SMARTSAND

Polymeric Sand

Techniseal

Installation Guide

VAN BEEK'S
LANDSCAPE SUPPLY

www.vanbeeks.com

Techniseal®
Protect and Beautify

SMARTSAND®

POLYMERIC SAND

For Interlocking Concrete Pavers

with NextGel™ TECHNOLOGY

UPDATE

December 21, 2022

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

APPLICATIONS

- Designed for optimal jointing of interlocking concrete pavers
- For standard[1] installations with narrow joints
- Residential projects: driveways, walkways, patios, etc.
- Non-vehicular commercial projects[1]

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 perfect joint between interlocking concrete pavers exposed to normal traffic[1]. Applied dry, it hardens after being activated with water. SMARTSAND® is specially designed for interlocking concrete paver joints where mechanical compaction is done. 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.

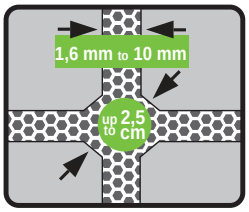
[1]For non-standard installations such as high-humidity areas, pool decks, false or wide joints (between 2.5 cm (1") and 10 cm (4")), areas exposed to heavy traffic such as public ways and commercial projects with vehicular traffic, surfaces with steep slopes or surfaces exposed to large amounts of standing 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: 1,6 mm (1/16 in)
Maximum Joint Width: 25 mm (1 in)
SMARTSAND® is specially designed for interlocking concrete pavers with joint width from 1,6 mm to 2,5 cm (1/16" to 1"), ideal for joints from 1,6 mm to 10 mm (1/16" to 3/8") with intersecting spaces up to 2,5 cm (1").

Minimum joint depth: 4 cm (1.5")



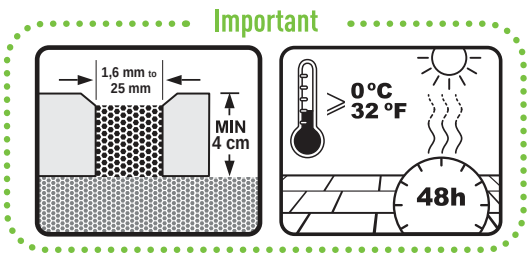
DIRECTIONS

BEFORE YOU BEGIN

ALWAYS TEST on a small hidden area of approximately 0.4 m² (4 sq. ft.) to ensure that result meets your expectations (see Warranty).

In order to ensure good cohesion and long-term resistance, jointing sand must imperatively dry completely before being exposed to rain (24 hours minimum). The drying time will be extended in cold or humid weather and for wide joints installations (wider than 13 mm (1/2")). Why? Like paint, polymeric sand must dry completely to polymerize and offer all its advantages. However, jointing sand will be able to withstand unexpected rain 60 minutes after installation.

Installation Conditions:
- Use only on pavers installed over a drainage base and bed (sand-set) as per ICPI recommendations.
- Temperature must be above **0 °C (32 °F)** for 48 hours following installation.
- Surface and joints must be **dry**.
- Sprinkler system must be turned off.
- No rain forecasted for the next 24 hours.



Necessary Tools:
- Street broom with semi-rigid bristles
- Leaf blower
- Spray nozzle and garden hose
- Plate compactor

Compaction Information:
Mechanical compaction is **MANDATORY** when using SMARTSAND® Polymeric Sand. Failure to do so may compromise joint integrity and performance. If joint width is greater than 0,6 cm (¼") and mechanical compaction is either not possible or traditionally not used, please use Techniseal's NOCO™ polymeric joint.

Plate compactor such as Multiquip's Mikasa MVB series, Wacker Neuson's VP and WP series, Toro's FP series are examples of models that can be used to ensure proper mechanical compaction. Use of a teflon coated plate or paving pad is important to help protect the surface.

Plate compactor – Ideally, the plate compactor should have a maximum centrifugal force of 25 kN (5,000 lbf) and a frequency between 80 and 100 Hz. The weight of the plate compactor should not exceed 100 kg (220 lb). A smaller machine can be used for repair work and joint replacement.

Drying: To ensure optimal cohesion and long-term stability, SMARTSAND® Polymeric Sand 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. Product must dry at least 60 minutes before being exposed to unexpected rain.

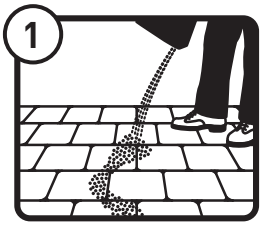
Traffic: Pedestrian: Immediate / Vehicular: 48 to 72 h. Block access during that period.

CAUTION
- Wear appropriate safety gear.
- Product must dry at least 60 minutes before being exposed to unexpected rain.
- **To obtain optimal performances, it is recommended to plan for 24 hours without rain.**
- Ensure that joint has hardened before cleaning and sealing the surface. Depending on climate and type of installation, typical recommended wait time is **30 days**.

