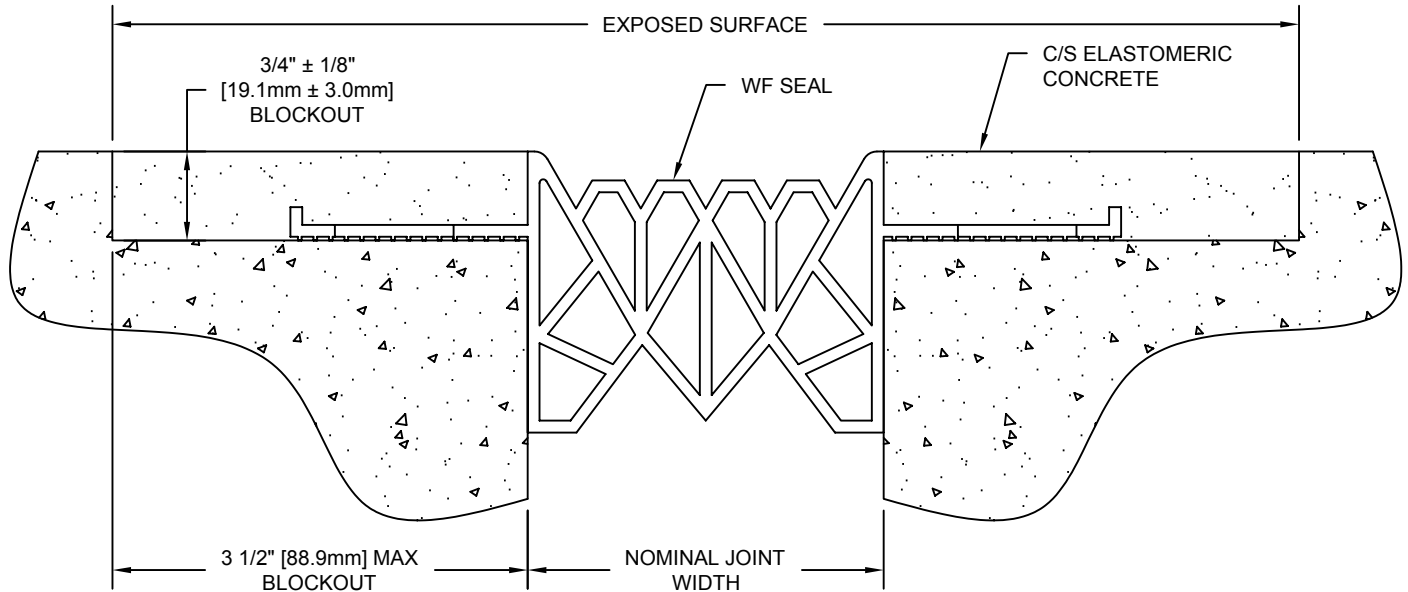


WF 225, WF 300, WF 400, WF 500 & WF 600 INSTALLATION INSTRUCTIONS

12BQ



	WF-225	WF-300	WF-400	WF-500	WF-600
EXPOSED SURFACE	8.50" [215.9mm]	9.13" [231.9mm]	9.88" [250.9mm]	10.25" [260.3mm]	10.50" [266.7mm]
JOINT WIDTH	1.50" [38.1mm]	2.13" [54.1mm]	2.88" [73.1mm]	3.25" [82.5mm]	3.50" [88.9mm]
TOTAL MOVEMENT	1.19" [30.1mm]	1.50" [38.1mm]	2.25" [57.1mm]	3.25" [82.5mm]	4.00" [101.6mm]

IMPORTANT INFORMATION

Prior to the commencement of Installation all materials **MUST** be inspected for Damage. Any damage must be reported to Construction Specialties as soon as possible, so that replacement materials may be furnished without delay.

All work must be completed as per Architect's Approved "Shop Drawings", and in accordance with these Installation Instructions. When installation is complete, all materials must be protected from damage until the Architect's FINAL INSPECTION.

