

FLEXLOCK ULTRA SAND G2
FOR PAVER & NATURAL STONE JOINTS
UP TO 4" FOR TRADITIONAL APPLICATIONS
& 2" FOR OVERLAY APPLICATIONS

TDS Revision Date (dd/mm/yyyy): 08/12/2021



TECHNICAL DATA SHEET

Update:

December 8, 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 ULTRA SAND G2 is made with a state-of-the-art manufacturing process. Specifically, calibrated sand is mixed with sophisticated intelligent polymers. This new generation of Intelligent Polymers neutralizes haze and dust. The polymeric sand application is now dust free and haze free. No blower is needed and the intelligent polymeric sand requires only one watering. **FLEXLOCK ULTRA SAND G2** is recommended for a variety of uses including pool decks, patios, footpaths, driveways, parking spaces, pavements, etc. Available in Sandy Beige, Graphite Grey, Ivory and Onyx Black.

Features:

- **No Dust, Haze Free, No Blower, and One Watering**
- **For Traditional applications**, rain safe 15 minutes after water activation
- **For Overlay applications**, rain safe 24 hours after water activation
- Used for joints up to a maximum of 4" (10 cm) in traditional application
- Used for joints up to a maximum of 2" (5 cm) in overlay application
- ASTM C144 gradation allows use in even the tightest joints
- [OSHA silica crystalline compliant](#) (OSHA 29 CFR 1926.1153)
- Works above 32°F (0°C)
- Ideal for [Gator Base](#) applications
- Can be used on false joint pavers
- Helps prevent weeds and damage caused by burrowing insects.
- Helps prevent erosion due to wind, rain and freeze/thaw cycles.
- Waterproof bags: Lay bag flat on its back, so front of the bag is facing you. Intact pallets or bags can be stored outdoors.

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 ULTRA SAND G2** while the sand is being spread over the paver surface, leaving a residue. Always apply on a test area before using the **FLEXLOCK ULTRA SAND G2** on clay pavers.

Moss:

FLEXLOCK ULTRA SAND G2 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.



Access our
online sand
calculator

Per 50 lb (22.7 kg) bag (Paver 2-3/8" (6 cm) in height)	NARROW JOINTS	WIDE JOINTS
	1/8" to 3/8" (3-9 mm)	3/4" to 1-1/4" (19-32 mm)
Sandy Beige, Graphite Grey, Ivory	65-85 sq. ft. (7-7.9 sq. m)	22-42 sq. ft. (2-3.9 sq. m.)
Onyx Black	58-76 sq. ft.	20-38 sq. ft.

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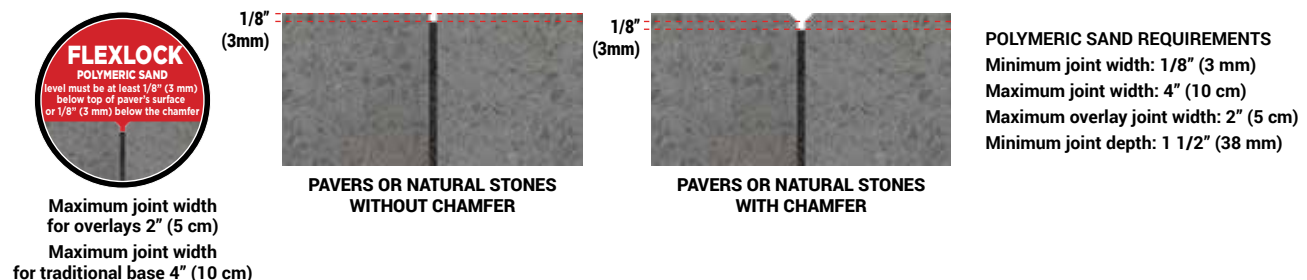
IMPORTANT INSTALLATION NOTES FOR G2

- A Always refer to the latest **FLEXLOCK ULTRA SAND G2 Technical Data Sheet (TDS)** at [Flex-lock.com](http://flex-lock.com) before installing **FLEXLOCK ULTRA SAND G2**.
- B Pavers and slabs must be installed according to [ICPI Tech Spec #2](http://www.icpi.org) traditional base (www.icpi.org) before **FLEXLOCK ULTRA SAND G2** installation. For overlay, ICPI recommends 2 inches (5 cm) diameter drainage holes spaced approximately 10 feet (3 meters) apart and at the lowest elevations in the slab. Holes should be filled with 3/8" (9mm) stone and covered with a 1 foot x 1 foot (30 cm x 30 cm) patch of [Gator Fabric GF4.4](#). Drilled holes should allow any water entering the bedding layer to freely flow out.
- C 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 ULTRA SAND G2** 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 ULTRA SAND G2** from properly sliding into the joints and obtaining very densely packed joints, which is critical to the product's performance.
- E Temperature must be above 32°F (0°C) with dry conditions and a minimum of **15 minutes of dry weather** required after activation in traditional application and **24 hours in overlay applications**.
- F For all paver surfaces, and particularly around in-ground pools, there must be a minimum 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 ULTRA SAND G2**.
- 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 ULTRA SAND G2**.
- H Do not sweep **FLEXLOCK ULTRA SAND G2** over asphalt.
- I **FLEXLOCK ULTRA SAND G2** 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 tire.
- 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 ULTRA SAND G2** can be applied when pavers are installed directly open graded aggregates that lock or choke themselves. This means the polymeric sand will not migrate through the voids. Do not apply **FLEXLOCK ULTRA SAND G2** when the pavers are installed directly on aggregates with large voids.

