Practical aids for green thumbs





[®] The green basis for experienced gardeners

Tillman GardenTechnology is a division of Tillman Construction Chemicals, the leading producer of additives for concrete and mortar. Tillman's products are used in many different projects all around the world. For example in road construction and hydraulic engineering, in housing and industrial construction. Since short, special Tillman products can be used to create splendid gardens. Even in the gardening sector, Tillman's highquality and easy-to-use products are indispensable.

Tillman GardenTechnology has developed a broad range of "green" aids which enhance

every garden for experienced hobby gardeners and professionals. Are you considering the creation of a pond, a waterfall, the design of new footpaths, or the construction of flowerbeds, a pergola or a greenhouse? Tillman offers practical aids for green thumbs.

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Tillman GardenTechnology Product overview

The Tillman GardenTechnology range of products right now comprises three main product groups with many different products. Right now, new products are being developed in our laboratories. You will receive detailed information about those products in time.

Product groups



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Garden Technology

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Permepoxy TM

Article no. 29510 Type I Article no. 29511 Type II Article no. 29512 Type III Article no. 29513 Type IV Article no. 29515 Type III (anthracite)



Permepoxy TM is a water-permeable 3 component system containing a quartz and epoxy mortar. The product offers a broad variety of possible applications with numerous possibilities. Permepoxy TM can be used as an exchange for gravel or other fillers in the construction of footpaths and trails. As Permepoxy TM hardens, maintenance and cleaning require much less effort than for loose materials. The product's structure allows to simply discharge water into the subsoil. Once hardened, Permepoxy TM is resistant to abrasion and chemicals and shows high compressive strength. Depending of the project and the desired results, different kinds of quartz compositions can be chosen from.

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Permepoxy TM

Article no. 29510 Type I Article no. 29511 Type II Article no. 29512 Type III Article no. 29513 Type IV Article no. 29515 Type III (anthracite)



Application

Permepoxy TM is used to:

- Create footpaths and trails
- Spray bands on house walls and gables
- Cycle paths
- Trunk markings
- Water-permeable surfaces in the construction of greenhouses

User instructions

Thoroughly mix components B and C and then add them to component A. Mix the whole composition/mixture again, after which the product is ready to be processed. After the processing, stamp and compact the product. The density of the underground greatly influences the compressive strength of the hardened product. Level the surface before the hardening starts.

The time of processing and hardening depends on the temperature. At 20°C, processing time is about 15 to 30 minutes, hardening takes about 2 to 4 hours, meaning that results are obtained soon after a short processing time. Complete hardening takes about 24 hours. Processing and hardening times are prolonged at lower temperatures. Do not process the product at temperatures below 5°C. Consumption depends on the level of compaction and the thickness of the layer applied. 100 kg of Permepoxy TM will yield a volume of about 65 litres.

Remarks

The surfaces to be treated have to be clean and free of oils and grease. To assure good adherence to the surface, the have to be absolutely dry. As Permepoxy TM is water-permeable, it is indicated to create a subsoil that is water-permeable or to create a slightly declining slope. This prevents the Permepoy TM-layer from filling with water and thus creates a good resistance to frost. Sand an/or recycled gravel mixtures have to be compacted and stabilised. When installing this product outdoors, weather and surfaces have to be dry.

It is recommended to wear protective gloves and clothes when processing this product. Clean used tools immediately after the application using a solvant (thinner). Hardened Permepoxy TM can't be removed from tools.



Fullgrip TM



Fullgrip TM is a 3 component epoxy resin containing high-quality hard material, specially developed to give antislip properties to many different kinds of surfaces. Fullgrip TM is easy to mix and to process. After the installation, the strewing of the hard material and hardening, an even and rough surface is obtained that is resistant to abrasion and weather and that can be called an antislip surface. Fire-dried quartz of a maximum grain size of 1 mm is included in the delivery for standard applications.

