Installation Procedure

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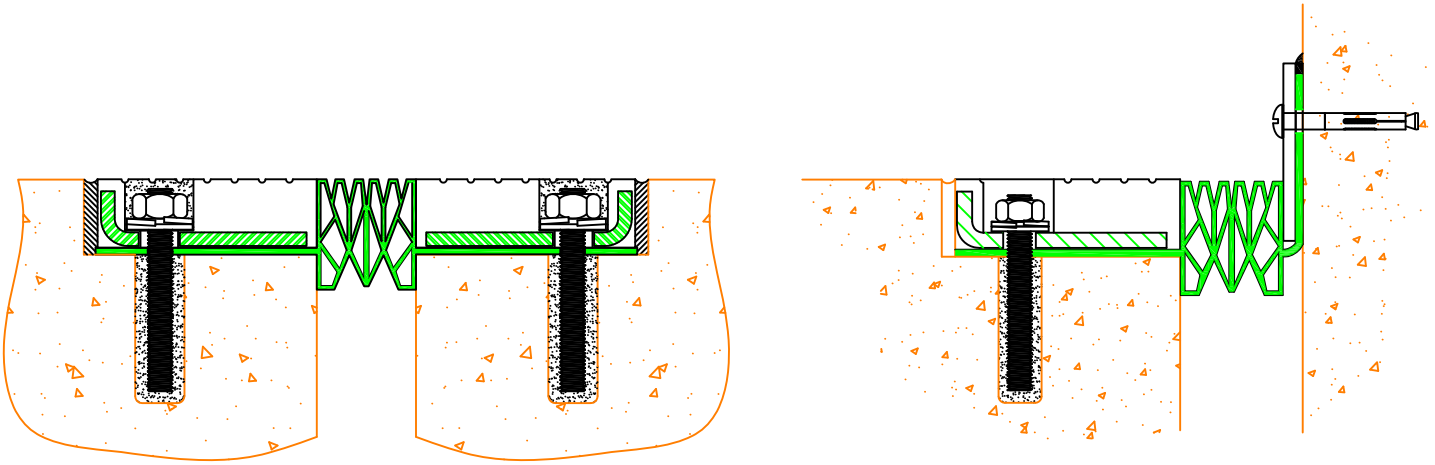

Wabo® ElastoFlex
Model(s) EFJ/EFJ-C
Horizontal Expansion Control Systems

The following installation procedure is very important and must be fully understood prior to beginning any work. To ensure proper installation and performance of expansion joint system the following actions must be completed by the installing contractor. Failure to do so will affect product warranty.

1) Carefully read and understand installation procedure. Contact WBA's Technical Service Department at (800) 677-4922 for product assistance.
2) Inspect all shipments and materials for missing or damaged components and hardware. Contact Customer Service at (800) 677-4922 with WBA's order number and invoice for prompt assistance.
3) Inspect substrate or adjacent construction for acceptance before beginning work. Report unacceptable construction to the project manager for scheduled repair work.
4) Review WBA shop drawings for project specific detailed information if Engineering services were purchased at time of order.

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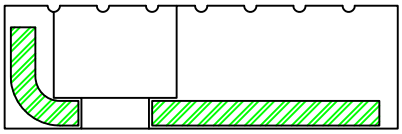
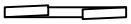
Standard components

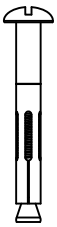


Premolded Steel Reinforced Elastomeric
Anchor Block (P/N 2914)

5/8" Nut
(P/N 7963)



5/8" Lockwasher
(P/N 7729)

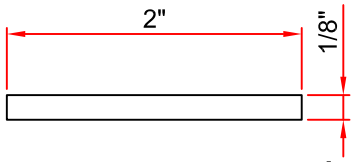


1/4" x 2" Lg Threaded *
Concrete Anchor
(P/N 6912)

5/8" Washer
(P/N 7549)

