

I Found Just One Marshall Fire Home Being Rebuilt With Fire Resistance in Mind

Last Saturday I visited **181 Mohawk Circle** in Superior, which is being rebuilt with EcoBlox, a non-combustible masonry material. The home is in the Sagamore subdivision, which was completely destroyed in the Marshall Fire. Today that subdivision is abuzz with construction activity on virtually every lot, but every other home I saw is a wood-frame rebuild.

The home I visited is one of eight Boulder area homes that was on the Colorado Green Building Guild's annual **Green Homes Tour**. It made by far the biggest impression on me.

Lisa Morey, founder of **Colorado Earth LLC**, was on-site to answer questions about the blocks which she makes and sells for home construction. After graduating with an engineering degree she got another degree in architectural design. She started building with adobe bricks while living and working in New Zealand in the 2000s. There she gained experience from building nearly 50 homes, and from that work published a book, "**Adobe Homes for All Climates**," in 2010.

Lisa's mission is to scale the natural building industry by offering an affordable wall system made from locally obtained material. Through her company, she designs, manufactures and builds the structural blocks that are "fireproof, soundproof, bug-proof, bulletproof, breathable, biodegradable, and mold resistant."

The blocks are made using "overburden" material (earth) from a nearby quarry and are not fired. The walls made from EcoBlox are finished with a lime-based plaster that can last indefinitely. EcoBlox have

lower embodied energy because, unlike regular bricks, they are not fired. The blocks have an average compressible strength of 1,200 psi. Two holes in the blocks are for rebar running the height of the walls. The holes are then filled with concrete. The mortar between blocks is made from the same material as the blocks themselves. The exterior is then covered with lime plaster; the interior is left as exposed blocks with a thin lime wash.

While the exterior walls are made of the EcoBlox, interior walls are typically framed in the usual manner using 2x4s and 2x6s, although they can be constructed of narrower EcoBlox. The exterior walls are composed of two rows of the blocks as shown in this picture. Between them electrical wiring and other utilities can be run before the gap is filled with perlite insulation. The blocks measure 6"x12" and vary in height from 2" to 5". Typical height is 3.5".

Earthen construction is nothing new, of course. The genius of these EcoBlox is that they provide a construction material that can be purchased by the pallet and used by masons to build homes. According to the company's slide presentation, 30 to 50 percent of the world's population currently lives in earth-based dwellings.

The Superior home is not Lisa's first home built with EcoBlox. She has built other such homes throughout Colorado and the USA.

EcoBlox, being dirt, are non-combustible and studies have shown 50% less energy is needed for heating and cooling compared to a traditional wood-frame home.

The machine that compresses the mixture of clay, dirt and lime into the blocks is made by Advanced Earthen Construction Technologies (AECT). The location of Colorado Earth's machine is in Brighton. It can produce up to 480 blocks per hour from locally sourced clay and dirt. The ingredients being locally sourced further reduces the carbon footprint of EcoBlox.

"These machines are what builders will use when this industry really takes off," said Ryan Runge, president of AECT. Ryan says that the wood-frame style of home construction was originally a quick fix after WWII to build homes for returning soldiers, but the idea stuck. He thinks the construction industry will adopt building with products like EcoBlox now for many reasons, including fire resistance, lower carbon footprint and better insulation resulting in lower heating and cooling costs.

Lisa told me that she made a presentation to many homeowners who lost their homes in the Marshall fire, but only the owners of 181



Mohawk Circle signed on to rebuild their home with her EcoBlox. You can reach Lisa at 720-556-0473.

REAL ESTATE TODAY



By JIM SMITH Realtor®



Another Green Homes Tour Is Coming on Saturday, Oct. 7th

The annual **Metro Denver Green Homes Tour** is based at the American Mountaineering Center (AMC) in Golden. More about that in next week's column.

Leading up to that tour, there are three free presentations you can attend:

- ◆ Tuesday, September 19, 7 p.m.: Joe Burdick, installing your own solar PV
- ◆ Tuesday, September 26, 7 p.m.: Heat pump homeowners panel
- ◆ Thursday, October 5, 7 p.m.: Joan Gregerson, Taking advantage of Xcel Energy's Time of Use program.

All three presentations will be at Jefferson Unitarian Church, 14350 W. 32nd Avenue.

Price Reduced on Unique Wide Acres Ranch Home

Wide Acres is that quiet neighborhood tucked south of Colfax to the east of Colorado Mills. With 3,493 sq. ft. of finished living area, this 3-bedroom home at **1125 Zinnia Street** is set back about 100 feet from the street on its 0.57-acre lot, making it even more quiet and secluded. The price is now \$100,000 less than its original listing price, making it a great deal, too. **Come to my open house this Saturday, noon to 2pm and see for yourself.** This home is convenient to St. Anthony's Hospital, NREL, the Colorado School of Mines and downtown Golden. It is being sold by the same family that had it built in 1974. The indoor and outdoor living space is exceptional, as you'll see when you view the **narrated video tour** at www.WideAcresHome.info or call me at 303-525-1851 to request a showing.



Denver Ranch Back on Market with Refinished Floors

This charming ranch at **2670 Kearney Street** in Park Hill is only minutes from City Park, the Denver Zoo & the Denver Museum of Nature and Science. The home is on a double lot with extensive flower and vegetable gardens. The bathroom was completely remodeled in 2020 and the kitchen was renovated with new granite countertops. A new roof and Bosch dishwasher were installed in July 2023. The original hardwood floors were refinished last week. The home features new Anderson windows throughout. The main sewer line was completely replaced in 2009. Backyard includes newer storage shed. The large concrete patio is great for summer entertaining. There are two bedrooms on the main floor, plus a non-conforming third bedroom in the basement. This home is located on a quiet street only one block from McAuliffe International Middle School. You can view my **Narrated Video Tour** at www.ParkHillHome.site, then come to **Greg Kraft's** open house this **Saturday, 11 to 1.**



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"I cannot do all the good the world needs, but the world needs all the good I can do." —Jana Stanfield