

ECOSYSTEMS™

APPLICATION INSTRUCTIONS

Version 082718



IMPORTANT

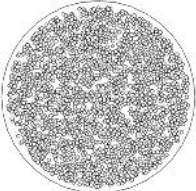
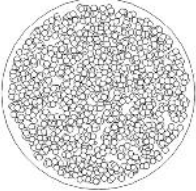
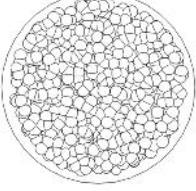
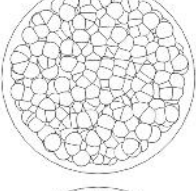
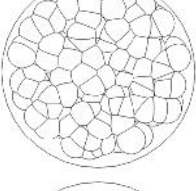
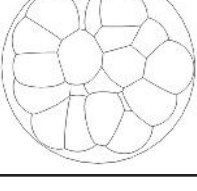
REVIEW ALL
FOLLOWING PAGES

KIT CALCULATION TABLE

HOW TO USE TABLE:

Place a pinch of particles or aggregate on the estimation swatches to determine the particle volume and water volume to mix with each kit.†

One kit is a bottle of PART A and a bottle of PART B

ESTIMATION SWATCH	PARTICLE VOLUME*	WATER VOLUME
SIZE 1 .46 mm / .02 in No. 50 	30 LBS	4-1/4 CUP
SIZE 2 .80 mm / .03 in No. 30 	40 LBS	2-1/3 CUP
SIZE 3 1.62 mm / .06 in No. 16 	90 LBS	1 CUP
SIZE 4 2.36 mm / .09 in No. 8 	120 LBS	3/4 CUP
SIZE 5 3.85 mm / .15 in No. 4 	150 LBS	1/3 CUP
SIZE 6 5.92 mm / .25 in 3/8" 	200 LBS	1/4 CUP

† Estimation table is to be used for aggregates and sands only. If using recycled rubber, glass, synthetic particles, or non-porous materials, contact support for correct mix design.

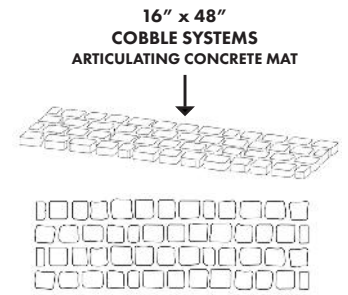
NOTE:

Aggregates smaller than **SIZE 1** are not recommended
 Adjust your volumes proportionally for aggregates larger than **SIZE 6 (1/4 IN)**
 You may need a mixer with a capacity larger than 3.5 CUFT for **SIZES 5&6**
 Larger capacity mixer may be used for larger batches.

COVERAGE CALCULATION TABLES

COVERAGE PER KIT (COBBLE SYSTEMS)*

PARTICLE SIZE	COVERAGE PER KIT
SIZE 1	15 SQFT
SIZE 2	20 SQFT
SIZE 3	40 SQFT
SIZE 4	75 SQFT
SIZE 5	90 SQFT
SIZE 6	130 SQFT



COVERAGE PER KIT (NON-COBBLE SYSTEMS)*

Based on size 3 particles at 1-1/14" joint depth

Stone Dimensions		Grout Joint Width			Square Foot Coverage
Width	Length	1/4"	1/2"	3/4"	
3.5	3.5	72	36	18	
4	8	86	43	29	
6	6	86	43	29	
8	8	106	53	35	
8	10	117	59	39	
10	12	143	72	48	
12	12	158	79	53	
16	16	213	106	71	
16	24	245	122	82	



*Estimations only. It is recommended to adjust your mix design accordingly if the mix appears too dry or too wet or if the coverage is more or less than above.

IMPORTANT

**REVIEW ALL
 FOLLOWING (6) PAGES**

I. EQUIPMENT & SUPPLIES

It is **VERY IMPORTANT** to have all your materials and supplies ready and accessible before starting the application. This is especially true during spells of hot weather, as the mix will cure at a more rapid rate.

	Disposable Mixing Containers (5 qt)
	Disposable Mixing Sticks
	Measuring Cup for water (at least 2 cup)
	Hose with spray attachment. There must always be access to water.
	Clean portable mixer. Plastic drum is highly recommended for easy clean up.
	Double blade foam floor squeegees with broom stick.
	Stiff bristle push broom.
	Rags
	Garbage Can

	<p>Fold out work table for work area</p>
	<p>Tarp for under work area</p>
	<p>Stiff bristled hand brush</p>
	<p>Standard soft broom</p>

ALWAYS WEAR WHEN HANDLING:

	<p>Nitrile Gloves</p>
	<p>Eye Protection</p>
	<p>Dust mask while handling dry aggregate</p>

II. PREPARATION CHECKLIST

Before starting the application process, go down this checklist to make sure you are ready.

