

ArtCrete 200

Sparkling Wall Finish



DESCRIPTION • *ArtCrete 200 Sparkling Wall Finish* is a pre-mixed, polymer-fortified cementitious coating containing glass chips in a white cement matrix, specially designed to produce stucco that can virtually adhere to any flat or curved surface, on external or internal applications. It can be applied by hand or machine to conform to any shape using one or more coats. The final appearance of the finish coat is manipulated to expose a brilliant sparkling surface with a wide selection of aggregates.

USES • *ArtCrete 200* is suitable for use as a 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.

ADVANTAGES

- ✓ Superior adhesion.
- ✓ Highly flexible and resistant to cracking.
- ✓ 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 CHARACTERISTICS

Weather Resistance: *ArtCrete 200* has the ability to withstand weathering including resistance to rain and extreme thermal and moisture changes.

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

Crack Resistance: Due to its high degree of flexibility, *ArtCrete 200* is able to withstand bending of the substrate and to bridge hairline cracks.

Bond: *ArtCrete 200* can be applied directly on a variety of surfaces, including non-cement based substrates such as gypsum board and wood panels.

COVERAGE • Coverage depends on the tools used for application, texture, surface irregularities and roughness. Coverage of approximately 6 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 35°C. Avoid working in direct sunlight. Temporary protection from weather and other damage must be provided at all times until entire job is completed.

TECHNICAL DATA

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

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

SURFACE PREPARATION • *ArtCrete 200* is very compatible with concrete masonry and new concrete 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. Dense, smooth surfaces, and those retaining excessive amount of form release agent can cause delamination of the plaster from the base. High gloss, or low absorption surfaces can be made more receptive by sandblasting.

Any painted or coated surfaces should be sandblasted or pressure washed to remove existing coating. The base should be straight, true to line, and plane. Misalignment of substrate can be corrected with *ArtGrout 700 Ready-Mix Plaster*, avoiding excessive and different plaster thicknesses within a single panel.

MIXING • Mixing should be completed 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. 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, but care should be taken not to exceed 10 liters of water per 35 kg bag.

APPLICATION • Surface Application: *ArtCrete 200* can be applied by hand or machine to a thickness of not less than 2mm. and a maximum of 10mm. in a single coat application. However, some textures need to be applied to thickness of up to 20mm.

A steel trowel, wood float and a sponge float are used in conjunction with a small amount of clean water to produce any texture desired. Anywhere from a smooth steel trowel to a Spanish finish can be achieved. *ArtCrete 200* advanced formulation allows for simple fast applications without the requirement of densification. Unlike other plasters, the surface will not slag, crack, or delaminate if not floated, but coarse-floated textures usually produce the highest sparkling effect.

The textured finish is achieved by scrapping, floating or troweling while the plaster is still "green". A uniform approach is essential to achieve an even finish. The application of a coat of plaster should not be interrupted within a façade, the applicator must plan ahead to complete the work up to either a control joint or to a corner of a façade before halting the application for any reason. When using a plaster machine, the plaster is applied in a continuous operation and finished manually to the specified thickness. Texture is controlled by the air pressure, the opening of the orifice, and the distance of the nozzle from the surface.

Aggregate Exposure: *ArtCrete 200* ultimate brilliance is achieved by exposing the special sparkling glass chips and optional decorative aggregates.

A variety of methods can be used for the exposure depending on texture, project, and climate. Acid Itching 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 itching operation. The itching 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 itching can be carried out as soon as 6 hours after application. Prolonged waiting periods will make the surface very hard to expose, and repeated itching 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 eyewear anytime in contact with all types of acids. 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*.

SEALING • *A-Z Penetrating Sealer* is highly recommended to prevent moisture from penetrating the surface without disturbing the breathability or sparkle of the surface.

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 CHILDREN. 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 • 35 kg paper bags.

Creative Concrete Concepts

PO Box 925794, Amman 1110, Jordan; Tel +962-6-487-4078, Fax +962-6-488-9133 • PO Box 91234, City of Industry, CA 91715-1234, USA; Tel +1-909-266-0709, Fax +1-909-266-0711 • PO Box 31017, Sharjah, UAE; Tel +971-6-532-1119, Fax +971-6-532-8833