

When You Talk to Code Officials . . .

There are other significant code issues to be addressed at the ICC Final Action Hearings. Here is some background if you raise these issues with local code officials. Please contact NAHB Codes & Standards staff Steve Orłowski at 800-368-5242, ext. 8303 or sorłowski@nahb.com with questions or if you want to know about other issues you may consider raising in your meetings.

Proposal: F178- 2007/08. The original code change proposal was to require that all dwellings not classified as R occupancies to be equipped with single- and multiple-station smoke alarms. The International Fire Code committee modified the proposal, creating a retroactive requirement that all occupancies built under the IRC would also be subject to this code requirement. This modification was deemed outside the scope of this committee by the ICC staff.

Committees Action: Approved as Modified

Desired Final Action Hearing Result: Disapproval

- The issue is not with the proposal, but the manner in which the IFC committee has overstepped its authority by creating a code requirement on structures that are outside its scope and the purview of this code.
- The original proposal would have added to the IFC the requirement for existing R occupancies to be fitted with single- and multiple-station smoke alarms, now part of the International Property Maintenance Code. The proposed modification creates a conflict with the International Residential Code, which requires all new homes to be equipped with interconnected smoke alarms (multiple-station).
- Should this proposal be approved, NAHB will submit a formal complaint to the ICC Code Correlation Committee and the Board of Directors for an official ruling. ICC staff has analyzed the code modification and agrees that the committee imposed a retroactive requirement on the IRC outside the scope of the IFC and a public comment should be submitted to rectify the issue.

Proposal: S20-2007/08. Removes from 1505.2 and R902.1 slate, clay, and concrete roof tiles from the list of approved Class A roof assemblies.

Committees Action: Approved As Submitted

Desired Final Action Hearing Result: Disapproval

- The reasoning statement indicated that slate failed to meet the testing requirements of ASTM E108 15 minutes into the test. However, there was no indication that concrete tiles and clay had failed the test.
- There is no scientific proof or supporting evidence that concrete tile and clay roof coverings failed during actual field conditions. The supporting statement is merely a hypothesis of what could happen under these conditions.
- The supporting statement is also contradictory. In one instance, it supports field condition experience to no longer permit clay and concrete tile for what could happen and then condemns it in the following paragraph for allowing previous editions of the code to permit its use based on *field* experience.

Proposal: RB148-07/08. Provide independent wall bracing table for wind loading

Committee Action: Disapproved

Desired Final Action Hearing Result: Approved as Modified by Foam Sheathing Coalition and NAHB

- The new wind bracing table proposed by the ICC Ad-Hoc Wall Bracing Committee is onerous. Bracing lengths increase by as much as 100%, even for typical one- or two-story houses.
- The committee did not consider the increased strength that a braced wall gains when placed in an actual structure, relying solely on two-dimensional shear wall tests and ignoring the increased performance seen in 3D whole-building tests.
- The proposed bracing amounts exceed traditional bracing required by the CABO code, which has been shown to perform well under high-wind conditions.
- NAHB and the Foam Sheathing Coalition are collaborating on a revised table to be submitted for public comment. This proposal considers the increased performance from 3D tests and conservative biases in wind loads and shear wall tests.
- The NAHB/FSC proposal is benchmarked to traditional one- and two-story houses in 90 mph, Exposure B regions. Bracing amounts will be consistent with CABO.
- Bracing for three-story houses and houses in 100mph-110mph wind regions or Exposure C will increase, as one would anticipate.

Proposal: RB12- 2007/08 & RB230- 2007/08. IRC Wind Limitations

Committee Action: RB12—Disapproved; RB230—Approved as Modified

Desired Final Action Hearing Result: RB12 Approved as Submitted or RB230 Approved as Modified

- The NAHB proposal is to bring homes in 100 mph hurricane-prone region back into the IRC. The limit imposed in 2006 was a knee-jerk response to the 2004/2005 hurricanes.
- No technical substantiation was ever provided that the IRC conventional construction provisions were inadequate.
- In fact, houses built to the IRC provisions and which experienced winds of up to 110 mph in Katrina and Rita performed well.
- Observed problems have been in older housing stock not constructed to building codes.
- NAHB's proposal allowing builders in 100 mph region who use continuous plywood or OSB sheathing to stay within the IRC scope was approved.
- Continuous sheathing has been shown in 3D whole-structure testing to have twice the capacity of intermittent wall bracing, and to resist up to 120 mph wind loads.

Proposal: RB207- 2007/08. Roof Uplift Connections

Committee Action: Disapproved

Desired Final Action Hearing Result: Approved As Modified by NAHB

- The proposal is too conservative for 90 mph, Exposure B construction. Hurricane ties would be required in edge zones for 24'-0" roof spans, and tabulated loads are based on low-slope roofs that experience higher uplift pressures.
- The ASCE 7 wind loads are conservative by about 20% for one-story homes and by about 30% for two-story homes in built-up or heavily-treed urban and suburban environments.
- NAHB is preparing a modification based on ASCE 7 provisions that will provide wind load reductions for high-slope (7:12 or greater) roofs.
- High-slope roofs experience lower uplift pressures and significantly lower damage in high-wind events. Therefore, introducing a factor to credit and encourage the use of higher-slope roofs is appropriate.

Proposals: EC16 (and-33-35-36-46-91 & 92). After the defeat of EC-14, the mandatory energy requirement proposal to fulfill the “30 Percent Solution” to the energy problem in this country, the authors of EC 14 broke out each requirement into individual pieces. Now, they are attempting to mandate energy efficiency through each separate proposal.

Committee Action: Disapproved all

Desired Final Action Hearing Results: Disapprove

- NAHB is very concerned with the energy crisis in this country, but is also acutely aware of the costs involved in reaching the objectives of the proposed code changes. These costs exacerbate the housing affordability crisis while serving as the poster child for the law of diminishing returns.
- The proponents would mandate items that in some areas of the country have a significant expected payback costs – not just of more than 10 years, which is what NAHB considers a fair return on investment, but in some cases more than 50 years to achieve a return on investment – or even never. A classic example: a requirement for foundation insulation in Miami, Florida.
- The code proponents did not allow trade-offs for improved efficiency of heating and cooling equipment but centered on increasing insulation or the higher performance of windows and doors. These proposals do not give credit for higher-efficiency appliances as a tradeoff for building or water heating using the performance method.
- To keep housing affordable, NAHB has worked to develop a prescriptive tradeoff table for the IRC which would allow lower R-values in walls, ceilings and floors as tradeoffs for the use of energy efficient heating appliances. This would allow builders to help keep construction costs down. This alternative was strongly opposed by the proponents of these proposals in the IECC.

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