



GATOR NITRO JOINT SAND

TDS Revision Date (dd/mm/yyyy): 14/03/2024

TECHNICAL DATA SHEET

Update: March 14, 2024
 Make sure you have an updated data sheet on hand.
 Canada and U.S. dial **1-855-847-7767** or (450) 624-1611

Description: **GATOR NITRO JOINT SAND** is the ideal air cure, permeable jointing material. It is a ready-to-use mixture of calibrated sand and proprietary resin formula which cures when exposed to air, hardening from top to bottom of the joint. The product can be installed in wet or dry weather.

- Ideal for:**
- Concrete pavers and slabs
 - Natural and wet cast stones
 - Outdoor porcelain tiles with Gator tile system
 - Traditional, permeable and open graded installations
 - Pedestrian Gator Base installations
 - Pedestrian and light residential vehicular use
 - Residential driveways, patios, pool areas and walkways

- Features:**
- Joints of 1/8" (3 mm) to 1/4" (6 mm) for porcelain tile
 - Joints of 3/16" (5 mm) to 2" (50 mm) for pavers and stones
 - Permeable*
 - Apply rain or shine
 - Strength from top to bottom
 - Works above 37°F (3°C)

* Permeable when installed. If not maintained, permeability will be obstructed over time.

Recommendation of joints for pedestrian and vehicular applications.

	Minimum joint width	Maximum joint width	Minimum joint depth	Pedestrian	Vehicular
Porcelain Tile with Gator Tile System	1/8" (3 mm)	1/4" (6 mm)	3/4" (20 mm)	✓	X
Stones	3/16" (5 mm)	2" (50 mm)	1" (25 mm)	✓	X
Concrete pavers	3/16" (5 mm)	2" (50 mm)	2-3/8" (60 mm)	✓	X
Interlocking Concrete Pavers	3/16" (5 mm)	2" (50 mm)	2-3/8" (60 mm)	✓	✓

Note:

1. Gator Nitro jointing sand can be applied with interlocking concrete pavers which will be interlocked and with a minimum joint of 3/16" (5 mm) in vehicular applications such as light vehicle (LV) or a vehicle whose Total Authorized Weight Loaded (TAWL) does not exceed 7700 lbs (3500 kg). This category includes both tourist passenger cars or passenger cars (PV). Application of Gator Nitro Sand is not recommended for Heavy Duty vehicular weight (PL).
2. Outdoor Porcelain tiles must be installed using Gator Tile System with minimum joint depth of 3/4" (20 mm).



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Maintenance of paved surface:

When maintaining the paved surface, apply [Gator Shampoo](#) to clean the entire surface including the stone 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).

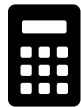
GATOR NITRO JOINT SAND is permeable when installed. However, If not maintained properly, permeability will be obstructed over time. To avoid obstruction in the joints, periodically use a pressure washer to remove all dirt and debris. Wait 28 days after the initial application of **GATOR NITRO JOINT SAND** before using a pressure washer.

Moss:

GATOR NITRO JOINT 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:

The quantity required depends on the size of the joints. One pail of 40 lb (18.1 kg) will cover:



[Access online sand calculator](#)

	Porcelain tile 24" x 24" x 3/4" with 1/8" joint width Porcelain tile 60 cm x 60 cm x 20 mm with 3 mm joint width Paver or stone 12" x 12" x 2 3/8" with joints of 3/16" to 1" Paver or stone 30 cm x 30 cm x 60 mm with joints of 5 mm to 25 mm			
	Beige	Grey	Silver	Black
1/8" joint (PorcelainTile)	550 ft ²	505 ft ²	550 ft ²	476 ft ²
3 mm joint (Porcelain tile)	58 m ²	47 m ²	58 m ²	44 m ²
3/16" joint (Concrete paver)	55 ft ²	54 ft ²	55 ft ²	51 ft ²
5 mm joint (Concrete paver)	5,1 m ²	5 m ²	5,1 m ²	4,7 m ²
3/4" joint (Concrete Paver)	15 ft ²	14 ft ²	15 ft ²	13 ft ²
19 mm joint (Concrete paver))	1,4 m ²	1,3 m ²	1,4 m ²	1,2 m ²
1" joint (Concrete Paver)	11,4 ft ²	10,6 ft ²	11,4 ft ²	9,8 ft ²
25 mm joint (Concrete paver)	1,1 m ²	1 m ²	1,1 m ²	0,9 m ²

Permeability:

Permeable when installed. If not maintained, permeability will be obstructed over time.

