

# **Building Code Adoption Process**

## **Meeting #4**

### **May 28, 2009**

Today's guest speaker is Tim Pate, Co-Chair CCICC Code Change Committee. He is employed by the City and County of Broomfield as a Senior Plans Analyst. He has first-hand experience with ICC.

CBO Birchfield handed out the form needed to order Code books, and told those in attendance that a discount is available if they order the books through the building department. Instructions are also on the ICC web site. He added Larimer County has plans to move forward with residential contractor licensing this fall. Local contractors will need to comply.

Today's focus is on changes that will impact the local area. Issues will be identified so designers and contractors can absorb them and prepare to address the issues.

Mr. Pate gave a brief review of the following portions of the 2009 Code. The following notes are not completely inclusive of what was reviewed in the meeting, but makes note of those changes that were deemed more important or generated more discussion among those in attendance:

304.1 Mr. Pate is struggling with the outpatient surgery locations portion of the code. New section is still classified as B occupancy when the stay is less than 24 hours.

308.5.1 Clean up issue for last two code issues – changed to R-3.

310.1 can be classified as R-3 – transient congregate living facility.

402.6.1 added and will allow reduced open space for unlimited area malls, which will match reduced open space for regular buildings.

403.6.1 changed after 9/11. This item requires a fire service access elevator – not a separate elevator, but one with additional enhancements.

403.2.4 – increased minimum bond strength for high rise buildings

403.5.2 – requires an additional exit stairway in high rises over 420 feet above the fire department vehicle access

403.5.5 for high rise buildings, and requires luminous egress path. No timetable established.

419 Live/work units – new section added which allows you to construct, under the IBC, what would look like a townhouse with a business component on the bottom and residence on the top – classified as R-2 with a 3000 maximum square foot total – 1500 square foot maximum for the business component , which is limited to the lower level. Possible problem could be a deli on the ground floor with no bathrooms, and have bathrooms upstairs in the living unit. No restrictions on use of the lower area. Requirements currently with businesses (doors, exit signs, etc) will not apply with live-work units. Broomfield will be making amendments to this portion of the code.

CBO Birchfield noted these live/work units could be presented in the downtown area as redevelopment projects. The 2009 building code assumes these live/work areas have sprinklers. There are areas like this where the development code and the building code need to be meshed together in order to accomplish the goal. Community Development Director Bob Joseph interjected the Estes Valley Development Code already has provisions for these types of units in the CO – Commercial Outlying zoning district. One of the requirements is the living unit must be used by the owner or an employee of the business on the lower level. CBO Birchfield is questioning the sprinkler system portions of the code language, as the proposed IBC will require sprinklers. He is considering amending this, depending on the use of the building. The work portion of the live/work unit must exceed 10% of the total square footage of the unit in order to be considered a live/work unit. We have the option to change the square footage amounts; however, the breakdown cannot have more than 50% work portion. The commercial business has to be on the main floor, with the residential area on the second floor. Five employees can occupy the area.

419.2 Occupancies – classified as R-2 (same as apartment houses). If you don't have the 50-50 separation, you will have to classify each use and construct accordingly. IBC commercial use would require sprinklers, but a live/work unit would not be required to do so. Storage cannot be more than 10% of the nonresidential space. A comment was made that 10% for storage will not likely work for a live/work area in Estes Park when the business is a retail operation. Sliding doors and spiral stairways are allowed with rules.

419.4 Vertical openings between floor levels of a live/work unit are permitted without enclosure, which is a big change from the current code.

The fire district will need to be involved when determining code for sprinklers in live/work units. CBO Birchfield recommends requiring a 13 system for flexibility in building use.

419.7 Accessibility will not fall under provisions for R-2 for the upstairs area, only the downstairs area.

Mr. Pate noted that by keeping the business on the main level, the stairs can be designed using R-2. However, if a 13 system is installed with future potential for other use, the stairs may need to be redone in order to accommodate the new use.

David Habecker asked about walk-out basements and/or unfinished basements, and if they are included in figuring the 3000 square foot maximum. Mr. Pate replied that his interpretation is the basement is not included in the total square footage; however, the basement portion of the building could not be used to conduct business.

Table 503 – CBO Birchfield stated the importance of understanding when you use the Residential code or the IBC. Single-family, duplexes, townhouses can use the Residential code. When you have more than two units, you are required to use the building code. He will recommend to not require sprinklers in R-2s if they are being constructed under the IBC.

Chapter 7 deals with fire resistant construction.

703.6 – This code could affect Estes Park's commercial buildings. This code will require that walls are permanently identified every 30 feet with the fire rating.

706.8 – Deals with changes in openings and how they relate to the fire rating.

903.2.6 – States retail buildings that display and sale upholstered furniture will require fire sprinklers. There is no size threshold for this code. CBO Birchfield believes this needs some revision because this code would require any commercial business with a couch to be sprinkled. This could be an issue in CD and CO districts.

903.2.7 – All retail is Group M occupancy. Sprinklers are required throughout if the building is over 12,000 square feet. Other areas concerning Group M were listed.

