Varistone Z

Jointing Mortar for Heavily Loaded Decorative Paving (also usable in rainy conditions)

Product Application:

VARISTONE Z is a two-component, durable, permeable jointing mortar based on epoxy resin, designed for jointing natural stone paving, concrete paving, tile, and brick floors on terraces, garden paths, driveways, access roads, and public squares. VARISTONE Z is specifically developed to handle medium-to-heavy traffic loads, including motorbikes, cars, minibuses, and light commercial vehicles.

The minimum joint width must be 5 mm, and the minimum joint depth must be 30 mm.

• VARISTONE Z offers high compressive strength and durable permeability, thanks to the specific structural composition of epoxy resin and aggregate additives.

• The two-component formulation allows for quick application, enabling the economical creation of durable joints between paving stones.

- The mortar is self-levelling and self-compacting.
- VARISTONE Z can be applied in rainy conditions and at low temperatures.
- After application, the pavement can be walked on after 24 hours at 20°C.

• The range includes three contemporary colours with a natural appearance. VARISTONE Z is available in:

natural, stone grey, and basalt.

• Once hardened, the mortar is resistant to sweeping and cleaning machines.

• VARISTONE Z avoids the growth of weeds and burrowing pests in the joints.

• The mortar is resistant to frost and de-icing salt.

• The joint surface only needs to be cleaned with clean water, e.g., using a pressure washer. Environmentally harmful weed killers are unnecessary.



Technical Product Information:

Conditions:

Stable substrate. The construction must suit the anticipated (traffic) loads.

• For pedestrian traffic, laying stones or tiles on a sand or crushed stone bed is sufficient.

• For motor vehicle loads, stones or tiles must be laid on a mortar or permeable concrete bed, depending on the expected loads. Jointing mortars cannot compensate for subsidence in the substrate.

Joint width: minimum 5 mm, joint depth: 30 mm. For joint widths greater than 15 mm, the depth should be at least twice the joint width. Outside and surface temperature: minimum 3°C to max. 25°C.

Chamfers must be brushed free, as performance cannot be guaranteed on these.

Required Tools:

Forced-action mixer or drill (minimum 800 W) with a mixing paddle, mixing tub, water hose with spray nozzle, special rubber squeegee and coconut broom.

Preparation:

Thoroughly clean the surface to be jointed, remove all debris.

When jointing highly sensitive/absorbent stones (i.e., Indian sandstone, Chinese granite, Blue stones etc.), it is recommended to apply a stone protection/impregnation the day before jointing in order to ease the jointing and prevent any stains.

Wetting:

Saturate the surface with water.

Mixing the Jointing Mortar:

Mix the mineral binder mixture and separately packed hardener into a homogeneous mass using a forced-action mixer or drill with a mixing paddle.



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Filling the Joints:

Use a special rubber squeegee to work the mortar intensively into the joints immediately. Working time is at least ten minutes at 20°C. Higher temperatures reduce, and lower temperatures extend the working time.

Finishing:

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.

Avoid loading newly jointed areas for at least 24 hours.

During the initial period, a thin binder film will remain on the surface, enhancing the texture of the top layer. This film will disappear after several months of exposure to weather conditions. In sheltered areas, the film will wear away through mechanical abrasion.

It is essential to ensure the mortar is in full contact with the pavement across the entire surface during grouting.

Experience shows that certain stone types may exhibit unique optical effects with residual binder layers on the surface. It is therefore advisable to create a test area when working with unfamiliar stone types. For uncured material, clean tools with water.

Required Quantities:

The quantities indicated in the table are indicative and based on flat, uniformly laid paving stones. Variations in the natural shape of stones and laying patterns may result in deviations. Joint depth 30 mm.

	Dimensions in mm		Consumption kg/m² by Joint Width		
	width	length	5 mm	10 mm	15 mm
Mosaic	40	40	11.3	20.4	27.8
paving	50	50	9.3	17.0	23.5
	40	60	9.6	17.5	24.1
Small	100	120	4.5	8.6	12.3
paving	100	100	4.9	9.3	13.3
	80	100	5.4	10.3	14.7
	60	80	6.9	13.0	18.3
Big	160	180	2.9	5.7	8.3
paving	140	180	3.1	6.1	8.9
	120	180	3.6	6.9	10.0

Material Properties:

Density:	1.70 g/cm3
Compressive Strength:	ca. 25.0 N/mm2
Flexural Strength:	ca. 10.0 N/mm2
Elasticity Modulus:	5500 N/mm2
Water Permeability: At 2	20% joint surface,
	Approx 1.8 ltr/m2/min
Shelf Life:	At least 1 year, in dry,
	frost-free storage in the
	original unopened
	packaging

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Safety Instructions / Waste Disposal:

Avoid contact with skin; wear safety goggles and gloves.
Unmixed material must be disposed of as chemical waste.

• Mixed and hardened product is inert and does not require special disposal.

- Product information is available on the
- packaging and in the safety data sheets.
- May cause skin sensitivity upon contact.

• Wash immediately with plenty of water and soap if contact occurs.

No legal liability can be derived from the instructions in this product information or verbal advice unless expressly confirmed in writing. Upon the publication of this product information, all previous data sheets become void.