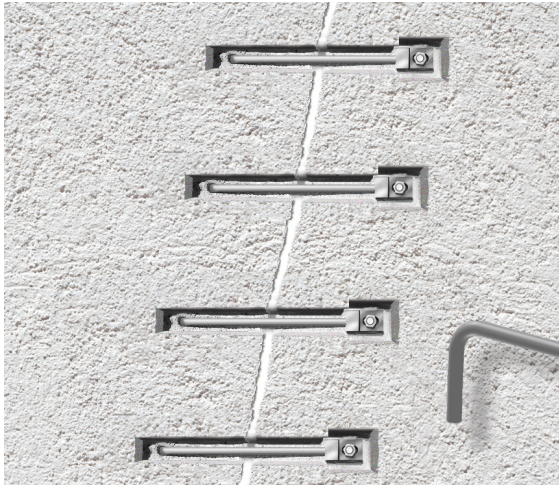


AQUABOND
Stress Proof Stitch



**SP-1238
Stress Proof
Mechanical
Stitches**

(SPK-12-5 kit has 5 stitches, 5 Anchors and 1 AE-2200-250)

Included in SPK-12-10 kit:

- 10 SP-1238 AquaBond Stress Proof Stitches
- 10 Expanding anchor studs with nut
- 2 Cartridges of AquaBond AE-2200-250 with mixer nozzles
- 12" Ruler
- Installation and materials guide

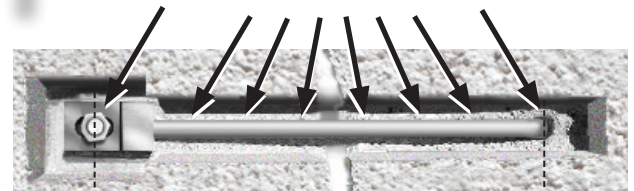
Tools:

- 4" Masonry saw
- Chipping hammer
- Hammer drill, and 1/2" and 5/8" masonry drill bits
- 3/4" Socket wrench
- Standard caulking gun
- Shop vacuum

Materials (not included):

- Hydraulic cement

Before inserting the device, apply an ample bead of anchoring epoxy along the base of the channel in order to adhere the rod in place. Also inject anchoring epoxy into both holes.

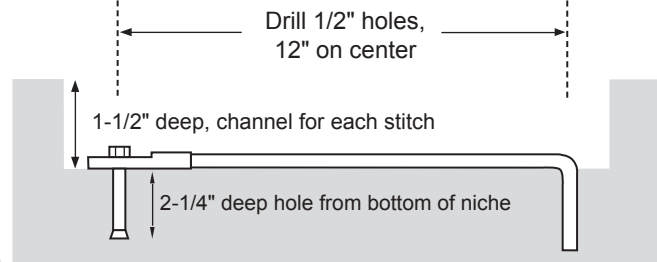


NOTE: All repairs to the crack itself must be completed before beginning installation of the SP-1238 Stress Proof Stitches. For a rigid, permanent, full-depth repair, the crack should first be filled using AquaBond PF-37 Polyurethane Foam (Available in a complete 10' kit as Part No. PFK-377).

AquaBond Stress Proof Stitch Installation:

Step A: Locate stitches one foot apart along the length of the crack. Trace the stitch shape onto the concrete and mark where the two holes belong. (12" apart on center). Using the 1/2" masonry bit, drill the two holes approximately 4" deep. Then widen **one** of the holes with the 5/8" masonry bit. **Do not over-drill the hole depths.**

Step B: Cut and chip a 1-1/2" deep channel for each stitch, using a 4" masonry saw and chipping hammer. Remove all debris, clean out completely. Verify that the holes are 2-1/4" deep below channel bottom.



Step C: Inject AquaBond AE-2200-250 Anchoring Epoxy into the two holes. ALSO, lay an ample bead of the adhesive all along the bottom of the channel - enough to anchor the length of the rod securely to the bottom of the channel. This will result in a very strong repair.

Step D: Place the sleeve anchor up through the oval hole in the stitch plate and thread the washer and nut flush with the top side of the shaft. Insert the anchor into the 5/8" hole Tap the head of the nut until sleeve is fully seated, and the entire stitch is flush in the adhesive in the bottom of the channel.