All materials should be arranged in the order that they are to be installed. All hardware required for each portion of the work should be placed with the appropriate materials.

Please review all Approved Shop Drawings and this Document to familiarize yourself with all the details and components of this assembly.

IMPORTANT:

READ THROUGH ALL INSTRUCTIONS PRIOR TO STARTING INSTALLATION

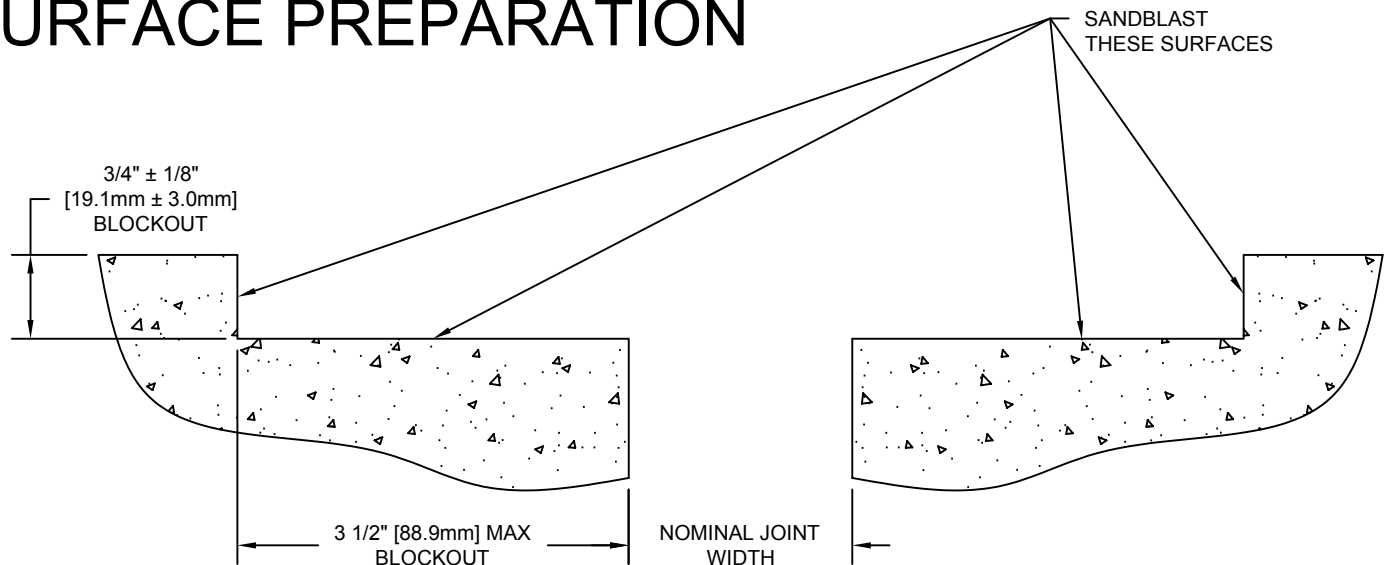
10/10/05

CONSTRUCTION SPECIALTIES

P.O. BOX 380
MUNCY, PA 17756
PHONE (570)-546-5941
FAX (570)-546-8022

This document is the property of Construction Specialties and contains CONFIDENTIAL PROPRIETARY INFORMATION that is not to be disclosed to third parties and is not to be used without approval in writing from Construction Specialties, Inc.

