

What's Wrong with my Concrete

Yes, this is concrete at my house in Boulder, CO. Photos A and C are of the “new” concrete placed in 1992. Photo B is the “old” driveway placed in 1967. I bought the house in 1988 so I am responsible only for the “new” concrete. Well sort of.



A. Front Porch/Sidewalk



B. Old Driveway at Road



C. New Driveway Surface

Let's start with **Photo A**. There's a crack in the intersection of the porch and sidewalk that were poured together. Yes, there should have been isolation-joint material there. I asked the finisher during forming why he didn't put an isolation joint at that location because that was where it was going to crack. His response: "I've never seen it crack there." I thought about that, and felt I was too much of a college professor, so I said O.K. I marveled for 8 years at how this finisher was correct, until the concrete cracked in 2000. It took 8 years; what... concrete shrinkage? I doubt it. Probably some settlement and maybe contraction due to cold weather. So I'm blaming Mother Nature. The finisher was correct for 8 years, but I have been correct for 16 years. I think the finisher was telling the truth. He had never seen it crack at that location, because he had never gone back to look at his work 8 years later!

Photo B. Hey, it didn't look like that when I bought the house in 1988. The driveway had only one horizontal crack. And I knew why. At the far right in the photo you can see there is a culvert directly underneath the crack. I can live with one horizontal crack, but then the culvert collapsed in 2014. O.K., the driveway cracked more!

Photo C. Looks like some freeze-thaw damage. And I should be really mad at the finisher for this, because I know it's all his fault! However, it's hard to blame him because the damage happened during the winter of 2016. So the concrete surface was great for 24 years and then came 2016—a bad winter. Imagine if this had happened after the first winter. So if the concrete has a problem the first winter, look at other concrete that has been in place for 5, 10, 15 or 20 years and is looking good. We can have the best concrete and the best finishing, but when Mother Nature wants to win, she wins!

If you think my concrete looks bad you should see Ward's driveway in Lebanon, TN. Ward's patio in Detroit was still almost pristine after 12 years, with only one random crack. But that doesn't count because Paul Albanelli's residential crew did that work, and we know about his excellent quality control.

I'm thinking about replacing the concrete in my driveway again. I'm also considering watching it for another 24 years to see how it performs. I'd hate to put down new concrete and have Mother Nature kick its butt!