

# K A U F M A N

PRODUCT  
INFORMATION

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## SureShot

### Description

SureShot is a high performance, single-component, dry mix shotcrete product. SureShot is specifically designed for the repair of concrete above or below grade in horizontal, vertical and overhead applications. SureShot is a unique blend of portland cements, specially proportioned aggregates, polypropylene fibers, microsilica, and a migrating corrosion inhibiting agent to provide a long lasting concrete repair and protection of steel reinforcement. Superior strength, low dust and rebound, excellent adhesion, and a non-sag formulation make SureShot ideal for use even in enclosed areas.

### Uses

SureShot is ideal for use in parking garages, bridges, tunnels, mines, underground utility structures, dams, piers, marine structures, and beams. SureShot may be used vertically, horizontally, or overhead and will produce limited rebound and dust, due to the uniquely proportioned aggregates, which will make application easier for the nozzelman.

### Laboratory Physical Properties @75 °F

Compressive Strength (ASTM C-109)	1 day	2,000
	7 days	3,700
	14 days	5,200
	28 days	5,900
Flexural Strength (ASTM C-78)	1 day	400
	7 days	650
	28 days	725
Residual Strength (ASTM C-1399)	28 days	45
Bond Strength (ASTM C-882)	7 days	1,200
	28 days	2,200

### Field Test Results

Water/Bag	approx. 2/3 gl./50 lb. bag	
Absorption	7.5%	
Rebound	2%	
Rapid Chloride Permeability (ASTM C-1202)	<500 Coulombs Very Low Rating	
Compressive Strength (ASTM C-42)	1 day	3,200
	7 days	6,800
	14 days	10,100
	28 days	10,800
Flexural Strength (ASTM C-78)	7 days	900
	28 days	1100

### Test Properties

It is difficult to duplicate field performance of SureShot in the laboratory due to the unique application methods involved. However, laboratory data is still relevant, especially when comparing different formulations from different manufacturers. The performance data provided is only an example of what is possible with SureShot. In the field, the real performance is dictated by an experience and proper techniques of the nozzelman.

SureShot complies with the requirements of ASTM C-1480, Type FA (Fine Aggregate), Grade GU (General Utility). In addition, SureShot complies with Grades SR (Sulfate Resistant), LP (Low Permeability), and FR Class II (Fiber Reinforced).

### Packaging/Yield

50# bag (.45 ft<sup>3</sup>) @ 1/2" will yield 9 ft<sup>2</sup>  
80# bag (.72 ft<sup>3</sup>) @ 1/2" will yield 14.4 ft<sup>3</sup>  
3,000 # bag (27 ft<sup>3</sup>) @ 1/2" will yield 540 ft<sup>3</sup>

### Directions

#### Surface Preparation

Clean surface to remove all foreign matter including curing compound and form release agents. Remove all unsound concrete including spalled, cracked, or loose and deteriorated concrete through approved methods such as water blasting.

Dampen substrate thoroughly for a minimum of 30 minutes prior to placement of SureShot. This will control the temperature and the suction rate of the substrate. Never apply over puddles of free-standing water. Take extra precautions when applying SureShot to masonry by making certain that the surface is adequately pre-wetted.

### Mixing

SureShot is designed for easy mixing and application by dry process shotcrete machinery. This type of equipment is able to apply SureShot very effectively in vertical, overhead and horizontal applications, while maintaining the correct water-cement ratio and the proper amount of compaction of the mortar.

## **Application**

Kaufman Products always recommends a job mock-up be performed to assist the nozzleman in determining the correct amount of water and air needed to properly apply SureShot. In addition, we recommend strict adherence to all American Concrete Institute guidelines including the following:

ACI 506R	Guide to Shotcrete
ACI 506.2	Specifications for Shotcrete
	ACI 506.1R Committee Report on Fiber Reinforced Shotcrete
ACI CP-60	Craftsman Workbook for ACI Certification of Shotcrete Nozzleman
ACI CP-60	Craftsman Workbook for ACI Certification of Shotcrete Nozzleman

## **Precautions**

Consult your KPI representative. Read Material Safety Data before using.

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