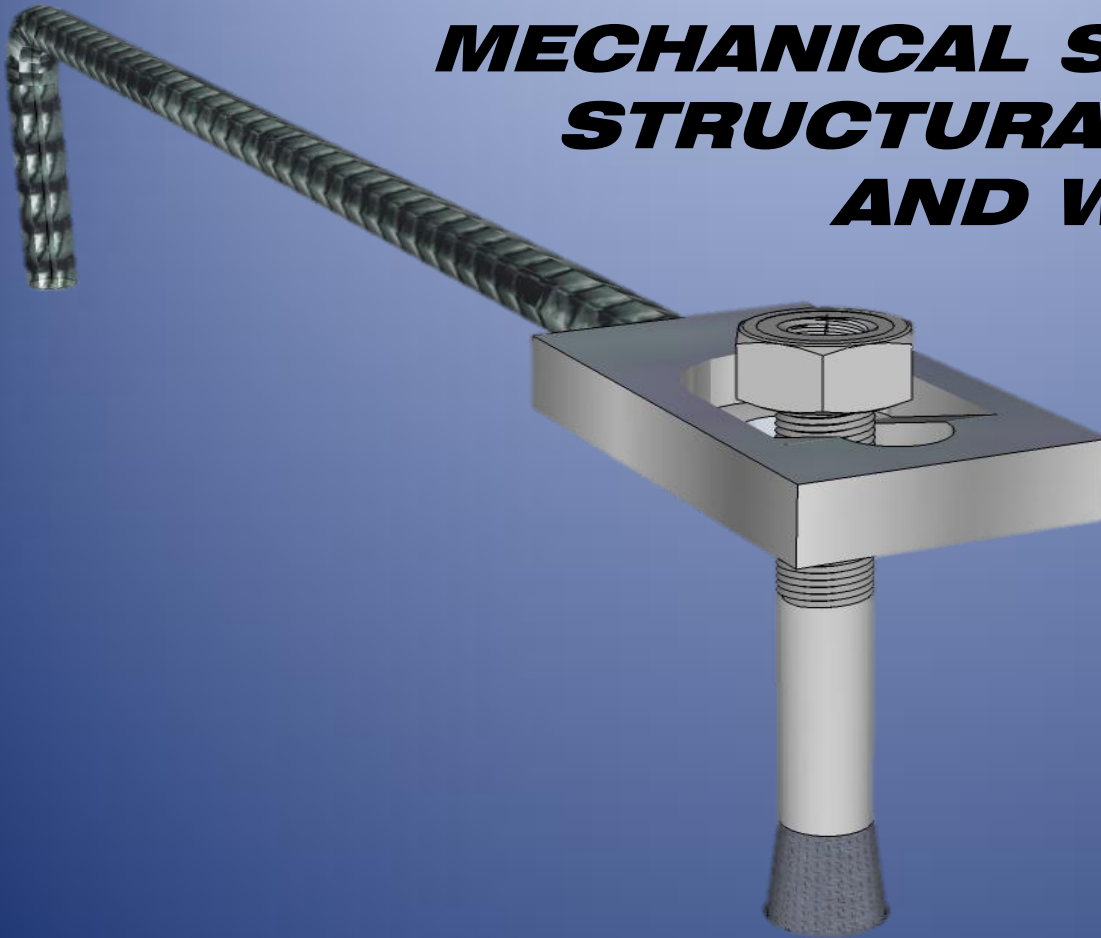


# ***ST 12***

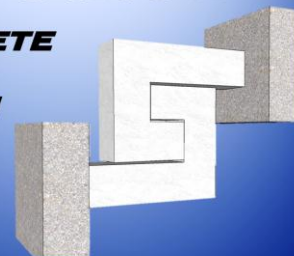
## ***MECHANICAL STITCHES FOR STRUCTURAL POOL DECK AND WALL REPAIRS***



***COMPRESSION SYSTEM  
ENGINEERED TO REPAIR  
FRACTURED CONCRETE***

***SlabStitch™***

***CONCRETE  
REPAIR  
SYSTEM***



***Mark Weber, PE  
Licensed Engineer***

***MwEngineering.net***

***SlabStitch.com***

***Phone: 754-333-0877***

ASOK, I NEED YOU  
TO HELP ALICE GIVE  
A PRESENTATION  
TO 500 SALES  
REPS.



