Reconstituting Delaminated Concrete

There are many types of delaminated concrete conditions and they can occur for many reasons not always readily identifiable. But delaminated concrete is often the kiss of death and owners often demand replacement. Unfortunately even replacement is no guarantee that it won’t happen again. And such corrective action is costly and time consuming. With today’s environmental concerns one must question the waste of creating 1.2 tons of CO₂ for every ton of cement that is manufactured. Thus there is one more reason to find a solution to delaminated concrete other than ripping it out and taking the chance that delamination can happen again.

Express Polymers is pleased to have developed a unique solution to repair delaminated concrete utilizing our proprietary products and repair techniques. With this knowledge we have helped numerous facilities save thousands of dollars by avoiding the dismantling of existing concrete slabs with their huge cost of replacement and down time. Our techniques can be used on bridge decks where overlays have delaminated, as well as parking decks, office buildings, hospitals, etc.

A multi-story structure under construction discovered the existence of delaminations under a number of concrete floor installations where new concrete was poured over existing concrete slabs. Express Polymers Inc. was asked to establish a product application protocol using its experience and materials knowledge to enable a fast and simple repair to the delaminated decks. Our techniques are minimally invasive and don’t require the drilling of hundreds of injection ports and pumping epoxy into the cracks. This epoxy technology has been known to cause more damage to the concrete over time since epoxies will age degrade and become brittle.

Using Express Polymer products a selected surface area can be repaired and returned to service in minutes with minimal surface preparation. And no other product can provide the penetration capability of ultra thin 10-Minute Concrete Mender. Our gravity fill technique coupled with the occasional use of ‘Nelson Polystuds’® to further connect slabs together has proven to be most cost effective. Note the gap on the core in the photo at the right that was gravity filled with Mender from a penetration over 10 feet away.

Express Polymers, Inc.
Delivering knowledge and superior solutions for concrete results!

Nelson R. Tonet, P.E., President
P. O. Box 500, 500 Millers Run Road, Morgan, PA 15064
888.433.6922