There is the same quantity of both PART A bottles and PART B bottles.

The correct aggregate is accessible and ready to mix.

Temperature WILL NOT be below 32 degrees Fahrenheit in the next 24 hours.

It WILL NOT rain within 6 hours of application.

The temperature is UNDER 95 degrees Fahrenheit.

The surface will be able to be blocked off to foot traffic for at least 4-5 hours and vehicular traffic for 24 hours after application.

There are no large debris (sticks, leaves, stones) on surface or in joints.





The surface is clean, dry, and free of grease and oil.

Those handling the material are wearing nitrile gloves and eye protection.

Everyone handling the material has read and understands the instructions and MSDS.

A work area is set up with a **tarp** on the ground, a **fold out table**, **trashcan**, and all your **mixing tools and supplies** within reach.

III. GROUT MATRIX APPLICATION

<p>1. Empty prescribed amount of aggregate into mixer and let mix while binder is being prepared.</p>	 A person wearing a light blue shirt is pouring a dark, granular aggregate from a white plastic bag into a grey concrete mixer. The mixer is tilted, and the aggregate is falling into it.
<p>2. Empty 1 bottle PART A (White Label) and 1 bottle PART B (Black Label) into a 5 QT disposable mixing container.</p>	 A person wearing black gloves is pouring liquid from two white plastic bottles into a white bucket. The bucket is placed on a wooden surface. The liquid is being poured from the bottles into the bucket.
<p>3. Thoroughly mix for 2 minutes with a disposable mixing stick.</p>	 A person wearing black gloves is using a wooden mixing stick to stir the liquid in a white bucket. The bucket is on a wooden surface. The person is holding the stick vertically and moving it up and down.
<p>4. Add prescribed amount of water to container. Mix for another minute.</p>	 A person wearing black gloves is pouring water from a clear plastic bottle into a white bucket. The bucket is on a wooden surface. The person is also holding a wooden mixing stick in the bucket.

5. *Mist the inside of the mixer to prevent excessive clumping.* Immediately empty the **container** into the **mixer** and allow particles to coat for 3 minutes. Agitate the **mixer** as it is rotating and make sure no aggregate remains caked to the walls.



6. While mix is getting blended, thoroughly wet the surface with the shower setting on a **hose attachment**. Failure to do so may result in excessive staining of the surface.



7. Immediately pour contents of **mixer** onto surface and push diagonally over joints with a clean, flexible, and wet **double blade foam squeegee**.

IMPORTANT: If the water on surface has started to evaporate, saturate with water again as needed.

NEVER spread mixture over a dry surface.



8. Continue using the **squeegee** to fill joints and make sure there are no large clumps remaining on the surface. Any stray particles can be cleaned up with a **stiff bristled broom** later. Any clumps can stick permanently so take your time and make sure everything is in the joints and surface of cobbles are completely exposed.



9. Clean the **squeegee** with water and a **stiff bristled hand brush** between each batch. Make sure squeegee is pliable. Replace as needed.



10. Rinse the inside of the **mixer** every other batch with high pressure water to prevent mix from adhering to walls.

NEVER POUR SLURRY ONTO A SURFACE YOU NEED KEPT CLEAN AS GROUT WILL PERMANENTLY STICK.



CURING:

The Grout must be protected from any movement, agitation, dust and debris while curing. The Grout will need to cure for 24 hours before any heavy load is applied. Foot traffic can resume within 8 hours. It is highly recommended to place visible barriers to prevent any traffic on the surface. If leaving overnight, cover with tarps to protect.

CLEAN UP:

Spray and rinse excess binder from tools and equipment with water immediately after application. Scrub with soap and water for stubborn areas. Remove unwanted binder with mineral spirits, rubbing alcohol, or epoxy thinner.

Once the grout has cured. Use a **stiff bristled broom** to dislodge any stray particles that remain on the surface. Any particles remaining on surface will be dislodged by normal traffic over time.

NOTE: A very thin film from the binder may remain on the surface causing the color to intensify in areas. This is normal and will disappear when exposed to weather and traffic over a period of time. To minimize staining, the surface **MUST** be saturated with water at all times during application. **NEVER spread mixture over a dry surface.**