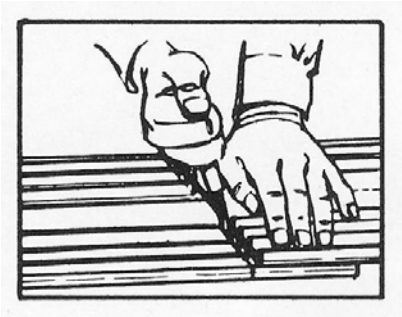
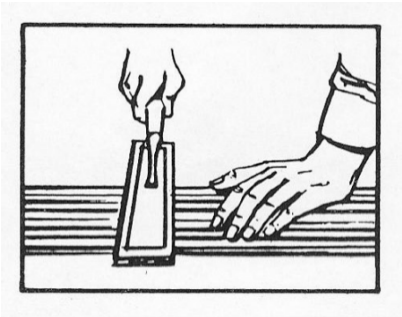
BUILDING TRUST

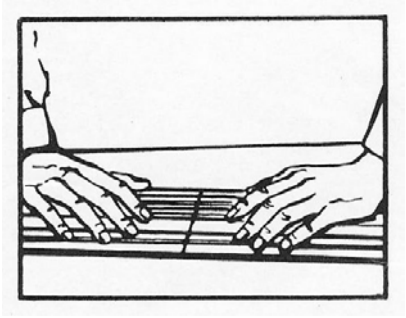
SPLICING TPER/PE WATERSTOPS

INSTALLATION GUIDE

Following is the proper procedure, as recommended by Sika for field splicing Westec TPER and PE waterstops:







1. Provide factory fabricated corners, intersections and transitions, leaving only straight butt joint splices for the field.
2. Use a worktable to create field splices. Table should be solid, have access to 110v power supply and have jigs and fixtures to aid splicing.
3. Cut ends square, using a circular saw or compound miter saw equipped with a carbide tipped blade (10" diameter with 40 teeth). This will ensure matching edges.
4. Preheat Teflon covered Sika Splicing Iron No. 213 to 410℉.
5. Press ends of cut waterstop firmly against the preheated iron. Maintain pressure until approximately 1/8" of melted material appears at the iron surface.
6. Quickly remove Splicing Iron and hold waterstop ends tightly together until they bond (approximately 60 seconds). **Note**: If you do not join the ends quickly the melt bead will skin over, resulting in an inadequate bond. Do not move, bend, stretch or stress the splice before the 60 second bond time.
7. When fabricating waterstop into horizontal tees, ells or crosses, always miter the ends at an appropriate angle (typically 45-degrees) so the continuity of the ribs and/or centerbulb is maintained. This will also produce a much stronger joint. **Factory fabricated corners, intersections and transitions are strongly recommended.**

Special Safety Notation: When splicing TPER and PE waterstop with a heated splicing iron, inhalation of the fumes may be harmful to your health. Splicing should be done only in areas with adequate ventilation.

QUALITY ASSURANCE

Waterstop splicing defects which are unacceptable include, but are not limited to the following:

1. Tensile strength less than 60% of parent section.
2. Use of adhesives, solvents or free lap joints.

3. Misalignment of centerbulb greater than 1/16 inch.
4. Misalignment that reduces waterstop cross-section area more than 15%.
5. Bond failure at joint, deeper than 1/16 inch or 15% of material thickness.
6. Combination misalignment and bond failure with net reduction of waterstop cross-section area greater than 15%.
7. Misalignment of waterstop splice resulting in misalignment of waterstop in excess of ½ inch in 10 feet.
8. Visible porosity in the welded joint, including pinholes.
9. Charred or burnt material.
10. Bubbles or inadequate bonding detectable with a penknife. If while prodding the entire joint with the penknife, the knife breaks through the outer portion of the weld into a bubble, the joint shall be considered defective. The industry is not using the spark test because the test by itself is not a good indication of high quality welds in waterstop. For example, a 3/16" thick waterstop could have a poor weld by only 1/16", resulting in a net tensile strength of 33% of the parent material. This unacceptable weld will pass the spark test.
11. Visible signs of splice separation when cooled splices are bent by hand at sharp angle.
12. Edge welding.

Provide destructive sampling of waterstop field welds at intervals determined by field engineer. A minimum of one field weld at the beginning and end of each day should be sampled. Make ¼ inch slices perpendicular to the weld on one half of the waterstop. Slice the remaining half along the weld. Welded section should exhibit consistency of material, and lack of porosity and charring. Welded material should not be noticeably different appearance from the parent material.

Sika Corporation - US
201 Polito Avenue
Lyndhurst, NJ 07071
United States
Usa.Sika.com

For More Information Contact
Sika - St. Louis Sales Office
3400 Tree Court Industrial Blvd.
63122, St. Louis, MO
United States
www.USA.Sika.com
Phone: 1-800-325-9504
Fax: 800-551-5145