



System Information

BD Classic 70-45

Polyurethane Sealer & Glaze

Description

BDC 70-45 is a clear, single component, solvent based, VOC compliant sealer and glaze. It is a very hard polyurethane that offers better gloss, UV resistance and stain resistance than most other sealers. The solvent base allows the material to penetrate and adhere to concrete, porous brick & unglazed tile and most types of decorative acrylic cement coatings. BDC 70-45 creates a glossy “wet look”.

Uses

BDC 70-45 is designed to seal and create a “wet look” on concrete, unglazed brick or tiles and many other masonry surfaces. Perfect to seal & glaze stamped concrete, stained concrete, and decorative acrylic cement systems.

Advantages

- UV Resistant
- VOC Compliant
- High Gloss
- Excellent Adhesion
- Chemical Resistant

Finish

Gloss

Color

Clear

Coverage

The coverage will vary depending on the surface. BDC 70-45 will cover up to 400 square feet per gallon on a smooth surface and between 250-300 square feet per gallon on a rough/porous surface. Test product over small area of the substrate to determine coverage and whether or not a 2nd coat is needed.

Packaging

1 & 5 gallon pails

Inspection

Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170). All moisture should be kept away a min. of 72hrs before application and a min. of 72 hours after installation. This includes sprinklers, rain, fog, dew, etc.

Before starting flooring work, test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts have a tendency to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is ran, and cannot be used to predict long-term conditions.

Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for a floor coating's installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, *Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride*. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 3.5lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure for an epoxy flooring installation. If the reading is any higher, please consult your B.D. Classic Salesman for further instructions.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or all together failure of the coating system. Testing is the responsibility of the applicator. B.D. Classic bears no responsibility for failures due to any of the above conditions.

Thinning

Up to 25% acetone may be added to thin material for better absorption, increased coverage, longer working time, and to minimize bubbling.

Application

BDC 70-45 may be sprayed, rolled or brushed. Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be cut in using a brush. Pour the remaining material near the cut in area and spread evenly using a 3/8” – 1/2” non-shed, solvent resistant roller cover. Apply quickly and *do not over roll*, as product will begin to “tack-up” as the curing process occurs. Thinning with acetone will help facilitate installation in most applications.

For spraying purposes, use a heavy-duty pump pesticide sprayer (i.e. Hudson, Ortho). Use a low volume fan (generally colored yellow) for easiest

application. Spray as lightly as possible to avoid puddling. There is no need to back roll product unless spraying over a previously coated surface.

As a sealer over concrete: Apply as above thinning with up to 25% acetone.

Drying Time

Allow 8 hours before light foot traffic or recoating. Normal traffic may be permitted after 24 hours. Allow 7 days vehicle traffic. Allow 72 hours before placing heavy objects on the surface.

Recoat Time

Apply second coat after first coat is completely dry. Do not wait longer than 24 hours before applying second coat. If existing coating has been cured for longer than 24 hours, sand the surface with 100 grit sand paper, remove debris and wipe with acetone just before new application.

Handling Precautions

Material is flammable. Extinguish all flames, pilot lights and electric motors until all vapors are gone and the coating is hard. The vapor is harmful. Use only with adequate ventilation and/or appropriate cartridge type respirator. Avoid contact with skin and wear protective gloves. Read Material Safety Data Sheets before using.

Slip and Fall Precautions

BD Classic recommends the use of slip-resistant aggregate in all coating or flooring systems that may be exposed to wet, oily or greasy conditions. These aggregates can be incorporated into the materials

using different methods to achieve varying profiles and degrees of slip-resistance. However, textured surfaces can be slippery under certain conditions. This type of activity on the flooring surface, maintenance procedures and type of footwear may all be factors to consider when deciding the degree of slip-resistance needed for given area. BD Classic or its sales agents will not be responsible for injury incurred in a slip and fall situation. It is the end users' responsibility to provide for their own safety and to determine the suitability of these coatings for their particular application.

Limitations

- Do not apply in temperatures below 50°F or above 90°F.
- Do not apply unless temperature is 5° above the dew point or if rain is expected within 24 hours.
- Do not apply on damp or moist surface as it will whiten and may cause delamination.
- Do not allow any BD Classic products to freeze.
- Apply on a test area before starting actual job.
- Surface will become more slippery.
- Prior to coating previously sealed surfaces, do a small area to test for adhesion.
- Do not apply over 10 Series or other water-based acrylics.

Clean Up

Uncured material can be removed with acetone or similar solvent. To remove cured material, consult a BD Classic Representative.

Technical Data

V.O.C.	< 100 grams/liter
Weight/gallon	8.0 lbs.
Weight Solids	45%
Viscosity @ 77° F (Brookfield)	30-40 cps
Dry Time @ 77° F	3 hrs.
Direct Impact	140 inch-lbs.
Reverse Impact	40 inch-lbs.
Pencil Hardness	2H
Taber Abrasion, CS 17 Wheel, 1000g load, 1000 cycles	8.4 mg loss
Four Hour Spot Tests	
IPA	No Effect
MEK	No Effect
Toluene	No Effect
50% Sodium Hydroxide	No Effect
50% Phosphoric Acid	No Effect
Aniline	Stain Only
50% Sulfuric Acid	Stain Only
37% Hydrochloric Acid	Lifting
100% Acetic Acid	Failure