

Technical Bulletin – ISR CM

COLOR MATCHING SYSTEM FOR POURED AND PRECAST CONCRETE



Today, Conproco is the most recognized name in masonry restoration. As a pioneer in masonry restoration Conproco has developed:

- Introduced first color-matched repair mortar for natural stone and terra cotta available in a wide range of standard colors
- Matrix - the first program that provided certified applicators the ability to accomplish on-site color matching of natural stone and terra cotta
- The KIOSK - a system that enables authorized local dealers to color match and *produce* stone repair mortar, repointing mortar, concrete repair mortar and pigmented terra cotta glazes with next day turn-around
- M3P Stain Kits – A punch list tool used to tweak the color of the repair, recreate veining or aging, or for adding variation
- Hands-on training in best practices of masonry restoration
- AIA certified courses in masonry restoration
- SWR Institute Validated Training classes in masonry restoration
- IMI supported training in masonry restoration

Conproco also has a long history of developing repair mortars for concrete that address a wide variety of demanding applications, from very rapid setting, to form and pour, vertical and overhead hand applied, spray applied and most recently mortars

incorporating proprietary ISR (Internal Stress Relief) technology.

We have combined the disciplines of masonry repair and concrete repair to offer the ISR System for the repair of poured-in-place and precast concrete structures.

The system includes three repair mortars; ISR AG (incorporating 3/8-inch aggregate for deep repairs and horizontal applications), ISR V/O (vertical and overhead patching and ISR CM (Color Match) repair mortar available in 23 standard concrete colors as well as custom color matching.

Repairing concrete structures most often requires patching. Standard repair mortars seldom come close to matching the parent concrete in color. The greater the patching, the larger the repairs, the more the aesthetic appeal of the structure is compromised by the variation in color between the parent substrate and non-pigmented repairs.



Coatings are used to hide the patching as well as to protect the parent concrete from environmental contaminants. Coatings have a life expectancy depending on the quality of the product and application. Once a structure is coated, the need to recoat is established.

Technical Bulletin – ISR CM

The concept of ISR CM is to closely match the repair mortar to the parent concrete to preserve the natural aesthetic appeal of the original structure. By “disguising” the repair, the need and expense of coating is eliminated. If desired, protective treatments such as Conpro Shield MX (silane/siloxane water repellent) and M3P (mineral silicate technology) can be used to preserve the original appearance without creating a need for continuing maintenance.

The ISR system has been developed to address concrete repair recognizing not only the aesthetic benefits but also initial costs. ISR CM can be applied to a minimum of 1 inch. When the repairs are greater than 1 inch deep, the non-pigmented mortars ISR V/O and ISR AG can be used to build out deep repairs. The final 1 inch lift is finished using ISR CM colored to match the parent concrete. This completely compatible system of products insures that the cost of concrete repairs is similar to other competitive repair mortars.

In 2008 Conproco along with The Getty Foundation and Brent Harris funded the publication of *DOCOMOMO Preservation Technology Dossier 8 “Restoring Postwar Heritage”*. We have been actively working since then to develop materials that better enable cost-effective methods of preserving our concrete structures that are faithful to their original design. The ISR CM system is the result of that effort.

The ISR system is built on proprietary technology. A full description of this is available at www.conproco.com.