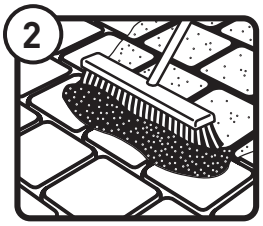
- Not for use on submerged or constantly wet surfaces.
- Joints become soft when humid but become hard again when dry.
- Do not mix product with cement, sand or any other material.
- Because product comes from a natural source, color and grain size may vary.
- This product starts repelling water a few minutes after initial wetting. Make sure to complete each section per detailed installation instructions before moving to the next one.
- The use of cleaning devices (high pressure washer, etc.) is restricted during the first 30 days. It should be noted that too direct and violent jets can create alterations, so it is best to consult the machine manufacturers in order to use the specific accessories with soft jets.
- Failure to have recessed joint could lead to premature joint degradation.
- Do not sweep product over asphalt.
- Bedding layer needs to be able to drain properly in order to allow for the SMARTSAND® Polymeric Sand to dry properly. Certain type of bedding or screening materials may not drain properly which will trap moisture and may cause issues.
- Proper maintenance is paramount to maintaining joints in optimal condition. Excessive moisture, shade, inadequate cleaning and maintenance, presence of soil and organic matters (including grass trimmings) left on the joints may contribute to growth of moss, mold or mildew and a premature deterioration of the jointing product.

IMPORTANT: Do not use this product as capping sand.

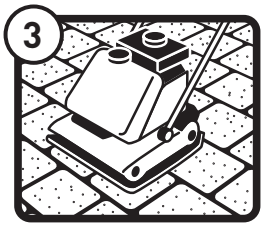
INSTALLATION



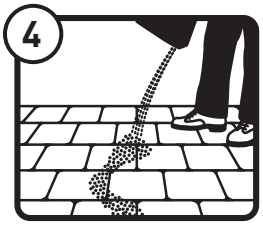
Spread product evenly on a small surface.



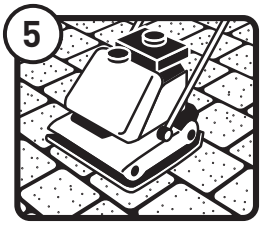
Using the street broom, fill joints completely. Spread sand over **short distances**.



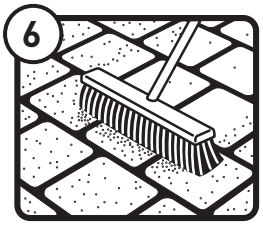
Pass the plate compactor over the entire surface to compact the sand.
Mechanical compaction should ideally be done starting from center of installation, working towards the edges. Please follow best practices for mechanical compaction as outlined by ICPI.



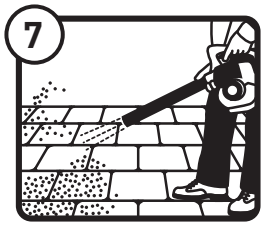
Spread more product to fill joints again. Use the street broom again.



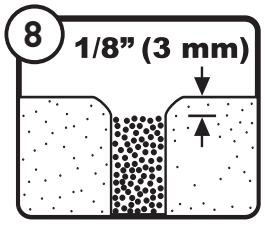
Pass the plate compactor or paver roller over the entire surface a second time.
For thicker hardscape products, additional mechanical compaction may be required until joint saturation is reached. Proper compaction does not allow a finger to sink into the joint.



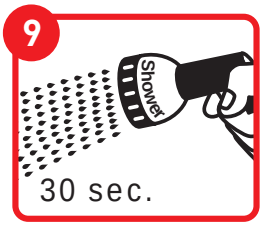
Remove excess sand from the surface with the broom.



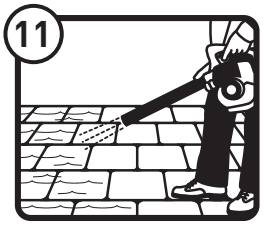
Level the height of the sand with the leaf blower.



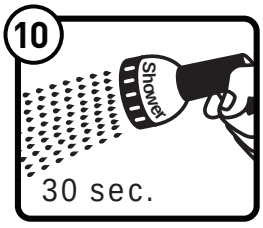
Sand level must be at least 3 mm (1/8”) below top of pavers or up to the bottom of the chamfer.



Starting from bottom of the slope, quickly shower a 20m² (200 sq. ft.) section to set the sand for **30 seconds**.



On textured pavers, use the blower to remove the excess water off the surface and into the joints.



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. Check for water accumulation at the surface of the jointing sand as a cue to stop watering. Wait until there is no free water at the surface of the joint and verify the depth of activation. If SMARTSAND® is activated at 75% or more of its depth stop watering. If activated at less than 75%, water for an additional 30 seconds and check again after 30 seconds. **Avoid overwatering SMARTSAND® as this will significantly lengthen the curing time and may compromise product performance.**

COVERAGE

For a 22,7 kg bag (50 lb): Narrow joints: 6 to 11 m² (60 to 120 sq. ft.) Wide joints: 2,3 à 4 m² (25 to 40 sq. ft.). For a more precise evaluation of the coverage, please refer to the product calculator at techniseal.com. The amount required will depend on the shape and size of the slabs, tiles and pavers, as well as the width and depth of the joints.

STORAGE

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

PACKAGING

Polymeric Sand	Product Code	Color	Retail Size	Units per pallet
SMARTSAND	40101219	Granite	22,7 kg / 50 lb (bag)	56
	40101221	Pacific Grey	22,7 kg / 50 lb (bag)	56
	40101218	Tan	22,7 kg / 50 lb (bag)	56
	40101220	Urban Grey	22,7 kg / 50 lb (bag)	56

Colour varies from one region to another. Shipping fees will be added to non-local sands.
Consult your Techniseal® dealer for color availability, pricing and delivery time.

WARNING

For more information and advice on the proper handling, storage, and disposal of this product, please refer to the latest version of its Safety Data Sheet (SDS). This official document contains physical, ecological, and other important information pertaining to the safe usage of this product. Visit www.techniseal.com or call 1-800-465-7325 to request or find an up-to-date version of this product's Safety Data Sheet (SDS).

KEEP OUT OF REACH OF CHILDREN

TRANSPORT

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