For many years, engineers have looked for ways to fully inject repair polymers into cracked concrete structures. The general consensus is to seal off the crack with a sacrificial epoxy and install injection ports every few inches. Then thick epoxy is injected under high pressure into the crack with expensive resin injection pumps. The process is time-consuming, the epoxy is brittle, the equipment is expensive and the skill level is highly specialized. This makes epoxy injection slow, evasive, expensive and not really effective in the field.

At Roadware, we look for ways to make concrete repair fast, effective, less evasive, and easy.

Fast is better. When injecting Roadware 10 Minute Concrete Mender™ into concrete, the fast gel and cure time allows you to make a full depth repair from the bottom of the crack up to the top. If the crack you are injecting has a large hidden void, Concrete Mender™ repairs will start to gel and plug up the void in several minutes. Injection epoxy that takes several hours to cure will sink to the bottom of your crack and pool in the base before it has a chance to cure.

Effective. Concrete Mender™ is a Structural Polyurethane. It is about as hard as typical concrete with much greater tensile and bonding strength. It is super thin at 8cps with a surface tension 1/3 of water. It can easily penetrate concrete cracks and surfaces. Concrete Mender™ does not need to be forced into cracks with high pressure pumps and extraordinary methods. Concrete Mender™ can easily flow into cracks and fissures with just simple manual tools and a specially designed application mixer. You can repair more cracks in less time with less waste than ever before. Concrete Mender™ will create millions of molecular anchors that grab on the rocks in the concrete and build polymer chains that will restore aggregate interlock and structural integrity.

Easy Application. For a repair to be effective in the field, it has to be simple enough for crews to apply efficiently. Installation productivity saves money. No ports or pumps. No cutting open cracks and must less hazardous silica dust.
Drill a 3/8” diameter hole about one inch deep into the crack at several points along the crack. Clean the crack and holes with a vacuum.

Tape off the top of the crack and around the holes you just drilled with clear duct tape or thick clear repair tape. These tapes have a good adhesive that will stick to the surrounding concrete. Do not use packing tape or other tapes without testing them first.

Assemble a cartridge of Roadware 10 Minute Concrete Mender™ using our specially designed Soft-tip static mixer. Purge the cartridge of air as directed and insert nozzle into the first hole drilled.

Gently squeeze the handle of the gun and slowly inject Concrete Mender™ into the crack. Work product into several holes at a time, moving the cartridge back and forth among them. Allow time for the Concrete Mender™ to start gelling in the bottom of the crack. As the crack starts to fill completely, you will see Concrete Mender™ flow under the clear tape from one drilled hole to the other. You may see air bubbling up from one hole as you inject Concrete Mender™ into adjacent holes.

Once the crack is filled to refusal, move on to the next few drilled holes until the whole crack is filled.

After 10 minutes at 70 degrees or 23 C, pull the tape. Use a grinder or polishing device to remove and excess material and blend in the repair.

Hairline Cracks • Delaminations • Hollow Spots

Easy Injection repairs 24” deep or more.