

## Our Experience with the Munters DryCool HD

We built our house in western North Carolina in 1995, following the guidelines in John Bower's book, The Healthy House. My wife and I wanted our home to be free of toxic materials. Our goal was to make it as energy efficient and energy independent as our budget would allow. We used a passive solar design with high quality Anderson windows, predominately on the south side. A simple rectangular shape, with only one floor at ground level kept the cost down. The concrete slab, with ceramic tile floor, acts as a heater in fall and winter, and a cooler in spring and summer. The attic and walls are heavily insulated. We found that in summer, the temperature would rarely get above 80° inside, even when it reached the 90's outside. In the winter the temperature would rarely get below 60°, without supplemental heat. We use our Tulikivi thermal mass soapstone heater starting about Thanksgiving.

We have been very happy with our house, with one exception: the humidity. Two portable dehumidifiers kept the humidity down some, but due to the considerable heat and noise, we were unwilling to run them *all* of the time. Consequently, we experienced sweating floors and mold in kitchen cupboards. In the winter, condensation formed on the windows if the outside temperature got below about 20°. In the summer, sometimes the humidity would reach 90% in the house!

I have resisted getting central air conditioning because of the cost, but also because I didn't think we needed it. But last summer was especially hot and humid. It was time to do something. We visited a friend who had a "mini-split" in an earth-sheltered house. Their humidity level measured 73% - too high for our comfort. Our contractor didn't think AC would solve our moisture problem. In researching central dehumidification systems, I tried to find one that wouldn't heat up the house. I discovered the DryCool HD residential dehumidifier by Munters.

We installed it and the difference so far has been remarkable. Our contractor was surprised how quickly the Munters brought the humidity down from 80% to 40%. We have not seen the indoor humidity above 49%. We now keep it set at 45% and it stays within a percent or 2. It is a great pleasure to stay nice and dry even in the midst of 2 or 3 consecutive rainy days.

But there was another concern. Would our electric bill rise? We got our first bill since installing the Munters, and getting rid of our two portable dehumidifiers, and two HEPA air filters. It was actually \$13. Less than it was the previous month. We used less electricity than the same month last year.

When we take showers, the Munters takes all the humidity out quickly, so we don't need to ventilate as before. My wife and I are very happy to be done battling moisture issues in our home. No more heat output or loud noise from dehumidifiers, and a lower electric bill too.

The following pictures show our house style and how the unit was installed.





