



Report on Critical 2015 Code Change Proposals

NAHB called on our members to meet with their state and local building code officials to discuss and gain support on these **critical** International Construction Code change proposals before the Public Comment Hearings in Atlantic City earlier this week.

With your help, NAHB Construction, Codes and Standards Committee members and staff were successful in ensuring that the majority of these and hundreds of other changes approved were necessary, practical and cost-effective.

Here are the results of the 40 most important votes.

2015 IRC - Building Code Change Proposals



RB68 – Exterior Wall Penetrations. This proposal corrected an inconsistency in which windows are permitted in exterior rated walls, but penetrations prohibited. The code will now allow exterior wall penetrations such as dryer vents, hose bibs, electrical boxes and junction boxes to be unprotected in rated walls that are less than 5 feet and more than 3 feet from the lot line or the point used to measure fire separation. *Approved.*



RB94 – Attic Draft Stopping. This proposal would have required draft stopping in attics every 1,500 square feet in all single-family homes and townhouses. Builders would need to install drywall (or another approved material) from the ceiling joist to the underside of the roof sheathing to prevent the passage of smoke. For roof systems that use open web trusses this would have been labor intensive; for traditional wood-frame rafters, this would have required additional framing to support the drywall. *Disapproved.*



RB9 – New Required Inspections. This proposal would have added building department inspection requirements for exterior roof and wall sheathing and fasteners in high-wind regions. *Disapproved.*



RB46-13 – Default Wind Exposure C. This proposal changes the default wind exposure category to Exposure C (flat, open terrain) versus the current Exposure B (urban and suburban, or wooded areas). If approved, this change could result in many dwellings

being incorrectly classified as Exposure C, which would require as much as a 40% increase in design wind loads. *Disapproved.*



RB127-13 – Additional Stairs & Ramps. This proposal requires all single-family homes and townhouses with multiple levels to have a stair or ramp within 50 feet of any habitable portion of the dwelling. The 2012 IRC requires a single stairway or ramp to connect all habitable levels. *Disapproved.*



RB159 – Residential Sprinkler Monitoring. This proposal would have permitted a sprinkler water-flow alarm initiating device to be connected to a multiple-station alarm or a household fire alarm system. NFPA 13D does not require a water-flow initiating device to be installed in a dwelling already equipped with smoke alarms. *Disapproved.*



RB166 – Additional Requirements for Exterior Foam Plastics. This proposal would have required all single-family homes or townhouses with foam plastics in the wall or roof system within 10 feet of the property line to be protected on both the interior and the exterior by a thermal barrier and prohibited the use of any siding that uses foam insulation as a backer product. Had this proposal been approved, it would have required builders to sheath the entire exterior of their homes in a layer of drywall or wood sheathing, or maintain a distance of 10 feet from all property lines. *Disapproved.*



RB179-13 – Residential Accessibility. This proposal requires all one- and two-family homes to be designed so individuals with disabilities can enter unassisted, have a zero clearance entrance or an elevator or lift, an accessible bathroom, bedroom and (if located on the accessible level) a kitchen with 40 inches of clear floor space at all counters. *Disapproved.*



RB190 – Flood Zone Foundation Walls. This proposal would have removed the ability to construct unreinforced masonry foundation walls less than 4 feet in height in a “Zone A” special flood hazard area. *Disapproved.*



RB264 – Wood Deck General Provisions. This proposal expands prescriptive wood deck provisions to include joist and beam span tables, allowable post sizes and other details. Some proposed requirements – struck down – exceeded common practices and details used successfully in many jurisdictions. *Approved.*



RB401 – Attic Ventilation. This proposal deleted a provision which allowed the building official to waive attic ventilation requirements based on the specific climate or topography conditions at

the building site. Builders now must reevaluate how they construct attics to ensure that they do not trap moisture and provide adequate ventilation. *Approved.*

2015 IRC - Mechanical Code Change Proposals



RM27 – Makeup Air Requirement. This proposal clarifies that makeup air may be provided from any nearby livable space within a home and not just from the room, usually the kitchen where the exhaust hood is. This change will provide consistency with makeup air requirements in the International Mechanical Code. *Approved.*



RM33 – Minimum Makeup Air Volume. Both the 2009 and the 2012 IRC require makeup air to be provided only when a kitchen exhaust hood has an exhaust rate that exceeds 400 cfm. This proposal would have clarified that the required volume of makeup air shall be the exhaust rate of the hood minus 400 cfm. As an example, a home with an exhaust fan having a capacity of 600 cfm would only be required to have 200 cfm of makeup air. *Disapproved.*

