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FLEXLOCK SAND FOR CONCRETE PAVER JOINTS UP TO 1"

TDS Revision Date (dd/mm/yyyy): 26/11/2021

TECHNICAL DATA SHEET

Update: November 26, 2021

Make sure you have an updated data sheet on hand. Canada and U.S. dial **1-855-847-7767** or (450) 624-1611

Description:

FLEXLOCK SAND is a unique mixture of polymer binders and calibrated sand available in Sandy Beige and Graphite Grey. The installation of **FLEXLOCK SAND** is almost identical to using regular paver joint sand except for the application of water. Once **FLEXLOCK SAND** sets, it becomes very firm and locks between the paver joints while still retaining flexibility and providing a long lasting, durable jointing material. **FLEXLOCK SAND** is recommended for a variety of uses including pool decks, patios, footpaths, driveways, parking spaces, pavements etc.

Features:

- Advanced Haze Free Technology.
- For Traditional application, rain safe 1 hour after water activation.
- Can be used for joints up to a maximum of 1" (2.5 cm)
- ASTM C-144 gradation of the polymeric sand allows use in even the tightest joints.
- OSHA silica crystalline compliant (OSHA 29 CFR 1926.1153).
- Works above 32°F (0°C)
- Waterproof bags: Lay the bag flat on its back, so the front of the bag is facing you.
 Intact pallets can be stored outdoors
- 15 Year Limited Warranty

Maintenance of paved surface:

When maintaining the paver surface, apply Gator Shampoo to clean the entire paved surface including the paver joints. Wash, rinse and remove any residue by using a hose and a watering gun set to shower with the normal maximum water pressure from any residential or commercial building (typically 80 psi /550 kPA).

Clay pavers:

If used on clay pavers make sure they are 100% dry. Clay pavers tend to hold moisture, which can prematurely activate the **FLEXLOCK SAND** while the sand is being spread over the paver surface, leaving a residue (always apply on a test area before using the **FLEXLOCK SAND** on clay pavers).

Moss:

FLEXLOCK SAND will not cause nor prevent moss, mold or mildew. Moss, mold and mildew are caused by certain on site conditions including excess moisture, shade, absence of ventilation, inadequate cleaning or maintenance, presence of soil or other organic debris left on the product.

Coverage:

Quantity required depends on the shape and size of the concrete pavers as well as the width of the joints.



Per 50 lb (22.7 kg) bag (Paver 2-3/8" (60 mm) in height)	NARROW JOINTS	WIDE JOINTS	
	1/8" to 3/8" (3-9 mm)	3/4" to 1" (19-25 mm)	
Sandy Beige & Graphite Grey	65-85 sq. ft (6-7.9 m²)	22-42 sq. ft.(2-3.88 m²)	



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IMPORTANT INSTALLATION NOTES

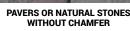
- A Always refer to the latest FLEXLOCK SAND Technical Data Sheet (TDS) at Flex-lock.com before installing FLEXLOCK SAND.
- B Pavers and slabs must be installed according to ICPI Tech Spec #2 (www.icpi.org) before **FLEXLOCK SAND** installation. If pavers are installed over a concrete slab, (overlay application) **FLEXLOCK ULTRA** polymeric sand must be used.
- C Traditional Base application, using FLEXLOCK SAND for pavers' sides and top surfaces must be completely dry. Do not apply if the paver surface is damp or wet. The damp or wet surface will cause FLEXLOCK SAND to prematurely activate and will lead to the polymers sticking on the paver surface.
- D Do not apply if the paver joints are damp or wet. This will prevent the **FLEXLOCK SAND** from properly sliding into the joints and obtaining very densely packed joints, which is critical to the products performance.
- E Temperature must be above 32°F (0°C) with dry conditions (no rain for at least 1 hour) after installing **FLEXLOCK SAND**.
- For all paver surfaces, and particularly around in-ground pools there must be a slope of 1/8 inch (3 mm) per linear foot away from the edge of the pool, or structures to ensure optimal performance of the **FLEXLOCK SAND**.
- G For the pool coping units it is mandatory to use mortar in the joints. For the rest of the paver installation around the pool, you can use **FLEXLOCK SAND**.
- H Do not sweep **FLEXLOCK SAND** over asphalt.
- FLEXLOCK SAND level, must be at least 1/8 inch (3 mm) below top of paver's surface or 1/8 inch (3 mm) below the chamfer or erosion may occur. The filled and cured polymeric sand joints should never be in direct contact with foot traffic or tires.
- J For textured or pre-finished surfaces, we recommend to remove all the sand from the paver or slab surface prior to using the plate or roller compactor.

