

Cracks, chips and broken or flaking areas in concrete are not only unsightly, they can lead to further deterioration of the surface. The result is a costly replacement project as opposed to a simple repair. Inspect your concrete and masonry walls, walks and slabs for damage on a regular basis. Early spring is an excellent time to assess any damage from winter freeze/thaw cycles.

When repairing concrete it's important to select the right repair product for the job. A product ideally suited for general patching may not work well on small cracks and fractures. And not all products are suited for overlaying large areas. That's why QUIKRETE® offers a complete line of concrete repair products formulated to meet all your patching and repair needs.

Minor Cracks and Fractures

Small cracks and fractures 1/8" to 1/2" wide are often difficult to patch using cement-based products. There's just no way to force the mixture into such a small opening. QUIKRETE® Gray Concrete Crack Seal and QUIKRETE® Concrete Repair Caulk solve this problem. Gray Concrete Crack Seal is a thick liquid that can be poured directly into cracks in walks, slabs and other horizontal surfaces. Concrete Repair Caulk is a textured sealant that can be applied to cracks in walls and other vertical surfaces.

Required Tools & Materials

- QUIKRETE® Gray Concrete Crack Seal
- QUIKRETE® Concrete Repair Caulk
- QUIKRETE® Concrete & Asphalt Cleaner
- QUIKRETE® All-Purpose Sand
- Scrub brush
- Wire brush
- Caulking gun

Step by Step

Minor Cracks in Horizontal Surfaces

1. Use a wire brush or similar tool to clean all dirt, concrete chips and organic matter from the crack. Clean grease and heavy dirt deposits using QUIKRETE® Concrete & Asphalt Cleaner.



2. Shake bottle of QUIKRETE® Gray Concrete Crack Seal. Cut the tip of the bottle so the opening matches the width of the cracks to be repaired. If the crack is deep fill to within $\frac{1}{4}$ " of the surface with QUIKRETE® All-Purpose Sand.



3. Apply the sealer in $\frac{1}{4}$ " layers. Allow each $\frac{1}{4}$ " layer to setup overnight before applying the next layer.

Minor Cracks in Vertical Surfaces

1. Clean the crack as just described.

2. Cut tip of QUIKRETE® Concrete Repair Caulk tube on an angle to make a $\frac{1}{4}$ " to $\frac{3}{8}$ " hole. Use cartridge in standard caulking gun.

3. Apply by pushing cartridge tip over surface and forcing bead of Concrete Repair deep into the crack. Apply no thicker than $\frac{3}{8}$ " at a time.



For Best Results

- On hot days, cool the caulking tube in your refrigerator for an hour or so before application. The caulk will run less and be easier to apply.
- Use QUIKRETE® Concrete Repair Caulk to seal joints where concrete and masonry meet wooden or metal framing or other surfaces. Fill the joint completely and slightly overlap the caulk onto the adjacent surfaces.

Larger Cracks and Holes in Vertical Surfaces

Wide, deep cracks and holes in concrete blocks and concrete walls require patching with a cement-based repair product. QUIKRETE® Quick-Setting Cement is an excellent product for this type of repair because it has superior bonding capabilities.

Required Tools & Materials

- QUIKRETE® Quick-Setting Cement
- QUIKRETE® Concrete Acrylic Fortifier
- QUIKRETE® Concrete & Asphalt Cleaner
- Cold Chisel
- Hammer
- Wire brush
- Broom
- Safety glasses or goggles
- Sponge
- Pointing trowel
- Finishing Trowel

Step by Step

1. Clean the loose concrete and dirt from the damaged area using the hammer, chisel and a wire brush. Clean grease and dirt from the area to be repaired with QUIKRETE® Concrete & Asphalt Cleaner. Rinse the area thoroughly.



2. Make sure to dampen the area to be repaired before mixing the patching material.



3. Mix the QUIKRETE® Quick-Setting Cement with water according to the directions on the package. If the area to be repaired is less than 1" deep x 1" wide, add QUIKRETE® Concrete Acrylic Fortifier to the mix water. Keep in mind the QUIKRETE® Quick-Setting Cement is a stiff mix and will have the consistency of modeling clay.

4. Press the patching material as deep as possible into the area to be repaired using a pointing trowel or similar tool. Completely fill the area to be repaired.



5. Use a steel finishing trowel to compact the repair and screed off any excess material. Feather edge the patching material onto the adjoining surfaces to create a smooth, clean repair.



6. Mist the repair area several times daily to promote better curing and a strong bond. (This step is not necessary if QUIKRETE® Concrete Acrylic Fortifier was mixed with the QUIKRETE® Quick-Setting Cement.)

For Best Results

- Keep the trowel clean and damp when applying QUIKRETE® Quick-Setting Cement. This will keep the mix from curling up on the trowel.
- Do not add too much water to the QUIKRETE® Quick-Setting Cement during mixing. Mix only as much material as can be placed in 10 minutes.

