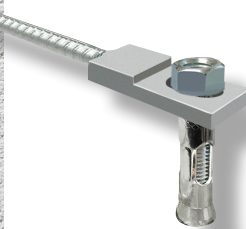


AquaStitch



**ASN-12
Mechanical
Stitches**



Included in ASKN-12-10 kit:

(ASKN-12-5 kit has 5 stitches and 5 studs)

- 10 ASN-12 AquaStitch mechanical stitches
- 10 Expanding anchor studs with nut
- 1 Cartridge of AquaBond CR-2100-250 with mixer nozzle
- 12" Ruler
- Installation and materials guide

Tools:

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

Materials (not included):

- Hydraulic cement

Step A: Chase the crack with masonry saw and "V" cut to open crack approximately 3/4" wide.

If crack is leaking, fill it with Aquabond's **CR-2100-400 Non-Sag** Concrete Repair Compound or **CR-2000-400 Self-Leveling** Concrete Repair Compound, or equivalent products. (use the self-leveling product on flat, level cracks)

If the crack isn't leaking, it may be filled with a rapid setting hydraulic cement such as SGM Pool Patch or Quikrete Hydraulic Water-Stop.

Step B: Locate stitches by tracing a rectangle 14-1/2" x 1-3/4" and marking the holes 12" apart on center. Using 1/2" masonry bit, drill the two holes approximately 4" deep.

Step C: To create the box niche, cut and chip approximately 1-1/2" deep rectangular area with masonry saw and chipping hammer. To improve the chipping operation and make cleaner box cuts, the rectangular area can be sliced with the saw along its length prior to chipping. Remove all debris, clean out completely.

Open *one* of the holes with a 5/8" drill bit and verify that holes are 2-1/4" deep below niche bottom. Do not over-drill the hole depths.

Step D: Inject AquaBond CR-2100-250 Anchoring Epoxy into both drilled holes.

Place the sleeve anchor through the stitch and thread nut onto the topside of the shaft 3 or 4 turns.

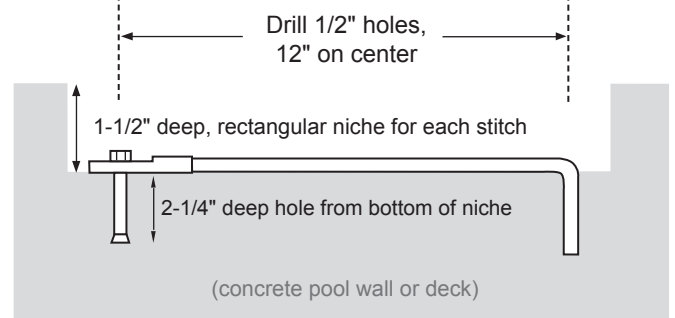
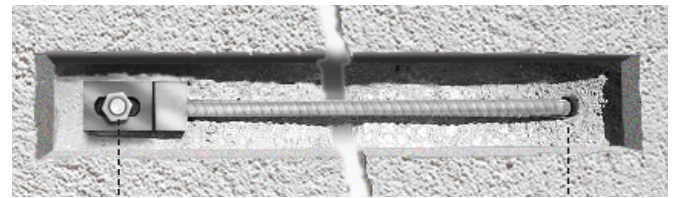
Insert sleeve anchor into 5/8" hole and the hook into the 1/2" hole then tap down the head of the nut until sleeve is fully inserted in the hole, and the entire stitch is flush in bottom of the niche.

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

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

Step G: Fill each niche with non-shrink hydraulic cement. Finish 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 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.





Installation & Materials Guide

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Included in ASKN-12-10 kit: (ASKN-12-5 kit has 5 stitches and studs)

- 10 ASN-12 AquaStitch mechanical stitches
- 10 Expanding anchor studs with nut
- 1 Cartridge of AquaBond CR-2100-250 with mixer nozzle
- 12" Ruler
- Installation and materials guide

Tools:

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

Materials (not included):

- Hydraulic cement

PART 1 – MATERIALS

- AquaStitch stitches (one stitch per foot of crack)
- Aquabond CR-2100-250 Concrete Repair Compound U-tah cartridge with mixer nozzle (250ml cartridges)
- Hydraulic Cement High Strength Repair Mortar for stopping leaks in concrete

PART 2 – MATERIALS DESCRIPTION

AquaStitch Mechanical Stitches: When installed properly can restore the tensile strength across the crack, stabilize the structure, and transfer load away from the fracture. The stitches are fabricated with a machined face and slot, welded to A-706 rebar hook, hot dip galvanized, then installed in a niche below the concrete surface. The mechanical stitches inhibit the crack from expanding and getting larger. The anchoring mechanism, consists of a threaded stud with an outwardly flared cone-shaped end. 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.

Aquabond CR-2100-250 Non-Sag Concrete Repair Compound: This two-component, high-solids epoxy chemically bonds with the concrete to provide a strong structural repair and is specially designed and formulated to repair cracks in pool shells and concrete slabs. Dispensed from a single-tube, U-tah cartridge with a standard caulking gun through a static mixing nozzle, when properly installed, CR-2100-250 provides a repair that is both waterproof and high strength (structural).

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

AquaStitch ASN-12 Mechanical Stitches:

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

Aquabond CR-2100-250 Concrete Repair Compound

- 10 Stitches requires one 250ml cartridge to inject into the drilled holes

***For filling the crack with epoxy, please refer to the volume calculator on our [AquabondAdhesives.com](http://www.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.**

Hydraulic Cement

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