QUIKRETE®

CEMENT & CONCRETE PRODUCTS™

SAND/TOPPING MIX

PRODUCT NO. 1103

DIVISION **3**

Concrete Topping
03 53 00

PRODUCT DESCRIPTION

QUIKRETE® Sand/Topping Mix consists of a uniformly blended mixture of Portland cement and commercial grade sands, used for repairing and topping damaged horizontal concrete surfaces less than 2" (51 mm) thick.

PRODUCT USE

QUIKRETE® Sand /Topping Mix is formulated for placing concrete overlays less than 2" (51 mm) thick. It is also used for patching and leveling steps, walks and floors. Other applications for QUIKRETE® Sand/Topping Mix include:

- Chimney caps
- Large crack repairs
- Thick setting beds for ceramic floor tile
- Filling cores in masonry block or brick

SIZES

- QUIKRETE® Sand/Topping Mix –
  - 80 lb (36.3 kg) bags
  - 60 lb (27.2 kg) bags
  - 40 lb (18.1 kg) bags
  - 10 lb (4.5 kg) bags
  - 25 kg (55 lb) bags
  - 30 kg (66 lb) bags

YIELD

- 80 lb (36.3 kg) bag - Approximately 0.66 cu ft (19 L)
- 60 lb (27.2 kg) bag - Approximately 0.5 cu ft (14 L)
- 40 lb (18.1 kg) - Approximately 0.37 cu ft (10 L)

TECHNICAL DATA

APPLICABLE STANDARDS

ASTM International - ASTM C387 Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete
QUIKRETE® Sand/Topping Mix exceeds the compressive strength requirements for high strength mortars per ASTM C387. Typical compressive strengths are:

- 3000 psi (20.7 MPa) at 7 days
- 5000 psi (34.5 MPa) at 28 days

INSTALLATION

SURFACE PREPARATION

When using Sand/Topping Mix to resurface damaged concrete surfaces 1/2" - 2" (12.7 - 51 mm) thick dig a small trench along the edge of the damaged surface so that forms can be set in place level with the old concrete surface. It is important to form a solid base for the new topping.

Remove all broken and loose concrete. Clean the surface thoroughly with QUIKRETE® Concrete & Asphalt Cleaner.

ADMIXTURES

For patches less than 1" (25.4 mm) thick, replace part of the mixing water with QUIKRETE® Concrete Acrylic Fortifier #8610 for improved bonding. Add the QUIKRETE® Concrete Acrylic Fortifier directly to the mix at the rate of 3 pt (1.4 L) per 60 lb (27.2 kg) bag or 1/2 gal (1.9 L) per 80 lb (36.3 kg) bag.

MIXING

NOTE:

- For applications 1" - 2" (25.4 - 51 mm) thick, use specified bonding agent
- For applications less than 1" (25.4 mm) thick, use specified admixture

MACHINE MIXING

QUIKRETE® Sand/Topping Mix can be mixed in a barrel type concrete mixer or a mortar mixer. Choose the mixer size most appropriate for the size of the job. Allow at least 1 cu ft (28 L) of mixer capacity for each 80 lb (36.3 kg) bag of QUIKRETE® Sand/Topping Mix to be mixed at one time

- For each 80 lb (36.3 kg) bag of QUIKRETE® Sand/Topping Mix to be mixed, add approximately 8 pt (3.8 L) of fresh water to the mixer
- Turn on the mixer and begin adding bags of Sand/Topping Mix to the mixer
- If the material becomes too difficult to mix, add additional water until a workable mix is obtained

Note - Final water content should be 8 - 12 pt (3.8 - 5.7 L) of water per 80 lb (36.3 kg) bag of Sand/Topping Mix. For other bag sizes, use Table 1 to determine water content.

HAND MIXING

- Empty Sand/Topping Mix bags into a suitable mixing container
- For each 80 lb (36.3 kg) bag of mix, add approximately 8 pt (3.8 L) of clean water. Work the mix with a shovel, rake or hoe

• Add additional water as needed to obtain a workable plastic-like consistency

Note - Final water content should be 8 - 12 pt (3.8 - 5.7 L). Be sure all material is wet. Do not leave standing puddles. For other bag sizes, use Table 1 to determine water content.

