

K A U F M A N

PRODUCT
INFORMATION

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SureGrout

Description

SureGrout is a precision made, ready to use, non-shrinking, non-metallic grouting compound for use in construction trades and plant maintenance. It is composed of a balanced blend of dry inorganic compounds, special cements, tough, high strength properly graded quartz aggregates, plus other proprietary ingredients.

SureGrout expands at a controlled rate to take up for the volumetric voids created by water evaporating from the mix. This ensures high strength and intimate contact with surrounding surfaces and its resultant load-carrying ability.

SureGrout is unique in the fact that its special formulation requires less water to produce a workable mix than all other non-metallic grouts. This means that the important water/cement ratio is lower than other grouts and consequently a denser, stronger grout is produced. At the same time, less water means less shrinkage compensation.

SureGrout meets all aspects of ASTM C-1107, shows positive expansion when tested as per ASTM C-827 and ASTM C-1090, and is approved for use by countless Departments of Transportation. SureGrout is an incredibly versatile non-shrink grout because it may be mixed for dry-pack, plastic, flowable, and fluid applications. Furthermore, SureGrout may also be used in form and pour applications.

Uses

Structural Columns, Bearing Plates, Anchor Bolts, Precast Columns, Foundation Underpinnings, Prestressed Cables, Precast Joints, Cable Anchorages, Patching Holes & Cracks, Machine Pads, Tilt-Up Panels

Features

Non-raveling
Non-rusting
Water and oil resistant
Non-corrosive
Pumpable
Precision blended
Economical
Non-bleeding
Non-staining
Multiple Mix Ratios

Technical Data

High Strength

Certified independent laboratory tests under field conditions show SureGrout provides high strengths so high, that they exceed design requirements and provide a large margin of safety for field variation. The below tests were placed at normal consistency and not water immersed, or fog cured for higher results.

Non-Shrink

All grouts should be non-shrinking to properly carry the intended load. Sand/cement grouts shrink and provide no load carrying ability. To compensate for shrinkage, some grouts over-expand, which exerts undesirable upward pressure on base plates.

Pull Out Strength

All grouts should provide high bond strength to anchors and to the concrete in which they are embedded. SureGrout provides over 35,000 psi when the anchor is placed in tension.

Packaging/Yield

50 lb. moisture resistant, 4 ply bag with a polyethylene liner. Each bag yields .45 ft³ or 777 in³ when mixed normally. SureGrout is also available in 3,000 lb. bulk bags that yield 27 ft³.

Set Time (ASTM C-266)

Initial: 4 hours
Final: 5.5 hours

Set Time (ASTM C-191)

Initial: 4.5 hours
Final: 6.5 hours

Flow Cone Test (ASTM C-939)

Fluid: 23 seconds

Flow Table Test (ASTM C-1437)

Flowable: 135%
Plastic: 101%

Compliances

ASTM	C-109	CRD	C-227
	C-157		C-621
	C-827		
	C-1107		

Mixing Ratios- Water per bag of SureGrout

<u>ASTM Designation</u>	<u>Quarts</u>
Dry-Pack	2.7 plus 25# Pea Gravel
Plastic	3.65
Flowable	4.0
Fluid	4.5

Pumping

SureGrout can be pumped successfully using a ChemGrout CG-050 or higher grout pump and mixer or similar system.

Shelf Life	One year in original, unopened bags
Storage Conditions	Store dry at 40-95°F
Color	Concrete Gray
Working Time at 72°F	45 minutes

Compressive Strength Test Results, psi.

(ASTM C-109 with 2" cubes.)

	2.7 qts. (Dry Pack)	3.65 qts. (Plastic)	4.0 qts. (Flowable)	4.5 qts. (Fluid)
1 Day	6,000	3,500	3,000	2,200
7 Days	10,500	6,200	5,900	5,400
28 Days	11,500	8,500	7,500	6,500

Height Change Moist Cured

(ASTM C-1090)

	2.7 qts. (Dry Pack)	3.65 qts. (Plastic)	4.0 qts. (Flowable)	4.5 qts. (Fluid)
3 days	.01%	.01%	.01%	.01%
7 days	.06%	.06%	.06%	.06%
14 days	.06%	.06%	.06%	.06%
28 days	.06%	.06%	.06%	.06%

Early Age Height Change

(ASTM C-827, maximum 4%) +.02%

Flexural Strength, psi.	1,000-1,400
(ASTM C-293)	

Bond Strength, psi.

(ASTM C-882)

28 Days	1,800-2,000
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Bond Strength, psi.

(Virginia Department of Transportation, VTM 41)

28 Days	5,300 psi.
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Tensile Splitting Strength, psi.

(ASTM C-496)

28 Days	500-600
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Pull Out Strength

(ASTM E-488)

Number 6 Grade 60 rebar embedded 6 3/4 " in a 7/8" hole drilled into 4,000 psi. concrete. A maximum load of 37,000 lbs. was obtained.

Directions

See separate sheet with complete directions titled, *Recommended Field Procedures for SureGrout*.

Specifications

All grouting shall be done with SureGrout as manufactured by Kaufman Products, Inc. Baltimore, Maryland. The grout shall be mixed according to directions furnished by the manufacturer and installed in accordance with their directions. Perform all grouting work in accordance with the recommendations of the American Concrete Institute for mixing and placement of concrete.

Contractors using this product are encouraged to review *"Recommended Field Procedures for SureGrout"*. Read complete *Safety Data Sheet* before using.

Technical Information

Test results were achieved under laboratory conditions. Statistical variations will occur based upon mixing methods, temperature & humidity, test methodology, site conditions, curing conditions, application methods, and equipment.

For professional use only. Not for sale to or use by the general public.

LIMITED WARRANTY We warrant our products to be of good quality and will replace material proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement, Kaufman Products, Inc makes no warranty or guarantee, expressed or implied, including warranties of fitness or merchantability, respecting its products, and Kaufman Products, Inc. shall have no other liability with respect hereto. User shall determine the suitability of the product or the intended use and assume all risks and liability in connection thereto. Our salespeople, distributors and their salespeople have no authority to change the printed recommendations concerning the use of our products.