SABBIA ANTIERBA

CARATTERISTICHE GENERALI

DESCRIZIONE	SABBIA PER LA SIGILLATURA DELLE FUGHE DI PAVIMENTAZIONI AUTOBLOCCANTI.
PARTICOLARITA'	EVITA/RIDUCE LA GERMINAZIONE DI ERBE ED INFESTANTI ALL'INTERNO DELLA FUGA IN SABBIA
GRANULOMETRIA	0÷2 mm
LARGHEZZA FUGHE	1.5÷5mm
FABBISOGNO / TIPO PAVIMENTO	
Autobloccanti a fuga stretta	±2.5÷3.5 kg/m^2
Autobloccanti a fuga larga	±5÷6 kg/m^2
Lastre a fuga stretta	±1.2 kg/m^2
Lastre a fuga larga	±2.5÷3 kg/m^2
Cubetti porfido	±10÷15 kg/m^2

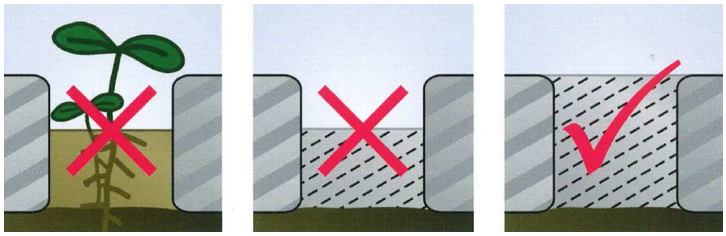
CARATTERISTICHE TECNICHE

CALPESTABILITA' & CARRABILITA'	IMMEDIATA
PESO IN VOLUME	1600 kg/m^3
COLORE SABBIA	BIANCA
IMBALLO	SACCO DA 25kg

NOTE

AL FINE DI OTTENERE LA MASSIMA EFFICACIA, LA FUGA DEVE ESSERE INTERAMENTE RIEMPITA CON SABBIA ANTIERBA.

RIMUOVERE TERRA O ALTRO MATERIALE ORGANICO EVENTUALMENTE PRESENTE ALL'INTERNO DELLA FUGA.



IN CASO DI CONTATTO CON GLI OCCHI O PELLE LAVARE BENE CON ACQUA.

IL PRODOTTO SI OTTIERE TRATTANDO SABBIA DI QUARZO CON DISERBANTE LIQUIDO (IN AUTOCLAVE). E' QUINDI ESCLUSA LA PRESENZA DI DISERBANTE IN POLVERE CHE POTREBBE RISULTARE, IN FASE DI POSA, PERICOLOSO PER LA SALUTE OLTRE CHE ROVINARE IL COLORE DELLA PAVIMENTAZIONE.

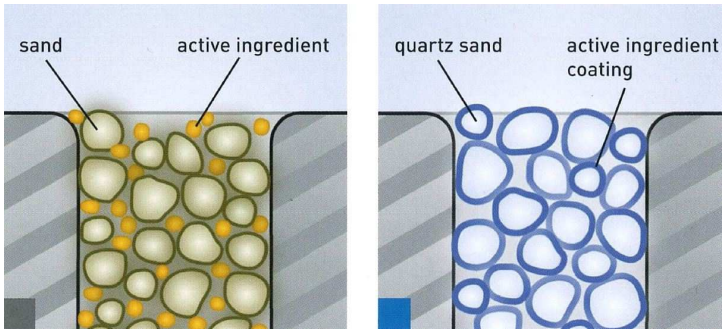
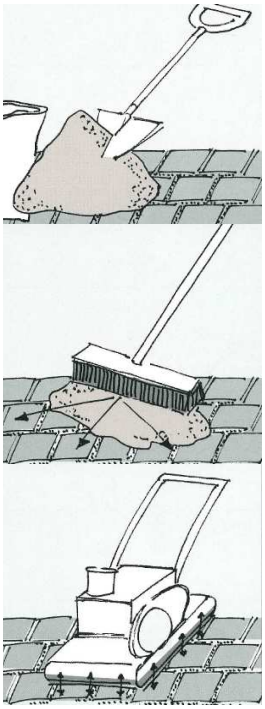


FOTO PRODOTTO

MODALITA' DI POSA



FASE 1
Mescolare a secco prima di utilizzare la sabbia

FASE 2
Fare entrare un primo spolvero di sabbia all'interno delle fughe, con l'ausilio di una scopa a setole rigide.

