vdw 840 plus – 1K Jointing Mortar

For jointing natural stone and concrete block paving, slabs and clinker surfacing on garden paths, house entrances and terraces.



for pedestrian traffic



permeable to water



width ≥ 3 mm



clean surface



for coated concrete blocks

- natural



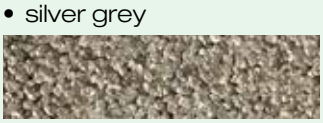
- stone grey



- basalt (dark grey)



- silver grey



Quality for Professionals

Further properties









- can be slurried in with water, **without** loss of quality
- no manual re-compaction, self-compacting effect
- can be applied in light rain
- suitable for narrow joints from 3 mm
- virtually binder-film-free surfaces
- ready to use
- suitable for ceramic terrace elements

Technical Data

Product description
Ready-to-use jointing mortar curing with atmospheric oxygen, with a graded mineral aggregate mix.

Binder:	1-component, highly modified liquid polymer curing with atmospheric oxygen
Joint width:	continuously at least 3 mm, maximum 20 mm
Joint depth:	min. 30 mm; for joint widths ≥ 15 mm the jointing depth must be at least twice the joint width
Packaging:	12.5 kg and 25 kg PE sack (vacuum-packed) in a PP bucket

Material data

Flexural strength:	approx. 8.0 N/mm ²*
Adhesive tensile strength:	approx. 1.5 N/mm ²*
Compressive strength:	approx. 17.0 N/mm ²*
E-Modulus:	approx. 3,900 N/mm ²
Water permeability:	1.7 x 10^{-5} m/s (approx. 3 l/m²/h at 5 % joints)
Storage life:	18 months, stored dry

Application data

Pot life:	approx. 45 minutes at 20 °C
Outside temperature:	min. 5 °C, max. 25 °C
Substrate temperature:	min. 5 °C, max. 25 °C

Ecology

Water hazard class:	WGK 1
Disposal code:	080112, 010409, 080199

(* based on DIN standards)

Consumption

The consumptions stated in the table refer to setts cut on all sides and laid as coursed paving, and are based on our many years of experience. The natural shape of the setts and different laying patterns may result in deviations. If in doubt, determine the consumption on a trial area. The values refer to a joint depth of **10 mm** and must be multiplied by the actual joint depth. **Also use our consumption calculator at: www.gftk-info.de/verbrauchsrechner**

	Dimensions in mm		approx. consumption kg/m² for joint widths			
	Width	Length	3 mm	5 mm	10 mm	15 mm
Mosaic paving	40	40	2,4	3,8	6,8	9,3
	50	50	1,9	3,1	5,7	7,9
	40	60	2,0	3,2	5,8	8,1
Block paving	100	120	0,9	1,5	2,9	4,1
	100	100	1,0	1,6	3,1	4,4
	80	100	1,1	1,8	3,4	4,9
	60	80	1,4	2,3	4,3	6,1
Sett paving	180	180	0,6	0,9	1,8	2,6
	140	160	0,7	1,1	2,1	3,1
	120	160	0,7	1,2	2,3	3,3
	100	200	0,7	1,2	2,4	3,4
Slab paving	600	400	0,2	0,4	0,7	1,0
	400	400	0,3	0,4	0,8	1,2
	300	300	0,3	0,6	1,1	1,6

Application

You will find further information in this application video



Clean the surface completely, open the vacuum bag



Saturate the surface



Apply the mortar in portions



Work it in with a hard rubber squeegee and a water spray



Clean the surface with a soft water spray



Remove any last mortar residues with a coconut fibre brush



Follow the curing notes!

Compared with the usual 1-component jointing mortars curing with atmospheric oxygen, **vdw 840 plus 1K Jointing Mortar** stands out for its higher strength and the option of slurrying the mortar in with a water jet.

Requirements:
A stable, load-bearing and permanently water-permeable substrate, joint depth ≥ 30 mm, joint width continuously ≥ 3 mm, **max. 20 mm**, surface and outside temperature min. 5 °C, max. 25 °C.

Test area:
On natural stone and concrete block paving, contact between **vdw 840 plus 1K Jointing Mortar** and the stone surface can cause visual changes such as darkening and /or staining. We generally recommend laying a **test area**.
On absorbent surfacings we recommend using **vdw 950 StoneProtect 3 in 1**.

Preparation:
Clean the surface to be jointed free of any residues.

Pre-wetting:
Saturate the surface thoroughly. Always use clean, cool tap water for wetting and cleaning!

Filling the joints:
Cut open the PE sack. Then take part of the mortar out of the container, place it on the wet surface and **slurry it into the joints** with a soft water jet and a hard rubber squeegee. Clean excess mortar residues off the paving surface with a water spray, without washing out the joints. Repeat these steps until all the mortar has been applied. A slight binder film may remain, depending on the type of stone. Sweep the paving surface with a damp coconut fibre brush and smooth the joint surface as you do so. Chamfers must be swept clear!

