### **PENETRATING SEALERS & LIQUID DENSIFIERS**

Master Format #: 03 35 00

# **SURFHARD**

## LIOUID DENSIFIER AND DUSTPROOFER CONCRETE



#### **PACKAGING**

5 gal (18.9 L) pail Code: 060 05 55 gal (208 L) drum Code: 060 55

#### APPROXIMATE COVERAGE

See table below for coverage approximations.

#### **CLEAN UP**

Clean brushes, tools, equipment and flush sprayer with potable water immediately after use.

#### **SHELF LIFE**

2 years in original, unopened package

### **DESCRIPTION**

SURFHARD is a water-based magnesium fluorosilicate solution that reacts chemically with alkaline materials in concrete producing a more dense, durable, and chemically resistant floor. SURFHARD is especially effective at strengthening weak, soft, or dusting concrete surfaces. A patented penetrating agent in SURFHARD assists in its penetration and reactivity, enabling SURFHARD to dustproof and densify at a greater depth.

#### PRODUCT CHARACTERISTICS

#### **FEATURES/BENEFITS**

- Densifies and dustproofs concrete surfaces
- Prolongs floor life
- Resists acids, alkalies, oils and salts
- Improves concrete that is carbonated, soft, or powdery
- Can be used without interrupting production schedules

SURFHARD helps protect concrete APPEARANCE against the harmful effects of:

- Caustic soda
- · Ammonium chloride
- · Calcium chloride
- Solvents
- Sodium chloride
- Fuel oils
- Soap solutions
- Sugar solutions

#### PRIMARY APPLICATIONS

- Concrete floors, especially those with carbonated, soft, or dusting surfaces
- Schools
- Industrial floors
- Commercial buildings
- Residential basements

SURFHARD is a clear liquid that does not change the color or appearance concrete. Immediately application, the color of the treated concrete may initially appear darker. As SURFHARD cures and dries out, the treated concrete will have little change in appearance. Treated concrete will slightly bead water and other liquids.

#### **APPLICATION PROPERTIES**

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Foot traffic: 4 to 6 hours Wheel traffic: 4 hours VOC content: ≤ 5 q/L

#### **COVERAGE**

The number of coats, dilution ratios, and coverage rates are dependent on the texture and porosity of the concrete. Coverage rates and material requirements below are approximations for steel-troweled concrete surfaces. Extremely porous or dusting surfaces may require less dilution, lower coverage rates, or additional coats and must be determined on the jobsite.

	Dilution Ratio (Surfhard:Water)	Coverage Rate, Diluted Surfhard	Volume of Undiluted Surfhard Required for 1000 ft² (93 m²)
1st coat	1:2	150 ft²/gal (3.7 m²/L)	2.2 gal (8.3 L)
2nd coat	1:1	200 ft²/gal (4.9 m²/L)	2.5 gal (9.5 L)
3rd coat	2:1	300 ft²/gal (7.4 m²/L)	2.2 gal (8.3 L)

### **DIRECTIONS FOR USE**

**Surface Preparation:** The surface to be treated should be clean, free of curing compounds, sealers, paint or any other contaminants that could prohibit penetration of SURFHARD. Membrane forming curing compounds should not be used on new concrete if SURFHARD is to be applied, unless a dissipating curing compound such as KUREZ DR VOX is used and cleaned off the surface after the curing period. For best performance, concrete should be dry before applying SURFHARD. New concrete surfaces should be at least 7 days old prior to application. Extremely soft and porous surfaces should be saturated with water prior to application. When the surface is dry, apply the 1st coat of SURFHARD and proceed as indicated under Placement below. This pre-wetting concentrates the chemical at the top level of the concrete. The final coat will then harden at the top surface and yield maximum wearing and resistance qualities. In some instances, or in some selected areas, a surface may require an additional application of undiluted SURFHARD to complete hardening and dustproofing.

Mixing: SURFHARD is easily diluted in water with mild agitation.

**Placement:** Flood each coat of SURFHARD onto the surface and spread with a soft fiber broom, squeegee, or mop. Allow the solution to soak into the concrete for 10 to 15 minutes and redistribute any puddles that remain. Treated surfaces should be thoroughly dry between coats. Drying time may vary from 4 to 12 hours depending upon the temperature, humidity, and whether the concrete is indoors or outdoors. As the various coats of SURFHARD are applied, each succeeding coat will yield increased coverage because the concrete surface is in the process of hardening and becoming denser. After the third coat, the floor should be thoroughly flushed with water and scrubbed with a stiff broom to remove any residual material. If the floor should show patches of white upon drying, immediately flood with water and scrub the floor with a mechanical scrubber, rinse and dry. Do not attempt further treatment.

**NOTE:** All three coats may not be necessary to harden the floor. If the floor should show patches of white on drying, immediately flood with water and scrub the floor with a mechanical scrubber, rinse and dry. Do not attempt further treatment.

### PRECAUTIONS/LIMITATIONS

- SURFHARD is not recommended for application to colored concrete surfaces.
- Allow the product to dry 4 to 6 hours at 70 °F (21 °C) before exposure to traffic or rain.
- SURFHARD is a water-based material and must be kept from freezing.
- If excess SURFHARD is left on the concrete surface, a white residue may form and should be removed by scrubbing immediately. If this residue is allowed to dry, removal may require mechanical means such as sanding or grinding.
- In all cases, consult the Safety Data Sheet before use.