

**9600 SYSTEM****BRITECAST™****DECORATIVE QUARTZ EPOXY FLOOR TOPPING****DESCRIPTION AND USES**

BriteCast™ Decorative Quartz Epoxy Floor Coating is a three component formulation of epoxy resin polymer, polyamine activator and carefully blended, brightly colored quartz aggregate. When sealed with BriteCast™ Sealer, the system provides an attractive, long lasting, and easily maintained floor system.

This system is typically for indoor use in new construction, restrooms, dressing rooms, showers, pharmaceutical plants, food preparation areas, bottling lines and other commercial, institutional and industrial floor areas.

This CPS Type II product is typically installed by factory trained contractors. Be sure you are fully aware of all application procedures and have all the required equipment available prior to beginning the installation of this product.

FEATURES AND BENEFITS

- Suitable for food and beverage facilities. BriteCast is 100% solids making it essentially odorless during application. BriteCast will not support bacterial growth making it suitable for food and beverage applications.
- Chemical resistant: BriteCast has the same corrosion resistant as the OverKrete Xtra S, which offers splash and spill resistance to many acids, alkalis and solvents. Refer to the Product Recommendation Guide.
- Fire resistant: The BriteCast system is a naturally fire resistant material due to the high percentage of mineral aggregate contained in the product.
- Heavy load capacity: Has 3 times the compressive strength of concrete.
- Rapid turn-around time: Depending on ambient temperatures, floors can be ready for foot traffic 12-24 hours after installation, full mechanical use in 24-48 hours, and full chemical exposure in 4-5 days.
- Sanitary: BriteCast is a nonporous, high density system. It resists gritting and traffic soil, will not support bacterial growth, will not hold odors, will not dust and is easy to clean.

LEED RATING SYSTEM*

BriteCast™ meets or exceeds the requirements of EQ Credit 4.2 Low-Emitting Paints & Coatings under the LEED New Construction and Major Renovation Standard.*

BriteCast™ is manufactured in Tulsa, OK and can contribute to MR Credit 5.1 Use of Regionally Manufactured Materials under the LEED New Construction and Major Renovation Standard* for project sites within a 500 mile radius of Tulsa, OK.

* Visit www.usgbc.org/leed for more information.

PACKAGING

BriteCast Base Coat is packaged in 4-gallon kits, 20-gallon kits and 60-gallon kits. BriteCast Aggregate is Made-To-Order and packaged in 50 pound bags. Nine colored blends are available. Product codes are listed below. BriteCast Sealer is packaged in 1-gallon kits, 3-gallon kits, 15-gallon kits and 75-gallon kits. Mixing ratios are shown on the product labels.

PRODUCTS**BriteCast Base Coat**

236870	Clear (4-Gallon Kit)
236871	Clear (20-Gallon Kit)
236872	Clear (60-Gallon Kit)
236876	Super Light Gray (4-Gallon Kit)
236877	Super Light Gray (20-Gallon Kit)
236878	Super Light Gray (60-Gallon Kit)

BriteCast Aggregate – 50 lb. Bags

241830	BC-103
241831	BC-105
241832	BC-109
241833	BC-112
241834	BC-117
241835	BC-119
241836	BC-120
241837	BC-121
241838	BC-122

BriteCast Sealer

236895	1-Gallon Kit
236896	3-Gallon Kit
236897	15-Gallon Kit
236898	75-Gallon Kit

COLOR RECOMMENDATIONS

Super Light Gray: Should be ordered whenever the BriteCast system is placed over a FlorClad™ HD base, unless tying into a cove base.

Clear: Should be used for any double broadcast 1/8" floor, and for any BriteCast floor that is to be tied into a cove base. The BriteCast basecoat can be used with any of our standard blends of colored quartz aggregate.

COMPANION PRODUCTS

Penetrating Prime & Seal™
Prime & Seal™
BriteCast™ Sealer
Blokfil™
FlorClad™ HD
8100 OverKrete Xtra S / OP



TECHNICAL DATA

9600 SYSTEM BRITECAST™ DECORATIVE QUARTZ EPOXY FLOOR COATING

PRODUCT APPLICATION

SURFACE PREPARATION

NEW CONCRETE: New concrete must be 28 days old. Laitance must be removed by muriatic acid etching, diamond grinding or shot blasting. On concrete that has been cured with curing compounds or has a burned in finish, shot blasting or sandblasting is required.

