



Date: Wednesday, June 23, 2021
Time: 8:00 AM
Location: Lake Estes Conference Room, 200 West Oak St 3rd floor Fort Collins, CO 80521
Virtual Option - Please contact kjames@larimer.org for evite

BOARD OF APPEALS MINUTES

Meeting Number 21-005

Call to Order

In Person: Board member Paul Higman, Staff Eric Fried

Virtual: Board members Rex Poggenpohl, Wayne Thompson. Guest: Clint Hanna

With three of five Board members being present, a quorum for conducting business was achieved.

Personal Appearances

Clint Hanna was appointed to the Board of Appeals, effective July 1, 2021.

Approval of Minutes

Minutes were not approved. Minutes have been corrected and uploaded for approval at July 14 meeting.

Tabled Items – None

Hearing Items – None

Discussion Items – 2021 Building Code Review

Board is recommended to participate in the Joint City/County Code Review Committee that meets on Tuesdays from 10AM – 1PM. Meeting during the July 4 holiday week will move from July 6 to July 8.

Chief Building Official (CBO) Fried asked Board Chair Paul Higman to update the Board on 2021 International Energy Conservation Code changes (IECC). There are many differences between the 2018 and 2021 IECC.

Board Chair Higman began with changes to the IECC Commercial Prescriptive Insulation Requirements (Table C402.1.3) which increase minimum attic insulation requirements to R49. Insulation in metal-framed walls changes to R-13 cavity plus R10 continuous insulation. Insulation in wood-framed walls changes to R13 cavity plus R7.5 continuous or R20 cavity plus R3.8 continuous insulation. Corresponding changes were made to Table C402.1.4 (“U-Factor Method”).

402.5.1.2 Continuous air barriers shall be tested for air leakage. Residential and institutional occupancies must comply with the testing provisions of C402.5.2, while all other commercial occupancies must comply with

C402.5.3. C402.5.1.2 exempts commercial occupancies between 5,000 and 50,000 sq. ft. from this testing requirement. For buildings exempt from testing, air barrier materials or assemblies must meet certain requirements. Similar testing requirement exemptions were amended out of Larimer County's 2018 IECC.

Board Chair Higman recommends getting rid of the dwelling unit test exceptions in C402.5.2. The leakage threshold did not change, and an individual dwelling is its own entity. Fort Collins has adopted a Green Code, and the .3cfm/sq. ft. requirement is the same as Fort Collins. .25cfm/sq. ft. is the City's code for Commercial.

402.5.3 now contains an exception if measured air leakage exceeds .4cfm/sq. ft. but doesn't exceed .6. This section now allows for further testing to find and seal the air leaks. Fort Collins's amendments limit commercial air leakage to .25cfm/sq. ft. while the County adopted the code unchanged at .4cfm/sq. ft. CBO Fried stated that by policy, he has allowed commercial applicants with failed air leakage tests to take corrective action as suggested by the tester, retest, and ask for code modification approval if they still exceed the threshold after all practical sealing improvements were done. The code has now caught up with the policy.

402.5.1.5 requires verification of building envelope performance. Board Chair Higman stated that this section is not worded very well. Air barrier installation failures should be addressed early so that corrections can be made. The air leakage test at the end should be a verification rather than a pass/fail.

Board Chair Higman mentioned that the City of Fort Collins will be aggressive with their testing and installation requirements. Board member Poggenpohl wonders if there is any reason to consider the City's amendments and the 2021 changes. CBO Eric believes this is a policy decision that should come from the County Commissioners rather than the Building Division. He stated that the residential thermal envelope changes include continuous wall insulation, R60 instead of R49 attic insulation, and changes to floor and slab insulation. The 2021 IECC will increase energy efficiency by approximately 15%, which is a big jump, especially since Larimer County amendments have stayed a little behind code to ease in the changes.

Board member Thompson stated that he finds the inspection timing to be a challenge, if the county needs to inspect each exterior assembly layer (sheathing, insulation foam board, weather-resistive barrier, and siding) while contractors are trying to get the project done quickly. Due to nailing siding through foam board, engineers may need to design more interior shear walls, more nailing, staples, etc. to resist wind loads. CBO Fried stated he is concerned about possibly sagging shear walls and agrees that inspections are an issue. Board member Poggenpohl also expressed concern with these issues.

CBO Fried agreed that the biggest change may be the continuous insulation. Board Chair Higman stated that the key is building performance, and that perhaps we could accept other construction methods like the way we used to build. Board member Thompson wonders if there is a way to get back to ½" foamboard and ½" OSB, or 1" foamboard that works structurally. Board member Higman agreed that this is one of the other methods. There may be more flexibility if using one of the other compliance paths besides prescriptive, which allow tradeoffs and a weighted average. He stated that he was not sure if COMcheck can do it. You need to meet the structural provisions first, then see if the COMcheck can be met.

CBO Fried stated that in Larimer County's current amendments, the minimum insulation for below-grade walls was amended from R10 to R 7.5, while above-deck roof insulation went from R30 went to R20. He asked if the board felt we should continue with these amendments or go back to code.

Board Chair Higman said that the minimum slab insulation went from R10 for two feet down to R15 for commercial, R20 two feet down for multifamily, and R10 four feet deep for single-family dwellings. The change from two to four feet depth is a huge change, as is the R20 requirement, which is four inches of foam board.

Board Chair Higman referenced C402.5.11 ("Operable openings interlocking"). He stated there were not many substantial changes to Section C403 ("Building Mechanical Systems"). The push nationally is towards all-electric buildings. Some Larimer County buildings will continue to use natural gas or propane in rural areas. Some jurisdictions are looking at geothermal fuel sources. CBO Fried agreed that it's difficult in areas like rural parts of Larimer County to prohibit using natural gas/propane altogether. Some of these changes are being driven at the state and Federal level and may become requirements even if the IECC does not mandate them. Two appendices of note are Appendix CB ("Solar Ready Zone") and CC ("Zero Energy Building Provisions"). To get to net zero energy use and net zero carbon production, renewable energy would need to be generated

on site or procured from off-site. Board member Poggenpohl wondered if there are incentives for mandatory solar and stated the Board of Commissioners should make a policy decision if they want to adopt these appendices. CBO Fried noted that since Larimer County does not provide Utilities, there are currently no county financial incentive to install solar.

CBO Fried again recommended that anyone interested in the IECC should attend the next three meetings of the Joint 2021 Code Review Committee, which will discuss the IECC.

Board Member Poggenpohl motioned to adjourn, Board Chair Higman seconded. Passed 3-0. Meeting adjourned.

CONSIDERATION OF TODAY'S AGENDA AND MINUTES OF BOARD OF APPEALS

Paul Higman, Chair

Eric Fried, Staff Liaison

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