vdw 855

Heavy Duty Epoxy Paving Joint Mortar (Self-Compacting)

High performance for paving subject to heavy traffic loads

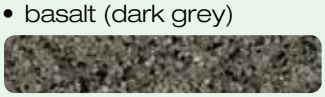
For small format paving with natural stone, concrete block and brick in heavily used or heavily trafficked areas and areas subject to heavy vehicle loading, such as roads, trafficked roundabouts, loading areas and town centres, plus market squares, heritage or historic areas exposed to modern traffic.

- Fast, cost effective and durable jointing
- Can be applied in the rain and at lower temperatures
- Easy flow applied
- Self-compacting
- Fast opening for traffic
- Clean, stain free surfaces
- Optimum strength correlation
- Limited water permeability
- Highly frost and de-icing salt resistant
- Mechanical sweeper resistant
- Abrasion resistant
- Environmentally friendly

- natural (sand)

- stone grey

- basalt (dark grey)



Quality for professionals

Can be applied in the rain with no additional protection required!

GftK

GftK-international GmbH
Kottenforstweg 3
D-53359 Rheinbach-Flerzheim

Phone.: +49 (0) 2225 / 9157-26
Fax: +49 (0) 2225 / 9157-49
info@gftk-international.com
www.gftk-international.com

Product and Application Information

Site requirements: A stable, load-bearing structure, a water-permeable sub-base and the paving layer must all be correctly designed and installed for the anticipated traffic loads and in accordance with **BS7533**. **vdw 855** is designed for small format and **cannot be used for jointing large format paving slabs**, or to compensate for any settlement of the substructure, or for the sealing and waterproofing of any surfaces. Movement joints must be installed as necessary to comply with the required structural design and any anticipated levels of movement. The **vdw 855 mortar can be applied on damp/wet paving and in high humidity and even in the rain**.

Joint depth: Full joint depth of the paving resp. full height of the setts.
Joint width: min. 10 mm.
Application conditions: The ambient and substrate temperatures should be min. 3 °C/37,4 °F to max. 25 °C/77 °F. The vdw 855 material temperature should be min. 5 °C/41 °F to max. 20 °C/68 °F.

In pedestrian areas: In these areas it is acceptable to lay the paving on a 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. The paving should be laid as directed by the manufacturer or as stated in **BS 7533**.
In areas of vehicular traffic: Paving must be laid in a permeable concrete or mortar bed designed for the relevant load in accordance with the relevant traffic loads and **BS 7533**, otherwise increased cracking may occur.

Tools: A drill with spherical mixing paddles, a hose with spray nozzle, a squeegee and a coconut fibre brush. Uncured material can be removed from the tools with water.

Test area: On some reconstituted or sensitive natural stone paving, the **vdw 855** binder 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. The colour of the joint mortar will darken slightly during the curing process. UV light radiation over time may cause the colours i.e. stone grey and basalt to turn slightly lighter. **Therefore always apply a test area first.**

Preparation/Pre-wetting: Clean the surface thoroughly of all dirt, cement residues, organic materials or any other possible contaminants including cleaning out all of the joints to the required depth. **Thoroughly pre-wet the surface of the paving** and mask adjacent surfaces which are not to be jointed.Mask adjacent areas that are not to be jointed. **Always use clean and fresh tap water!**

Mixing: Pre-mix the **vdw 855** resin-coated aggregate (component A) materials in the pail. Then add all of the liquid hardener (component B) from the bottle in the pail and mix with the drill and spherical paddle mixers until smooth and homogeneous.
Mixing time: 3–5 minutes. Any material that is not thoroughly mixed must not be used. **No water should be added during the mixing process.**

Filling the joints: Apply immediately after mixing, by pouring the **vdw 855** directly onto the pre-wetted surface. Work the self-compacting material thoroughly into the joints using a rubber squeegee. If the viscosity of the product diminishes re-moisten by spraying lightly with water from a hose. The paved area must be kept constantly wet during application. We recommend working from the highest to the lowest points. **Do not mix part units of the product. Any unmixed material must not be used.**

Brushing off: Remove any excess **vdw 855** mortar residue from the area after about **5 min. (immediately** at temperatures over 20 °C/68 °F) using a **damp** coconut fibre brush and then **spraying lightly with water from a hose at a distance of about 25 cm**. Avoid washing material out of the joints. Be careful to clean the paved surface towards areas not yet jointed and do not allow any water containing residues to pond, stand, dry out or run-off over completed areas. Finally remove any remaining fine residues, again with **a damp** coconut fibre brush – do not brush any residual dry material into any unfilled joints. Clean this brush in water frequently. **Chamfered edges must be brushed free of the vdw 855 mortar.** Cured mortar can only be removed mechanically.

All of the times and timing information in this Technical Data Sheet are based on a temperature of 20 °C/68 °F and 65 % relative humidity. Higher temperatures will reduce and lower temperatures will increase them.

Cordon off the freshly applied areas for a period of min. 24 hours, or until the paving surface is no longer tacky. Then the areas can be walked over. The area can be fully released to vehicular traffic after 3–5 days, when fully hardened. In general, a strength test should be carried out before final clearance of the area.

A very thin film of the resin binder will remain on rough surfaces or any surfaces that are not cleaned thoroughly. This film will disappear after a period of exposure to traffic and wheathering.

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 joint depth in all of these examples is 30 mm.**

	Dimensions in mm		Approx. kg/m², for joint widths		
	Width	Length	10 mm	15 mm	20 mm
Small setts	100	120	8,8	12,7	16,3
	100	100	9,5	13,7	17,5
	80	100	10,6	15,1	19,3
	60	80	13,3	18,8	23,6
Larger setts	160	180	5,9	8,5	11,1
	140	180	6,3	9,1	11,8
	120	160	7,1	10,3	13,3

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.

Wet density: 1,75 g/cm³
Set mortar density: 1,62 g/cm³
Flexural strength: approx. 15,0 N/mm²
Compressive strength: approx. 45,0 N/mm²
E-Modulus: 8500 N/mm²
Water permeability: $2,0 \times 10^{-5}$ m/s (0,23 l/m²/min at 20 % joints)
Storage: 1 year, if stored unopened in sealed and undamaged packaging, kept dry and frost-free. **Do not store at temperatures above 20 °C/68 °F.**
Packaging: 25 kg (plastic pail)

Safety information: When using **vdw 855** avoid contact with skin and wear PPE. Keep away from children. There should be sufficient ventilation when working in enclosed spaces. Unmixed and uncured material requires disposal as special waste. Mixed, fully cured material is inert and does not require special disposal.

This information 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.

Contact:

Rheinbach-Flerzheim, March 2014