

# vdw 425

## Cement Based Jointing Mortar for wide joints

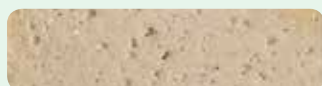
For light to medium traffic loads



**Cementitious, polyurethane-coated, fast-curing joint mortar. Especially designed for the jointing of particular wide joints, e.g. polygonal flooring, for inside and outside, for light to medium traffic loads.**

- Impermeable
- Highly frost and de-icing salt resistant
- Easily flow applied
- Self-Compacting
- Mechanical sweeper resistant
- For joints up to 50 mm wide
- Quickly accessible and resilient
- Compressive strength of 40 N/mm<sup>2</sup>
- Environmentally friendly

- sand beige



- grey



- anthracite



*Quality for professionals*

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# Product and Application Information

**Site requirements:** A stable, load-bearing structure with continuously open, empty joints. A water impermeable sub-base. **vdw 425** is a cementitious, plastic-coated fast-curing water-impermeable paving joint mortar and cannot be used to compensate for any settlement of the substructure. The paving layer must all be correctly designed and installed for the anticipated traffic loads and in accordance with the requirements of **BS 7533**.

Install pavement and slab floors in a drainable concrete or mortar bed. We recommend **vdw 480 BeddingCompound** or other cementitious beddings. Expansion joints must be installed as necessary to comply with the required structural design and any anticipated levels of movement.

**Joint width: continuous minimum 6 mm, maximum 50 mm.**  
**Joint depth: continuously full block height (minimum 20 mm).**  
 The open, empty joints are to be filled to full joint depth of the paving resp. full height of the slabs.

**Application conditions:**

**For application, external, substrate and material temperatures should be min. 5 °C / 41 °F to max. 25 °C / 77 °F.**

**Tools:** A rotary-drum mixer, best a compulsory forced action mixer. A mixer suitable for small surfaces, a water hose, an adjustable spray nozzle or fan type nozzle; a squeegee, a scrubber, a sponge board, a cleaning set with roller mount or a surface cleaning machine. Tools can be cleaned with water while the mortar is fresh and mechanically when it has cured.

**Test area:** On some natural stones or sensitive natural stone paving, the **vdw 425** contact can make the stone appear darker or to have a 'wet look'. These effects are not defects in the product or shortcomings in the execution of the work. Some types of stones may show signs of discolouration after jointing. Darkening may occur in sensitive or highly absorbent slabs such as granite and sandstone due to rising damp from the bedding. Variations in mix water quantities and moisture levels can lead to shade differences in the joint. This is not a quality defect. Differences in colour between the various vdw mortar products are unavoidable due to different minerals, binders and aggregates. Colour reproductions in the product information packs are only an indication and only approximate to the original colours of the vdw joint mortars. **Therefore always apply a test areas first!**

**Preparation / Pre-wetting:** Fasten loose stones with care and prevent any mortar from getting into any drains or sinks. Thoroughly clean the surface of all dirt, cement residues, organic materials or any other possible contaminants including cleaning out all of the joints to the required depth. Check the minimum joint depth and adjust if necessary by blowing with a compressed air or water jet. Mask adjacent areas not being paved. **Thoroughly pre-wet the surface of the paving. Always use clean and fresh tap water!** In case of natural stones with a rough surface, concrete-patio elements or absorbing paving stones the surface must be fully saturated before starting the application of **vdw 425**. The wetting level is dependent on the block absorbency and the temperature. In case of **coated** concrete-patio elements only pre-wet slightly, due to low absorption behaviour. **Do not allow any water containing residues to pond or stand in the joints.**

**Mixing:** Firstly pour approx. 3.5 L water per 25 kg bag in a clean mixing vessel. Add **vdw 425 Color** and mix for approx. 2 minutes to obtain a smooth, uniform, homogenous and pourable mortar. Leave to rest for about 2 minutes and mix again briefly (for about 30 sec). Prevent the mineral compound from settling (sedimentation). Partial amounts can also be mixed in an according mixing ratio.

**Filling the joints:** Apply the ready-mixed **vdw 425** onto the pre-wetted surface. Spread the mortar across the paved, pre-wetted surface using a rubber squeegee and work thoroughly into the joints. Pay attention to applying the mortar fully over the paving with the rubber squeegee and work well into the joints. Apply the mortar in such a way that the joint cross-section is completely filled. If necessary, grout again with fresh mortar when the mortar has gone off in the joint. We recommend filling the joints from the highest to the lowest points.

**Cleaning:** Remove surplus joint mortar immediately with the rubber squeegee. After a hardening time of about 30 minutes at 20°C (checked by a joint pressure test), wash the paving clean diagonally to the joint cross-section using floor washing equipment / machine, or a stiff brush with a hose and spray or fan type nozzle – without washing out the joints. Then finally, clean the paving surface again with a hose spray and locally with a sponge to remove any final residues. **Warning! Do not allow the joint material to harden on the paving surface. Material which has hardened on the surface can only be removed mechanically!** Cleansing materials may only be used at the earliest 28 days after complete hydration.

**Post-processing:** Protect the mortar from sun radiation, draughts, frost and temperatures < 5 °C and > 30 °C. Cordon off the freshly jointed areas for a period of at least 5 - 7 hours. Then the areas can be walked over. Protect the freshly jointed surfaces from strong rain for at least 12 hours (do not place the covers directly onto the paving; ensure that the air can circulate freely over the surface). Load-bearing capacity of the surface: after 5 - 7 hours accessible, after 48 hours resilient, fully resilient after 7 days. In principle a strength test should be carried out before the final use of the surfaces.

**All times and timings relate to a temperature of 20 °C / 68 °F and 65 % relative humidity. Higher temperatures will reduce, whilst lower temperatures will increase them.**

**Chamfered edges must be brushed free, as performance cannot be guaranteed on these. Cured mortar can only be removed mechanically.**

**Consumption:** The consumptions stated in the table below refer to coursed pavements of natural stone setts with cropped or riven edges and have been compiled from our experience. The natural shape of setts and different paving designs, or laying techniques 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 (i.e. min. 30 / 40 mm)

	Dimensions in mm		Approx. kg/m <sup>2</sup> , for joint widths		
	Width	Length	6 mm	10 mm	15 mm
Sett paving	160	180	1,2	2,0	2,9
	140	180	1,3	2,2	3,1
	120	160	1,5	2,4	3,5
Block paving	100	120	1,9	3,0	4,4
	100	100	2,0	3,3	4,7
	80	100	2,3	3,6	5,7
	60	80	2,9	4,6	6,4
Slab paving	600	400	0,5	0,8	1,2
	400	400	0,6	1,0	1,5
	300	300	0,8	1,3	1,9
	200	200	1,2	1,9	2,8
Polygonal paving	Quantity to be determined with test surface!				

**Key technical values:** All GftK paving joint mortars are designed to have the ideal correlation between their compressive and flexural strengths, plus their modulus of elasticity values, according to their recommended areas of use. **vdw 425:**

- Binder:** Selected special cements, low-chromate to TRGS 613
- Aggregate particle size:** 0,1 – 2.0 mm
- Density:** 2,0 g/cm<sup>3</sup>
- Flexural strength:** approx. 10.0 N/mm<sup>2</sup>
- Compressive strength:** after 24 hours: approx. 8.0 N/mm<sup>2</sup>  
after 7 days: approx. 30.0 N/mm<sup>2</sup>  
after 28 days: approx. 40.0 N/mm<sup>2</sup>
- Permeability:** water impermeable
- Storage:** 9 months in original, unopened, sealed and un-damaged packaging, kept dry and frost-free.
- Packaging:** 25 kg (sack)
- Application data**
- Added water:** 3,5 litres per 25 kg sack
- Pot life:** 15 minutes at 20°C after mixing
- Ambient and substrate temperature:** >+ 5 °C, max. + 25 °C

**Safety information:** When using **vdw 425** avoid contact with skin and wear suitable PPE. Keep away from children. Do not allow the product to get into the sewerage system. Uncured material requires disposal as special waste. Mixed and cured material is inert and does not require special disposal.

The information on this Technical Data Sheet (TDS) 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. The information on this TDS is subject to amendment and the user must ensure they have the latest information. Our General Conditions of Sale and Supply apply. No legal liability should be derived from the specifications provided in this TDS or from verbal consultation, unless the content of the consultation was explicitly confirmed by us in writing. This product information invalidates all prior product data sheets.

**Contact:**

Rheinbach-Flerzheim, April 2015

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