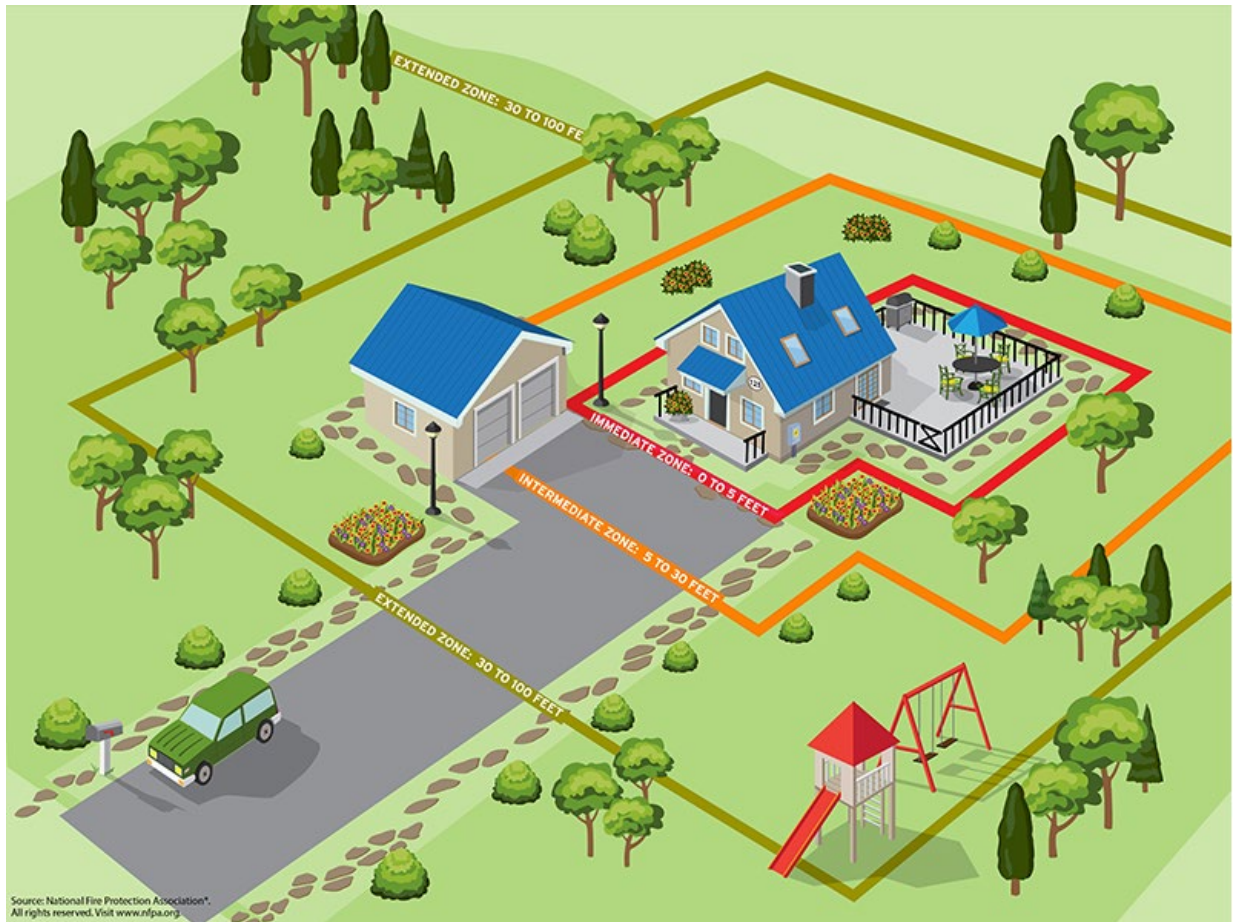


## Rebuilding Better Residential Workshop Series

### Workshop 2: Materials and Equipment for a Resilient Rebuild

Information from workshop 2 can be found on Boulder County's RebuildingBetter.org website.