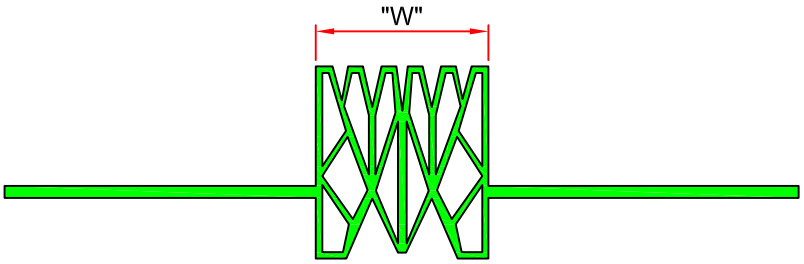
5/8" Dia. x 4-1/2" Lg.
A36 Threaded Anchor (P/N 6519)
Hilti HY 150 Epoxy Adhesive Cartridge (P/N 6521)

NP1 Sealant
(P/N 2826)



Corner Wall Mount Plate *
P/n: 9015

Components shown below vary in size depending on model of system



Elastomeric Elastoflex Gland
Note: Webbing Varies with Model

Model	Seal Width "W"	P/N
EFJ-225/225C	2 1/4"	1224
EFJ-300/300C	3"	1230
EFJ-400/400C	4"	1228
EFJ-600/600C	6"	1229

*Denotes: Components
used for Corner Condition

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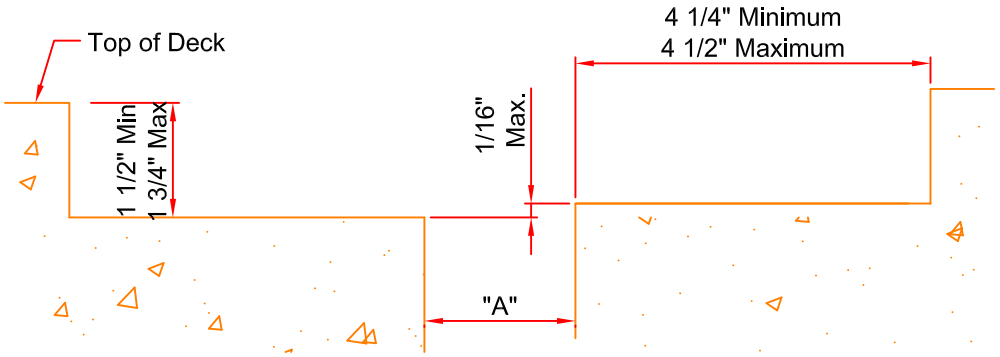
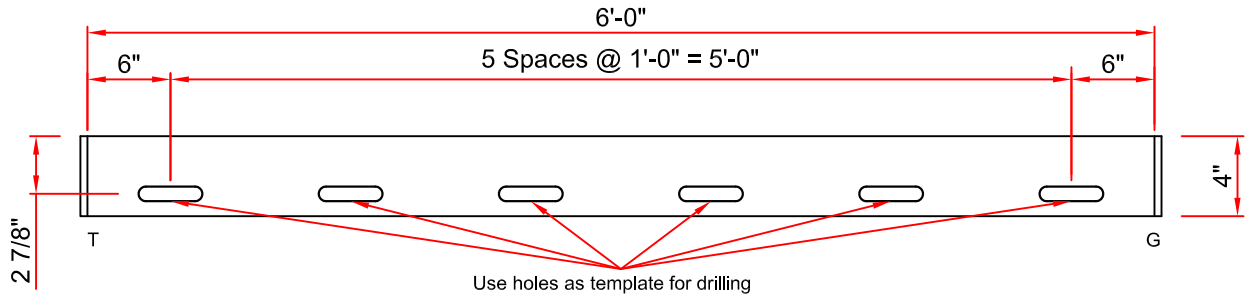


1

Blockout: Blockout in the deck, sidewalk & curbs, shall be constructed to dimensions shown on drawings. All air bubbles 1/4" and larger shall be pointed with an epoxy grout. The bottom shall be parallel with the deck surface.

Surface Preparation: To properly achieve adhesion of sealants, all oils, grease, tars, coatings, asphalt and/or other contaminants must be removed. Sandblasting is the preferred method of cleaning the blockout. After cleaning blow out all residue with compressed air.

