

July 16, 2018

State Fire Marshall Tyree
1207 Quarrier St.
Charleston, WV 25301

RE: State Building Code Rule

Dear Fire Marshall Tyree,

Thank you for the opportunity to provide comments on the "State Building Code" rule opened on June 22, 2018. The proposed rule changes the ANSI/ASHRAE/IESNA Standard 90.1 from the 2007 to the 2010 edition for commercial buildings. The American Chemistry Council (ACC) is an important stakeholder in the West Virginia building code. ACC and its members with facilities in West Virginia support the proposed rule, but believe West Virginia should go further and update both the residential and commercial energy code to the 2018 International Energy Conservation Code (IECC).

ACC is an Important Stakeholder

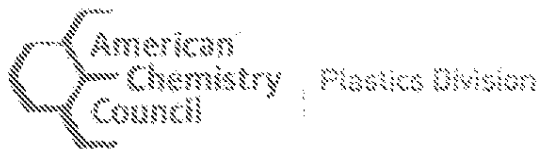
ACC represents leading companies engaged in the business of chemistry, including 20 companies with manufacturing or distribution facilities in West Virginia employing approximately 9,132 individuals in the state.

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 Update to ASHRAE 90.1-2010

Updating from the ASHRAE 90.1-2007 standard to the ASHRAE 90.1-2010 standard will improve the energy efficiency of West Virginia's commercial buildings. The West Virginia building energy codes impact ACC's members and their employees. Energy efficient buildings create economic opportunities for businesses and industry by promoting new energy efficient technologies and reducing energy waste. 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.

ACC recommends including an option to comply with the 2012 IECC as well. The 2012 IECC includes ASHRAE 90.1-2010 as a referenced compliance option and provides an



equivalent path. This addition would offer more flexibility at the same level of performance.

ACC Supports West Virginia to Advance Building Energy Codes Further

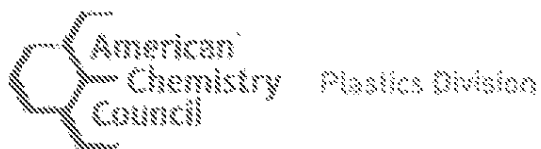
The proposed update is a step in the right direction, but West Virginia can go further to improve the minimum standards for energy efficiency in the state. ACC supports adoption of the 2018 IECC for residential and commercial buildings.

On the commercial code, the Department of Energy has issued a preliminary analysis showing that the 2018 IECC (including ASHRAE 90.1-2016) will save an average of 34.9% over West Virginia's current commercial energy code.

Summary of E.C. DOE Analysis of ASHRAE Standards 90.1-2016 (Commercial Energy Code)	
Model Energy Code	Estimated Average Improvement over ASHRAE 90.1, 2007/2009 IECC (West Virginia Current Code)
ASHRAE 90.1-2010/2012 IECC	18.2%
ASHRAE 90.1-2013/2015 IECC	18.2% + 8.5% (26.7%)
ASHRAE 90.1-2016/2018 IECC	18.2% + 8.5% + 8.2% (34.9%)

West Virginia should also update the residential energy code. The energy cost savings for an upgrade from the 2009 IECC to the 2015 IECC is around 30%. An upgrade to the 2018 IECC will include additional savings beyond that level. A building constructed to the 2009 IECC will miss those savings, costing more money to heat and cool every year over the entire life of the building.

Summary of E.C. DOE Analysis Comparing 2015 IECC to 2009 IECC (Residential)	
Metric	Compared to 2009 IECC
Annual total energy savings	27.5%
Potential savings of the 2015 IECC	25.5%
Average (30-year) life cycle cost savings of 2015 IECC	\$9027.41
Simple payback period of the 2015 IECC	2.9 years



Annual (2013 year)
energy cost savings of
\$66,301.50/ACC

\$588.93

We support the efforts of the State Fire Marshall to advance energy efficiency in residential and commercial buildings constructed in West Virginia. Please do not hesitate to contact me either at 202-249-6223 or via email at josh_young@americanchemistry.com. ACC, its member companies and our employees thank you in advance for considering our views.

Sincerely,

Josh Young
Senior Director, Government Affairs, State Affairs and Political Mobilization
American Chemistry Council

June 7, 2018

Kenneth E. Tyree
West Virginia State Fire Marshal
1207 Quarrier Street, 2nd Floor
Charleston, WV 25301

RE: Adoption of 2015 IECC Chapter 4 Residential Energy Code in 2020

Dear Fire Marshal Tyree:

Please accept this letter as Energy Efficient West Virginia's (EEWV) comments on the proposed plans for code adoption over the coming months. EEWV is a nonprofit, nonpartisan organization that advocates to increase and improve the energy efficient economy in West Virginia, including both the residential and commercial sectors.

EEWV has four main objectives for energy codes in the state. First and foremost, we seek to ensure that West Virginians know that, if they are building a new building, it will meet modern standards for efficiency and will not create unforeseen high utility bills. Second, we wish to have long-term stability and the ability to plan for energy code implementation over the coming years. Third, EEWV seeks to give breathing room and time for the residential industry to plan and prepare for increased energy codes. Finally, we hope to make room and give an incentive to increase local adoption of codes sooner than later, either before or at the same time as the rest of the state increases the energy code.

We request that you, and the other stake holders, support the following:

1. Adopt the ASHRAE 90.1-2010 codes during the next legislative session, to go into effect as soon as possible.
2. Require the submission of a ResCheck Compliance Certificate 4.6.2 or newer, HERS rating certificate, or other similar certification, for all new residential constructions, with a visible compliance sticker to be signed and placed on the electrical panel upon successful testing by an inspector under certified supervision.
3. Adopt the 2015 or 2018 IECC Chapter 4 Residential Energy Code, to go into effect in 2020, one year later than the ASHRAE commercial codes go into effect.