#### RebuildingBetter.org Website Chapter 2: Building a Resilient Home



Research around home destruction vs. home survival in wildfires points to embers and small flames as the leading cause of ignition in wildfires. Embers are burning pieces of airborne wood and/or vegetation that can be carried more than a mile by the wind. They can cause spot fires and ignite homes, debris, and other objects.

A combination of **Firewise** construction and **landscaping** can help homes withstand windblown embers by minimizing the likelihood of flames touching the home or any attachments and reducing the chance of fire spreading. **The key elements to consider for a resilient home include:** air tightness, home shape, enclose eaves, fuel bridges, deck enclosures, windows and doors, siding, roofing and insulation, gutter guards, and electric appliances.

Use the QR code on the right to visit the National Fire Protection Association webpage on preparing homes for wildfire.

Learn more about building a Firewise home at [www.RebuildingBetter.org/chapter-two](http://www.RebuildingBetter.org/chapter-two).



*National Fire Protection Association Webpage*



## RebuildingBetter.org Website Chapter 3: Rebates, Discounts and Incentives

The Rebuilding Better website includes a roundup of rebates, discounts, and incentives for households rebuilding after the Marshall Fire. The list is constantly changing and we are updating this website accordingly. This website is a work in progress and will be updated as more resources become available.

### Xcel Energy Incentives for Rebuilding Residents

Xcel Energy is offering one-time incentives specifically for those who lost their homes in the Marshall Fire. As you look to rebuild your home, consider one of several ways to incorporate energy efficiency from the ground up. The incentives will be paid out as a rebate at the time you take possession of your new house. These incentives apply to new homes built to replace properties destroyed in the Marshall Fire.

Home Certification Standard	Rebuilding Homeowner Incentive*	New Homeowner Incentive**
2021 International Energy Conservation Code	\$7,500***	\$0
ENERGY STAR® v3.2	\$10,000	\$1,250
Zero Energy Ready Homes v2	\$12,500	\$2,500
ENERGY STAR® New Certification	\$17,500	\$5,000
Passive House (PHI/PHIUS)	\$37,500	\$15,000

\* Rebuilding Homeowner Incentives are available to Marshall Fire-affected residents who lost their home, choose to rebuild on their same parcel, and previously had an Xcel Energy account.

\*\* New Homeowner Incentives are available to new residents who purchase a parcel where the home was destroyed by the Marshall Fire and build a new home.

\*\*\* Where adopted by the municipality and if the homeowner does not opt out.

### Equipment Discounts

Various companies have reached out to support residents in rebuilding high-performance homes after the Marshall Fire with rebates for heat pumps, air sealing, ventilation and windows.

### Solar Energy Resources

Community Solar Garden: All community members rebuilding will have access to a solar garden dedicated to the Marshall Fire survivors. This option will match Xcel’s current rates, so homeowners will pay nothing upfront, and no premium over time.

Rooftop Solar: The nonprofit Solar United Neighbors (SUN) is creating a solar co-op that will make it easy for all residents who are rebuilding their homes to save on the installation of solar panels, often significantly below what they would pay on their own.

### Portable Induction Cooktop Lending Program



The most efficient electric cooking technology is induction, and induction cooktops deliver better cooking performance than gas. Induction cooking is faster, easy to control, and safer than cooking with gas or propane. In addition, because the surface does not heat up (only the pans and food), it is very easy and safe to clean up any spills.

Boulder County’s Office of Sustainability, Climate Action and Resilience is offering a free, two-week loan of portable induction cooktops for residents to try cooking with induction technology. Visit the form using the QR Code under Additional Resources to request a cooktop.

### State Grant for Rebuilding Residents

The first offering in the State’s sustainable rebuilding program will be a grant program that will provide **\$10,000** for high efficiency electric homes or rental units that are built to the 2021 International Energy Conservation Code, BuildSmart, or stronger standards.