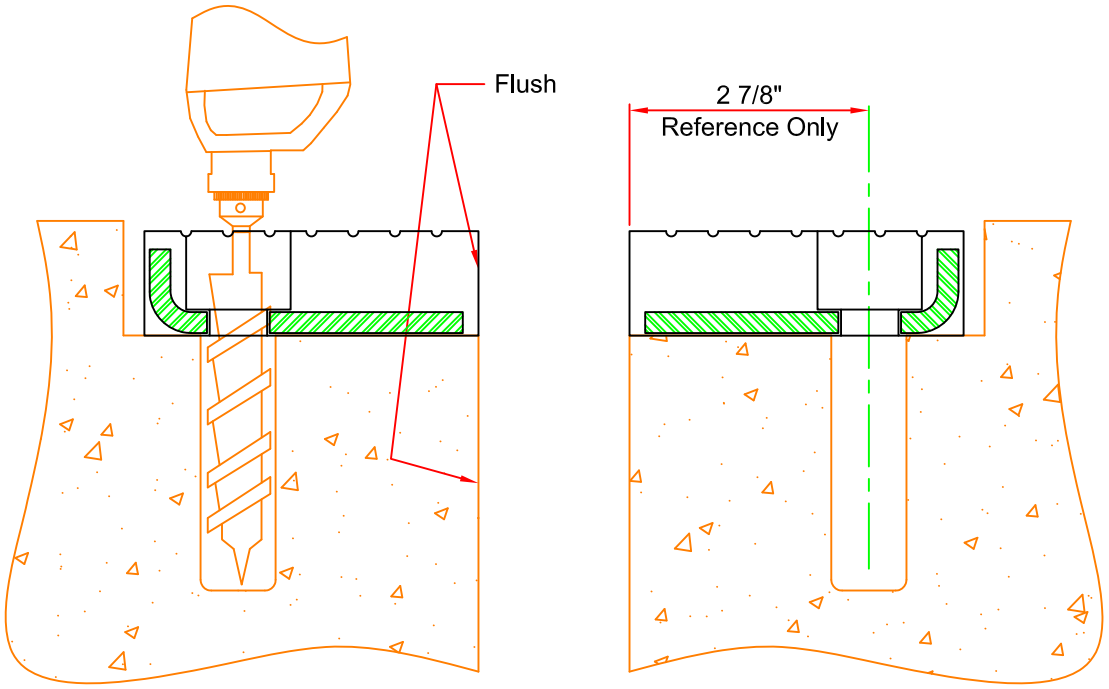


T - Tongue
G - Groove

Plan View
Standard Elastoflex Anchor Block

2

Anchor Bolt Installation: Utilize the actual elastomeric anchor blocks as templates to locate adhesive anchors. It is recommended to start at either a curb or miter and to utilize quick clamps to hold the blocks together at the tongue and groove connections align the anchor block with the throat opening to locate gauge line of anchors.



3

Set blocks flush with edge of joint opening. Drill pilot holes at anchor locations into concrete structure and remove EPDM blocking. Once the EPDM blocking has been removed, follow Anchor Manufacturers guideline for using the correct Dia size drill bit. After drilling holes use compressed air or a vacuum to clean out holes.

