

Doug Rye *says ...*



What is the best wall insulation for existing homes ?

As you read this column, there are only a few days left until the deadline to enter the 2010 Electric Cooperatives of Arkansas makeover contest. In my opinion, the 2008 and 2009 makeover houses were two of the very best examples of how to make existing houses more energy efficient, more comfortable and have lower monthly utility bills. On a scale of 1 to 10, I think that they are both 10s. What a great educational tool to show others what can be done to improve existing houses.

You may find this hard to believe but I, yes I, “the King of Caulk and Talk,” still learn from these experiences. There was no insulation in the exterior walls of the 2009 house except for one room, which had been added onto the original house. It had two-inch fiberglass batts. There are millions of houses in our country that need, but have no exterior wall insulation. I get calls at my office regularly about that problem. In the past it has been quite difficult to insulate existing walls. While plans were being made on the ways to make the 2009 house more energy efficient, the planners found a product called RetroFoam™. The name indicates that it is foam for retrofitting. It proved to be a perfect solution for this house. Installation was fast and clean with very little waste, mess or cleanup.

It was this simple. Two-inch holes were drilled in each stud cavity about four feet from the floor. A flexible hose was then inserted into the hole and pushed down to the floor. A white foam, which has the consistency of shaving cream, was injected in the cavity until the foam started coming out of the hole. The hose was then pushed up into the cavity until it touched the top plate and foam was installed to fill that part of the cavity.

A two-inch plug was then inserted into the hole. It took about two minutes to fill that cavity. All of us who were watching this process were very impressed. It only took a few hours to insulate the exterior walls of the entire house. Because the house was to receive new vinyl siding, we drilled the holes right through the wood lap siding. If we were intending to re-use the existing siding, we would have removed one piece, drilled through the wall sheathing, installed foam, and then replaced the piece of siding. The family told me this past winter that it was like living in a totally different house. Can you imagine the difference?

I have also learned that this can be a great application for brick veneer houses. In this case, small holes are drilled in the mortar joints and foam is injected into the entire airspace behind the brick. I am anxious to see this done soon. Do you know why? It is because one of these two processes may be just right for your house. As always, call me at the office if you have questions. In the meantime try to stay cool.



Installing RetroFoam™ through the drilled two-inch holes.

Doug Rye, a licensed architect living in Saline County and the popular host of the “Home Remedies” radio show, works as a consultant for the Electric Cooperatives of Arkansas to promote energy efficiency to cooperative members statewide. To order Doug’s video or ask energy efficiency-related questions, call Doug at 1-501-653-7931. More energy-efficiency tips, as well as Doug’s columns, can also be found at www.ecark.org