vdw 490 – Universal Trass Drain Mortar

Bedding mortar for natural stone and concrete block paving and slabs.

- for light to heavy traffic loads
- permeable to water
- ready to use
- WET & DRY — wet and dry application
- early pedestrian access and loading



wet & dry application

GftK

Quality for Professionals

Further properties









• pleasant consistency and no tearing when spreading	➡	easier working, hardly any build-up on the screeding tool and therefore rapid progress on site
• high strength	➡	up to 35 N/mm² achievable
• highly water-permeable	➡	meets the requirements of DIN 18318 and of ZTV-Wegebau
• rapid hardening	➡	walkable early, can be jointed 24 h after installation
• optimised formula	➡	can be mixed or applied dry, unmixed
• capillary-passive effect thanks to high-grade polymer modification	➡	prevents rising capillary moisture with fine chipping gradings

Technical Data

Product description

Trass-cement-bound factory dry mortar for laying paving setts and slabs outdoors. Its special grading curve produces a highly water-permeable mortar bed with virtually no capillary suction. This reliably prevents frost damage.

Binder:	Standard cements with additives, low in chromate to TRGS 613
Bedding thickness:	4 –10 cm
Packaging:	25 kg bag

Material data*

Compressive strength:	> 35.0 N/mm² after 28 days
Adhesive tensile strength:	> 1.6 N/mm²
Water permeability:	> 1000 L/m²/h
Storage life:	12 months, stored dry and frost-free

Application data

Mixing ratio:	1.8 – 2.0 litres of water per 25 kg bag
Pot life:	approx. 2 hours at 20 °C after mixing
Outside temperature:	min. 5 °C, max. 25 °C
Substrate temperature:	min. 5 °C, max. 25 °C

Ecology

Water hazard class:	Class 1 – slightly hazardous to water
Disposal:	Disposal code 170101, 101314

Consumption: ca. 17 kg/m²/cm of build-up height

*) determined by standard-compliant testing

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 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, March 2022

Application

You will find further information in this application video



prepare the sub-base and base courses



Pour in max. 2 l of water



Add vdw 490



apply the mortar and screed it off over guide rails



set the paving with a hammer



For slabs, apply vdw 495 Universal Adhesive Slurry to the underside



follow the curing notes!

Requirements:
The sub-base and base course must be sufficiently level, load-bearing and free-draining. They must be dimensioned so that no harmful deformation occurs. Ensure drainage by means of a free-draining substrate or a sufficient drainage fall, if necessary combined with a drainage mat. Ambient and substrate temperature > 5 °C, max. 25 °C.

Mixing the Universal Trass Drain Mortar:
Mix **vdw 490 Universal Trass Drain Mortar** homogeneously with 8 % clean, cold water (2.0 litres of water per 25 kg of dry mortar) to an earth-moist consistency. No maturing time is required. Stiffened mortar must not be made workable again either with water or with fresh mortar.

Applying the mortar:
The mixed mortar is applied in the usual way. Lay out only as much material as can be worked within the pot life. The layer thickness in the compacted state must be at least 4 cm and no more than 10 cm, depending on the area of use and the construction method. Bed the setts hammer-tight in **vdw 490 Universal Trass Drain Mortar**. To improve adhesion we recommend dipping the setts in **vdw 495 Universal Adhesive Slurry** before laying. After 24 hours the areas can be jointed with **vdw Paving Joint Mortar**. When laying slabs, screed **vdw 490 Universal Trass Drain Mortar** off level, observing the respective bedding thickness. Before laying the slabs, apply **vdw 495 Universal Adhesive Slurry** to the underside of the slab. The joint area must be free of **vdw 495 Universal Adhesive Slurry**.

Alternative application (for pedestrian areas only)
The mortar is poured straight from the bag, applied at the appropriate layer thickness and screeded off level. Then activate the laid-out area with a fine water spray. To improve adhesion we recommend dipping the setts in **vdw 495 Universal Adhesive Slurry** before laying. Before laying slabs, apply **vdw 495 Universal Adhesive Slurry** to the underside of the slab. The joint area must be free of **vdw 495 Universal Adhesive Slurry**. Once the paved area is finished, wet it thoroughly with water. The water then passes through the joints into the bedding layer and activates the hardening.

Curing:
The following points refer to a temperature of 20 °C and 65 % relative humidity (high temperatures shorten, low temperatures lengthen the setting time). Cordon off the freshly laid areas for a period of at least 48 hours. After 24 hours the areas can be jointed. Protect the mortar from rapid drying out and from rain for 12 hours. Can take car traffic after 7 days. Fully loadable after 14 days.

Application notes

In constructions on drainage mats with open paving edges (e.g. balconies & roof terraces) the bedding mortar must be completely dry before jointing, as otherwise leaching from the bedding layer can cause efflorescence on the edge profile.

Sufficient drying through is only ensured after at least 3 days.

Consumption
Bedding thickness: 4 – 10 cm
Build-up height: approx. 17 kg/m²/cm

Packaging

Colour	Pack size (bag)	Art. no.
cement grey	25 kg	490001.825

Product requirements bedding mortar

		Compressive strength in N/mm² or MPa		
Use category / load class		ZTV Wegebau	DIN 18318	FGSV M FP geb
N1	walkable	≥ 10.0 *	≥ 10.0	≥ 30.0 mean value ≥ 25.0 single value
N2	trafficable, vehicles up to 3.5 t	≥ 20.0 *	≥ 20.0	
N3	trafficable, vehicles over 3.5 t	≥ 30.0 *	≥ 30.0	

* Bedding type 1
Info: bedding type 2 (> 10 N/mm² N1 – N3)

vdw Mortar Systems

for concrete, natural stone, ceramic and clinker paving



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We are glad to support you with your project!

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