



## SMARTSAND®

### POLYMERIC SAND

For Interlocking Concrete Pavers



with  
**NextGel**<sup>™</sup>  
TECHNOLOGY

### UPDATE

**January 23, 2019**

Make sure that you have an up-to-date technical data sheet in hand by consulting our website: [Techniseal.com](http://Techniseal.com)  
U.S.A. and Canada: dial 1 800 465-7325  
Others: dial (514) 523-8324 (Canada)

### APPLICATIONS

- Ideal for interlocking concrete pavers
- For standard<sup>1</sup> installations with narrow joints
- Residential projects: driveways, walkways, patios, etc.
- Non-vehicular commercial projects<sup>1</sup>

### PROPERTIES

- NO HAZE
- Meets ASTM C144 standard
- Fast-setting
- Inhibits weed growth
- Deters ants and other insects
- Eliminates joint erosion – water, frost heaving, wind, power washing, etc.
- Stabilizes paver installations - follows movement

### DESCRIPTION

SmartSand® Polymeric Sand from Techniseal® is a mix of ASTM C144 graded sand and binder that provides a stable joint between interlocking concrete pavers exposed to normal traffic<sup>1</sup>. Applied dry, it hardens after being activated with water. It allows joints to resist erosion, weeds and insects.

Manufactured with the NextGel™ technology, SmartSand® is quick to activate, sets rapidly and leaves no undesirable haze on pavers.

<sup>1</sup>For non-standard installations such as high-humidity areas, pool decks, false or wide joints (between 2.5cm (1”) and 10cm (4”)), areas exposed to heavy traffic such as public ways and commercial projects with vehicular traffic, surfaces with steep slopes or surfaces exposed to large amounts of standing water, we recommend the use of **HP NextGel™** Jointing Sand from Techniseal (High-Performance formula).

**Important:** Use only on pavers or slabs installed over a drainage bed (sand-set).



Techniseal® Polymeric Sand counts towards LEED credits, based on the use of regional and recycled materials.

**JOINT DIMENSIONS:**

Minimum Joint Width: 1.5mm (1/16")

Maximum Joint Width: 2.5cm (1")

**Note:** SmartSand® is specially designed for interlocking concrete pavers with a joint width from 1.5mm (1/16") to 60mm (1/4"). However, it can also be used with wider joints, up to 2.5cm (1") (width of intersections).

Minimum Joint Depth: 4cm (1.5")

**DIRECTIONS****BEFORE YOU BEGIN**

- Before proceeding with the installation, make sure you have an up-to-date technical data sheet in hand.
- On large projects, test the product on approximately 4.6m<sup>2</sup> (50 sq. ft.) and have it approved by a specifier or the customer.
- Check the weather forecast. Although SmartSand can resist an unforeseen rain 60 minutes after its installation, it is recommended to plan for at least 24 hours without rain in order to obtain optimal performances.
- On an existing installation, when replacing the sand, always use HP NextGel<sup>MC</sup> jointing sand.
- In case of uncertainty regarding the installation of this product or for any further assistance, please contact technical support at 1 (800) 465-7325.

**Installation Conditions:**

- Bedding must be made of 0 to 5mm (3/16") dense graded sand.
- Only install over a drainage base and bed (sand-set) as per ICPI recommendations.
- Temperature must be above 0°C for 48 hours following installation.
- Surface and joints must be **dry**. This will prevent the polymers on the surface from being activated, which would make the sand stick to the pavers.
- Sprinkler system must be turned off.

**Necessary Tools:**

- Street broom with semi-rigid bristles.
- Plate compactor - Ideally, the plate compactor should have a minimum centrifugal force of 25 kN (5000 psf) and a frequency between 80 and 100 Hz. The weight of the plate compactor should not exceed 100 kg (220 lbs.). A smaller machine can be used for repair work and joint replacement.
- Rubber mallet (in case mechanical compaction is not possible (large slabs)).
- Leaf blower.
- Spray nozzle and garden hose.