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GMPH!!!



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IS THAT YOUR  
STOMACH?



YETH.



## **Permanent structural solution**

- Precision machined anchoring system
- Reestablishes compression in slab
- Designed per American Concrete Institute
  - Repair of Concrete Structures ACI 224.1R-07
  - Post-Tensioned Concrete Design For ACI 318
- Post-tensioning structural repair



# ***ST 12***

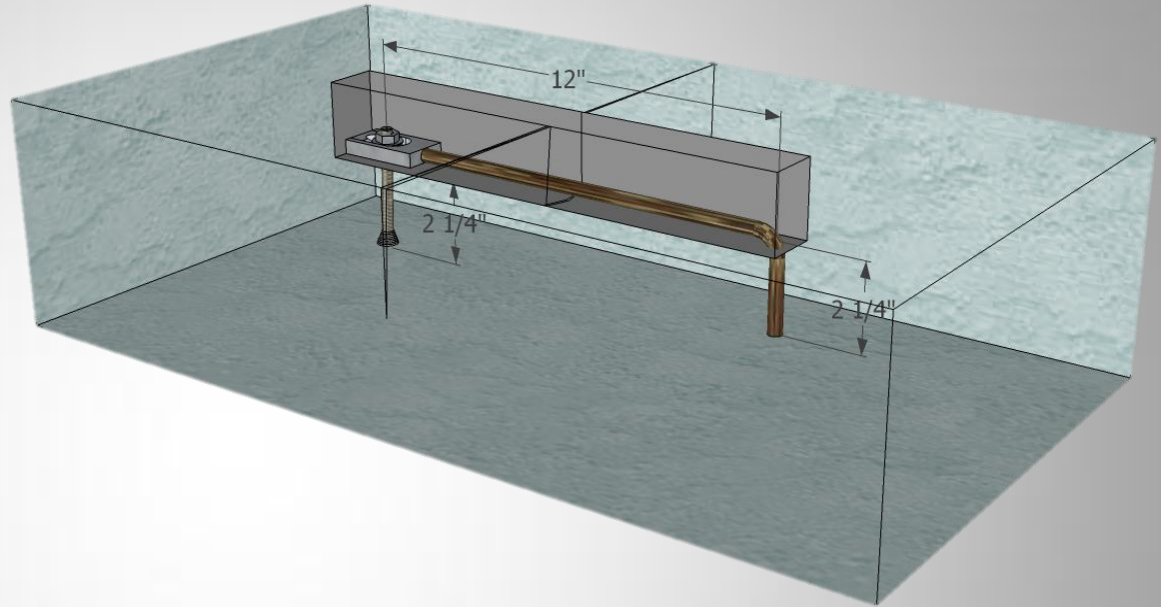
- **Easy installation**
  - Requires no special tools or epoxies
- **Precision machined**
  - Tightens down on flat or outwardly curved surfaces
- **12-inch lengths**
  - Locks into solid areas of reinforced concrete
- **Available in 5 or 10 anchor stitches sets**
  - One stitch per foot of crack (typical)
- **Hot-dip galvanized**
  - Prevents corrosion
- **15 year Warranty**
  - Guaranteed against manufacturers defects



