

Xtreme Hard Densifier

Technical Data Sheet

Colloidal Silica is at the heart of concrete technology. It is a substance that reacts with the chemistry of concrete to produce more cementitious material, which translates into higher performance concrete.

Xtreme Hard™ Densifier

Technical Data/Spec Sheet

Concrete Finishes Section 3300, 3600

Product Description

Xtreme Hard Densifier is a blend of inorganic polymer materials that penetrates slab concrete to increase surface density and hardness. Utilizing a proprietary and “green” manufacturing process, Xtreme Hard Densifier’s unique formulation of uniform, concentrated, nano-sized particles, suspended in an ultra low surface tension liquid, penetrates deeply into concrete surfaces bonding with the cement components of the slab. Xtreme Hard Densifier makes an extremely hard, dense floor surface that has increased wear resistance to foot and fork lift traffic. It is water based and environmentally friendly and is VOC compliant in all states.

Xtreme Hard Densifier with reactive *Colloidal Silica* is a densifier/ hardener for concrete, used to improve the performance and appearance of concrete floors. It increases surface hardness, compressive strength, abrasion resistance, and liquid penetration- resistance. It is an integral part of the concrete polishing process, which can yield a glossy, reflective appearance similar to terrazzo or polished natural stone. Xtreme Hard densifier reduces dusting, efflorescence and ASR. It is a non-toxic, safe-to-handle liquid that does not require scrubbing in, removal, or hazardous residue disposal, and does not leave discoloring mineral salt deposits on concrete.

Xtreme Hard Densifier is a zero-VOC, environmentally responsible product that may help qualify for LEED credits for indoor environmental quality (EQ Credit 4.2: Low-Emitting Materials).

Primary Applications

- Interior or exterior concrete
- Warehouses/Distribution center floors
- Manufacturing plants
- Medical and Research
- Residential garages and floors
- Commercial floors

Features/Benefits

- Fills porosity/capillaries of concrete creating a permanent bond that makes floors and walls harder, less prone to dusting and absorption of most liquids.
- Meets all VOC regulations including California.
- Meets LEED qualifying standards.
- Resists penetration of many liquids including oils and many chemicals.

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- Helps minimize many rubber tire marks in warehouse applications.
- Application equipment may be cleaned with water.
- Will not discolor or blush over time.
- Not affected by bond breaker systems when used as directed.
- Will not leave a white cast on floor if over used or not removed.
- Reduces operating costs by increased ease of maintenance and cleaning

Performance dvantages

- Lower pH improves reactivity and stability of materials.
- Low viscosity and smaller molecular size provides deeper and more complete penetration.
- Will not peel.
- Reduces dusting.
- Can be applied to newly trowel green slabs.

Packaging

5 gallon pails (19L)

55 gallon drums (209L)

Technical Information

Dry time	20 minutes to 1 hours
VOC Content	0 g/l
Total Solids	18%
Active Ingredients	100% of total solids
PH	9
Freeze point	32°F
Slip Resistance	Does not change floor friction coefficient
Shelf Life	2 year
Coverage	500sf/gal
Density	Makes it 6-10 times more wear resistant
Depth of Surface Penetration	4 -10mm
Abrasion	ASTM C501 – 61 % increase in abrasion resistance
Hardening	ASTM C39 – 40% increase in compressive strength

Application/Directions

Xtreme Hard Densifier has two primary methods of application. The first method is designed for application while the slab is still green just after final trowel. The second is designed for use with existing or cured concrete.

New Concrete (Green)

Xtreme Hard Densifier may be applied to newly installed concrete after final trowel while slab is still green. Slab must be clean and free of all materials such curing compounds, bond breakers, form

release oils or construction dust and debris, etc. Dilute 6 gallons of water to one gallon of Xtreme Hard concentrate. Use a low pressure sprayer to achieve a consistent, even application and to ensure consistent coverage of the surface. Re-apply as necessary to keep surface wet for 20 minutes. Let surface dry. No cleaning, flooding, neutralizing or rinsing is necessary. If curing agent is to be applied, it can now be applied over dried application of Xtreme Hard Densifier.

Existing, Cured Concrete

Xtreme Hard Densifier can be applied to concrete of any age. Surface must be clean and structurally sound. Surface also must be clear of membrane forming curing compounds, sealers, oils, dust and other surface contaminants. For best results use a black scrubbing pad with Xtreme Hard Cleaner. If more aggressive surface preparation is needed to remove surface contaminants, 60-100 grit sanding screens can be used. A thorough cleaning is needed after additional scrubbing

Dilute 4 gallons of water to 1 gallon of Xtreme Hard concentrate solution. Use a low pressure sprayer to apply Xtreme Hard Densifier to form an even sheen across surface to ensure complete saturation of surface. Apply enough Xtreme Hard to keep the surface wet for 15 to 20 minutes. Let surface dry 1 hour before heavy traffic.

Clean-Up

Clean tools and equipment with water immediately after use. Residue from application and clean-up is non-toxic. Protect metals, glass, wood, paint or brick from contact with Xtreme Hard Densifier. If surface is accidentally over sprayed, wash immediately with potable water.

Maintenance

Routine sweeping, mopping and periodic mechanical scrubbing with a neutral pH, non-rinsing cleaner or water is needed. We recommend using Xtreme Hard Cleaner for all cleaning regimes.

Avoid any acidic cleaners. Acidic cleaners may etch the surface over time and cause a dulling of the finish. No aggressive scrubbing brushes such as straogrit, nylogrit or other aggressive scrubbing brush should be used. Avoid detergents containing hydroxides or sulfates.

Warranty:

When applied as directed, Xtreme Hard Densifier will reduce abrasion and wear to the surface of the concrete. Regular sweeping and cleaning of the concrete surface with Xtreme Hard Cleaner will maintain its performance and increase longevity. If applied by a certified applicator, Xtreme Hard Densifier is warranted to penetrate and chemically strengthen the surface of concrete to reduce dusting for 25 years.

This warranty does not cover incidental or consequential damages nor does it cover failure of mix design, penetrating curing compounds, cracking or conditions that are a result of poor concrete finishing. Damage from faulty maintenance procedures or accidental damage to the slab is not covered.

XTREME HARD VIETNAM

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