

# **Stratmore Construction Solutions Limited**

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# **IMPORTANT - READ THIS DOCUMENT BEFORE USE**

# Hydrotite CJ Profile Waterstops – Installation Method & Procedures

### This document applies to all Hydrotite CJ profiles including CJ-0720, CJ-0725 & CJ-1020

### **Hydrotite Installation Checklist**

Before installing Hydrotite CJ Profiles, please confirm that everybody using and installing Hydrotite have:

- 1. Read this document thoroughly. If anything in this document differs from the construction drawings, check with your engineer and/or confirm with Stratmore Construction Solutions Limited
- 2. Confirmed that the minimum coverage requirements are met, for both poured concrete and precast concrete (50mm minimum from all edges reinforced; 100mm minimum from all edges unreinforced)
- 3. Confirmed that any rebate for the location of Hydrotite is the correct width and no deeper than 5 mm maximum
- 4. Ensured that the concrete being placed will be properly vibrated and consolidated to avoid any potential voids.

For more additional details, please refer to the Hydrotite CJ Installation Instructions (Long) 2009 document and contact Stratmore Construction Solutions Limited if there are any questions regarding the use of Hydrotite CJ profiles in this project.

#### Installation

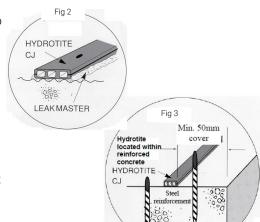
 Apply Hydrotite CJ to a smooth, clean, dry surface similar to a wood float or formed groove free from oils, grease, dust, debris, etc. Bug holes 4 – 5mm in diameter or depth should be grouted up with a non-shrink grout (or use Krystol Waterstop Treatment). A formed groove can easily be produced by attaching a wood baton 20 - 25mm wide by 5mm thick (as appropriate for the profile being placed) onto the joint side of the form (Fig. 1).



When placing Hydrotite CJ directly onto the concrete surface, ensure that the surface is clean as described above.

- 2. Using a solvent-based adhesive (such as Hydrotite adhesive), brush a 20 25mm wide strip onto the concrete surface where the Hydrotite is to be located. Do not apply the adhesive to the concrete wider than 20 25mm as this may interfere with subsequent concrete bonding. Two or more coats may be required for particularly porous surfaces. When adhesive is touch dry (no adhesive should stick when touched with knuckles), remove the backing from the Hydrotite CJ and place the Hydrotite CJ onto the concrete. Press down well, ensuring that there is adequate contact pressure. Place only the length of Hydrotite CJ to suit the section being poured. We do not recommend nailing of Hydrotite as it may be stretched or if loose form a curtain effect that would allow the concrete slurry or aggregate to get under or behind the Hydrotite.. Ensure concrete is properly vibrated/consolidated and free from voids that could allow water past the Hydrotite.
- 3. For rough concrete, fill any voids with Leakmaster and bed the Hydrotite onto the Leakmaster. The Leakmaster is to be applied to a clean dry surface via a standard caulking gun and is used to build up the rough concrete to a smooth surface i.e. the Leakmaster fills the imperfections in the concrete. Place the Hydrotite onto the bead of Leakmaster, using moderate hand pressure, press the Hydrotite down into Leakmaster until the Leakmaster oozes out from under the Hydrotite and there are no visible gaps between the Hydrotite and the concrete surface (Fig. 2)

To accommodate swelling forces upon expansion, Hydrotite CJ profiles **must** have 50mm or more good quality <u>reinforced concrete cover</u> from all edges (Fig. 3) or 100mm minimum cover from all edges for unreinforced concrete of at least 22.5MPa. Reinforcing must be located in concrete at all edges, otherwise increase minimum cover to 100mm for unreinforced edges. Locate Hydrotite as close to reinforcing steel as possible and/or centrally.