# ST 12

## Repairs:

- SWIMMING POOL AND DECK CRACKS
- SPA CRACKS
- FOUNTAIN CRACKS
- SLAB ON GRADE CRACKS



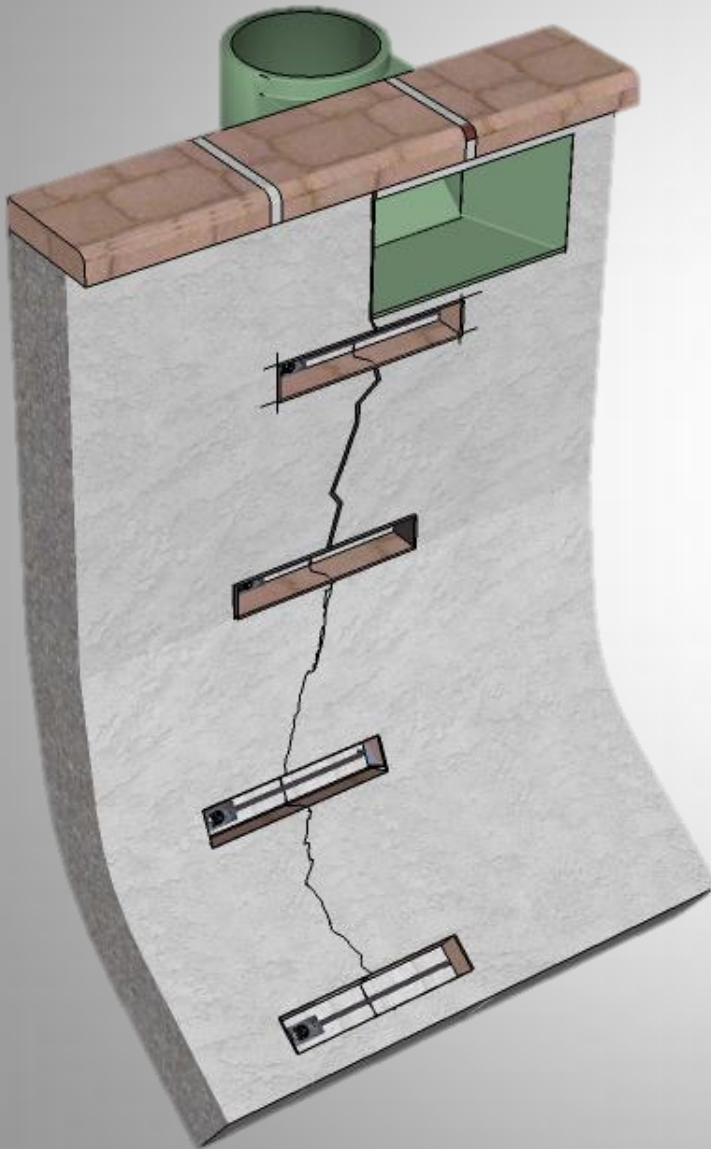
## Compresses Cracks in:

- GUNITE
- SHOTCRETE
- CONCRETE



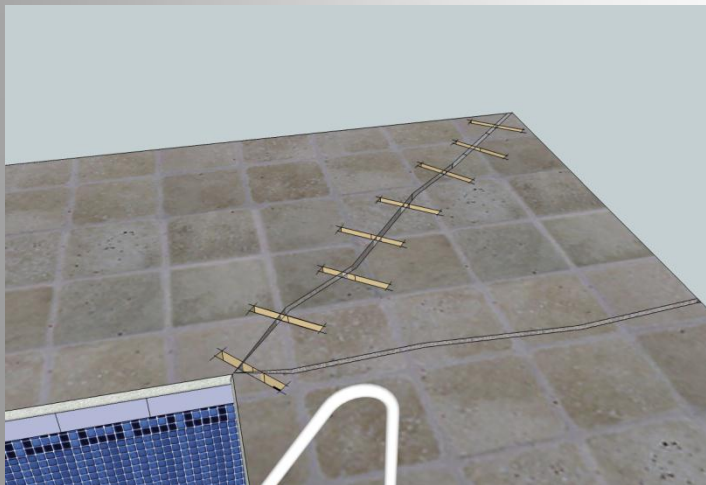
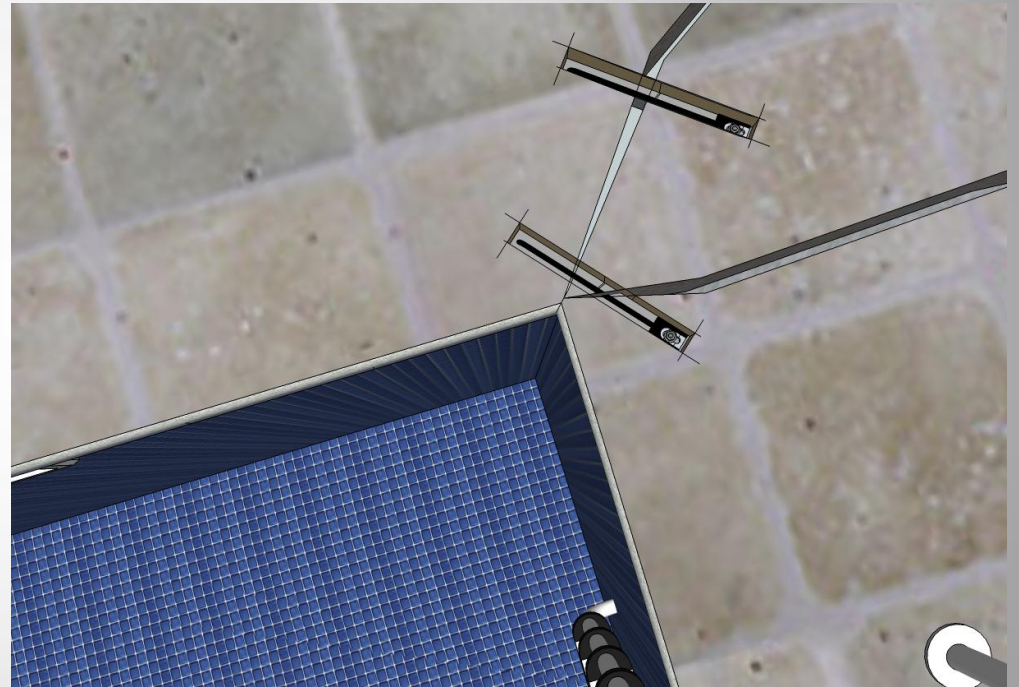
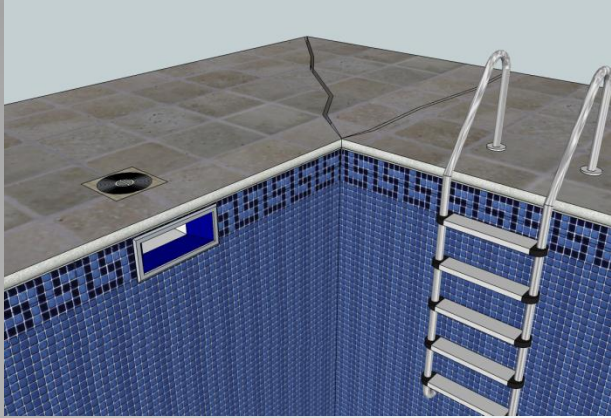
# ***ST12 Pool Repair***

- Corner of skimmer
  - Crack extends through cove
  - Easy installation on flat and curved surfaces
  - Repair completed with 5 Anchor Stitches