EXISTING CONCRETE: Existing concrete must be clean and sound. Old coatings and toppings must be removed. Concrete must be clean and free of previous coatings, oil, wax, paint, and other contaminants. The concrete surface must be clean and properly profiled to enable the coating to achieve maximum bond. Water soluble contaminants can be hosed off with water. Some water insoluble materials are difficult to remove and may require abrasive blasting, scabbling or other methods of removal.

Concrete must be visibly dry at time of application, and surface texture must be comparable to 60-80 grit sandpaper or ICRI CSP #3 - #5. The prepared concrete must be primed with Prime & Seal Primer or Penetrating Prime & Seal Primer. Consult the appropriate Technical Data Bulletin.

MIXING EQUIPMENT

Mixing of BriteCast basecoat is accomplished using a birdcage mixer and a 500-700 rpm electric drill motor. This will help reduce the tendency to entrain air into the mixed product.

Important: Hand mixing will produce inconsistent results and is not an approved method.

COVE BASE

Application of cove base material should be completed before application to the floor. Consult the BriteCast Application Instructions for details.

MIXING

Note: Before starting, ensure that the material, concrete surface, and the ambient air are all 65-90°F. Precise portions of part A (resin) and part B (activator) are measured into the mixing pail. The mix is run for 90-120 seconds to ensure complete mixing of parts A and B. Do not mix more than 4 gallons at once.

THINNING

Do not thin. No thinning is required.

APPLICATION EQUIPMENT

Rubber squeegee
3/8" nap shed resistant roller

PRODUCT APPLICATION (cont.)

APPLICATION

Application of 1/16 inch floor

1) Placement of BriteCast basecoat is by rubber squeegee followed by back rolling with a 3/8" shed resistant roller. The mix is placed at a wet thickness of 16 mils, or 100 square feet per gallon. To ensure proper material thickness, a 100 square foot area should be marked off or a wet film thickness gauge could be used. You should allow the material to flow out for about 10 minutes.

2) Once an area of 100-200 square feet of liquid has been placed, broadcast the BriteCast aggregate evenly over the surface. It is important that a wet edge of liquid, free of aggregate, be maintained throughout the installation as this will help ensure a smooth final surface. It will take approximately 50 lbs. of BriteCast aggregate per 100 square feet to broadcast to rejection (refusal).

3) After the material has had time to "set" (about 8-10 hours, depending on temperatures), excess aggregate is swept and vacuumed from the surface.

Note: Shoes with black or marking soles should be avoided. Marks in the surface will be very difficult to remove and will show through the sealer coat.

Application for a 1/8 inch floor:

This will be done by the "double broadcast" method. Over the bare, properly prepared concrete, accomplish the above steps 2, 3, and 4, and then repeat.

SEALER APPLICATION

For 1/16" or 1/8" coating: After final sweeping of excess aggregate, the floor is ready to be sealed with BriteCast Sealer. The procedure for mixing and application of the BriteCast Sealer can be found in its own respective data bulletin. More detailed information can be found in the BriteCast Sealer Application Instructions, which should be consulted prior to beginning application.

Low Profile: Approximately 18-24 mils of BriteCast Sealer will provide better cleanability with a smoother surface texture, while still providing good slip resistance. Two coats are recommended.

High Profile: Approximately 16-18 mils of BriteCast Sealer will provide a more aggressive texture for best slip resistance with lessened cleanability. One coat of BriteCast Sealer applied.

CLEAN UP

Xylene can be used to remove material from equipment if it is cleaned before the material has started to set up; otherwise, stronger solvents such as methylene chloride will be necessary.



TECHNICAL DATA

9600 SYSTEM BRITECAST™ DECORATIVE QUARTZ EPOXY FLOOR COATING

PRODUCT APPLICATION (cont.)

