



Production Description

COLORHARD® is a ready-to-use, shake-on type, concrete surface hardener and dust proofer manufactured in natural concrete gray plus a variety of colors. It is a product designed to be applied to freshly poured concrete where the high strength cement and quartz aggregate become permanently fused to the concrete substrate. This high concentration of aggregate and cement at the surface gives the floor a durable, rock like hardness that will stand up under the most severe traffic conditions. COLORHARD® is a special surface treatment that eliminates bonding problems normally associated with toppings.

The combination of quartz aggregate, chemically pure oxide pigments for color and high strength cement in COLORHARD™ provide a low maintenance concrete surface that is extremely hard, durable, decorative, and slip-resistant when finished with a broomed or textured finish.

COLORHARD™ is designed to be used on interior or exterior concrete. It is recommended where a high quality, hardwearing concrete surface is desired. Use on high traffic walk-ways, warehouse, auditorium and factory floors, aisles, turnarounds, and other areas where a heavy duty concrete surface is required. COLORHARD™ may be used in conjunction with a 2-inch (5.1 cm) or more topping of concrete.

Color Availability

Standard colors - 16 shown on Surface Colors chart

- Plus: Terra Cotta
- Natural available in pails or 50 lb (22.7kg) bags

Custom colors:

- Are available on request
- Require lead time for preparation
- Have additional cost
- Minimum order size is 300 lbs (136.1kg)

Installation

Before using this product, please refer to the Material Safety Data Sheet for additional information. Proper handling precautions MUST be followed. The conditions of use, handling, and application of this product and information (whether verbal or written), including any suggested formulations and recommendations, are beyond Lambert Corporation's control. Therefore, it is imperative that testing be performed to determine satisfaction and suitability for intended use and health, safety, and environmental issues. The following information is meant as a guideline of best industry practices. While Lambert Corporation does suggest adherence to these guidelines, unforeseeable variables and/or developed successful installer practices may cause variation in methods and/or results.

These instructions assume that ACI standards and recommended techniques have been followed in construction of floors or placing of proper bonded restoration toppings of 2-inch (5.1cm) or more.

Concrete Substrate

Use a placeable and finishable concrete mixture of the required strength design with a slump not to exceed 4-inches (10.2cm), and with no more than 3% entrained air. For heavy-duty traffic areas, concrete designed for at least 4500 PSI (31.0MPa) should be used. At temperatures below 60°F (15.6°C) or above 85°F (29.4°C), follow ACI Recommended Practices for Cold or Hot Weather Concreting.

Cautions - Air-Entrained Concrete

Excessive air content in the concrete will frequently produce a very rubbery condition that is difficult to finish to a level, smooth surface. Unusually high amounts of air may separate from the mix and become entrapped in the form of bubbles below the surface being finished. These bubbles not only prevent trowelling the floor to a level surface but also can produce blisters.

Placing and Consolidating Concrete

Deposit concrete between previously placed screed points with the least possible handling. Vibrators may be used to consolidate concrete. Strike off concrete level with a true wooden strike off bar. Immediately behind the strike-off operation, the concrete is further leveled and consolidated with a wooden Darby. This operation must be completed before any free moisture (bleed water) rises to the surface. If there is free-bleed water on the surface, remove it prior to first floating. Float areas to an even surface that corresponds to the finished grade as soon as the concrete will handle weight of finisher.

Shake-On Application

When available/applicable, refer to project specifications COLORHARD™ application rates, usually stated in terms of "lbs per 100ft²" of surface area. When the substrate has reached the point where no excess moisture appears at the surface and the surface will properly hold the aggregates,

COLORHARD™ is applied evenly to the surface by the broadcast or shake-on method. Apply by hand, allowing the shake-on material to sift through the gloved fingers while moving the hand to obtain a uniformly thick application over the surface. Use of a spreader will help speed application in large areas. Do not use a shovel to throw or broadcast hardener by shovel. Apply as soon as possible to areas doorways since these areas lose moisture more rapidly. Water must not be added to the surface during application or finishing. The moisture must come from the substrate in order to ensure adequate bond and density.

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| <p>Packaging:</p> <p>60 -lb (27.2-kg) Pail (5-gal)</p> <p>50-lb (22.7kg) bag in Natural Gray Only</p> |
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SURFACE HARDENERS

COLORHARD™

MASTER FORMAT: 03 35 16
03 35 33 // 03 53 15 // 32 13 16 . 23

The first **COLORHARD™** application should consume 50 to 60% of the total specified poundage, with the balance held for a second application and final touch up. With wooden hand floats or power floats, float the shake-on material applied adjacent to walls, forms, columns and doorways as soon as possible. Finishers using a power trowel with float blades should float the shake over all other areas as soon as the **COLORHARD™** material has absorbed moisture from the concrete beneath it (this will be apparent by surface darkening) and as soon as the float blades do not mark the surface. Float just enough to bring the moisture through the shake-on material and to achieve a "paste". Time the floating so it will not be necessary to sprinkle water on the dry shake surface. Do not steel trowel at this time.

The second application is then applied immediately so it can absorb the moisture through the first shake material before it evaporates. Apply the second **COLORHARD™** shake at right angles to the first one for more uniform color and thickness. When second application has absorbed moisture (indicated by darkening of the surface) float the surface with a power trowel equipped with float blades or disc float. It is important to achieve a "paste" consistency (low water/cement ratio) that is then worked into and on the concrete substrate and becomes a dense surface with a high compressive strength. The surface can be further compacted by additional floating if time and setting characteristics of the concrete permit. When concrete is just barely hard and firm, steel trowel uniformly to a smooth finish. This is a "time sensitive" operation; never re-wet surface.

Finishes

Surface may be "broomed", smooth, scored, or textured if desired. Smooth finishes that require excessive steel trowelling are not recommended unless the poundage is increased to a minimum of 1-pound per square foot (4.9kg/m²) of surface area. Broom finishes are recommended for most exterior surfaces.

Curing and Sealing

COLORHARD™ may cured and sealed with Lambert cure and seal products. Contact Lambert for more information.

Protection

After curing and sealing, the area should be segregated. Alert other trades to the need for special protection against the rolling or sliding of heavy loads across the surface until concrete has been cured 14-30 days.

Limitations

COLORHARD™ is not a topping material that is installed after the concrete has hardened. It is designed to become the surface part of freshly placed concrete.

Care must be taken not to overwork the surface (destroying the glue line bond) when installing **COLORHARD™** over 2-inch (5.1cm) or more topping of fresh concrete.

Technical Data

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| Aggregate Type | Quartz |
| Aggregate Size | 14-35 mesh |
| Cement | Portland |
| Pigments | Oxides |

Coverage

- Heavy Duty Industrial Use - 75 to 100 pounds per 100 ft² (3.9-4.9kg/m²) of surface area
- Medium Duty Industrial Use - 55 to 80 pounds per 100 ft² (2.7-3.9kg/m²) of surface area.
- Light Colors - 80 to 100 pounds per 100 ft² (3.9-4.9kg/m²) of surface area is minimum poundage to achieve good uniform color over a gray concrete substrate.

Clean-Up

Product can be cleaned up by sweeping, paying attention to minimizing the creation of excess dust.

First Aid

Cement powder or freshly mixed concrete may cause skin injury. Avoid contact with skin and wash exposed skin areas promptly with water. If any cement powder or mixture gets into eyes, rinse immediately and repeatedly with water and get prompt medical attention.

**KEEP OUT OF REACH OF CHILDREN.
FOR INDUSTRIAL USE ONLY.**