11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

Silicoflex Joint Sealing System

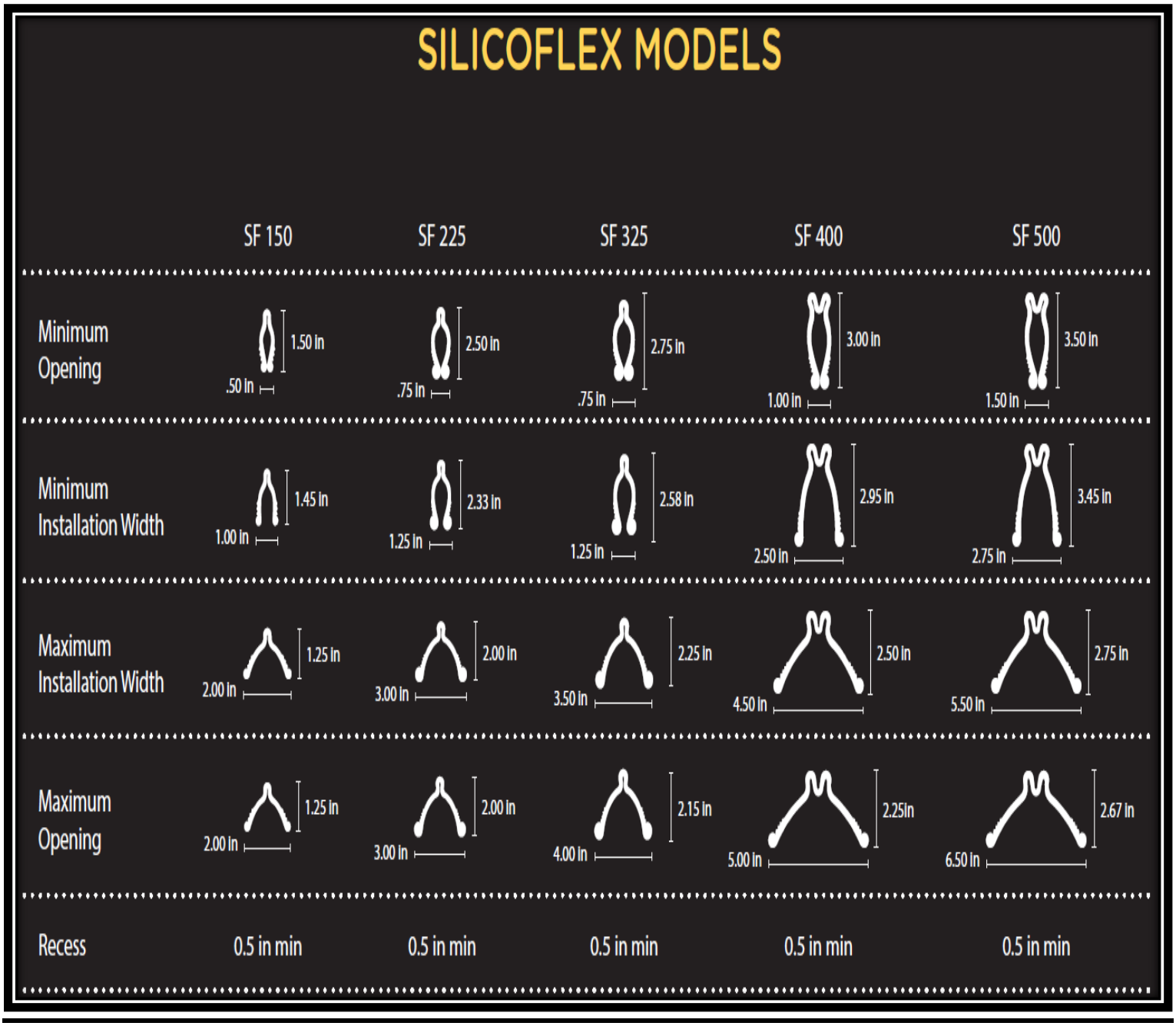
SILICOFLEX GLAND ON WOODEN REEL

P-200 Primer (A and B Components)