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





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REQUIRED SUB-SURFACE PREPARATION AND FOUNDATION OPTIONS

FLEXLOCK ULTRA SAND G2 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 or overlay base system. (See diagrams).

1 Traditional base system:

- A minimum 2% top surface slope for proper water runoff
- **FLEXLOCK ULTRA SAND G2** level, must be at least 1/8" (3 mm) below top of paver's surface or 1/8" (3 mm) below the chamfer
- Minimum joint width 1/8" (3 mm), Maximum 4" (10 cm)
- Minimum depth of joint 1 1/2" (38 mm)
- Layer of bedding sand maximum of 1" (25 mm)
- Layer of 6" (15 cm) thickness of 0- 3/4" (0-20 mm) compacted crushed stone
- For light traffic applications the pavers must be completely interlocked

C-33 sand or ASTM No. 9 stone can be used under pavers.



TRADITIONAL BASE

2 Gator Base system:

- A minimum 2% top surface slope for proper water runoff
- **FLEXLOCK ULTRA SAND G2** level, must be at least 1/8" (3 mm) below top of paver's surface or 1/8" (3 mm) below the chamfer
- Minimum joint width 1/8" (3 mm), Maximum 4" (10 cm)
- Minimum depth of joint 1 1/2" (38 mm)
- **Gator Base** on compacted sand (C-33 sand or ASTM No. 9) maximum of 1" (25 mm)
- Adding a layer of bedding sand (C-33 sand or ASTM No. 9) maximum of 1" (25 mm) on top of Gator Base is also an accepted method, when paver or stone are not equal in height
- For pedestrian applications only

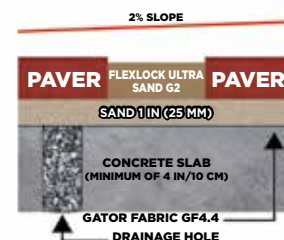
C-33 sand or ASTM No. 9 stone can be used under pavers.



TRADITIONAL BASE

3 Overlay application:

- A minimum 2% top surface slope for proper water runoff
- **FLEXLOCK ULTRA SAND G2** level, must be at least 1/8" (3 mm) below top of paver's surface or 1/8" (3 mm) below the chamfer
- Minimum joint width 1/8" (3 mm), Maximum 2" (5 cm)
- Minimum depth of joint 1 1/2" (38 mm)
- Layer of bedding sand maximum of 1" (25 mm)
- Layer of 4" (10 cm) thickness of concrete with 2" (5 cm) drainage hole every 10' (3 m) filled with 3/8" (9mm) clean stone and cover with a geotextile for water evacuation
- For light traffic applications the pavers must be completely interlocked



Drainage hole for water evacuation must be installed according to ICPI Tech Spec #10

OVERLAY

Note:

- Remove all loose and fragile concrete
- Cover the surface with a geotextile **Gator Fabric GF4.4**, refill with crushed stone and compact it

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REQUIRED SUB-SURFACE PREPARATION AND FOUNDATION OPTIONS (CONT.)

4 Overlay application:

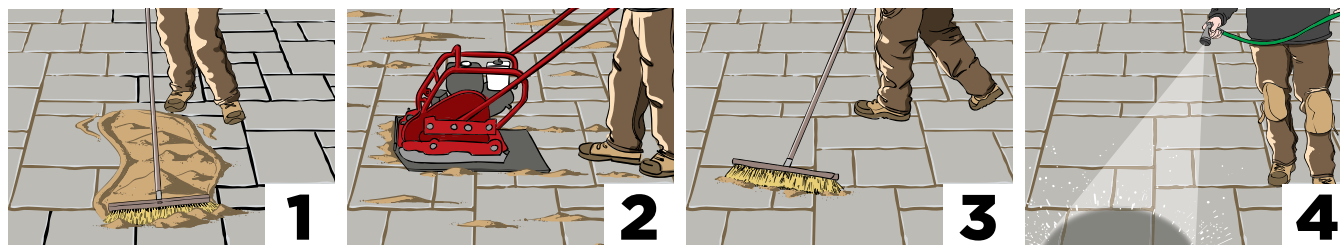
- A minimum 2% top surface slope for proper water runoff
- **FLEXLOCK ULTRA SAND G2** level, must be at least 1/8" (3 mm) below top of paver's surface or 1/8" (3 mm) below the chamfer
- Minimum joint width 1/8" (3 mm), Maximum 2" (5 cm)
- Minimum depth of joint 1-1/2" (38 mm)
- Layer of bedding sand maximum of 1" (25 mm)
- Minimum layer of 2" (5 cm) thickness of 0-3/4" (0-20 mm) compacted crushed stone
- Layer of 4" (10 cm) thickness of concrete with 2" (5 cm) drainage hole every 10' (3 m) filled with 3/8" (9mm) clean stone and cover with a geotextile for water evacuation
- For light traffic applications the pavers must be completely interlocked

Note:

- Remove all loose and fragile concrete
- Cover the surface with a geotextile [Gator Fabric GF4.4](#), refill with crushed stone and compact it



C-33 sand or ASTM No. 9 stone can be used under pavers.



