



## TECHNICAL DATA SHEET

Update: December 18, 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-X FINE JOINT SAND is the ideal air cure, low permeability jointing material. It is a ready-to-use

> mixture of calibrated fine sand and new 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. The Rapid Flow Technology

makes it fast and simple to Install.

Ideal for: • Concrete pavers, concrete slabs, natural stones or wet cast stones

· Outdoor porcelain tiles, porcelain pavers or porcelain slabs

· Residential driveways with light vehicular use

Patios, pool areas and walkways

Sub Base: Traditional drainage base

· Permeable base

Hybrid base

• Gator Base (for pedestrian use only)

Note: The concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles,

porcelain pavers or porcelain slabs must have no movement prior to, or after the installation of GATOR NITRO-X into the joints. If the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs move or rotate, this is due to improper sub-base preparation. For clarity, GATOR NITRO-X, will not prevent lateral or rotational forces that are generated to the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain

pavers or porcelain slabs installations. Any movement on any paving material will void the warranty.

Features: • Joint width of 1/8" (3 mm) to 1/4" (6 mm) for outdoor porcelain tiles, porcelain pavers or porcelain slabs

· Joint width of 1/8" (3 mm) to 2" (50 mm) for concrete pavers, concrete slabs, natural stones or wet cast stones

• Joint depth min 3/4" (20 mm) to a max 2-3/8" (60 mm)

· RAPID FLOW TECHNOLOGY

· Fast and simple installation

· Xtra fine gradation jointing sand

Xtra low permeability

· Apply rain or shine

Xtra strength from top to bottom

Works above 37°F (3°C)

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-X has a low permeability 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-X** before using a pressure washer.

GATOR NITRO-X will not cause nor prevent moss, mold or mildew. Moss, mold and mildew are caused by Moss:

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.



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Coverage:

The quantity required depends on the size of the joints. One pail of 27.5 lb (12.5 kg) will cover:

Porcelain tile 24" x 24" x 3/4" with 1/8" joint width (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 3/16" to 1" (30 cm x 30 cm x 60 mm with joints 5 mm to 25 mm)					
	Taupe	Platinum	Gunmetal	Black	Vanilla
1/8" joint (Porcelain tile)	374 sq. ft.	348 sq. ft.	348 sq. ft.	323 sq. ft.	374 sq. ft.
3 mm joint (Porcelain tile)	35 sq. m.	33 sq. m.	33 sq. m.	31 sq. m.	35 sq. m.
1/8" joint (Concrete paver)	64 sq. ft.	59 sq. ft.	59 sq. ft.	54 sq. ft.	64 sq. ft.
3 mm joint (Concrete paver)	6 sq. m.	5.5 sq. m.	5.5 sq. m.	5.1 sq. m.	6 sq. m.
3/16" joint (Concrete paver)	38 sq. ft.	35 sq. ft.	35 sq. ft.	33 sq. ft.	38 sq. ft.
5 mm joint (Concrete paver)	3.6 sq. m.	3.3 sq. m.	3.3 sq. m.	3.1 sq. m.	3.6 sq. m.
3/4" joint (Concrete paver)	10.4 sq. ft.	9.6 sq. ft.	9.6 sq. ft.	9 sq. ft.	10.4 sq. ft.
20 mm joint (Concrete paver)	0.97 sq. m.	0.9 sq. m.	0.9 sq. m.	0.84 sq. m.	0.97 sq. m.
1" joint (Concrete paver)	8 sq. ft.	7 sq. ft.	7 sq. ft.	6.8 sq. ft.	8 sq. ft.
25 mm joint (Concrete paver)	0.75 sq. m.	0.69 sq. m.	0.69 sq. m.	0.65 sq. m.	0.75 sq. m.



Permeability:

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

Storage:

24 months in cool area. 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-X** can be double stacked for storage, but not in transport.