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Fullgrip TM

Article no. 29713



Application

Fullgrip TM can be applied to almost every kind of solid surface and is used to give antislip properties to the following kinds of surfaces:

- Garden timber
- Crossovers
- Sundces of Dildges
- Motallia auríago

User instructions

Mix component A, add the whole quantity of component B and remix for about 3 minutes. Pour this mixture to the surface to be treated and distribute it to obtain a thin layer using a big brush. Now strew component C to this surface. Component C is pressed onto the layer, for example by using a lamb fur roll. Excessive material can be brushed away as soon as the hardening process is completed. The processing time depends on the temperature. At 20°C, the processing time is about 15 to 30 minutes, providing fast results. Lower temperatures prolong the processing and hardening times. Do not process this product at temperatures lower than 5°C. 2.5 kg of Fullgrip TM (components A, B and C) will cover about 0.75 to 1 m³, depending on the project and the thickness of the layer.

Remarks

The surfaces to be treated have to be clean and free of oil and grease. To assure good surface adhesion, those surfaces have to be absolutely dry. For the application on wood and concrete, these materials have to be thoroughly dry inside as well.

It is recommended to wear protective gloves and clothing when processing this product. Tools have to be cleaned immediately after the application using a solvant (thinner). Once hardened, Fullgrip TM can't be removed from tools.



Rapid concrete TM



Rapid concrete TM is a ready-to-use, high-quality, mineral mortar. It is multifunctional and thus offers a wide variety of possible applications. Rapid concrete TM can be processed without preparation as it is a self-mixing concrete.

Application

Rapid concrete TM is used for rapidly fixing (garden) posts, for the finishing of road construction works, for levelling kerbstones and for the construction of smaller foundations. The product is also suitable to anchor playground equipment, pergolas or (flag)poles. Rapid concrete TM is particularly suitable for the application with the Tillman GardenTechnology Rapid Pond Construction System (see picture).



User instructions

- Generalities

Half of the excavated hole is filled with clean tap water. The object to be fixed is positioned. Rapid concrete TM is filled into the hole, around the object, until the pit is full and the dry mortar is saturated with water (refill water if necessary). Hardening is not influenced negatively by little quantities of excessive water. Optionally level the concrete surface or cover it with soil or sods. Do not process Rapid concrete at temperatures below 5°C.

- Fixing of posts

For fixing posts, excavate a pit of about 1/3 the size of the post. After placing the post, the pit is filled with water before dry Rapid concrete TM is added. Mix the concrete and the water using a shovel. After about 10 minutes, the post is fixed and doesn't need further support, it can be charged lightly after a few hours.

Fixings/Finishes in road construction works

For the finishing of road construction works, a trench is excavated alongside the construction work, about 100 mm in breadth and about 70 mm in depth. The trench is wetted before dry Rapid concrete TM is filled in. A sufficient quantity of water is added. After about 30 minutes, the road can be compacted with a vibrator.

- Placing of kerbstones

For placing kerbstones, a hole of about 200 mm is excavated where the stones join and filled with Rapid concrete TM. After placing the kerbstones the mortar is wetted using a watering can with a rose.

- Smaller foundations

The foundations are filled with a layer of dry Rapid concrete TM (thickness about 80mm). Possible construction elements are placed onto the dry concrete layer before it is wetted using a watering can with a rose.

Contact your supplier for information about applications in construction projects. As the surface is little water-permeable, or even impermeable, after the installation and hardening, the pavement has to be designed in a way that allows surface waters to be easily discharged.

GardenTechnology

Rapid concrete TM





Rapid mortar TM



Rapid mortar TM is a mortar containing highly reactive binders and high-quality quartz aggregate with a maximum grain size of 4 mm. Polymers added to the product guarantee an excellent adhesion to the surface. Rapid mortar TM reaches high compressive strength after a very short period of time.

Application

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Rapid mortar ${ m TM}$

Article no. 29502



Rapid mortar TM is used for laying big, irregular stones, foundlings and quarry stones. The ambitious user uses Rapid mortar TM to fix decoration and sculptures and to lay garden walls. The rapidly hardening mortar permits to obtain good results within a few hours. The fast strength development allows to considerably reduce the time for necessary fixation. Thus, fixation for days is a thing of the past. Using Rapid mortar TM considerably reduces working hours, and sometimes even travel times. In comparison to conventional mortars and cements, it is no longer necessary to wait a whole day because of the slow hardening process. Rapid mortar TM can be charged after a few hours' time.

Rapid mortar TM is employed by professionals in the field of infrastructure. It is used for example for repairs of concrete roads, bridges, crossovers and driver-training fields which have to be back in service after a short time. The product is for example used to raise or repair manhole covers or to fix anchorages. Repairs on sewage systems, sewer pipes or manholes can be executed fast, which reduces inconveniences to a minimum. Several work stages can be executed in succession and without waiting times, due to the rapid hardening process.

User instructions

Prepare Rapid mortar TM with water to obtain a plastic mortar. Rapid mortar TM is added to the mix water, the mixing time is about 3 minutes until a homogeneous mixture is obtained. Apply the mixture using a trowel or other suitable tools. Thoroughly clean used tools immediately after usage.

The processing time of Rapid mortar TM is about 15 minutes at 20°C. Adding Acrytekt TM (Art. No. 3302) increases the water density and the chemical resistance, and the processing time is prolonged. 100 kg of Rapidmortar TM, prepared with water, yield about 55 litres of ready mortar.



Biocide TM



Biocide TM is a ready-to-use product for cleaning different kinds of surfaces polluted by algae or mould. Biocide TM acts chemically on the stains and removes them from the surface. Biocide TM causes an acidic reaction, and calciferous surfaces are then protected by a mineral layer, presenting highly unfavourable conditions for algae and moss. Renewed formation of these kinds of pollution is thus made harder and treated surfaces are spared for quite some time.

Biocide TM was developed for experienced users. It is a strong cleaning agent providing good results. The application on washed concrete, concrete and brick pavings refreshes those kinds of surfaces, removes pollution and intensifies colours.

Application

Biocide TM is used to remove pollution, algae and mould from:

- Bricks and plaste
- (Mosaic) paving
- (Wooden) crossovers, bridges
- Wooden garden furniture

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Biocide TM

Article no. 29801



User instructions

The surface to be treated is wetted before the application of Biocide TM to prevent loosened dirt particles from penetrating the surface. Penetrating dirt particles would make the cleaning more difficult. Apply Biocide TM by pouring, spraying or by using a brush. Let the product act for 30 minutes to 1 hour (don't let it dry).

The cleaning effect of Biocide TM can be enforced by brushing the surface with a broom or brush to remove even tenacious stains. Rinse the surface with plenty of clean water. Repeat the treatment for tenacious stains. Very porous surface can be treated with a broom. The impregnating effect of Biocide TM prevents the renewed formation of "green" soiling for a long time. Biocide TM can be thinned down with water in a relation of 1:3.

Remarks

It is recommended to wear protective clothing and gloves. When using Biocide TM protect neighbouring vegetation from any contact with the product. A trial application on a hidden spot is necesary before the actual application to test the reactions of the surface.



Pond mortar TM



Description

Pond mortar TM is a mineral mortar which is particularly suitable for designing and building waterfalls and water courses, for masonry tasks, for the construction of watertight bases of ponds and for modelling edges of ponds. Its fast hardening properties enable the execution of several work steps in one day.

Applications

- The production of foundations and walls for new and existing ponds
- Designing and modelling of waterfalls and water courses
- The construction of walls for filter systems
- Attachments of steel, glass, natural stones, concrete and bricks
- Sealing of leaky ponds
- Repairs and adjustments of (brick) walls in ponds
- Give a personal touch to your own creations!
- Creation of cement-based ponds using the GardenTechnology Rapid Pond Creation System (see picture)



GardenTechnology Rapid Pond Creation System

Ponds can easily be constructed in 4 simple steps using the GardenTechnology Rapid Pond Creation System:

- 1. Excavate a pit.
- 2. Cover the surface of the pond-to-be with common foil used for gardening.
- 3. Cover the bottom area with water (a "layer" representing the future foundations of the pond) and strew in dry Rapid Concrete TM (Article no. 29501).
- 4. About 2 hours later, the base and walls can be lined with Pond mortar TM.

User Instructions

The surface to be treated has to be cleaned, and free of grease. Preparation should be done in a mortar mixer, or using a stirring device for drilling machines and a tub. Pond mortar TM is mixed with water until a the mix obtains a good workability. The mortar is then applied to the surface to be treated using ladle, trowel or putty. It can also be applied without tools, just using your hands (in which case wearing gloves is recommended). The look of the surface can be enhanced with natural stones, sand and gravel which can be applied to the mortar before it hardens. The surface could also be treated with a wet hand brush to roughen it up. The consistency of the mortar depends on the task to be executed. Prepare a quantity of mortar which can be processed within 25 minutes. When later filling the pond, keep an eye on the acidity of the water to ensure an advantageous environment for animals and plants. Freshly applied pond mortar can increase the acidity of the water. When exhibiting an unfavourable acidity, the water should be replaced (fully or in part).

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Pond mortar TM





Pondfix TM

Article no. 29605 (component A) Article no. 29606 (component B)



Description

Pondfix TM is a two-component PCC system mortar. The system consists of a cement-based mortar (component A) and an emulsion of synthetic resins (component B). The final product is water-tight, has a high chemical resistance and high compressive and tensile strengths.

Applications

Pondfix TM can be used to repair leaky ponds, to place boulders natural and artificial stones, tiles and slabs, to design water courses, waterfalls and fountains. The product adheres to steel, glass and a variety of synthetic materials and therefore can be used to install these.

Pondfix TM is particularly suitable to give brickwork ponds a water-tight lining and finish. Pondfix TM is an excellent means for filling and sealing joints, cracks, seams and supplies. Rigid connections and seams, for example steel on concrete or stone, can be made water-tight. Special polymers in the product provide for its excellent adhesion to the various surfaces.

User instructions

Pondfix TM has a processing time of 20-30 minutes, depending on consistency and ambient temperatures, followed by relatively fast stiffening. To guarantee a good adhesion to the surface, the surface to be treated has to be clean and free of any remaining organic particles. If the product is applied to foils, it is recommended to make sure the foil is perfectly dry and to then roughen up its surface using sanding paper. When later filling the pond, keep an eye on the acidity of the water to ensure an advantageous environment for animals and plants. Freshly applied Pondfix TM can increase the acidity of the water. When exhibiting an unfavourable acidity, the water should be replaced (fully or in part).

Both components are mixed in a concrete mixer until a homogenous mix is obtained. The consistency depends on the respective task, i.e. how stiff or plastic it has to be. The possible consistency for processing ranges from kneadable to highly viscous. The mortar is applied with a steel trowel or a ladle. The used tools are to be cleaned with water immediately after the application.

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Pondfix TM

Article no. 29605 (component A) Article no. 29606 (component B)





Pondfinish TM



Pondfinish TM is a high-quality 3 component quartz and epoxy mortar especially developed for the finish of pond edges. After the application and hardening, Pondfinish TM possesses a durable, stone-like surface, looking like stone sheet.

Application

Pondfinish TM is used to improve the edges of a pond or other surfaces in and around a pond. Pondfinish TM can be applied to different kinds of plastic sheets, concrete, steel, and stone-like materials.

User instructions

Stir component A until it becomes a homogeneous mixture. Add the whole amount of component B, mix for another 3 minutes. Pour the mixture onto the surface to be treated and use a big brush to distribute it to a thin layer. Strew component C onto the still wet layer, use a roller to lightly press the material onto the layer. Excessive material can be brushed away after the hardening. The processing time depends on the temperature. At 20°C, the processing time is about 15 to 30 minutes which guarantees fast results. The processing time is prolonged at lower temperatures. The product is not suitable to be processed at temperatures below 5°C. Consumption depends on the kind of surface and the thickness of the layer. 2.5 kg of Pondfinish TM (components A, B and C) will cover 0.75 to 1 m², depending on the thickness of the layer applied.

Remarks

The surfaces to be treated have to be clean and free of oil and grease, as well as completely dry to guarantee good surface adhesion. When applied on wood and concrete, these materials have to be thoroughly dry inside as well.

It is recommended to wear protective gloves and clothing when processing this product. Tools have to be cleaned immediately after the application using a solvant (thinner). Once hardened, Pondfinish TM can't be removed from tools.

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Pondfinish TM





Joint casting system TM

Article no. 29710 Article no. 29711 Article no. 29712 Article no. 29714



The Joint Casting System TM is Tillman's solution for the jointing of mosaic pavings and consists of the following products:

- Joint casting mortar TM

a cement-bound mortar, capable of flow, to fill the joints of mosaic pavings made of natural stones. It is easy to mix and to apply and gives strength, elasticity, water-impermeability and frost resistance to the paving.

