

Gravel-Lok[®]

Installation instructions and tips for bonding small pebbles in the joints between larger flagstones, stepping stones, or concrete pavers.

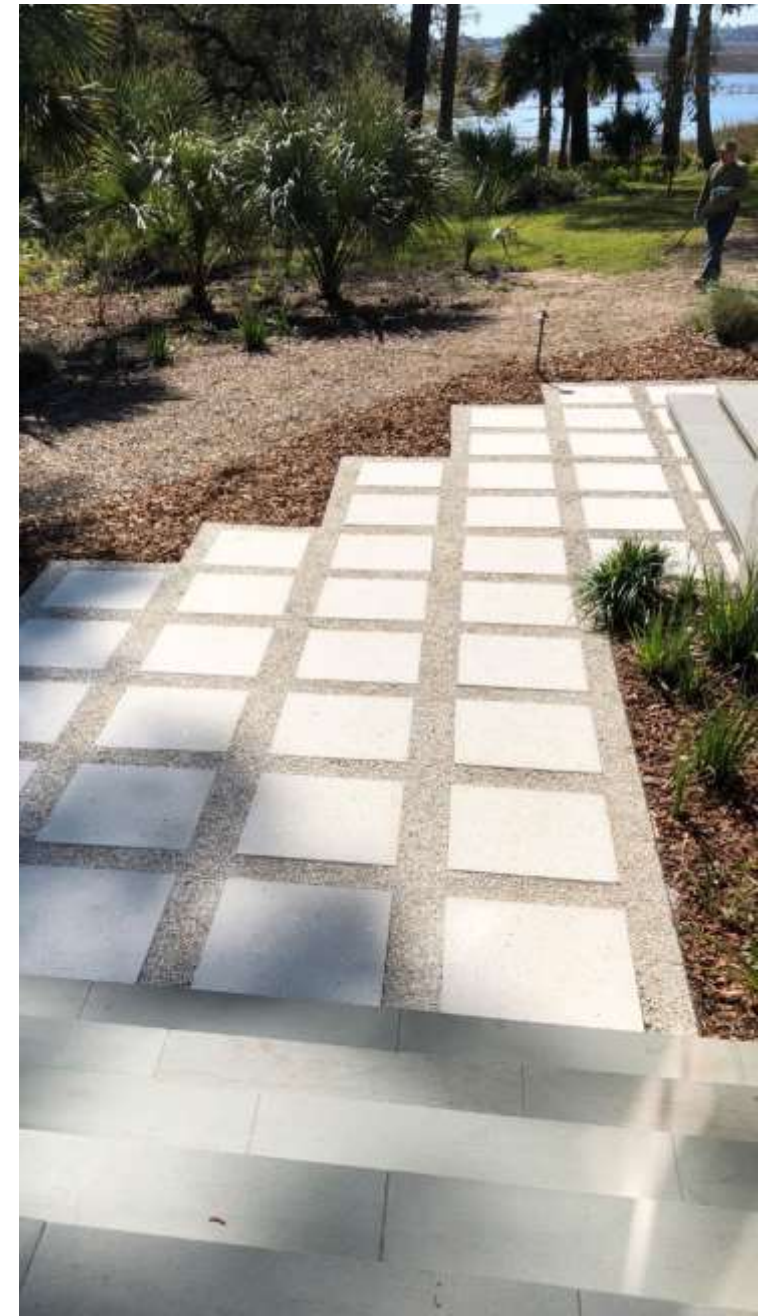


BEST INSTALLATION METHOD (MIX):

1. Choose pebbles which are small (but must be at least 1/8" in size). Clean and dry pebbles thoroughly. Ideally, stones should be at least 3 stones high for good structural integrity. However, if your joints are very narrow (about 1" wide) then your stones could be at least two stones high.
2. Mix pebbles with Gravel-Lok liquid per instructions on back of container.
3. Carefully place them into the joints. Allow 24 hour to cure.
4. Apply a roll coat if possible (if joints are wide enough to do this without getting liquid on the adjacent stones. If joints are very narrow, skip this step).



TIP: If stones are light in color, use Gravel-Lok Clear formula. It contains UV additives and will not discolor stones.



Mix liquid with the stones in a wheel barrow or 5 gallon plastic bucket. Work in small batches. Then place the stones into the joints and take the time to trowel carefully to a smooth finish. Stones that are sticking up will be more vulnerable to becoming loose over time.



Tip: line wheelbarrow with plastic trash bag to protect it. Gravel-Lok will not stick to it.



IMPORTANT!

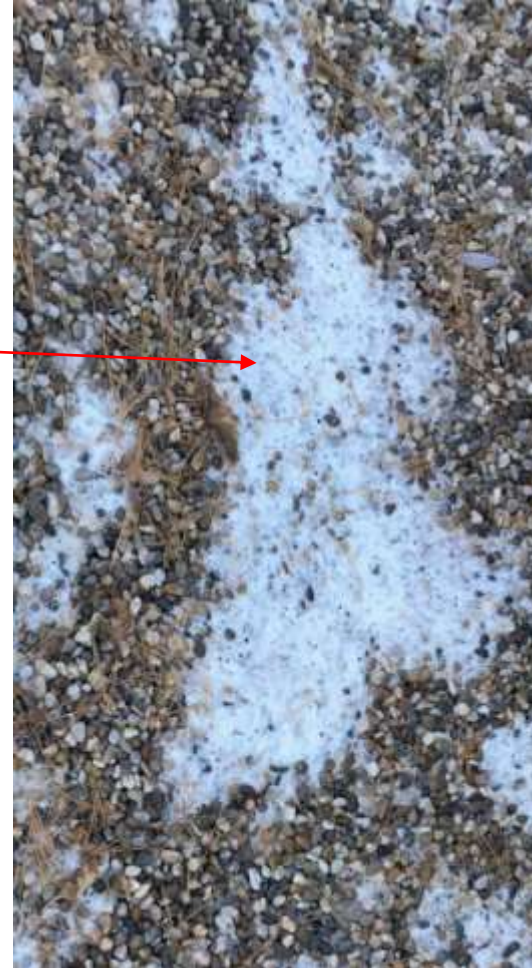
Do not use more liquid than it calls for. The mix ratio described on the back of every container is 20 - 24 oz. of liquid to a 5 gallon bucket of stones (filled to 5 gallon mark, not top of bucket) which is about 50 lbs. of stones.

Using too much liquid will cause foaming. And, anytime the liquid “pools up” foaming will occur.

If you see foam and it has not yet cured, you can crush the bubbles with a brush and they will go away.

It can take time for the liquid to foam up from a pool at the bottom of your stones and then percolate back up through the stones for you to see the foam.

If the foam has already cured there is nothing you can do to eliminate it other than chisel out this area and patch it with new stones.



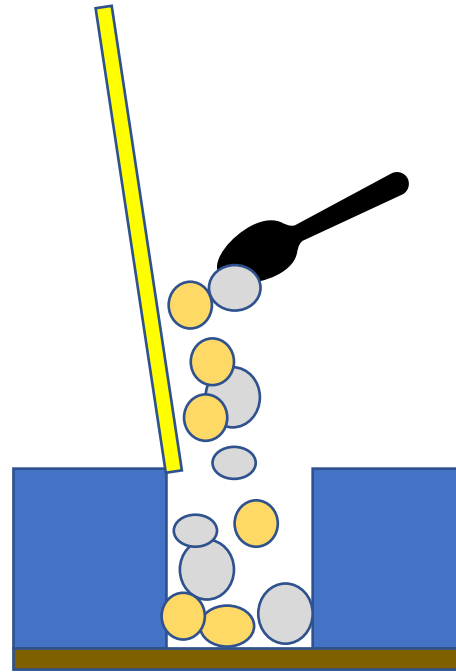




TIP: If your joints are narrow, it may be challenging to place the stones in the joints (wet with Gravel-Lok) without dropping some wet stones onto the adjacent flagstones. You could use a piece of cardboard covered a plastic trash bag or a piece of plexiglass to create a “wall” or “guide” on one side of the joint.

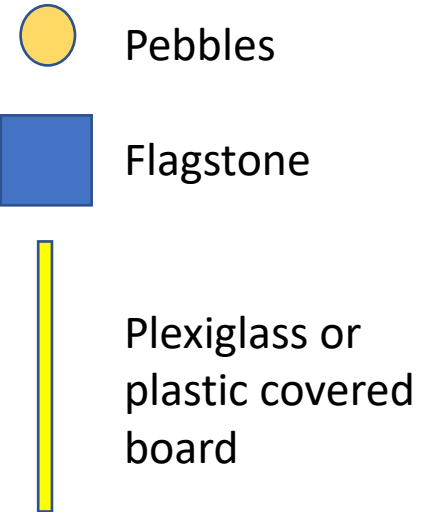


← 6" - 12" Wide →



(side view)

Legend



Allow your installation to cure for a full 24 hours. Then, blow off any debris (leaves, etc.) that might have fallen on the surface and apply a roll coat using the same Gravel-Lok liquid. If joints are wide enough to use a paint roller. Be careful to not drip any liquid on the adjacent flagstones.

Do not lay your roller down on the bonded stones. Excess liquid can drip off and foaming could occur in that area.

(Note: If your joints are very narrow, skip this step)



In the event that you drip Gravel-Lok liquid on the flagstones, immediately use acetone on a rag to clean it up.

You can also use acetone to clean any tools immediately after use.

If Gravel-Lok has already cured then acetone will not dissolve it.

NOTE:

Do NOT apply Gravel-Lok to your larger flagstones or stepping stones. It is not formulated for that purpose and they will become too slippery.



ALTERNATE INSTALLATION METHOD (SPRINKLE):

SECTION 2: SPRINKLE METHOD

If your stones are already in place and you cannot pick them up, then follow these instructions:

1. Pebbles must be at least 1/8" in size. Clean and dry stones in place as best as possible. Remove any leaves, twigs, or debris and then hose it down with water to clean off any dirt or dust. Allow plenty of time for the stones to dry. Make sure they are dry even down at the bottom of the joint.

TIP: after cleaning the stones, cover with a breathable cloth such as landscape fabric to allow air to dry the stones but prevent more debris from falling on the area while it dries out.

2. Sprinkle the liquid onto the stones at a rate of 1 gallon per 18 – 20 square feet as long as your stones are 2.5" deep. If your stones are more shallow, you will need to apply it more lightly, let it cure, and reapply lightly where necessary. We highly advise you to do a small test area first to determine the proper rate of application. You need to apply enough to bond the stones together but not too much that it causes foaming.

3. Apply a roll coat if possible (if joints are wide enough)



TIP: If stones are light in color, use Gravel-Lok Clear formula. It contains UV additives and will not discolor stones.

The goal is to lightly sprinkle the liquid onto the stones. Also, when stones are less than 2.5" deep and too much liquid is applied, it can foam up and ruin the job. You can always add more! It is better to apply it lightly and let it cure. Then, apply more where needed, if necessary.

In order to apply it lightly into a narrow space, such as joint, use a disposable plastic bottle. Empty out the liquid and use a hair dryer to make sure the inside of the bottle is dry. (Gravel-Lok should never be mixed with water.)

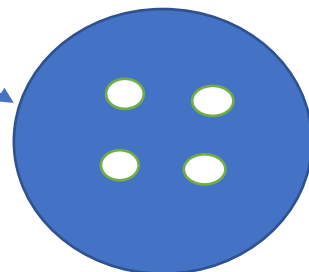
Drill out holes in the cap (1/16" or 1/8" holes). Use a funnel to fill bottles about half way with Gravel-Lok. Prepare and fill several bottles at once so you won't have to stop to refill very often.



Liquid should flow out of the holes like strands of spaghetti. (Not form a single stream)



DRILL
SMALL
HOLES INTO
THE CAP



For very narrow joints (1") a single, narrow spout may work



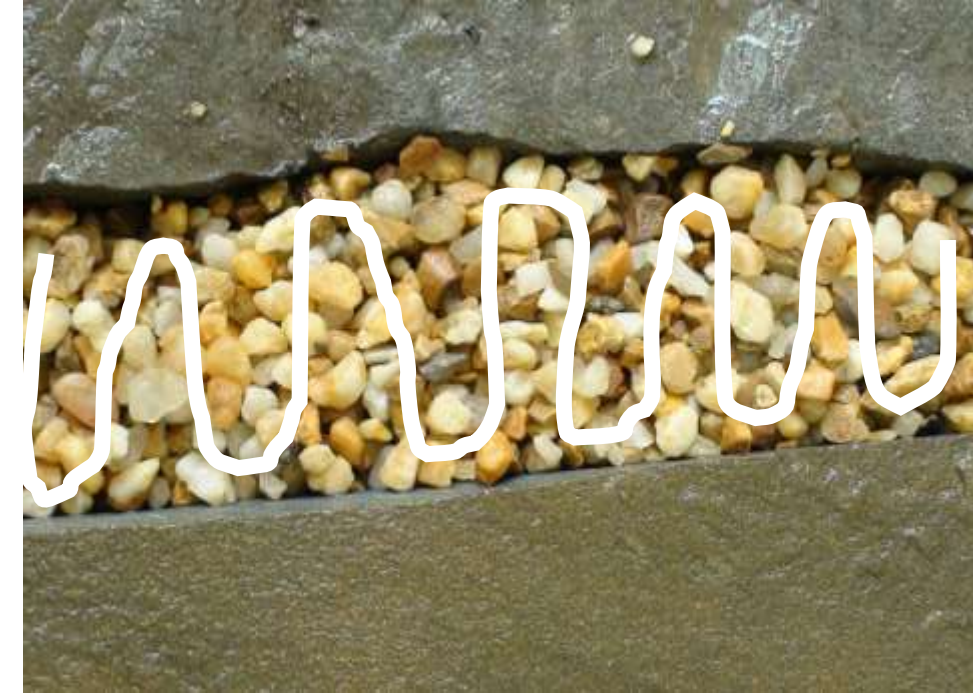
SECTION 2: SPRINKLE METHOD



When sprinkling it on, it should initially have a striped effect, or if using a small single spout, a squiggly effect. In a short period of time the liquid will expand a bit and cover more of the stone. Then, allow it to cure for 24 hours. Reapply lightly in areas that didn't bond well.



*Note: it will not look white when you apply it. The white color is depicted here for illustration only.





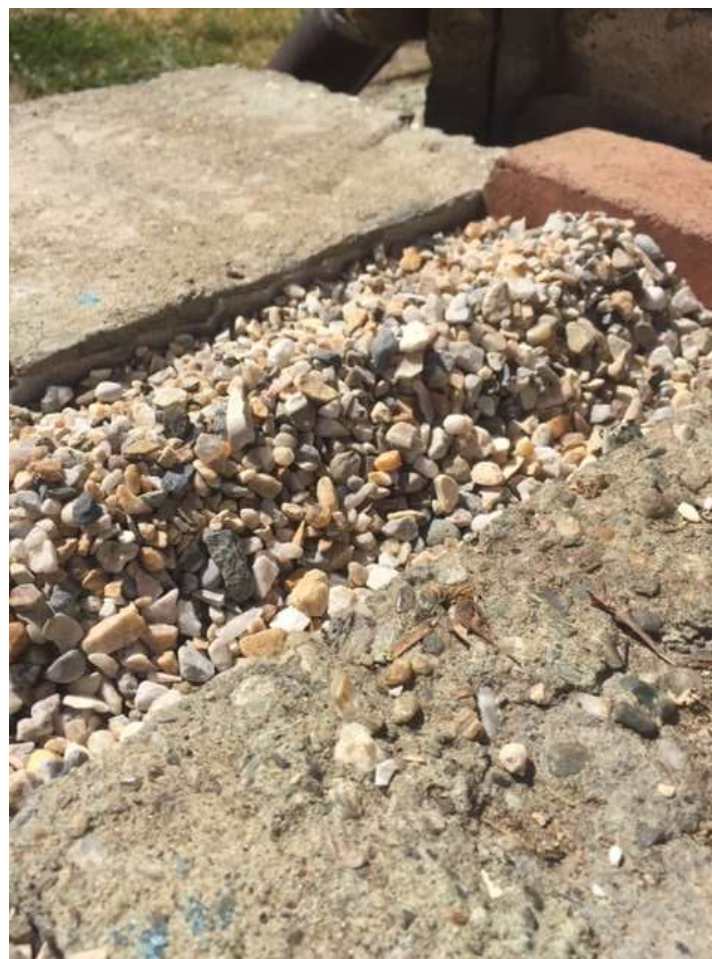
These photos are for illustration only.



Be sure to wear gloves.



Tip – if joints are wide, you can mound the stones into the center of the joint. Apply the liquid, mix it around a bit, then spread the stones back out to the edges and flatten as smooth as possible. See next two slides.





TIP: use inexpensive plastic utensils (purchase at Dollar store and throw away after this project) to “mix” the stones a bit with the liquid in the mounded center area of the wide joint.



Then, use the utensils to spread the stones out towards the edges. Smooth the stones back into the space and flatten them.

This technique helps to coat the stones with the liquid and it's helpful to avoid working too closely to the adjacent flagstones or stepping stones.



IMPORTANT!

Do not use more liquid than it calls for. The application rate is 18 – 20 square feet for a gallon of Gravel-Lok liquid if the stones are 2.5” deep. This is extremely hard to judge when applying to joints. Also, joints are often shallow. It is best to do a test area, apply lightly, allow it to cure and see the results. Adjust as necessary. Get a feel for the application rate before doing the entire job.

Using too much liquid will cause foaming. Anytime the liquid “pools up” foaming will occur.

If you see foam and it has not yet cured, you can crush the bubbles with a brush and they will go away.

It can take time for the liquid to foam up from a pool at the bottom of your stones and then percolate back up through the stones for you to see the foam.

If the foam has already cured there is nothing you can do to eliminate it other than chisel out this area and patch it with new stones.

With the SPRINKLE method it is important to remember that you can always apply more if you didn’t apply enough; you can’t take it away! Applying too much will cause foaming.



Allow your installation to cure for a full 24 hours. Then, blow off any debris (leaves, etc.) that might have fallen on the surface and apply a roll coat if joints are wide enough to use a paint roller. Be careful to not drip any liquid on the adjacent flagstones.

Do not lay your roller down on the bonded stones. Excess liquid can drip off and foaming could occur in that area.

(Note: If your joints are very narrow, skip this step)



In the event that you drip Gravel-Lok liquid on the flagstones, immediately use acetone on a rag to clean it up.

You can also use acetone to clean any tools immediately after use.

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NOTE:

Do NOT apply Gravel-Lok to your larger flagstones or stepping stones. It is not formulated for that purpose and they will become too slippery.



Before using Gravel-Lok read safety precautions detailed on the rear label of every container.



PRECAUTIONARY STATEMENTS

HANDLING & STORAGE

Handling: Do not breathe mist, vapors or spray. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing, eye protection and face protection. In case of inadequate ventilation wear respiratory protection. Keep container closed when not in use. Do not reseal if contaminated. Keep away from heat and flame.

Storage: Store in tightly closed containers in cool, dry and well-ventilated area away from heat or sources of ignition. Keep out of direct sunlight.
Storage Temperature: 60°F - 90°F (15.6°C - 32.2°C).

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear a face shield and chemical safety glasses or goggles.

Skin Protection: Wear impervious gloves. Cover exposed skin.

Respiratory Protection: For airborne exposure above the exposure limit(s), wear a NIOSH approved air-purifying respirator equipped with organic vapor cartridges. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure air-supplying respirator.

