

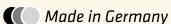




Patented, stabilised joint and pathway materials for outdoor use



www.stones-baustoffe.de



STONES ECO

FUGEN ::: PROTECT

protects STONES ECO joints in a permanently moist environment

Ready-to-use, transparent special liquid for protecting STONES ECO joints in permanently moist environments or under puddles of water. Once thoroughly dry, it creates a highly flexible frost- and weather-resistant bond between the particles of STONES ECO FUGENSAND joint sand in the upper zone of the joint, which also allows water to permeate through it. This protects the joint sand from being worn away when being wiped clean e.g. with a wet mop. Cleaning the surface is made considerably easier and can also be done with an unpressurised water spray.

USE

The stone and joint surfaces must be clean and dry. Cover any adjacent surfaces that are not to be protected. The ideal application temperature is between 8 °C and 25 °C.

If **SE FUGENPROTECT** is unintentionally applied to the stone surface and not fully removed without delay, it can lead to a slight shininess and a visual intensification of the colour of the surface. However, this effect disappears after approximately 2–3 months through wear if the surface is left open to the weather. Therefore, you should always apply the product on a test area first. Shake the product thoroughly before use.

Apply **SE FUGENPROTECT** directly out of the bottle using the nozzle dispenser cap until the joints are saturated. Apply the product only to the joints, not to the stone surface. **Any of the product that finds its way onto the stone surface must be removed immediately with a wet sponge or hand towel. The treated surfaces must be protected from moisture for at least 24 hours. It can be cleaned with a mop after 4–7 days.**

PROFITEP WestMiss Figer WestMiss Figer WassMiss Figer WassM

- Water-permeable
- ► For joint widths from 1 mm
- Makes STONES ECO joints wipe-proof
- ► Protects against puddles of water





FIELDS OF APPLICATION

Water-permeable stabilisation of the surface of **STONES ECO FUGENSAND** in natural stone paving, concrete masonry paving, slab and brick paved surfaces. Suitable for areas such as garden paths, patios and house entrance areas.

STORAGE LIFE

24 months, frost-free
Protect containers from direct sunlight

COVERAGE

Depends on joint width

PLEASE NOTE

Keep out of reach of children. Always check the compatibility of the product on an unseen area before use. No liability is accepted for improper use.

HANDLING & APPLICATION



SE FUGENPROTECT – with nozzle dispenser for increased coverage. The nozzle dispenser can be found under the screw cap.

STONES ECO FUGENPROTECT

can be used for the following products:

STONES ECO FUGENSAND

STONES ECO FUGENSAND Terrassenplatten Plus

*Contains no renewable raw materials

ARTICLE LIST Dated 01. 08. 2018

STONES ECO

FUGEN:::SAND

For joints 1-20 mm

Art. No.	EAN code	Description	Colour	Container
01011201	4260287260016	STONES ECO FUGENSAND 1-20 mm	Grey	25 kg bag
01011204	4260287260023	STONES ECO FUGENSAND 1-20 mm	Beige	25 kg bag
01011207	4260287260030	STONES ECO FUGENSAND 1-20 mm	Basalt	25 kg bag

STONES ECO

FUGEN::SAND

TERRASSENPLATTEN PLUS

For joints 1-10 mm

Art. No.	EAN code	Description	Colour	Container
01011501	4260287260191	SEF TERRASSENPLATTEN PLUS 1-10 mm	Grey	15 kg bag
01011504	4260287260214	SEF TERRASSENPLATTEN PLUS 1-10 mm	Beige	15 kg bag
01011507	4260287260207	SEF TERRASSENPLATTEN PLUS 1-10 mm	Basalt	15 kg bag

STONES ECO

FUGEN:::PROTECT

Art. No.	EAN code	Description	Colour	Container
09000105	4260287260184	STONES ECO FUGENPROTECT	Transparent	1I, 15 bottle box

MOWESTAB®**TERRA**

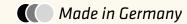
WEGEDECKE



FLL Report 2007 compliant

Art. No.	EAN code	Description	Colour	Container
05011201	4260287260245	MOWESTAB TERRA pathway material	Creamy sand	25 kg bag

climate-friendly building material Contains renewable raw materials







ENVIRONMENTAL BONUS

Certified with the eco-INSTITUT label – an environmental advantage that we offer with this advanced product for ecological joint materials.

- ► Extensive emissions and pollutant testing ensures the product is safe and not hazardous to health
- Healthier products contribute to a lower pollution load in your living environment
- Non-hazardous to the health of users, installers, customers etc.