Step E: Using a socket wrench, tighten the nut on the anchor approximately 3 or 4 turns, up to 50 Ft-Lb torque. Locate each stitch carefully because this installation is designed for permanent placement. Once installed and tightened down, the anchor cannot be easily removed or relocated.

Step F: Repeat the above procedure with stitches spaced at approximately one foot apart along the length of crack. (10 AquaBond Stress Proof Stitches for a 10-foot crack).

Step G: After all of the stitches have been installed and the anchoring epoxy has had plenty of time to cure (at least 24 hours), fill each niche with non-shrink hydraulic cement. Finish the swimming pool with marble-based pool plaster or polymer modified cement for aquatic applications.

Note: A minimum 5" slab is recommended for Mechanical Stitch installation. For shallower slab thicknesses, drill the anchor hole accordingly and install and tighten the nut. Once tightened, the threaded shaft may extend upward and can be ground down flush with the top of the nut.

StressProof® is a registered trademark of Niagara LaSalle Corporation



AQUABOND Stress Proof Stitch

PART 1 – MATERIALS

- AquaBond SP-1238 Stress Proof Stitches (one stitch per foot of crack)
- AquaBond AE-2200-250 Anchoring Epoxy in caulk-sized U-tah cartridge with mixer nozzle (250ml cartridges)
- Hydraulic Cement High Strength Repair Mortar for stopping leaks in concrete

PART 2 – MATERIALS DESCRIPTION

AquaBond Stress Proof Stitch, Concrete Crack Repair Stitches: Our 115,000 lb. tensile strength StressProof® cold-rolled 1144, 3/8" steel stitch material is 3X STRONGER than #3 rebar. When installed properly they can restore the tensile strength across the crack, stabilize the structure, and transfer load away from the fracture. Installed in a channel below the concrete surface. AquaBond Stress Proof Stitches inhibit the crack from expanding and getting larger. The mechanical part of the anchoring mechanism consists of threaded concrete anchors with outwardly flared, cone-shaped ends. Tightening of the nut pulls the cone-shaped stud end into the expander sleeve, wedging it outward and locking the anchor into the concrete base material. Additional extra strength is provided by embedding each hook and rod in our super-strong, AquaBond AE-2200-250 Anchoring Epoxy.

AquaBond AE-2200-250 Non-Sag Anchoring Epoxy: When properly installed, our super strong, Aquabond AE-2200-250 Anchoring Epoxy adds an incredible, unifying bonded strength to the entire installation. This waterproof, high-solids, two-component epoxy chemically bonds with the concrete and is specially formulated for repair and stabilization of cracks in pool shells and concrete slabs. The epoxy is dispensed from a single-tube, U-tah cartridge with included mixer nozzle, using a standard caulking gun.

Hydraulic Cement: A rapid setting, high strength repair mortar designed to plug leaks instantly in concrete and masonry. Designed to block running water or leaks in cracked pool shells and concrete slabs.

PART 3 – QUANTITIES NEEDED TO REPAIR 10-FOOT CRACK

AquaBond SP-1238 Stress Proof Mechanical Stitches:

- 10' of crack requires 10 Stitches
- One stitch per foot of crack, typical

AquaBond AE-2200-250 Concrete Repair Compound

- 10 Stitches requires two 250ml cartridges to embed each stitch rod and inject into each drilled hole.

Hydraulic Cement

- 30 lbs for 10' of crack
Use SGM Pool Patch or equivalent hydraulic cement

***For filling the crack with epoxy, please refer to the volume calculator on our AquaBondAdhesives.com website (in the "TECHNICAL" menu) to determine how much you'll need. You may also call AquaBond to discuss your needs. The amount will vary based on the length, width and depth of the crack.**

(SPK-12-5 kit has 5 stitches, 5 Anchors and 1 AE-2200-250)

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- 10 SP-1238 AquaBond Stress Proof mechanical stitches
- 10 Expanding anchor studs with nut
- 2 Cartridges of AquaBond AE-2200-250 with mixer nozzles
- 12" Ruler
- Installation and materials guide

Tools:

- 4" Masonry saw
- Chipping hammer
- Hammer drill, and 1/2" and 5/8" masonry drill bits
- 3/4" Socket wrench
- Standard caulking gun
- Shop vacuum

Materials (not included):

- Hydraulic cement