ArtCrete 200 Sparkling Wall Finish

DESCRIPTION • ArtCrete 200 Sparkling Wall Finish is a pre-mixed, polymer-fortified cement-based plaster containing decorative aggregates such as fine glass chips and silica in a cement matrix. ArtCrete 200 is applied in thicknesses of 5 mm or more on plastered surfaces as a finish coat; it may also be applied on blockwork in larger thicknesses. The plaster is then washed or acid etched to reveal the decorative aggregates.

USES • *ArtCrete 200* is suitable for use as a decorative finishing coat on exterior and interior walls and facades ranging from residential to heavy commercial and industrial buildings. Due to its superior adhesion strength and flexibility, it can be applied over a wide variety of bases without the need for primer or key coat when applied in up to 6 mm thickness.

ADVANTAGES •

- ✓ Polymer modified: high adhesion, crack resistance.
- ✓ Breathable, allowing humidity to escape.
- ✓ Cement-based, and therefore compatible with the substrate
- ✓ Minimum need for maintenance.
- ✓ Extremely durable for all climates.
- ✓ Wide range of application, 2mm to 20mm.
- ✓ Wide choice of colors and aggregates.
- ✓ Unlimited choice of finishing textures.

PERFORMANCE CHARACTERESTICS •

<u>Weather Resistance:</u> *ArtGrete 200* has the ability to withstand weathering including resistance to rain and extreme thermal and moisture changes.

<u>Tensile Strength:</u> *ArtCrete 200* is able to resist tensile stresses, whether developed internally or externally, due to the material properties' compatibility with a cement-based substrate.

<u>Crack Resistance:</u> Due to its high polymer modification, *ArtCrete 200* is resistant to cracking.

<u>Bond:</u> ArtCrete 200 can be applied directly on a variety of surfaces such as fair-faced concrete and plaster without the need for a key coat or primer when applied in up to 6-8 mm thickness; for higher thickness only a rough finished plaster surface is required.

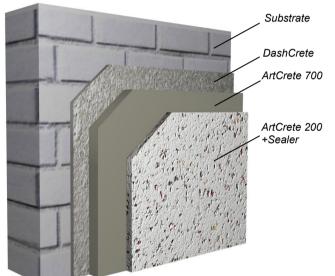
COVERAGE • Coverage depends on the tools used for application, texture, surface irregularities and roughness. Coverage of approximately 2.5-3.5 sq meters per 35 kg bag at 5 mm thickness is dominant.



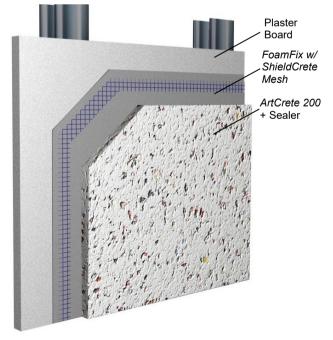
LIMITATIONS • Do not mix or apply if ambient temperature is expected to drop below 5°C during installation or in the proceeding 24 hours, or if rain is expected in the proceeding 24-hour period after application. Do not mix or apply when ambient temperature is expected to exceed 40°C. Avoid working in direct sunlight. Temporary protection from weather and other damage must be provided at all times until entire job is completed.

SYSTEM CONFIGURATION •

ArtCrete 3-Coat System:



ArtCrete Plus System:



ArtCrete 200 Spakling Wall Finish



TECHNICAL DATA •

Test	Result
	Result
Flexural Strength ASTM C 348	
7 days	3.5 MPa
28 days	6.2 MPa
Compressive Strength ASTM C 109	
7 days	8.1 MPa
28 days	12.9 MPa
Coefficient of Thermal Expansion ASTM C 531:2000	5.7 x 10 ⁻⁶
Wetting Expansion ASTM C 157	
Water storage @ 28 days	0.029%
Water storage @ 56 days	0.048%
Drying Shrinkage ASTM C 531:2000	0.147%

Note: properties dependant on size and physical properties of aggregates used.