FASE 3
Vibro compattare il pavimento mediante piastra vibrante munita di tappettino protettivo in gomma.

FASE 4
Ripetere le fasi 1, 2 e 3 in modo da riempire completamente la fuga.

I test eseguiti nel campo prove di LWG (Istituto Bavarese di Vinicoltura e Ortocoltura), confermano che la sabbia antierba è molto efficace nella riduzione della germinazione di erbe e infestanti in genere (allegato report in lingua inglese).

LWG Landespflege

Bayerische Landesanstalt für Weinbau und Gartenbau

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Landscape Managament

Bavarian State Institute for
Viviculture and Horticulture

Effectiveness of vegetation suppressive joint filling sand for paved areas

Abstract of the final report on the research project
L068a_09 to L068d_09

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Abstract of the final report on the
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Effectiveness of growth suppressing sand for paved surfaces

Project Span
15.12.2009 – 31.07.2010

Project Manager: LLD Jürgen Eppel
Project Member: LOR Thomas Leopoldseder

Veitshöchheim, August 2010

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Effectiveness of growth suppressing sand for paved surfaces

Abstract of the final report on the research projects L068a_09 to L068d_09

Thomas Leopoldseder

Background of the study

By commission of the company Gebrüder Dorfner GmbH & Co. Kaolin- und Kristallquarzsand-Werke KG, the Landscape Management Department of the Bavarian State Institute for Viticulture and Horticulture studied the growth suppression properties of the product "Dorfner Fugensand+" during the first half of 2010.

Since the distribution of airborne seeds can cause undesirable weeds and grasses to start growing almost immediately in the grout of newly paved surfaces, Dorfner Fugensand+ could save maintenance costs if the additive it contains prevents/reduces germination and further growth of the undesirable plants.

Figure 1: Applying the grout (Photo taken on 21.01.2010)

Concept of the study

To study the effectiveness, the product "Dorfner Fugensand+" and a conventional mixture of lime / crushed sand / crushed stone was applied as grout to two sections of plaster in the greenhouse of the Landscape Management Department.

Twice at an interval of 35 days and under controlled growing conditions, 100 seeds each from the species *Hieracium pilosella* (Mouse-ear Hawkweed), *Lolium perenne* (Perennial Ryegrass), *Medicago lupulina* (Back Medic), *Plan tago lanceolata*

Figure 2: Counting the seedlings (Photo taken on 23.02.2010)

(Ribwort Plantain), *Taraxacum officinale* (Common Dandelion) and *Poa annua* (Annual Meadowgrass) were sown and watered in a wet and a dry trial.

After about two months, the grout between the paving stones was removed to a depth of 1 cm and replaced by artificially aged sand, which had been mixed earlier with silt and leaf compost. Afterwards, the germination trials were run again.

Figure 3: Seed trays with Hieracium pilosella (Mouse-ear Hawkweed) l to r on crushed sand, peat growing medium and Dorfner Fugensand+ (Photo taken on 13.01 .2010 – 21 days after sowing)

Results of the study

Even in the preliminary trials, there was a noticeable effect on a wide spectrum of plant species comprising 14 herbs and grasses in seed trays. On all three observation dates, Dorfner Fugensand+ yielded conspicuously fewer seedlings from eight species. In the case of the other four species, the differences were striking on one date only. Only two plant species in general did not exhibit any differences to germination in conventional lime-crushed sand.

This effect was subsequently confirmed by the counting of seedlings in the sections of pavement.

