DUCTILCRETE® SHL 20 Surface Hardener

High-performance Lithium Silicate Sealer, Densifier and Dustproofer for concrete.

Product Description

DUCTILCRETE® SHL 20 surface hardener is a high-performance liquid lithium silicate sealer/ densifier for concrete surfaces. DUCTILCRETE® SHL 20 surface hardener penetrates and reacts with cured concrete, producing calcium silicate hydrate within the concrete pores. Treated surfaces will remain breathable while reducing porosity, dusting, and water permeability and increasing abrasion resistance.

DUCTILCRETE® SHL 20 surface hardener protects the concrete from deterioration, and is specially formulated for residential, commercial and industrial concrete floors like:

- Warehouses and manufacturing plants.
- Distribution centers.
- Parking decks – garages.
- Retail stores and shopping malls.
- Healthcare and hospitals.
- Commercial offices.
- Institutional buildings.
- Residential buildings.

Product Advantages

- Enhance overall surface durability.
- Improves abrasion resistance, light reflectance and gloss.
- Easy and low maintenance application.
- Reduce dusting, porosity and water permeability.
- When properly applied, will not leave the whitish blush characteristic of sodium silicate sealers.
- Does not contribute to Alkali Silica Reaction (ASR).
- Can be used interior and exterior.
- Fast curing. Ready for traffic in one hour for most floors.
- Breathable.
- Apply on new or existing concrete.
Application

- DUCTILCRETE® SHL 20 surface hardener may be applied on freshly placed concrete after the final finishing and to existing (cured) concrete.
- Always apply DUCTILCRETE® SHL 20 surface hardener to a clean concrete surface free of dust, laitance, curing agents, impregnation, coatings bond breakers, oil, dirt, grease or debris that will reduce penetration.

For freshly placed concrete

- May be applied immediately after finishing or after joints have been cut.
- After final finishing, or cutting of joints, apply a single coat of DUCTILCRETE® SHL 20 surface hardener with a quality low pressure sprayer.
- Uniformly spread the DUCTILCRETE® SHL 20 surface hardener with a soft broom or microfiber applicator to thoroughly coat the concrete eliminating any puddles or excess. Apply enough material to keep the surface wet for 15–20 minutes.
- Apply additional DUCTILCRETE® SHL 20 surface hardener to porous areas that dry quickly.
- Any excess DUCTILCRETE® SHL 20 surface hardener that dries on the surface will appear as a dry powder residue and can be removed with a stiff broom, power sweeper, or floor scrubbing machine.
- An ASTM C309 compliant curing compound may be applied.

For existing concrete

- Clean surface to remove any dirt, laitance, curing compounds or coatings that may prevent DUCTILCRETE® SHL 20 surface hardener from penetrating the surface.
- Apply the DUCTILCRETE® SHL 20 surface hardener with a quality low pressure sprayer, in a single saturating coat.
- Uniformly spread the DUCTILCRETE® SHL 20 surface hardener with a soft broom or microfiber applicator to thoroughly coat the concrete eliminating any puddles or excess.
- Apply enough material to keep the surface wet for 15–20 minutes. Apply additional the DUCTILCRETE® SHL 20 surface hardener to porous areas that dry quickly.
- Let treated areas dry. Remove any dried powdery residue with a stiff broom or floor scrubbing machine.

Final Finishing

- Treated concrete surfaces with DUCTILCRETE® SHL 20 surface hardener will increase in hardness, durability and shine over time and regular maintenance.
- To enhance the surface sheen, buff or burnish the dry concrete surface with an orbital floor machine or high-speed propane burnishing machine in both directions with a black, then red floor cleaning pad.
- An additional gloss can be achieved on treated concrete surfaces by burnishing with a diamond-impregnated 800 grit or hogs hair pads on a high-speed machine. Please consult a professional applicator for this type of procedure.

Coverage Rates

Coverage rates will vary with concrete porosity.
Fresh, Uncured, Burnished Concrete 800-1000 ft² / gal
Existing Steel Troweled Concrete 400-500 ft² / gal
Existing Float Finished Concrete 250-350 ft² / gal

Technical data

| Appearance | Clear |
| Specific Gravity | 1.11 |
| Weight | 9.3 lbs./gallon |
| VOC Content | 0 g/l |
| Freeze Point | 32°F |
| Dry time | 1 to 2 hours. |
| Shelf life | 2 years from date of manufacture (in the original tightly closed containers) |

USDA Accepted for Indirect Food Contact

Packaging & Storage

55 gallon plastic Drums.
5 gallon plastic pails.

Limitations

As every project and application can vary, it is the contractor’s responsibility of determining compatibility by performing field test simulating actual jobsite conditions.

Do not use acidic or citrus based cleaners. Although DUCTILCRETE®SHL 20 surface hardener will improve the ability of the treated surface to resist liquid penetration and staining, spills should be cleaned up quickly to minimize any damage.

Applied by a professional applicator.

Health and Safety

Read and understand the product label and Safety Data Sheet (SDS) for each system component. All users should acquaint themselves with this information prior to working with the products and follow the precautionary statements.

SDSs can be obtained by contacting your local GCP representative or office, by calling GCP and in some cases from our web site at gcpat.com.