

Bomanite®

The Paving Innovators

COLOR HARDENER

Technical Bulletin

Bomanite Color Hardener is a dry-shake material for coloring and hardening concrete flatwork, and is specially formulated for use in the installation of Bomanite and Bomacron cast-in-place colored, textured and imprinted concrete paving and flooring. Bomanite Color Hardener may also be utilized within the Bomanite Custom Polishing System specifically in reference to Belcolore By Bomanite (See Bomanite Custom Polishing Guideline Specifications). Bomanite Color Hardener is a blend of three principal ingredients: mineral oxide pigments, cement and graded silica aggregates. Special conditioning admixtures are also included to improve workability. Bomanite Color Hardener is used in residential, commercial and municipal applications. Two grades of Color Hardener are available:

Regular Grade: This grade is recommended for all applications except areas subject to exceptionally heavy pedestrian traffic or heavy road traffic in freeze areas. Appropriate areas include residential driveways, patios, pool decks, entryways, walkways, showroom floors, lobbies and medians.

Heavy Duty Grade: This grade includes specially graded Emery (aluminum oxide) to increase wear resistance. It is normally recommended for installations that are expected to receive exceptionally heavy wear, including vehicular entrances, theme parks, plazas, crosswalks, street sections and high-traffic sidewalks.

Bomanite Color Hardener is the most effective coloring method to achieve your desired results in the installation of Bomanite and Bomacron. This method can also be utilized for other specified colored concrete applications including salt finishes, broom finishes and rotary finishes. A greater variety and intensity of colors are available by using this coloring method. Color hardener can be formulated to create a wide variety of hues from soft pastels to vivid blues and purples, which is difficult to achieve with other coloring methods. Bomanite Color Hardener also improves imprinting, while providing increased durability, wear resistance and fade resistance. Bomanite Color Hardener is applied by specially licensed, trained and equipped Bomanite licensees.

FEATURES AND BENEFITS:

- CONDITIONS SURFACE FOR IMPRINTING
- STREAK FREE
- INTENSE COLOR
- HARDENS SURFACE
- EXPANDED COLOR PALETTE
- REDUCES POROSITY OF SURFACE
- UV STABILITY

COVERAGE GUIDELINES:

Dark Colors	0.6 pound per sq. ft. minimum / 2.9 kg. per sq. m
Medium Colors	0.7-0.8 pound per sq. ft. minimum / 3.4-3.9 kg. per sq. m
Light Colors	0.9-1.0 pound per sq. ft. minimum / 4.4-4.9 kg. per sq. m

PACKAGING:

Moisture-Resistant Bag 60 pounds / 27.2 kilograms

GENERAL INFORMATION:

Colors	25 standard colors — Refer to the Bomanite Color Hardener/Release Agent Color Chart for color selections and names. Custom colors available upon request (minimum 1,000 sq. ft.).
Shelf Life	Approximately 1 year, if stored in dry conditions.
Resistance to UV Light	Excellent
Resistance to Abrasion	Excellent
Suggested Sealers	Bomaseal I-18 or I-27 Bomanite HydroLock Bomaseal VOC Bomanite Hydrocoat
Maintenance	All Bomanite/Bomacron installations should be regularly maintained by a licensed Bomanite contractor in order to maintain a top quality appearance. Every 18 to 36 months, installations should be inspected by your local Bomanite contractor and cleaned and resealed as required by volume and intensity of traffic. Contact your local Bomanite contractor for the proper maintenance program in your area, as the need for maintenance will vary depending on a number of factors including traffic conditions, geographical location and weather.
Limitations	May be used on vertical faces of step risers, curbs, etc., but not practical for use on large areas of vertical surfaces. Do not use with concrete mixes containing calcium chloride.
Caution	Contains Portland Cement and free silica. Do not take internally. Keep out of the reach of children. See Material Safety Data Sheet for complete information.
Available Sales Aids	Bomanite Color Hardener Display Board Bomanite Color Hardener Chips Bomanite Color Hardener/Release Agent Color Chart Contact your local Bomanite licensee to request Bomanite Color Hardener sales aids to assist you in the design process.

Warranty

Bomanite Color Hardener, a proprietary product, is warranted to be of uniform quality within manufacturing tolerances. Since control is not exercised over its use, no warranty, expressed or implied, is made as to the effects of such use. Seller and manufacturer obligations under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. The user assumes all other risks and liabilities resulting from use of this product. If you have any questions, please contact Bomanite Corporation.

Important Note

This specification supersedes all Bomanite Color Hardener specifications prior to August 1, 2004.

SPECIFICATIONS:

1.00 GENERAL

1.04 Related Work (to be completed by a licensed Bomanite contractor except where noted)

- a. Preparation work, including sub-grade preparation, finish grading, constructing formwork, placing and setting screeds, and furnishing and placement of reinforcement shall be done by a licensed Bomanite contractor or other qualified contractor.
- b. Provide and place concrete.
- c. Provide and apply all Bomanite Color Hardener. Regular grade color hardener is recommended for all application areas except those subject to heavy pedestrian traffic or heavy vehicular traffic.

2.00 PRODUCTS AND MATERIALS

2.01 Concrete Mix Design

- a. The concrete shall have a minimum compressive strength of 3,000 psi in non-freeze areas, 3,500 psi in moderate freeze-thaw areas and 4,000 psi in severe freeze-thaw areas. Portland cement shall conform to ASTM C 150 Type I, II, or V, depending on soil conditions. Aggregates shall conform to ASTM C 33. Mixing water shall be fresh, clean and potable. In freeze-thaw areas only, an air-entraining admixture complying to ASTM C 260 shall be used to achieve an entrained air content for the particular mix used in accordance with the published recommendations of the Portland Cement Association and the American Concrete Institute. No admixtures containing calcium chloride shall be permitted.

2.02 Coloring, Imprinting, Curing and Sealing Materials

- a. Bomanite Color Hardener: The concrete shall be colored with the following Bomanite Color Hardener color(s):

The grade of the hardener shall be: (choose one) Regular Grade or Heavy Duty Grade.

3.00 EXECUTION

3.01 Installation Procedures

- a. The area to receive Bomanite/Bomacron imprinted concrete shall have the sub-grade prepared as required as for any concrete slab on grade.
- b. The formwork shall be installed in accordance with the drawings. The slab thickness shall be consistent with that of ordinary concrete slabs under the same conditions. (Note to specifier: Bomanite/Bomacron is most often a 4" thick or greater monolithic slab on grade. However, Bomanite may also be installed as a 1-1/2" or thicker topping over a base slab.)
- c. Provide reinforcement as specified.
- d. Control joints and/or expansion joints shall be provided in accordance with the drawings and the guidelines established by the American Concrete Institute. As with any concrete slab, Bomanite/Bomacron imprinted concrete usually contains construction joints, control joints and expansion joints. The contractor shall advise and work with the architect/engineer to determine the best location for these joints to minimize the visibility of the joints and to minimize unsightly cracking.
- e. The concrete shall be placed and screeded to the finished grade and floated to a uniform surface using standard finishing techniques.
- f. Bomanite Color Hardener shall be applied evenly to the surface of the fresh concrete by the dry-shake method using a minimum of 60 pounds per 100 square feet/27 kilograms per 9 square meters. It shall be applied in two or more shakes, floated after each shake and troweled only after the final floating.

FOR A COMPLETE GUIDELINE SPECIFICATION, CONTACT YOUR LOCAL BOMANITE LICENSEE.

Bomanite®

Your affordable,
durable paving solution



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