903.2.7.1 High-piled storage. Some codes are woven together and work with each other. All related areas of codes need to be reviewed in order for the code to be effective and not be filled with unintended consequences.

1007.8 – Mr. Pate noted that a two-way communication system at elevators (some sort of approved system to notify emergency personnel about situation) will be put into place so people in need of help can go to an elevator and notify emergency personnel without having to go down the stairs.

1009.4.1 Dimension Reference Surfaces, noting that measurements are taken exclusive of carpets, rugs, or runners. Broomfield is planning to delete carpets from this code. CBO Birchfield is concerned about stair geometry and how it

relates to safety, as the tolerances are very critical. This part of the code doesn't talk about tile, stones, etc. As a local community, we need to come to a consensus as to how everyone is going to measure stairs, and we also need to decide when to measure. Ray Duggans likes the code without any changes. Mike Menard – thinks stair manufacturers should be required to go back to making 12' stock.

1009.13 –Mr. Pate stated the guard requirements will be changed to 36 inches out because the standard landing size is 36 inches instead of the historically used 30 inches.

R105.2 – CBO Birchfield stated he will recommend the requirement of permits for all decks, primarily due to setback issues along rivers and streams.

Concerning work exempt from permits, CBO Birchfield noted in the 2009 code, a permit is not required for a one-story detached accessory structure of 200 square feet or less. He is proposing an amendment which would change 200 square feet to 120 square feet, which will bring it in line with the building code. Larimer County is also at 120 square feet.

Other work exempt from permitting was discussed here. No major changes.

R202 – Mr. Pate commented that the Attic, Habitable definition has been changed to make provisions for minimum square feet on attics. This change will make the life safety issues kick in. If it's unfinished, it does not have to meet these provisions. Egress will be required only if the attic is used as a sleeping area.

There is now a definition for stairs, which matches the IRC with the IBC

CBO Birchfield reviewed the definition of townhouse. This definition implies that each townhome is on a separate plat with separate, attached walls. There was some confusion about how to interpret the requirement of fire walls on common walls that are also a property line. The 2009 IRC is assuming this will be sprinkled. If this part of the code is adopted, all townhomes will have to be sprinkled. USE CAUTION HERE!

R311.3 – Floors and Landings at Doors has an added exception for small decks.

R312 – Guard height now needs to be built 36" above the adjacent fixed seating area rather than 36" above the floor. No mention in the code about moveable furniture.

Mr. Pate mentioned the Clapton rule, and how it relates to windows and grade.

CBO Birchfield again expressed concern about the definition of a townhouse, stating effective January 2, 2011, the code will kick in to sprinkle new single-family homes and townhouses unless we amend the code to take it out. The Town does not have the infrastructure to implement this new code. He is concerned about the property protection issue as much as life safety. If the Commercial Downtown area goes up in flames, it could devastate the local economy. CBO Birchfield stated the sprinkler requirement could be triggered by a change of use in the existing building, noting minor alterations would not trigger having to install a sprinkler. The existing building code gives us a lot of flexibility.

Mr. Pate clarified the requirement of sprinklers on a residence is only for NEW single-family and townhouses.

R314 – A new exception was added so that adding smoke alarms for installation, alterations, or repairs of plumbing or mechanical systems is not required by will still be required for all other interior work that requires a permit.

R315 – Carbon Monoxide Alarms – July 1, 2009 new state law requiring carbon monoxide detectors in all new dwellings. CBO Birchfield noted Realtors and property managers will also have accountability to make sure this law is followed. He noted the State legislation has to deal with new construction, while the ICC deals with existing and new construction.

R613 SIP – Structural Insulated Panels now have some regulations.

IRC Energy – Mr. Pate stated that this code is approximately 15% more restrictive than 2006 code, and includes R-20 in exterior walls, programmable thermostats, 50% of all light bulbs need to be high efficacy, etc. The goal is to have tighter houses, but not too tight. The code also mentions duct leakage and heated swimming pools .

IRC Mechanical – Two notable changes are concerning locking access caps for refrigerants, and exhaust hoods have to open up to an exterior wall if over 400 cfm exhaust.

IRC Fuel Gas – Corrugated gas piping needs to be bonded to the electrical service grounding electrode system to create a higher safety level for lightening strikes.

CBO Birchfield encouraged people to look at the website. We now have a state energy code that needs to be implemented, along with decisions as to how to implement the inspections of these items.

The next meeting will be held June 4<sup>th</sup>, from 3:00-5:00 p.m. in the Town Board room.

CBO Birchfield will recommend to Town Board for residential contractors working within the town limits be licensed by testing. There have been issues with residential contractors accepting commercial jobs that they are less familiar with. Larimer County will require the ICC test, which is a nationally standardized test . The building department has handouts with more information. Mr. Pate noted that more and more jurisdictions are taking this path to have licensed contractors. CBO Birchfield noted there will be a free study session here in August.

The meeting was adjourned at 5:10 p.m.