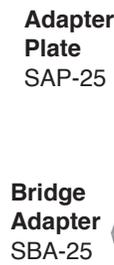
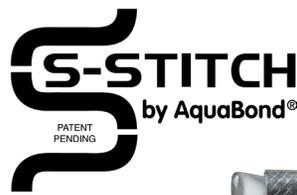


# Installation and Materials Guide

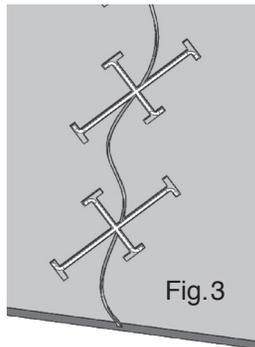
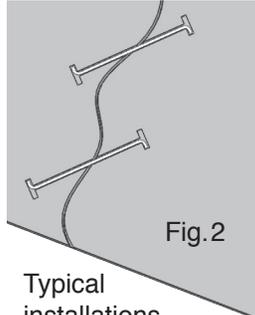
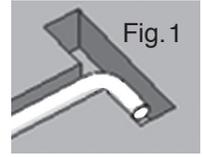


## Tools Required

- 4" Masonry saw
- Chipping hammer
- Hammer drill with 5/8" masonry drill bit
- 3/4" Socket wrench
- Heavy duty caulking gun (AquaBond DM-250, 26:1 gun recommended)
- AquaBond AE-2200-250 Anchoring Epoxy
- Shop vacuum

## S-Stitch installation on Relatively Flat Surfaces

1. Pre-mark the locations of the stitches by tracing them onto the work surface, **no more than 12 inches apart**.
2. Center stitches on the crack — angled approximately 45 degrees to the crack. Figs.2 & 3
3. Make saw cuts approximately 1-1/2 inches **into the actual structural concrete beneath the finish seal-off layer**. Chip or grind a space large enough to accept the 1/4" diameter S-Stitch including the end sweeps. Fig. 1
4. Clean the channels out thoroughly to be dust-free, for good epoxy adhesion.
5. Dispense and spread a 1/4" layer of AquaBond AE-2200-250 anchoring epoxy along the full length and width of the bottom of the channel. Embed the stitch securely into the epoxy.
6. Cover the stitch with a good layer of anchoring epoxy, **being sure to completely encapsulate each stitch in epoxy**.
7. Let anchoring epoxy cure for at least 24 hours. (temperature can affect curing times)
8. When hard epoxy-cure is achieved, fill and finish the channels with substrate material to complete the job.



## Notes:

While a 45 degree angle is best, placing the S-Stitch straight across the crack is acceptable when necessary. Any combination of straight and angled is okay, too.

The highest strength is achieved when crisscrossing stitches, or when installing longer S-Stitches. The stitch length determines how far the actual load is spread.

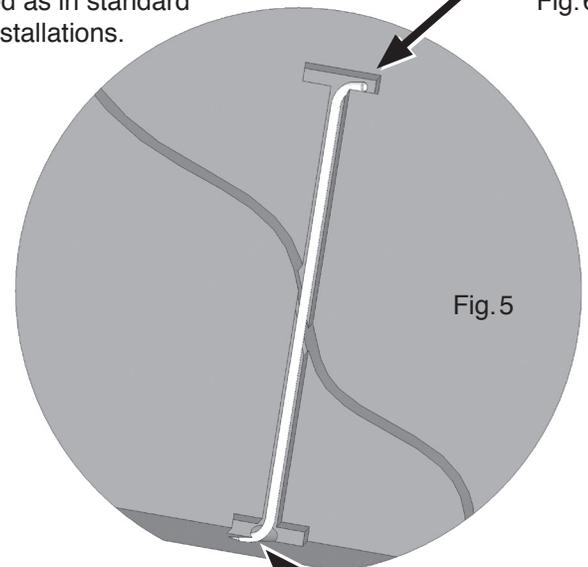
For another repair option, doubling the stitches, one on top of another, increases the modulus to prevent wall heaving, buckling or moving in an outward manner.

## Optional Angled & Drilled Method

An optional method for S-Stitch installation adds the element of hooking one end of the profile into a drilled hole at one end of the channel as in Figure 4.

The other end of the Stitch lays in the channel at the opposite angle. Fig.6

Of course, anchoring epoxy has been applied in the channel and the entire stitch gets encapsulated as in standard installations.



