

Cementitious Grouting Material

- **excellent plasticity**
- **light expansive**
- **non-shrink**
- **high final strength**
- **resistant to frost and de-icing salts**

Product Description	VANDEX GROUT is a cementitious, non-shrink grouting material, with the following particle size ranging:		
	GROUT 04 particle size: 0–4 mm	suitable for voids ranging	15–60 mm
	GROUT 08 particle size: 0–8 mm	suitable for voids ranging	50–100 mm
	GROUT 16 particle size: 0–16 mm	suitable for voids ranging	60–400 mm

Areas of Application	VANDEX GROUT is used in civil and structural engineering as a structural and baseplate grout. The main areas of application are:	
	<ul style="list-style-type: none">▪ grouting of steel structures▪ grouting for underpinning▪ grouting of machine bases▪ grouting of bridge beds▪ grouting of rails and slabs (crane rail)	<ul style="list-style-type: none">▪ anchor grouting for machines and threaded rods▪ grouting of prefabricated units▪ grouting of foundations▪ grouting underwater

Properties	VANDEX GROUT is non-shrink and exhibits a controlled increase in volume. It is free from chlorides and high-alumina cement, and resistant to frost, de-icing salts and gritting materials.
-------------------	--

Preparation of the Foundation	The substrate must be sound and free from dirt, grease and loose particles or layers which could weaken the bond. The prepared substrate must be open textured and well keyed. VANDEX GROUT must be applied to the saturated, surface dry substrate. The surface must be above freezing.
--------------------------------------	--

Mixing	Maximum quantity of water to be used per 25-kg-bag of VANDEX GROUT 04 is 2.9 l. VANDEX GROUT 08 is 3.0 l. VANDEX GROUT 16 is 2.5 l. The grout material and the specified amount of gauging water is mixed using a mechanical mixer. A lump-free, uniform consistency is achieved by wetting the walls of the mixer with water before the first mix. Subsequent mixes are made by adding approximately four fifth's of the required gauging water to the grout powder, mixing for two minutes, and then adding the remaining water. The final mixing-time depends on the mixer, although four minutes should be considered the minimum. The final mixed material must exhibit a uniform, free flowing consistency.
---------------	--

Application	The mixed and uniformly stirred material is poured into the void. Grouting beneath steel or machines is usually done into previously constructed formwork which has to be grout tight and free of suction. If the particular void cavity is not equal sided, the VANDEX GROUT has to be placed in one continuous pour through the longer side. Depending on the size of the specific unit to be grouted, an additional funnel/tube may be needed to
--------------------	---

ensure that the whole unit has been completely filled. Because of the good flow characteristics of the grout, further compaction will not be necessary. As an alternative, VANDEX GROUT can be placed mechanically using pumps in the case of extensive works. A high density (low void ratio) grout is achieved using a number of ventilation holes, or slots, provided during the construction so that air pressure does not prevent the natural flow of the grout.

Curing

Curing of the exposed grout edges can be undertaken, as with all hydraulically setting cement mortars, by laying moist hessian over it, followed by polythene sheeting. When covering with polythene, it is important to avoid a heat accumulation underneath. This can be done by regular spraying with water. Curing should be for at least 5 days. As an alternative to the traditional curing techniques, it is possible to use curing compounds. After use, tools must be thoroughly cleaned with water.

Consumption

Calculated quantity (ready-mix mortar) per m³:
 GROUT 04: 1990 kg
 GROUT 08: 2060 kg
 GROUT 16: 2130 kg

Packaging

25-kg-bag

Storage

When stored in a dry place in unopened, undamaged original packaging, shelf life is 12 month.

Technical Data

Properties of ready-mix mortar

Range of grain size [mm]	GROUT 04:	0-4
	GROUT 08:	0-8
	GROUT 16:	0-16

Properties of freshly-mixed mortar

Density of freshly-mixed mortar [kg/dm ³]	2.3
Approx. amount of swelling [%]	approx. 0.5
Workability period (+20 °C) [min.]	approx. 45
Workability temperature [°C] (temperature of substrate)	≥ +5
With temperatures below +5 °C take winter construction measures.	

Properties of hardened mortar

Compressive strength* [N/mm ²] after days:	1	7	28	90
	approx. 50	80	90	100
Bending tensile strength* [N/mm ²] after days:	1	7	28	90
	approx. 7	10	11	12

*Storage of samples according to DIN EN 196, p. 1. – All data are averages of several tests under laboratory conditions. In practice, climatic variations such as temperature, humidity, and porosity of substrate may affect these values.

Health and Safety

VANDEX GROUT contains cement. Irritating to skin. Risk of serious damage to eyes. Keep out of reach of children. Do not breathe dust. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. For further information please refer to Material Safety Data Sheet.

The information contained herein is based on our long-term experience and the best of our knowledge. We can, however, make no guarantee since for a successful outcome, all circumstances in an individual case must be taken into consideration. Indications of quantities required are only averages which in certain cases might be greater.



CONCRETE PROTECTION AND WATERPROOFING

HEADOFFICE AND INTERNATIONAL SALES:

VANDEX INTERNATIONAL LTD
 P.O. Box, CH-4501 Solothurn/Switzerland
 Phone: +41 (0)32 626 36 36, Fax +41 (0)32 626 36 37
 E-mail: info@vandex.com www.vandex.com

PRODUCTION AND SALES GERMANY/AUSTRIA:

VANDEX ISOLIERMITTEL-GESELLSCHAFT m.b.H.
 Postfach 1406, D-21487 Schwarzenbek/Germany
 Phone: +49 (0)4151 89 15-0, Fax +49 (0)4151 89 15 50
 E-mail: info@vandex.de www.vandex.de