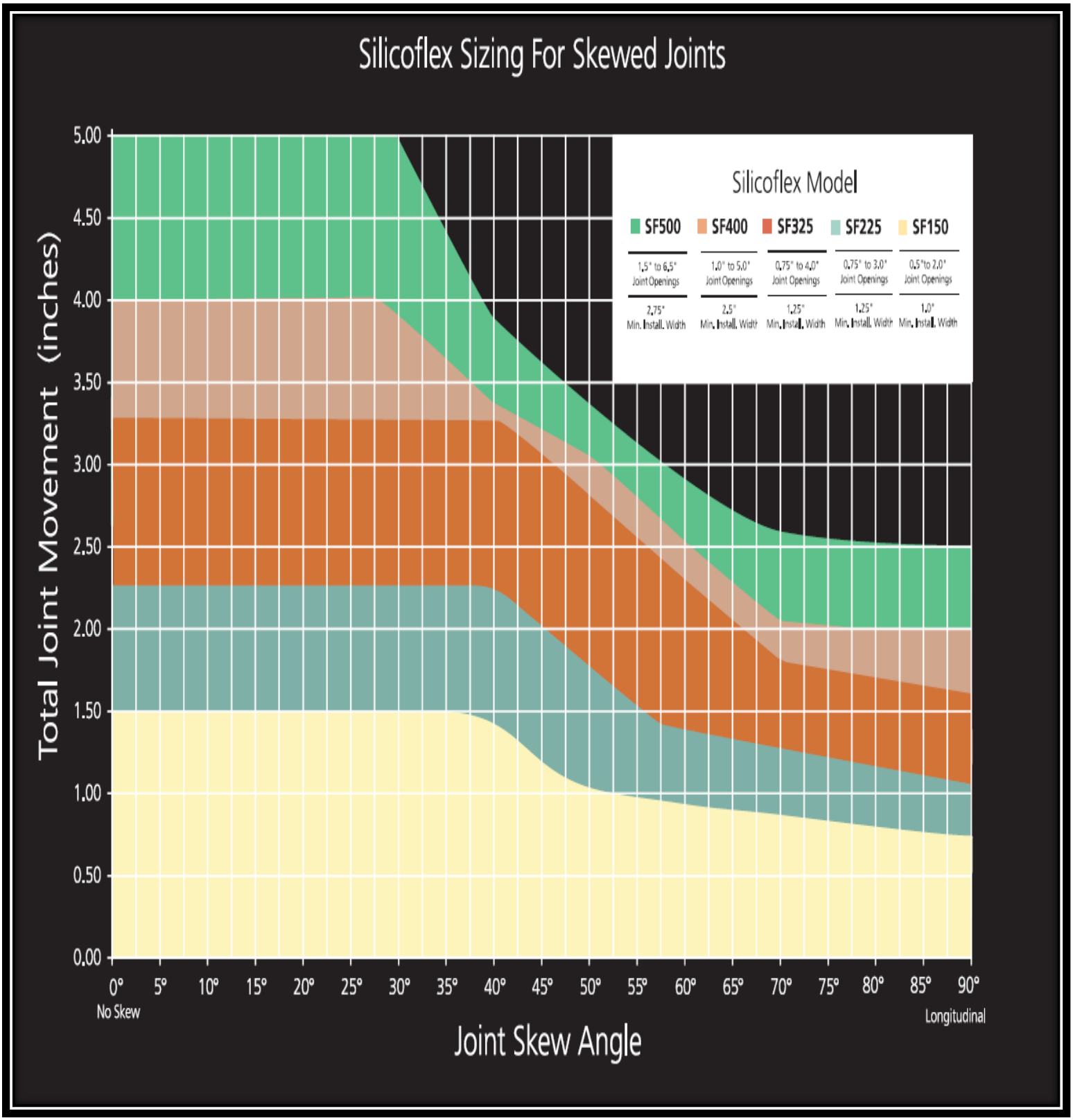
Single Component Silicone Locking Adhesive

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

Preformed Silicone Gland Sizing Chart – (5 Different Sizes)



11035 Walden Ave. Alden, NY
Phone: (716) 901-7020



11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

Silicoflex Installation Equipment

Item	Use	Notes
Air Compressor	For sandblaster and pneumatic caulking gun	
Sandblasting Equipment	For removing old adhesive, primer, and to produce a rough profile on both inner joint faces	This method is preferred as it not only removes the old seal material but produces a rough profile in which to bond the Silicoflex system to
Clean Rags	To clean Silicoflex gland and joint header	
Denatured Alcohol - ONLY	To clean Silicoflex gland and joint header	Not Isopropyl as this has oils in it
Clean Empty Can	To mix two-component Silicoflex P-200 Primer	One-pound Coffee can or one quart pail
Small Paint Brushes	To apply mixed Silicoflex Primer to joint header	Small rollers may be used as well
Caulking Gun (30 oz. size)	To apply Silicoflex locking adhesive	Manual, Pneumatic or Battery Powered.
*Compatible Fitting for Pneumatic Caulk Gun	To connect pneumatic caulk gun to compressor hose	Verify prior to installation that you have compatible fitting. The connection on caulk gun is often the quick disconnects type. Chicago type fitting is often found on compressor.
Box Cutter or Knife	To cut the end off the caulking tube	
Locking Adhesive Poker	To break the thin plastic seal of caulking tube	Something long and thin like a screwdriver or bailing wire
Tongue Depressors	To smooth out top bead of adhesive	Small or large sized, depending on Silicoflex gland size
*Foam Backer Rod	To place in joint every 12" to stabilize Silicoflex gland and set joint height only if there is no lower step on both sides of the joint face.	Used to prevent gland from falling through joint. Only necessary when joint width is in the wider portion of its cycle or if there is no lower step on both sides of joint face.
*Disc Grinder	To smooth out rough/jagged edges inside concrete joint header	Can be used instead of sandblasting if sandblasting is not permitted or available.
*Splicing Kit	To cut angles for curbs, sidewalks and skews	A miter box or wood frame with 45 and 90-degree angles and a sharp knife to cut material.

* If Necessary

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

Surface Preparation

Steel, Concrete or Elastomeric Concrete Surfaces:

To ensure a good bond, the joint must be clean and dry.

STEP 1 The inside vertical face of both sides of the joint interface must be sandblasted. Steel surfaces must be sandblasted to a "near white" condition. Concrete must be sandblasted to remove all unsound concrete from exterior surfaces.

NOTE: All concrete must be fully cured prior to the installation of the Silicoflex system.

STEP 2 Using oil and water-free compressed air, blow joint area clean of all sand and debris. Care must be taken to remove sand and debris from vicinity of the joint so that it doesn't enter the joint during installation.

STEP 3 Using a clean rag saturated in Denatured Alcohol, wipe down both sides of the vertical face of the open joint to properly clean the bonding surface.

Note: **Mineral spirits and paint thinners *are not* to be used for cleaning the joint header.**

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

STEP 4

Mix together the A and B components of R.J. Watson Silicoflex P-200 primer in a clean bucket until it becomes a uniform opaque color. The primer must then be applied to the vertical face of the joint interface with a clean brush or roller. Allow 30 minutes for the primer to dry prior to the installation of Silicoflex gland.

Note: **Traffic must not be allowed to pass over open joint after primer has been applied. Installation must be completed the same day as primer application.**

STEP 5

Unroll the silicone rubber gland and place adjacent to joint. Using a rag saturated in Denatured Alcohol, remove any dirt or talc, which may be on the bonding surface from the rounded edge to the top of the ridges on the preformed silicone gland.