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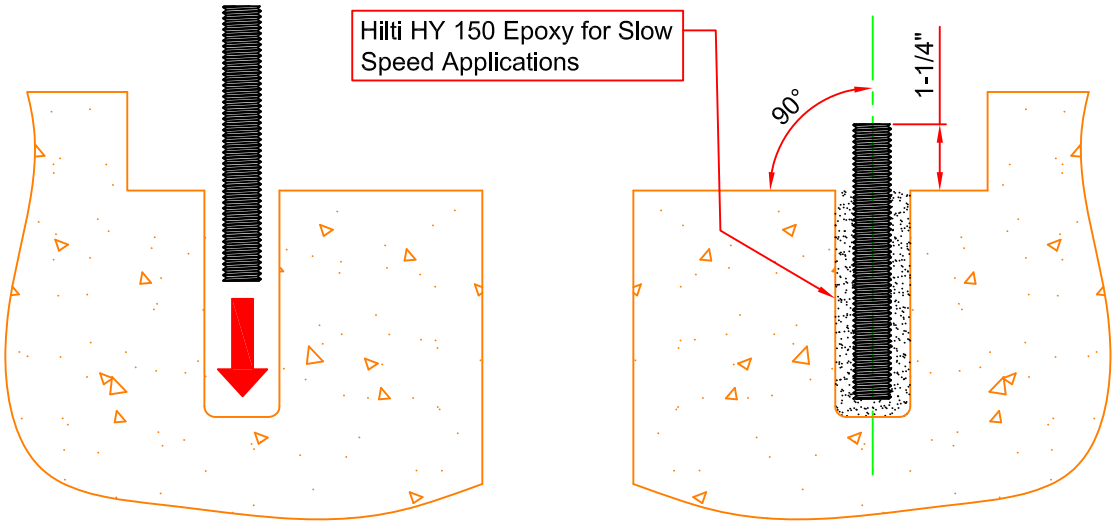
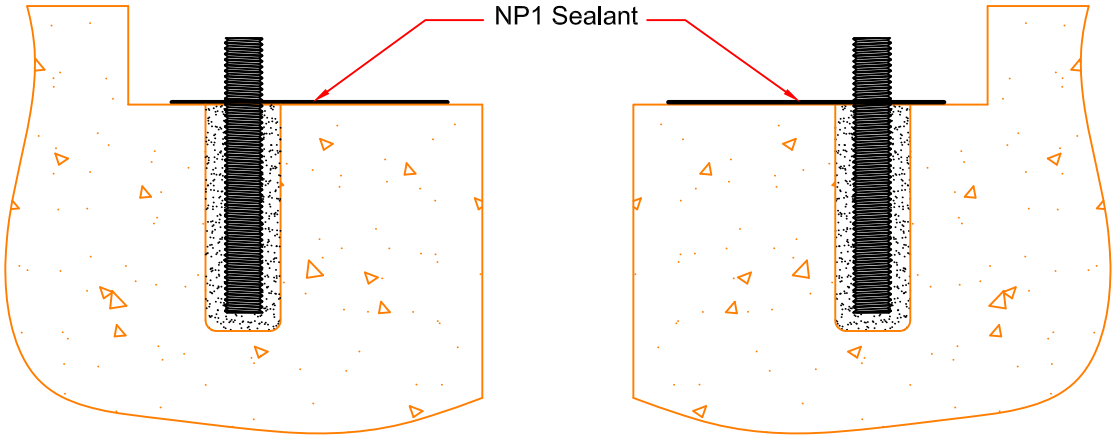
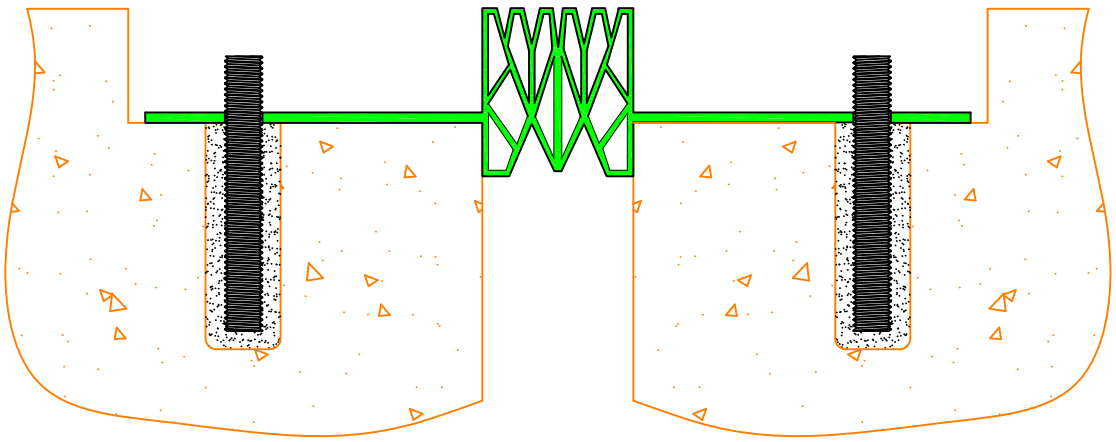


4 Cast in place anchor bolts. Care shall be taken to ensure that the anchors are set at right angles to the blockout.
Note: Hole size, depth, drill bits, installation procedure and cure times shall be in strict accordance with epoxy manufacturer's (Hilti) guidelines.