SHELF LIFE

Unopened, properly stored containers: 2 years

SAFETY

BriteCast contains amine curing agents. Avoid skin contact by using protective clothing and gloves. In case of eye contact or ingestion, contact a physician immediately. BriteCast is intended for industrial use only. This product should not be used by untrained or non-professional personnel.

SAFETY DATA SHEET

Safety Data Sheets are available. It is strongly recommended that they be read by all persons handling BriteCast SC.

If there are any questions on the use of this product, please consult our technical service department.

PERFORMANCE CHARACTERISTICS

COMPRESSIVE STRENGTH

METHOD: ASTM C579
TYPICAL VALUE: 10,000 psi

FLEXURAL STRENGTH

METHOD: ASTM C580
TYPICAL VALUE: 3,150 psi

MODULUS OF ELASTICITY

METHOD: ASTM C580
TYPICAL VALUE: 5.0 x 10⁵ psi

TENSILE STRENGTH

METHOD: ASTM C307
TYPICAL VALUE: 2,000 psi

BOND STRENGTH TO CONCRETE

METHOD: ASTM D4541
TYPICAL VALUE: Exceeds tensile strength of concrete (concrete fails first)

TABER ABRASION

METHOD: ASTM 4060, CS 17 Wheel
TYPICAL VALUE: Loss/1,000 cycles = 30 mg.

WATER ABSORPTION

METHOD: ASTM C413
TYPICAL VALUE: 0.10% maximum

LINEAR SHRINKAGE

METHOD: ASTM C531
TYPICAL VALUE: 0.05% maximum

PERFORMANCE CHARACTERISTICS (cont.)

LINEAR COEFFICIENT OF THERMAL EXPANSION

METHOD: ASTM C531
TYPICAL VALUE: 3.4 x 10⁻⁵ in./in./°F

FLAMMABILITY

METHOD: ASTM D635
TYPICAL VALUE: Self-extinguishing

IMPACT RESISTANCE

METHOD: Mil-D-3134J
TYPICAL VALUE: Satisfactory per 3.15

COEFFICIENT OF FRICTION

METHOD: ASTM D2047
TYPICAL VALUE: 0.6 minimum

FILM HARDNESS, SHORE D

METHOD: ASTM D2240
TYPICAL VALUE: 85

POROSITY WITH NO SEALER COAT

METHOD: NACE Stand TM0174
TYPICAL VALUE: 0.00



TECHNICAL DATA

9600 SYSTEM BRITECAST™ DECORATIVE QUARTZ EPOXY FLOOR COATING

PHYSICAL PROPERTIES

		9600 SYSTEM BRITECAST DECORATIVE QUARTZ EPOXY FLOOR COATING
Resin Type		Polyamine Converted Epoxy
Pigment Type		Colored Quartz
Solvents		None
Weight*	Per Gallon	9.1-9.2 lbs.
	Per Liter	1.09-1.10 kg
Solids*	By Weight	100%
	By Volume	100%
Volatile Organic Compounds*		<1 g/l (0.01 lbs./gal.)
Recommended Dry Film Thickness (DFT) Per Coat		16 mils
Wet Film to Achieve DFT		16 mils
Practical Coverage at Recommended DFT (assumes 15% material loss)		400 sq.ft./kit
Mixing Ratio		3:1 base to activator by volume
Induction Period		None
Pot Life @ 70-80°F (21-27°C) & 50% Relative Humidity		30 minutes. Higher temperatures and larger quantities of activated material will significantly reduce pot life. Pour material onto floor immediately after mixing.
Dry Times at 70°F (21°C) and 50% Relative Humidity	Initial Cure	Allow to "set" for 8-10 hours after broadcast of aggregate
	Foot Traffic	16-24 hours
	Full Use	24-48 hours
	Full Cure**	4-5 days
Shelf Life		2 years
Flash Point		>200°F (93°C)
Safety Information		CAUSES NOSE, THROAT, EYE AND SKIN IRRITATION. CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED. MAY CAUSE ASTHMA, SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. SEE PRODUCT SAFETY DATA SHEET (SDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.

*Activated Material

** Coating achieves its full physical and chemical resistant properties.

Calculated values are shown and may vary slightly from the actual manufactured material.

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.



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