Note: **Mineral spirits and paint thinners *are not* to be used for cleaning the silicone rubber gland because it will leave an oily residue that will prevent proper adhesion between the adhesive & Gland.**

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

Installation of Preformed Silicone Gland:

Preformed Silicone Gland gets installed in an inverted "V" shape

Note 1: Irregular joint openings or joints that are exceptionally wide and do not have a lower step, will require the use of a backer rod to properly position the seal at the recommended depth as well as stabilize the seal during installation.

Note 2: Directional changes (such as curbs, sidewalks, barriers and/or skews) in the line of the joint should be shown on the purchase order and discussed with our technical service representative. Depending on the difficulty they can either be pre-fabricated at our facility or cut and mitered in the field using the Silicoflex locking adhesive.

STEP 1

(SF150) Prior to installation of the Silicoflex gland, a bead of Silicoflex Locking Adhesive (approximately 3/8" diameter) should be applied to both vertical surfaces of the open joint, approximately 1-1/4" below the surface of the deck.

(SF225) Prior to installation of the Silicoflex gland, a bead of Silicoflex Locking Adhesive (approximately 3/8" diameter) should be applied to both vertical surfaces of the open joint, at a point approximately 2" down below the surface of the deck.

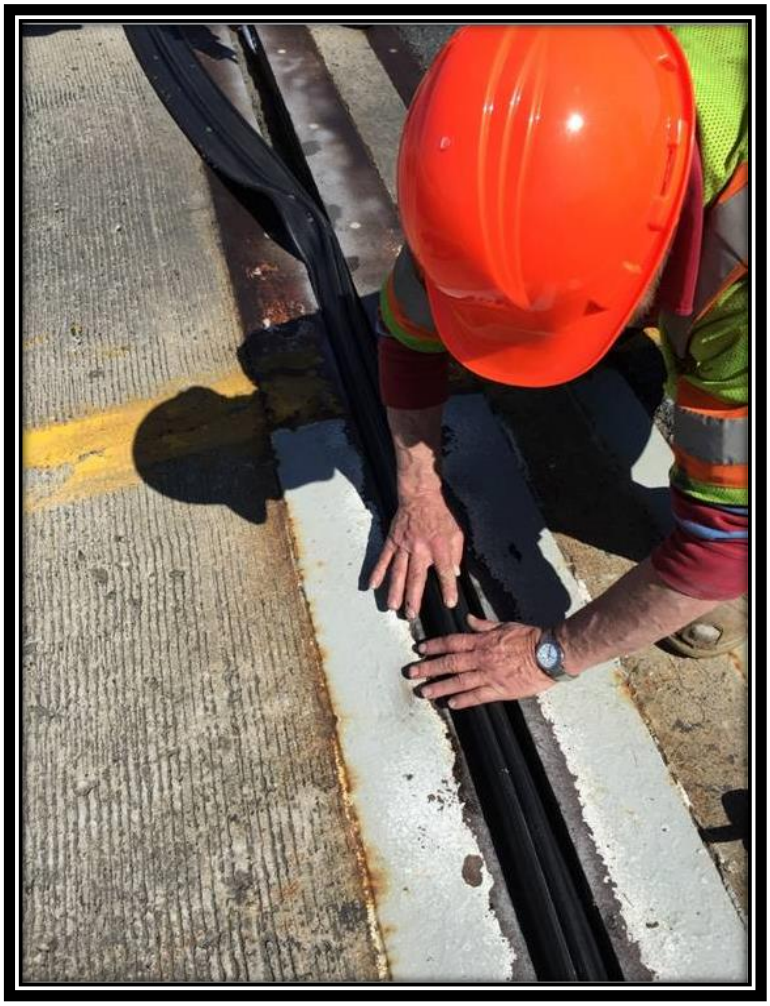
(SF325) & (SF400) Prior to installation of the Silicoflex gland, a bead of Silicoflex Locking Adhesive (approximately 3/8" diameter) should be applied to both vertical surfaces of the open joint at a point approximately 2-½" down below the surface of the deck.

