

HOW TO USE THIS GUIDE

By Tom Locke

Editor

The Spring 2009 Real Estate Guide is meant to provide practical information as well as interesting reading.

We lead with an article about the construction of an interesting dome home in Fairplay that is the fulfilment of a long-term dream.

We also provide stories on a variety of other topics: home sales – how many have been sold and at what prices; trends in foreclosures and how to buy a pre-foreclosed or foreclosed home; trends in building permits; protecting the investment in your home; credit scores and mortgages; and a recent market recap.

Warranty deeds for the three months ended Dec. 31 are organized by subdivision, so readers can easily see trends in their own subdivisions and get an idea of what's happening with their own home values.

Building permits organized by month for the last three months of 2008 indicate who has been building what and for how much.

We hope this guide will help you navigate the ins and outs of real estate in Park County during some unusually difficult times for many in the real estate industry.

DOME HOME OF FAIRPLAY BRINGS DIFFERENT VISION TO LIFE

*Distinctive green
construction finds
home in Park County*

By Amanda Garrison

Correspondent

Keith and Sylvia Wortman realized a 30-year dream when they began the two-month construction of their Monolithic Dome Home. The design and construction process, created by engineers in Texas, is not only distinctive, but surprisingly energy-efficient and environmentally friendly.

Keith Wortman's dream of a dome-shaped home began approximately 30 years ago when he traveled the country as a public speaker. He happened upon a high school built by the Monolithic Company in Emmet, Idaho, and was so impressed with the building that he began his research into the company and began looking for land and drawing his dream home in his head.

That process went on for years, but several years ago, when vacationing in Breckenridge, Wortman and his wife, Sylvia, traveled over Hoosier Pass and found the perfect parcel of land for their special home. Wortman went to work with the engineers and designers at the Monolithic Company to design his home, which is 4,000 square feet, including a 740-square-foot garage, plus an adjacent shop that is 800-plus square feet.

He estimates that the cost will be \$120 to \$125 per square foot, finished. Even though the interior isn't finished yet, he welcomes visitors.



STEP INTO THE DOME

The two doorways and large window pictured above are still covered in plywood, awaiting their final finishes and unveiling. The sprayed-in-place, concrete dormers above the doors and windows offer protection from the snow and elements. The Wortmans' dome home is the first built with these features in the original structure. Usually they have been formed and then added on after the initial dome is complete. The Wortmans enjoy 4,000 square feet of living space beneath the three domes. (Photo by Amanda Garrison/The Flume)

"Close to 300 people have come up and seen it," he said. Indeed, on Feb. 17 some people from Ohio flew out to see the home. Other visitors have arrived from Georgia, Florida and various parts of Colorado.

"This will be a draw to Park County" said Wortman, who is a member of the board of trustees for the Town of Fairplay.

He and the designers were careful to design the structure around all existing bristlecone pine trees on the property. Only two small trees had to

be transplanted, but no trees were destroyed in the building of the structure.

The home is actually made completely out of concrete. A concrete pad is poured, and then the Airform, a reinforced, water-resistant fabric, is inflated into a bubble. Once the bubble is inflated, the interior is sprayed with three inches of polyurethane foam that acts as insulation for the entire structure.

All electrical and plumbing lines are installed, along with

hangers and rebar, on top of the foam layer. Once all rebar and utility lines are in place, a 6,000 pounds-per-square inch concrete mix is sprayed into the shell. At the end of the process there are three inches of foam and four inches of concrete with the specialized Airform fabric on the outside of the shell.

The timeline for the construction started July 15 and ended at the end of September 2008, excluding interior work. The land was leveled and the

About the cover photo

The cover photograph was taken by Bernie Nagy of Fairplay in June 2007 from a bridge over the South Platte River on County Road 59 in the Hartsel area of South Park. Nagy said he particularly likes the flow of the river in the photograph. He also noted that the eye catches the red barn, and it shows off the wide-open scenery until you get to the mountains in the background.

foundations were started on July 15. The pallet containing the domes arrived around Aug. 15.

One difference

This is the first home built with the dormers or outer frames of the windows and door included in the original bubble. Usually the dormers are inflated and added to the original structure after, but the Wortmans had the window and door dormers figured and poured as part of one complete structure.

According to Wortman, the cost of the Dome Home "is approximate to the cost of building a conventional stick-frame home." The long-term costs of heating/cooling and maintenance on the dome home are substantially superior to those of conventional buildings.

"Everyone is talking about 'green' building these days, but the dome home is 'green' in itself," said Keith Wortman.

Homes are given an "R" rating for the energy efficiency of the home; a common home has an R-35 rating, which means approximately one doorway of air is lost from the structure. This dome-home was given a conservative rating of R-60, but the Wortmans were told a rating of R-90 was more accurate. The heat-loss from this home is almost non-existent, which makes heating costs almost nothing. There isn't a concern of air circulation, because the structure acts almost like a vacuum exchange every time a window or door is opened.

One of the owners of Monolithic has a home in Idaho Falls, Idaho, that's comparable in size to the Wortmans' home, and its heating bills are tiny. "He has never seen a heating bill over \$27 a month," said Keith Wortman.

Sylvia Wortman cited another advantage of the house: "The home is virtually dust free, which is any woman's dream."

Her husband said they've talked to many people who live in dome homes, and the feedback has been consistently positive. "Literally 100 percent of the people living in a dome say they'd never go back to anything else," he said.

