

Bomanite/Bomacron

Suggested Guideline Specifications

Bulletin 200.6

Following are the suggested Bomanite/Bomacron specifications to assist you in the preparation of project documents. The Bomanite/ Bomacron portion of the project should be separated from the balance of the concrete work in Division 3, since the work will be performed by specifically trained Bomanite contractors. Depending on the project, the Bomanite/Bomacron portion of the work may also be included in Division 2, Paving and Walks, Division 7, Roof Decks, or Division 9, Special Flooring. Additional assistance on specifications and technical service are available from your local Bomanite contractor or Bomanite Corporation.

1.00 GENERAL

1.01 Description - Bomanite/Bomacron Imprinted Concrete includes:

- a. Materials: Forming materials, reinforcement, concrete, dry-shake color hardener, curing compound, release agent and sealer.
- b. Special imprinting and texturing tools.
- c. Concrete placement and finish.
- d. Color hardener and release agent placement.
- e. Pressure washing to remove excess release agent.
- f. Curing compound application (Bomanite only).
- g. Sealer application.

1.02 References and Standards

a. Bomanite/Bomacron Imprinted Concrete:

Install in accordance with the standards and specifications of Bomanite Corporation and the American Concrete Institute (ACI).

b. The contractor for this work shall be the following Bomanite licensed contractor who has been trained and equipped by Bomanite Corporation:

Bomanite contractor: Carolina Bomanite Corporation
Address: 4933 Chastain Ave., Charlotte, NC 28217
Telephone : 704-364-1854 or 800-522-6514
Fax: 704-527-7789

1.03 Definitions

Bomanite: a cast-in-place concrete slab, having the surface colored and imprinted with a pattern. The work is performed on the job site by trained and experienced workmen.

Bomacron: A cast-in-place concrete slab, having the surface colored, imprinted with a pattern and texture. The work is performed on the job site by trained and experienced workmen.

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. For all pedestrian and light traffic applications, provide and apply regular grade Bomanite Color Hardener. For heavy pedestrian and vehicular traffic, provide and apply heavy duty grade Bomanite Color Hardener.
- d. Provide and apply all Bomacron release agents. Release agent is a dry powdered, colored agent used to facilitate release of the imprinting tools from concrete surface, and to provide moderate color variations to the textured surface.
- e. Provide and apply Bomanite and/or Bomacron imprinting tools.
- f. (Bomanite only) Provide and apply curing compound.
- g. (Optional) Provide and apply grout for imprinted joints. (Grouting option applies to Bomanite patterns only, except in special cases. Consult your local Bomanite Contractor.)
- h. Provide and apply sealer.
- i. Outside edges of all imprinted slabs shall be left uncolored unless otherwise specified in the drawings.
- j. (Optional) Provide and apply Bomanite Con-Shield per manufacturer's recommendations. Con-Shield will prevent deterioration and spalling from deicing salts used in freeze/thaw conditions. Con-Shield will also increase the abrasion resistance of Bomanite/Bomacron.

1.05 Quality Assurance

- a. All Bomanite/Bomacron work shall be installed by a licensed Bomanite contractor. The Bomanite contractor shall provide a qualified foreman or supervisor who has a minimum of three years experience with imprinted and textured concrete, and who has successfully completed at least five Bomanite/Bomacron imprinted concrete installations of high quality and similar in scope to that specified herein, and located within a 100 mile radius of the proposed project. Evidence that the contractor is qualified to complete the project in a workmanlike manner as specified herein shall be submitted to, and approved by, the architect/engineer.
- b. All Bomanite work shall comply with the current specifications and quality standards issued by Bomanite Corporation.
- c. The Bomanite contractor shall provide a job site sample (referee sample) of 100 square feet minimum to be approved by the architect/engineer prior to the start of construction. Said sample shall be the standard for the balance of the work installed, and shall be protected against damage until final approval from the architect/engineer.

2.00 PRODUCTS AND MATERIALS

2.01 Concrete Mix Design

- a. The concrete shall have a minimum compressive strength of 3000 psi in non-freeze areas, 3500 psi in moderate freeze-thaw areas and 4000 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.
- b. (Optional) Bomacron Release Agent: The following Bomacron Release Agent color(s) shall be applied to all concrete surfaces to be imprinted and textured: _____ .
- c. Pattern: The following Bomanite (Bomacron) pattern shall be used: _____ . All imprinting tools used in the execution of this project shall be manufactured by Bomanite Corporation.
- d. (Optional) Reinforcement: All imprinted slabs shall conform to the guidelines and recommendations of the American Concrete Institute for reinforcement of cast-in-place concrete slabs.
- e. Curing: All Bomanite imprinted concrete slabs shall be cured with Bomanite Color Cure, Clear Cure or approved equal. Bomacron imprinted concrete slabs are not compatible with curing compounds, and do not typically require membrane or mechanical curing. Bomacron imprinted/textured concrete may be cured using nonstaining reinforced curing paper when necessary.
- f. Sealer: All Bomanite/Bomacron slabs shall be sealed in accordance with the manufacturer's recommendations.

3.00 EXECUTION

3.01 Installation Procedures

- a. The area to receive Bomanite/Bomacron imprinted concrete shall have the sub-grade prepared and compacted as required by local governing authority and conditions.
- 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 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. It shall be applied in two or more shakes, floated after each shake and troweled only after the final floating.
- g. (Optional) Bomacron Release Agent shall be applied evenly to the troweled surface prior to imprinting. (Note to the specifier: this product should be specified only if imprinted slab is Bomacron.)
- h. While the concrete is still in its plastic stage of set, the Bomanite/Bomacron imprinting tools shall be applied to the surface.
- i. Approved curing method shall be applied in accordance with the manufacturer's recommendations immediately after completing the imprinting process for Bomanite slabs only. Reference section 2.02.
- j. (Optional) After initial curing period, the imprinted joints shall be grouted using a sand/cement/water mixture.
- k. After the initial curing period (and grouting operation, if applicable), the surface of the slab shall be sealed.

CODES, CERTIFICATION

All materials manufactured by Bomanite Corporation are warranted to be of uniform quality within manufacturing tolerances. Since control is not exercised over their use, no warranty, expressed or implied, is made as to the effects of such use. Bomanite Corporation's obligation under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective.

Please contact your local Bomanite contractor for available warranties on workmanship. Bomanite Corporation makes no warranty, expressed or implied, as to the quality of the workmanship by local Bomanite contractors.

OPERATION, 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 should be cleaned and resealed as required by volume and intensity of traffic. Contact your local Bomanite contractor for the proper maintenance program in your area.

Bomanite International Society

OVER 225 CONTRACTORS WORLDWIDE

The Bomanite International Society of licensed contractors is a worldwide network of specially trained and equipped professionals. Through constant exchange of new ideas, re-education and development programs, members of the Bomanite International Society continue to increase already high standards of quality and service.

The activities of the Bomanite International Society are coordinated by Bomanite Corporation. The Corporation also provides services and technical assistance to its member licensees, and to architects, designers and engineers specifying Bomanite products.

©Copyright 2005 Bomanite Corporation. Bomanite® and Bomacron® are registered trademarks and servicemarks with the U.S. Patent Office and other countries. All Bomanite Concrete Graphics® patterns are copyrighted and are the property of Bomanite Corporation and cannot be copied for any purpose.

IMPORTANT NOTICE: This specification guideline supersedes all Bomanite/Bomacron specifications published prior to October 2005.