

## MARSEAL® Crack Bridging Ability

Every secondary containment manufacturer makes claims regarding the crack bridging capabilities of their products. At the end of the day, most conventional containment systems cannot tolerate crack movement on the concrete surface of secondary containment areas, floors, chemical trenches or truck loading and unloading areas.

Over the last ten years, the U.S. Environmental Protection Agency (EPA) has realized a need to improve the regulation of hazardous wastes and the storage of chemicals. Since concrete is the main component in secondary containment areas and other areas subjected to chemical spills and attacks, these regulations have concentrated on those materials necessary for the repairing and protection of concrete. Acids, caustics and other chemicals may not only damage the concrete, but also seep through these structures and adversely affect the surrounding environment. Thus there is a great need for containment systems that offer excellent chemical resistance as well as the ability to protect concrete that may deteriorate or become damaged.

Containment systems are necessary because cracks in the concrete, caused by poor structural design, alkali aggregate expansion, overloading, etc., allow hazardous materials to penetrate into and through the concrete. An initial crack formation and subsequent opening creates very high strain at the interface of the concrete and the containment system. Most highly chemical resistant polymer containment systems have relatively low elongation capabilities that allow the strain from a concrete crack to propagate on through the containment system. As a result, crack bridging properties are seen as a basic necessity for the durability and integrity of containment systems on concrete surfaces. Most current polymeric coatings show very limited crack bridging ability in environments where corrosion control is needed. For years corrosion control research has attempted to develop a lining which will endure the cracks and strains of concrete movement while still retaining a monolithic surface. Most efforts have failed to produce the necessary combination of ingredients to accomplish this objective. Year after year, crack and joint repair continues to be a regular maintenance item.

Only with *MARSEAL®* Corrosion Resistant Linings, can long-term crack bridging be accomplished. Since all *MARSEAL®* linings are specially manufactured sheet membranes, they remain flexible through their serviceable life to effectively bridge cracks and joints while protecting concrete substrates from the ingress of corrosive/reactive liquids.

**MARSEAL®**  
CORROSION RESISTANT LININGS5020 Panther Parkway, Seville, Ohio 44273  
Ph. 800-321-5583 • Fx. 330-769-9334**MARSEAL® CRACK BRIDGING ABILITY**  
[www.blairrubber.com](http://www.blairrubber.com)