

16 Greenmeadow Dr., Suite 202 | Timonium, MD 21093

GUNITE 2020

Low Dust Shotcrete

TECHNICAL DATA

DESCRIPTION:

Gunite 2020 is a single component, micro silica modified shotcrete with fibers with a special admixtures to reduce dust. NIOSH 0600 and 7500 exposure testing has shown a measured dust reduction of 95%. In addition to dust reduction, Gunite 2020 contains a proprietary blend of admixtures, specially graded aggregates and low alkali portland cement to yield a very low dust, high build, low rebound dry process gunite requiring only the addition of potable water. The dramatic reduction in dust allows for greater safety and application efficiency.

USE FOR:

Bridges and roadways, tunnels and piers, manhole and sewer repairs, elevated concrete slabs, parking decks, piers and bulkheads

ADVANTAGES:

- Low permeability
- High build
- Low rebound
- Use on vertical or overhead repairs

	3 DAYS	7 DAYS	14 Days	28 DAYS
Compressive Strength (ASTM C 109 Modified)	3000 psi (20.6 MPA	6000 psi (41.3 MPa)	7000 psi (47.9 MPa)	8000 psi (55.0 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)		<700 Coulombs		
Set Time		Initial Set 90 minutes Final Set 3 Hours		





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

Low Dust Shotcrete

TECHNICAL DATA

APPLICATION: Add potable water to Gunite 2020 at the nozzle using 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 current ACI 506: Guide to Shotcrete for application and curing methods. For detail application instructions refer to US Concrete Guide Specification Guide.

7001

LIMITATIONS: Gunite 2020 should be used when ambient temperatures are at 40°F (4°C) and rising. Lower tem-

peratures 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 2020 is packaged in 80 lb or 3000 lb bags. Each 80 lb bag yields approximately .63 ft³ when

mixed with water.

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.