Preparing for the Building Code Public Comment Period

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Overview of Building Codes Update

Fede ral

- Model code drafted by the International Code Council (ICC) and updated every three years
- The International Energy Conservation Code (IECC) is one aspect of the model code

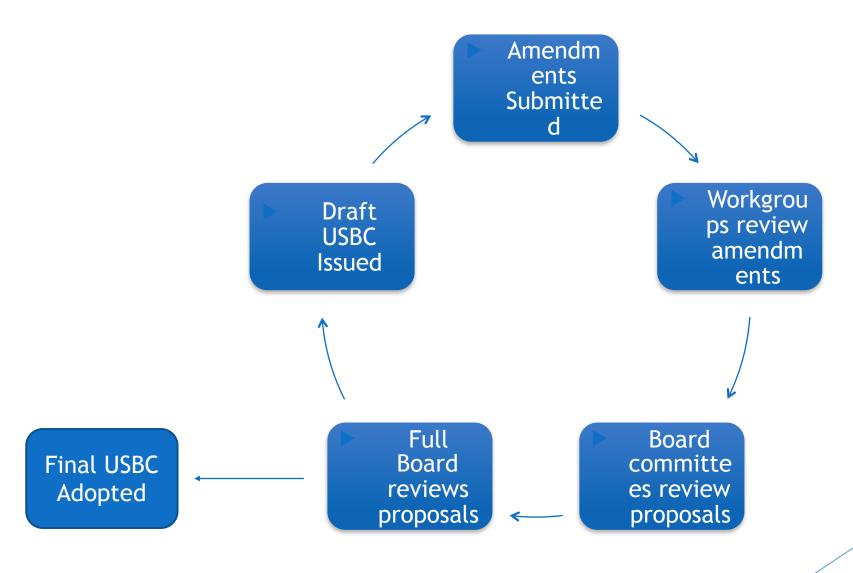
State

- No federal mandate for states to adopt the model code
- State Ten states have already adopted the 2015 model codes

Virgi nia

- VA building code is known as the Uniform Statewide Building Code (USBC)
- Board of Housing and Community Development tasked with updating the Virginia USBC through a two-year process

Virginia USBC Update Cycle



Timeline for Updating Virginia USBC

- Now: public comments on draft code regulations (ends 5/26)
- May 15, 2017: public hearing on draft code regulations at Board of Housing and Community Development meeting (10am)
- June 13, 2017: Stakeholder workgroup meeting; will make recommendations on submitted code proposals
- Fall 2017: Board of Housing and Community Development subcommittees will review proposals
- November/ December 2017: Board votes to adopt final USBC; is sent to Governor's office for approval; published in VA register

Efficiency Standards in the Draft USBC

- ► Draft Commercial Code: Up-to-date
- ▶ Draft Residential Code- New energy efficiency requirements included:
 - Require 75% of permanent lighting fixtures to be highly efficient
 - Require insulation on all hot water pipes
 - Energy Rating Index compliance pathway created (performance)
- ▶ Draft Residential Code- weakening amendments currently included:
 - Attic insulation remains at same standard for last 30 years
 - Wall insulation remains at R15 instead of increasing to R20
 - Replacement windows not required to meet current efficiency specs
 - Visual inspection for building and duct air-tightness allowed

April 12th Subgroup proposals

- Require mechanical testing for air-duct tightness in non-conditioned spaces
- Create the 2018 ERI compliance pathway instead of the 2015 version
 - Proposal put forth by the Leading Builders Association (Pulte, Ryan, etc)
 - ▶ Raises the index number from 54 to 62
 - ► Allows renewables to be included in the rating but thermal envelope must meet 2015 IECC





A Case for Studying Compliance Issues

Some homes in Virginia that get tested for "above code" certifications, often fail to meet Virginia standards on the first try.

Data from two Virginia HERS raters:

Think Little, Charlottesville, VA:

118 homes tested between 3/2015 and 9/2016

- 23% failed the blower door test for building air-tightness
- 53% failed testing for ductwork air-tightness
- EDGE Energy, McLean, VA:

55 homes and 72 duct systems tested between 7/2015 and 7/201

- 60% failed the blower door test for building air-tightness
- 56% failed testing for ductwork air-tightness



Conclusion: only a mechanical test can definitively show if new homes are meeting Virginia's air-tightness standards.

VAEEC Comments

- ▶ In general, we support adoption of the 2015 IECC Model Code
- Since proposals that would bring the USBC up to the 2015 model code failed last year, we support the proposals currently in the draft USBC:
 - Requiring 75% of permanent lighting fixtures to be highly efficient
 - Requiring insulation on all hot water pipes
 - Creating the Energy Rating Index compliance pathway (performance)
- ▶ We also support the two proposals sponsored by the April 12th subgroup:
 - Requiring mechanical testing for air duct tightness
 - Creating the 2018 Energy Rating Index pathway
- ► We will continue working with stakeholders to push for more efficiency measures in the USBC.



Important Links and Information

Draft USBC can be viewed here: http:// register.dls.virginia.gov/details.aspx?id=6239

Sign up to see the list of important dates, track proposals, submit proposals, etc.: www.dhcd.virginia.gov

Board of Housing and Community Development Website: www.dhcd.virginia.gov/index.php/boards-andcommissions/125.html

Email comments to: Elizabeth Rafferty <u>Elizabeth.Rafferty@dhcd.virginia.gov</u> and cc Kyle Flanders <u>Kyle.Flanders@dhcd.virginia.gov</u>

Comments should be addressed to the board chair, Mr. John Ainslie





Thank you

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