EASY TO USE

Brush the dry product into the joints. Carefully clean the surfaces of the slabs or paving. Soak the joints with water. Do not premix or apply as a slurry! The joints can be refurbished at any time. The process is just as easy.

WEED SUPPRESSION

Conventional joint sand

with STONES ECO FUGENSAND





LEAVES NO FILM

If used correctly, the product leaves no film on the surface.

STORAGE LIFE

If stored properly and in dry conditions, storage life is unlimited, even if the bags have been opened. The joint sand does not harden in the bag.

APPLICATION CONDITIONS

Dry stone surface. Minimum 2 °C outdoor temperature. The product is very effective for joint widths of 1 mm or more and is very versatile. The joint-filled surfaces **do not have to be protected** against **rain!**

SELF-REPAIRING JOINTS





Rain (moisture) reactivates the binder and closes microcracks in the joint

PRODUCT INFORMATION

Suitable for lightly loaded surfaces used to access e.g. houses, hotels, or parking areas subject to occasional vehicular traffic (vehicles up to 3.5 t total weight) travelling at limited speeds or for pedestrian zones, footpaths and patios.

Containing **SOLID GREEN BINDER**, the naturally stabilised, water-permeable joint material is intended for all **suitable**, fixed-in-place natural stone and concrete masonry surfaces founded on water-permeable unbound bedding.

TIPS FOR PROPER USE:

Ensure that the paved surface is founded on water-permeable unbound bedding and brush the **STONES ECO FUGENSAND** into the joints when the weather and the stone surfaces are dry.

Permanently rigid path edgings are always required to prevent the paving spreading outwards when the joints are in the flexible condition. The paving and the underlying layers should have a transverse fall of 2–3% and a longitudinal fall of about 1%

to ensure the water drains off the surface. Surfaces subject to occasional vehicular traffic finished with mosaic paving, areas around swimming pools, balconies and roof terraces are not suitable for **STONES**

ECO FUGENSAND.

RECOMMENDATIONS FOR USE







Vibrate



Clean off surface



Sprinkle/mist-spray with water

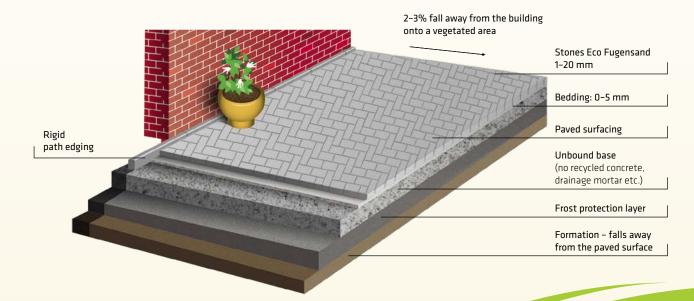


5-10 minutes



Saturate with water

WATER-PERMEABLE SUBCONSTRUCTION





ENVIRONMENTAL BONUS

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EASY TO USE

Brush the dry product into the joints. Carefully clean the surfaces of the slabs or paving. Soak the joints with water. Do not premix or apply as a slurry! The joints can be refurbished at any time. The process is just as easy.

WEED SUPPRESSION

Conventional joint sand

with STONES ECO FUGENSAND TPP





LEAVES NO FILM

If used correctly, the product leaves no film on the surface.

STORAGE LIFE

If stored properly and in dry conditions, storage life is unlimited, even if the bags have been opened. The joint sand does not harden in the bag.

APPLICATION CONDITIONS

Dry stone surface. Minimum 2 °C outdoor temperature. The product is very effective for joint widths of 1 mm or more and is very versatile. The joint-filled surfaces **do not have to be protected** against **rain!**

SELF-REPAIRING JOINTS





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Suitable for lightly loaded surfaces used to access e.g. houses, hotels, or parking areas subject to occasional vehicular traffic (vehicles up to 3.5 t total weight) travelling at limited speeds or for pedestrian zones, footpaths and patios.

Containing **SOLID GREEN BINDER**, the naturally stabilised, water-permeable joint material is intended for all **suitable**, fixed-in-place natural stone and concrete masonry surfaces founded on water-permeable unbound bedding.

