XYPEX® Method Statement

REPAIR OF LEAKING TIE HOLES

No Water Flow

2020-04

There are several styles of form ties used in construction today. Regardless of the type of form tie or form tie assembly used they all can leave a pathway that can become a leak channel for water or other fluids.

It is impossible to detail all of the different styles of ties used in concrete formwork. The following procedure is based around the typical “Plastic Cone Snap Tie” forming tie system and the cone shaped indent left by it. These procedures can be used as a basis for repair and modified for other styles of form ties.

No Water Flow – Not Actively Leaking

STEP 1: Chip out the void left by the snap tie cone to a “U” shape as per the drawing shown below. The slot is to be approximately 1” (25 mm) in diameter and 1.5” (37 mm) deep. A “V” shaped finished void is not acceptable. Cut back any steel to provide an empty void to the desired depth.

STEP 2: Remove all loose material within the void and to 12” (300 mm) diameter area around the void. Clean, profile (ICRI CSP-3) and saturate this area with water. Allow water to be absorbed into the concrete and then remove all surface water.

STEP 3: Apply one slurry coat of Xypex Concentrate at a coverage of 1.5 lb./sq.yd. (0.8 kg/m^2) to the inside of the void and to a 12” (300 mm) diameter area around the chipped void. Application may be performed by brush or gloved hand.

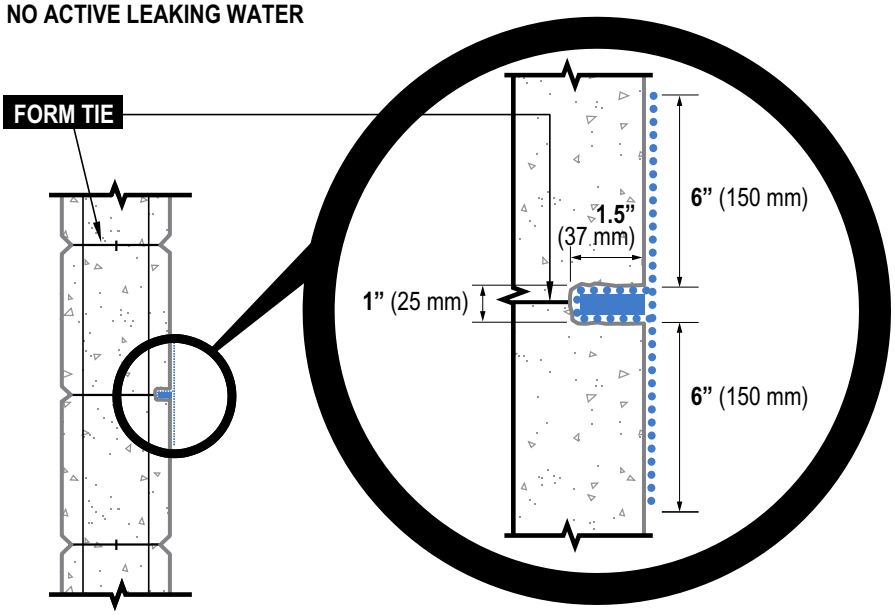
STEP 4: While the slurry coat is still tacky, fill the void to the surface with Xypex Concentrate Dry-Pac mixed in the following proportions: one part clean water to six parts Concentrate by volume. Blend Dry-Pac by trowel for 10 to 15 seconds only (lumps should be present in the mixture). Apply Dry-Pac by gloved hand, then compress it tightly using a pneumatic packing device or a hammer and dowel.

STEP 5: Wet Dry-Pac surface lightly with water, then apply a slurry coat of Xypex Concentrate at a coverage of 1.5 lb./sq.yd. (0.8 kg/m^2) over the repaired area and to a 12” (300 mm) diameter area around the filled void.

STEP 6: Cure by keeping moist by fog spraying periodically with water for two to three days. Open to water contact as per Xypex Coatings guidelines.

Note:
When early exposure to water is required:
1. In Step 3 – apply slurry to the inside of the void only.
2. In Step 4 – replace the top 1/4” - 1/2” (6 - 12 mm) of Xypex Concentrate Dry-Pac with Xypex Patch’n Plug.
3. Step 5 and Step 6 – eliminate.
4. Allow materials to gain sufficient strength for exposure to liquids.

NO ACTIVE LEAKING WATER



XYPEX® Method Statement

REPAIR OF LEAKING TIE HOLES

Against Flow of Water

Active Leaking

STEP 1: Chip out the void left by the snap tie cone to a “U” shape as per the drawing shown below. The slot is to be approximately 1” (25 mm) in diameter and 1.5” (37 mm) deep. A “V” shaped finished void is not acceptable. Cut back any steel to provide an empty void to the desired depth.

STEP 2: Remove all loose material within the void and to 12” (300 mm) diameter area around the void. Clean, profile (ICRI CSP-3) and saturate this area with water. Allow water to be absorbed into the concrete and then remove all surface water.

STEP 3: To stop active water flow apply Xypex Patch’n Plug to half the depth of void. Patch’n Plug is mixed by adding one part clean water to 3.5 parts Patch’n Plug powder by volume.

STEP 4: Apply one slurry coat of Xypex Concentrate at a coverage of 1.5 lb./sq.yd. (0.8 kg/m^2) to inside of the void over the Patch’n Plug and to a 12” (300 mm) diameter area around the chipped void. Application may be performed by brush or gloved hand.

STEP 5: While the slurry coat is still tacky, fill the void to the surface with Xypex Concentrate Dry-Pac mixed in the following proportions: one part clean water to six parts Concentrate by volume. Blend Dry-Pac by trowel for 10 to 15 seconds only (lumps should be present in the mixture). Apply Dry-Pac by gloved hand, then compress it tightly using a pneumatic packing device or a hammer and dowel.

STEP 6: Wet Dry-Pac surface lightly with water, then apply a slurry coat of Xypex Concentrate at a coverage of 1.5 lb./sq.yd. (0.8 kg/m^2) over the repaired area and to a 12” (300 mm) diameter area around the filled void.

STEP 7: Cure by keeping moist by fog spraying periodically with water for two to three days. Open to water contact as per Xypex Coatings guidelines.

Note:
When early exposure to water is required:
1. In Step 4 – apply slurry to the inside of the void only.
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3. Step 6 and Step 7 – eliminate.
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