

Fixing small cracks in a foundation wall.

Last Updated: Friday, June 30th, 2017, Created: Wednesday, November 10th, 2004

Randy in Winnipeg has found small cracks in a foundation wall and wants to know how to fix them. Right up front I want to make the statement that it is often not worth the bother to fix a small crack in a foundation wall that is not moving -- especially if no water is coming in. The best way to keep water out of the basement is to keep it from getting near the foundation wall -- rain gutters, downspouts away from the foundation and sloped landscaping to keep surface water away from the house. You can do all the waterproofing you want, if you have a lake outside that foundation wall, it will find a crack that you missed. You can follow much more information about avoiding water getting to the crack by reading this article and following the links in the article.

Now, let's study cracks.

MEASURING MOVEMENT

Winnipeg is known for Gumbo Clay, that moves up and down from year to year, so it is likely that Randy's cracks are not stable. I always suggest drawing a line across a crack, putting a couple of measurement marks on the line so that the movement of the crack can be tracked over time. Check back every month for a year. If the crack doesn't move at all, fill it with anything.

The most common fix for non-moving cracks is Kwik-Plug or some other "hygroscopic" cement -- a product that swells as it cures to lock itself into the crack. It will be necessary to chisel out the crack about 3/8th of an inch wide and deep to get anything into the crack. One special working caution with hygroscopic patching material -- mix it in very small batches and apply it immediately, it tends to set in about 30 seconds! That's not much working time. On the good side, this means you can actually use it to block an active leak -- just hold it in place for 30 seconds and then move on up the crack. If the crack does move a little bit, but does not get worse and worse, then use a flexible sealant like polyurethane. Follow this link for information on DIY injection systems.

If the crack is slowly getting wider and wider, call in a professional contractor or structural engineer to find out why.

Keywords:

Foundation, Waterproof, Walls, Polyurethane, Sealing, Concrete, Leaking, Repair, Movement, Cracks, Techniques, Water