



ABS Crack-Stitching System... The Hidden Solution

Environmental conditions, such as freeze – thaw cycles, and an unstable soil base leave concrete slabs vulnerable to transverse and longitudinal cracks in sidewalks.

ABS Concrete Systems has pioneered a unique system to address these issues. After extensive research and development the crack-stitch repair system has been successfully used on taxiways at the Calgary International Airport, numerous sidewalk Fusion-Crete® overlay repairs and the City of Calgary Public Works is currently training their workers in the application of the system.

Crack stitching is an effective means of stabilizing an existing crack and prevents eventual movement of the crack from causing delamination of an overlay system. By pinning the crack together in three dimensions, the movement of the crack is limited to rotation only. The purpose is to prevent the crack from moving apart, sideways, up or down.

Crack stitching will not eliminate the potential of a hairline crack appearing when exposed to stresses. However, this hairline crack is (considered a control crack) designed to withstand movement and minimize the effect on the overlay system.



CRACK STITCHING: Galvanized steel blades being installed before Fusion-Crete® is applied.

Crack Stitching Process

1. A series of saw cuts are installed perpendicular to the crack to a depth of approximately half the thickness of the slab. Saw cuts must be spaced ten to twelve inches apart.
2. A corrugated galvanized steel blade is installed in the saw cuts.
3. Fusion-Crete® slurry is then applied to fill the remaining voids in the saw cut and the crack itself.