CRACK STITCH®

CRACK STITCH®
PROJECT SPOTLIGHT

EXPERTS' CHOICE WINNER 2024

REPAIRING CRACKS ON ABOVE GRADE CONCRETE DECKS AT THE FORD MOTOR COMPANY HEADQUARTERS

WITH THE CRACK STITCH®

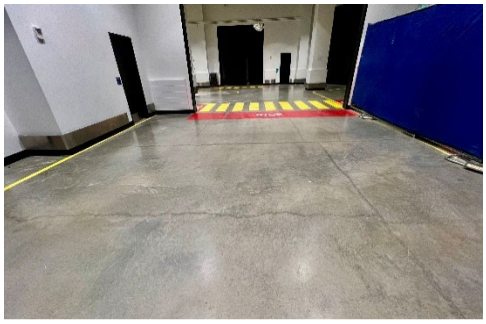


INTRODUCTION

The Ford Motor Company Headquarters located in Dearborn, MI had numerous concrete cracks occurring on above grade concrete decks within their facility which recently opened in 2025.

THE PROBLEM

Heavy loads were placed on the above grade concrete decks during construction and thousands of lineal feet of concrete cracking had occurred throughout the facility. The cracks on these above grade concrete decks were also worsening, becoming wider and longer with the passage of time.







THE SOLUTION

The Crack Stitch was chosen on this project to repair these cracks, as it is the strongest and most robust concrete crack repair system available on the market to repair cracks & prevent cracks from reopening. Upon reviewing the concrete design, the slab depth, and the severity of the cracking, it was determined that two Crack Stitches would be installed every 5 lineal inches in slots cut perpendicular to each individual crack being repaired with the Xtreme Epoxy 4070. The first phase of repair on this facility involved several hundred lineal feet which was completed in November of 2025 by Barton Malow (General Contractor) and Commercial Contracting Corporation (Subcontractor). A second and larger phase of repair was completed in July of 2026, with other sections of the facility to be repaired in the future. As each section of the facility is repaired with the Crack Stitch, a resinous floor coating system will be applied in these areas to achieve high-level aesthetics.

ABOUT THE CRACK STITCH

The Crack Stitch is a carbon-fiber & Kevlar stitch installed in tension with the crack (perpendicular) to fully repair and keep cracks from reopening in the future. The open grid design of the Crack Stitch allows the repair material used to form adhesive rivets throughout the entire stitch, much different than smooth materials used as concrete staples which allow “travel” to occur in the slot/channel. Each Crack Stitch has a design strength of 4,500 lbs. (tensile) and an ultimate strength of 6,600 lbs. (tensile) when ASTM tested. This stitch can be used to repair cracks in heavy commercial or industrial projects, along with secondary containment areas and other aggressive environments where concrete cracking is occurring.