Larger Cracks and Holes in Horizontal Surfaces

For wider cracks or damaged areas of concrete up to one square foot in size, use QUIKRETE® Vinyl Concrete Patcher. Vinyl Concrete Patcher is an excellent product for repairing isolated patches of crumbling or pitted concrete up to a depth of 1/2". Because it contains fine sand and vinyl resins, it can be troweled to a finish as thin as 1/16" so it is smooth with the surrounding concrete.

- 1.** Vigorously rub the wire brush over the flaking concrete to loosen all damaged concrete. The tip of the trowel can be used to pry up loose sections of the flaked concrete.
- 2.** Sweep away all loose particles and dust.
- 3.** If needed, clean the surface using QUIKRETE® Concrete & Asphalt Cleaner. Rinse with clean water. Do not leave any standing water on the surface to be repaired.



4. Apply the QUIKRETE® Vinyl Concrete Patcher with a trowel. Feather edge the patching mixture out onto the surrounding concrete to create a smooth repair.



5. Apply the patcher in $\frac{1}{4}$ " layers. If the hole is deeper than $\frac{1}{4}$ ", apply the patcher in stages, allowing each layer to cure for several days before applying the next layer.

For patches greater in depth than $\frac{1}{2}$ ", but less than 2", QUIKRETE® Sand Mix should be used.



1. Undercut the edge of the repair area at least 1" below the surface using a hammer and cold chisel. Brush out all loose concrete, dust, and other material until there is a solid base for the repair.

2. Clean the exposed area as needed, using QUIKRETE® Concrete Bonding Adhesive to the surface after it has dried. Brush the adhesive on as thick as a coat of paint.

3. If the repair is 1" to 2", apply a coat of QUIKRETE® Concrete Bonding Adhesive to the surface after it has dried. Brush the adhesive on as thick as a coat of paint.

4. Allow the Bonding Adhesive to dry completely before applying the patching material.

5. Mix the QUIKRETE® Sand Mix with water to a plastic-like consistency.

6. Press the sand mix into the hole. Immediately smooth and level the patch using a trowel.



7. After the sand mix patch has lost its water sheen, trowel the area to desired finish.

Overlaying Larger Surfaces

QUIKRETE® Latex Cement is a two-part repair product consisting of a special latex powder and liquid latex bonding agent. This material is made for patching and smoothing concrete and masonry surfaces over larger areas. It can be applied from a thickness of 1/16" TO A FULL 1/4". QUIKRETE® Latex Cement can be used indoors and out, and as an underlayment or finished wear surface. It is designed for long-lasting, durable repairs.

Required Tools & Materials

- QUIKRETE® Latex Cement
- QUIKRETE® Concrete & Asphalt Cleaner
- Scrub brush
- Broom
- Wire brush
- Trowel
- Large mixing container
- Straightedge

Step by Step

Surface Preparation

1. Remove all loose flakes, dirt and dust from repair area.
2. Scrub away grease, oil and stubborn dirt using QUIKRETE® Concrete & Asphalt Cleaner.
3. Dampen the surface to be repaired with clean water, but do not leave standing water.

Mixing and Application

Each pail of QUIKRETE® Latex Cement contains a 44-pound bag of latex cement powder and a 1-gallon jug of latex bonding agent.

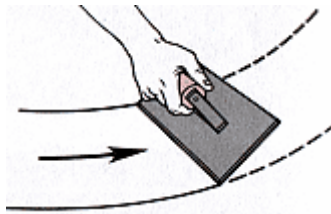
1. Pour most of the latex bonding agent into a clean container and gradually mix in all of the latex cement powder.
2. Slowly add in additional amounts of latex bonding agent until the

desired workable consistency is achieved. Do not add water to the mix.

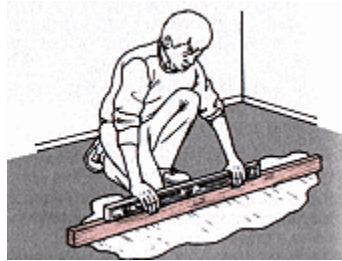


3. Do not mix more cement than can be placed in 20 minutes. Avoid overmixing in mechanical mixers. It can lead to air entrapment and a reduced bond.

4. Apply the latex cement to the surface using a large finishing trowel. Apply pressure to ensure a good bond.



5. Run a straightedge back and forth over the repaired area to level the patching material.



6. If desired, trowel the surface to a smoother finish.

7. Under normal circumstances, QUIKRETE® Latex Cement does not require moist-curing. But in hot, windy, or low humidity conditions, it is best to moist-cure the overlayment for at least 48 hours.

For Best Results

- Do not use QUIKRETE® Latex Cement when the temperature is expected to fall below 40° F within the next 48 hours.
- For fills deeper than ¼" apply QUIKRETE® Latex Cement in layers, allowing for curing between applications. Deeper fills up to 2" deep should be filled with QUIKRETE® Sand Mix and QUIKRETE® Concrete Bonding Adhesive as described

earlier in this section.

The QUIKRETE® Companies

