

16 Greenmeadow Dr., Suite 202 | Timonium, MD 21093 410.561.8770 | www.uscproducts.com

MICRO SILICA MODIFIED SHOTCRETE

TECHNICAL DATA

DESCRIPTION: Gunite 7000 micro silica modified shotcrete mortar is a single component, micro silica shot-

crete available in both **Wet (7000w)** or **Dry Formulations (7000d)**. **Gunite 7000** features micro silica for added density, tensile and flexural strength. **Gunite 7000** has excellent durability and is resistant to freeze thaw cycling. Easy to use, **Gunite 7000** requires only the addition of potable water at the job.

USE FOR: Bridges and roadways, tunnels and piers, manhole and sewer repairs, elevated concrete

slabs, parking decks, piers and bulkheads

ADVANTAGES: ● Available in either **Wet Process (7000w)** or **Dry Process Formulations (7000d)**

• High compressive, tensile, flexural and bond strengths

Low permeability

High build

Low rebound and dust

Use on vertical or overhead repairs

Excellent finishing characteristics

• NSF/ANSI/CAN 61 & 372 certified for drinking water systems

| | 3 DAYS | 7 DAYS | 28 DAYS |
|---|--------------------------|----------------------------|------------------------|
| Compressive Strength (ASTM C 109 Modified) | 3000 psi (20.6 MPa) | 4000 psi (27.4 MPa) | 7000 psi (48.0 MPa) |
| Bond Strength (ASTM C 882 Modified) | 900 psi (6.2 MPa) | 1500 psi (10.3 MPa) | 2000 psi (14.0 MPa) |
| Flexural Strength (ASTM C 348) | | 500 psi (3.4 MPa) | 1900 psi (13.0 MPa) |
| Splitting Tensile (ASTM C 496) | | 400 psi (2.7 MPa) | 1000 psi (7.0 MPa) |
| Unit Weight | 135 lb/ft³ (2.275 kg/m³) | | |
| Drying Shrinkage (ASTM C 157 Modified) | 025 % (Dry Cured) | | |
| Scaling Resistance 50 cycles (ASTM C 672) | none | | |
| Rapid Chloride Permeability (ASTM C 1202) | <850 Coulombs | | |
| Air Content | 5 % (+/- 1.5%) | | |
| Set Time | | ial Set Final Sours 4 hour | |



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APPLICATION: Add potable water to Gunite 7000 at a maximum rate of 10% water (123 fluid ounces per 80 lb bag) by weight to **Gunite 7000**. Use normal dry process shotcrete methods. Pre-dampen surface to a surface saturated, dry condition with clean water for good bond. No special curing is required. Always follow practices of ACI 506-R85: Guide to Shotcrete for application and curing methods. For detail application instructions refer to US Concrete Guide Specification Guide.7001.

LIMITATIONS: Gunite 7000 should be used when ambient temperatures are at 40°F (4°C) and rising. Lower temperatures produce a slower set; higher temperatures produce a faster set. For temperatures below 40°F (4°C) consult with the manufacturer for special cold weather placement provisions which include but are not limited to conditioning of the materials, use of heated mix water and thermal protection. In hot weather use chilled water for mixing.

PACKAGING:

Gunite 7000 is packaged in 50 lb, 80 lb or 3000 lb bags. Each 80 lb bag yields approximately .63 ft³ when mixed with water.



Meets the Requirements of NSF/ANSI/CAN 61 & 372

Certified to NSF/ANSI/CAN 61 & 372

NSF/ANSI/CAN 61 & 372

CAUTION:

WARNING! CONTAINS FREE SILICA & PORTLAND CEMENT. DO NOT **BREATHE DUST.** May cause delayed lung injury (silicosis). Follow OSHA safety and health standards for crystalline silica (quartz). Cement powder or freshly mixed concrete grout or mortar may cause skin injury. Avoid contact with skin and wash exposed skin areas promptly with water. If any cement powder or mixture gets into the eyes, rinse immediately and repeatedly with water and get prompt medical attention.