At one end of the channel, a 5/16" hole is drilled beyond the channel. The hook of the stitch is inserted and epoxied in the drilled hole. Fig. 4

**See Other Side for Installations on Curves and Corners**

## Installing Expanding Anchors

When installing expanding anchors, drill 5/8" holes to 2-1/2" depth. Inject anchoring epoxy into the holes before inserting the expanding anchors. Before the epoxy hardens, expand the anchor by turning the nut until firm resistance is felt.

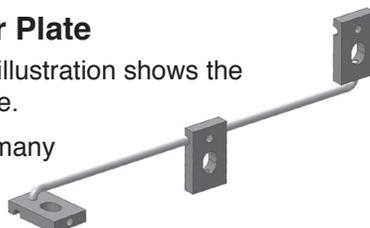
**A minimum 5" slab is recommended when using expanding anchors.**

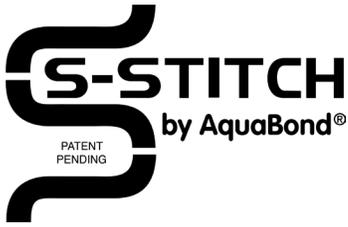
For shallower slab thicknesses, drill the anchor hole accordingly and install and tighten the nut. Once tightened, if the threaded shaft extends upward, it can be ground down flush with the top of the nut.

## The Versatile SAP-25 Adapter Plate

Although an unlikely application, this illustration shows the versatility of the SAP-25 Adapter Plate.

Its machined holes and groove offer many options for anchoring S-Stitches in limitless configurations.





# Curve and Corner Installations

## Large Radius Curve Repair

(Using stitches only, without plates or anchors)

On an inside cove, the center portion of the channel will be shallower than the ends. but middle of stitch should lay at least 1/2 inch in depth. The reverse will be true for an outside cove repair.

On an outside corner the center of the stitch will be somewhat deeper in the wall than the ends.

Stitches should be installed NO MORE THAN 12" apart, across the crack at roughly a 45 degree angle as in Figs. C1 and C2.

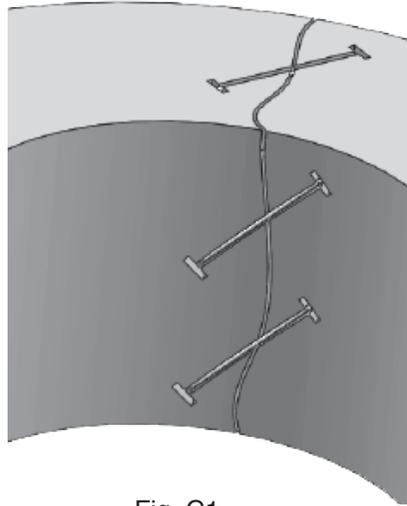


Fig. C1

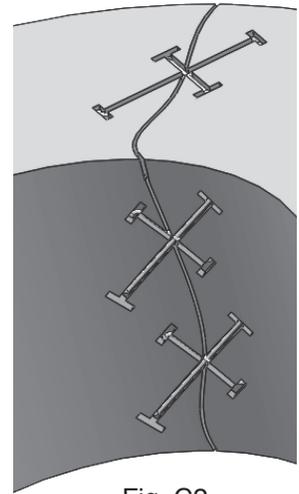


Fig. C2

## Tight Radius and Square Corner Repair

(Using adapter plates, adapter bridges and expanding anchors)

Corner crack repair requires a mechanical anchoring system to prevent S-Stitch from popping out from unforeseen ground force or movement.

Extremely versatile AquaBond expanding anchors, adapter plates and bridge adaptors can be ordered as part of a kit or separately. (See inside and outside corner configurations in Figs. C3 & C4.)

### Inside or Outside Corner

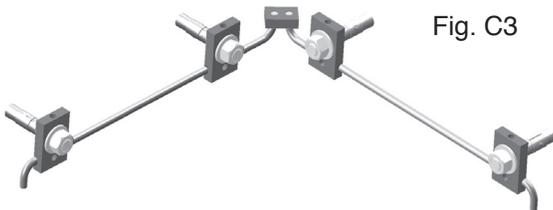


Fig. C3

Above is the suggested configuration of components for a sharp, in inside OR outside corner repair.

SAP-25 Adapter Plates with SA-58 Expanding Anchors create a firmly anchored, structurally sound repair.

Stitch length is determined by the situation onsite.

### Outside Corner



Fig. C4

Above is the configuration for an outside corner repair using 6" S-Stitches and other components supplied in our SSKC-06-10 Outside Corner Repair kit.

Adapter Plates pin the stitches down and are anchored by expanding anchors. The system creates a stable, structurally sound repair.

A bridge adapter acts as a hinge-point and also locks the stitch ends together.



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