## PREPARATION INFORMATION (IMPORTANT NOTES)

- A. Always refer to the latest GATOR NITRO-X Technical Data Sheet (TDS) at AllianceGator.com before installing.
- B. The concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs **must have no movement prior to, or after the installation** of **GATOR NITRO-X** into the joints. If the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs move or rotate, this is due to improper sub-base preparation. For clarity, **GATOR NITRO-X**, will not prevent lateral or rotational forces that are generated to the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs installations. **Any movement on any paving material will void the warranty.**
- C. **GATOR NITRO-X** 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.
- D. **GATOR NITRO-X** must be installed above 37°F (3°C).
- E. Joint width of 1/8" (3 mm) to 1/4" (6 mm) for outdoor porcelain tiles, porcelain pavers or porcelain slabs. Joint width of 3/16" (5 mm) to 2" (50 mm) for concrete pavers, concrete slabs, natural stones or wet cast stones.
- F. Joint depth: Minimum 3/4" (20 mm) Maximum 2 3/8" (60 mm).
- G. Working time: Product must be applied within approximately 45 minutes.
- H. **GATOR NITRO-X** can only be used on a drainage base application.
- I. Paved surface can be used after 18 hours.
- J. Avoid power-washing for a minimum of 28 days after applying.



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#### PREPARATION INFORMATION (IMPORTANT NOTES (CONT.))

## Option 1 Traditional Drainage Base

- Gator Fabric GF4.4 covering bottom and side of excavated area.
- Foundation of 4-6" (10-15 cm) compacted crushed stone (0-3/4" (0-20 mm)).
- Setting bed of 1" (25 mm) of sand or chip stones (1/8" to 1/4" (3 to 6 mm) that will lock or choke\*) (ASTM No. 9).
- Nail <u>Gator Edge</u> on the compacted crushed stone and insure the vertical section of the edge hugs the pavers, so no bedding material migrates out. See diagram 1.

## Option 2 Permeable Base

- Gator Fabric GF4.4 covering bottom and side of excavated area.
- 4-6" (10-15 cm) of 1-1/2" (38 mm) plus of compacted crushed stone.
- 2" (50 mm) of 34" (20 mm) net stone well compacted.
- Setting bed of 1-2" (25-50 mm) of chip stones (1/8" to 1/4" (3 to 6 mm) that will lock or choke\*) (ASTM No. 9).
- Spread and trowel <u>Gator XTreme Edge</u> on the 3/4" (20 mm) net and make sure the <u>XTreme Edge</u> hugs and lies 1" (25 mm) under the pavers. See diagram 2.

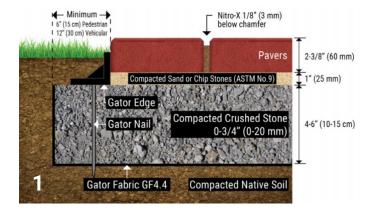
**N.B. GATOR NITRO-X** could be installed only 90 minutes after <u>Gator XTreme Edge</u> has been applied.

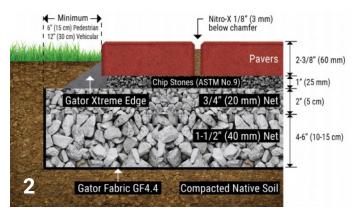
## Option 3 Hybrid Base

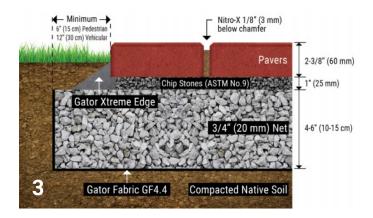
- Gator Fabric GF4.4 covering bottom and side of excavated area.
- Foundation of 4-6" (10-15 cm) compacted crushed stone 3/4" (20 mm).
- Setting bed of 1" (25 mm) of chip stones (1/8" to 1/4" (3 to 6 mm) that will lock or choke\*) (ASTM No. 9).
- Spread and trowel <u>Gator XTreme Edge</u> on the 3/4" (20 mm) net and make sure the <u>XTreme Edge</u> hugs and lies 1" (25 mm) under the pavers. See diagram 3.