SURFACE PREPARATION • Any paint, coatings, curing agents, or contamination on the substrate should be remove before application of *ArtCrete 200*, preferably by mechanical means. Adhesion of *ArtCrete 200* requires only an absorbent surface, therefore *ArtCrete 200* is compatible with masonry surfaces and can be applied on an array of bases: block, brick, plaster, gypsum board, and wood panels. All bases should be sufficiently rigid, clean of any surface contamination that may prevent good suction. High gloss, or low absorption surfaces can be made more receptive by mechanical means.

To reduce material consumption, the base should be straight, true to line, and plane. Misalignment of substrate can be corrected with *ArtCrete 700 Brown Coat Ready Mix Plaster* or *FoamFix ST Base Coat*.

MIXING • Mixing should be done by a mechanical method, preferably with a paddle type mixer. Drill mounted jiffy type mixers can also be used. Always add clean potable water first. Mixing duration should last for 3 to 5 minutes to insure proper color and material dispersion within the mix. Typically, one 25 kg bag will require 5.5-6.5 liters of water depending on the type of aggregates used, though the plasterer can best judge the required consistency depending on the desired finish, while observing its workability and the degree of bonding to the substrate. However, care should be taken not to exceed 7.5 liters of water per 25 kg bag.

APPLICATION • <u>Surface Application</u>: *ArtCrete 200* can be applied by hand or machine directly to plastered surfaces. The minimum application thickness is governed by the size of the aggregates, but for most cases the minimum application thickness is around 5 mm. A rough finished plaster or scratch coat is the preferred surface.

Use a rounded-ends steel trowel to apply the mixed material on the surface, while applying sufficient pressure to insure good compaction and contact with

the substrate. Pass the steel trowel quickly over the surface of the render to spread the material to the desired thickness. Allow the render to set for a few minutes then float with a sponge float to allow air pockets to escape and compact the material. Then start the troweling the surface smooth progressively as it hardens to achieve a smooth texture. DO NOT WATER CURE.

Aggregate Exposure: ArtCrete 200 ultimate brilliance is achieved by exposing the decorative aggregates. A variety of methods can be used for the exposure depending on texture, project, and climate. Acid etching produces the highest sparkle while maintaining the most original finished texture. Allow the finished surface to cure a minimum of 24 hours, depending on ambient conditions, before the etching operation. The etching process should be carried out at a time when only the thin cement film covering the aggregates is removed without creating pinholes and voids in the surface. Interior applications require a minimum of 72 hours curing, while in some hot weather exterior applications etching can be carried out as soon as 6 hours after application. Prolonged waiting periods will make the surface very hard to expose, and repeated etching applications will be required to produce enough sparkle.

Only use diluted Hydrochloric Acid (Muriatic Acid) and an acid resistant brush. Protect all surrounding areas and avoid contact with metal. Make sure to wear protective gloves and proper evewear anytime in contact with all types of acids. Dampen the dry render surface first by light spraying. Work the surface from the top while constantly scrubbing. Make sure the acid does not runoff the surface which will create undesired lines. The use of A-Z AcidGel prevents runoffs and requires less scrubbing. Once the desired sparkle is achieved the surface and all surrounding areas must be sufficiently flushed with generous amounts of clean water. Care must be taken to insure all acid is neutralized and flushed down to a proper drain. Acid neutralization may be achieved by spraying the surface with liberal amounts of clean water containing a pH neutralizer such as baking soda (500 gm baking soda to 20 liters of water) with a hand-pump sprayer. The final sparkle will appear after the surface dries.

Light Sand Blasting can be used on open large projects, but a minimum application thickness of 8mm is required and a curing time of not less than 14 days.

CURING • *ArtCrete 200* is designed to be air cured only. Moist curing should be applied to the base coat only and continued until the application of *ArtCrete 200*. If it is hot, dry and or windy, the plaster should be moistened and covered with polyethylene plastic sheeting. The use of curing agents such as *A-Z 100 Curing Agent* is NOT recommended as it will alter the final appearance of *ArtCrete 200*.

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SEALING • *A-Z Penetrating Sealer* or *A-Z HydroSeal* are recommended to prevent staining the surface from drain water or other liquids; *A-Z HydroSeal* is a topical sealer and may be diluted with water at 1:1 ratio.

CLEANING • Clean all tools and equipment promptly with clean water.

