

BROOM FINISH

COMMERCIAL TRAFFIC CONCRETE OVERLAYMENT

QUICK FACTS

PRODUCT NAME	BROOM FINISH
PACKAGING	50 lb. Bag (22.7 kg)
FORMULAS	Gray
COVERAGE*	1-50 lb. Bag (22.7 kg) bag = approx. .46 ft ³ Base Coat = 100-180 ft ² Finish Coat = 150-250 ft ²
MIX RATIO / WATER DEMAND	4 – 6.5 qt. (3.8 – 6.2 liter) water to 1-50 lb. bag (22.7 kg)
SHELF LIFE	12 months in unopened bag under normal conditions when kept dry and moisture free, and out of direct sunlight
CURE / SET TIME **	Initial Set: 2 - 8 hours Full Cure: 28 days

**NOTE: Finish coat coverage range varies on desired texture being created*

***When placed at air and substrate temperatures consistently between 50°F (10°C) and 90°F (32°C) during and within 48 hours of placement. Interior applications and cool, shady areas will take significantly longer to cure.*

DESCRIPTION

BROOM FINISH is designed to resurface high-traffic concrete surfaces without compromising color, design, or texture. BROOM FINISH is a proprietary, single-component, self-bonding, cement based overlayment, in grey Portland cement bases. BROOM FINISH, when applied can transform old, spalled or worn-down concrete by eliminating surface defects, increasing wear ability and coefficient of friction (COF).

Although BROOM FINISH was designed to renovate broomed concrete exterior surfaces, a variety of textures and designs can be achieved for exterior flatwork or interior floors, including: broom finish, stipple (bubble finish), swirl, wood grain and Euro-Texture (slop trowel).

BROOM FINISH is formulated and optimized for exterior applications such as parking lots, parking garages, ramps, stairwells and walkways where heavy foot or vehicular traffic is present. These venues include theme parks, educational, medical, warehousing, multi-family, and manufacturing. When BROOM FINISH is properly applied and sealed, it will produce an attractive high strength wear surface with a long life-cycle and low maintenance. BROOM FINISH may also be colored by using premeasured color packs.

BENEFITS:

- High Compressive Strength
- Increased COF (Coefficient of Friction)
- Gray Cement Bases

SURFACE PREP

The surface must be free of dust, dirt, oil, grease, paints, glues, sealers, curing agents, efflorescence, chemical contaminants, rust, algae, mildew and other foreign matter that may serve as a bond breaker. Any concrete must be sufficiently cured to have sufficient hydration, approximately 7 - 14 days depending on temperatures and humidity. No system should be placed upon concrete that is flaking, spalling, or has hibernating spalling. Proper profile should follow the standard established by the International Concrete Repair Institute (ICRI) Technical Guideline no. 03732 for Concrete Surface Profile (CSP).

Some areas may require patching or crack treatment prior to application of BROOM FINISH.

MIXING

Due to BROOM FINISH CONCRETE OVERLAY'S diverse applications and textures, there can be a significant difference in water demand between systems. Additionally, porosity of substrate and environmental conditions can affect water demand as well. Approximate water demands for BROOM FINISH is 4 – 6.5 quarts (3.8 – 6.2 liters) of clean water.

While water demands vary the steps for mixing remain constant:

1. Carefully measure needed clean water and pour into a 5-gallon (18.9L) pail.
2. If color is desired, use (1) color pack per 50 lb. bag of BROOM FINISH. Open color pack and pour all contents into the clean water in the 5-gallon pail.
3. Thoroughly mix the color pack into the water, with a handheld concrete mixer equipped with a "Cage Mixing Blade", on low speed for a minimum of 15 seconds.
4. Slowly introduce BROOM FINISH into the pail while the mixer is running.
5. After all product has been added to the pail, scrape side of pail with a margin trowel to ensure all dry product is incorporated into the wet mix.
6. Continue to mix for a minimum of 1-minute after all ingredients are combined to achieve a lump-free consistency. Additional water can be added at this time, with total water demand not exceeding 6.5 quarts.

APPLICATION

All BROOM FINISH applications are recommended to have a two-coat system, comprised of a Base Coat and a Finish Coat. If a color pack is going to be used, it

should be added to both coats for the most accurate finish color.

