LAKESIDE AT THE ISLES

ON PALMER RANCH SECTION I, A CONDOMINIUM

Concrete Crack Repair on Your Lanai

Introduction:

Concrete crack repair is not difficult and there are arguably several ways to go about it. Esthetically pleasing repairs to "knockdown" textured surfaces like ours are a bit more challenging, but a few simple extra steps can make a big difference to the end results. The following guidelines are the result of some experimentation and trial and error and should yield repairs that are both durable and (mostly) invisible.

Overview:

All poured concrete lanais are prone to cracking due to construction issues, thermal stress, and settling. Even though upstairs lanais with cracked floors can cause water damage to the ceiling of the units directly below, it is no less important for the cracks in the lower units to be repaired since water from rain and wash-downs can find its way into the soil below and undermine support by erosion. Additionally insects love moisture and may nest in moist areas below your slab. All owners have a vested interest in inspecting, maintaining, and cleaning their lanais regularly and as needed to maintain property values and the mutual enjoyment of our community.

After a concrete slab has cracked it is no longer monolithic, but a dynamic puzzle of moving parts. This means that whatever is used to fill the cracks must be elastic, durable, and bond well to masonry. Masonry products such as mortar, grout, or concrete patch are unsuitable since they will crumble when the slabs move and may even begin breaking the concrete along the original cracks making the problem worse. Any acrylic urethane elastomeric sealant such as ProMax 300 RCS-4, are suitable and readily available. These urethanes are strong, paintable, and exterior grade. In my case I chose to use a siliconized sanded grout. This product comes in a tube and has similar properties to urethanes. The reason I used it is because it has a slightly sandy texture that better matches the concrete. If you choose this type just make sure it is exterior grade, not all of them are.

Before any sealants can be applied the cracks need to be prepped. By creating a "V" groove along the crack we insure that the caulking will fill the void and maximize the bond. This can be accomplished by using hand tools. The simplest method is to use a cement board scoring tool and drag it into the crack in short powerful strokes. The method allows you to follow the contours of the crack while making an ideal 1/8" depth groove. Using this tool 30 linear feet of cracks can be prepped in a couple of hours. Other options include a Dremel tool with a pointed carbide or diamond burr, or a grout removal tool.

Supplies:

Work Gloves, Kneepads, Eye Protection, Broom, Vacuum, Grooving Tool, Caulk Gun, Caulk, 80 Grit Sandpaper, Kitchen Sponge, Paper Towels, "Safety" Razor Blade, Paint Brush, Roller Frame, "Rough Texture" Roller Cover, and Paint.

Note: The HOA requires that lanai walls, floors and ceilings match your building color. For your floors I recommend H&C water based concrete stain available at the Sherwin Williams store on Bee Ridge). *Your Sherwin Williams building paint codes are as follows; Buildings #1, 4, 5, 8 and 11 are Interactive Cream SW6113. Buildings #2, 7, and 10 are Kilim Beige SW6106. Buildings #3, 6, and 9 are Cachet Cream SW6365.*

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Order of Work:

Crack Prep- Caulking- Trimming- Washing- Painting.

Crack Prep:

Identify cracks and begin opening a "V" groove (work gloves, eye protection). It is safer and easier to draw the grooving tool into an already "V"eed groove than it is to work into the crack. Start in the center of the room and work toward the edges. By doing this you will be ending your stroke with the tool in the existing "V", eliminating the chance of slipping and scarring the floor. Prepping an inch or so at a time works best (see fig 1).

Caulking:

Once your cracks are grooved use a folded sheet of sandpaper and lightly sand the across the top and edges of the cracks to insure that there are no feather edges above the surface. Trim your tube of caulk to match the width of the crack and begin applying a bead of caulk into the crack working in 2ft lengths. The caulk bead should fill to the bottom of the groove and also be well above the floor. Because our floors are "Concrete Spatter Knockdown texture" it is important that you don't spread the bead with a putty knife, but rather feather the edges using your fingers to create a "hill" shape with the peak following along the center of the crack (see fig 2). Using a damp sponge, blend the edges of the caulk being careful not to disturb the extra high bead over the crack. The idea here is to minimize any disruption to the texture of the original floor and create a mostly invisible repair.

All caulk shrinks as it cures so inspect each seam to make sure the caulk is even with, or above the surface of the floor. If there are sunken sections reapply a small bead of caulk to those areas and allow it to cure. Once cured "razor" each seam flush to floor and remove any "feathers" that may stick above the surface with light sanding if necessary. Once your cracks are done, sweep and vacuum all of the debris, re-trim your caulk tube nozzle to allow for a larger bead and caulk along all walls and sliding doors. Using your finger to smooth the caulk bead will insure a professional appearance. Allow everything to cure.

Your floor is now ready for paint prep.

Paint Prep and Painting:

"Spatter textured floors" do not require sanding, but it is important to remove grime and loose dirt. If there are areas where there has been poor adhesion of previous paint you should wire brush to remove any flaking. Mild dish soap, warm water and a broom, along with a good rinse with a garden hose is all that's needed. The floor needs to be thoroughly dry before applying paint. Follow the directions on the paint can and apply two coats, allowing the recommended time between coatings.

Wait a couple of days for the paint to fully cure, then put your furniture out and invite your friends over for a drink to admire your fine work.

Now that your lanai project is done, you're free to wander around the house looking for other things to improve. Grout anyone?