

WINERIES: BUILDING OPTION COMES INTO PLAY

A centuries-old building method is the latest in energy efficient technology for a Paso Robles winery. Carmondy McKnight Winery, which focuses on environmental stewardship, has begun construction of a barrel storage facility made primarily of straw bales covered in plaster. The thick walls should keep temperatures fairly constant, which is important for winemaking, and reduce energy costs by eliminating the need to install a refrigeration unit.

Additionally, straw bale construction helps recycle rice straw, an agricultural waste product that doesn't decompose easily. "We like to say we're using nature's product to produce nature's product," said Greg Cropper, Carmondy McKnight's winemaker and general manager.

Working with Atascadero-based sustainable building firm Semmes and Co., Cropper and winery owners Gary and Marian Conway began planning the 2,500-square foot building three years ago and expect it to be ready for use by fall. If it's kept fairly sealed up, the facility should function like an aboveground cave, with temperatures at around 55 degrees.

This is comparable to temperatures at the neighboring Justin Vineyards and Winery's Isosceles Center, which has 40,000 square feet of underground gunite caves used for wine storage at 52 to 56 degrees. Justin winemaker Fred Holloway couldn't say how much the facility cost.

Neither would Cropper disclose the price tag of Carmondy McKnight's new facility. However, he did say straw bale buildings are cheaper than underground caves. But his facility will be a third more expensive than a traditional warehouse with a cooling system, Cropper said.

"But our goal is the savings to the environment in using sustainable products as well as a reduction of as much as 90 percent of man-made energy to cool the building," he said. Carmondy McKnight isn't the only local winery to use straw bale construction.

The first California winery and commercial business to use straw bales was Claiborne & Churchill of San Luis Obispo. In 1995, Claiborne & Churchill constructed an approximately 3,000-square-foot building that serves as tasting room, winery and storage facility.

"We love it," said Clay Thompson, winemaker and co-owner of Claiborne & Churchill. "It saves money and energy and is good for the Earth. Plus it just feels good to be there, surrounded by those thick walls."

Straw bale buildings also do well in earthquakes, Thompson added. More than a year ago, the magnitude 6.5 San Simeon Earthquake shook Claiborne & Churchill's tanks and knocked barrels over, but Thompson didn't find a single crack in the building.

Thompson wouldn't reveal construction costs but said his building ended up being a little less than \$100 per square foot cheaper than what he would have paid for a structure with traditional wood siding.

He worked with San Luis Obispo architect Marilyn Miller Farmer of Habitat Studio Architecture on the design, which features 16-inch-thick walls.

Interest in straw bale construction has greatly increased in the 10 years since Thompson built his winery, Farmer said. "Almost all of my clients come in interested in it," she said.

Farmer designs about three or four straw bale structures each year. Straw has been used in construction for centuries. However, the first straw bale structures were built in the Midwest more than 100 years ago, when a shortage of lumber forced people to look for alternative construction methods.

--Written by Michaela Baltasar, The Tribune