

Bomanite® *Toppings Systems*

Bomanite Broadcast Aggregate System Guideline Specification

DIVISION 090000

FINISHES

- GENERAL

RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

2 SUMMARY

- A. Work specified in this section includes all labor, materials, equipment and services necessary to complete the proprietary Bomanite Broadcast Aggregate System utilizing Bomanite High Performance Coatings for interior applications including surface preparation, jointing, primers, bodycoats, aggregates, topcoats and applicable maintenance treatments.
- B. Related Sections include the following:
 - 1. Division 1 Section "Product Requirements" for submittals and substitutions.
 - 2. Division 3 Section "Cast-in-Place Concrete" for concrete slabs.
 - 3. Division 3 Section "Joint Sealers" for installation of caulking if required.

1.3 Definitions

- A. **Bomanite High Performance Coating:** Two component coatings ranging from epoxies through to urethanes and polyaspartics designed for applications requiring improved abrasion, chemical or impact resistance as compared to conventional single component concrete sealers.
- B. **Bomanite Broadcast Aggregate System:** A multi-layer flooring system comprised of Bomanite High Performance Coatings (HPC) and selected aggregate particulates installed using a process that results in seamless, skid resistant flooring.

1.4 SUBMITTALS

- A. **Product Requirements:**
 - 1. Provide submittal information within 35 calendar days after the contractor has received the owner's notice to proceed.

B. Product Data:

1. Submit Bomanite specifications, test data and other data required for each type of manufactured material and product indicated.
2. Submit Bomanite Technical Bulletins listing product name, descriptive data, curing time and application requirements.
3. Submit 3" x 3" minimum samples showing finished system to be matched or expanded upon as per specification by way of mockup at later date.
4. Submit Bomanite Material Safety Data Sheet (MSDS) and other safety requirements.

C. Field quality-control test and inspection reports.

1. Documentation by the Bomanite contractor of the surface profile and moisture test results prior to Bomanite Broadcast Aggregate System installation.
2. Moisture tests resulting in a reading of 4 lbs or greater per foot in a 24-hour period or 82% Relative Humidity or greater as obtained via humidity probes will dictate additional steps and product applications in order to correctly perform a Bomanite Broadcast Aggregate System installation. Consult with the Bomanite Licensed Contractor or Bomanite Technical Services on an appropriate system designed to suppress the moisture vapor prior to installation.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: The contractor for this work shall be a Bomanite Toppings System Licensed Contractor and Certified Applicator approved by Bomanite Company (303) 369-1115.

1. Provide letter of certification from The Bomanite Company stating that installer is a certified applicator of special concrete finishes and is familiar with proper procedures/installation requirements of the manufacturer.
2. Use an authorized Bomanite Licensed Contractor and adequate number of skilled workmen who are thoroughly trained and experienced in the necessary craft.
3. Applicator shall be familiar with the specified requirements and the methods needed for proper performance of work of this section.
4. Applicator shall be familiar with the previously approved mock-ups that demonstrated standard of workmanship.
5. Authorized Bomanite Toppings System installers limited to the following:
 - a. www.bomanite.com/locate/

B. Manufacturer Qualifications: A firm experienced in the support and training of a national installer network and manufacturing products required/listed to complete the work.

1. The Bomanite Company (303) 369-1115 – no equal

C. Source Limitations:

1. Bomanite Broadcast Aggregate System and related materials: Obtain each type of material of the same brand from one source from a single manufacturer.
2. Do not interchange manufactured materials within the Bomanite Broadcast Aggregate System without receiving written approval by The Bomanite Company as all warranties, whether expressed or implied, will be null and void.

D. Mock-ups:

1. Apply finish to mock-ups constructed by Bomanite Licensed Installer, using each type of finish to demonstrate finished appearance and standard of workmanship.
 - a. Mock-up shall include entire system, including surface preparation, primers, body and top coats, aggregate, color(s), decorative accents or graphics (if necessary), control joints, expansion/isolation joints, gloss level and maintenance finishes if applicable.
 - b. Notify Architect seven days in advance of dates and time when mock-ups will be constructed.
 - c. Obtain from Architect approval of mock-ups before starting construction.
 - d. If the Architect determines that the mock-ups do not meet requirements, General Contractor will demolish and remove them from the site and arrange to assemble more until approved.
 - e. Maintain mock-ups during construction in an undisturbed condition as a standard for judging the completed work.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing Bomanite or labels of Bomanite approved products indicating brand name and directions for storage, mixing with other components and application.
- B. Store materials to comply with Bomanite written instructions to prevent deterioration from moisture or other detrimental effects.
- C. Dispense special concrete finish material from Bomanite factory numbered and sealed containers. Maintain record of container numbers.

1.7 PROJECT CONDITIONS

- A. Environmental Limitations:
 1. Comply with Bomanite written instructions for ambient temperature and other conditions affecting installation performance.
 2. Concrete must be cured a minimum of 28 days or as directed by the manufacturer before installation of Bomanite Broadcast Aggregate System can begin.

