved amendments regarding:

R806.4 R408.3

Conditioned Attic Assemblies Unvented Crawl Space

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A copy of the approved code amendl wording is attached

These approved code changes will be published in a supplement to the current code and should be available in September 2004. The next planned publication for the code, which will include all of the approved amendments and removal of discontinued items, is scheduled for 2006.

A copy of the actual published supplement, when available, will be posted on the Engineering section of the Icynene Dealer Internet "Foam Booth" website. All Dealers and Icynene staff will be advised when the supplement is available.

Please note that many jurisdictions at this time have not adopted ICC, IRC, Iac or IECC. Although the approved code amendments have a potential to influence how buildings are built in your area, you should remember that the building code officials are under no obligation to accept the approved amendments - it is at their discretion. As always, it is imperative that you contact your local building department prior to proceeding with new / alternate approaches and secure the necessary approval.

Annroved Amendments:

International Energy Conservation Code (IECC)

International Residential Code (IRC).

Item 11. F.

R806.4 Conditioned attic assemblies: Unvented conditioned attic assemblies (spaces between the ceiling joists of the top story and the roof rafters) are permitted under the following conditions:

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2.

3.

4.

No interior vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly.

An air-impermeable insulation is applied in direct contact to the underside/interior of the structural roof deck. "Air-impermeable" shall be defined by ASTM E 283.

Exception: In zones 28 and 3B, insulation is not required to be air impermeable.

In the warm humid locations as defined in N11 01.2.1 :

a. For asphalt roofing shingles: A 1 perm or less vapor retarder (determined using Procedure B of ASTM E 96) is placed to the exterior of the structural roof deck; i.e. just above the roof structural sheathing.

b.

For wood shingles and shakes: a minimum continuous 1/4-inch vented air space separates the shingles/shakes and the roofing felt placed over the structural sheathing.

In zones 3 through 8 as defined in **N11** 01.2 sufficient insulation is installed to maintain the monthly average temperature of the condensing surface above 45/F. The condensing surface is defined as either the structural roof deck or the interior surface of an air impermeable insulation applied in direct contact to the underside/interior of the structural roof deck. "Air-impermeable" is quantitatively defined by ASTM E 283. For calculation purposes, an interior temperature of 68/F is assumed. The exterior temperature is assumed to be the monthly average outside temperature.

Approved Amendments:

International Energy Conservation Code (IECC)

International Residential Code (IRC).

R408.3 Unvented crawl space. Ventilation openings in under-floor spaces specified in Sections R408.1 and R408.2 shall not be required where:

1

Exposed earth is covered with a continuous vapor retarder. All joints of the vapor retarder shall overlap by 6 inches (153 mm) and shall 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 and sealed to the stem wall,

2. And one of the following is provided for the under-floor space:

- a. Continuously operated mechanical exhaust ventilation at a rate equal to 1 cfm for each 50 ft² of crawlspace floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section **N11 02.2.8**, or
- b. Conditioned air supply sized to deliver at a rate equal to 1 cfm for each 50 ft² of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille) and perimeter walls insulated in accordance with Section **N1102.2.8**, or
- c. Plenum complying with M1601.4, if under floor spaces used as a plenum.