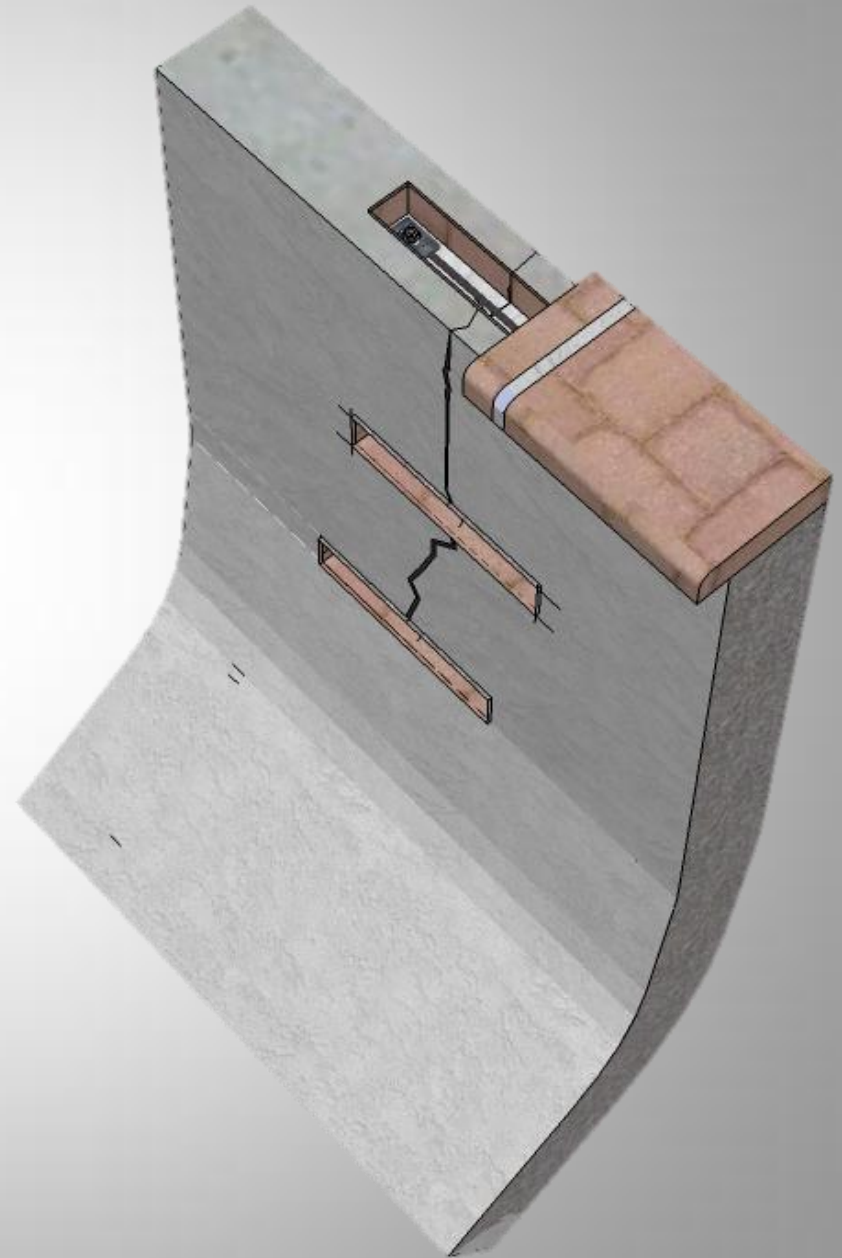
# ***ST12 Deck Repair***





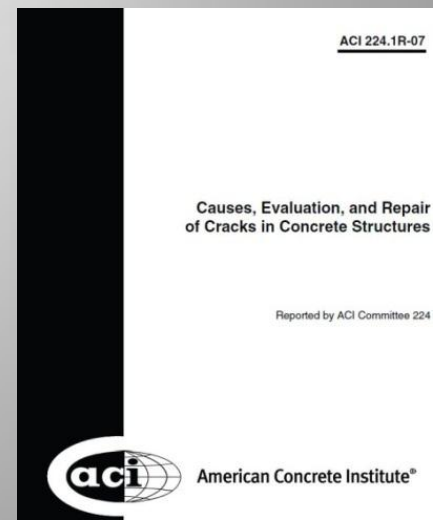
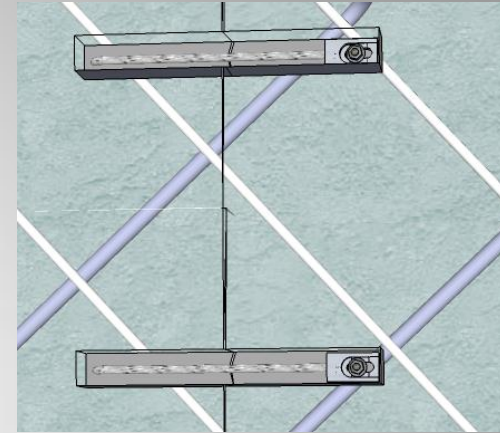
# ***ST12 WALL REPAIR***

- Top of wall
  - Crack starts in slab and extends through beam
  - Compression Stitches installed in horizontal beam and vertical wall



# **SlabStitch** **ADVANTAGE**

- Precision machined from high strength A366 steel to lock down and compress
- High strength 60,000 psi rebar “hook” to bridge cracked areas
- 12-inch lengths always bite into solid areas of reinforced concrete
- Engineered to be the best product in the market to repair fractures
- Visit [SlabStitch.com](http://SlabStitch.com) for Specifications, Performance, and Installation Guide



# Selling Tool - Website

## SlabStitch

Concrete Repair System – Engineered to Restore Fractured Concrete

**SlabStitch™**  
CONCRETE  
REPAIR  
SYSTEM



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*SlabStitch™ is a structural system to permanently stitch fractures that develop in reinforced concrete structures such as pools, decks, and walls.*