TIPS FOR PROPER USE:

Ensure that the paved surface is founded on water-permeable unbound bedding and brush the **STONES ECO FUGENSAND TPP** into the joints when the weather and the stone surfaces are dry. Permanently rigid path edgings are always required to prevent the paving spreading outwards when the joints are in the flexible condition. The paving and the underlying layers should have a transverse fall of 2–3% and a longitudinal fall of about 1% to ensure the water drains off the surface. Surfaces subject to occasional vehicular traffic finished with mosaic paving, areas around swimming pools, balconies and roof terraces are not suitable for **STONES ECO FUGENSAND TPP**. The material is self-compacting in layers up to 2 cm deep.*

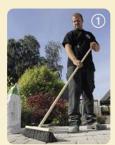
PLEASE NOTE

Certain kinds of ceramic paving units "tilt" and "wander" when laid on a gravel bed due to their self-weight and dimensional format.



(e.g. long, narrow formats, inaccurate laying or settlement of the gravel bed).

RECOMMENDATIONS FOR USE







*Vibrate - for 2 cm joint depth or more



Clean off surface



Sprinkle/mist-spray with water



5-10 minutes



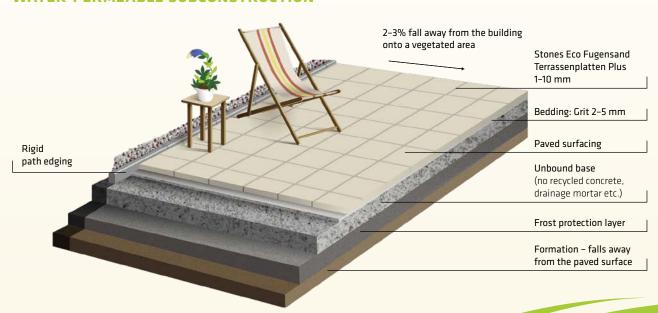
Saturate with water

The paving units can become displaced horizontally (wander) through use and due to weather-dependent temperature fluctuations. If this happens, it may be necessary to refill the joints ("maintenance joint"). Please note that this is not due to a defect in the joint material.

Our joint material is intended for filling joints only in suitable and solidly laid stone surfaces. Our cleaning recommendations must be observed.

Please note that the paving units must always be laid unbonded to one another. Some manufacturers of ceramic paving units do not allow their products to be laid in this way.

WATER-PERMEABLE SUBCONSTRUCTION



What is the difference between STONES ECO FUGENSAND

and many polymer joint sands?

ENVIRONMENTALLY FRIENDLY

- ► STONES ECO FUGENSAND is a sustainable building material.
- STONES ECO FUGENSAND is stabilised by the innovative SOLID GREEN BINDER. The binder consists mainly of renewable raw materials.
- Polymer joint sands are stabilised by means of a chemical reaction.

SELF-REPAIRING

- ▶ STONES ECO FUGENSAND continuously repairs itself when it is in contact with water (e.g. rain). Permanent cracks cannot form because "expansion" following contact with water closes any microcracks in the joint caused, for example, by settlement of the paving. The joint sand is reactivated with each shower of rain, which gives it the ability to self-repair.
- Polymer joint sand, once it has been activated, remains rigidly bound. The inevitable result is that cracks in the joints become increasingly wider over time.

WEED SUPPRESSION

- By stabilising the joints and continuously self-repairing microcracks, STONES ECO FUGENSAND minimises rooting of wind-borne weed seeds. STONES ECO FUGENSAND also suppresses weed growth by raising the pH-value in the joint, thus preventing any windborne seeds (e.g. grasses and weeds) that may penetrate the surface of the joint from rooting.
- Once hardened, polymer joint sand stops the growth of weeds only until the first crack forms, which then provides weeds with a place to grow.

FILMS

- ➤ **STONES ECO FUGENSAND** reactivates on contact with water, which prevents films from forming.
- Polymer joint sand residue left on stone surfaces hardens, which creates a permanent film and spoils the attractive, natural look of the stone surface. Films are very common and can only be removed with a great deal of difficulty. Applying excessive quantities of water when activating polymer joint sand is not the solution: it leads to the binder being washed out onto the stone surface, which makes cleaning more difficult.



REPAIR AND MAINTENANCE

- STONES ECO FUGENSAND can be removed from joints by applying enough water. New STONES ECO FUGENSAND brushed into the joints bonds solidly with the remaining existing material.
- Polymer joint sand can be removed from joints only with a masonry hammer and chisel. The joints cannot be renovated with polymer joint sand because the "old" and the "new" materials do not bond solidly to one another.

STORAGE LIFE

- ► STONES ECO FUGENSAND has an unlimited storage life when stored in dry conditions.
- Polymer joint sand hardens over time, even in unopened containers. Polymer joint sand from opened containers cannot be stored in a way that makes it reusable. It has to be discarded and therefore pollutes the environment.