2015 International Fire Code Change Proposals



F223-13 and F224-13 – Retrofitting Existing High-Rise with Sprinklers. These two proposals would have required require an automatic sprinkler system to be retroactively installed in any existing high-rise residential building within a 12-year period. *Disapproved.*

2015 Existing Building Code Change Proposals



EB29 – Level II Alteration and Fire Pumps. This proposal removed the longstanding exception which does not require a sprinkler system to be installed if there is not adequate water supply and pressure available to reach the floor where the system would be required, if the design would require a fire pump. *Withdrawn at hearing.*



EB57 – Fire Sprinkler Group A. This proposal would have required a fire suppression system installed in all new assembly occupancies in existing structures and require the suppression system to be installed on all floors between the assembly occupancy and the level of discharge. This would have been a significant cost to building owners and a disruption to the tenants and occupants of the building. *Withdrawn at hearing.*

2015 Administrative Code Change Proposal



ADM62 – Referenced Standards Administrative Updates. In accordance with ICC policy, any referenced code or standard can be automatically updated. The problem is there are several standards that have been identified for an automatic update that have not completed their revision processes and include significant proposed changes that cannot be addressed in the 2015 ICC code development cycle. *Approved.*

2015 IECC – Residential Energy Code Change Proposals



RE166 – Mechanical Equipment Trade-offs. This proposal would have reinstated the performance option in the International Energy Conservation Code (IECC) to reduce prescriptive requirements by installing HVAC equipment with higher energy-efficiency performance ratings than required by the code. *Disapproved.*



RE109-13 – Duct Leakage Trade-off. This proposal reinstates the performance option in the IECC to reduce prescriptive requirements by installing ducts with less air leakage than required by the code. *Approved.*



RE72 – Building Tightness Trade-off. This proposal would have allowed builders to trade improvements in other building energy components for less stringent building envelope pressure test results. This performance option provided needed flexibility in meeting the air tightness requirements and provided options for recovering from the rare, unexpected air-tightness test failure. *Disapproved.*



RE170 – Window Area Trade-off. The 2012 IECC provides no incentive in the performance path to optimize the window area to save energy and provide daylighting, egress and views that make for a safe and comfortable house, but does penalize builders for windows in excess of 15 percent of wall area. This code change proposal would have provided the building designer the ability to reduce window area to less than 15 percent and get credit for the energy saved. *Disapproved.*



RE75 – Multi-Family Building Tightness Testing Correction. This proposal would have removed requirements to test each individual dwelling unit for building tightness in multifamily buildings and allowed builders to test the entire building as a whole, as is done in commercial buildings. *Disapproved.*



RE90 – Building Tightness Leakage Rate Correction. The 2012 IECC requires homes to have a leakage rate of no more than three air changes per hour (3 ACH) in climate zones 3-8. The ASHRAE Handbook of Fundamentals shows that less than 10% of homes achieve 3 ACH or less. This proposal would have modified the requirement from 3 ACH to 4 ACH, an aggressive tightness level that still would have provided a tight, comfortable, energy-efficient home for the consumer. *Disapproved.*



RE98-13 – Additional Design Limitations for Prescriptive Path. This proposal would have not allowed air handlers in attics, electric resistance heating, or fenestration area to exceed 15% unless specific limitations are met. *Disapproved.*



RE28 – Ceilings Climate Zones 2, 3, 4 & 5. This proposal would have reinstated the appropriate minimum ceiling R-Values in Climate Zones 2, 3, 4 and 5, those published in the 2009 IECC. The 2012 IECC values increase construction costs an average of \$1,342 per home yet save only \$14 per year in energy costs – or a payback of 99 years. *Disapproved.*



RE34 – Walls R Value/U Factor Corrections, Climate Zones 6, 7 & 8. This proposal would have reinstated the appropriate minimum wall assembly R-Values/U-Factors in Climate Zones 6, 7 and 8 published in the 2009 IECC. The 2012 IECC values increased the upfront construction costs an average of \$1,819 per home yet only save \$48 year in energy costs – or an average payback of 41 years. *Disapproved.*



RE38 – Walls R Value/U Factor Correction Climate Zone 3. This proposal would have reinstated the appropriate minimum wall assembly R-Values/U-Factors in Climate Zone 3 published in the 2009 IECC. The 2012 IECC values increased the upfront construction costs an average of \$1,199 per home yet only save \$50 year in energy costs, or an average payback of 24 years. *Disapproved.*