GENERAL NOTES AND SURFACE PREPARATION



System Components:

C/S Primer	Parts A and B
C/S Tack Coat	Parts A and B
C/S Elastomeric Concrete	Parts A, B and C

Tools and Materials Required:

Clean 5 Gallon Bucket
Standard Paint Brushes
Drill with a 3/4" Paddle Mixer Attachment
Concrete Trowel
Heat Welder (able to maintain 520°F)
Soldering Iron
Bulk Caulking Gun

General Notes:

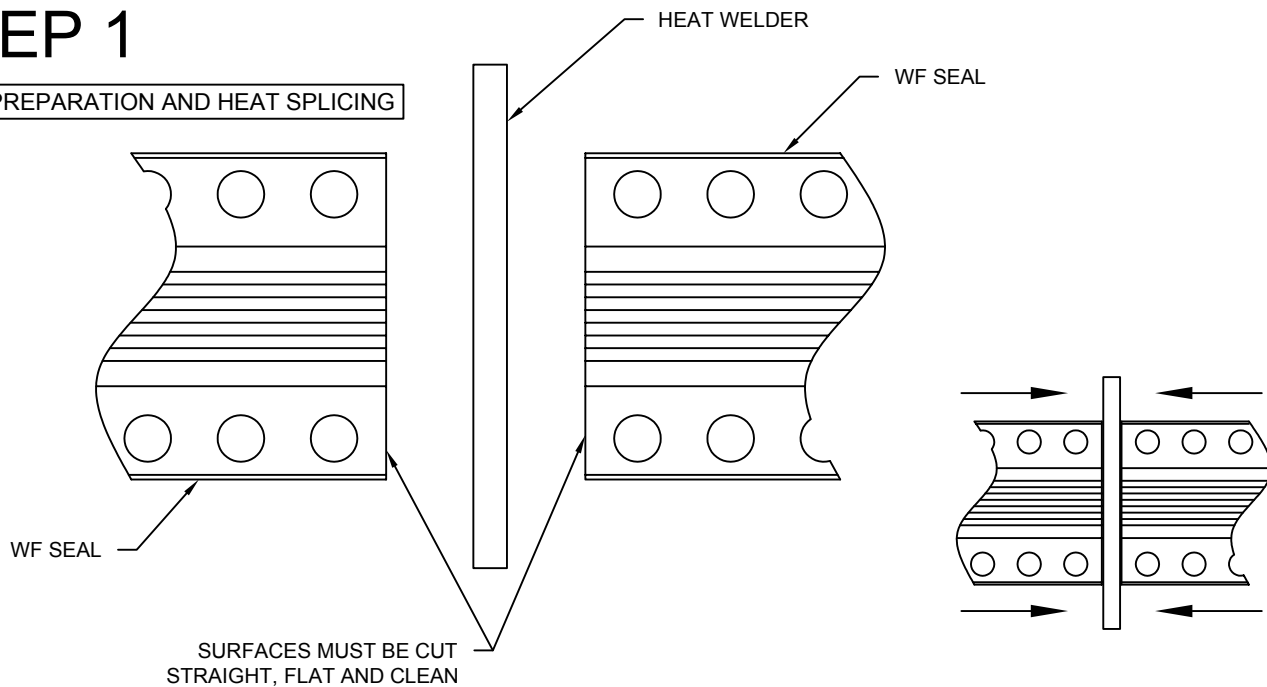
- 1.) The blockouts must be formed to the specified dimensions detailed on the C/S Shop Drawings.
- 2.) Blockout surfaces shall be solid, free of voids, dust, release agents or any other contaminants that would inhibit the bond of the primer.
- 3.) Any locations of edge raveling, spalling or other damage to the blockout surfaces must be repaired with a non-latex high strength grout that will provide a sound and square blockout. Sika Grout-Pak is recommended.
- 4.) New concrete must be fully cured for a minimum of 28 days prior to the installation.
- 5.) Surfaces must be completely dry; any moisture will cause a reaction with the elastomeric concrete.
- 6.) Surface temperatures should be higher than 40°F (5°C) at time of installation.
- 7.) Surface temperatures higher than 80°F (27°C) can reduce pot life or cause rapid curing.
- 8.) Proper safety equipment, according to the MSD sheets, should be worn at all times during the installation. Some of the components of the elastomeric concrete system contain hazardous materials such as isocyanates.