5 Apply a serpentine bead of NP1 Sealant. Sealant should be spread by a 1/8" grooved trowel to assure a nice even spread on the blockout as shown. Follow immediately to the next step, before Sealant cures.
Note: It is recommended you work in short increments: 12 ft.



6 Compress seal and insert into the expansion opening and pushing seal flaps firmly into Sealant bedding on base of blockout. Follow immediately to the next step.

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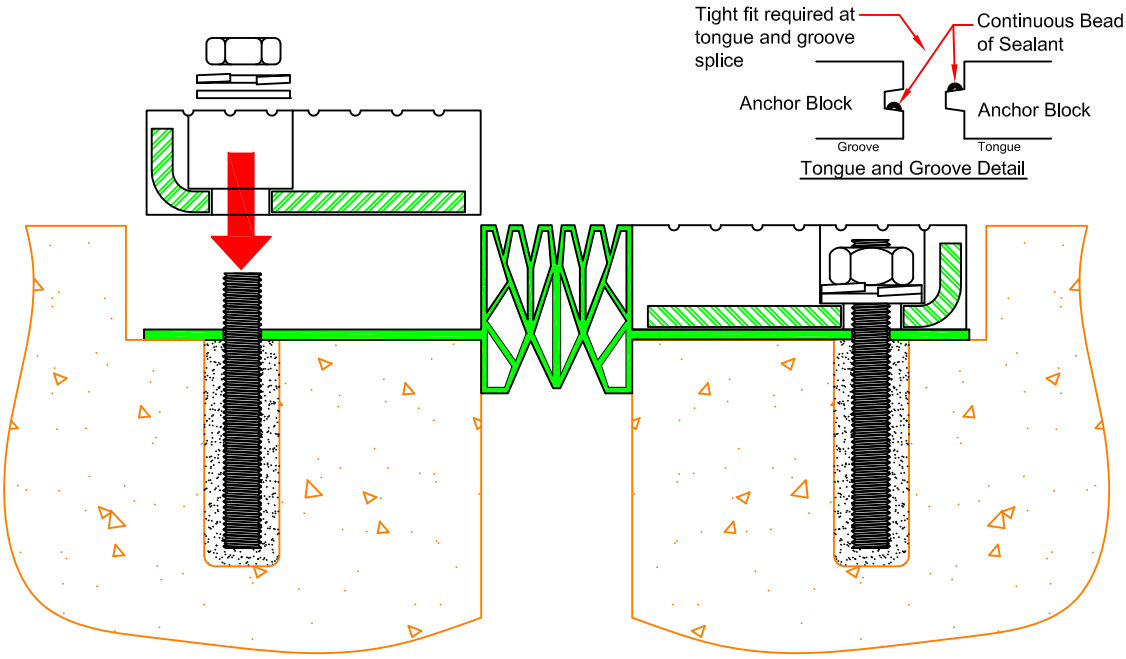
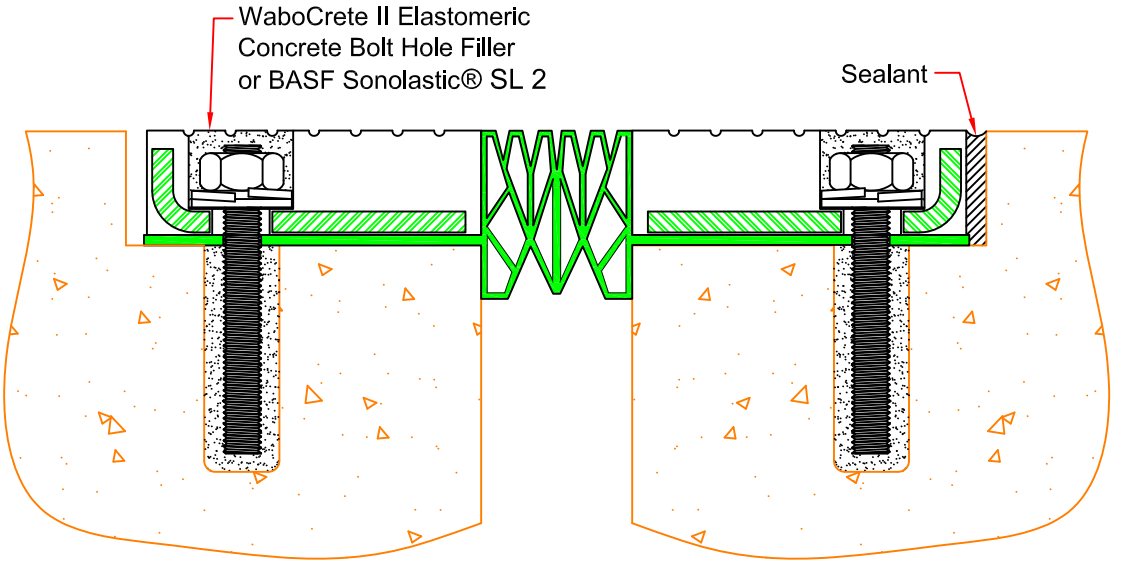