RE8 – Solar-Ready Zone. This proposal would have required home builders to dedicate portions of every new home's roof for to the installation of future solar equipment. It also would have required the construction of a chase for wiring and accommodations in the electrical box for solar relay equipment. *Disapproved.*



RE9 – Solar-Ready Zone. This proposal was the same as RE8-13, but with additional public comments offered in Atlantic City adding more definitions for qualified houses and a successful effort to place it in to the appendix as an option. *Approved.*



RE50 – Adjustment of U-Factor Calculations. This proposal corrects the conversion from R-Value to U-Factor without changing stringency. It is important that the U-Factors and R-Values do match when small alterations are being made to the wall assemblies selected in the R-Value table. *Approved.*



RE62 – Mechanical Room Insulation. This proposal would have required all walls of a residential mechanical room with combustion make-up air openings to the exterior insulated according to exterior wall assembly requirements. *Disapproved.*



RE116 – Duct Sealing. This proposal would have allowed an alternative duct-tightness testing method to be used. It also clarified what distribution system efficiency should be applied to the Standard Referenced Design and how the ducts should be modeled in the performance path. *Disapproved.*



RE132 – Hot Water Pipe Insulation. This proposal limits insulation requirements to ¾" or larger piping; underground or under slab, exterior, or recirculation piping; and from the water heater to the distribution manifold. The amount of energy saved by insulating hot water pipes is very small – roughly \$3-\$7 per year for plastic piping based on a study by the Home Innovation Research Labs, and those results were duplicated by NREL in a 2009 study. *Approved.*



RE162 – Renewable Energy Sources. There was no energy credit given or acknowledged in the 2012 IECC performance path for renewable energy produced at the dwelling site or on the dwelling itself. This proposal would have allowed energy credits to be given for such alternate energy sources. Opponents argued that allowing credits would be a disincentive for constructing tight thermal envelopes instead. *Disapproved.*



RE186 – Flex Points-Based Compliance. This proposal set arbitrary energy conservation levels or “flex points” required for compliance. No quantitative data was submitted to substantiate or justify these flex points. It eliminated boilers and other equipment from consideration. The proposal had far too many presumed ideas for whole-house energy efficiency and should not become a requirement. *Disapproved.*



CE168/171 – Air Tightness Test (Commercial). These proposals require all commercial and high-rise residential buildings to be tested for air tightness. The testing industry and standards are not ready for the number of tests that will be required and the complexities of large multistory buildings. In addition, these tests are very expensive and the accuracy is dependent on a variety of factors. *Disapproved.*



CE29, Part I -13 – Alternate or Accredited Energy Programs (Commercial). This proposal allowed the code official or other authority having jurisdiction to accept alternate programs that comply with the intent of the energy code provisions or a national program that has received independent accreditation. *Disapproved.*



CE29, Part II -13 – Alternate or Accredited Energy Programs (Residential). This proposal allowed the code official or other authority having jurisdiction to accept alternate programs that comply with the intent of the energy code provisions or a national program that has received independent accreditation. *Disapproved.*



CE31, Part I -13 – Mandatory Requirements for Above-Code Programs (Commercial). This proposal eliminates the need to meet all “Mandatory” requirements identified by the IECC as long as the program exceeds the energy-efficiency levels required. *Disapproved.*



CE31, Part II -13 – Mandatory Requirements for Above-Code Programs (Residential). This proposal would have eliminated the need to meet all “mandatory” requirements identified by the IRC/IECC as long as that program exceeded the energy-efficiency levels required. ICC voted to require multifamily developments to meet both code and above-code programs to comply. *Disapproved.*



Oct. 8: Code officials preside at the Final Comment Hearings in Atlantic City, N.J. on Day 7: Commercial Energy Code.

Preparations for the 2015 model family of building codes are already underway as staff looks at ways to amend and improve each section. In May 2014, code officials and proponents including product manufacturers, utilities and government officials join home builders and remodelers in Memphis for the preliminary hearings on the International Green Construction Code.

All codes will be available for adoption by state and local jurisdictions when ICC publishes them in early Spring 2015.

For additional information on the code adoption process and how you can lend a voice, contact NAHB Vice President of Construction, Codes and Standards Neil Burning at 800-368-5242 x8564 or nburning@nahb.org.