Please note: All pavers must be completely interlocked for vehicular and pedestrian use. If pavers are fanned they are not considered interlocked. **FLEXLOCK SAND** can be applied when pavers are installed directly on open graded aggregates that lock or choke themselves. This means the polymeric sand will not migrate through the voids. Do not apply **FLEXLOCK SAND** when the pavers are installed directly on aggregates with large voids.

THIS CROSS-SECTION REPRESENTS THE HEIGHT OF POLYMERIC SAND FOUND IN THE JOINTS









PAVERS OR NATURAL STONES WITH CHAMFER

POLYMERIC SAND REQUIREMENTS Minimum joint width: 1/8" (3 mm) Maximum joint width: 1" (2.5 cm) Minimum joint depth: 1 1/2" (38 mm)



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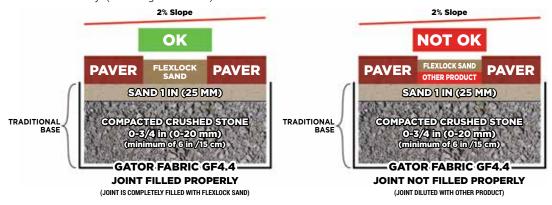


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REQUIRED SUB-SURFACE PREPARATION

FLEXLOCK SAND is recommended for a variety of uses including pool decks, patios, footpaths, driveways, parking spaces, pavements etc. The concrete pavers must be installed on a traditional base system composed of 2 layers. The upper layer can have a maximum of 1 inch (2.5 cm) of bedding sand. The lower layer must have a minimum of 6 inches (15 cm) of crushed stone compacted at 98 % Proctor density. (See diagram below).



Sand or ASTM No.9 stone can be used under the pavers

NEVER USE SUPERSAND BOND WHEN PAVERS ARE INSTALLED ON A CONCRETE SLAB – INSTEAD USE FLEXLOCK ULTRA SAND 1,2 3,4 5 7,8,9

FLEXLOCK SAND INSTALLATION INSTRUCTIONS (FOR A NEW PAVER SURFACE)

- 1 Spread **FLEXLOCK SAND** with hard-bristle broom. Make sure the **FLEXLOCK SAND** completely fills the joints. Do not use other materials in the joints.
- 2 Leave a layer of FLEXLOCK SAND on the surface to aid in vibrating and consolidating FLEXLOCK SAND into joints. For textured or pre-finished surfaces, we recommend to remove all the sand from the paver or slab surface prior to using the plate or roller compactor.
- 3 Vibrate the **FLEXLOCK SAND** into the paver joints using a vibratory plate compactor. A rubber pad is recommended. A roller compactor is best for slab installation.
- 4 Joints sand level, must be at least 1/8 inch (3 mm) below top of paver's surface or 1/8 inch (3 mm) below the chamfer. It is best to compact in several directions to ensure there are no air gaps or voids in the joints. Repeat steps 1-3 to ensure joints are filled and consolidated. Narrow joints require more care to completely fill.
- 5 Sweep off excess **FLEXLOCK SAND** from the paved surface, first with a hard-bristle broom, then a soft bristle broom. Joints sand level, must be at least 1/8 inch (3 mm) below top of paver's surface or 1/8 inch (3 mm) below the chamfer.
- 6 Use a leaf blower to remove all remaining **FLEXLOCK SAND** residue from the paver surface.

WATER ACTIVATION (IMPORTANT NOTES)

- A Work in manageable sections, ideally about 100 sq. ft. (10 sq. m.) at a time, depending on temperature.
- B Do not allow **FLEXLOCK SAND** to wash out of joint.
- C Never allow paved surface to dry out during the water activation phase.
- D Watering must be started at the lowest point of the paved surface.
- E Use a watering gun connected to a hose. Setting should be set to shower.



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FLEXLOCK SAND WATER ACTIVATION STEPS

- 7 Shower water on a specific water area of 100 sq.ft. (10 sq. m.), wait no longer than 2 to 3 minutes. Proceed to STEP 8.
- 8 Shower and rinse simultaneously on a section of approximately 100 sq. ft. (10 sq. m.) so as to eliminate any **FLEXLOCK SAND** residue left on the pavers. Any **FLEXLOCK SAND** residue should go directly into the paver joints. Wait no longer than 2 to 3 minutes. Proceed to STEP 9.
- 9 Shower and rinse simultaneously, so as to eliminate any FLEXLOCK SAND residue. Any residue should go directly into the paver joints. However, stop showering when you see water retention on the paver joints. Wait no longer than 2 to 3 minutes. Proceed to STEP 10. Note: Repeat the directions of steps 7 to 9 for all other areas that have not been showered with water.
- 10 Use a leaf blower to remove any excess water remaining on the paver pores and crevices. This blowing action is necessary to help remove any remaining **FLEXLOCK SAND** residue left on paver surfaces from the previous steps.

