

Farm Family Loves Its New Domed House

By Mick Lane, Contributing Editor

Cindy and Lee Quaintance have lived in their new farmhouse for more than two years and still, nearly once or twice a week, they find themselves showing it off to friends, neighbors and, quite often, to people they don't know who just stopped to look.

The reason is that they built one of the only monolithic dome homes in the country.

Quaintance first became interested in dome construction about 15 years ago. At that time, one of his friends became enthused about monolithic dome houses after reading about them in an old copy of Mother Earth News magazine.

"He talked about them a lot and how energy efficient they were," remembers Quaintance, now a farmer near Edgerton, Kansas, southwest of the Kansas City area.

His friend talked about domes so much, in fact, that domes were still on Lee's mind nearly 10 years later when he and Cindy decided to build a house on their farm. "We're organic farmers and a lot of what we do isn't viewed as normal by the community," he says. "So building a dome house wasn't that out of place for me."

But Cindy had to be convinced. They contacted the Monolithic Dome Institute in Italy, Texas, and got information and a list of dome owners. Then they took a road trip to visit with a couple dome home owners.

That's when Cindy began to change her mind about them. "They look a lot smaller on the outside than they are once you're inside," she says.

Still, she wasn't ready to build until she'd put together a design that incorporated what she wanted inside with the dome that Lee wanted for the outside. He jokes that the amount of paper she used before arriving at the final design resulted in the death of several trees.

With help from the Monolithic Dome Institute and an experienced dome builder from Arkansas, who put up the shell, the Quaintances began construction in January, 1998. They acted as general contractors on the project and hired local people to do the inside and finish work. Cindy's father installed the wiring.

Working at it only part time, they completed the house in a little over a year. "We could have put it up in a lot less time if we'd worked at it full time," Quaintance says.

Their dome home is a 53-ft. circle that rises to 24 ft. at the peak. There are entryways on the east and west sides of the house. Quaintance says, "It looks sort of like an igloo."

There's 3,500 sq. ft. of finished space inside the dome. The design Cindy settled on has two stories, with two bedrooms, a full bathroom, and storage space on the second floor and an office, kitchen, two bedrooms, two full bathrooms and more storage space on the main floor. "There's no basement, so we had to design the house with plenty of closets and storage rooms," Cindy says.

The main entry, on the east, is two stories high, with windows and double doors. It opens into a living room with a high vaulted ceiling. The west entry, with a more traditional back door, is one story high. Entering the back door takes you through the mudroom into the kitchen.

When they built it, the cost was a little less than the cost of a wood-frame site-built home. "The concrete dome was the only difference," Quaintance says. "Inside, wiring and plumbing, interior walls and ceilings are no more or less expensive for a dome."

Their dome house is all electric, with a heat pump instead of a furnace (with electric strips for backup heat) and an electric water heater.



Cindy and Lee Quaintance have built one of the only monolithic dome homes in the country. It's 53 ft. in dia. and 24 ft. at the peak, making it "look sort of like an igloo."

"It's recommended that you not use gas in a dome," Cindy points out.

"They're so air tight that there's no place for the gas to go if there should be a leak," Lee adds.

As for efficiency, the Quaintances have only their previous house for a comparison. That house was a 700 square foot mobile home on the farm, with natural gas heat. Their electricity bill in the new 3,500 sq. ft. home, is about \$15 per month more than the total of gas and electricity was for the trailer. They say the dome house is more comfortable in the winter and the summer than most frame-built homes.

Quaintance says the polyurethane foam and concrete dome has an insulation value of R-60, so no additional insulation was needed in the exterior walls. It doesn't absorb as much heat, so stays cooler in the summer. It has the added benefit of dampening sound. "We can't hear our rooster crow," Cindy says. In fact, they seldom notice when the train passes on the tracks that are about 200 yards from the house. "Trains used to rock the trailer," Lee recalls.

While they've been around for years, domes are still not commonplace. However,

energy efficiency and lower construction costs seem to be renewing interest in them.

The Monolithic Dome Institute reports they're being used a lot for church and school buildings. For example, after a fire destroyed their school building, the rural Pattonsburg RII school district, Pattonsburg, Mo., put up monolithic dome structures for the high school, gymnasium, and elementary schools.

Properly constructed monolithic domes are nearly impervious to outside weather. Hail bounces off and tornadoes just blow over. According to reports, the Pattonsburg schools no longer need tornado drills because the safest place for students during a tornado would be right at their desks.

The Quaintances - both of them - are now convinced monolithic domes make ideal farm houses.

Contact: FARM SHOW Followup, Monolithic Dome Institute, 177 Dome Park Place, Italy, Texas 76651 (ph 972 483-7423; fax 972 483-6662; E-mail: mail@monolithic.com; Internet: www.monolithic.com); or, contact Lee and Cindy Quaintance by E-mail at soaringaglefarms@juno.com.



SAMCO X-Tend machine uses rollers on back to lay down plastic over row.

Row Crop Planter Lays Down Plastic As It Plants

A first-of-its-kind row crop planter lays down a layer of biodegradable plastic as it plants, creating a greenhouse environment for emerging seedlings.

The "Samco X-Tend" machine has been used for years to grow corn in Ireland, where growing conditions are marginal. As plants emerge from the soil they pop right through the film, which protects emerging plants from frost and promotes rapid growth during early emergence.

The machine is available in 4 and 6-row models. The 4-row model sells for about \$20,000. Cost for the plastic film is about \$80 per acre.

Contact: FARM SHOW Followup, SAMCO Agricultural Manufacturing, Tuogh, Adare, Co. Limerick, Ireland (ph 011 353 61 396176; fax 011 353 61 395123; E-mail: samcoagri@eircom.net).



Hitch Saver keeps trailer hitch from rusting out. Fits over the tongue and trailer jack.

Heavy Duty Cover Protects Trailer Hitches

A new waterproof cover is designed to keep trailer hitches clean and rust-free.

The "Hitch Saver" is made from heavy duty vinyl and fits over the tongue and trailer jack. It zips up at the back and buckles at the bottom. There's enough room inside to store hitch chains and wiring.

"It fastens securely enough that it'll stay put even in a severe windstorm," says inventor Jan Stromberger. "I got the idea when the hitch on my trailer rusted so bad that I could hardly crank it. I had to have the entire hitch sandblasted and repainted. The cover is de-

signed to be used only when the trailer is in storage, not when it's on the road. Two sizes are available. The size you need depends on the height of your jack. It comes in either black or gray and is machine washable."

Sells for \$44.95 plus S&H. A lock sells separately for \$5.95.

Contact: FARM SHOW Followup, Jan Stromberger, Box 5849, Portland, Ore. 97228 (ph 503 238-6688; E-mail: HitchSaver@aol.com; Website: www.hitchsaver.com).