Surface Preparation:

- 1.) Sandblast the concrete surfaces at all locations where the elastomeric concrete will be applied. Sandblasting should expose new concrete and clean the surface of all loose debris and form release agents.
- 2.) All finished exposed surfaces of the expansion joint cover system and the surrounding concrete should be masked/covered with paper and tape to prevent the elastomeric concrete from staining or adhering to these surfaces.

STEP 1

SEAL PREPARATION AND HEAT SPLICING



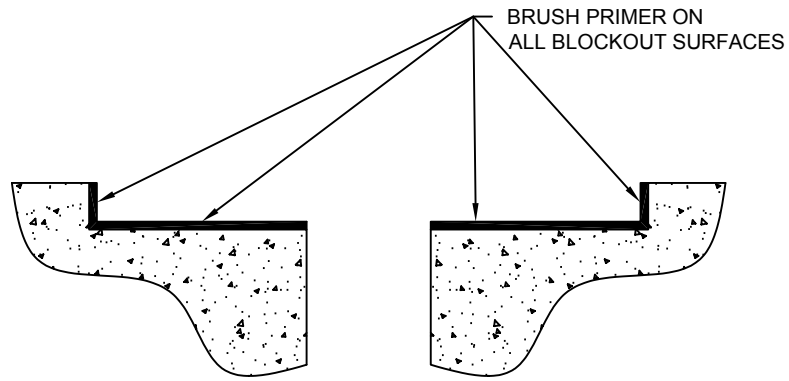
- 1.1) Uncoil the length(s) of Seal to be installed, lay each piece out flat and allow the Seal some time to flatten before it is bonded in place. The higher the temperature of the Seal the faster it will relax to flat and straight. Seals should be placed in direct sunlight if possible to reduce the amount of time required.
- 1.2) Place each length of Seal next to the blockout area where it is to be installed. If the run is longer than the length of Seal, then a heat splice must be created between the two pieces of Seal.
- 1.3) To create the heat splice each end of the Seal to be spliced must be cut straight, flat and clean. Any irregularities in the ends of the Seal will create problems throughout the entire splicing process.
- 1.4) Each surface to be spliced must be cleaned with solvent and allowed to completely flash off before applying any heat. Do not use water to clean the Seal. The water trapped in the cells will draw heat away from the splice during the heat welding process.
- 1.5) Each end of the Seal must be aligned with the other section to be spliced. Place the Heat Welder or Hot Plate between the two lengths of Seal so each surface of the splice is touching the Heat welder. The Heat Welder should maintain a temperature of 520°F during the splicing process.
- 1.6) Hold the Seals against the Heat Welder until the face of the Seal begins to melt about a 1/16". The duration of time required to melt the surface of the Seal will vary depending on the temperature of the Heat Welder and the conditions at the job site.
- 1.7) Remove the Heat Welder and press the Seals together carefully aligning the outside walls of the seal profile. Molten material will mushroom out from the location of the splice when the Seals are pressed together. This is called "flash".
- 1.8) Hold the Seals together for approximately 30 to 60 seconds or until the surface of the Seal cools and a good bond is created.
- 1.9) Use a Soldering Iron to smooth any inconsistencies or close small gaps in the splice, then trim and remove the remaining flash with a sharp knife, being careful not to cut into the Seal.

Note:

Heat Splicing is a difficult process that takes practice. It is recommended trial splices be created between short lengths of scrap Seal prior to attempting the splices for the actual installation.

