

## Application Guidelines

### Related Product Information

- Data Sheet: VANDEX CEMELAST & VANDEX BB 75
- Material Safety Data Sheet: VANDEX CEMELAST LIQUID & VANDEX BB 75

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### 1. Preparation of Substrate

Concrete to receive VANDEX CEMELAST 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 in layers, the number depending on the total thickness. The surface to be coated can be slightly damp, but not so wet that all the pores are saturated.

Surfaces marked by ridges, voids, etc. must first be levelled.

### 2. Mixing

Before use, stir the VANDEX CEMELAST LIQUID vigorously to avoid segregation.

Place 25 kg of VANDEX BB 75 in a clean container, add 9 kg of VANDEX CEMELAST LIQUID and stir for at least 3 minutes with a mechanical mixer.

Where site conditions require, rinse the container with up to 150 ml clean water per unit and add to the mixture.

### 3. Climatic Conditions

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

### 4. Layer thickness

Minimum layer thickness per layer: 1.0 mm

Maximum layer thickness per layer: 2.0 mm

Maximum layer thickness in total: 3.0 mm

### 5. Application Methods

#### 5.1 Trowel application

A scrape coat of VANDEX CEMELAST 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. VANDEX CEMELAST is applied in one or two layers as specified. If two layers are required it is recommended that the second layer is applied whilst the first layer is still tacky. The waiting time before applying the second layer is approx. 2 - 4 hours, but depends on local climatic conditions such as humidity, temperature, etc. The first layer must not be damaged during application of the second layer.

## 5.2 Spray application

VANDEX CEMELAST can be applied with a suitable fine mortar spraying device. The equipment required and the air used must be adjustable so that the optimum spray pattern can be achieved.

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

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

The first layer of VANDEX CEMELAST 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.

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

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

The final layer can be left as a spray finish or trowelled smooth. The spray finish provides an „orange peel“ type texture which is easy to clean.

## 6. Consumption

Ground conditions:	Minimum thickness of layer:	Approx. minimum quantity to be applied:
1. Ground moisture	2.0 mm	4 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.

## 7. Curing and Protection

The rate of setting and hardening will depend on the surrounding temperature and humidity.

For maximum effectiveness from your VANDEX CEMELAST treatment, it is essential that the layers are protected for at least 5 days against sun and wind.

Subsequent treatment must take place in such a way that the VANDEX CEMELAST is able to dry out completely before it comes into contact with water.

Surfaces treated with VANDEX CEMELAST should be protected from frost for at least 5 days. If necessary, cover with insulation mats.

## 8. Painting

All surfaces treated with VANDEX CEMELAST, which are to be coated or painted, must be left to cure for at least 4 weeks.

The paint must have equivalent elastic properties to VANDEX CEMELAST and in addition it has to be water vapour permeable and alkali resistant.

## 9. Backfilling

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

## 10. Filling of Water Retaining Structures

In accordance with standard water industry practice, particular note needs to be taken of the following points:

- Clean all surfaces (ceiling, walls, slab, columns, stairs, etc.) with potable water (do not use high pressure). Please, also refer to point 7 „Curing and Protection“.
- Remove all cleaning water.
- Disinfect all internal surfaces with approved disinfectants.

Filling can take place when the surface treatment has hardened sufficiently, usually not less than 14 days after application. However, if earlier filling is specifically required, filling may be considered after a minimum of 7 days, provided the surface is thoroughly checked for hardness.

## 11. Health and Safety

VANDEX CEMELAST 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. Provide good ventilation if inside.

For further information please refer to Material Safety Data Sheet of VANDEX BB 75 and VANDEX CEMELAST LIQUID.

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.