**N.B. GATOR NITRO-X** could be installed only 90 minutes after <u>Gator XTreme Edge</u> has been applied.

\* Choke refers to chip stones (ASTM No. 9 1/8" - 1/4" (3 mm - 6 mm)) setting bed that prevents the **GATOR NITRO-X** from migrating through the voids.









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#### PREPARATION INFORMATION (IMPORTANT NOTES (CONT.))



#### Option 4a Gator Base (Pedestrian use only)

- Gator Fabric GF4.4 covering bottom and side of excavated area.
- Setting Bed: Compacted sand 3/4" -1" (20-25 mm) or chip stones (1/8" to 1/4" (3 to 6 mm) that will lock or choke\*) (ASTM No. 9).
- Gator Base installation exceeding 6" (15 cm) the final paved area.
- · Same as traditional.
- Screw in the <u>Gator Edge</u> on the <u>Gator Base</u> at every 2nd hole and insure the vertical section of the edge hugs the pavers.
  See diagram 4A.

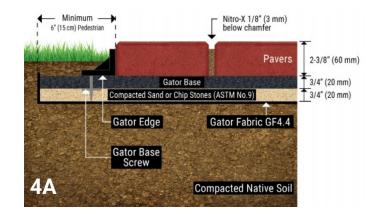


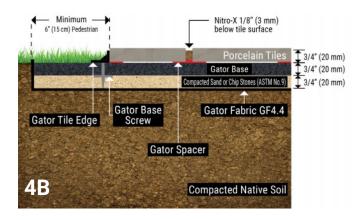
## Option 4b Gator Base (Pedestrian use only) with Gator Tile System

- Gator Fabric GF4.4 covering bottom and side of excavated area.
- Setting Bed: Installation of sand 3/4" -1" (20-25 mm) or chip stones (1/8" to 1/4" (3 to 6 mm) that will lock or choke\*) (ASTM No. 9).
- <u>Gator Base</u> installation exceeding 6" (15 cm) the final porcelain tiles area.
- Install the porcelain tiles with the help of the <u>Gator Spacer</u> (1/8", 3/16" or 1/4" (3 mm, 5 mm or 6 mm)) and the <u>Gator XP glue</u> to insure a mechanical bonding and the structural integrity of the system.
- Install <u>Gator Tile Edge</u> against the porcelain tiles and use <u>Gator Base Screws</u> at every second holes on the <u>Gator Base</u>.

## **Gator Tile System 7 components:**

- **1** GF4.4
- 2 Gator Base
- 3 Gator Spacer 1/8", 3/16" or 1/4" (3 mm, 5 mm or 6 mm)
- 4 Gator XP Glue
- 5 Gator Tile Edge
- 6 Gator Base Screw
- 7 Gator Nitro-X Sand
- \* Choke refers to chip stones (ASTM No. 9 1/8" 1/4" (3 mm 6 mm)) setting bed that prevents the **GATOR NITRO-X** from migrating through the voids.







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#### **INSTALLATION STEPS**

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

## **NOTE**

- A. The concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs must have no movement prior to, or after the installation of GATOR NITRO-X into the joints. If the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs move or rotate, this is due to improper sub-base preparation. For clarity, GATOR NITRO-X, will not prevent lateral or rotational forces that are generated to the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs installations. Any movement on any paving material will void the warranty.
- **B.** 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.
- **C. GATOR NITRO-X** can be applied when the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs are installed directly on chip stones (1/8" to 1/4" (3 to 6 mm)) that lock or choke\* themselves. This means the **GATOR NITRO-X** will not migrate through the voids.
- Do not apply GATOR NITRO-X when the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs are installed directly on aggregates with large voids. GATOR NITRO-X will migrate through aggregates with large voids.
- **E.** By following **GATOR NITRO-X** installation instructions carefully, you will obtain a very hard jointing material.
- **F.** When installing concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs around an underground pool, a slope of 1/8 inch (3 mm) per linear foot (30 cm) away from the pool is mandatory.
- **G.** All concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs surfaces must have a drainage slope for the **GATOR NITRO-X** to work at its optimum.
- **H.** For the pool coping blocks, it is mandatory to use mortar in the joints. For the rest of the concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs installation around the pool, you can use **GATOR NITRO-X**.
  - \* Choke refers to (when concrete pavers, concrete slabs, natural stones or wet cast stones and the outdoor porcelain tiles, porcelain pavers or porcelain slabs are installed directly on chip stones (1/8" to 1/4" (3 to 6 mm)) that lock or choke themselves. This means the **GATOR NITRO-X** will not migrate through the voids.)

