

# SikaGrout® 212

## High performance, cementitious grout

Construction

<b>Description</b>	<p>SikaGrout® 212 is a non-shrink, cementitious grout with a unique 2-stage shrinkage compensating mechanism. It is non-metallic and contains no chloride.</p> <p>With a special blend of shrinkage-reducing and plasticizing/water-reducing agents, SikaGrout® 212 compensates for shrinkage in both the plastic and hardened states. A structural grout, SikaGrout® 212 provides the advantage of multiple fluidity with a single component. SikaGrout® 212 meets ASTM C-1107 (Grade C).</p>
<b>Where to Use</b>	<ul style="list-style-type: none"> <li>■ Use for structural grouting of column base plates, machine base plates, anchor rods, bearing plates, etc.</li> <li>■ Use on grade, above and below grade, indoors and out.</li> <li>■ Multiple fluidity allows ease of placement: ram in place as a dry pack, trowel-apply as a medium fluidity, pour or pump as high flow.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>■ Easy to use, just add water.</li> <li>■ Multiple fluidity with one material.</li> <li>■ Non-metallic, will not stain or rust.</li> <li>■ Low heat build-up.</li> <li>■ Excellent for pumping: Does not segregate, even at high flow. No build-up on equipment hopper</li> <li>■ Superior freeze/thaw resistance.</li> <li>■ Resistant to oil and water.</li> <li>■ Meets ASTM C-1107 (Grade C).</li> <li>■ Shows positive expansion when tested in accordance with ASTM C-827.</li> <li>■ SikaGrout® 212 is USDA-approved.</li> </ul>
<b>Coverage</b>	Approximately 0.44 cu. ft./bag at high flow.
<b>Packaging</b>	50-lb. multi-wall bags; 36 bags/pallet

### Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

<b>Shelf Life</b>	One year in original, unopened bags.		
<b>Storage Conditions</b>	Store dry at 40°-95°F (4°-35°C). Condition material to 65°-75°F before using.		
<b>Color</b>	Concrete gray		
<b>Flow Conditions (ASTM C-109, Plastic &amp; Flowable; ASTM C-939, Fluid)</b>	<b>Plastic<sup>1</sup></b>	<b>Flowable<sup>1</sup></b>	<b>Fluid<sup>2</sup></b>
<b>Typical Water Requirements:</b>	6 pt.+	6.5 pt.	8.5 pt.
<b>Set Time (ASTM C-266):</b>	<b>Initial</b>	3.5-4.5 hr.	4.0-5.0 hr.
	<b>Final</b>	4.5-5.5 hr.	5.5-6.5 hr.
<b>Tensile Splitting Strength, psi (ASTM C-496)</b>			
	<b>28 day</b>	600 (4.1 MPa)	575 (3.9 MPa) 500 (3.4 MPa)
<b>Flexural Strength, psi (ASTM C-293)</b>			
	<b>28 day</b>	1,400 (9.6 MPa)	1,200 (8.2 MPa) 1,000 (6.8 MPa)
<b>Bond Strength, psi (ASTM C-882 modified): Hardened concrete to plastic grout</b>			
	<b>28 day</b>	2,000 (13.7 MPa)	1,900 (13.1 MPa) 1,900 (13.1 MPa)
<b>Expansion % (CRD C-621)</b>	<b>28 day</b>	+0.021%	+0.056% +0.027%
<b>Compressive Strength, psi (CRD C-621)</b>			
	<b>1 day</b>	4,500 (31 MPa)	3,500 (24.1 MPa) 2,700 (18.6 MPa)
	<b>7 day</b>	6,100 (42 MPa)	5,700 (39.3 MPa) 5,500 (37.9 MPa)
	<b>28 day</b>	7,500 (51.7 MPa)	6,200 (42.7 MPa) 5,800 (40 MPa)

<sup>1</sup>CRD C-227: 100-124% (plastic), 124-145% (flowable)

<sup>2</sup>CRD C-611: 10-30 sec efflux time.