Pre-casting agent TM VGM

a ready-to-use, wax-like emulsion without solvants which prevents the adhesion of the Joint casting mortar TM on neighbouring surfaces.

Curing compound TM VGM

a ready-to-use emulsion with a retarding effect on the top layer of the (natural stone) paving, jointed with Joint casting mortar TM.

Application

Joint casting mortar TM is used to fill the joints of mosaic pavings made of natural stones like porphyry, granite, and so on. The mortar can also be used for jointing burnt materials. Pre-casting agent TM VGM is applied to surfaces which are not to be treated directly with Joint casting mortar TM, but could be stained by cement paste as the cleaning of the surface proceeds. Curing compound TM VGM retards the hardening of the top layer and thus makes the cleaning of the surface easier.

User instructions

- Pretreatment

Pre-casting agent TM VGM is evenly sprayed onto the surface using a suitable spraying device. The product is applied to the clean and dry surface in dry weather. Pre-casting agent TM VGM is not sprayed onto surfaces, on which the Joint casting mortar TM is to be applied.

Joint casting

The surface to be treated has to be solid and clean, as well as free of oil and grease (no difference between new and older pavings). 25 kg of Joint casting mortar TM are prepared with 3.5 litres of water. Mixing time is 5 minutes (use of a concrete mixer is highly recommended). The prepared mortar is applied to the wetted and pre-treated surface and distributed using appropriate tools.

- Curing

Immediately after the application of Joint casting mortar TM, Curing agent TM VGM is evenly sprayed onto the treated surface which is then covered with plastic sheets. Depending on ambient temperatures and strength development, but usually after 2 to 3 hours, the sheets are removed to clean the surface using a specially developed spraying device and at low pressure. During this treatment, the thin layer of mortar on top of the stones is removed. After the cleaning, the joints should be some milimetres lower than the stones.

Remarks

The treated surfaces can be slippery after rainfall due to waxlike components. These residues can easily be removed with warm water and a pressure washer. Adherence of further layers, like paints, markings or other toppings, could be limited by possible wax-like residues.

GardenTechnology

Joint casting mortar TM Article no. 29710

Joint casting mortar TM (anthracite) Article no. 29714

Pre-casting agent TM VGM Article no. 29712

Curing compound TM VGM Article no. 29711





Soil compactor TM



Soil compactor TM is a cement-bound product especially developed for the underground solidification of (mosaic) pavings. Its well-balanced composition and special properties allow a considerable reduction of filler sand. As Soil compactor TM hardens after the application, it limits a possible sinking of the paving, as possible surcharges are distributed to larger areas. Moreover, weeds are prevented from growing through the once hardened layer.

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Soil compactor TM

Article no. 29701

Application

Soil compactor TM is used to solidify the underground of:

- (Mosaic) po
- Terraces
- Pavements
- Parking spaces and so of

Soil compactor TM can be used for laying tiles, artificial stone pavings, brick pavings, cobblestone pavements and for fixing natural stones.

User instructions

The underground is levelled and consolidated. Soil compactor TM is then applieddepending on the future strain on the paving. If the paving is expected to bear lower strain, as for pavements for example, the thickness of the layer of Soil compactor TM is recommended to be 1 cm. Increase the thickness of the layer in a relation to increased charge.

During the installation of the (mosaic) paving, a part of the sand layer is mixed with a part of Soil compactor TM (by raking or milling). The (mosaic) paving is finished as usual (the paving is compacted and sand is strewn onto the surface). Soil compactor TM hardens (the hardening process is started by the humidity of the filler sand and the underground, and rain) after which the paving constitutes a single-layer surface through the composition of Soil compactor TM, the filler sand and the stones.

Once hardened, the surface will be, almost, water impermeable. Thus, the paving should be designed and installed in a way to allow easy discharge of (surface) water.



The green basis for experienced gardeners.

Detailed information and prices on request. Tests for suitability are necessary before the application of our products. Recommendations for and information about our products and their application are made to the best of our knowledge and proficiency and can never be at the basis of or the justification for a liability claim. Our products have to be treated in compliance with all valid degrees for safety and waste materials treatment without exception. Our sales activites are executed in compliance to our general terms of sale, registered at Amsterdam Regional Court, no. 003.



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