(SF500) Prior to installation of the Silicoflex gland, a bead of Silicoflex Locking Adhesive (approximately 3/8" diameter) should be applied to both vertical surfaces of the open joint approximately 3-1/4" down below the surface of the deck.

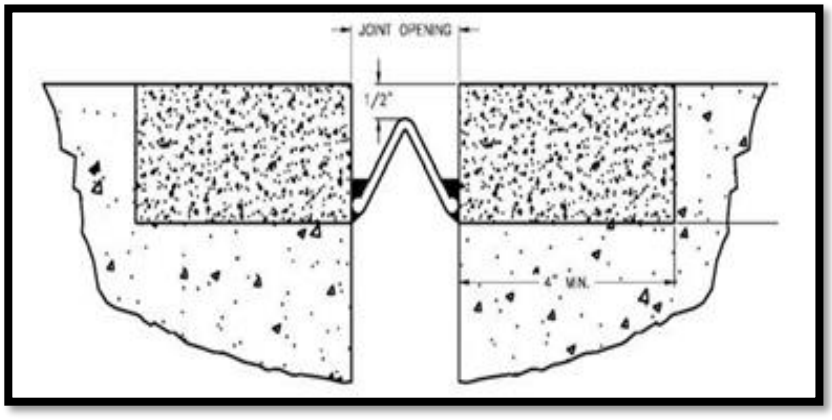
Note: **The Silicoflex Locking Adhesive will skin over quickly at warm temperatures. It is recommended to work 3-5 feet at a time.**

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

STEP 2 Insert the gland into the joint in an inverted "V" shape with the point of the "V" aiming upward.



STEP 3 The depth of the preformed silicone gland must be continually checked and adjusted by hand so that the very top of gland is between ½" and 1" below the road surface at full closure as depicted in this cross sectional view.



Cross sectional view of joint →

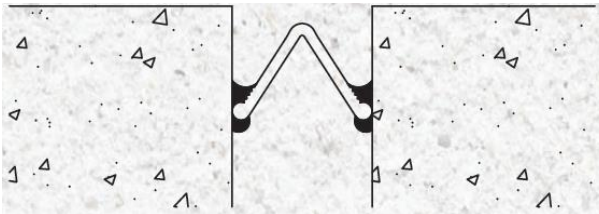
Note: SF400 & SF500, have a double fold at the top and SF150 Shown, SF225, & SF325 have a single fold at the top.

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

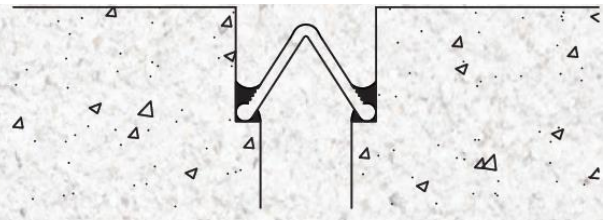
Installation Width and Depth for Each Size Gland:

Correct Joint Depth Needed for Each Gland Size→	Silicoflex SF150	Silicoflex SF225	Silicoflex SF325	Silicoflex SF400	Silicoflex SF500
	2 1/2"	3 1/2"	3 3/4"	4"	4 1/2"
Maximum Opening	2"	3"	4"	5"	6 1/2"
Minimum Opening	1/2"	3/4"	3/4"	1"	1 1/2"
Maximum Installation Width	2"	3"	3 1/2"	4 1/2"	5 1/2"
Minimum Installation Width	1"	1 1/4"	1 1/4"	2 1/2"	2 3/4"

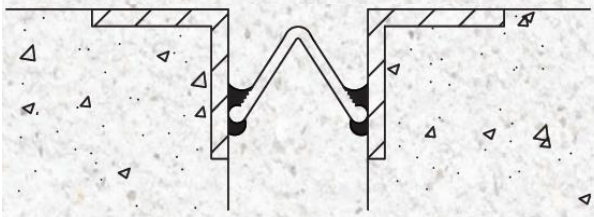
Typical Silicoflex Applications:



