

BOMANITE GUIDELINE SPECIFICATION

1.00 General

1.01 Description: The work in this section shall be designated as BOMANITE Concrete in the plans. The work shall include all labor, material, equipment and transportation required to complete the installation of BOMANITE. The Contractor for this work shall be a BOMANITE Licensed Contractor who has been trained and equipped by: BOMANITE CORPORATION. The Licensed Contractor shall be BEYOND CONCRETE at 36 Industrial Drive; Keyport, NJ 07735; (800) 972-0668; Fax (732) 441-3318; <http://www.beyondconcrete.com>; sales@beyondconcrete.com.

1.02 Definitions:

BOMANITE: a cast-in-place concrete slab, having the surface colored and imprinted with pattern available in over 35 patterns. The work is performed on the job-site by trained and experienced workmen.

BOMACRON: colored, imprinted and textured cast-in-place concrete available in over 35 patterns and textures (custom patterns are also available).

1.03 Related work: To be completed by BEYOND CONCRETE.

- A. Preparation work, including sub-grade preparation, finish grading, setting of forms and screeds, and furnishing of reinforcement when required shall be done by BEYOND CONCRETE or General/Other Contractor, depending on the specific situation.
- B. Provide and place all concrete
- C. Provide and apply all BOMANITE Color Hardener
- D. Provide and apply all BOMACRON Release Agent when required
- E. Provide and apply BOMANITE and/or BOMACRON imprinting tools in the proper pattern per specification
- F. (Optional) Grout imprinted joints
- G. Outside edges of BOMANITE slab shall be left uncolored, except where indicated to be colored in the plans

1.04 Quality Assurance:

- A. All BOMANITE work shall be installed by a licensed BOMANITE Contractor who shall provide a foreman, supervisor and crew who have completed at least 100 BOMANITE installations of high quality, including at least 1 installation of at least 40,000 square feet.
- B. All BOMANITE work shall comply with the current specifications and quality standards issued by BOMANITE Corporation.
- C. (Optional) BEYOND CONCRETE shall provide a job-site sample to be approved by the Architect prior to start of construction.

2.00 Products and Materials

- A. Concrete Mix Design: The concrete shall have minimum compressive strength of 4,000 psi in severe freeze-thaw areas. The mix design shall contain synthetic fiber additive for reinforcement. 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 agent complying with ASTM C 260 shall be used to achieve an entrained air content for the particular concrete mix used in accordance with the published recommendations of the Portland Cement Association and the American Concrete Institute. No admixtures containing calcium chloride are permitted. Special mix designs used in most situations. Consult your local BOMANITE contractor before specifying anything more detailed than what is in guideline specification.
- B. BOMANITE Color Hardener: The concrete shall be colored in the following: _____. BOMANITE Color Hardener color(s). Refer to BOMANITE Color Chart for color selection. Regular Grade hardener recommended for all applications except areas subject to exceptionally heavy pedestrian traffic or heavy road traffic in freeze areas.
The Grade of BOMANITE Color Hardener shall be _____.
- C. BOMACRON Release Agent: The following BOMACRON Clear Liquid Release Agent shall be applied to all concrete surfaces to be imprinted with BOMACRON imprinting tools.

- D. Additional reinforcement: (Optional) Shall be as follows: _____.
- E. Construction Joints (control joints): Shall be sawcut as per BOMANITE and ACI standards.
- F. Isolation Joints (expansion joints): Shall be installed around existing walls, columns and other obstructions.

3.0 **Execution**

3.01 Installation Procedures:

- A. The area to receive BOMANITE shall have the sub-grade prepared as follows: (Sub-grade Preparation: Required as for any concrete slab on grade).
- B. The formwork shall be installed and the slab thickness shall be the same thickness as would be required for an ordinary concrete slab in the same situation. Structurally, BOMANITE is concrete and most often a monolithic slab-on-grade with a thickness of 4" or greater. 6" thick recommended for vehicular traffic areas.
- C. (Optional) Provide reinforcement when specified.
- D. Control joints (and/or expansion joints) shall be provided in accordance with the plans. (Optional) Expansion joints shall be installed as with any concrete slab, BOMANITE slabs usually contain construction joints, control joints, and expansion joints. BOMANITE Contractors can advise on how to best design such joints on each specific project for attractive appearance and to minimize the possibilities of cracking. A clear agreement on joint location should be reached prior to start of construction. If joint location is not specified the BOMANITE Contractor shall install joints as necessary.
- E. The concrete shall be placed and screeded to the finished grade and floated to a uniform surface in the standard method.
- F. BOMANITE Color Hardener shall be applied evenly to the plastic surface by the dry-shake method using a minimum of 60 per 100 square feet. It shall be applied in two or more shakes, floated after each and troweled only after the final floating.
- G. BOMACRON Clear, Nonpigmented Release Agent shall be applied evenly to the surface.
- H. While the concrete is still in the plastic stage of set, the BOMANITE (or BOMACRON) imprinting tools shall be applied to make the desired impression to the surface.
- I. A highlighting/antiquing color will be rolled or brushed on the top surface of the imprinted concrete. (Optional) Special multicolor effects may be applied.
- J. (Optional) After initial curing, some patterns may be grouted.
- K. BOMANITE Surface Sealer (2 coats) containing a slip/skid-resistant additive will be applied.