**Compaction Information:**

Use a plate compactor as described above. Check with the paver supplier about the suitability of using a plate compactor. For **pavers or slabs with a sensitive surface**, use a plate compactor with a rubber mat or a membrane such as a flat-joint plastic snow fence placed on top of the paved surface. Where a plate compactor cannot be used, proceed with a manual compaction: hammer vigorously each corner as well as the contour of each slab with a rubber mallet. This will generate a vibration and pack down the product. A manual compaction **will never replace** the use of a plate compactor. In order to obtain a joint that is dense, solid and durable and that will perfectly resist erosion, the surface must be compacted mechanically.

**Drying:** To ensure optimal cohesion and long-term stability, SmartSand must dry completely after initial wetting. Drying time will be shorter if it is warm and dry, and longer if the climate is cool and damp.

**Down time before using:** Pedestrian areas: none / Vehicular areas: 24 to 48 hours. Block access during that period.

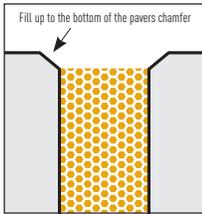
**Warnings:**

- Wear adequate protective clothing and gear.
- Do not use this product as capping sand.
- Do not use as a substitute for mortar (e.g. paving stones installed over a concrete bedding).
- Do not mix polymeric sand with cement, sand or any other material.
- **Wait 30 days** after installation before cleaning and sealing pavers.
- Not for use on submerged or constantly wet surfaces.
- Joints become soft when humid, but become hard again after drying.
- Because product comes from a natural source, colour and grain size may vary.
- This product starts repelling water only a few minutes after initial wetting - wet no more than 20 m<sup>2</sup> (200 sq. ft.) of surface at a time.
- Do not sweep product over asphalt.



**1. Spreading sand over the pavers:**

Surface must be dry. Spread sand uniformly over the surface. Using a push broom, sweep the product so as to fill the joints completely, down to their full depth. Avoid sweeping the product over long distances, so that the integrity of the sand is preserved.



**2. Compacting the sand:**

This step is critical to obtain solid, durable joints. Mechanical compaction will provide, at all times, a stronger joint.

Run a plate compactor over the entire surface to fully compact the joints.

**Repeat steps 1 & 2** until joints are completely full. Joints must be filled up to the bottom of the pavers chamfer, or 3mm (1/8”) below the top of the pavers.

Where a plate compactor cannot be used, proceed with a manual compaction: hammer vigorously each corner as well as the contour of each slab with a rubber mallet. This will generate a vibration and pack down the product. A manual compaction **will never** replace the use of a plate compactor



**3. Activating the sand:**

This step must be followed closely in order to ensure optimal results.

**Important:** Before wetting the surface: **Remove all sand residue with a leaf blower.** Keep the leaf blower at a good distance, so as to not empty the joints. This will avoid having product residue activated with water and stick to the surface of the pavers. Surface must be free of the product.

Since SmartSand starts repelling water only a few minutes after it gets wet, it is essential to wet no more than 20m<sup>2</sup> (200 sq. ft.) of surface at a time. Ensure that the wetting of one section is finished before another section is started. Wetting of the entire project should be done without interruptions.

1. Set the spray nozzle to “shower”.
2. Start showering from the bottom of the slope.
3. Wet a 20m<sup>2</sup> (200 sq. ft.) section for **approximately 30 seconds** without displacing the sand.
4. Wait a few seconds and wet the same section again for another **30 seconds or until joint are saturated** (water can no more penetrate the sand). Avoid run-off and foaming.
5. Immediately move on to an adjacent 20m<sup>2</sup> (200 sq. ft.) section. **Avoid excess flooding of the surface**, which could cause unwanted run-off.

**Tip:** On textured pavers, after wetting the joints on a section, use a leaf blower to blow excess water off the surface. This will remove any remaining sand and polymer residue.

**When wetting joints wider than 12mm (1/2”):** wet sections no larger than 5m<sup>2</sup> (50 sq. ft.). For each section, shower for 30 seconds a first time, then shower again for another 30 seconds or until joints can no longer absorb water.