*SlabStitch™* Anchor Stitches are precision engineered to restore the tensile strength across the crack, reestablish compression, and stabilize the structure. The stitches are fabricated with a machined face and slot, welded to a high quality A-706 hook, hot dip galvanized, and installed in a niche below the concrete surface. The system works by tightening down the anchor wedge to post-tension the rebar stitch, inhibiting the crack from expanding and getting larger. The anchoring mechanism consisting 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. The system is engineered to transfer load away from the fracture, thus creating a long-lasting fix.

### Features:

- Available in Various Quantities – 5 and 10 stitch sets
- Requires no special tools or epoxies
- Precision machined – Tightens down securely on flat or outward curved surfaces
- 12-inch lengths – Locks into solid areas of reinforced concrete
- Weld extends 1/2-inch into machined head - Stitch is highly resistant to failure
- Hot-dip galvanized – Prevents corrosion



ORDER NOW at HORNER  
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Download Free  
Concrete Stitching  
Post-Tensioning  
Design Guide ACI 318



# Concrete Crack Repair Guide

## Structural crack repair options include:

- • Doweling
- • Epoxy Injection
- • Adding Reinforcement
- • Post Tensioning and Compression
- • Anchor Stitching

The **SlabStitch** Structural System for **Concrete Crack Repair** involves a combination of options (adding reinforcement, post tensioning and compression, anchor stitching, doweling, and epoxy injection) and is engineer recommended to restore the structural soundness and integrity of a concrete member. **SlabStitch** anchor stitches are highly recommended as the best solution to restrain future movement in slabs.

# Selling Tool

## Mechanical System to Repair Concrete Pools and Slabs

**SlabStitch™**

CONCRETE  
REPAIR  
SYSTEM



ST12  
Mechanical  
Stitches



Swimming pool professionals searching for new products and techniques to repair concrete cracks are choosing the **SlabStitch™** concrete stitches. The **SlabStitch** mechanical stitches are anchored down and tightened mechanically putting tension across the crack.

**SlabStitch™** has built clear history on engineered, tested and field-supported products. More and more contractors are choosing **SlabStitch** to repair concrete prior to resurfacing pools, decks and patios because it provides the optimal combination of strength, installation time, and cost.



CUTAWAY VIEW



WALL APPLICATION



FULLY STABILIZED FRACTURE

### FEATURES:

- Precision Engineered to transfer load away from the fracture, creating a long-lasting fix
- Easy to follow instructions – High customer satisfaction
- Anchor and Wedge Designed for Easier Installation – Requires no special tools or epoxies
- Precision machined – Compresses on flat or outwardly curved surfaces
- Hot-dip galvanized - Prevents corrosion
- 12-inch lengths - Locks into solid areas of concrete slab
- Available in sets of 5 and 10 - One stitch per foot typical
- Robust 5/8" diameter anchor and wedge - For positive holding values
- Technical support – The SlabStitch™ Engineering Team is always available
- 15 year Warranty – Guaranteed against manufacturers defects

For guidance on difficult applications or for answers to simple questions, call your local **SlabStitch** Dealer or call **SlabStitch** direct to speak to a Specialist. Our Engineering Team is always available to provide support.


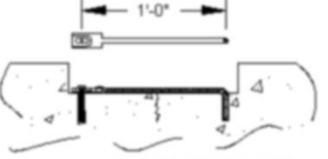

SlabStitch Mechanical Systems  
[www.SlabStitch.com](http://www.SlabStitch.com)