FLEXLOCK ULTRA SAND G2 INSTALLATION STEPS (FOR A NEW PAVER SURFACE)

- 1 Spread with hard-bristle broom. Make sure the **FLEXLOCK ULTRA SAND G2** completely fills the joints. Do not use with other materials in the joints. Leave a layer of **FLEXLOCK ULTRA SAND G2** on the surface to aid in the vibrating and consolidation of **FLEXLOCK ULTRA SAND G2** 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.
- 2 Vibrate the **FLEXLOCK ULTRA SAND G2** into the paver joints using a vibratory plate compactor. A rubber pad is recommended. A roller compactor is best for slab installation. 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 and 2 to ensure joints are filled and consolidated. Narrow joints require more care to completely fill.
- 3 Sweep off excess **FLEXLOCK ULTRA SAND G2** from the paved surface, first with a hard-bristle broom, then a soft-bristle broom. Take care to leave the height of **FLEXLOCK ULTRA SAND G2** at least 1/8 inch (3 mm) below top of paver's surface or 1/8 inch (3 mm) below the chamfer.

IMPORTANT 30-30 WATER ACTIVATION NOTES FOR G2

- A Use a watering gun connected to a hose. Set to shower.
 - B Watering must be started at the lowest point of the paved surface.
 - C Never allow paved surface to dry out during the water-activation phase.
 - D Do not allow **FLEXLOCK ULTRA SAND G2** to wash out of joint.
 - E Shower for a minimum of 30 seconds for 30 sq. ft. (3 sq. m.) or until the **FLEXLOCK ULTRA SAND G2** repels the water and the water starts to accumulate on the joints.
- 4 Shower for a minimum of 30 seconds for 30 sq. ft. (3 sq. m.) or until the **FLEXLOCK ULTRA SAND G2** repels the water and the water starts to accumulate on the joints.



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FLEXLOCK ULTRA SAND G2 INSTALLATION (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 ULTRA SAND G2** 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 ULTRA SAND G2** installation steps 1 to 4 for a new paver surface.

TYPICAL PROPERTIES						
Test	European Method	North American Method	Cure	Units European (American) method	Typical Value*	
					minimum	maximum
Sand Gradation	DIN EN 13139	ASTM C-144	N/A	N/A	Compliant	Compliant
Penetration resistance	ISO 1920-14	ASTM C-403	7 days	N/mm ² (PSI)	1,8 (250)	2,6 (370)
			28 days		19 (2760)	39 (5630)
Water Absorption	BS EN 12808-5	ASTM D-1403	28 days	g (g/100cm ²)		
	30 minutes	30 minutes			0,15 (1,0)	0,23 (1,4)
	4 hours	4 hours			0,31 (2,0)	0,43 (2,7)
Erosion resistance	ISO 19392-3	ASTM D-7538	15 minutes	erosion %	<5	5
Flexural strength	BS EN 13892-2	ASTM C-348	7 days	N/mm ² (PSI)	0,6 (80)	0,9 (130)
			28 days		2,4 (350)	3,5 (510)
Compressive strength	BS EN 13892-2	ASTM C-109	7 days	N/mm ² (PSI)	1,1 (160)	2,3 (340)
			28 days		8,7 (1260)	11 (1600)

* Will vary depending on the color of the sand

Packaging:	Product	Size	Units per Pallet
	FLEXLOCK ULTRA SAND G2 - Sandy Beige	50 lbs (22.7 kg)	56
	FLEXLOCK ULTRA SAND G2 - Graphite Grey	50 lbs (22.7 kg)	56
	FLEXLOCK ULTRA SAND G2 - Ivory	50 lbs (22.7 kg)	56
	FLEXLOCK ULTRA SAND G2 - Onyx Black	50 lbs (22.7 kg)	56

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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 (25 mm)) and appropriate installation of reinforced edging in accordance with above specified method for applying product.) Also warranted when used with Gator Base. 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 ULTRA SAND G2 for any installation not installed to manufacturer's specifications and [ICPI Tech Spec #2 and #10](#).

1 YEAR LIMITED WARRANTY (COMMERCIAL)

Please note that when the product is used for other purposes (Mixed-use, commercial, institutional or other), the above terms apply except that the applicable period is reduced to 1 year from purchase.

ALLIANCE DESIGNER PRODUCTS INC. excludes any responsibility for use of any Gator Polymeric Sand for any installation not installed to manufacturer's specifications and [ICPI Tech Spec #2 and #10](#).

**15 YEAR
LIMITED WARRANTY****WATER
PROOF X
BAG****NO DUST • HAZE FREE • NO BLOWER • ONE WATERING
RAIN SAFE AFTER 15 MINUTES**