

# The ICC Holds Hearings for 2018 Edition of Codes



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Code changes to the 2015 International Codes are being considered this year, with RCI taking an active role in testifying on the various proposals. The International Code Council (ICC) considered a record number of submittals to change the structural requirements of the International Building Code (IBC), International Energy Conservation Code (IECC), International Fire Code (IFC), and the building provisions of the International Residential Code (IRC). The code process begins with submitting proposals to change the code, followed by committee hearings, a public comment phase, and final action hearings. The first-round hearings were held in April, during which the various technical committees of the ICC heard testimony concerning the codes mentioned above, as well as other codes.

## WIND PRESSURES ON ROOFS

Proposals of interest included several that were in response to changes to the American Society of Civil Engineers' (ASCE's) upcoming 2016 edition of ASCE-7. The changes to ASCE-7 affect external wind pressures on roofs. ASCE analyzed wind tunnel test data and concluded that the requirements for external pressures on roofs needed to be revised. In some areas of the country, these changes will greatly increase pressures to be resisted by the structure. It is felt that if the internal pressures are adjusted, it will normalize the changes to the external pressure requirements. Opponents urged ASCE and the ICC Structural Committee to delay approving changes to the external pressure require-

ments until the internal pressures could be analyzed during the next cycle of ASCE 7. In this manner, the changes for external and internal pressures will be effective at the same time. Opponents argued if the external pressures are approved at this code cycle and internal pressures are not revised until next code cycle, there can be drastic structural changes that will be required during the next three-year code cycle, and then when the internal pressures are analyzed and revised, the pressures will be normalized.

Opponents argued it will be an unfair burden to building owners and designers to meet these requirements for three years, when they probably will not be required once the internal pressures are revised. Both the Single Ply Roofing Institute (SPRI) and the Metal Building Manufacturers Association (MBMA) submitted proposals to normalize the proposed changes to ASCE 7. RCI and many others testified in favor of the SPRI and MBMA stance, resulting in a split committee vote, forcing the chair of the committee to break the tie. Unfortunately, the chair voted to disapprove the proposals. In order to achieve approval, the proposals will require a two-thirds majority of the voting membership to overturn the committee's decision.

The committee's published reason for disapproval was: "There were concerns of significant economic impact from multiple industries; and if there is such a jump in wind pressures, a gradual increase is warranted. Perhaps smoothing it out over three to six years may be warranted since it would give ASCE and [the] industry a chance to fix the wind provisions or, if they are correct, this would turn out to be an

incremental step. ...Another concern is that pressures increase significantly, and they will also affect IEBC wind triggers, which is not intended. It was also noted that the proposed exception is appropriately written as an option and a designer could still calculate wind pressures directly from ASCE 7-16. But in some locations there will be large increases in roof component and cladding pressures that [are] not accompanied by widespread field observation."<sup>1</sup>

RCI's submittal changing the IBC Chapter 15 requirements for designing and testing roof edge material to provisions of the ANSI/SPRI ES-1, *Wind Design Standard for Edge Systems Used with Low-Slope Roof Systems*, was disapproved. The RCI proposal would have stated that ES-1 would be required in hurricane-prone areas only. Currently, the provisions of ES-1 are mandatory throughout the United States. There were many opponents to the proposal, including the Federal Emergency Management Agency (FEMA), the National Institute of Standards and Testing, the Single Ply Roofing Industry (SPRI), various membrane manufacturers, representatives from the property/casualty insurance industry, and others. Testifying in favor of the proposal were RCI and the National Association of Home Builders. The proposal was defeated, receiving no votes to approve the proposal. The committee stated there was not sufficient evidence to justify lowering the threshold on where the edge securement requirements apply.

## AIR BARRIER REQUIREMENTS

There were numerous proposals to the IECC concerning air barrier requirements, including revising the Chapter 2 definition

of “air barrier” to clarify it and to include a reference to continuous air barriers. The new definition states an “air barrier is one or more materials joined together in a continuous manner to restrict or prevent the passage of air through the building thermal envelope. An air barrier can be a single material or an assembly of materials.”<sup>2</sup> The proposal also deleted the definition of continuous air barrier. The proposal was approved. An approved proposal by the Department of Energy requires air leakage testing of certain buildings based on climate zone, building use, and the floor area of the conditioned space as specified in a new table that will be located in Section C402.5.

Another proposal would modify the “deemed-to-comply” list of materials for air barriers in Section 402.5 of the IECC. Currently, the code provides a list of 16 materials that are deemed to comply with the testing requirements to be classified as approved air barriers. Materials not included on the deemed-to-comply list must be tested in accordance with ASTM E2178. Item 11 on the list is a fully adhered single-ply roof membrane. The proposal would delete the requirement of “fully adhered” and simply state that a single-ply roof membrane will comply as an approved air barrier. RCI and others opposed the proposal, arguing that a single-ply membrane should be fully adhered to act as an air barrier. The committee disapproved the proposal. The committee’s reason for disapproval was “The code needs installation requirements to achieve the required air barrier. This subject matter belongs in the section for assemblies of materials. Air moves in the interstitial spaces of the building envelope; therefore, the stricken words need to remain for the integrity of the list of materials.”<sup>3</sup> Again, it will take a two-thirds majority of the voting membership to overturn the committee decision at the final action hearings in the fall.

#### INSULATION IN THE ROOF ASSEMBLY

The 2015 IECC, Section 402.2, requires that R-values for insulation be in accordance with a table provided in the code. With a few exceptions, this applies to the roof assembly. The first exception occurs when using tapered insulation in the roof assembly. The exception applies when using continuous insulation that varies less than 1 inch in thickness; then the area-weighted U-value is used instead of the table require-

ments. RCI opposed this change, arguing that designers use the area-weighted U-value to calculate insulation values, and it would not be appropriate to delete it from the code. The proposal was disapproved and will need a two-thirds majority to be overturned at the final action hearing.

The deadline to submit public comments was July 22, 2016, with final action hearings scheduled for the end of October. The final action hearings are limited to items that have public comments submit-

ted. Items not receiving public comments will be placed on the consent agenda pending committee decisions.

#### FOOTNOTES

1. 2016 Report of the Committee Action Hearings on the 2015 Edition of the GROUP B International Codes, International Code Council.
2. Ibid.
3. Ibid.



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