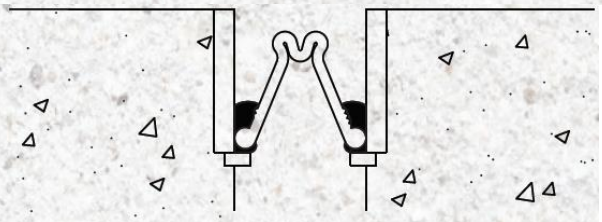
Silicoflex installed in concrete headers



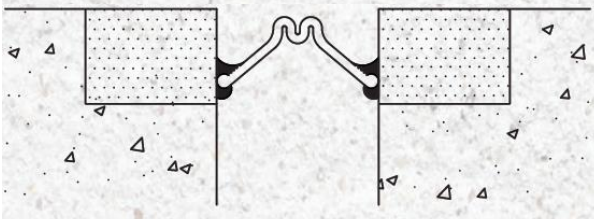
SIlicoflex installed in stepped concrete headers



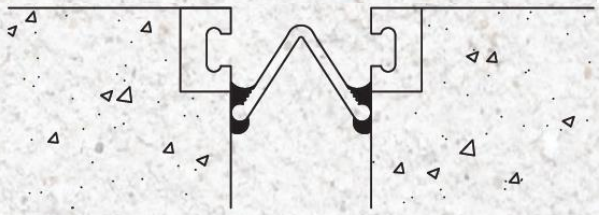
SIlicoflex installed with steel armoring



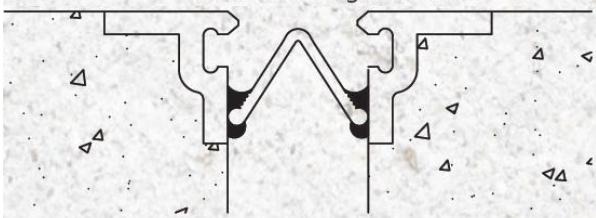
SIlicoflex installed with stepped steel armoring



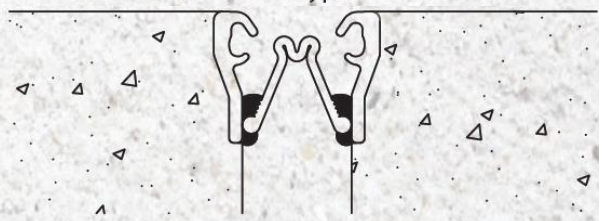
SIlicoflex installed with elastomeric or polymer concrete nosing material



SIlicoflex installed to repair Strip Seal Locking Mechanism Type A/E Extrusion



SIlicoflex installed to repair Strip Seal Locking Mechanism Type M Extrusion



SIlicoflex installed to repair Strip Steel Locking Mechanism Type P Extrusion

STEP 4

A final bead of Silicone Locking Adhesive (approximately 3/8" diameter) is to be applied to each side of the Silicone Rubber Gland which should be in contact with the joint header. This final bead shall be placed to the top of the ridges on the preformed silicone gland, and no higher.

