NON-SHRINK GENERAL PURPOSE GROUT
PRODUCT NO. 1585-01, 1585-51

PRODUCT DESCRIPTION
QUIKRETE® Non-Shrink General Purpose Grout is a high-strength, non-metallic, non-shrink grout designed for grouting and general construction applications. It can be mixed to a fluid, flowable, or plastic consistency requiring only the addition of clean water.

PRODUCT USE
Typical applications for QUIKRETE® Non-Shrink General Purpose Grout include grouting of:
• Steel columns
• Bearing plates
• Precast concrete
• Keyway Grouting
• Other anchoring or void filling conditions that require high strength

The non-shrink characteristics of Non-Shrink General Purpose Grout make it stable and capable of handling high load transfers.

NOTE: This product is not for use in precision grouting of machinery. (For precision grouting of machinery use QUIKRETE® Non-Shrink Precision Grout No. 1585-00)

SIZES
• 50 lb (22.6 kg) bags

YIELD
• Each 50 lb (22.6 kg) bag will yield 0.45 ft³ (12.7 L) at flowable consistency

TECHNICAL DATA

APPLICABLE STANDARDS
• ASTM C827 Standard Test Method for Change in Height at Early Ages of Cylindrical Specimens of Cementitious Mixtures
• ASTM C939 Standard Test Method for Flow of Grout for Preplaced-Aggregate Concrete (Flow Cone Method)
• ASTM C1090 Standard Test Method for Measuring Changes in Height of Cylindrical Specimens from Hydraulic-Cement Grout
• ASTM C1107 Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)
• US Army Corps of Engineers (COE) CRD-C 621 Specification for Non-Shrink Grout

PHYSICAL/CHEMICAL
QUIKRETE® Non-Shrink General Purpose Grout complies with the physical requirements of ASTM C1107 and CRD 621. Typical results obtained for QUIKRETE® Non-Shrink General Purpose Grout, when tested at 73.5 °F ± 3.5 °F (23.0 °C ± 2.0 °C), are shown in Table 2.

INSTALLATION
SURFACE PREPARATION
Wear the appropriate personal protective equipment. All grouting surfaces should be clean and free of foreign substances including corrosion, if present on steel. Remove all spalled areas and areas of unsound concrete. Preparation work done on the grouting surfaces should be completed by high pressure water blast, breaker, hammer, or other appropriate mechanical means to obtain a properly prepared surface. Saturate repair area with clean water before grouting to ensure SSD condition. No standing water should be left in the repair area. Refer to current ICRI Guide 310.2R for additional surface preparation information.

MIXING
WEAR IMPERVIOUS GLOVES, such as nitrile when handling product. QUIKRETE® Non-Shrink General Purpose Grout should be mechanically mixed for a minimum of 3 minutes using a 5 gallon (19 L) bucket with a ½ in (13 mm) drill and paddle mixer. For larger applications, a standard mortar mixer may be used. Add only enough water to achieve the preferred consistency listed in Table 2. Add the powder to the water and mix to a lump free consistency. Typical starting water contents can be found in Table 1.

APPLICATION
WEAR IMPERVIOUS GLOVES, such as nitrile when handling product. Place the grout quickly and continuously using proper consolidation techniques when possible (i.e. light rodding, vibrating, tamping, etc.) to
eliminate air bubbles. The typical application depth of QUIKRETE® Non-Shrink General Purpose Grout is up to 3 inches (75 mm). For applications over 3 inches (75 mm) in depth, it is preferable to extend the product with high quality 3/8 in (9.5 mm) pea gravel, at a rate of approximately 25 pounds (11.3 kg) of gravel per 50 pound (22.6 kg) bag of QUIKRETE® Non-Shrink General Purpose Grout. For many applications, it may be placed up to 6 inches (150 mm) in depth without the extension. When placing at depths over 3 inches (75 mm) and the surface area is over 2 ft² (0.19 m²), the product should be extended. For all these applications, care should be taken to not overwater, which may cause segregation.

CURING
A damp cure of at least 3 days is necessary to control the non-shrink characteristics and maintain strength levels.

PRECAUTIONS
- Additions of cement or other materials will eliminate the designed product qualities
- Water quantities may be affected by temperature, mixing method and batch size
- QUIKRETE® Non-Shrink General Purpose Grout should not be re-tempered
- Mix no more grout than can be placed in 25 minutes
- Follow ACI 305R when using product in hot weather
- Follow ACI 306R when using product in cold weather
- Use a consistent water temperature when mixing multiple batches, to prevent performance fluctuations

TABLE 1 TYPICAL WATER DEMAND PER 50 lb (22.6 kg) BAG

<table>
<thead>
<tr>
<th>Consistency</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic</td>
<td>4-1/2 qt (4.3 L)</td>
</tr>
<tr>
<td>Flowable</td>
<td>5 qt (4.7 L)</td>
</tr>
<tr>
<td>Fluid</td>
<td>5-1/2 qt (5.2 L)</td>
</tr>
</tbody>
</table>

SAFETY
IMPORTANT: Read Safety Data Sheet carefully before using. WEAR IMPERVIOUS GLOVES, such as nitrile, mask, and eye protection.
DANGER: Causes severe skin burns and serious eye damage. Prolonged or repeated inhalation of dust may cause lung damage or cancer.
KEEP OUT OF REACH OF CHILDREN

SHELF LIFE
12 months from date of manufacture as long as the undamaged package is stored in a dry location that is protected from moisture, and out of direct sunlight.

WARRANTY
NOTICE: Obtain the applicable LIMITED WARRANTY at www.quikrete.com/product-warranty or send a written request to The Quikrete Companies, LLC, Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured by or under the authority of The Quikrete Companies, LLC. © 2022 Quikrete International, Inc.

TABLE 2 TYPICAL PHYSICAL PROPERTIES AT 73.5 °F (23 °C)

<table>
<thead>
<tr>
<th>Consistency</th>
<th>Plastic</th>
<th>Flowable</th>
<th>Fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow @ 5 Drops, ASTM C1437</td>
<td>100 to 125%</td>
<td>125 to 145%</td>
<td>20 to 30 seconds</td>
</tr>
<tr>
<td>Compressive Strength, ASTM C109 (Modified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>PSI (MPa)</td>
<td>PSI (MPa)</td>
<td>PSI (MPa)</td>
</tr>
<tr>
<td>1 day</td>
<td>3000 (20.6)</td>
<td>2500 (17.2)</td>
<td>2000 (13.7)</td>
</tr>
<tr>
<td>3 days</td>
<td>5500 (37.9)</td>
<td>4500 (31.0)</td>
<td>3500 (24.1)</td>
</tr>
<tr>
<td>7 days</td>
<td>7000 (48.2)</td>
<td>6500 (44.8)</td>
<td>5500 (37.9)</td>
</tr>
<tr>
<td>28 days</td>
<td>9000 (62.0)</td>
<td>8000 (55.1)</td>
<td>7000 (48.2)</td>
</tr>
<tr>
<td>Height change, ASTM C1090</td>
<td>0.0 to 0.2%</td>
<td>0.0 to 0.2%</td>
<td>0.0 to 0.2%</td>
</tr>
<tr>
<td>@ 1, 3, 7 &amp; 28 days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height change, ASTM C827</td>
<td>0%</td>
<td>0.3%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

* Refer to www.quikrete.com for the most current technical data and SDS
Revised March 2022