Storage:

Store outdoors under a covered area, away from direct sun or store indoors at temperatures ranging from -22 to 86°F (-30 to 30°C). Skid of **GATOR NITRO JOINT SAND** can be double stacked for storage, but not in transport.



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PREPARATION INFORMATION (IMPORTANT NOTES)

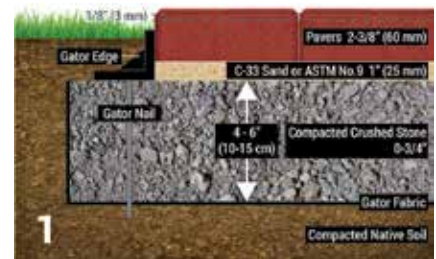
- A. Always refer to the latest **GATOR NITRO JOINT SAND** [Technical Data Sheet \(TDS\)](#) at Flex-lock.com before installing.
- B. **GATOR NITRO JOINT SAND** can be installed rain or shine. Paving surface must be pre-wet before installation and must remain wet throughout the installation process or staining may occur.
- C. **GATOR NITRO JOINT SAND** is an extremely strong and rigid jointing material, please ensure there is ABSOLUTELY NO paver, porcelain tile or stone movement prior to installation to prevent joint cracking.
- D. For pedestrian use or residential vehicular applications
- E. **GATOR NITRO JOINT SAND** must be installed above 37°F (3°C).
- F. Paver or stone joint Width: Minimum 3/16" (5 mm) Maximum 2" (50 mm)
- G. Paver or stone joint depth: Minimum 1" (25 mm) Maximum 4 3/4" (12 cm)
- H. Porcelain tile joint width Minimum 1/8" (3 mm) Maximum 1/4" (6 mm)
- I. Porcelain tile depth: Minimum 3/4" (20 mm)
- J. Working time : approximately 45 minutes.
- K. **GATOR NITRO JOINT SAND** can only be used on a drainage base application. In a non-drainage base application, **GATOR NITRO JOINT SAND** cannot be used.
- L. Paved surface can be used after 18 hours.
- M. Avoid power-washing for a minimum of 28 days after applying.

REQUIRED SUB-SURFACE PREPARATION AND FOUNDATION OPTIONS

GATOR NITRO JOINT SAND is recommended for a variety of uses, including patios, walkways, pool decks, residential and commercial interlocking concrete pavers applications. The pavers, natural or wet cast stones must be installed on one of the 3 drainage base systems below:

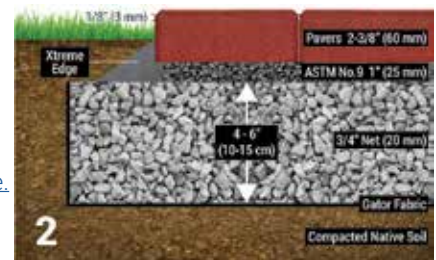
Option 1 Traditional

- [Gator Fabric GF4.4](#) covering bottom and side of excavated area.
- Foundation of 4-6" (10-15cm) compacted crushed stone 0-3/4" (0-20mm).
- Setting bed of 1" (25mm) of sand or ship stone ([ASTM No. 9](#)).
- Remove bedding layer along the paved surface, install [Gator Edge](#) against the paved selected surface and nailed in the compacted crushed stone.