Inside

Once inside the domes, it is quickly forgotten what the outside of the building looks like. Even with just the framing up, the domes turn into a normal home with amazing lines and vaulted ceilings. The highest ceiling is 23 and a half feet above the floor of the home, and the home features a sunken living room and a loft above the kitchen and living room areas.

The Wortmans expect the interior finishes to be done in approximately two months. They plan to entertain offers from such television shows as *Extreme Homes* and publications such as *Architectural Digest*.

"We truly feel our home will bring spectators and business to Fairplay, and we hope our dream home can do as much for the community as for us,"



BIG THINGS COME IN SMALL PACKAGES

The dome home arrived in this 1,300-pound package. All three and a half domes are completely attached to each other. (Photo by Keith Wortman)

Keith Wortman said.

David South, of the Monolithic Dome Institute, was part of the creation of the building process and a key person in patenting the construction process.

"In our present world we care a lot about green buildings – the reality is that house is probably the greenest you can build. The three reasons it is so green are: energy efficiency; the fact it is made out of concrete, but because it is thin shells, the concrete of the dome or shell is equal to the amount of concrete used in the foundation slab; finally, the longevity of the building makes it energy

efficient. The dome buildings have a 500-year life expectancy, which means you could remove interior walls and design an entire new inside or use for the building, and the shell would remain in place and unharmed."

South also talked specifically about the attributes of the Wortmans' home.

"It is a beautiful home and probably the most earthquake-proof home you could build. They don't have any moment connections, which are the connections where walls meet the roof. Those are broken in earthquake shakes, and engineers will say that heavy snowfall

will put as much pressure on a structure as that would cause damage as an earthquake. Because of the rounded shell, the snow slides off without causing damage."

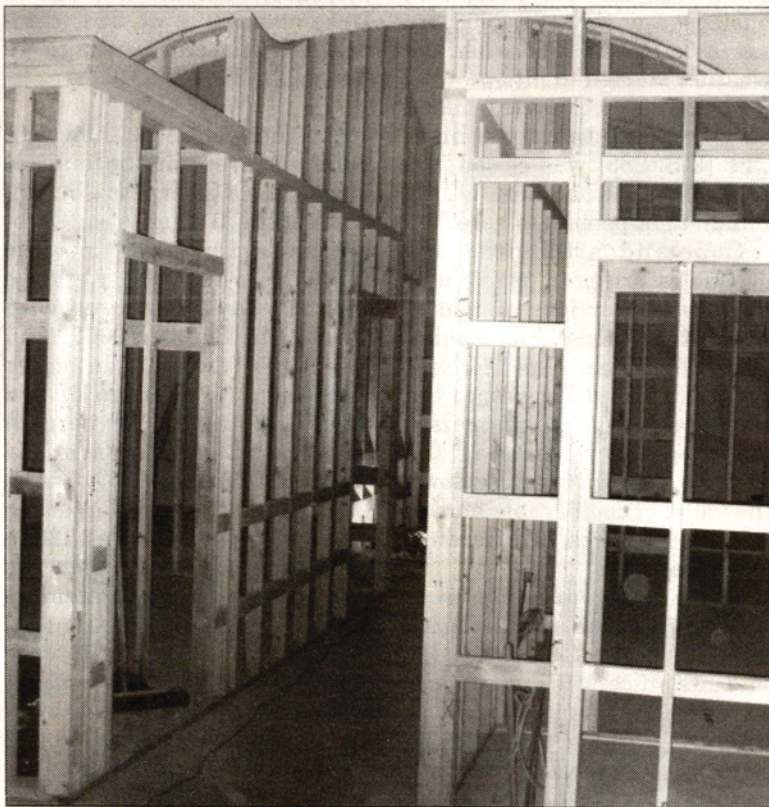
The Monolithic Dome Institute has domes in 52 countries and 48 states, including 41 structures in Colorado. For more information about dome homes go to www.monolithic.com. For an opportunity to see the Wortmans' local dome home, contact Keith or Sylvia Wortman at 661-607-8929, and watch for open-house viewings when the interior is complete.

—Tom Locke
contributed to this article.



IN THE TREETOPS

Forming the foundations close to the treetops sometimes made a person stop and ponder, according to owner Keith Wortman. This is the foundation behind the wall. Note the steel in the foundation, which was folded up and tied into the walls before the concrete was sprayed. The rebar is embedded in the form and goes all the way around the house. Once the steel is up and the concrete sprayed, the entire building becomes the foundation. It is all one piece. There are more than 220 cubic yards of concrete in the house and more than 20,000 pounds of rebar, in addition to about 600 gallons of mix for the spray foam. While it was not a small job, from the start of digging the foundations for the shop and the house until completion with both buildings, it was exactly one day less than two months later that the crew left. (Photo by Keith Wortman)



INTERIOR FRAMING

The builders use the natural curve of the domes in concert with the framing to create the rooms. (Photo by Amanda Garrison/The Flume)



AFTER INFLATION

Some crew and friends stuck around long after the inflation was complete. The arches that are drooping were inflated about three weeks later, after the insulating foam and steel were in place in the rest of the domes. To inflate them with the rest of the dome would have caused distortion in the domes themselves. This was the very first time that the Monolithic and South Industries corporations had ever done the augments as a part of the airform. They have always been added later. Owner Keith Wortman said it was an engineering feat to build the building the way they wanted. (Photo by Keith Wortman)