

510-RICR-10-00-02

RI One and Two Family Code

Public Comments



July 29, 2021

John Dean
Building Code Commission
560 Jefferson Blvd Suite 100
Warwick, RI 02886
john.dean@dbr.ri.gov

Via Online Docket:

[RISBC-2 Rhode Island State One and Two Family Dwellings - Rhode Island Department of State](#)

Re: Rule Identifier: 510-RICR-00-00-2: American Chemistry Council Comments Supporting Update to the Rhode Island One & Two Family Dwelling Code

Dear Members of the Building Code Commission:

Thank you for the opportunity to comment on the proposed amendments to the Rhode Island One and Two Family Dwelling Code. The American Chemistry Council strongly supports moving forward with a rulemaking to update the code based on the 2018 IRC.

We are concerned about an apparent loophole that would undermine the parallel update occurring with the Rhode Island Energy Conservation Code (RIECC). In the proposed revision, Chapter 11 maintains a compliance option by "Meeting the requirements of this Chapter using the criteria for climate zone 5 from figure N 1102A or table 1102.1.1". These tables do not reflect updates occurring in the RIECC to the 2018 IECC. The Commission should remove this outdated compliance option which conflicts with all other requirements in the RIECC and undercuts Rhode Island's efforts to improve energy conservation in residential buildings. ACC will submit a separate comment to the 510-RICR-00-00-8 docket to reiterate this point.

Thank you for the opportunity to offer our comments. For any questions, please do not hesitate to contact me at margaret_gorman@americanchemistry.com or (518) 432-7835.

Sincerely,
Margaret Gorman
Senior Director, Northeast Region
American Chemistry Council

VIA EMAIL

July 28, 2021

John Dean
Rhode Island Building Code Commission
560 Jefferson Boulevard, Suite 100
Warwick, Rhode Island 02886

RE: Proposed Rule 510-RICR-00-00-2 - RECA Comments Opposing Reference to Outdated Energy Conservation Requirements in the One- and Two-Family Dwelling Code

Dear Mr. Dean and Members of the Building Code Commission,

The Responsible Energy Codes Alliance (RECA) submits the following brief comments in response to the June 29, 2021 request for public comments.¹ We support the adoption of the 2018 *International Energy Conservation Code (IECC)* for residential and commercial construction as the Rhode Island State Energy Conservation Code (Energy Code), and we oppose the inclusion of Compliance Method #2 under Section N1101.1 of the proposed Rhode Island One- and Two-Family Dwelling Code (Residential Code). **Including this compliance method in the updated Residential Code could completely negate Rhode Island's progress on residential energy efficiency in the statewide Energy Conservation Code unless it is addressed in this rulemaking.** We urge the Commission to remove Compliance Method #2 from Section N1101.1 and delete all sections, tables, and references that make up this compliance option.

RECA submitted comments on Proposed Rule 510-RICR-00-00-8 in support of the state's proposed adoption of the 2018 *IECC* as the Rhode Island State Energy Conservation Code (Energy Code). As we noted in those comments, adopting and implementing the 2018 *IECC* with no weakening amendments will result in cost-effective energy savings for homeowners.²

¹ See <https://rules.sos.ri.gov/promulgations/part/510-00-00-8>. RECA is also submitting comments on the parallel docket that includes proposed changes to the Rhode Island State Energy Conservation Code, Proposed Rule 510-RICR-00-00-8.

² See U.S. Department of Energy, *Cost-Effectiveness Analysis of the Residential Provisions of the 2018 IECC for Rhode Island* (April 2021), available at https://www.energycodes.gov/sites/default/files/2021-06/RhodeIslandResidentialCostEffectiveness_2018.pdf.

However, the proposed Residential Code includes a compliance option that directly conflicts with the Energy Code and allows residential buildings to be constructed to a far less efficient and outdated set of efficiency requirements. The combined impact of Table N1102.1.2 and Section N1103.3.3 allows code users to construct residential buildings to the 2009 *IECC* requirements, which are substantially less efficient than the requirements being proposed for the statewide Energy Code (the 2018 *IECC*). Weaker requirements in the proposed Residential Code are marked in red below:

Code Requirement	Proposed R.I. Energy Conservation Code	Proposed R.I. One- and Two-Family Dwelling Code
Fenestration U-factor	0.30	0.35
Skylight U-factor	0.55	0.60
Ceiling R-value	49	38
Wood Frame Wall R-value	20 or 13+5	20 or 13+5
Mass Wall R-value	13/17	13/17
Floor R-value	30	30
Basement Wall R-value	15/19	10/13
Slab R-value and Depth	R-10 for 2 ft.	R-10 for 2 ft.
Crawl Space Wall	15/19	10/13
Duct tightness – Postconstruction test	4 cfm/100sq.ft.	8 cfm/100sq.ft.
Duct tightness – Rough-in test	4 cfm/100sq.ft.	6 cfm/100sq.ft.