Option 2 Open graded / Permeable

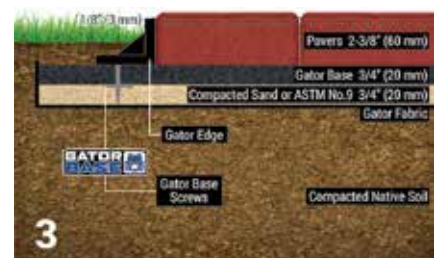
- [Gator Fabric GF4.4](#) covering bottom and side of excavated area.
- Foundation of 4-6" (10-15cm) compacted crushed stone 0-3/4" (0-20mm).
- Setting bed of 1" (25mm) of ship stone ([ASTM No. 9](#)).
- Remove bedding layer along the paved surface, spread and trowel [Gator XTreme Edge](#).



N.B. **GATOR NITRO JOINT SAND** could be installed only 90 minutes after [Gator XTreme Edge](#) has been applied

Option 3 Gator Base

- [Gator Fabric GF4.4](#) covering bottom and side of excavated area.
- Compacted sand 3/4" -1" (20-25mm) or Chip Setting Bed ([ASTM No. 9](#)).
- [Gator Base](#) installation exceeding 6" (15 cm) the final paved area.
- Install [Gator Edge](#) on the [Gator Base](#) against the paved select surface and use [Gator Base Screws](#) at every second hole to the [Gator Base](#).





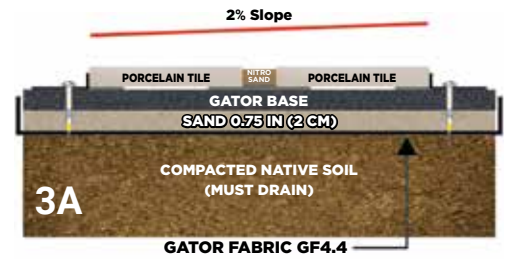
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REQUIRED SUB-SURFACE PREPARATION AND FOUNDATION OPTIONS (CONT.)

Option 3A Gator Tile System

- [Gator Fabric GF4.4](#) covering bottom and side of excavated area.
- Installation of Sand or Chip Setting Bed (ASTM No. 9) 3/4" (20 mm).
- [Gator Base](#) installation exceeding 6" (15 cm) the final porcelain tiles area.
- Install the porcelain tiles with the help of the [Gator Spacer](#) and the [Gator XP glue](#) to insure a mechanical bonding and the structural integrity of the system .
- Install [Gator Tile Edge](#) against the porcelain tiles and use [Gator Base Screws](#) at every second holes on the [Gator Base](#).
- Always refer to the latest GATOR TILE SYSTEM [Technical Data Sheet \(TDS\)](#) at [Flex-lock.com](#) before installing.



CROSS SECTION OF THE GATOR TILE SYSTEM

INSTALLATION STEPS

Designed for pedestrian or residential vehicular applications use only, **GATOR NITRO JOINT SAND** is ready-to-use and does not require any mixing. After you have followed the REQUIRED SUB-SURFACE PREPARATION described previously, you are ready to apply the **GATOR NITRO JOINT SAND**. Installation will be easier with two people.

NOTE

- There is no need to protect treated joints from rain while setting. Although the presence of rain will delay the setting process. Full strength: 28 days but surface can be walked on after 18 hours. If heavy rain has occurred when the joints have been pointed, then it may be necessary to revisit the job once the weather has cleared to touch up joints.
- **GATOR NITRO JOINT SAND** can be applied when pavers, Wet cast or natural stones are installed directly on open graded aggregates that lock or choke themselves. This means the **GATOR NITRO JOINT SAND** will not migrate through the voids. Do not apply **GATOR NITRO JOINT SAND** when the pavers, Wet cast or natural stones are installed directly on aggregates with large voids.
- **GATOR NITRO JOINT SAND** becomes very firm but will detach from pavers, Wet cast or natural stones if the sub-base has excessive movement. It will also detach or crack from the pavers, Wet cast or natural stones, if they are oscillating back and forth due to improper sub-surface preparation. By following **GATOR NITRO JOINT SAND** installation instructions carefully, you will obtain a very hard jointing material. It should be noted that **GATOR NITRO JOINT SAND** will continue to harden over time.
- When installing pavers, wet cast or natural stones around an underground pool, a slope of 1/8 inch (3 mm) per linear foot (30 cm) away from the pool is mandatory. All pavers, wet cast or natural stone surfaces must have a drainage slope for the **GATOR NITRO JOINT SAND** to work at its optimum. For the pool coping blocks, it is mandatory to use mortar in the joints. For the rest of the pavers, wet cast or natural stones installation around the pool, you can use **GATOR NITRO JOINT SAND**.

