

# 5410 MCCS

## PRODUCT DESCRIPTION

The 5410 Monolithic Concrete Coating System is designed to provide a breathable solid color floor surface while providing substrate protection from abrasion, wear, hot tires and chemical attack. The 5410 MCCS system can be applied over substrates with as much as 8 lbs of Moisture Vapor Emissions without peeling or blow off. NOTE: We do not recommend 5410 MCCS for industrial floors exposed to forklift traffic (use 4800, 5300 or 5073 as the topcoat in these types of extreme

## PRODUCT COMPOSITION

The 5410 Monolithic Concrete Coating Systems made up of the following components:

- 1) 4005 Epoxy Primer a two-component pigmented waterborne epoxy primer that increases the adhesion of the system to the concrete floor.
- 2) 5400 Chemical Resistant Topcoat a two-component waterbased chemical resistant polyurethane sealer used to seal the floor and provide a finished surface that resists abrasion, chemical attack, and UV degradation.
- 3) Rhino Grip- A very light non skid designed to stay suspended in mixed material for 30 minutes or longer.

## **COVERAGE RATES AND PACKAGING**

4005 WATERBORNE EPOXY PRIMER	600 ft/Kit 400 ft/Gal	Sold as 1.5 - gallon kit
5410 PIGMENTED TOPCOAT	250 ft/Gal 375 ft/Kit	Sold in 1.5- Gallon Kit
5410 Color Pack	375 ft/Pack	Sold as a pack
Rhino Grip Optional Non Skid Available in #30, #60 & #90 Grit	250 ft/pack	Sold as a pack

#### SUBSTRATE REQUIRMENTS

#### Concrete

Concrete shall be structurally sound and stable. Concrete shall be free of dust, dirt, grease, contamination, surface laitance, and other potential bond-breaking substances that could impair adhesion All cracks, gouges, and other surface defects need to be addressed prior to coating installation. Substrate and ambient temperatures must be above 50°F (10°C) during installation of coating. Relative humidity should not exceed 80% during installation of the coating. Environmental conditions must not be near the dew point during installation of the coating. Moisture Vapor Transmission of the substrate must not exceed 81b per 1000 ft<sup>2</sup> per 24 hours. For high MVT substrates, consult with a Versatile Building Products representative for recommendations.

## Other Substrates

Consult with a Versatile Building Products representative for recommendations over other substrates.

## **STEP 1) SURFACE PREPARATION**

(There are many methods of surface preparation for various substrates, many of which are adequate for this application. Consult a Versatile Building Products Representative for alternatives to the procedure outlined below, and methods of correcting problematic and contaminated substrates.)

#### Concrete

Pour water onto the concrete surface. Inspect area to see if water penetrates concrete (concrete will darken). If the concrete allows water to penetrate then proceed to clean the surface using V-100 concrete cleaner degreaser. Use liberal amounts on oils stains and scrub until the water no longer beads on stain. If water beads when doing the penetration test then the following additional preparation will be needed. Concrete must be mechanically profiled and prepared by shot-blasting, grinding, water-jetting, or other means of scarification to produce a Concrete Surface Profile (CSP) between #2

and #3, according to International Concrete Repair Institute (ICRI) Guideline No. 03732. Substrate and ambient temperatures shall be between 50°-85°F (10°-29°C.) Environmental conditions must not be near the dew point during installation of any component of the system.

#### STEP 2) INSTALLATION OF 4005 FAST DRYING EPOXY PRIMER

(Note: Material has a pot-life of 60 minutes based on an insulated 200 gram mass at a starting temperature of 77°F. <u>Warning: Large masses of mixed</u> and/or heated material will have a shorter pot-life.))

#### Mixing

Using a jiffy-type mixing blade at a minimum of 700 rpm, mix according to ratio listed on label of the 4005 A-Component with 4005 B-Component for two minutes. Mix for two minutes and transfer mix to a second mixing vessel and mix for an additional minute (transferring to a second mixing vessel prevents unmixed components clinging to the sides of the first mixing container from being poured onto the floor.)

#### Application

Begin by cutting-in the concrete footings and edges with a brush. Pour a band of the mixed 4005 material out onto the floor and begin rolling with a 3/8" nap roller. Work the material evenly to a wet film thickness of 5-6 mils (300 ft/gallon). Allow the 4005 to dry before proceeding to step 3.

#### STEP 3) INSTALLATION OF 5410 PIGMENTED TOPCOAT

Note: Material has a pot-life of 240 minutes based on an insulated 200 gram mass at a starting temperature of 70°F. <u>Warning: Large masses of mixed</u> and/or heated material will have a shorter pot-life.

#### Mixing

Use 3 bucket mixing: Add pre-measured unit "A" and pre-measured unit "B" to a clean mixing container. Add the correct corresponding REGULAR or DEEP base Color Pack (to obtain desired color) to the container and mix 2-3 minutes with a jiff-type mixing blade at minimum 700 rpm. Pour mixed material into application/transfer container and mix for an additional 30 seconds. Use this procedure throughout the coating process. Only mix enough material that can be used within the expected potlife.

## Application

Working only as much wet edge as can be properly handled. Begin by cutting-in the concrete footings and edges with a brush. Do not work edges more than 5-10 minutes ahead of the main body of the floor. Pour a band of the mixed material out onto the floor and begin rolling with a 3/8" nap roller. Work the material evenly to a wet film thickness of no thicker than 10 mils (125 ft/gallon). Warning: Applying material thicker than 10 wet mils may result in the formation of small foam bubbles.

Allow sealer 8-16 hours to dry before recoating, if necessary. Area may be opened to foot traffic in 16-24 hours depending on environmental conditions. Area may be opened to light vehicular traffic in 48-72 hours depending on environmental conditions. Chemical resistance will not fully develop for 5-7 days. Protect floor from spills during cure.

## **Optional Non Skid**

Apply desired amount of Rhino Grip Non Skid into mixture when mixing. Use a heavier grit size (#30-#60) for extreme non skid and a lower grit size (#90) for a lighter non skid finish. Roll out 5410 as listed above, the Rhino Grip will stay suspended in the mix for up to 30 minutes.

## 5410 CLEANUP

Immediately cleanup splatter marks and tools with water. Clean hands and exposed skin with mild soap and water, and/or citrus based hand-cleaner.

## ADDITIONAL CAUTIONS AND RECOMENDATIONS

- Coverage rates may vary.
- Mask all areas that need protection. If overspray or splatter occurs, cleanup with water immediately.
- Always wear protective clothing and equipment as required by OSHA and as necessary.
- Read Material Safety Data Sheets before commencing work.
- Use an 18-inch roller to help speed the application and uniformity of material.
- Be sure to backroll the topcoats to ensure a uniform coat.
- Not Suited for use over industrial floors exposed to forklift traffic (use 4800, 5300 or 5073 for extreme wear)