

# **CCSI** Densifier

**CCSI** Densifier is an advanced colloidal silica and Lithium Silicate based hardener and densifier for concrete. CCSI Densifier brings efficiency and cost savings to the process of polishing concrete.

Concentrate, 1 gallon yields 5 gallons of ready to use product covering about 2,500 sq. ft.

**CCSI** Densifier provides a range of nano particle sizes that efficiently and quickly lock up a variety of concrete substrates. Particle sizes range from 5 to 45 Nanometers in size

**CCSI** Densifier is safer and much more effective than conventional potassium or lithium silicate systems.

Works on overlays such as Agri Rok does not require Portland cement to perform.

**CCSI** Densifier can't "white out" if over applied like with any silicate densifiers. Any residue is easily removed with a floor buffer.

No VOCs or caustic residue to dispose of

**CCSI** Densifier can be used as a finishing aid to harden concrete as it is troweled.

#### Finishing and Curing Aid

One of the uses of our **CCSI** Densifier is as a finishing and curing aid. It works by closing off the small capillaries which transport water to the surface where it can evaporate, limiting the rate of moisture loss. It has a very positive effect on polishing operations after the concrete.

When used as a finishing aid or a curing aid: Concrete is constantly subjected to various drying conditions including, high concrete and/or ambient temperatures, low humidity, high winds, direct sunlight or work in heated interiors during cold weather, etc. Many of the high performance concrete mixes used on projects today are designed with low water/cement ratios and are prone to drying out prematurely.



When you use highly reactive silica like **CCSI** Densifier, directly into the surface during finishing operations, it acts as an evaporation retardant. It also provides a slippery surface for ease of trowelling. As a curing aid after slab placement it acts as a densifier. As a bonus you may not need diamonds to bring the floor to a polish during later operations (if it is finished properly)

# Instructions for use on floors undergoing polishing

## **Surface Prep:**

**CCSI** Densifier will produce a polish on 3,000 PSI and stronger concrete.

Low strength floors may require an application of **CCSI** Densifier prior to starting polishing operations.

Higher strength floors: Grind the floor to 200 grit prior to the application of **CCSI** Densifier.

## Application:

Apply **CCSI** Densifier with a pump sprayer to saturation; coverage should be 400sf to 600sf per gallon. Puddling is not necessary.

Keep the surface moist for 15 minutes and allow the surface to dry for 1 hour.

Use a floor buffer with a diamond impregnated pad (800 grit) to remove any residue and bring the floor to a luster.

Proceed to sealing. CCSI offers both water based and solvent based polished concrete sealer depending on the degree of protection required.

A burnished concrete effect can also be created by applying **CCSI** Densifier to a troweled concrete slab to provide a soft sheen appearance. The **CCSI** Densifier will help resist wear and control dusting. With the application of Nano Seal the burnished surface will resist stains from spills and provides a sealed surface in gloss or mat finish