Deerfield Beach, Florida  
754-333-0877

# Brochure



# Selling Tools

<p><b>Technical Specifications:</b>  <b>Description:</b> Engineered structural system to stitch fractures in reinforced concrete  <b>Installation Spacing:</b> 1-foot (can vary depending on crack severity)  <b>Stitch Tensile Strength:</b> 60,000 psi  <b>Anchor:</b> 2-1/4" sleeve type 4,975 psi shear strength  <b>Horizontal Dimensions:</b> 13-1/4" long x 1-1/4" wide x 3/8" thick  <b>Bridge Length:</b> 12" overall length extending 6" away from fracture  <b>Hook Length:</b> 2-1/4" wedged into concrete  <b>Anchor Length:</b> 2-1/4" wedged into concrete  <b>Wedge Mechanism:</b> Precision machined case hardened 1018 steel  <b>Bridge Material:</b> A-706 rebar  <b>Niche:</b> Saw-Cut Approx. 14-1/2" long x 1-3/8" wide x 2"  <b>Corrosion Resistance:</b> Hot-dip galvanized</p>	<p><b>Technical Summary:</b>          To correct cracking of a beam or slab the American Concrete Institute (ACI 224.1R-07) outlines post-tension (anchor) stitching as desirable to strengthen the fractured area. As with any repair, the extent and cause must be identified and addressed. The SlabTite ST12 uses post-tensioning rebar stitches, anchored into solid concrete to bridge the crack and apply a compressive force, taking into consideration both present and anticipated loading conditions. Post-tensioning is achieved by tightening the anchor on the machined wedge applying force along the 12-inch long stitch and rebar hook. The stitches bridge the crack extending into the unaffected areas, extending well into solid reinforced concrete. The tensioning mechanism is engineered to provide sufficient tension across the affected area without causing migration to another part of the slab. For a rigid, full-depth repair, epoxy can be injected in the base of the crack under low pressure and the injected crack will be stronger than the adjacent concrete. If active cracks are injected, other cracks can form near to or far away from the repaired crack unless sufficient amounts of reinforcing is added across the crack to restrain future movements.</p>	 <p><b>SlabTite Structural Systems</b>  <b>ST12</b></p> <p><b>Project:</b> ST12  <b>Doc.:</b> ST-09-11</p>
<p><b>Tools Needed:</b> 4" Masonry Saw, Chipping Hammer, Hammer Drill, 1/2" Masonry Drill Bit, 9/16" Socket and Wrench, Shop Vacuum, and for severe cracking, 2-Part Epoxy (not included). See below.</p> <p><b>Step A:</b> Locate the stitch by tracing a rectangle (14 1/2" x 1 3/4") and marking the holes 12" apart as shown.</p> <p><b>Step B:</b> Using 1/2" masonry bit drill both holes into concrete approximately 4" deep.</p> <p><b>Step C:</b> To create the niche, cut and chip approximately 1-1/2" deep rectangular area with masonry saw and chipping hammer. Remove all debris, clean out completely and verify holes are 2 1/4" deep.</p> <p><b>Step D:</b> Place the sleeve and anchor through the bottom of the stitch and thread the installation tool (included) onto the top side of the shaft 2-3 turns as shown, insert into the holes and tap down the head of the installation tool until sleeve is fully inserted in the hole and the unit is flush in bottom of niche. Remove the installation tool and install the washer and nut. For severe cracks, non-shrink epoxy can be injected in the hole for the rebar hook, as described in "Step G". Caution not to fill the sleeve and/or hole with epoxy as this will inhibit proper installation and tightening.</p> <p><b>Step E:</b> Using a ratchet and 9/16" socket, tighten the nut on the anchor approximately 3-4 turns up to 20 ft-lb torque. Locate each stitch carefully. Caution, the Anchor Stitch installation is designed for permanent placement. Once installed and tightened down, the anchors cannot be easily removed or relocated.</p> <p><b>Step F:</b> Repeat above procedure with stitches spaced at 12-inches along the crack (5 Anchor Stitches for 5 feet of crack).</p> <p><b>Step G:</b> "V" out and open crack approximately 1" deep with a masonry saw. It is recommended to fill the base of the "V" and the rebar drill hole with an Intradex Crack Repair and Anchoring Epoxy such as "FC Concrete" or "Stika Anchorfill" both readily available at your local home improvement store. After completing this process, fill with non-shrink hydraulic cement and finish with traditional marble-based pool plaster, polymer modified cement, or other cementitious topping.</p> <p><b>*Note:</b> A minimum 5" slab is recommended for Anchor 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.</p>	 <p><b>INSTALLATION RECOMMENDATION:</b>          For cracked areas that extend through the top of the beam, the installation spacing can be tightened to 6" min. (i.e., where wall crack terminates in top of beam, place one anchor stitch under the coping centered over the crack facing down, and place next stitch 6-8" below on horizontal wall surface. Stitches can be placed on back side of wall or beam if needed.</p> <p><b>INSTALLATION - TYPICAL</b></p>	<p><small>Drawings, drawings, details, and data represented in these sheets are the property of the registrant herein. Any reproduction of this information is without express authorization of the owner. This information can only be used in strict accordance with the terms and conditions of the contract to which it is attached. It is the responsibility of the user to obtain all necessary permits and approvals for the use of this information. The user shall be responsible for all consequences of any use of this information. The user shall be responsible for all consequences of any use of this information. The user shall be responsible for all consequences of any use of this information.</small></p>  <p><b>PAGE: 1 OF 1</b></p>