 Note: **FLEXLOCK SAND**, sets within 1 hour after water activation at above 32°F (0°C) (No rain should occur within 1 hour after water activation).

IMPORTANT:

The water used in steps 7 to 9 will activate a bonding action as well as condensing **FLEXLOCK SAND** in the joints. It is important to water the **FLEXLOCK SAND** a total of 3 times, as per steps 7, 8 and 9. Too little water will not properly activate the **FLEXLOCK SAND** and will reduce the final performance. If steps 7 to 10 are not done properly, a white haze may appear on paver surface after installation. This is due to excess **FLEXLOCK SAND** residue left on paver surfaces. This haze will dissipate over time, or it could be removed by using GATOR CLEAN efflorescence cleaner.

FLEXLOCK SAND INSTALLATION INSTRUCTIONS (FOR AN EXISTING PAVER SURFACE)

Remove existing jointing material. Be careful not to disturb the bedding material under the pavers. Pavers must be completely dry before installing a minimum of 1 1/2" (38 mm) deep into the joints. **FLEXLOCK SAND** level, must be at least 1/8 inch (3 mm) below top of paver's surface or 1/8 inch (3 mm) below the chamfer or erosion may occur. The filled and cured polymeric sand joints should never be in direct contact with foot traffic or tires. Follow **FLEXLOCK SAND** installation steps 1 to 10 for a new paver surface.

Typical Properties					
Test	Cure	Method	Value	Unit	
Water Penetration	24 hrs	ASTM C-642	<01:00	min:sec	
Flexural strength	7 days	BS EN 13892-2	625	psi	
Drying shrinkage	25 days	ASTM C-596	0.025	%	
Water immersion	7 days	SOP-MP-035	pass		
Resistance to efflorescence	7 days	SOP-MP-036	pass		
Penetration strength	24 hrs	SOP MP-032	93	PSI	
Spring drive	24 hrs	SOP MP 032	6	0-200 scale	
Abrasion resistance	24 hrs	SOP MP-030	pass		
Erosion resistance	24 hrs	SOP MP-029	<5.0	% lost	
Dirt Pick up during installation	N/A	SOP MP-031	2.64	ΔE value	



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Packaging: Product Size Units per Pallet

 FLEXLOCK SAND - Sandy Beige
 50 lb (22.7 kg)
 56

 FLEXLOCK SAND - Graphite Grey
 50 lb (22.7 kg)
 56

15-YEAR LIMITED WARRANTY (RESIDENTIAL)

Please note that this limited warranty applies only when the product is used for residential purposes exclusively (home owners or contractors using the product for single or multi-unit dwellings that are exclusively for residential use). The manufacturer cannot guarantee results as it has no control over surface and sub-surface preparation and product application. (Proper installation of pavers or slabs to ensure long-term stability of work, including granular foundation of certified crushed stone of 0-3/4 inch (0-20 mm) (minimum of 6 inches/15 cm), bedding sand layer (maximum of 1 inch/2.5 cm) and appropriate installation of reinforced edging in accordance with above specified method for applying product. However, for a period of 15 years from purchase, the manufacturer agrees that if the product is proven to be defective, and on the condition that it was installed pursuant to the method of application of surface and sub-surface preparation described above, then the manufacturer agrees to refund the purchase price. Proof of purchase is required for any claim.

EXCLUSION OF RESPONSIBILITY

THE PARTIES AGREE THAT REFUND OF THE PURCHASE PRICE AS STATED IS THE ONLY OBLIGATION OF THE MANUFACTURER. IN ALL EVENTS, THE MANUFACTURER SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES OR COSTS WHATSOEVER, (INCLUDING REMOVAL OR REINSTALLATION OF SAND OR PAVERS) DIRECT OR CONSEQUENTIAL. TO THE EXTENT PERMITTED BY LAW, THE MANUFACTURER EXCLUDES ANY IMPLIED WARRANTY OF QUALITY, MERCHANTABILITY OR FITNESS FOR PURPOSE. ALLIANCE DESIGNER PRODUCTS INC. excludes any responsibility whatsoever for the presence of moss, mold, mildew, or similar factors that may occur on the product after its installation. The presence of moss, mold or mildew is caused by the particular on-site conditions, including excess moisture, shade, absence of ventilation, inadequate cleaning or maintenance, presence of soil or other organic debris left on the product after installation. ALLIANCE DESIGNER PRODUCTS INC. excludes any responsibility for use of FLEXLOCK SAND for any installation not installed to manufacturer's specifications and ICPI Tech Spec #2.





