GENERAL INFORMATION

WATERSTOP REPAIR - OPTIONS FOR REPAIRING DAMAGE TO INSTALLED WATERSTOP

The intent of this guide is to explain several options for repairing damage to installed PVC waterstops. While the possible types of damage are countless, the concepts described below can be adapted for a wide range of situations. Consideration should be given to a number of factors before selecting a particular repair method. Factors such as joint type (moving or non-moving), waterstop style (dumbbell, ribbed, centerbulb), type, and extent of damage shall be examined.

PVC Patches:

PVC patches work well when the damaged area lies in a smooth, flat area of a PVC profile. This repair method is generally limited to dumbbell waterstops where a large portion of the profile is smooth and flat. This repair requires that an area surrounding the damage be melted, and is therefore limited to relatively small areas of damage.

Clean the repair area of all debris, concrete, dirt, oil, etc., before commencing the repair. Cut a small patch from a flat section of a PVC waterstop and size to extend beyond the damaged area on all edges by approximately 1/2". The area surrounding the damage will need to be heated until a layer (approximately 1/16" thick) of melted PVC material develops. This requires the use of a thermostatically controlled, Teflon coated, heating iron.

Further, the iron must be configured so as to apply heat only to the localized repair area. This can be accomplished by clamping an aluminum block of appropriate size and shape to a standard iron. Apply a Teflon cover to the block extension. Simultaneously heat the repair area and the face of the patch until a layer of melted material develops on both. Quickly remove both the patch from the iron, and the iron from the repair area, and apply the patch. Apply firm pressure to the patch for approximately 1 minute. Allow complete cooling before subjecting the waterstop to stress. Please refer to Sika Greenstreak's PVC Waterstop Installation Guide for additional instructions.

WATERSTOP REPAIR WITH SIKA HYDROTITE IN NON-MOVING JOINTS:

Damaged waterstop in non-moving joints can often be repaired using a combination of SIKA HYDROTITE hydrophilic strip-applied waterstop and LEAKMASTER, a hydrophilic caulk. These products rely on expansion brought on by water exposure to create a compression seal within a joint. They are therefore limited to joints that have minimal movement.
Clean the repair area of all debris, dust, dirt, concrete laitance, etc. Apply a liberal bead of LEAKMASTER to the concrete along both sides of the damaged waterstop and extending approximately 12” past the damaged area. Place a length of SIKA HYDROTITE CJ profile along the existing waterstop as well as short lengths of the profile to the outer edge of the waterstop.

As shown. Seal the cellular ends of the SIKA HYDROTITE profile with LEAKMASTER.