

# CRACK CONFINEMENT

The SRS-660BI has a design tensile capacity of 35,496 lbs per 12". This strength however is limited by the bond strength of the composite to the concrete substrate. If a 400 psi concrete bond strength is assumed then the strength developed by the epoxy bond on either side of the crack is as follows: 6" x 12" x 400 psi = 28,800 lbs. The ability to add this kind of strength to a crack repair has significant benefits.

Once a crack develops and moisture is able to get to the reinforcing steel and corrosion begins. As the corrosion progresses it worsens the condition of the concrete around the reinforcing steel. In order to repair these areas, the deteriorated concrete needs to be removed and the rebar corrosion needs to be addressed. Once the corroded rebar is addressed, the concrete can be repaired. If the corrosion process is not completely stopped, over time, the expansion of the steel can cause the patch to fail. One method to reinforce against these types of failures is to wrap the repaired areas with a bidirectional carbon fiber. This will not only provide confining strength over the repair, but will also help make up for an section loss in the corroded rebar.

**SRS-660BI can be used to remedy a problem injection or to simply reinforce a crack repair to provide peace of mind that it will not re-open.**



**A common application for the SRS-660BI is the reinforcement of cracks related to corroded rebar.**

## SRS-660BI



**CARBON FIBER STRENGTHENING SYSTEMS**





**STRUCTURAL REINFORCEMENT SOLUTIONS**