7 Before Sealant cures, place the anchor blocks into proper position. Utilize a thin wall socket (for clearance) to install nuts, torquing to **(50ft/lbs for Slow Speed and 65ft/lbs for High Speed applications)**. Follow procedure shown for tongue and groove splice connections and application of Sealant. Repeat process until all blockouts are placed. Retorque approximately one hour after initial placement, all hardware shall be retorqued to 50ft/lbs.



8 With all sections installed to the satisfaction of the engineer.
Edge Void Sealant - Utilizing compressed air, clean edge void cavity and fill with Sealant. Sealant should be pressed into edge void as shown with a masonry pointing trowel edge roller tool to ensure proper sealing. After sealant is installed, make sure that the sealant surface is smooth by using a grouting trowel.
Bolt Cavities - Fill in bolt holes with the supplied WaboCrete II Elastomeric Concrete with 50% of the supplied aggregate (30lbs.). It is recommended that the immediate area around the bolt cavities be covered with duct tape prior to the installation of WaboCrete II.
Note: Follow preparation and installation instructions in the material specifications.

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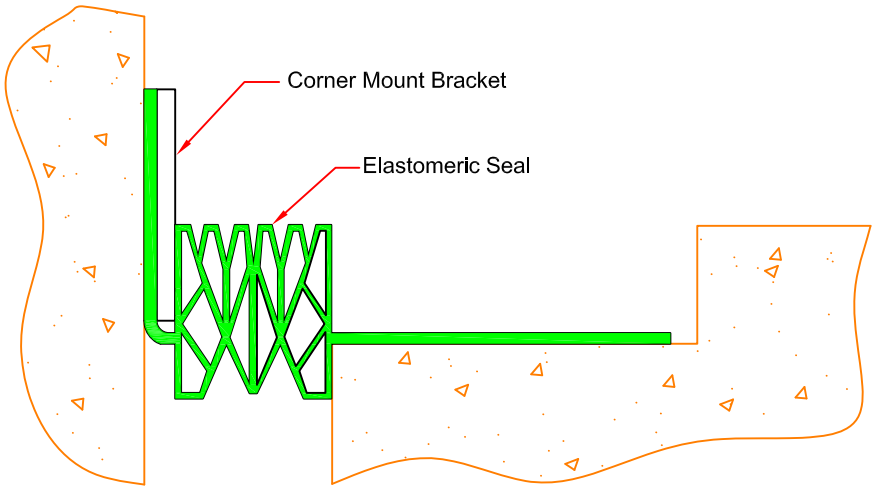
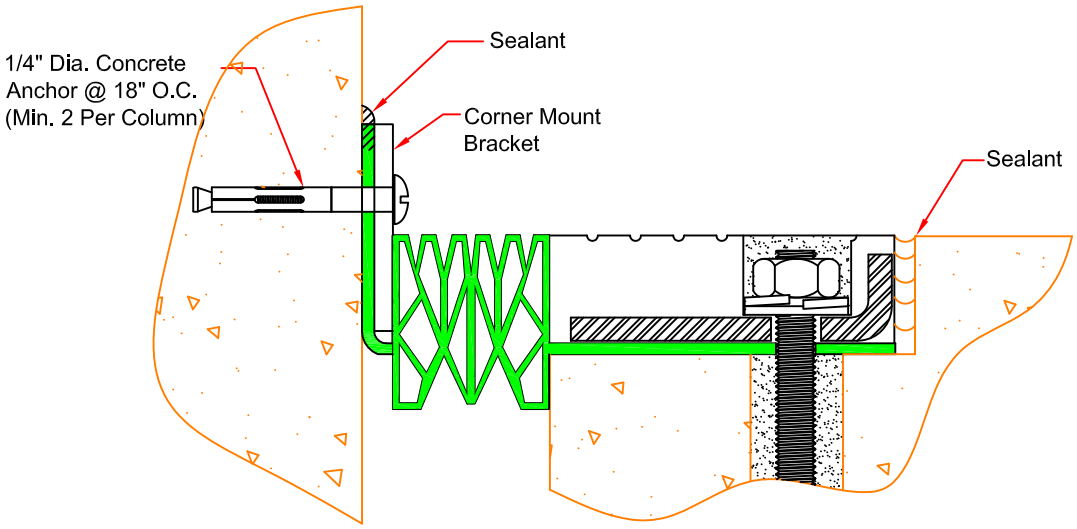


