While Xypex Bio-San C500 treated concrete will exhibit the same crack-healing properties as concrete treated with standard Xypex Admix, there are occasions where cracks might need to be directly repaired.

The following provides one recommended procedure for repair of cracks in Xypex Bio-San C500 treated concrete structures. These procedures are specific to repairs made on the sewage water side of concrete elements where Xypex Bio-San C500 admixture has been used. For exterior or non-sewage side repairs, the standard Xypex crack repair procedures as found at https://www.xypex.com/technical/statements should be used.

Step 1
Chip out crack/joint in a “U” shaped slot as per the drawing attached. The slot is to be 1” (25 mm) wide and at least 1.5” (37 mm) deep. A “V” shaped joint is not acceptable. The slot may be saw cut instead of chipped but ensure that the slot is dovetailed or otherwise shaped such that there will be mechanical interlock of materials placed into the slot at a later stage.

Step 2
Remove all loose material within the slot. Clean and saturate this area with water. Allow water to soak in and then remove all surface water.

Step 3
Apply one slurry coat of Xypex Concentrate at coverage of 1.5 lb./sq. yd. (0.8 kg/m²) to slot. Application may be performed by brush or gloved hand.

Step 4
While slurry coat is still tacky, fill the bottom 1/2” inch (12 mm) of the slot 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 block.

Step 5
Fill the rest of the slot to surface level with Xypex Mega-mix II with Bio-San. Mix the Megamix II with Bio-San to a mortar consistency. Mix no more mortar than can be used in 10 minutes. Apply the Megamix II with Bio-San into the slot by gloved hand or trowel.

Step 6
Remove any Xypex Concentrate from the outer surface of the concrete wall or element by scrubbing or grinding.

Step 7
Cure by keeping moist for two to three days. Open to water contact as per Xypex guidelines.
For repairs of cracks on the dry or negative side, including actively leaking cracks, use Xypex’s standard crack repair procedures. Crack repairs made on the dry or negative side will not adversely impact the anti-microbial nature of the Xypex Bio-San C500 concrete element.

Contact Xypex’s Technical Services Department for assistance.