



PRECISION NON-SHRINK GROUT

◆ The Pro's Choice Since 1936



Sakrete® Precision Non-Shrink Construction Grout is a non-shrink and non-metallic. When properly mixed to a fluid consistency allows for pumping grout to areas where it is difficult to access using conventional grouting methods.

Features:

- Meets or exceeds ASTM C1107
- Non-corrosive, will not attack reinforcement
- Non-shrink
- Non-metallic, Non-staining
- High strength
- Pumpable for easy placement
- Meets Corps of Engineers Specification CRD-C 621

Use For:

Structural grouting and general purpose structural grouting:

- For use above, at or below grade
- Column bases
- Anchor bolts
- Machinery bases sole plates
- Tilt-up panels
- Steel bearing plates
- Reinforcing steel in block cells
- Dowel rods
- Transfer lines
- Concrete - poured in place, precast, tilt-up and prestressed

Yield/Water/Coverage:

Bag Size	Coverage	Water
50 lb (22.7 kg)	0.45 ft ³ (12.7 L)	Fluid: 1 gal + 1 pt (4.3 L) Flowable: 1 gal (3.8 L) Plastic: 3 qts + 1 pt (3.3 L)

NOTE: Yield and water are approximate. The yield above does not allow for waste and spillage.

Color:

Gray

Technical Data:

DIVISION 9
Non-shrink Grouting
03 62 00

Technical Data cont.:

Precision Non-Shrink Grout	Fluid	Flowable	Plastic
Bag size	50 lb (22.7 kg)	50 lb (22.7 kg)	50 lb (22.7 kg)
Approx. water content per bag	1 gal + 1 pt (4.3 L)	1 gal (3.8 L)	3 qts + 1 pt (3.3 L)
Flow, ASTM C939	20-30 seconds		
Flow, at 5 drops, ASTM C1437		125-145	100-125
Compressive strength, ASTM C109			
24 hours	2,500 psi (17.3 MPa)	3,500 psi (24.2 MPa)	3,500 psi (24.2 MPa)
7 days	6,000 psi (41.4 MPa)	8,500 psi (58.7 MPa)	9,000 psi (62.1 MPa)
28 days	8,000 psi (55.2 MPa)	10,500 psi (72.3 MPa)	12,500 psi (86.2 MPa)
C-827 expansion	0 - 0.4	0 - 0.4	0 - 0.4
Height change, ASTM C1090			
1, 3, 7 and 28 days	0 - 0.2	0 - 0.2	0 - 0.2

NOTE: Test results obtained under controlled laboratory conditions at 73°F (23°C) and 50% humidity. More or less water may be required to achieve the desired mixing consistency depending on the atmospheric conditions and job site conditions. Do not exceed 4.75 qts (4.5 L) water per 50 lb (22.7 kg) bag.

Preparation/Application:

Refer to:

- ACI 302.1 Guide for Concrete Flooring and Slab Construction
- ACI 304.1 Guide for Measuring, Mixing, Transportation and Placing Concrete.

NOTE: it is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

1. Use only when the product, air, and surface temperature are above 40°F (4°C) for a minimum of 24 hours.
2. Clean area and remove all unsound concrete, grease, oil, paint, and any other foreign material that will inhibit performance.
3. Prior to grout placement, all surfaces must be clean and saturated with water for 24 hours. Remove excess water bringing it to a surface saturated dry condition (SSD).
4. Provide air relief holes where necessary if grouting is beneath large plates.
5. Wood form work or other absorbent forms should be coated with a form release oil to prevent grout adherence and water absorption.
6. Design form work to facilitate rapid, continuous and complete filling of the space to be grouted. Rodding the grout lightly will help move material.
7. Use methods that will enable the grout to flow by gravity between the surfaces and keep the grout in full contact with these surfaces until it has hardened.



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8. Avoid vibration which can cause bleeding and segregation. Shut down nearby machines for a minimum of 24 hours.
9. Minimum application thickness is 1" (25 mm) and a maximum thickness of 4" (100 mm).

NOTE: For installation where acids and sulfates are present, a protective coating is required. Protect uncoated aluminum from direct contact with Portland cement-based materials.

Refer to:

1. ACI 351. R-99 Report on Grouting Between Foundations and Bases for Support Equipment and Machinery
2. ACI 351.2R Foundations for Static Equipment
3. ACI 306R Cold Weather Concreting
4. ACI 305R Hot Weather Concreting

Mixing:

Desired grout consistency:

Fluid: 1 gal + 1 pt (4.3 L) per 50 lb (22.7 kg)

Flowable: 1 gal (3.8 L) per 50 lb (22.7 kg)

Plastic: 3 qts + 1 pt (3.3 L) per 50 lb (22.7 kg)

1. Only mix with clean potable water. The water quantities shown are approximate and may vary slightly with the type of equipment and application conditions.
2. Water demand and mix temperature must be determined using standard test methods for consistency and temperature measurement at the time of application.
3. Place 3/4 of desired mixing water, start mixer then slowly add the dry material. After all of the powder has been added, slowly add the remaining 1/4 water until the desired consistency is achieved.
4. Avoid adding excessive amounts of water that promotes segregation or bleeding of the grout.
5. Mix for 3 - 5 minutes to ensure a uniform lump free consistency and place immediately.

Curing:

1. Sakrete Construction Grout can be exposed under normal weathering conditions.
2. Forms may be removed as soon as the grout reaches its final set.
3. Prevent rapid water loss by covering the exposed grout surfaces with wet burlap during the first 48 hours or apply an acceptable water based cure and seal agent.
4. Protect from freezing for a minimum of 48 hours after placement.
ACI 308 Standard Practice for Curing Concrete.

Precautions:

Air, mix and substrate temperatures should be between 40°F (4°C) and 100°F (38°C).

- Colder temperatures or higher humidity conditions will retard set times.
- Do not use in applications of high dynamic loading.
- Do not retemper grout by adding water.

- Do not use as a floor topping or in large areas with an exposed shoulder around base plates.
- Do not add accelerators, retarders, plasticizer or other additives.
- Do not apply in application thicknesses <1" (25 mm) or > than 4" (100 mm).

NOTE: Proper application and installation of all Sakrete products are the responsibility of the end user.

Safety:

READ and UNDERSTAND the Safety Data Sheet (SDS) before using this product. WARNING: Wear protective clothing and equipment. For emergency information, call CHEMTREC at 800-424-9300 or 703-527-3887 (outside USA).

KEEP OUT OF REACH OF CHILDREN.

Limited Product Warranty:

The manufacturer warrants that this product shall be of merchantable quality when used or applied in accordance with the manufacturer's instructions. This product is not warranted as suitable for any purpose other than the general purpose for which it is intended. This warranty runs for one (1) year from the dates the product is purchased. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE DURATION OF THIS WARRANTY. Liability under this warranty is limited to replacement or defective products or, at the manufacturer's option, refund of the purchase price. CONSEQUENTIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY.