vdw 850

Paving Joint Mortar 2-component (Self-Compacting)

For natural stone, reconstituted stone and concrete block paved surfaces on driveways, roads and other trafficked paved areas, including those used by delivery vehicles etc.



for light to medium traffic loads



water permeable



joint width ≥ 5 mm



clean, stain free surfaces



no covering required



specially designed for wide joints

natural

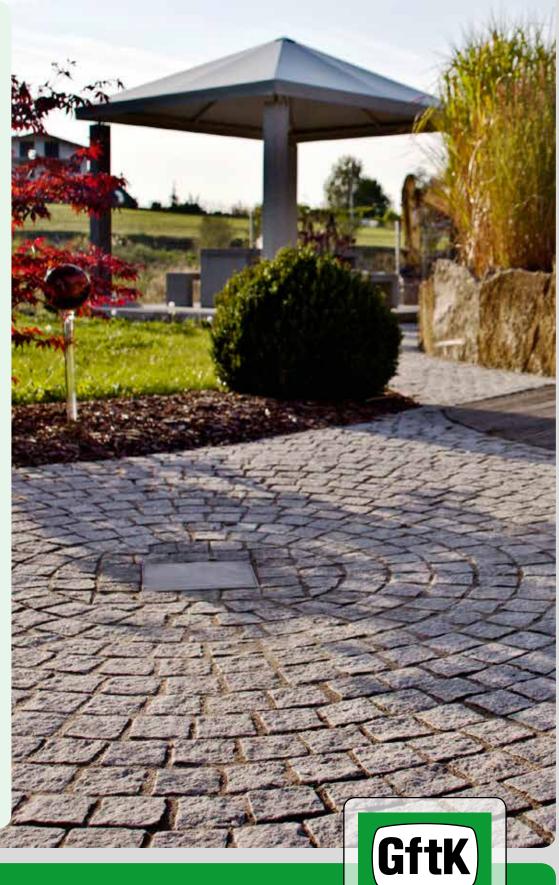


stone grey



basalt (dark grey)





Additional features









- fast and cost effective
- clean, stain free surfaces
- water permeable
- self-compacting
- mechanical sweeper resistant
- abrasion resistant

- highly frost and de-icing salt resistant
- durable
- can be applied in the rain and at low temperatures
- minimises the risk of accidents
- environmentally friendly

Technical Data

Product description

Reaction-resin based, paving joint mortar, with graded aggregates.

Binder: 2-component, solvent-free, water emulsifiable epoxy resin

Aggregate particle size: 0.1 – 1.2 mm

Joint width: continuously min. 5 mm

Joint depth: min. 30 mm, for areas with vehicle traffic: full block height; for joint widths

 \geq 15 mm the jointing depth must be at least twice the joint width.

Packaging: PP bucket (25 kg)

Material data:

Density (fresh): 1.7 g/cm³ Density (cured): 1.6 g/cm³

Flexural strength: approx. 10.0 N/mm ²
Compressive strength: approx. 25.0 N/mm ²
E-Modulus: approx. 5500 N/mm ²

Water permeability: 1.5 x 10⁻⁴ m/s (approx. 1.8 l/m ²/min at 20% joints)
Storage life: 1 year stored in a dry place away from frost

Application data

Mixing ratio of components: A : B = 100 : 2.7

Pot life: approx. 10 minutes at 20°C after mixing

Ambient temperature: min. 3°C, max. 25°C Substrate temperature: min. 3°C, max. 25°C min. 3°C, max. 25°C

Ecology

Water hazard class: resin component: WGK 2, hardener component: WGK 2

Disposal code: resin component: 080410, 080499,

hardener component: 080409, 080413, 080499

Consumption

The consumptions stated in the following table refer to setts with cropped edges all around and have been compiled from our long experience. The natural shape of setts and different paving designs may result in variations to these values. If in doubt, determine the actual consumption on a test area. *The consumptions stated below apply to a joint depth of 10 mm and must be multiplied by the actual depth.* Please see our consumption calculator at: www.gftk-info.de/english/jointing-mortar-usage-calculator



| | Dimensions in mm | | Approx. consumption in kg/m², for joint widths of: | | |
|---------------|------------------|--------|--|-------|-------|
| | Width | Length | 5 mm | 10 mm | 15 mm |
| Mosaic paving | 40 | 40 | 3,8 | 6,8 | 9,3 |
| | 50 | 50 | 3,1 | 5,7 | 7,8 |
| | 40 | 60 | 3,2 | 5,8 | 8,0 |
| Block paving | 100 | 120 | 1,5 | 2,9 | 4,1 |
| | 100 | 100 | 1,6 | 3,1 | 4,4 |
| | 80 | 100 | 1,8 | 3,4 | 4,9 |
| | 60 | 80 | 2,3 | 4,3 | 6,1 |
| Sett paving | 160 | 180 | 1,0 | 1,9 | 2,8 |
| | 140 | 180 | 1,0 | 2,0 | 3,0 |
| | 120 | 160 | 1,2 | 2,3 | 3,3 |

Application



Clean the surface in order to remove all residues



Wet the area



Add the binder component



Mix thoroughly until homogeneous



Work the mortar in



Clean with a hose spray ...



