July 11, 2018

Indiana Residential Code Committee
Indiana Government Center South
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Indianapolis, IN 46204
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Dear Members of the Indiana Residential Code Committee:

Thank you for the opportunity to provide comments regarding your review of Chapter 11 of the 2018 IRC. The American Chemistry Council (ACC) is an important stakeholder in the Indiana building code. ACC and its members with facilities in Indiana support adoption of Chapter 11 without weakening amendments.

ACC is an Important Stakeholder
ACC represents leading companies engaged in the business of chemistry, including 34 companies with manufacturing or distribution facilities in Indiana, employing approximately 30,946 individuals. Chemical industry activity in Indiana also indirectly generates 70,960 jobs.

The decisions of the Indiana Residential Code Committee impact ACC's members and their employees. The chemical industry supplies many products and materials to the building and construction value chain, including those that deliver energy efficiency throughout the entire structure. ACC's members are also large users of energy so the responsible use of energy is important to the industry's economic health and competitiveness. Energy efficiency is the lowest cost option for meeting energy demand. Energy efficient buildings create economic opportunities for businesses and industry by promoting new energy efficient technologies and reducing energy waste.

ACC has extensive knowledge regarding building code development. ACC is a partner in recent building science research, including projects with the Department of Energy and Home Innovation Research Labs. ACC representatives serve on the ICC, ASHRAE, ASTM, AAMA, and other code and standard setting bodies.

ACC Supports the 2018 IRC without Weakening Amendments
As the third largest industry in the State, the chemical industry supports Indiana updating the energy code to Chapter 11 of the 2018 IRC without weakening amendments.

The 2018 IRC is the right code for Indiana because Indiana's homeowners deserve construction that will deliver a healthy, safe, and energy-efficient home. Indiana's neighboring states recognize the technical resources and knowledge that underpin the continuous improvement of the IRC and have moved ahead to modernize their building

codes including the energy code. Michigan adopted the 2015 IRC energy provisions for residential buildings effective in 2016. Illinois adopted the 2015 IECC residential energy code effective in 2016 and is currently updating to the 2018 IECC. As recently as June 25, 2018, the Ohio Board of Building Standards Residential Construction Code Advisory Council recommended adding an un-amended 2018 IECC to the residential energy code. An Indiana update to the 2018 energy code not only makes technical sense but also will create efficiencies and savings by allowing more standardization across states.

The 2018 IRC Chapter 11 Is Flexible

Amendments that weaken the energy conservation provisions of the IRC are not necessary given the flexibility of Chapter 11 of the 2018 IRC. Chapter 11 provides flexibility with numerous compliance paths including a prescriptive path that provides alternative approaches of minimum R-value requirements, maximum assembly U-factor requirements and an area weighted U-factor method, a performance path, and an Energy Rating Index path. A builder can benefit from this flexibility to find their lowest-cost path to achieving code. These options are internally balanced; a weakening amendment to one path will create a loophole in the energy code. An amendment that results in paths of varying efficiency defeats the purpose of a minimum standard and may deceive citizens and residents about the energy, air quality, moisture control, and general performance of their homes.

The 2018 IRC Chapter 11 Is Affordable

Proponents of rolling back the energy code may wrongly suggest an update to the 2018 IRC will drive up construction costs. As manufacturers, we know a strong energy code with the flexibility of many equally strong compliance paths will unleash the power of competition without picking winners or losers. For example, the proposed cavity insulation and continuous insulation options are constructible with various products. For instance, multi-functional insulation materials can simplify construction. In contrast, state-specific amendments to the energy code can increase legal, contracting, design, and materials transaction costs.

For homebuyers who must maintain the home and pay for its utility and operational costs, features that reduce maintenance and utility bills are critically important. Reduced energy bills quickly repay the cost of improving energy efficiency. A U.S. Department of Energy analysis of Indiana's building code found that an update to the 2015 IRC Chapter 11 would take the average homeowner just 3.8 years to completely payback those costs with energy savings. Savings total $5,826 over 30 years, and the additional improvements in the 2018 code may further enhance this benefit.[1]

Many Technical Resources Are Available to Help

Indiana builders are able to construct homes that meet the 2018 IRC Chapter 11. The 2018 IRC provides guidance for practical matters such as cladding attachments to support constructability and compliance. In addition, manufacturers provide installation instructions for use of their products. Various third-party resources are available to

[1] *See* U.S. Department of Energy, *Cost-Effectiveness Analysis of the Residential Provisions of the 2015 IECC for Indiana* (Feb. 2016) https://www.energycodes.gov/sites/default/files/documents/IndianaResidentialCostEffectiveness_2015.pdf

support code compliance with helpful practices for construction. For example, ACC's Foam Sheathing Committee supports the technical information for builders on www.continuousinsulation.org, and ACC's Spray Foam Coalition has excellent resources at https://polyurethane.americanchemistry.com/polyurethanes/Spray-Foam-Coalition/.

Available resources provide a variety of actionable and code-compliant solutions to optimize moisture control, integrate various wall functions and components, and equip builders/designers with conventional or more advanced options for resilient, energy efficient performance. Thus, as with many forms of construction (including conventional framing, advanced wood framing, SIPs panels, ICF forms, etc.) there are significant resources available to support not just one but many reasonable options.

Thank You
Thank you for the opportunity to comment on this important decision. For any questions, please do not hesitate to contact me at 515-471-1957 or via email at John_Easter@americanchemistry.com. ACC, its member companies and our employees thank you in advance for considering our views.

Sincerely,

John Easter
Director, State Affairs
Midwest Region
American Chemistry Council