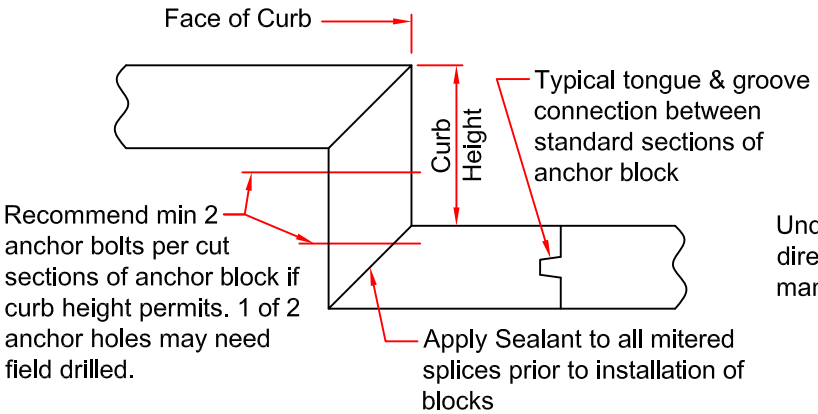
9 Fold up flap of the seal, insert Corner mount bracket between seal and flap as shown above. Set gland in throat opening. Use anchor block to prepare floor side of opening as shown in steps 3 & 4. For installing wall side, using Corner mount bracket as a template and drill locations for concrete anchors. Before applying Sealant, ensure gland is level, and all holes have been drilled.

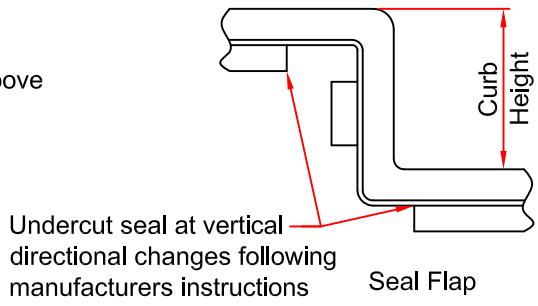


10 Apply Sealant to back of seal flap. Sealant should be spread by a 1/8" grooved trowel to assure a nice even spread on the back face of the seal as shown. Attach Corner wall mount bracket to wall using anchor bolts. Trim off excess seal flap flush with top of Corner wall mount bracket. Place bead of Sealant along top of wall mount. Install gland to floor as shown in steps 5, 6, 7, and 8.
Edge Void Sealant - Utilizing compressed air, clean edge void cavity and fill with Sealant. Sealant should be pressed into edge void as shown with a rounded edge roller tool to ensure proper sealing.

Curb Details

Curb area installations (if applicable) - undercut seal as indicated on the drawings at curb area and continue installing seal utilizing procedures in steps 5 and on.