APPLICATION CONDITIONS

- ➤ STONES ECO FUGENSAND is for use on dry stone surfaces at temperatures of 2 °C and above. It has no maximum allowable use temperature.
- Polymer joint sand can be used at temperatures of not less than 5 °C and not exceeding approximately 25 °C. Higher temperatures accelerate the process of chemical bonding. Joint sand left on the stone surface will often bond to it due to the heat of the stone. Immediately after filling, joints must be covered with a tarpaulin to protect them from rain.

JOINT FILLING

- ➤ STONES ECO FUGENSAND is ready for immediate use in suitable conditions for filling joints with widths of 1 mm upwards.
- Polymer joint sand has frequently to be mixed before use and in some cases applied as a slurry. With this method of application, joints have to be at least 5 mm wide and are completely filled.

PRODUCT INFORMATION

STONES ECO FUGENSAND - grey, basalt, beige

NOTES ON USE

Surfaces subject to vehicular traffic finished with mosaic paving, areas around swimming pools, balconies and roof terraces are not suitable for STONES ECO FUGENSAND. Experience has shown that in a limited number of cases Fugensand reacts chemically with certain types of stone, such as natural stone, brick or artificial stone, resulting in effects such as dark edges or light-coloured films. With these problematic types of stone, the product must therefore be tested on a small area and left for several days. These test areas can be used as reference surfaces. In the case of these problematic types of stone, the user must pay particular attention to our recommendations for use (thoroughly blow any Fugensand off the surface and apply plenty of water). How Fugensand is used on site is outside our responsibility. We are liable only for the consistent standard of our product. Users must always confirm the suitability of the product by undertaking their own trials. In order to reduce the amount of dust normally created when joint sand is shaken out of a bag, we recommend holding the open bag as low as possible over the joints to be filled. Depending on local circumstances and the amount of use of the joint-filled surface, the joints may be expected to require refilling after approximately 2-3 years. Should the filled joints become damaged, worn or dirty, then simply remove the loose material and dirt. Refill the joint with STONES ECO FUGENSAND in accordance with the recommendations for use.

The new joint material will bond firmly with the existing material

Use in permanently moist and/or permanently shadowed areas (particularly in waterlogged conditions) is not recommended. The binder in these situations loses more and more of its ability to regenerate and the joints lose their strength and weed suppressant effect.

ADVICE ON CARE AND CLEANING

A special property of **STONES ECO FUGENSAND** is its ability to become "flexible" again in contact with water. When this happens, the fine hairline microcracks in the joints, for example caused by settlement of the stones, "repair themselves". For this reason, we recommend you do not use power washers on surfaces with joints that have been filled with **STONES ECO FUGENSAND**. Powerful water jets can damage the joint filler, loosening the material and flushing it out of the joint. The paving is better cleaned with a suitable conventional chlorineand acid-free stone cleaner or swept when dry with a sweeping brush. In this way, you will preserve your filled joints and stone surfaces, which are usually roughened when cleaned with a power washer and as a result become

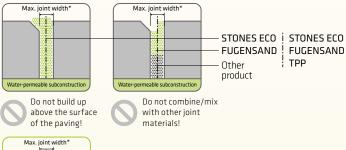
dirty quicker. For this reason, it is also advisable not to use power washers on impregnated or coated paving units. Please bear in mind that a power washer could also damage the bedding to the paving units and undermine them. Do not use impregnation or sealing agents. Variations in the texture and colour of the joint material may occur, as would be expected and is common considering the nature of the materials used. Rain or a concentrated jet of water can increase the natural process of dusting and lead to soiling of adjacent vertical and horizontal surfaces.

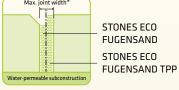
Attention: Please do not clean your stone surfaces with a damp cloth. You run the risk of wiping joint sand out of the joints and dirtying your stone surfaces. Wet cleaning of the joint-filled surfaces can be done but only after treatment with our special liquid SE FUGENPROTECT. Be careful to ensure the joints are always filled. Do not contaminate the surfaces with other materials, in particular organic substances. This could reduce the effectiveness of the binder, resulting in loss of joint strength.