STORAGE • Keep material covered and off the ground to prevent exposure to moisture. Store in a dry area. When stored at specified conditions in original unopened packaging, shelf life is 12 months from date of purchase.

SAFETY PRECAUTIONS • KEEP OUT OF REACH OF CHIDREN. DO NOT TAKE INTERNALLY. Portland cement and silica based products present health hazards. Irritating to eyes and skin. Use in adequate ventilation and do not breath dust. Contains silica aggregates (quartz). May cause delayed lung injury (silicosis). Use neoprene gloves and a dust mask when handling. FIRST AID: Eyes – Do not rub eyes, immediately flush with fresh water. Skin – Wash with soap and water. Inhalation – If experience difficulty breathing or if inhaled, move to fresh air. If symptoms persist, seek medical attention.

PACKAGING • 25 kg paper bags.

SUGGESTED SHORT FORM SPECIFICATIONS • For Installation on Block or Unprepared Surfaces: All architectural vertical surfaces designated in the plans or specifications as having a sparkling wall shall have CREATIVE CONCRETE finish CONCEPTS ArtCrete 200[™] installed in accordance with manufacturer technical data sheet and written instructions in the ArtCrete [3-Coat, 5-Coat] System. The dash coat shall be CREATIVE CONCRETE CONCEPTS DashCrete™ Splatter Dash Coat applied over the block work substrate in accordance with manufacturer technical data sheet and instructions. The leveling brown coat shall be CREATIVE CONCRETE CONCEPTS ArtCrete 700[™] Factory Blended Plaster applied in [] mm thickness and cured in accordance with manufacturer technical data sheet and instructions. [For 5-coat system only: Waterproofing coat shall be CREATIVE CONCRETE CONCEPTS ProofCrete 710™ Single Component Cementitious Waterproofing Coat applied in accordance with manufacturer technical data sheet and instructions]. The finish coat shall be CREATIVE CONCRETE CONCEPTS ArtCrete 200™ in color [select from CCC Standard Color Chart] with [clear glass,

colored glass, white silica, colored silica] aggregates in sizes up to [select up to 3 mm size]. The plaster surface shall be washed to expose the decorative aggregates. All finished surfaces that will not be permanently immersed in water must be sealed with CREATIVE CONCRETE CONCEPTS [A-Z Penetratina Sealer WB/LS/SB/SMK™, A-Z HydroSealer™] in accordance with manufacturer technical data sheet and instructions. All products shall be manufactured by CREATIVE CONCRETE CONCEPTS, Sharjah, UAE or Amman, Jordan; info@tex-crete.com.

For Installation on Plastered Surfaces. Plaster Board, or Fair-Faced Concrete: All architectural vertical surfaces designated in the plans or specifications as having a sparkling wall finish shall have CREATIVE CONCRETE CONCEPTS ArtCrete 200[™] installed in accordance with manufacturer technical data sheet and written instructions in the ArtCrete Plus System. [For field mixed plaster substrate, surfaces of questionable quality, or discontinuous surfaces: If installing on a plaster board or other highly porous surfaces, prime the surface with CREATIVE CONCRETE CONCEPTS A-Z Prime Bond. The base coat shall be CREATIVE CONCRETE CONCEPTS FoamFix ST™ applied in accordance with manufacturer technical data sheet and instructions with CREATIVE CONCRETE CONCEPTS ShieldCrete [SD, MD] fiberglass mesh embedded in the base coat]. The finish coat shall be CONCRETE CONCEPTS CREATIVE ArtCrete 200[™] in color [select from CCC Standard Color Charf] with [clear glass, colored glass, white silica, colored silica] aggregates in sizes up to [select up to 3 mm size]. The plaster surface shall be washed to expose the decorative aggregates. All finished surfaces that will not be permanently immersed in water must be sealed with CREATIVE CONCRETE CONCEPTS Penetratina [A-Z Sealer WB/LS/SB/SMK™. A-Z HydroSealer™] in accordance with manufacturer technical data sheet and instructions. All products shall be manufactured by CREATIVE CONCRETE CONCEPTS, Sharjah, UAE or Amman, Jordan; info@tex-crete.com.

Creative Concrete Concepts

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