1.8 PERFORMANCE REQUIREMENTS

- A. The product is required to bear daily foot traffic without loss of r
- B. The product is required to have bond strength to the substrate in

ASTM D-7234-05.

- C. The product is required to be in excess of 4000 PSI in tensile strength as per ASTM D-638.
- PRODUCTS

MANUFACTURERS

- A. In other Part 2 articles where titles below introduce products, the following requirements apply to product selection:
1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering materials decorative in nature required to be incorporated into the work include, and are limited to, manufacturer listed.
 - a. The Bomanite Company (303) 369-1115 www.bomanite.com

2.2 MATERIALS

- A. Bomanite High Performance Coating: Two component resin designed to improve the bond strength of the Bomanite Broadcast Aggregate System to the prepared substrate.
 1. Primer: BROADCAST AGGREGATE SYSTEM PRIMER SELECTION HERE
- B. Bomanite High Performance Coating: Two component resin designed to encapsulate the aggregate in the Bomanite Broadcast Aggregate System.
 1. Bodycoat: BROADCAST AGGREGATE SYSTEM BODYCOAT SELECTION HERE
- C. Bomanite High Performance Coating: Two component resin designed to encapsulate the aggregate in the Bomanite Broadcast Aggregate System.
 1. Second Bodycoat: OPTIONAL DOUBLE BROADCAST AGGREGATE SYSTEM SECOND BODYCOAT SELECTION HERE
- D. Bomanite High Performance Coating: Two component resin film forming product that enhances color while improving abrasion and stain resistance.
 1. Topcoat: BROADCAST AGGREGATE SYSTEM TOPCOAT SELECTION HERE
 2. Gloss Level: GLOSS LEVEL OF TOPCOAT HERE
- E. Broadcast Aggregate Color Blend: Specially selected and graded durable aggregates designed to be encapsulated in two component resin systems for the production of seamless flooring systems.
 1. Aggregate: INSERT BROADCAST AGGREGATE SYSTEM COLOR SELECTION HERE
- F. No substitutions or alternates to the above will be accepted.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Consult General Contractor, Structural Engineer, Architect and Concrete Contractor with Bomanite Installer present prior to pouring the concrete slab to which the Bomanite Broadcast Aggregate System is to be applied to. Ensure complete understanding of substrate preparation, vapor barrier installation, reinforcement, finishing, control joint placement penetrations floor flatness etc.
- B. Examine slab prior to Bomanite Broadcast Aggregate System ins

Installer present for conditions affecting performance of the Bomanite Broadcast Aggregate System. Rectify conditions detrimental to timely and proper work . Do not proceed with installation of Bomanite Broadcast Aggregate System until unsatisfactory conditions are corrected.

- C. Repair of defective portions of concrete slab due to improper installation is the concrete contractors responsibility under the guidance and approval of the Bomanite Installer. All repairs must meet the satisfaction of the architect of record.

3.2 SURFACE PREPARATION

- A. Mechanically profile the concrete slab with planetary head grinders, hand held grinders or shot blasting equipment to an ICRI CSP 2.
- B. Treat all cracks with a penetrating polyurea or equal two-component semi-rigid product in a manner consistent with the repair product manufacturer's guidelines. Grind the repair flush to the concrete slab prior to the Bomanite Broadcast Aggregate System installation.
- C. Any deficiencies greater than 1/16" in depth such as shot blast tracks, spalls or holes need to be filled and flush ground with an appropriate coarse sand and cement based repair product. Un-sanded (skim patching or feathering compounds) or products with a top size sand gradation less than 30 mesh are unacceptable.

3.3 INSTALLATION

- A. Apply the Bomanite Broadcast Aggregate System according to the manufacturers proprietary internal application procedures
 - 1. Prepare the substrate being sure to remove all dust and contaminates resulting from the mechanical surface preparation process.
 - 2. Prime the surface.
 - 3. After adequate cure time apply the specified bodycoats and aggregates.
 - 4. After adequate cure time apply the specified topcoat.

3.4 JOINTING

- A. Construction and Contraction Joints:
 - 1. If exposing and filling control joints with flexible sealant after substantial installation, sawcut construction and contraction joints through the Bomanite Broadcast Aggregate System in locations that mirror those in the base slab subsequent to sealant application.
 - 2. Perform jointing with a circular saw – walk behind saws are not acceptable unless of the early entry type to maintain required straightness standards.
 - 3. Joint Width: Per drawings and approved samples. Do not exceed 1/4-inch in width.
 - 4. Sawcut joints in a straight line with no overcutting. Use a hand tool to sawcut up to vertical edges such as walls, steps, curbs and columns.
- B. Isolation Joint Caulking:
 - 1. Install isolation joint caulking as required under Section 0

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3.8 PROTECTION

- A. General Contractor's responsibility to provide and install protection according to Bomanite Installer's recommendations. Protection of the finished surface is to be maintained by the General Contractor until substantial completion of the project is met and the floor can go into service.