We believe the inherent benefits of enhanced code compliance requirements will not place an undue burden on the new construction market stakeholders. Instead, it will raise up the industry and improve the quality and sustainability of all new building stock while creating jobs and supporting economic development paid for by a future of wasted energy costs. Most importantly, it will improve consumer confidence in the quality of the housing stock in the state.

Improving energy codes will:

- Promote better building practices that result in more healthy, comfortable, and efficient buildings dramatically leveraging wasted utility dollars to increase economic spending power.
- Quantify and mitigate excess energy consumption through new and existing qualified industry base that encompasses all trades, professions, and ownership.
- Increase statewide awareness of the benefits associated with code enforcement as it relates to community improvement, job training opportunities, and new revenue generation realized from wasted utility costs.
- Improve overall property and community value through lower operating costs and increased construction standards, technologies, durability, appearance, and quality of all homes and buildings.
- Enhance all businesses, residents, and workers through continued job training and education resulting in sustainable societal productivity paid for by the future utility cost waste.

Over the past few years, EEWV has worked with the Home Builders Association of WV Foundation to train HERS raters and HERS rater trainers. EEWV stands ready to help increase training in 2019 and 2020 to assist in training more HERS raters in order to meet the requirements of the 2015 IECC. West Virginia needs some advanced planning in order to know that code improvements are coming, so there is an impetus and adequate time for getting trained HERS raters.

Thank you for the opportunity to provide input on this process through the stakeholder's meeting and these comments. We look forward to continuing to work with you in the future.

Sincerely,

Emmett Pepper
Executive Director

Public Comments to HB 625

1. **From:** Cannon, Robert L <rcannon@beckley.org>
Sent: Monday, June 25, 2018 12:04 PM
To: Tyree, Kenneth E <Kenneth.E.Tyree@wv.gov>
Subject: RE: State Building Code 87-4 Submittal

Fire Marshal Tyree:

Thanks you for your 6/25/18 email and the notice of filing to update the State Building Code by proposing to update the commercial energy standard, ASHRAE/ANSI 90.1, from 2007 to 2010.

I am disappointed that no change to the residential energy code, IECC 2009 has been proposed, nor any update to the now three year old 2015 ICC Codes.

Robert L. Cannon, City of Beckley
WV Code Officials Assn.

2. Please see attached PDF

Dear Fire Marshall Tyree,

Thank you again for allowing ACC to participate as a stakeholder in the discussions around West Virginia's energy code update. We formalized our thoughts in the attached letter and hope this is helpful information in charting a course forward.

Regards,

Josh

Josh Young | American Chemistry Council

Senior Director, Government Affairs
State Affairs and Political Mobilization
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3. Please see attached PDF

Fire Marshal Tyree and fellow stakeholders:

Recognizing that the committee has probably already met today, I still wanted to submit EEWV's thoughts on moving forward with energy codes. Please see the attached.

Sincerely,

Emmett Pepper
Executive Director
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West Virginia Fire Commission
Office of the State Fire Marshal
Kenneth E. Tyree
1207 Quarrier St., (2nd Flr.)
Charleston WV 25301

July 20, 2018

Fire Marshal Tyree:

The West Virginia Office of Energy (WVOE) strongly supports the inclusion of commercial and residential energy codes into West Virginia's statewide building code (SBC). These codes are industry minimums; West Virginia has ample room for advancement as well as statewide adoption and enforcement. WVOE encourages jurisdictions to adopt and enforce more recent energy codes, allowing builders and architects additional options to meet code requirements.

Over the years, WVOE has worked collaboratively with all stakeholders in West Virginia's built community including the Home Builders Association of West Virginia and its nine regional chapters; the West Virginia Code Officials Association; the West Virginia Division of the International Association of Electrical Inspectors; West Virginia's ASHRAE chapter; the West Virginia AIA, a chapter of the American Institute of Architects; the West Virginia Society of Professional Engineers; and the West Virginia Fire Commission Office of the State Fire Marshal.

The relationship began decades ago, as the office provided funding for statewide training on the energy code portions of the SBC. It has matured, with all entities cooperating in the forward movement of West Virginia's energy codes.

WVOE is pleased the West Virginia Fire Commission is advancing the state's commercial energy code, ASHRAE standard 90.1-2007 to 90.1-2010. The state's proposed 2018-2022 energy plan encourages continued code training and WVOE commits to funding in-person workshops and seminars so that statewide, the built community will have familiarity with energy codes. Further, WVOE is working to advance the adoption of and compliance with the SBC. The proposed plan acknowledges that until the SBC, including energy codes, is adopted and enforced statewide, West Virginians are not realizing the full energy savings attributable to these codes. WVOE stands ready to train and provide technical assistance to jurisdictions on current energy code standards and beyond.

With that in mind, WVOE also encourages advancement of the International Energy Conservation Code for residential construction. In concert with our partners in the built community WVOE believes West Virginia can advance to IECC 2015 by 2020. Most of the non-energy components of the SBC are already at 2015 levels, potentially creating conflicts for builders, inspectors and code enforcement officials. Wherever possible, codes should advance in step as they are written comprehensively and in coordination so that changes in one code integrate properly with others.

As the Building Codes Assistance Project wrote to the Fire Commission in 2012: "Energy codes represent the low hanging fruit of building energy efficiency. Their adoption and implementation represent the easiest and most cost-effective path towards a secure energy economy in the future."

Sincerely,

WV Office of Energy Team

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Energy Development Specialist	Energy Development Specialist	Energy Development Specialist	Energy Development Specialist	Executive Secretary
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