

# Application Guidelines

## Related Product Information

- Data Sheet & Material Safety Data Sheet: VANDEX BB 75 Z

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## 1. Preparation of Substrate

Concrete to receive VANDEX BB 75 Z treatment must have a clean and well keyed surface to ensure maximum bonding. Surfaces to be waterproofed should be examined for structural defects, and unacceptable conditions reported and remedied.

Remove all cement laitance, shutter release agent, curing compound, loose particles, etc. by means of light, wet or dry sandblasting, high pressure water jetting or wire brushing.

Water leaks must be stopped in accordance with the VANDEX PLUG Application Guidelines.

Remove all protrusions and cut back to sound concrete, chasing out any honeycombed or damaged areas.

Construction joints and shrinkage cracks exceeding 0.3 mm should be routed out to a minimum depth of 20 mm. Shutter tie holes should be roughened.

Clean all chased out areas, shutter-tie holes, etc. and pre-water until the concrete is saturated. Following this, fill the areas with VANDEX UNI MORTAR 1 Z in layers, the number depending on the total layer thickness.

## 2. Pre-watering

Prior to applying VANDEX BB 75 Z, carefully rinse all the surfaces to be waterproofed and pre-water with clean water.

Pre-water several times so that the concrete is thoroughly saturated. When VANDEX BB 75 Z is applied, the surface should be damp but not wet. Any surface water on horizontal surfaces must be removed.

## 3. Mixing

Place 25 kg of VANDEX BB 75 Z in a clean container, add 5.0 - 5.75 litre of water for brush or trowel application, or 5.75 - 6.25 litres of water respectively for spray application and stir for at least 3 minutes with a mechanical mixer.

## 4. Climatic Conditions

Do not apply VANDEX BB 75 Z at temperatures below +5 °C (40 °F) or to a frozen substrate.

## 5. Layer Thickness

Minimum layer thickness per layer:	1.5 mm
Maximum layer thickness per layer:	2.0 mm
Maximum layer thickness in total:	5.0 mm

## 6. Application Methods

### 6.1 Brush application

VANDEX BB 75 Z can be applied using a suitable brush (mason's brush). It should be applied from the bottom upwards,

at which point the excess is worked sideways. Ensure that all cavities in the concrete are filled in order to exclude any trapped air.

VANDEX BB 75 Z is applied in one or two layers as specified. If two layers are applied it is recommended that the second layer is applied whilst the first layer is still damp on the surface. The waiting time before applying the second layer is approx. 2 - 4 hours, depending on local climatic conditions such as humidity, temperature, etc. The first layer must not be damaged during application of the second layer.

## 6.2 Trowel application

A scrape coat of VANDEX BB 75 Z is applied with a steel trowel for maximum adhesion to the substrate, working from the bottom up. All cavities and air holes must be filled in this first step of the work, thereby excluding trapped air. The first layer is then applied to the specified thickness.

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In addition, it is recommended that the first layer is textured slightly using a suitable brush (wallpapering brush) whilst still plastic. This ensures maximum adhesion between the layers.

## 6.3 Spray application

VANDEX BB 75 Z can be applied with a suitable fine mortar spraying device. The amount of material required and the air used must be adjustable so that the optimum spray pattern can be achieved.

The nozzle diameter is approx. 6 mm, depending on the spray gun used.

The compressor performance must be at least 5 bar pressure, delivering 500 l/min.

The first layer of VANDEX BB 75 Z is applied using a circular motion with the spray nozzle held at a 90° angle to the substrate. The distance between the spray nozzle and the surface will depend on the spray gun/compressed air used.

The material is then flattened with a suitable trowel. This operation levels the surface and increases adhesion to the substrate.

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In addition, it is recommended that the first layer is textured slightly using a suitable brush (wallpapering brush) whilst still plastic. This ensures maximum adhesion between the layers.

The final layer can be left direct as a spray finish or smoothed finely with the trowel. The spray finish provides and „orange peel“ type texture which is easy to clean.

## 7. Consumption

Ground conditions:	Minimum thickness of layer:	Approx. minimum quantity to be applied:
1. Ground moisture	1.5 mm	3 kg/m <sup>2</sup>
2. Pressureless surface water and seepage	2.0 mm	4 kg/m <sup>2</sup>
3. Hydrostatic pressure	3.0 mm	6 kg/m <sup>2</sup>

Please refer to the relevant Vandex product specifications for more detailed information.

## 8. Curing and Protection

VANDEX BB 75 Z is cement-based and will cure and harden in the same way as ordinary concrete. Setting and hardening will depend on the surrounding temperature and humidity.

For maximum effectiveness from your VANDEX BB 75 Z treatment, it is essential that the layers are kept damp for at least 5 days and protected against evaporation by sun and wind.

Careful postwatering should be carried out at intervals, starting the day following the application. Alternatively, the surfaces can be covered with plastic sheeting, wet mats or moist sand.

The use of curing compounds is not recommended

The freshly treated surfaces should be protected from rain for a minimum period of 24 h. Surfaces treated with VANDEX BB 75 Z should be protected from frost for at least 5 days. If necessary, cover with insulation mats.

## 9. Decoration, Coating and Tiling

All surfaces treated with VANDEX BB 75 Z, which are to be coated or painted, must be left to cure for at least 4 weeks. When a plaster or render finish is required on top of the VANDEX BB 75 Z treatment, it is essential to apply a thin rough cast of sand and cement on the final VANDEX BB 75 Z layer when it has reached initial set

If this is not practical, carefully clean the hardened VANDEX BB 75 Z surface and apply an appropriate bonding agent prior to rendering.

## 10. Backfilling

Backfilling can be carried out 3 days after completion of the VANDEX BB 75 Z treatment. If there is a risk that the layer of VANDEX BB 75 Z will be damaged during back-filling (sharp-edged material) then it must be protected by suitable means.

## 11. Filling of Water Retaining Structures

Filling of water retaining structures can take place after 14 days; however, if earlier filling is required for some reason careful filling after at least 7 days may be possible after checking the integrity of the surface.

## 12. Health and Safety

VANDEX BB 75 Z contains cement.

Irritating to eyes and skin. May cause sensitization by skin contact. Keep out of reach of children. 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.

For further information please refer to Material Safety Data Sheet.

The information contained herein is based on our longterm 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.