This compliance method maintains a loophole that allows one- and two-family homes to continue to be built to code requirements that are over a decade old, even as other buildings will be required to meet the 2018 *IECC*. **Homeowners may believe that new homes meet the requirements of the updated statewide Energy Code, when in fact these homes will have significantly higher energy bills and will be less comfortable for occupants for years.** In fact, the U.S. Department of Energy found that homes built to the 2009 *IECC* would **use over 27% more energy** than homes built to the 2012 *IECC*³, and given additional efficiency improvements in the 2015 and 2018 *IECC*, we expect that gap to be even

³ See U.S. Department of Energy, *Cost-Effectiveness Analysis of the 2009 and 2012 IECC Residential Provisions – Technical Support Document*, at Table 8.6 (Apr. 2013).

higher. These weakening amendments are particularly problematic because they impact the permanent elements of the building, such as insulation and window efficiency, and duct tightness. These building components are likely to remain unchanged over decades, and in some cases, over the useful lifetime of the home. Unsuspecting homeowners will bear the full costs of inefficient buildings every month through higher utility bills and reduced comfort.

We urge the Commission to strike Compliance Method #2, including Table N1102.1.2 and proposed amendments to N1103.3.3, and any references to this compliance method in the Residential Code and the Energy Code so that all new homes, whether built to the statewide Energy Code or to the Residential Code, are built to a consistent level of efficiency—and one that has been demonstrated to be clearly cost-effective and beneficial to homeowners.

Conclusion

As we noted in our previous letter, we firmly support the proposed adoption of the 2018 *IECC* as the statewide Energy Code and we encourage the Commission to apply a consistent set of efficiency requirements in both the statewide Energy Code and the Residential Code that meet or exceed the requirements of the 2018 *IECC*. Please contact me at (202) 339-6366 if you have any questions or would like to discuss how RECA can be of assistance.

Sincerely,

Eric Lacey
RECA Chairman

RECA is a broad coalition of energy efficiency professionals, regional efficiency organizations, product and equipment manufacturers, trade associations, and environmental organizations with expertise in the development, adoption, and implementation of building energy codes nationwide. RECA is dedicated to improving the energy efficiency of homes throughout the U.S. through greater use of energy efficient practices and building products. It is administered by the Alliance to Save Energy, a non-profit coalition of business, government, environmental and consumer leaders that supports energy efficiency as a cost-effective energy resource under existing market conditions and advocates energy-efficiency policies that minimize costs to society and individual consumers. Below is a list of RECA Members that endorse these comments.

Air Barrier Association of America

Alliance to Save Energy

American Chemistry Council

American Council for an Energy-Efficient Economy

CertainTeed LLC

EPS Industry Alliance

Extruded Polystyrene Foam Association

Institute for Market Transformation

Johns Manville Corporation

Knauf Insulation

National Fenestration Rating Council

Natural Resources Defense Council

North American Insulation Manufacturers Association

Owens-Corning

Polyisocyanurate Insulation Manufacturers Association

DATE: July 29, 2021

TO: RI Building Code Commission

RE: 2018 I-code adoption public comment period

The proposed update to RISBC-2, the state's one- and two-family dwelling code, does not align with the corresponding update to RISBC-8, the state's energy code. This works against the state's focus on removing local amendments to the model codes.

In the International Code Council's (ICC) model codes, energy requirements for residential construction are covered in the International Energy Conservation Code (IECC) and Chapter 11 of the International Residential Code (IRC). These two codes, which serve as the basis of RISBC-8 and RISBC-2, respectively, have matching sections and requirements that are intentionally identical. As such, maintaining alignment between RISBC-8 and Chapter 11 of RISBC-2 reduces RI divergence from ICC's model codes.

However, proposed changes to remove RI amendments from RISBC-8-2021 were not also proposed in the corresponding sections of RISBC-2-2021. Instead, legacy amendments from the RISBC-8-2013 cycle would continue to be in effect. Carrying these amendments forward in RISBC-2 would allow one- and two-family homes and townhouses to continue to be built to efficiency levels similar to those set by the 2009 IECC, which is inconsistent with the updating of energy code requirements for all other building types to a 2018 IECC-based level.

If the state seeks to remedy this misalignment, the proposed RISBC-2 amendments for Chapter 11 (specifically those on pg 38-41 of the [latest RISBC-2-2021 public comment draft](#)) could be altered to match the proposed RISBC-8 amendments (pg 19-24 of the [latest RISBC-8-2021 public comment draft](#)).

Please feel free to reach out with any questions about these comments or for any further information about the incremental cost, energy savings, or feasibility of implementation of the associated code requirements.

Kevin Rose
Senior Strategy & Policy Analyst
Customer Energy Management – New England
Kevin.Rose@nationalgrid.com
781.907.3595
nationalgrid