This will support the installation of heat pumps, heat pump water heaters, and electric stoves (either electric resistance or induction), and may be combined with the incentive program offered by Xcel Energy for Marshall Fire victims. Only primary homes will be eligible (not vacation homes or other second homes). The intent will be to offer this in both the Marshall Fire and East Troublesome Fire areas, working collaboratively with local government. The details of timing and program administration are still being finalized. More details about when and how to apply will be available in the coming weeks.

### Additional Resources

August Rebuilding Better Workshop Registration - <https://bit.ly/RebuildAugust22>

**Rebuilding Better Homeowner Resources Page**

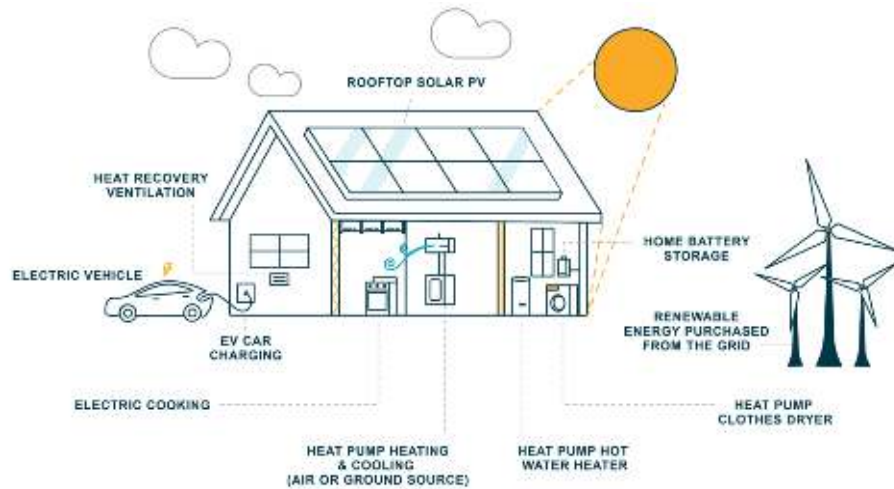
**Rebuilding Better Residential Rebates & Incentives**



**Induction Cooktop Lending Program Request Form**



## RebuildingBetter.org Website Chapter 5: Material & Equipment Choices



### Heating and Cooling

Heat pump technology used to be limited to southern regions of the country. Over the past 5-10 years, heat pumps have been improved and designed to operate in cold climates.

### Hot Water Heating

Although they cost a bit more than standard electric or propane water heaters, heat pump water heaters easily pay for themselves in annual energy cost savings.

### Cooking

Radiant electric cooktops are more efficient than that traditional electric coil version and perform about as well as a gas cooktop. The most efficient electric cooking technology is induction.

### Insulation

Insulation provides resistance to heat flow allowing a home to better maintain desired indoor temperatures. An insulation material's effectiveness is determined and measured by its thermal resistance.

### Solar

Solar PV technology captures the sun's energy and turns it into usable electricity. For the technology to work the photovoltaic solar cell absorbs solar radiation.

### Ventilation

Most conventional homes have no mechanical ventilation besides the bathroom fan and kitchen fans, which are only run intermittently. Without regular outdoor air ventilation, the concentration of pollutants inside the home can easily rise above EPA air quality standards, particularly when using natural gas appliances. Heat recovery ventilation or energy recovery ventilation provides fresh filtered air by passing outgoing and incoming air through a heat exchanger which brings the fresh incoming air closer to the temperature of the outgoing air. This efficient and controlled means of providing fresh air to a home allows you to control increase the amount of fresh air coming into a home or shut it off entirely if there is smoke or a bad air quality day. You can't do either of those things with uncontrolled air infiltration.

Learn more about each of these material and equipment choices at [www.RebuildingBetter.org/chapter-five](http://www.RebuildingBetter.org/chapter-five).