

City of Lawrence

Building Code Board of Appeals Meeting

February 7th, 2018 Development Services

MEMBERS PRESENT: Mark Stogsdill, Greg Rau, Michael Brunin, Chris Cunningham, Kevin Markley

STAFF PRESENT: Development Services
Ex- Officio Janet Smalter-Plans Examiner, Ex- Officio Adrian Jones- Plans Examiner, Ex- Officio Barry Walthall-Building Official

PUBLIC PRESENT: Bobbie Flory, Sean Reid, Curt Baumann, James Myers

Meeting called to order 11:00am.

First item of business was to approve minutes from the January 3rd, 2018 meeting. **Kevin Markley moved to approve minutes as written, Seconded by Michael Brunin. Motion passed 5-0.**

The next item was to receive comments from the public.

Bobbie Flory, of the LHBA, asked that the board keep the Energy Rating Index number at 70. She stated that in the 2018 IRC the new number is 62. Flory stated the average score for single-family in 2017 was 60.8. Flory said the builders are doing a good job of meeting and exceeding the 70 threshold. Flory stated that one-third of the houses tested in 2017 were above 62, but below 70. Flory said that for those homes to meet the 62 number there would be additional costs involved to reach compliance. Flory reminded the board that the City Commission has made affordable housing a priority, a critical success factor. Flory noted the least expensive new starter house in Lawrence today is listed for \$205,000.00. Flory said that requiring a 70 ERI number in Lawrence is still really good and exceeding what other communities in the region require. Flory said that many other local communities will adopt the 2018 IRC but will amend the energy portion of the code. Flory thought that keeping the ERI number at 70 will far exceed what most other communities will require. Flory advised the board that it would be prudent to wait for the analysis of the energy code from the Department of Energy before making final decisions. That report is not yet available.

James Myers, a local builder, stated that the homes most affected are starter homes. He said the costs associated to get a 62 rating on these homes are substantial. Myers said for example, in the Kansas City area the lowest ERI number required is an 85. He also reminded the board of the requirement that each home must pass a blower door test of less than 3 air changes per hour.

Stogsdill then stated that he had previously met with representatives of the LHBA to discuss many of these same issues.

Markley asked Myers what square footage was the hardest to make compliant.

Myers answered the 1800 sq. ft. slab, which is a normal starter house, is the toughest.

The board then began discussion of Chapter 11 of the 2018 IRC.

Stogsdill noted changes in window R-values.

Smalter discussed a long-standing amendment that can eliminate slab edge insulation when using the prescriptive method if your heating system efficiency is 90% or greater. Smalter said staff is recommending eliminating that amendment.

Adrian Jones said that contractors now have knowledge and experience installing this insulation.

Stogsdill said slab edge insulation is a very effective insulation method.

Rau agreed that slab edge insulation is important, but he thought the reason for the amendment was that calculations were done to show a 90% efficiency furnace offset the need for slab edge insulation.

The board discussed different techniques to install slab edge insulation.

Stogsdill asked if slab edge insulation was required only when using the prescriptive method.

Smalter said yes.

Barry Walthall stated that duct testing has been amended out if there is a whole test. Walthall asked the board if they wanted to carry over that amendment.

Smalter said she thought that amendment originally came from the Mechanical Board.

Walthall said it would be best to wait for the recommendation to come from the Mechanical Board.

Stogsdill noted that energy efficient lighting would be required for 90% of all fixtures, up from 75% in the 2015 IRC.

Stogsdill then noted the previously discussed ERI number for zone 4 has moved to 62.

Smalter said that the average ERI is 60.8 since the adoption of the 2015 code. Slab on grade homes were at 62.5. Basement homes average 58.5. Smalter also noted the average ERI under the 2012 code was 56.64. She stated our average numbers have crept up from 56.64 to 60.8.

Myers explained that in 2015-2016, there were some discrepancies with third-party raters and local energy specialists which resulted in a 3 to 5-point increase in ERI numbers.

Smalter thought there was room to look at adopting a lower ERI number based on the scores she reviews.

Brunin asked what percentage of builders were using energy raters vs. the prescriptive method.

Walthall said a rough guess was that 2/3 of all single-family homes built used the ERI method. Walthall also stated that the 62 number does not equate directly with prescriptive requirements but is a lot closer than it was. He did not think prescriptive requirements have matched the dip in ERI numbers in the last 6 years. Walthall agreed with Flory that waiting for the D.O.E. report would be prudent.

Stogsdill said he thought that keeping the ERI number at 70 for now would be his recommendation.

Markley commented that the ERI number can be changed at any time.

Brunin said that Habitat for Humanity and Tenants to Homeowners homes have struggled to meet the 70 threshold.

Rau said that we are far ahead of other communities. He said that it was a cost issue for him. He said that he doesn't think that homeowners are getting the payback for the costs associated with lowering the ERI to where it is now.

Markley said that he was in favor of staying at 70 based on the results of the testing.

Brunin said he agreed.

Markley said technology may make it much easier to attain in the future.

Stogsdill noted that the ERI number has risen since the 2015 codes.

Smalter said the appendices that staff is recommending being adopted are Manufactured Housing, Passive Radon Controls, Existing Building and Structures, and Daycare. Smalter also thought the board may entertain adopting the Tiny Houses Appendix. Smalter also noted the Solar Ready Provisions Appendix.

Stogsdill said he thought the Tiny House Appendix could be useful and be a good tool to use.

Sean Reid stated that the County may blend appendix Q with current County regulations.

Stogsdill asked staff about straw bale construction and if it had ever been attempted.

Walthall responded that it had been attempted once or twice.

Stogsdill was surprised that the IRC addressed straw bale construction.

Reid said that the County would embrace straw bale construction as an allowable method.

Stogsdill asked what would be required of design professionals if straw bale construction were allowed.

Walthall said that without the adoption of Appendix S, it would require an engineered design.

Brunin said he was involved in one straw bale project.

Markley asked if there was a downside to adopting the straw bale appendix.

Adrian Jones said that having a prescriptive method would be easier on the applicant.

Walthall said that the Solar Ready Appendix would put an extra burden on plans examiners. It would require all new homes to be ready for solar energy systems to be installed.

Reid stated that the orientation of houses is limited when using this appendix.

The board did not think the Solar Ready Appendix would be appropriate at this time.

Reid stated that he would like to see the County become more consistent with the City on most codes. He also said he would be an advocate of Straw Bale Housing. He said that some potential straw bale builders have been deterred by the cost of engineering.

Walthall stated he was working to schedule meetings so that it would be easier for members of the public to attend multiple board meetings.

Brunin made a motion to adjourn, Seconded by Rau. Passed 5-0.