TABLE 1 MIX WATER REQUIREMENTS FOR QUIKRETE® SAND/TOPPING MIX

Package size	Starting water content	Final water content
80 lb (36.3 kg)	8 pt (3.8 L)	8-12 pt (3.8-5.7 L)
60 lb (27.2 kg)	6 pt (2.8 L)	6-9 pt (2.8-4.3 L)
40 lb (18.1 kg)	4 pt (1.9 L)	4-6 pt (1.9-2.8 L)

APPLICATION

• Using 2 × 4s and stakes, construct a form around the old sidewalk or slab. Use a level to make sure that the forms are set at the correct height and that there is adequate slope for drainage

• If the area to be resurfaced requires topping from 1" - 2" (25.4 - 51 mm) in thickness, first coat the damaged area with QUIKRETE® Concrete Bonding Adhesive (#9902)

• Allow the Bonding Adhesive to dry before proceeding. Concrete Bonding Adhesive should not be used when Sand/Topping Mix contains Acrylic Fortifier

• Place the Sand/Topping Mix onto the damaged area and trowel the surface smooth using a steel finishing trowel or wood float

• Edge using a concrete edging tool if desired

• If the topping is placed over an existing concrete joint, it is important to tool a joint into the Sand/Topping Mix directly over the existing joint

• Use a trowel or jointer to form the joint at least half the depth of the patch

FINISHING

QUIKRETE® Sand/Topping Mix can be broom finished or hand trowel finished. Power finishing is not recommended. Specialty finishes, such as stamping, adding color or staining, are also acceptable.

CURING

General

Curing is one of the most important steps in the use of Sand/ Topping Mix. Proper curing increases the strength and durability of the repair, and a poor curing job can ruin an otherwise well-done project.

Proper water content and temperature are essential for good curing. In near freezing temperatures, the hydration process slows considerably. When weather is too hot, dry or windy, water is lost by evaporation from the repair and hydration stops, resulting in finishing difficulties and cracks. The ideal circumstances for curing are ample moisture and moderate temperature and wind conditions.

Curing should start as soon as possible and should continue for a period of 5 days in warm weather at minimum 70°F (21°C) or higher, or for 7 days in colder weather at 50 - 70°F (10 - 21°C).

Specific Curing Methods

• QUIKRETE® Acrylic Cure & Seal – Satin Finish (#8730) provides the easiest and most convenient method of curing. Apply by spray, brush or roller soon after the final finishing operation when the surface is hard. The surface can be damp, but not wet, when applying the curing compound. Complete coverage is essential

• Other methods of providing proper curing include covering the surface with wet burlap, keeping the surface wet with a lawn sprinkler and covering the surface with plastic sheeting or waterproof paper to prevent moisture loss

• If burlap is used, it should be free of chemicals that could weaken or discolor the concrete. New burlap should be washed before use. Place it when the concrete is hard enough to withstand surface damage and sprinkle it periodically to keep the concrete surface continuously moist

• Water curing with lawn sprinklers, nozzles or soaking hoses must be continuous to prevent interruption of the curing process

• Curing with plastic sheets is convenient. They must be laid flat, thoroughly sealed at joints and anchored carefully along edges

PRECAUTIONS

• Curing compounds should not be applied if rain or temperatures below 50°F (10°C) are expected within 24 hours

• Curing with plastic or burlap can cause patchy discoloration of the repair

• For repairs to colored surfaces, wet curing or the use of QUIKRETE® Acrylic Cure & Seal – Satin Finish (#8730) is recommended

• Do not use curing compounds during late fall on surfaces where de-icers will be used to melt ice and snow. Using curing compounds at that time can prevent proper air curing of the repair, which is necessary to enhance its resistance to damage caused by de-icers

• Protect Sand/Topping Mix from freezing during the first 48 hours. Plastic sheeting and insulation blankets should be used if temperatures are expected to fall below 32°F (0°C)

• Mixes that contain Concrete Acrylic Fortifier do not require extensive curing. No curing is required except in especially hot, dry or windy conditions. Under such conditions, the repair should be moist cured for 24 hours

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 under the authority of The Quikrete Companies, LLC.

** Refer to www.quikrete.com for the most current technical data, SDS, and guide specifications*