

Doug Rye says ...



Another affordable energy efficiency tool for you

The response to last month's column was just great. Many of you called to tell me that the column on window tinting was the answer to a problem that you have had for many years. Several have called to tell me that they have already had the tinting installed. When this happens, I light up like a newly decorated Christmas tree. Remember that the only reason for this column is to help you. So now I want to help you with another new answer for an old problem.

I receive many, many calls about hot attics. Well, it may not be super hot in your attic now, but now is the best time to make energy improvements there. I actually had a fellow call me while writing this column to ask about installing a radiant barrier in his attic. It is a nice cool day today. I told him to do like most folks and wait until it was a hot summer day with the attic temperature at about 150 degrees. He laughed and I commended him for planning ahead.

I'm going to give you a short course on residential radiant barriers. But first let me explain why the attic gets so hot. The rays of the sun hit the roof. The roof gets hot. Some rays are reflected back to the atmosphere but others actually go right through the roofing materials. The attic air is heated and the attic insulation absorbs much of the heat, thereby creating a super hot attic.

A residential radiant barrier is any product that can stop the radiant heat. It usually consists of sheets of aluminum foil, although it can be an aluminum-type paint. Some folks say that it is okay to just place that foil on the top of the attic insulation. That may actually help some, but it does not prevent the attic from getting hot. And if you have ductwork in the attic, it will still get hot. It is also my opinion that the product will lose

its efficiency as it gets dusty. The best location for the radiant barrier is at the roof deck. For new construction it is best to use roof sheathing that has the radiant barrier actually laminated to the sheathing. It is simple and certainly feasible and is being installed on many new houses in the south where cooling costs are a major consideration. Our testing shows that it performs magnificently.

If a radiant barrier is so helpful, then why don't more folks install it in their existing house? The answer is because it is difficult to install it properly. To do it right, the radiant barrier should be fastened to the bottom of the roof rafters. And if you think about it, this is not always a simple process and would probably take at least two people. This past summer I was introduced to a product that was much easier to install and could be done by one person and no tools are needed. It looked good to me, but just like the window tinting, I don't suggest a product to others until I have used it and have total confidence in it. We found a house that really needed a radiant barrier. We installed the product early in the morning on a day when the temperature at noon was 100 degrees. We came back to the house two days later when the temperature was even hotter at 102 degrees. We were happy to find that the attic temperature was nearly 30 degrees cooler than before. When the attic temperature and the ductwork are 30 degrees cooler, one should have better comfort and lower utility bills. The product is called "Enerflex™ foil" radiant barrier. The cost of the product is about 70 cents per square foot, which makes it feasible for many homes. For more details about this product go to www.enerflexfoil.com or call my office at 501-653-7931.

See you next month. Until then, MERRY CHRISTMAS to all.

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