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#### **INSTALLATION STEPS**

#### STEP 1

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-X**.

#### STEP 2

Open the bag of **GATOR NITRO-X** and spread 1/3 of the contents over the paved surface. Thoroughly soak the **GATOR NITRO-X** with water while using a squeegee or a hard bristle broom to spread and mix, allowing the **GATOR NITRO-X** to flow into the joints. Continue applying water while using a squeegee or broom to push the **GATOR NITRO-X** diagonally across the paved surface and into the joints. This action compacts and forces the **GATOR NITRO-X** into the joints ensuring the gaps are filled. Ensure joints are completely filled before moving on to the next section. Use a hard bristle broom for textured surfaces and final joint height setting.

#### STEP 3

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

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-X 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. Outdoor porcelain tiles, porcelain pavers and porcelain slabs and the concrete pavers and slabs, natural or wet cast stone ioints drainage (permeability)

Product	Water Permeability		
	(Gal/min./sq.ft)	(L/min./m²)	
Gator Nitro-X Sand Black	0.18	7.2	
Gator Nitro-X Sand GunMetal	0.24	9.7	
Gator Nitro-X Sand Taupe	0.17	7.1	
Gator Nitro-X Sand Vanilla	0.23	9.3	
Gator Nitro-X Sand Platinum	0.22	8.8	

The tests have been performed in order to evaluate the water permeability in a outdoor porcelain tiles, porcelain pavers and porcelain slabs and the concrete pavers and slabs, natural or wet cast stone 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/mm²)	(PSI)	(N/mm²)
Gator Nitro-X Sand Black	1102	7.6	572	3.9
Gator Nitro-X Sand GunMetal	938	6.5	522	3.6
Gator Nitro-X Sand Taupe	1470	10.1	860	5.9
Gator Nitro-X Sand Vanilla	926	6.4	485	3.3
Gator Nitro-X Sand Platinum	1086	7.5	434	3.0

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



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## GATOR NITRO-X 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-X Sand Black	No effect	No effect	
Gator Nitro-X Sand GunMetal	No effect	No effect	
Gator Nitro-X Sand Taupe	No effect	No effect	
Gator Nitro-X Sand Vanilla	No effect	No effect	
Gator Nitro-X Sand Platinum	No effect	No effect	

The purpose of these tests was to evaluate if the joints made of Gator Nitro-X 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 outdoor porcelain tiles, porcelain pavers and porcelain slabs and the concrete pavers and slabs, natural or wet cast stone.

Packaging:	Product	Size	Units per Pallet
	GATOR NITRO-X FINE JOINT SAND - BLACK	27.5 lb (12.5 kg)	48
	GATOR NITRO-X FINE JOINT SAND - GUNMETAL	27.5 lb (12.5 kg)	48
	GATOR NITRO-X FINE JOINT SAND - TAUPE	27.5 lb (12.5 kg)	48
	GATOR NITRO-X FINE JOINT SAND - PLATINUM	27.5 lb (12.5 kg)	48
	GATOR NITRO-X FINE JOINT SAND - VANILLA	27.5 lb (12.5 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-X 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-X for any installation not installed to manufacturer's specifications. Alliance Designer Products shall not be liable for any non-compliant use.





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