STEP 2

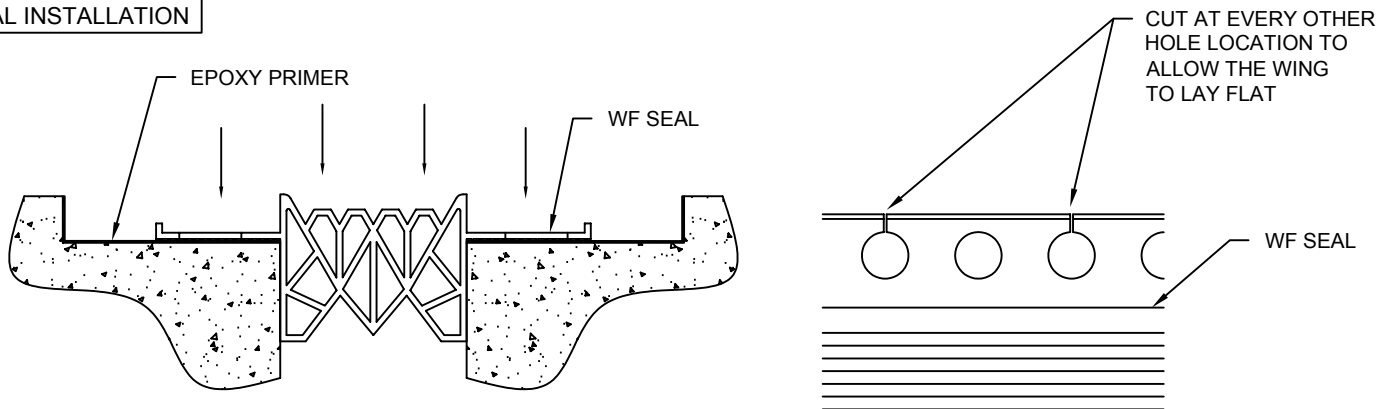
APPLICATION OF PRIMER



- 2.1) Pour the entire contents of the C/S Primer Part B into the container of Part A.
- 2.2) Reseal the lid of the Part A container and shake vigorously for 30 seconds to completely mix the two components.
- 2.3) Using a standard paint brush coat all of the concrete surfaces that the elastomeric concrete will be in contact with. Do not apply the primer to the aluminum surfaces of the EJC Frames. **Avoid puddling of the primer.**
- 2.4) Allow the primer to dry completely prior to continuing with the installation, but do not allow it to cure longer than 4 hours. If primer is allowed to cure for more than 4 hours it must be reapplied.

STEP 3

SEAL INSTALLATION



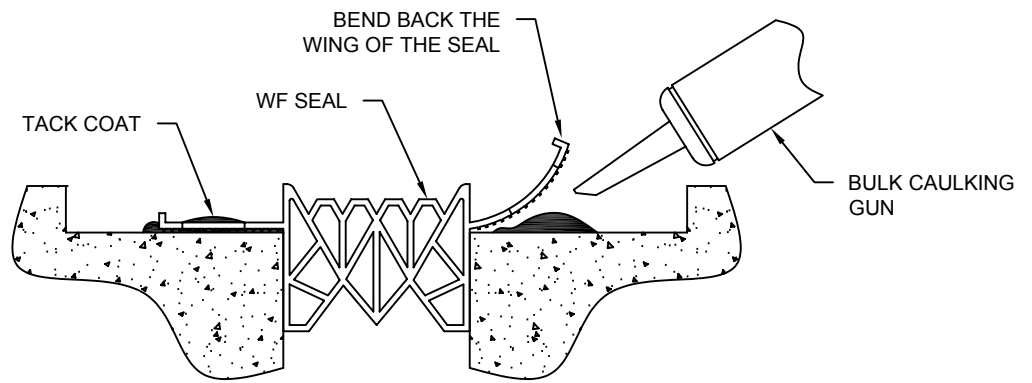
- 3.1) Compress the Seal and insert it into the joint. Press the Seal down into the joint until the wings are firmly seated against the bottom of the blockout. Care should be taken when installing any sections containing heat splices.
- 3.2) Protect all finished exposed surfaces from coming in contact with the elastomeric concrete or tack coat. These products will stain any surface including the surrounding concrete. Duct tape is recommended for adhering to the top surface of the Seal, and surrounding surfaces should be protected 12" to 18" on both sides of the blockouts.

Notes:

- 1.) The Seal may be installed while the primer is still wet, although the surface of the primer must be kept free of dirt, dust and debris.
- 2.) The wings of the Seal may not lay flat against the bottom of the blockout due to stresses in the material created during the manufacturing process. If the wings rise higher than $\frac{1}{2}$ " from the bottom of the blockout, cut the outer portion of the wing at every other hole to relieve the stress.