... and a damp coconut brush



Observe directions for curing!

Requirements:

A stable, load-bearing, permanently water permeable substrate, joint depth \geq 30 mm (for areas with vehicle traffic: full joint depth), joint width continuously \geq 5 mm, outside and surface temperature min. 3°C to **max. 25°C**.

Test area:

On natural stone setts and concrete block paving, contact between the vdw 850 plus Paving Joint Mortar (Self-Compacting) and the block surface may result in visual changes such as darkening and/or spotting. We generally recommend applying a test area first.

Preparation:

Clean the surface of all dirt, cement residues, organic materials, or any other contaminants, including cleaning out all of the joints to the required depth.

Wetting:

Fully saturate the surface of the paving. Always use fresh and cool tap water when wetting and cleaning.

Mixing the joint mortar:

Pre-mix the aggregate, then add the binder and mix for approx. 3 minutes until smooth and homogeneous. **No water should be added to the mix!**

Filling the joints:

Apply **immediately** after mixing by pouring directly onto the pre-wetted surface. Work the mortar thoroughly into the joints using a hard rubber squeegee. If the flowability decreases, slightly wet the mortar with water. The surface should be kept constantly wet during application. We recommend working from the highest to the lowest points.

Brushing off/Cleaning:

Remove any excess mortar residue immediately from the area by spraying lightly with water from a hose without washing out the joints. Be careful to clean the paved surface towards areas not yet jointed, and ensure the block surface is also cleaned. Remove any final residual mortar with a damp coconut fibre brush.

Curing

The following points apply to a temperature of 20°C and 65% relative humidity (high temperatures shorten and low temperatures lengthen the curing period).

Cordon off the freshly jointed areas for a period of at least 24 hours, or until the paving surface is no longer tacky. The area can then be made accessible to limited pedestrian traffic. The area can be fully released to vehicular traffic after 3–5 days, when fully hardened. In principle, a strength test should be carried out before putting into service.

Important information

Substrate

vdw 850 plus Paving Joint Mortar (Self-Compacting) is a jointing material and cannot absorb settlement from the substrate. The substrate, supporting structure and surfacing must be designed to accommodate the anticipated traffic load.

Bedding

- In pedestrian areas: It is acceptable to lay the paving and slabs on a fully compacted and stable, permeable sand or gravel bed. However, it is always better and more durable to lay paving in a permeable concrete or mortar bed; otherwise, increased cracking may occur. We recommend vdw 470 Cement Based Pervasive Mortar for landscaping or vdw 480 Bedding Compound and vdw 495 Bonding Slurry.
- In vehicular traffic areas: Paving and slabs must be laid in a permeable concrete or mortar bed designed for the relevant load we recommend to use vdw 470 Cement Based Pervasive Mortar for landscaping or vdw 480 Bedding Compound and vdw 495 Bonding Slurry.

Joints

- Minimum joint depth: The minimum joint depth for vdw 850 plus Paving Joint Mortar (Self-Compacting) is 30 mm, in areas with vehicle traffic the full joint depth. For jointing of polygonal paving laid in a permeable mortar bed with a suitable bond coat the minimum joint depth in pedestrian traffic only areas can be reduced to 20 mm.
- Minimum joint width: The minimum joint width for vdw 850 plus Paving Joint Mortar (Self-Compacting) is 5 mm. For joint widths ≥ 15 mm, the jointing depth must be at least twice the joint width.
- Chamfers must be brushed free, as performance cannot be guaranteed on these.
- Movement joints must be positioned according to the Safety Principles. Movement joints must be installed as
 necessary to comply with the required structural design and any anticipated levels of movement. Use a suitable
 flexible joint compound. We recommend vdw 880 Joint Flex or vdw 885 Joint Flex Compact.

The information in this Product Information Sheet is intended to give advice based on our testing and experience. We cannot guarantee results in any individual circumstances due to the variety of potential situations and the storage and application conditions for our products which are beyond our control. Specific project testing should be carried out where required. Our technical staff will be pleased to assist you at any time. We reserve the right to make changes without notice. Our Terms and Conditions of Sale and Delivery apply.

No direct legal liability can be assumed based on the data in this Product Information Sheet, or from any verbal advice unless this advice is expressly confirmed by us in writing. This Product Information Sheet replaces all previous versions.

Rheinbach-Flerzheim, September 2015

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Jointing Mortars



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