**2015 Building Code Adoption**

**Recommendations for Hinsdale County**

**and Town of Lake City, Colorado**

**10-21-2020**

Current ICC Building Codes:

**International Residential Code (IRC):** Single family homes, townhomes & duplexes

**International Building Code (IBC):** Commercial buildings

**International Mechanical Code (IMC):** Heating, Ventilation and Air Conditioning (HVAC) systems for both residences and commercial buildings

**International Energy Conservation Code (IECC):** Residential and commercial buildings

**International Existing Building Code (IEBC):** Existing building alterations, additions and remodels

**International Fire Code (IFC):** Primarily commercial buildings

**International Property Maintenance Code (IPMC):** Existing buildings, primarily residences

**International Fuel Gas Code (IFGC):** Propane installations

**International Plumbing Code (IPC):** State jurisdiction, residential and commercial buildings

**National Electrical Code (NEC**): State jurisdiction, residential and commercial buildings

**Hinsdale County current codes:**

2012 IRC, IBC, IMC, IECC, IEBC, IFGC, ICC 400 (Solid Log Homes), and 2009 IFC

**Town of Lake City current codes:**

2012 IRC, IBC, IMC, IECC, IFGC, ICC 400 (Solid Log Homes), and 2006 IFC

**Proposed Building Codes for Adoption by Both Jurisdictions:**

**2015 IRC, IBC, IMC, IEBC, IPMC, IFGC, IFC, 2015 or 2018 IECC, Appendix Q&T, 2018 IRC, Appendix R&S, 2015 IRC**

**Why Adopt the 2015 Building Codes?**

Hinsdale County and Town of Lake City currently follow 2012 building codes. New building codes are published every three years, and the newest codes will be published in 2021. The county and town desire to adopt 2015 building codes in order to keep current with building practices and construction technology advances, continue to provide for the health and safety of the public when building and buying homes, and to avoid increases in insurance premiums that correlate with out-of-dateadopted codes.

Insurance Services Office (ISO) provides data for property and casualty insurers. As part of the data it provides to insurers, ISO rates community building processes with the Building Code Effectiveness Grading Schedule (BCEGS), which assesses building codes and how they are enforced. The BCEGS ratings are surveyed, audited and updated every five years. The ratings are based on categories including which edition of code is adopted, building department staff qualifications, inspection procedures, code enforcement and more. Communities with good enforcement can expect reductions in property insurance rates.

Good (low) BCEGS ratings ensure municipalities have well-enforced, up-to-date codes that lead to safer buildings, less damage and lower insurance losses. A high BCEGS rating can result in higher insurance premiums and less opportunities for public safety grant funding.

Hinsdale County was due for a BCEGS re-evaluation in 2019, and at that time, ratings were scheduled to go up. In the fall of 2019, Building Official Richard Kimball filed a plan with BCEGS to mitigate the possible increase in the BCEGS rating. This plan included adoption of the 2015 ICC codes, since BCEGS ratings increase if building codes are more than five years out of date. Kimball’s plan was accepted by BCEGS, with a deadline to adopt 2015 ICC codes by the end of 2020. If the 2015 codes are adopted and approved, by the end of this year, local ISO ratings will remain at, or possibly even below, the current rating.

Adoption of newer codes triggers a state mandate to adopt one of the three most recent editions of the Energy Conservation Code, in this case 2012, 2015 or 2018.

**2012 vs 2015 code:**

When updating from the 2012 to 2015 codes, the main goal of the ICC was to eliminate inconsistencies, conflicts and discrepancies within the codes rather than make technical changes. There were no major changes to construction requirements from 2012 to 2015. The language of the codes was “cleaned up”, clarifying provisions and fixing errors that were present in previous editions of the various building codes. The 2015 IRC did add Appendices covering straw bale and straw clay homes.

Further, in the update from the 2015 to 2018 codes, an appendix was added to address Tiny Homes, residences under 400 square feet. Many jurisdictions that have adopted Appendix Q have amended it to cover homes up to 600 sf.

**2015 Building Code Review**

To move forward with adoption of the 2015 Building Code, Building Official Kimball worked with an ad-hoc committee to make recommendations to the County Commissioners and Town Trustees on specific amendments of the code. The ad-hoc committee was made up of Don Booher with Hinsdale County Planning Commission, Karen McClatchie with Town of Lake City Planning Commission, Town Mayor Bruce Vierheller, and citizen Ron Jones. The committee met and reviewed the codes multiple times over the course of several months in 2020.

**2015 Recommendations**

The spreadsheet attached to this document shows the specific recommended amendment changes from the 2012 to 2015 code. Recommendation is for the same amendments for both town and county, with one exception - amend Section R105.2.1 for only the town to reduce the square footage to 120 SF. The County will remain as it is written in the 2015 IRC at 200 sf.

**Energy Conservation Codes**

The Energy Conservation Codes have the most technical changes from one code cycle to the next because of advances in energy conservation technology in building construction. The Energy Conservation Code deals specifically with construction that affects the loss of heating and cooling, including insulation, windows, roofs, etc.

The consensus of Building Official Kimball and the ad-hoc committee is to recommend adoption of the 2018 International Energy Conservation Code over the 2015 code. This recommendation is primarily because the 2018 version of the code is less restrictive than the 2015 and offers more options for builders to meet the codes and save money.

The current 2012 Energy Conservation Code has only two options for builders when dealing with energy conservation construction requirements. The 2015 code has six options, while the 2018 code has eight options.

There are some increases in energy conservation requirements in the 2018 code, specifically in u-factors on windows (raised from .32 to .30), and roof/ceiling insulation increases from R-49 to R-60. The increase in efficiency from the change in windows is shown to add about $50 to the cost of a house. Improving the insulation in the roof/ceiling insulation systems will give a payback to a year-round homeowner in less than 2-3 years. Any cost increases incurred by these new requirements shall be offset by lower energy costs.

**Why do construction costs keep rising?**

One of the reasons construction costs keep rising is the cost of lumber, which have risen 172 percent since April, 2020, according to the National Association of Homebuilders Research Center. The increase in lumber cost is due to several factors beyond our control. The increase in lumber costs is far greater than any code factor in rising construction costs.

Rising lumber costs is one of the main reasons the recommendation in the code to allow for greater use of local sawmill lumber. it is environmentally sound, provides local jobs, and helps the local economy and opens the door for locally produced, portable and owner cut sawmill lumber.

Labor cost is another consideration of building costs and newer building codes allow for more options that use less lumber and less labor. There are provisions in the new codes that can help lower construction costs.