Curing:
The following points refer to a temperature of 20 °C and 65 % relative humidity (high temperatures shorten, low temperatures lengthen the curing time). Cordon off the freshly jointed areas for a period of at least 24 hours. The areas can then be walked on. **Protect the freshly jointed areas from moisture for a period of at least 24 hours.**
Exposure to moisture during the hardening phase can delay or impair the development of the final strengths. Final release of the areas after 7 days. In principle a strength test should be carried out before the areas are put into service.

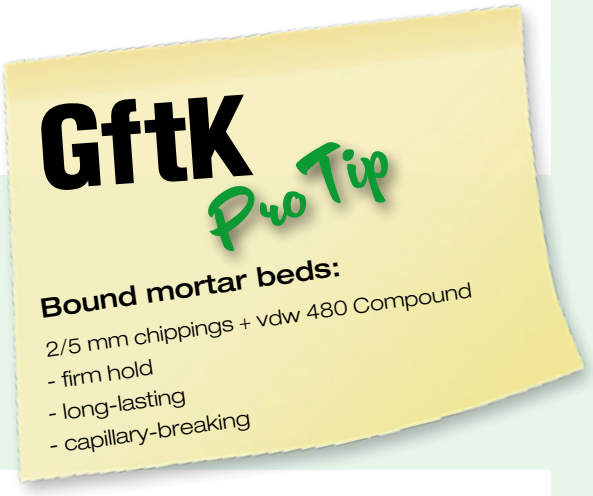
Important Notes

vdw 840 plus 1K Jointing Mortar is not suitable for interior use because of its characteristic inherent odour and must not be used in fountains or ponds or in adjoining swimming pool areas. Waterlogging, caused for example by a sub-base or base course that is not free-draining or by the use of highly alkaline or strongly acidic cleaners, can permanently damage the joint. The jointed areas are not resistant to high-pressure cleaners, but can be cleaned with commercially available chlorine-free cleaners if required. Because of the raw material base, slight surface sanding of the joint can occur; this is not a quality defect. If the PE sack is damaged, the material reacts prematurely and forms lumps. In that case the product can no longer be applied.

Opened containers must be used up and applied completely within the pot life.

Substrate

vdw 840 plus 1K Jointing Mortar is a jointing material and cannot absorb settlement from the substrate. Substrate, sub-base and surfacing must be designed to suit the anticipated traffic load.



Bedding

- Laying paving or slabs on a stable, permanently free-draining sand or chipping bed is sufficient. Better: laying paving or slabs on a free-draining concrete or mortar bed; we recommend **vdw 480 Bedding Compound** or **vdw 490 Trass Drain Mortar** and **vdw 495 Adhesive Slurry**, as otherwise increased cracking may occur.

Joints

- **Minimum joint depth:** The minimum joint depth for **vdw 840 plus 1K Jointing Mortar** is 30 mm. When jointing slab paving laid on a free-draining mortar bed with a bonding slurry, the minimum joint depth can be reduced to 20 mm in pedestrian areas.
- **Minimum joint width:** The joint width for **vdw 840 plus 1K Jointing Mortar** is at least 3 mm, max. 20 mm.

- For joint widths ≥ 15 mm the jointing depth must be at least twice the joint width.
- Chamfers on slab and clinker paving must be exposed, as sufficient adhesion is not ensured.
- Movement joints must be arranged in line with building principles. Joints from the substrate and at abutments to structures must be carried through. Seal with elastic jointing material. We recommend the **vdw Dehnungsfugenset**.

With these notes we wish to advise to the best of our knowledge on the basis of our tests and experience. Because of the many possible applications and the storage and application conditions of our products, which are beyond our control, we cannot however accept any warranty for the work result in individual cases. Carry out your own tests. Our technical advisory service is always available on the free phone number 0 800 / 800 850 800 or at Technik@gftk-info.de. Subject to change.

Please always refer to our detailed brochure “Application Technology Notes”. You can request it from your dealer or directly from us!

No direct legal liability can be derived either from the notes in this product information or from verbal advice, unless the content of the advice is expressly confirmed by us in writing. With the publication of this product information all previous versions become invalid.

Rheinbach-Flerzheim, September 2024

vdw Mortar Systems

for concrete, natural stone, ceramic and clinker paving



How to reach us:

Call us free of charge or write to us:

Contact: 08 00 / 800 850 800

We are glad to support you with your project!

Gesellschaft für technische Kunststoffe mbH
Kottenforstweg 3
D-53359 Rheinbach-Flerzheim

Phone: +49 (0) 2225 / 9157-0
Hotline: 0800 / 800850800
mail@gftk-info.de
www.gftk-info.de