Observe our detailed care and cleaning instructions and the product information sheets at:

www.stones-baustoffe.de

PLEASE NOTE STONES ECO FUGENSAND STONES ECO FUGENSAND Terrassenplatten Plus





- * STONES ECO FUGENSAND for joints of 1–20 mm, minimum installation depth 3 cm
- * STONES ECO FUGENSAND TPP for joints of 1-10 mm, self-sealing from an installation depth of 2 cm, minimum 2 cm paving thickness

The top of the STONES ECO FUGENSAND in the joint should be up to but not above the edge of the paving unit / just under the edge or chamfer of the paving unit



UNIVERSAL APPLICATION

MOWESTAB TERRA is available in a creamy sand colour and in the small quantities often required for paths and seating areas in private gardens. Supplied as a ready-mix in 25 kg bags, MOWESTAB TERRA is suitable for DIY construction. A hand tamper or roller is adequate for compaction. We recommend a 1-layer construction on a water-permeable, aggregate base. A 3 cm layer of pathway material requires approximately 2 bags/m² of MOWESTAB TERRA. MOWESTAB TERRA is economical to install and maintain.

The product's water permeability ensures that it can contribute to the surrounding ecosystem.

PRACTICAL ADVANTAGES

MOWESTAB TERRA is a certified load-bearing pathway material – as water-permeable and ecological as gravel. MOWESTAB TERRA contains "SOLID GREEN TERRA BINDER", which is based on plants and minerals. The binder stabilises the fine-grained aggregate mixture and is responsible for its water permeability.

MOWESTAB **TERRA** can also be laid to falls, with reduced risk of slipping and erosion. The combination of the pathway material aggregate mixture and the binder reduces the formation of dust, slurry and puddles, thus ensuring the surface looks natural and is pleasant to walk on.

MOWESTAB **TERRA** is tested and certified as having no harmful emissions or constituents and for its environmental compatibility. It also complies with the requirements of DIN 18035-5 and FLL Specialist Report 2007.

WEED SUPPRESSION - HOW IT WORKS

MOWESTAB **TERRA** pathway material has an elevated pH value and thus reduces the ability of air-borne seeds (e.g. grasses and weeds) to take root. During the course of use, organic deposits, e.g. from the tread of garden shoes, wheelbarrow tyres etc., can result in humus material building up on the pathway surface, which provides an opportunity for air-borne seeds to take root. Any weed growth should be carefully removed in accordance with our maintenance instructions. The growth of moss and algae is not suppressed, as they are essentially rootless.

When constructing a **MOWE**STAB **TERRA** pathway, please ensure that the bedding is free of weeds, because rooting weed suppression only works from above. It cannot prevent weeds from growing through the surfacing from the bedding.

BASIC PRINCIPLES

The pathway must be constructed to the appropriate falls to ensure drainage. The correct gradients must be applied from the compacted substrate to the finished surface. Observe the advice shown in our illustrations. The aggregate in the base should have a grading of 0–32 mm. (Fines < 0.063 mm content: < 5% by weight). The base should be laid on the compacted substrate, otherwise known as the "formation". The top of the compacted base must be shaped to the same gradients as the final MOWESTAB TERRA pathway material surface to ensure proper drainage. The MOWESTAB TERRA pathway material is laid on this aggregate base. The use of recycled concrete for the aggregate base is not recommended. We recommend that the pathway is edged with path edgings. Suitable edgings include aluminium profiles, paving blocks, kerb stones and impregnated hardwood boards.

PLEASE NOTE

Do not build the pathway between November and February. We recommend that the surfacing layer is not placed during rain or in frosty conditions. The pathway material layer must have completely dried out before first use. Only in this way will the particles within the pathway material layer form an efficient interlocking structure to ensure the highest shear strength with maximum water permeability and a long service life. The time it takes for the whole layer to dry out depends on the amount of rainfall and the prevailing temperatures, i.e. heavy rain and low temperatures can delay drying out!! Moisture (e.g. due to rain) in the pathway material layer will cause it to become slightly flexible, but it will harden once more after drying out again. The pathway material alternates between being a rigid and a flexible load-bearing construction, depending on the weather.

RECOMMENDATIONS FOR USE







Dampen aggregate base

Empty/spread out contents

Apply water





Compact

Variations in the texture and colour of the pathway material surface may occur, as would be expected and is common considering the nature of the materials used.

Rain or a concentrated jet of water can increase the natural process of dusting and lead to soiling of adjacent vertical and horizontal surfaces.

Advice on repair and maintenance can be found at www.stones-baustoffe.de

CONSTRUCTION OF A MOWESTAB TERRA PATHWAY







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climate-friendly building material Contains renewable raw materials

DO YOU HAVE ANY QUESTIONS?

www.stones-baustoffe.de



You can find a short video showing how to use the products, a coverage calculator for all paving unit formats and other product information online at www.stones-baustoffe.de or by scanning the QR code.

Partner of Nature