**COVERAGE**

22.7 kg: Narrow joints: 5.5 to 11m<sup>2</sup> (60 to 120 sq. ft.) Wide joints: 2.3 to 3.7m<sup>2</sup> (25 to 40 sq. ft.). Required quantity will depend on the shape and size of the pavers or slabs, and on the width and depth of joints.

**STORAGE AND SHELF LIFE**

Unused bags can be stored outside if they are still on a pallet and protected by the original packaging.

**PACKAGING**

Polymeric Sand	Product Code	Colour	Retail Size	Units per pallet
<b>SmartSand</b>	40101218	Tan	22.7 kg (bag)	56
	40101220	Urban Grey	22.7 kg (bag)	56
	40101219	Granite	22.7 kg (bag)	56
	40101232	Grey	22.7 kg (bag)	56
	40101229	Western Grey	22.7 kg (bag)	56
	40101230	Western Tan	22.7 kg (bag)	56
	40101233	Sierra Grey	22.7 kg (bag)	56
	40101224	Bourbon Tan	22.7 kg (bag)	56
	40101225	Southern Tan	22.7 kg (bag)	56
	40101226	Southern Grey	22.7 kg (bag)	56
	40101227	Prairie Tan	22.7 kg (bag)	56
	40101228	Prairie Grey	22.7 kg (bag)	56
	40101222	Niagara Tan	22.7 kg (bag)	56
	40101223	Nordic Grey	22.7 kg (bag)	56
	40101231	Mojave Tan	22.7 kg (bag)	56
	40101221	Pacific Grey	22.7 kg (bag)	56
	40101235	Ash Grey	22.7 kg (bag)	56
40101234	Napa Tan	22.7 kg (bag)	56	

**Important note:** Tan, Urban Grey, Granite and Grey are local sands available only in Eastern Canada. Pacific Grey is available locally only in Western Canada. Shipping fees will be added to non-local sands. Consult your Techniseal® dealer for colour availability, pricing and delivery time.

## LIMITED 15-YEAR WARRANTY

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Manufacturer, having no control over the use of this Product, does not guarantee finished work. This Limited 15-Year Warranty (hereinafter “warranty”), exclusively covers all residential installations (single or multi-unit exclusively residential). Replacement or refund of any product proven defective shall be the buyer’s sole remedy under this warranty. This product will perform its intended function when installed in accordance with its packaging instructions, technical data sheets instructions, and standard industry practices (ICPI Tech Spec #2). It is the sole responsibility of the user to determine the suitability and compatibility of this product for the intended use before installing it. No representation, promise, pre-approval, affirmation, statement, or demonstration by any employee of TECHNISEAL or its distributors shall modify or supersede the terms of this warranty. This warranty applies only to SMARTSAND used on the installation, and replaces all previous warranties. This warranty lasts so long as the job installation remains unchanged by the original owner and is none transferable, and shall end as specified in this warranty. To the extent permitted by law, all other warranties, including, but not limited to, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED. ANY IMPLIED WARRANTIES ARISING BY OPERATION OF LAW ARE LIMITED IN DURATION TO THE TERM OF THIS EXPRESS LIMITED WARRANTY.

Manufacturer will not be liable for damage or loss resulting from the following: structural failure; inadequate surface or sub-surface; inadequate job configuration; Acts of God; product misuse or modified; failure to comply with the packaging instructions, technical data sheets instructions, and standard industry practices; wear and tear from normal usage; cracking due to structural movement; excessive deflection due to heavy landscaping machinery, delivery truck, or waste collection truck or other failure of the substrate. IN NO EVENT SHALL TECHNISEAL BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF SALES OR PROFITS; BUSINESS INTERRUPTION OR DOWNTIME; INCREASED EXPENSE OF OPERATION; DAMAGE TO OTHER MATERIALS OR PROPERTY; OR LOSS OF USE OF PROPERTY. Proof of purchase is required for any claim. The above terms and conditions are applicable for commercial use, mix-use and institutional use except that the applicable period is limited to 1 year from the date of purchase.