

# ArtCrete 700

## Ready Mix Plaster



**DESCRIPTION** • *ArtCrete 700 Ready Mix Plaster* is a factory blended Portland cement-based, fiber reinforced plaster containing silica sand, graded aggregates, and specially formulated water-soluble admixtures for the highest workability, adhesion strength, and performance. *ArtCrete 700* is available gray or colored.

**USES** • *ArtCrete 700* is typically applied manually or by spray machine on block work, concrete, and all types of masonry vertical structures in up to 20 mm thickness in a single pass or 50 mm in multiple passes as the plaster leveling coat to receive paint or colored stucco. *ArtCrete 700* is used to level block structure walls to produce a uniform and level layer ready for the finish coat. When supplied as colored plaster, *ArtCrete 700* forms the leveling and finish layer in a two-coat plastering system. *ArtCrete 700* may be used on exterior and interior walls and facades ranging from residential to heavy commercial and industrial buildings. *ArtCrete 700* is also suitable in the production of faux rockwork, waterfalls, and themed walls.

### ADVANTAGES •

- ✓ Fiber reinforced, crack resistant.
- ✓ Silica sand based.
- ✓ Lower cost and higher quality than site-mixed plaster. Manufactured under strict controls to insure batch-to-batch consistency.
- ✓ Provides a consistent basecoat for receiving the finish coat, providing uniform absorbency that will insure a uniform finish appearance.
- ✓ Extended working time.
- ✓ Non-ignitable.

### TECHNICAL DATA •

| Test                            | Result   |
|---------------------------------|----------|
| Dry Powder Mix Density          | 1.7-1.9  |
| Maximum aggregate size          | 2.5 mm   |
| VOC Content                     | Nil      |
| Flexural Strength ASTM C 348    |          |
| 3 days                          | 2.4 MPa  |
| 7 days                          | 3.0 MPa  |
| 28 days                         | 4.1 MPa  |
| Compressive Strength ASTM C 109 |          |
| 3 days                          | 5.7 MPa  |
| 7 days                          | 10.0 MPa |
| 28 days                         | 11.5 MPa |

**COVERAGE** • Coverage depends on the tools used for application, texture, and surface profile. Coverage is approximately 2 sq meters per 50 kg bag at 10 mm thickness.

**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 under direct sunlight. Temporary protection from weather and other damage must be provided at all times until entire job is completed.

**SURFACE PREPARATION** • *ArtCrete 700* can be applied on an array of bases. It is compatible with concrete, blockwork, and masonry surfaces. *ArtCrete 700* must be applied on a surface with the proper roughness to provide adequate mechanical keying. For best results, it is highly recommended to apply it on a base of *DashCrete Splatter Dash Coat*. All bases must be sufficiently rigid, structurally sounds, and clean of any surface contamination such as dirt, grease and loose particles that may prevent good adhesion. Insure that all fixtures, concealed conduits, service outlet pads, window frames and door frames are well protected.

Dense, smooth surfaces and those retaining excessive amount of form release agent can cause de-lamination of the plaster from the base. The use of metal or wire lath on the surface will eliminate this problem. High gloss surfaces, or those with low absorption, can be made more receptive to plaster application by first applying a coat of *DashCrete Splatter Dash Coat*. Any painted or coated surfaces must be sandblasted or grinded to remove existing coating. The substrate must be sufficiently moistened prior to application by light spraying of water; on old masonry surface, wet the surface on the day before application with a water hose. Do not apply to surfaces that are frozen or contain frost or ice.

**MIXING** • Mixing must be done by mechanical means. For best results use an automated plaster mixing and spray machine. Mixing may also be done using a raped set type mixing blade fitted to a high speed drill. A paddle type mixer may also be used. Manual mixing by shovel is not recommended. Always add water first before the dry mix to prevent lumps in the plaster mix. Mixing duration should last for 3 to 5 minutes to insure proper material dispersion within plaster. Use 4.5-5.5 liters of clean water per 50 kg bag, depending on desired consistency, while observing workability and the degree of bonding to the substrate. For machine mixing, feed the bags continuously into the hopper while adjusting the mixing machine's water gauge to meet the necessary water demand. It is highly recommended to maintain water mixing ratio for all mixing batches on a job. Do not add any kind of unapproved additives to the mix.

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**APPLICATION** • Whether *ArtCrete 700* is applied by hand or machine, sufficient force must be used to develop full and intimate contact with the substrate.

**Spray Machine Application:** Hold nozzle at a distance of 30-40 cm from substrate. Move the nozzle in a continuous, smooth motion from side to side, building up layer by layer to achieve approximately the required thickness. Final leveling to the exact required thickness will be done manually at a later stage.

**Hand Application:** Transfer the plaster to the wall using a masonry trowel to impact the plaster to the wall at high speed; this will insure the application of sufficient force. Build up the thickness gradually in several layers.

**Leveling:** Use a rod or screed to even the surface to the required thickness. Hollow areas can be filled again and rodded to level out the surface. Use a stainless steel trowel to level out the plaster surface.

*ArtCrete 700* can be applied in thicknesses from 10 mm to 50 mm with a single application.

**FINISHING** • Once the plaster has achieved sufficient hardness, work with a steel trowel to achieve an even suction and the required surface texture. For surfaces to receive a paint finish, work the plaster surface with a steel trowel to achieve a smooth finish. For surfaces to receive a cementitious stucco finish coat (three coat system), *ArtCrete 700* should be finished with a coarse sand float, lightly broomed, or scratched horizontally to provide a bonding surface for the finish coat. When used as the leveling and finish coat in a two-coat system, finish to the desired texture such as floated or smooth trowel.

**CURING** • Moist curing by lightly fogging with water should be carried out within the first 24 hours after the 3-5 hour initial set. Commence curing by water spraying the plaster surface for three days. Protect the plaster coat from any adverse weather conditions, such as high winds and extreme heat, or rain and dew. Under adverse weather conditions it is recommended to cover the plaster with polyethylene plastic sheeting or Kraft-type paper to prevent excessive drying during the initial 24 hour period. Full cure is achieved in 7 to 28 days, depending on weather conditions. Plaster surface to receive an acrylic or epoxy based paint must be allowed to fully cure before application of the paint.

**SEALING** • When used as the finish coat, it is recommended to seal the cured surface of *ArtCrete 700* in order to prevent staining from rain runoff and other sources. *A-Z Penetrating Sealer* or *A-Z HydroSeal* is highly recommended to prevent moisture from penetrating the surface without

disturbing the breathability of the surface. On surfaces permanently in contact with water, the use of *A-Z HydroSeal* is highly recommended. Do not seal if *ArtCrete 700* will be later coated with a finish layer.

**CLEANING** • Clean all tools and equipment promptly with fresh 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 based products present health hazards. Irritating to eyes and skin. Use in adequate ventilation and do not breath dust. 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** • 50 kg paper bags and 1 ton bulk bags.