STEP 4

APPLICATION OF TACK COAT



- 4.1) Pour the entire contents of C/S Tack Coat Part B into C/S Tack Coat Part A.
- 4.2) Mix thoroughly with a $\frac{3}{4}$ " paddle mixer for 30 seconds.
- 4.3) Draw the mixture into a bulk caulking gun.
- 4.4) With the seal in place, bend up the wing of the seal and apply a liberal amount of Tack Coat under the wing. The Tack Coat should cover the entire surface beneath the wing and flow up through the holes in the wings.

Note:

Do not allow the Tack Coat to cure prior to applying the elastomeric concrete. Once the Tack Coat is in place begin to apply the elastomeric concrete directly over the uncured Tack Coat.

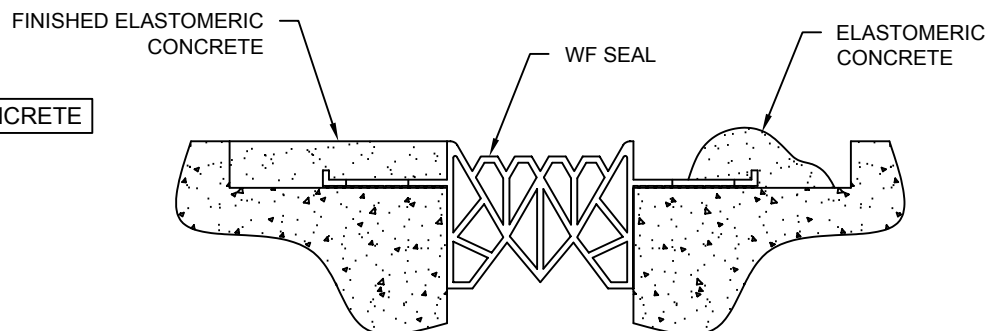
STEP 5

MIXING OF THE ELASTOMERIC CONCRETE

- 5.1) Pour the entire contents of C/S Elastomeric Concrete Part A and Part B into a clean 5 gallon bucket or larger container.
- 5.2) Mix thoroughly with a $\frac{3}{4}$ " paddle mixer for 30 seconds, without Part C.
- 5.3) While continuing to mix aggressively add Part C (aggregate) to the Part A and B mixture.
- 5.4) Mix for approximately 1 minute or just until all of the aggregate is coated. Do not over mix. Over mixing promotes a faster cure and will greatly reduce the working time of the elastomeric concrete.

STEP 6

APPLICATION OF THE ELASTOMERIC CONCRETE



- 6.1) Pour or trowel the elastomeric concrete mixture into the blockout, over the wing of seal.
- 6.2) Trowel flush with the top surface of the seal and the surrounding concrete surface.
- 6.3) Finish trowel or work the surface to insure good compaction and a smooth finish with no voids.
- 6.4) Apply any surface treatments, such as Black Beauty or anti-skid, to the wet surface of the elastomeric concrete.

STEP 7

COMPLETION AND CLEAN UP

- 7.1) Remove the protective tape and paper from the finish cover surfaces and the surrounding concrete slab before the elastomeric concrete fully cures.
- 7.2) Xylene should be used to clean any areas where the elastomeric concrete has come in contact with an unprotected surface of the cover system or the surrounding concrete.
- 7.3) The finished elastomeric concrete will cure in approximately 2 - 6 hours depending on surface temperature. Higher temperatures promote faster cure times.
- 7.4) Prevent vehicles from crossing the elastomeric concrete until it has fully cured.
- 7.5) Protect the WF Seal installation from heavy wheel loads that exceed the loading specifications by placing a piece of plywood spanning the entire system. The plywood will disperse the load, reduce the point impact of the wheel and protect the elastomeric concrete.

This completes the instructions for the installation of all WF Seal models.

