

## I.115 – Polymer Modified Cementitious Overlays

Polymer modified cementitious overlays consist of a proprietary blend of portland cements, various aggregates and proprietary hybrid polymer resins. The purpose of adding a hybrid polymer resin to the cement and aggregate is to greatly increase the performance characteristics and versatility of conventional cements, mortars and concrete materials.

Unlike conventional cement and concrete mixes, polymer cement overlays can be applied as thin as a single grain of sand or up to several inches thick without fear of delamination or typical product failure. In addition, polymer cement overlays are much more resistant to damage from salt, petrochemicals, UV, harsh weather conditions and traffic wearing.

Polymer cement overlays were introduced over twenty years ago, intended for use as a thin surface restoration material for concrete substrates. With years of successful and permanent applications, polymer cement overlays were introduced into to architectural concrete and commercial flooring industry in the early 80's where it's use has become an industry norm. To this day, polymer cement overlays are used for interior and exterior applications ranging from:

- **Skim Coat/Broom Finish Concrete Resurfacing** – Designed to restore and protect damaged, pitted, flaking and stained concrete back to the look of a new concrete surface. This application can even be “broom finished” if desired.
- **Concrete Regrading & Leveling** – Offers to ability to effectively repair and level concrete surfaces that have settled and become unsafe trip hazards. Regrading from several inches thick down to a feathered edge is possible.
- **Thin Stamped Overlays** – Similar to conventional stamped concrete, but only ¼” to ½” thick applied over existing concrete or wood substrate of any condition and at a fraction of hassle, cost and application time. The finished look is that of truly authentic tile, brick, slate, stone, wood plank and more.
- **Thin Stained Overlays** – Quickly becoming the commercial flooring industries most demanded and specified finish. A thin layer of polymer cement is applied over existing concrete or wood substrates and chemically stained with single or multiple translucent colors for a natural looking, elegant and durable flooring system. Optional patterns are often installed with cove type strips, similar to those used in terrazzo flooring.
- **Splatter Textures, Knockdowns & Slate Trowel Finishes** – The standard for commercial and residential pool deck finishes. Polymer cement is applied to the existing concrete substrate in a moderately textured finish (average of 1/8” thickness) in various patterns. Often times, the texture is knocked down with a trowel to slightly modify the appearance and feel of the finished application.

Elite Crete Systems Incorporated has led the polymer cement overlay industry with the most advanced technology in polymer resin based cement modification. Polymer cement overlays have been successfully developed, time-tested and used for many permanent applications by contractors, engineers, architects and public works agencies for internal and external applications, above and below grade.

Polymer cement overlays are permanent applications that offer longer life, durability, reliability, flexibility, water and chemical resistance, and optional safety (non-slip) textures that are not only cost effective and time saving, but can also be aesthetically appealing.

Polymer cement overlays are economical because they provide long term, durable renovation without the need for costly and continuous repairs normally associated with deteriorating concrete surfaces. It's fixed once, permanently and beautifully with a minimal amount of time lost, compared to traditional renovation projects.