Under steady moist conditions, Dorfner Fugensand+ can measurably reduce the number of plants that germinate in the joints of the pavement. However, it cannot entirely prevent growth under these uncommonly wet conditions, which with a precipitation of 2.5-3 mm/day is equivalent to an annual rainfall of around 1000 mm. In the aged condition, the size of the plants is clearly reduced, but a reduction in the number of plants is hardly noticeable.

In alternating conditions of moisture with phases without precipitation (dry trial), Dorfner Fugensand+ clearly shortens the time span in which the plants wither and die. In both the new and aged condition, the joints are kept practically free of growth caused by airborne seeds.

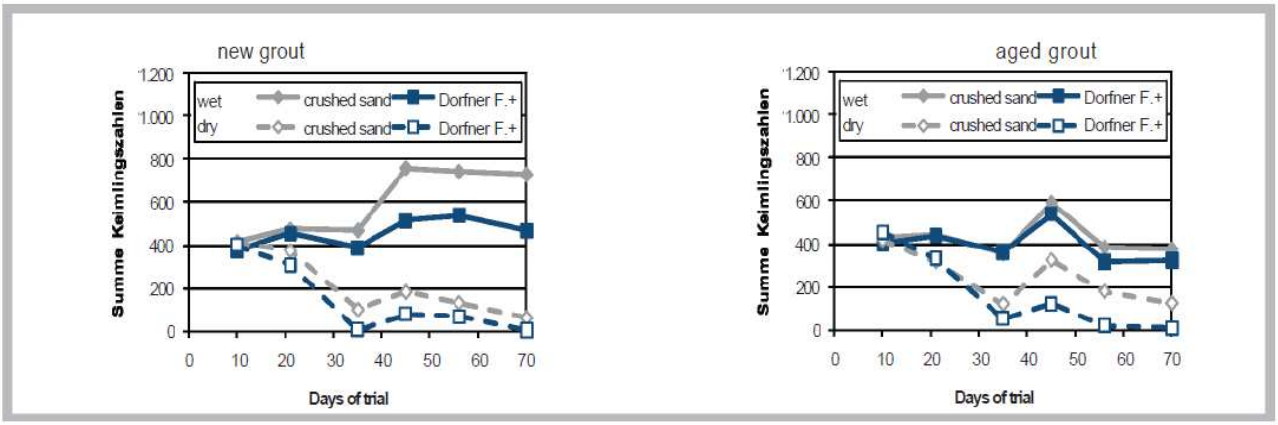

Fig. 2: Number of all six types of seedlings (from 100 seeds each, as of day 36th of the trial from 200 seeds each) on sections of plaster in the greenhouse of the Landscape Management Department (average from 3 repeats)

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Figure 4: Atrophying seedlings on aged Dorfner Fugensand+ under moist conditions (Photo taken on 27.05.2010, pallet 18)

Figure 5: In moist conditions in aged crushed sand, on the other hand, the plants are larger and stronger (Photo taken on 27.05.2010 pallet 17)

Figure 6: In the dry trial, the sections with Dorfner Fugensand+ are almost free of vegetation (Photo taken on 21.04.2010,

Figure 7: On crushed sand, by contrast, seedlings could germinate even in the dry trial

Notice

The conditions in the greenhouse, with the simulated annual precipitation of approx. 600 mm (dry trial) to 1000 mm (wet trial), cover a wide spectrum of climatic conditions. However, the findings cannot be transferred to every single situation outdoors.

Due to its grain size distribution, Dorfner Fugensand+ does not meet the requirements for use in road construction according to the TL Pflaster-StB 06. The updated DIN 18318 (issued 2010), however, allows the use of sand with a grain size of 0/2 mm for "surfaces which cannot be accessed by motor vehicles."

For all other applications, the suitability of Dorfner Fugensand+ for construction purposes should be checked.

The abstract of the final report on the research projects L068a_09 to L068d_09 was written by:

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