



The House That Randy Built

Posted by [Euan Mearns](#) on September 21, 2013 - 1:34pm

One of the nice aspects of the 7+ years I have been involved with The Oil Drum has been attending conferences and meeting with some of my cyber friends, who by and large figure among the nicest bunch of folks I ever met. In 2007 I attended the ASPO meeting in Houston and it was then that I met Randy Udall for the first time. Well you know what some Americans are like - you meet, you chat a while, discover you get along, down a couple of beers and before you know it you are invited to go visit. And so it was with Randy Udall....

The house that Randy built, sunk low in the Colorado terrain, provides shelter from winter storms and from exposure to summer sun. Photovoltaics, solar hot water (on the roof) and a single wood burner (chimney) provides all the energy needs.

Three years later, my wife and I had a trip planned to the States to go visit Dave Rutledge (another cyber mate) at his mountain lodge in New Mexico and I thought it would be cool to visit Randy en route. We exchanged a couple of emails, he warned that his wife Leslie was cautious about some of his friends coming to stay and that his son once claimed that the family lived in a "mud hut" and by now I was wondering if this was such a good idea. But plans were made and we went to stay with Randy in Colorado for a couple of days in August 2011; on arrival, any trepidation melted away.

A "mud hut", not quite. The stucco exterior finish covers thick foam insulation that in turn covers compressed earth (adobe) blocks. This provides protection from winter cold and summer heat, and thermal inertia from the large temperature swings prevalent in this part of the world.

At first sight Randy's house did indeed have the feel of a "mud hut" but upon entering the reality of a beautifully and lovingly crafted passive house unfolded. I was astonished to learn that Randy had designed and built every inch of this house himself, including the manufacture of every compressed earth brick and the hammering in of every nail - in neat serried ranks.

I wish I had recorded the vital statistics but the mass of bricks was carefully calculated to provide thermal inertia, keeping the house warm in winter but cool in summer. I was also very surprised to learn that all of the insulation was on the outside of the masonry structure which is the opposite of the way we build our houses in the UK. South-facing windows collect wintertime solar energy and the adobe block walls and brick floors soak up much of that heat energy, keeping the home warm through cold nights. During the summer, just opening the windows at night cools off the massive floors and walls, helping the house stay cool during hot days. Putting the insulation on the outside of the exterior walls is the only way to make this adobe wall strategy work effectively.

The house was set low in the terrain, providing protection from winter storms and from the worst excesses of summer heat. Outside you find a large solar PV array, providing a surplus of electricity and solar hot water arrays on the south facing roofs providing all the hot water

required and, if my memory serves correctly, some interior heating during winter time.

The rather plain exterior gave way, inside, to simple, beautifully crafted, elegance.

Every timber cut and every nail hammered by one man. This is a masterpiece that will hopefully endure.

Inside, beautiful craftsmanship provides simple but elegant living space to match the view of Mount Sopris that dominated the surrounding landscape. Not many of us leave a lasting legacy. Randy has left memories of a wonderful and thoughtful teacher and a house that will hopefully stand as a testimony to his passion for sustainable living for centuries to come.

The view out of the front window wasn't that bad either. Mount Sopris (3,952 m /12,965 ft) offered Randy and his family fantastic walking, climbing and ski mountaineering opportunities.

Renewable energy and renewable transport. I am seldom pleased with the pictures I take, but there is something about this one I really like.

On the second evening of our visit, we dined with the local mayor and downed a few glasses of red. Randy may look pensive but he is actually looking at his lap top, has my credit card and is planning a road trip for us through Mesa Verde and Grand Canyon en route to New Mexico, one of the best trips my wife and I have ever made. He knew this area like the back of his hand.

To some, this house and lifestyle may seem fabulously exuberant. But the house, in fact, was built for a relatively tiny amount of money with most of the cost coming by way of blood, sweat, tears, knowledge and love of a vision for the future. These Udalls lived a simple life with a very strong sense of community involvement.

Most folks who read these pages will already know that in June of this year Randy died aged 61 of natural causes while hiking alone in the Wind River range of Wyoming, hunting for wild trout. The tragedy here is that he was snatched from his family and the sustainable living community he championed 10 to 20 years prematurely.

Thank you to Leslie Udall for consent to publish this article and to Steve Andrews for some useful editorial comments.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](http://creativecommons.org/licenses/by-sa/3.0/).