- 1 Ensure paver surface is compacted then thoroughly wet the area to be jointed. If the surface is dry or temperature is high, more water will be required to avoid staining of the surface when spreading the **GATOR NITRO JOINT SAND**.
- 2 Open the bags and spread the contents over the paved surface. Wet the **GATOR NITRO JOINT SAND** with a hose set on "shower" while using a squeegee or broom to push the **GATOR NITRO JOINT SAND** diagonally across the paved surface and into the joints. This action compacts and forces the **GATOR NITRO JOINT SAND** into the joints ensuring the gaps are completely filled.





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INSTALLATION STEPS (CONT.)

3 The joints should be filled 1/8" (3 mm) below the top surface or 1/8" (3 mm) below the paving stone chamfer with the **GATOR NITRO JOINT SAND**. Shower the surface to rinse off excess material from the paved surface. Repeat steps 2 and 3 until the whole paving area is completed.

4 Any excess **GATOR NITRO JOINT SAND** residue left on the paved surface can be simply cleaned off by brushing and rinsing off the surface.

Note:

Excess material can be stored directly in the pail with 2" (50 mm) of water covering the **GATOR NITRO JOINT SAND** and closing the pail tightly. Excess product will last an extra 4 weeks when stored in this fashion.

For a nicer, smoother surface joint finish, use a suitable mason jointing tool. This process can only be done once Steps 1 to 4 are completed and the **GATOR NITRO JOINT SAND** is in its curing phase. Allow 18 hours of cure time before pedestrian use. Temperature and humidity will impact curing time.



The joints are effectively rain safe immediately, although rain will delay the setting process. Full strength will be reached after 28 days. Surface can be opened to traffic after initial setting, approximately 18 hours in dry conditions above 75°F (24°C). If heavy rain has occurred when the joints have been pointed, then it may be necessary to revisit the job once the weather has cleared to touch up joints. **GATOR NITRO JOINT SAND** can be applied when pavers, natural or wet cast stones are installed directly on open graded aggregates that lock or choke themselves. For residential vehicular use, **GATOR NITRO JOINT SAND** must be used with interlocking concrete pavers only. **GATOR NITRO JOINT SAND** is a solid joint material, however it is not designed to resist the movement that will occur in a vehicular application with non-interlocking pavers and stones, or with certain interlocking paver styles which can move or rotate when subjected to vehicular traffic. Porcelain tile must be installed with the Gator Tile System. Visit our [TDS](#) at Flex-lock.com for complete details.

GATOR NITRO JOINT SAND becomes very firm but will detach from porcelain tiles, pavers, natural or wet cast stones if the base has excessive movement. Excessive movement of pavers, tiles or stones may cause **GATOR NITRO JOINT SAND** to crack or detach. By following **GATOR NITRO JOINT SAND's** installation instructions carefully, you will obtain a very hard jointing material. It should be noted that **GATOR NITRO JOINT SAND** will continue to harden over time.



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GATOR NITRO SAND PERMEABILITY, COMPRESSIVE, STRUCTURAL AND CHEMICAL TESTING RESULTS.

These results are based on methods and standards . Example ,Time of curing , Temperature, Humidity, Joint Depth, Joint Width.