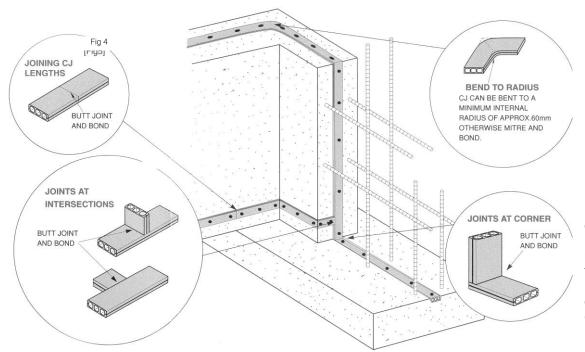
concrete wall

**Note**: The pictures and instructions refer to CJ-0725-3K. For CJ-0720-2K & CJ-1020-2K, all instructions apply however these profiles are only 20mm wide. References to 25mm widths must be changed to 20mm. Hydrotite CJ is not suitable for use in expansion joints or in suspended slabs over sensitive equipment or habitable areas.

Hydrotite Installation Details 2016 Issued: August 2016 Supercedes: December 2012 Page 1 of 2 Refer to Hydrotite datasheets and additional installation instructions for more information. The information contained in this data sheet, is to the best of our current knowledge, true and accurate, but any recommendations or suggestions which may be made are without liability on our part, since the conditions of use are beyond our control. Buyers and users are urged to make their own assessment of our products under their own conditions and for their own requirements. This installation guide provides details on the correct installation and concrete cover requirements for Hydrotite LO profiles; architects, engineers, installers and end users must ensure that the design and installation of Hydrotite is correct for the proposed application. Fraser Brown & Stratmore Ltd reserves the right to alter information without notice. Hydrotite should be protected from moisture or ponding of water prior to placement of concrete to avoid pre-expansion. If Hydrotite has been exposed to water check for expansion. Hydrotite turns from a dark blue colour to a light blue colour when it starts to expand. This acts as a visual alert for the contractor so that they can tell if the Hydrotite has pre-expanded prior to pouring concrete. If Hydrotite has been submerged in water for some time and has already expanded too much, simply remove the strip and replace it with new material. The expanded strip when dried will return to its original size and can be reused without losing its sealing/expanding properties. If reusing Hydrotite it may be necessary to adhere the Hydrotite strip to the concrete with a brushable grade adhesive (see step 2 previous page)

#### Jointing

Hydrotite CJ profiles should always be butt jointed (Fig.4) – never overlapped. Push sections of Hydrotite CJ together tightly to ensure a good joint. If required, Hydrotite CJ may be glued together using cyanoacrylate glue ("super glue"). In particularly difficult locations where voids may occur, use Leakmaster to fill any gaps (Fig. 3 over page). Also use a small bead of Leakmaster across any joins.



Typical Applications - Refer to datasheet & Stratmore Construction Solutions for details

#### Wall Joints

Position Hydrotite CJ-0720/25 centrally or towards either edge if preferred, observing coverage requirements. Position Hydrotite

CJ-0720/25 to protect steel reinforcing from water damage in reservoirs, pools, water tanks, etc.

#### Slab Joints

Position Hydrotite CJ-0720/25 centrally or towards either edge if preferred observing coverage requirements. Position Hydrotite CJ-0720/25 to protect steel reinforcing from water damage in reservoirs, pools, water tanks, etc.

#### **Pipe Penetrations**

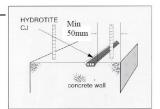
Position Hydrotite CJ-0720/25 around pipes and other fittings passing through concrete. Adhere Hydrotite CJ-0720/25 to the pipe or fitting using super glue or make an O-ring using super glue, then feed onto the pipe.

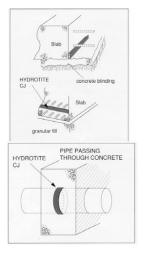
## **Precautions**

Ensure Hydrotite is located with the proper minimum concrete cover from all edges of 50mm for reinforced concrete and 100mm for unreinforced concrete minimum at least 22.5MPa. Note where reinforcing is to one side only, then unreinforced side must have 100mm concrete cover. DO NOT reduce concrete cover as concrete cracking could occur. Ensure Hydrotite is kept dry before installation. If you have any questions; contact us before use.

Rough surfaces, voids in the concrete due to poor compaction & consolidation or poorly applied Hydrotite may allow the passage of water even after the Hydrotite has swelled. Proper function requires good workmanship and adherence to these instructions. Please contact us if you have any questions.

For precast concrete, clean the surface to remove laitance, grease, mud, etc, and then affix the Hydrotite as above. Ensure proper concrete cover and rebate dimensions (if used).





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