Elastomeric Seal

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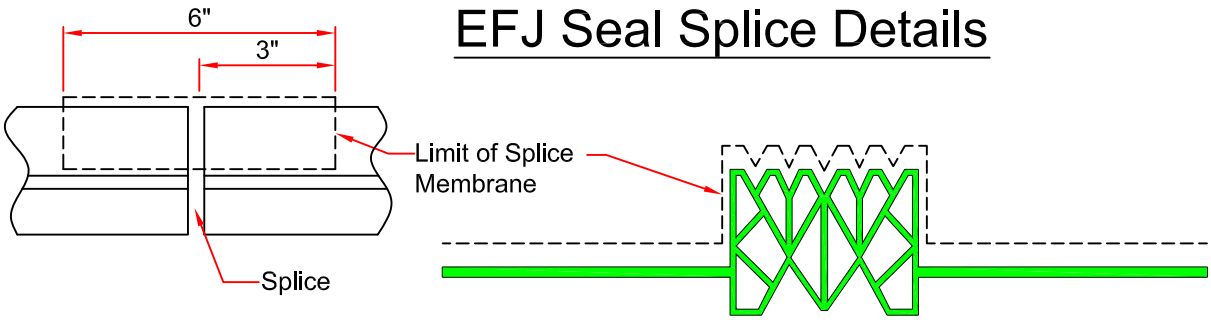
EFJ Seal Splice Details



Seal Splice Instructions

1. Cut ends of the ElastoFlex seal, with a sharp knife and a miter box (supplied by contractor). Insure cuts are clean, straight and square.
2. Clean ends of seal with a solvent to remove any foreign material.
3. Brush apply PP Primer (part #2717) to both seal ends to be joined together at splice.
4. Apply Bordens 241 adhesive (part #2716) as specified by the manufacturer to all internal and outer webs of the two seal surfaces to be bonded.
5. Apply pressure bringing the two surfaces intight contact immediately upon completing application of the adhesive. Hold in place for approximately one to two minutes to allow adhesion.
6. Re-check quality of all splices and apply additional adhesive if required to ensure proper miter or splice.
7. Contact manufacturer for clarification of above procedure (if required) prior to proceeding with splicing seal profile. It is usually recommended to allow 15 minutes time before installing spliced seal. Care shall be exercised as a result that it takes 24 hours for adhesive to fully cure.
8. Apply 1/32" thick thermoplastic splice membrane with adhesive for additional protection (Optional) and reinforcement of splice at straight run butt splices only.

Recommended Equipment for WaboCrete Mixing

- Abrasive blasting Equipment
- 3/4" Heavy Duty Drill (1 hsp - Low RPM)
- 3/8" Hand Drill
- (2) Jiffy mixing paddles
- (1) Large Paddle (4" to 6")
- (1) Small Paddle (2")
- (1) Roll of 15lb Roofing Paper
- (2) Clean 5 gallon plastic buckets
- (4) Clean 1 gallon plastic buckets (For bonding agent)
- (8) 2" disposable paint brushes (For Bonding agent)
- Rubber gloves
- (8) 2" Margin trowels
- Misc. hand tools and extension cords

Yield Calculations for full unit of WaboCrete:

- One unit of Wabo®Crete II will yield .60 cu. ft.
- One unit of Wabo®Crete II = One US half gallon Part A, One gallon Part B, and one 60 lb Container of aggregate. the formula for calculating volume is: (length in feet x width in inches x depth in inches) / 86.4 = Number of units of Wabo®Crete needed to complete the job.

Example

Based on a blockout size 3 1/2" wide x 3/4" deep x 30' long:
The calculation would be: (.0304 x 30)= .91 units. This calculation is for only **ONE** side of the bockout.

Curing of Wabo®Crete:

Wabo®Crete II is an ambient cure material. Cure times are therefore, temperature dependant. Suggested cure times are listed below:

Cure Time:	21° - 32°C(70°-90°F)	- 1 to 1 1/2 Hours
(Open to Traffic)	10° - 21°C(50°-70°F)	- 1 1/2 to 2 Hours
	4° - 10°C(40°-50°F)	- 2 to 3 Hours

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