

Gunite

Cementitious Spray-on Rock Liner

Gunite is a spray applied, high strength cementitious liner which provides structural strength, support and protection in excavations and construction areas.

- Gunite offers excellent protection against rock weathering and fire proofing
- Machines are electric and air or all air power systems and can be used above and below ground
- Product and equipment for Gunite application provided by Strata.



APPLICATIONS

• SURFACE

- Highwalls
- Portal areas
- Reclamation & impoundment areas

• UNDERGROUND

- Slopes
- Shaft bottom areas
- Belt drives and power centers
- Sumps and pump stations
- Seals

Gunite 2024

Low Dust Shotcrete

Gunite 2024 is a single component, micro silica modified shotcrete with fibers, that features a proprietary blend of admixtures, specially graded aggregates, and low alkali portland cement to yield a very low dust, dry-process gunite. Testing has shown a dust reduction up to 98%.* This dramatic reduction in dust allows for greater safety and application efficiency.

ADVANTAGES

- High Early Strengths
- Fibers provide superior tensile and flexural strengths and reduced drying shrinkage
- Low permeability
- High Build
- Low rebound
- Use on vertical and overhead repairs
- Requires only the addition of potable water

APPLICATIONS

Provides superior performance for any gunite project.

- Underground ventilation structures such as seals, overcasts, bulkheads and stoppings
- Bridges and roadways
- Tunnels and piers
- Manhole and sewer repairs
- Elevated concrete slabs and parking decks



	1 DAY	7 DAYS	28 DAYS
Compressive Strength (ASTM C 109 Modified)	4000 psi (27.5 MPa)	7000 psi (47.9 MPa)	8000 psi (55.0 MPa)
Bond Strength (ASTM C 882 Modified)		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/ft ³ (2.275 kg/m ³)		
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		

Gunite 7424

Modified shotcrete with fibers

Gunite 7424 is a single component, micro silica modified shotcrete with 1/2" polypropylene, alkali resistant fibers. It utilizes the latest cement technology to provide very high early one day strength, coupled with excellent long term strength gains. Micro silica increases density and lowers permeability and special additives greatly reduce dust and rebound.

ADVANTAGES

- High early strengths
- Fibers provide superior tensile and flexural strengths and reduced drying shrinkage
- Low permeability
- High build
- Low rebound
- Use on vertical and overhead repairs
- Requires only the addition of potable water

APPLICATIONS

Provides superior performance for any gunite project.

- Underground ventilation structures such as seals, overcasts, bulkheads and stoppings
- Bridges and roadways
- Tunnels and piers
- Manhole and sewer repairs
- Elevated concrete slabs and parking decks



	1 DAY	7 DAYS	28 DAYS
Compressive Strength (ASTM C 109 Modified)	4000 psi (27.5 MPa)	6000 psi (41.3 MPa)	8000 psi (55.0 MPa)
Bond Strength (ASTM C 882 Modified)	900 psi (6.2 MPa)	1500 psi (10.3 MPa)	2300 psi (15.8 MPa)
Flexural Strength (ASTM C 348)		700 psi (4.8 MPa)	1100 psi (13.0 MPa)
Splitting Tensile (ASTM C 496)		400 psi (2.7 MPa)	1000 psi (7.0 MPa)
Unit Weight	135 lb/ft ³ (2.275 kg/m ³)		
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	4 % (+/- 1.5%)		
Set Time	Initial Set 2 hours		Final Set 4 hours