A. Paver joints drainage (permeability¹)

Product	Water Permeability	
	(Gal/min./sq.ft)	(L/min./m ²)
Gator Nitro Sand Beige	1.1	46
Gator Nitro Sand Grey	2.3	93
Gator Nitro Sand Black	0.7	31
Gator Nitro Sand Silver	1.3	55

¹The tests have been performed in order to evaluate the water permeability in a paver joints without substrate. In this case, the values obtained are limited to the joints exclusively rather than a complete paver system installation. These values will decrease significantly with any kind of underneath restriction combined with dust or debris accumulation into the joints over times. To perform these tests, we used multi dimensions Permeable Grey pavers as shown with ; 15 mm joints width, 60 mm thick w/o the underground base. The support was made of geotextile Gator Fabric GF3 on a wood pallet. The tests were performed after 7 days of curing and were repeated twice, on 3 different locations . Temperature was 20 degrees Celsius. Relative humidity was 50%.

Paver dimensions 60 mm x130 mm x (130-160-185-215 mm)



B. Compressive & flexural strength

Product	7 day compressive strength		7 days flexural strength	
	(PSI)	(N/mm ²)	(PSI)	(N/mm ²)
Gator Nitro Sand Beige	1178	8.1	323	2.2
Gator Nitro Sand Grey	667	0.5	232	1.6
Gator Nitro Sand Black	1104	7.6	377	2.6
Gator Nitro Sand Silver	503	3.5	84.7	0.6

Test Method used : BS EN 13892-2 Determination of flexural & compressive strength.



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GATOR NITRO SAND PERMEABILITY, COMPRESSIVE, STRUCTURAL AND CHEMICAL TESTING RESULTS. (CONT.)

C. Chemical resistance

Product	Sodium Hypochlorite 4% slt (Bleach)	Calcium Chloride 50% slt (De-icing salt)
	7 days immersion	7 days immersion
Gator Nitro Sand Beige	No effect	No effect
Gator Nitro Sand Grey	No effect	No effect
Gator Nitro Sand Black	No effect	No effect
Gator Nitro Sand Silver	No effect	No effect

The purpose of these tests was to evaluate if the joints made of Gator Nitro Sand would deteriorate in contact with swimming pool chlorine or de-icing salt in winter. After 7 days of total immersion, no deterioration of the products was observed.

A very long period (several months) would probably have an effect similar to what we would be observed on concrete pavers.

Packaging:	Product	Size	Units per Pallet
	GATOR NITRO JOINT SAND - Beige	40 lb (18.1 kg)	48
	GATOR NITRO JOINT SAND - Grey	40 lb (18.1 kg)	48
	GATOR NITRO JOINT SAND - Silver	40 lb (18.1 kg)	48
	GATOR NITRO JOINT SAND - Black	40 lb (18.1 kg)	48

5-YEAR LIMITED WARRANTY

Before applying the product, the user/buyer must determine its suitability for intended use and user/buyer assumes all risks in that regard. It is a condition of the Limited Warranty that before using the product on the intended larger area, the user/ buyer must test the product on a small less observed area of approximately 4 sq. ft. (0.4 sq. m.) to ensure results meet user/buyer's expectations. In the event that no test is carried out, the 5-year Limited Warranty will only apply to 4 sq. ft. (0.4 sq. m.). Alliance Designer Products Inc. cannot guarantee results as it has no control over surface preparation and product application. If this product is proven to be defective, on the condition that it was applied pursuant to the required method of application and surface preparation, the sole obligation Alliance Designer Products Inc. is to refund the purchase price. Proof of purchase is required for any claim. Alliance Designer Products Inc. shall not be liable for any other damages whatsoever, direct or consequential. To the extent permitted by law, Alliance Designer Products Inc. excludes any implied warranty of quality, merchantability or fitness for purpose

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 NITRO sand for any installation not installed to manufacturer's specifications.

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 GATOR NITRO SAND for any installation not installed to manufacturer's specifications . Alliance Designer Products shall not be liable for any non-compliant use.

**5 YEAR
LIMITED WARRANTY**



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