# Engineering Approvals



# PR Efforts

- Press Releases
- Swimming Pool Industry Group
- National Swimming Pool Foundation
- Association of Pool & Spa Professionals

## Generated Inquiries and Sales

- Home Owners
- Pool Builders/Renovators
- Restoration Companies

# Technical Support



**Mark Weber, PE**  
**Licensed Engineer**

**MwEngineering.net**

**SlabStitch.com**

**Cell: 561-305-0476**

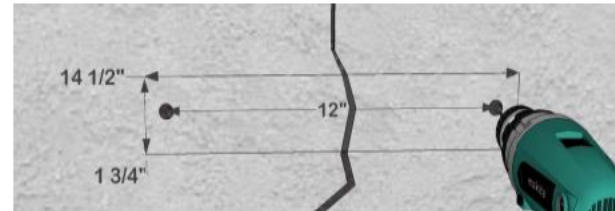
# INSTALLATION GUIDE



## ST12 ANCHOR STITCH INSTALLATION GUIDE

**Tools Needed:** 4" Masonry Saw, Chipping Hammer, Hammer Drill, 1/2" Masonry Drill Bit, 9/16" Socket and Wrench, Shop Vacuum; and for severe cracking, 2-Part Epoxy (not included). See below.

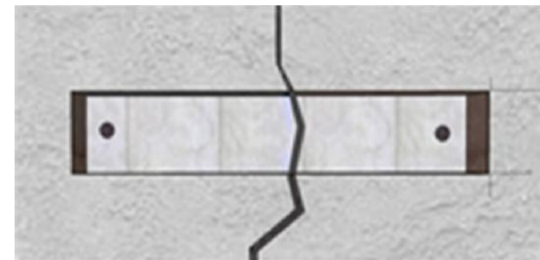
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**Step C:** To create the niche, cut and chip approximately 1-1/2" deep rectangular area with masonry saw and chipping hammer. Remove all debris, clean out completely and verify holes are 2 1/4" deep.

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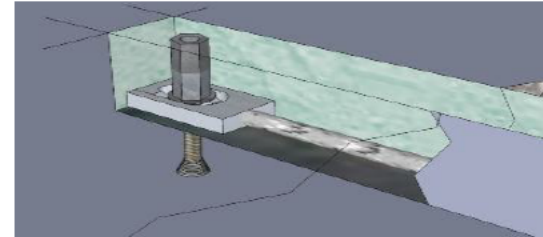


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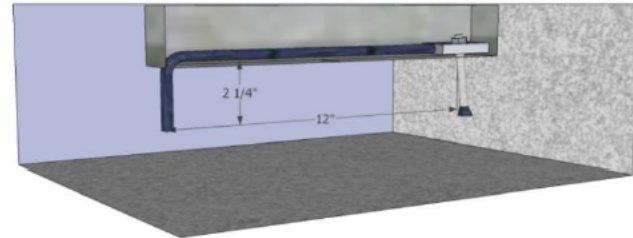
# INSTALLATION GUIDE

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www.SlabTite.com

Deerfield Beach, FL  
754-333-0877



























# What's Next

- Product Development
  - Application Specific Features
    - Larger Mechanical Anchor Version – More secure in thinner slabs
    - Counterbore and Countersink ends
    - Various Sizes and Styles based on the application

***For Questions and Technical Support***

**Mark Weber, PE**

**Phone: 754-333-0877**