Rebuilding Technical Assistance Guide



Building or remodeling a home can be an overwhelming experience under the best of circumstances. If you lost your home, garage, workshop, studio, barn, or other structures in the Four Mile Canyon Fire last fall, the process is even more daunting because you were not planning on doing it. There are many resources available, including individuals, workshops, and other programs, that can help you. This guide is designed to introduce you to these opportunities.

How Can Our Team Assist You?

This publication describes a variety of resources that are available. From one-on-one technical assistance to group workshops, we want to provide services that will be helpful to you. Let us know how we can better serve you. Would it be helpful to have longer office hours? Workshops in small group settings? Please let us know! Our contact information can be found at the end of this document.

What is BuildSmart?



BuildSmart is Boulder County's sustainable building program, which includes

energy and sustainable building requirements for new and remodeled homes in the unincorporated portion of the county. It is intended to promote and encourage high performing, sustainable, and energy efficient homes that reduce energy consumption, lower occupant operating costs, reduce the production of greenhouse gases and conserve and protect our water and other natural resources. Our staff can help you understand how you can meet these requirements.

Land Use Department Case Managers



Case managers are available to help guide you through the rebuilding process. We are available to talk to you about your initial plans, visit your property if you have concerns about the location of the new structure or driveway, and work with your design team on the details of the project. We can also be a resource for any hard to answer questions. Perhaps you have concerns about your septic system, water supply, erosion, dead trees or other issues. Your case manager can schedule meetings, provide names and phone numbers and otherwise point you in the right direction, which can save you time and frustration. If you don't already have a case manager, contact Garry Sanfaçon at 720.564.2642 or gsanfacon@bouldercounty.org and he will introduce you to your case manager when you are ready.

Building Assistance

Land Use staff is available Monday-Friday, 8:00-4:30 to answer questions, discuss options, talk about timelines and to provide permitting assistance. Property owners, architects, and contractors can schedule meetings in advance or you may walk in the front door, at your convenience. If phone or email would be more convenient, here's a quick guide:

- Green building/BuildSmart Contact Doug Parker at 720.564.2643 or dgparker@bouldercounty.org at the beginning of your project for advice, tips, and building science techniques.
- Wildfire mitigation and building with ignition-resistant materials – contact Jeff Dwight or Eric Philips at 303.441.3926 or jdwight@bouldercounty.org or ephilips@bouldercounty.org
- Construction questions Plans examiners are available to answer your questions and review your plans with you before you formally submit them. Call 303.441.3926 or email building_official@bouldercounty.org.
- Septic questions Contact Iris Sherman with Public Health at 303.441.1157 or isherman@bouldercounty.org.
- Driveway questions Contact Chad Schroeder with Transportation at 720.564.2663 or cschroeder@bouldercounty.org.

Site Inspection and Certification

Boulder County is working with the State of Colorado Department of Health and Environment to perform site inspection and certification of properties with homes destroyed in the fire to ensure that the site is cleaned to state standards. More information regarding this program will be available soon.

Workshops

The county has hosted, and is willing to host, workshops on a variety of topics to help provide information to property owners, home builders, and design professionals. Potential topics include:

- Passive Solar Design learn how to take advantage of our Colorado sunshine to keep your house warm in the winter and cool in the summer through appropriate orientation of the house, proper usage of overhangs, window placement, and efficient interior materials.
- Insulation the least expensive energy source is the one you don't have to pay for! A tight building envelope with modern insulation will reduce your energy bills throughout the life of your home.
- Wildfire Mitigation and Ignition-Resistant Materials Wildfire mitigation and rebuilding with ignition-resistant materials is one of the best ways to protect your home from future fire hazards. There are a wide variety of materials and techniques that can be used to protect your property as best as possible.
- Renewable Energy Some people are taking this disaster as an opportunity to rebuild homes that go above and beyond current green building requirements. Even if you aren't able to incorporate solar hot water heaters, photovoltaic collectors, or ground-source heat pumps now, there may be ways to incorporate these technologies into your home for future upgrades.

What else would you like to know? How would you like to have these workshops made available? Possible venues include lunchtime presentations, after-hours workshops, or recording these presentations and making them available on the County's website. Stay tuned for times, dates, and locations of these workshops. And if you have a suggested topic, contact Doug Parker at 720.564.2643 or dgparker@bouldercounty.org .

Design Assistance

The County is looking into using federal grant funding to provide technical assistance to property owners. While the details of these programs are still being ironed out, we hope to provide rebates or discounts to help property owners building modest homes with some assistance for items such as energy rating modeling, blower-door tests, and insulation inspections.

Buyer's Cooperative

In the wake of other disasters, some property owners have joined together to form buyer's cooperatives in order to negotiate bulk pricing on items such as cabinetry, flooring, windows and other materials. If this is something the community desires, the County can assist in formation of an organization to try and take advantage of any pricing breaks. The County can help provide a forum for citizens to come together.



Definitions

Often times, our staff can throw around a lot of terms that you may or may not be familiar with. If we use terms or acronyms that are uncommon to you, please ask for clarifications! Here are a few of the terms that are regularly used when discussing building a house in Boulder County:

HERS (Home Energy Rating System):

This is a measurement of residential building efficiency and is required when the performance path is used. It is measured by comparing proposed building design to the 2006 International Energy Conservation Code (IECC). A HERS rating of 100 means the house performs at the 2006 IECC requires. A HERS rating of 75 means the house is 25% more efficient that the 2006 IECC requires. BuildSmart requires that larger houses have lower HERS ratings, that is, that they be more efficient than smaller houses.

Energy Rater:

An Energy Rater is the professional who performs the modeling which demonstrates how the house will be built to perform at the specified HERS rating. Energy Raters are certified through a national certification process called RESNET (Residential Energy Services Network), which is a collaboration of the National Association of State Energy Officials and Energy Rated Homes of America.

Performance Path:

Using the HERS rating and working with an energy rater to demonstrate how efficient a house will be is often referred to as the "performance" path.

Prescriptive Path:

As an alternative to the performance path, BuildSmart outlines specific requirements that architects and homebuilders can utilize to build a home that will meet the intent of the code without utilizing an energy rater. This option is only available for homes with 6,000 square feet of conditioned floor area or less.

Tight Building Envelope:

A home that meets or exceeds the air tightness requirement from either the performance path or the prescriptive path, as measured by an energy rater using a blower door. This is important because leaky homes waste energy.

Websites

Land Use Department: www.bouldercounty.org/lu

Boulder County BuildSmart: www.BoulderCountyBuildSmart.org

Four Mile Canyon Fire, Countywide Resources: www.bouldercounty.org/fourmilefire

Helpful Hints

- We are here to help! Talk to us early and often! Land Use Department 303.441.3930 or FourMileRebuilding@bouldercounty.org
- Talk to your case manager about the structures that were destroyed and your potential plans to rebuild as early as possible – even before you hire an architect or builder.
- We can help you think about how to incorporate Energy Efficiency and Safety into your design.
- Check with Public Health for status of your septic system at www.SepticSmart.org.



