

2011-01-18: Shingle Roof Stress Cracks?

No matter what you might do to make a living whenever you think you just might have seen it all, there is always a something new waiting around the corner to dash your illusions. Problems with roofs are common in most every home even newly constructed houses often have defects in the roof. Most roofing defects are workmanship related, not materials failures. Left in the right hands, the number of ways to screw up a good load of roofing materials seems almost infinite. Having documented literally thousands of roof deficiencies over the years, I was surprised this week to find a defect that I don't recall seeing before: stress cracks through the shingles.

The home was a 1980's vintage, foreclosed townhouse. The roof of the house had continuous vertical cracks spaced nearly uniformly across it. The cracks were three shingle tabs apart, in other words, the width of one shingle. The cracks ran up the roof through the courses of shingles at both slopes. There were also a few random horizontal cracks that ran across several tabs. The roof covering had literally been torn apart by some unknown force. Interestingly, the adjoining townhouse units did not have any signs of this cracking condition.



The roof had these long continuous cracks through the shingles



This close shows how the crack ran completely through the shingles



Some random horizontal cracks were also noted

There were no problems noted with the roof framing or decking of the house, and the roof ventilation appeared to be adequate (continuous ventilated aluminum soffit at the eaves and ridge vent at the peak).

A possible explanation for this problem was that the shingles were installed on the roof without a layer of felt (tar paper) beneath them. This could have caused the shingles to

seal down to the decking. Roof decking expands and contracts with changes in the temperature and humidity and this movement probably caused cracks in the shingles.

You never know what the roof is going to look like till you closely inspect it, preferably by walking it.

Have ladder, will walk roof (if it safe to do so!)

Happy Trails!

Russell