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://USA.SIKA.COM/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

## How to Use

### Surface Preparation

Remove all dirt, oil, grease, and other bond-inhibiting materials by mechanical means. Anchor bolts to be grouted must be de-greased with suitable solvent. Concrete must be sound and roughened to a CSP 4 or higher to promote mechanical adhesion. Prior to pouring, surface should be brought to a saturated surface-dry condition. Steel should be cleaned and prepared thoroughly by blastcleaning to a white metal finish. Follow standard industry and Sika guidelines for use as an anchoring epoxy.

For pourable grout, construct forms to retain grout without leakage. Forms should be lined or coated with bond-breaker for easy removal. Forms should be sufficiently high to accommodate head of grout. Where grout-tight form is difficult to achieve, use SikaGrout® 212 in dry pack consistency.

### Mixing

Mix manually or mechanically. Mechanically mix with low-speed drill (400-600 rpm) and Sika mixing paddle or in appropriately sized mortar mixer.

Make sure all forming, mixing, placing, and clean-up materials are on hand. Add appropriate quantity of clean water to achieve desired flow. Add bag of powder to mixing vessel. Mix to a uniform consistency, minimum of 2 minutes. Ambient and material temperature should be as close as possible to 70°F. If higher, use cold water; if colder, use warm water.

**Product Extension:** For deeper applications, SikaGrout® 212 (plastic and flowable consistencies only) may be extended with 25 lbs. of 3/8" pea gravel. The aggregate must be nonreactive, clean, well-graded, saturated surface dry, have low absorption and high density, and comply with ASTM C33 size number 8 per Table 2. Add the pea gravel after the water and SikaGrout® 212.

### Application

Within 15 minutes after mixing, place grout into forms in normal manner to avoid air entrapment. Vibrate, pump, or ram grout as necessary to achieve flow or compaction. SikaGrout® 212 must be confined in either the horizontal or vertical direction leaving minimum exposed surface. SikaGrout® 212 is an excellent grout for pumping, even at high flow. For pump recommendations, contact Technical Service. Wet cure for a minimum of 3 days or apply a curing compound which complies with ASTM C-309 on exposed surfaces.

### Tooling & Finishing

After grout has achieved final set, remove forms, trim or shape exposed grout shoulders to designed profile

### Limitations

- Minimum ambient and substrate temperature 45°F and rising at time of application.
- Minimum application thickness: 1/2 in.
- Maximum application thickness (neat): 2 in. However, thicker applications can be achieved. Contact Sika's Technical Services Department (800-933-7452) for further information.
- Do not use as a patching or overlay mortar or in unconfined areas.
- Material must be placed within 15 minutes of mixing.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® Hi-Mod 32.

**PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.**

KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. FOR PROFESSIONAL USE ONLY.

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at <http://usa.sika.com/> or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. SALE OF SIKA PRODUCTS ARE SUBJECT SIKA'S TERMS AND CONDITIONS OF SALE AVAILABLE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING 201-933-8800.

Visit our website at [usa.sika.com](http://usa.sika.com)

1-800-933-SIKA NATIONWIDE

Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.

**Sika Corporation**  
201 Polito Avenue  
Lyndhurst, NJ 07071  
Phone: 800-933-7452  
Fax: 201-933-6225

**Sika Canada Inc.**  
601 Delmar Avenue  
Pointe Claire  
Quebec H9R 4A9  
Phone: 514-697-2610  
Fax: 514-694-2792

**Sika Mexicana S.A. de C.V.**  
Carretera Libre Celaya Km. 8.5  
Fracc. Industrial Balvanera  
Corregidora, Queretaro  
C.P. 76920  
Phone: 52 442 2385800  
Fax: 52 442 2250537



Sika and SikaGrout are registered trademarks. Printed in Canada.