BASE COAT

The base coat for BROOM FINISH can be applied by: broom, trowel, squeegee, or sprayed. The intent of the base coat is to create a uniform substrate, which will allow for the finish coat to create the desired texture/finish. In the case of recreating a broom finish, the most common application is to broom the base coat and finish coat. The below mention techniques are based on application choice:

Concrete Broom

1. Once the substrate has been properly prepped, ensure the surface is SSD (saturated surface dry) with no standing puddles.
2. Pour a generous ribbon of BROOM FINISH. Using a standup squeegee, tightly squeegee the ribbon of BROOM FINISH to the substrate, covering the entire area, by pushing the product.
3. While the base coat is still wet, use the concrete broom to evenly create the desired broom texture, by lightly dragging the broom in the same direction, each time. Take care not to leave edges high from where you start and stop.

Trowel / Squeegee

1. Once the substrate has been properly prepped, ensure the surface is SSD (saturated surface dry) with no standing puddles.
2. Pour a generous ribbon of BROOM FINISH CONCRETE OVERLAY tightly squeegee the ribbon of BROOM FINISH CONCRETE OVERLAY to the substrate, covering the entire area, by pushing and/or pulling the product. Take care not to leave edges high from where you start and stop**.

Spraying

1. Once the substrate has been properly prepped, ensure the surface is SSD (saturated surface dry) with no standing puddles.
2. The spray gun should have its tip adjusted/placed to a ¼" (6.3mm). Other size orifices can be used, but will change the amount and flowability of the material.
3. Setting for air compression should be approximately 8 ft² (.23m³) per minute at 40 psi (276 kPa) continuous.
4. Spray material straight down. Material should be placed at 100% coverage, this can be done by spraying in a circular motion, with material placed at the volume of it almost wanting to flow and self-level**.

** Note: If a broom finish is desired, while material is still wet, use a concrete broom and lightly drag the broom in the same direction.

FINISH COAT

The finish coat for BROOM FINISH can be applied by: broom, trowel, squeegee, or sprayed. The intent of the finish coat is to create the desired texture/finish i.e.: Broom, Stipple (Bubble Finish), Swirl, Wood Grain, Sponge Float, Euro-Texture (Slop Trowel).

In the case of recreating a broom finish, the most common application is to broom the finish coat in the same direction as the base coat.

1. The base coat should be dried long enough so that it is a uniform moisture level and can bare the weight of the applicator. Approximately 2-8 hours, depending on environmental conditions (temperature, wind, humidity, direct sun light).
2. Scrape the floor or use a rubbing stone to eliminate all unwanted rough edges and or material standing taller than desired. Sweep floor so that it is free of all loose contaminants.
3. The finish coat is applied in the same fashion as the above 3 mentioned techniques of the base coat.
4. Stencils and tape patterns may be removed as soon as the finish coat placed has dried to an even color/moisture level and can bare the weight of the applicator walking out onto it. How soon the stencil or tape patterns are removed can cause the material to chatter differently adding a 3-D element to the patterns created.

Sealing

To complete a BROOM FINISH application, sealing is required.

CLEAN-UP

Before BROOM FINISH dries, spills and tools can be cleaned up with water.

TESTING DATA

DENSITY

132 pounds/ft³ (2114 kg/m³)

COMPRESSIVE STRENGTH – ASTM C-109

28 days 6128 PSI (42251 kPa)

FLEXURAL STRENGTH – ASTM C-348

28 days 6128 PSI (42251 kPa)

28 days 1575 PSI (10859 kPa)

TENSILE STRENGTH – ASTM C-190

28 days 910 PSI (6274 kPa)

ABRASION RESISTANCE - ASTM D-4060

1 day 1 gram lost

7 day 1 gram lost

SHEAR BOND – ASTM C-882

Modified / mortar scrubbed into substrate

7 day 1232 PSI (8494 kPa)

28 day 1695 PSI (11686 kPa)

WARNING

KEEP OUT OF REACH OF CHILDREN. Inhalation: Avoid prolonged breathing of airborne dust, particularly present during mixing. Use NIOSH approved respirator for nuisance if threshold limit values are unsafe. **Skin Contact:** Skin contact may cause irritation. Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. **Eyes:** Wear safety eye protection when applying. Contact with eyes may cause irritation. Flush eyes with water for 15 minutes. If symptoms persist, seek medical attention.

WARRANTY

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufactures/seller’s option. Manufacturer shall not be liable for cost of labor or direct and/or incidental consequential damages.