STEP 5

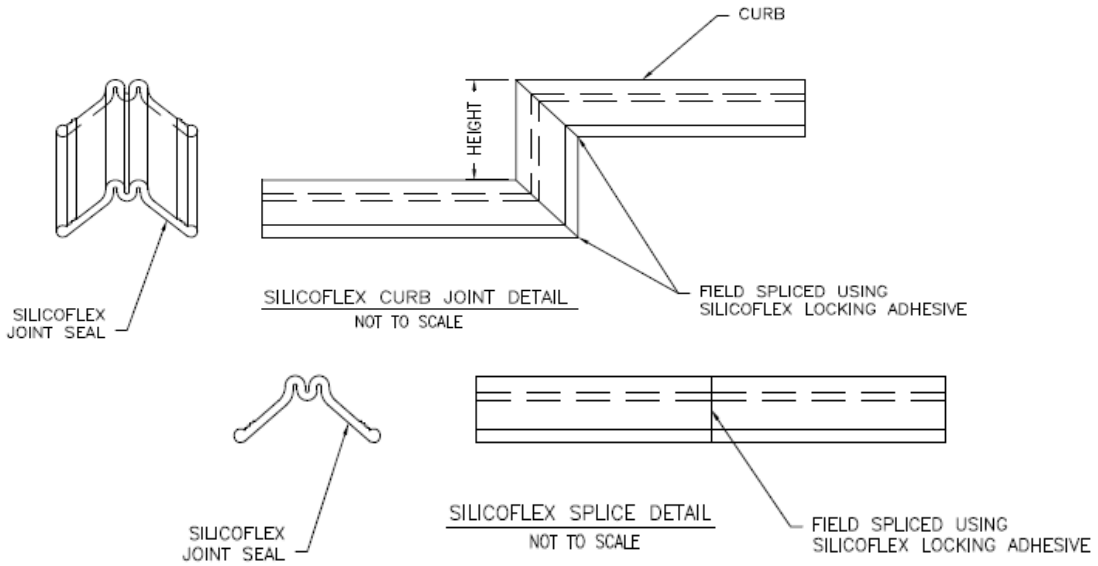
The adhesive should then be tooled at least twice to make sure that there is proper contact with the vertical edges of the joint. Tool the Silicoflex Locking Adhesive twice to be sure that the sealant has seated firmly into the gland serrations. A wooden tongue depressor can serve as a tool.

Note: **Silicoflex is a moisture curing single component adhesive. At 75F and 50% humidity, it tacks over in a few minutes and cures in approximately 24 hours under these conditions. It can be opened to traffic one hour after installation.**

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

Silicoflex Splicing Procedure:
For Vertical Turns at Curbs, Barriers, and Straight Sections

1. A miter box and a long, sharp knife shall be used to maintain a straight and accurate cut.
2. After all miter cuts have been made, dry-fit them together with your main section of gland as an assembly to ensure proper fit throughout the entire joint section.
3. Prepare the joint as outlined in the attached instructions by sandblasting both sides of the joint opening first, then clean the joint opening and all spliced pieces thoroughly using denatured alcohol only.
4. Apply the first bead of Silicoflex Locking Adhesive to both sides of the primed joint opening starting at one of the upturn or spliced ends.
5. Apply Silicoflex Locking Adhesive to both spliced edges that have been cut and will be bonded together.
6. Then insert each spliced piece one at a time into the joint just above the beads of adhesive so that both cut ends meet to either form a straight splice or the desired angle-**(Example: 45° or 90° angle).**
7. Then lightly push them both down into the joint holding the two splices together, to where the very top of the gland is between 1/2" to 1" below the road surface and or barrier wall-***(Refer to cross sectional view on page 8).*** This process should be performed concurrently for the entire length of the joint you are installing.
8. Next apply the finished bead of Silicoflex Locking Adhesive to both sides of the inserted gland assembly not to exceed the top of the ribs on both sides of the gland. Then using a wooden tongue depressor, tool both beads of Silicoflex Locking Adhesive which will produce a smooth finished water tight seal on both sides.
9. Across the top of all splices, apply a 3/8" bead of Silicoflex Locking Adhesive and using a wooden tongue depressor, tool and feather the bead smooth to ensure a water tight bond.
10. Reference the four completely installed directional changes on pages 13 & 14.



Here is a joint section completely installed

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

Here are Four Typical Directional Change Sections Completely Installed

SF500 Gland Spliced to Transition from Road, up Curb, and into Sidewalk

SF225 Gland Spliced to Accommodate a Skew

SF400 Gland Spliced to Turn Up a Barrier Wall

SF225 Gland "Tee-Spliced" into SF400 Gland

11035 Walden Ave. Alden, NY
Phone: (716) 901-7020

Additional Directional Changes that can be made with Silicoflex

Intersection Template with SF225 Seal

Multi-Intersection Installed

SF225 Installed Through Barrier