SIKA® HYDROTITE
INSTALLATION OF “CJ” PROFILES

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INSTALLATION

INTRODUCTION

SIKA HYDROTITE is a state-of-the-art hydrophilic Waterstop. Comprised of a modified chloroprene rubber, SIKA HYDROTITE has unmatched durability and water sealing capacity. Expanding multiple times its original volume when exposed to water, SIKA HYDROTITE conforms to gap variations along the joint. This action ensures complete sealing even under high hydrostatic head pressures. Due to its slim profile, excellent concrete consolidation can be expected around the waterstop, with little chance of the profile being moved out of position when concrete is placed. The small cross section allows CJ profiles to be packaged in convenient 10-meter rolls.

SIKA HYDROTITE CJ profiles, as well as all other SIKA HYDROTITE profiles, are treated with a special delay coating to prevent the profile from reacting with fresh, moist concrete and expanding before curing takes place. Bond SIKA HYDROTITE profiles to smooth, even surfaces, free of dirt, oil, or laitance for best results. Maintain a minimum of 2” concrete coverage over SIKA HYDROTITE CJ profiles (minimum 4” concrete coverage for CJ-1030-4M and CJ-3030-M profiles) when using 3500 PSI or greater compressive strength concrete. Increase the coverage on reduced strength concrete. SIKA HYDROTITE CJ profiles may be installed in a formed groove of appropriate dimensions or directly to a plain flat concrete surface.

FORMING REQUIREMENTS

SIKA HYDROTITE CJ profiles are installed after the form is stripped from the first pour and before the second concrete pour is made. Therefore, splitting of the form is not required. SIKA HYDROTITE can be installed to the plain surface of concrete or in a formed keyway.

Due to the hydrophilic nature of SIKA HYDROTITE, installation of the profile should be timed as close as possible to the second placement of concrete. This will reduce the chance for premature expansion of SIKA HYDROTITE due to rainwater or ground water exposure. When extended periods are expected between pours along a common joint line, install...
SIKA HYDROTITE to a point slightly beyond the end of the first expected pour. Protect exposed length of SIKA HYDROTITE from moisture. In the event the exposed SIKA HYDROTITE exhibits expansion before the next placement of concrete, remove swelled material before splicing to a new length of SIKA HYDROTITE. Follow splicing instructions listed below.

SPLICING

SIKA HYDROTITE CJ profiles are designed with a cellular cross section. The cellular cross section allows the profile to compress slightly when concrete is placed and rebound as the concrete shrinks during cure. The cellular cross section also acts to control the expansive force placed on the surrounding concrete.

Straight lengths of CJ profiles should be cut square with a sharp knife or good pair of shears. Place several drops of a cyanoacrylate adhesive (i.e. Super Glue) on the cut ends of SIKA HYDROTITE and immediately join the ends together. Hold in position for approximately 30-45 seconds to allow the adhesive to set. Proper alignment and bonding of the cut ends will prevent water entering the cells of the profile. Future hydration of the waterstop will further seal the bond area.

Flat 90° corners should be spliced by miter cutting the two ends at 45° and proceeding in a manner similar to the above. When space permits, CJ-0725-3K and CJ-1020-2K can be bent to an inside radius of approximately 2 inches, eliminating a spliced joint.

Flat “T’s” and “X’s” should be made by butt splicing the legs with the use of cyanoacrylate adhesive. Vertical 90° corners, vertical “T’s” and vertical “X’s” should be butted and bonded with the cyanoacrylate adhesive. All splices can be further enhanced by placing a bead of LEAKMASTER at the splice.

BONDING TO CONCRETE

Remove all dust, oil, laitance, etc., from concrete surface prior to adhering SIKA HYDROTITE. Depending on concrete surface conditions, one of several adhesives can be used.

Normal forming practice leaves a sufficiently smooth surface for direct bonding of SIKA HYDROTITE to the concrete by one of several methods. SIKA HYDROTITE CJ-1020-2K and CJ-0725-3K profiles are available with a “peel-and-stick” adhesive backing for fast and easy installation. Simply remove the release paper and press the profile firmly against the concrete in the desired location. SIKA HYDROTITE profiles can alternatively be secured with SIKA HYDROTITE ADHESIVE. The adhesive should be applied to both the SIKA HYDROTITE profile and the concrete surface and allowed to dry to a tacky condition. Once this condition is met, place the SIKA
HYDROTITE profile into position. These methods work well when concrete surfaces are smooth and dry.

Concrete surfaces left rough due to jackhammering, extensive weathering, etc., should be brought to a smooth level condition. LEAKMASTER, a single component swellable sealant, can be used for this purpose when the concrete surface is dry. Apply a sufficient bead of LEAKMASTER to the rough concrete to ensure that a smooth level surface will result. SIKA HYDROTITE should be placed in position within 4 hours of application of LEAKMASTER. Concrete nails may be used on vertical or overhead surfaces to hold the profile in position while the LEAKMASTER cures.

A 2-part epoxy may also be used to level rough surfaces. SIKA GRENSTREAK EPOXY 7300 can be used on rough, wet concrete surfaces to bond SIKA HYDROTITE profiles into position. SIKA HYDROTITE should be applied to the bed of epoxy prior to final cure, approximately 30 minutes. Again, concrete nails may be used on vertical or overhead applications while the epoxy cures.

**IMPORTANT PRECAUTIONS**

SIKA HYDROTITE CJ type profiles should be used primarily in site formed concrete joints where limited movement is expected. SIKA HYDROTITE protects a joint from water migration by creating a compressive seal within the joint. Joints with excessive movement will diminish this compressive seal and compromise the seals’ effectiveness. While SIKA HYDROTITE CJ profiles can be wet-dry cycled many times, a constantly damp and/or wet environment is ideal.

Cracking of the concrete, caused by the expansion pressure of SIKA HYDROTITE, can be avoided by maintaining a 2” minimum concrete coverage. Increase this coverage if lightweight or low strength concrete (<3000 PSI compressive strength) is used or when using CJ-1030-4M and CJ-3030-M profiles.

SIKA HYDROTITE should be stored in a cool, dark, dry place. Exposure to moisture prior to installation may expand the SIKA HYDROTITE prematurely. If SIKA HYDROTITE is installed in an expanded condition, the effectiveness of the seal may be severely reduced.

Once installed, adequate measures should be taken to prevent exposure to rain water, ground water, etc., before the joint is covered with concrete.

**Limited Warranty:** Sika® warrants its products to be free of manufacturing defects and that they will meet Sika’s current published physical properties when applied in accordance with Sika’s directions and tested in accordance with ASTM and Sika’s standards. There are no other warranties by Sika® of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Sika® shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty, whether expressed or implied, including any warranty of merchantability or fitness for a particular purpose or from any other cause whatsoever. Sika® shall also not be responsible for use of this product in a manner to infringe on any patent held by others.