

APPLICATION GUIDELINES



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RELATED PRODUCT INFORMATION

Data Sheet: VXIDS01/02USA101
Material Safety Data Sheet:
01.10.2001

1. Preparation of Substrate

Prior to the application of VANDEX SUPER, the substrate must have a clean, open surface profile to ensure maximum bonding. Surfaces to be waterproofed should be examined for structural defects and unacceptable conditions reported and remedied.

Remove all contaminants such as cement laitance, form release agent, curing compound and loose particles by means of light wet or dry sandblasting, high pressure water blasting or approved means.

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

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

Construction joints and shrinkage cracks exceeding 0.012" (0.3 mm) should be routed out to a minimum depth of 3/4" (20 mm). Form tie holes must be roughened.

Clean all prepared areas and prewater until the concrete is saturated. Apply the material over damp, not wet substrate. All standing water must be removed. Fill the repair areas with VANDEX UNI MORTAR 1 ZSR.

2. Pre-watering

Prior to applying VANDEX SUPER, carefully rinse all the surfaces to be waterproofed and prewater with clean, potable water.

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

3. Mixing

VANDEX SUPER is mechanically mixed with potable water to a consistency of thick oil paint. Separate containers should be used for measuring the VANDEX SUPER powder and water. Approximate mixing ratio is 2.0 parts of water to 5.0 parts of powder (by volume).

Mix only as much material as can be used within 20 minutes, agitate the mixture frequently. Do not retemper VANDEX SUPER, simply remix to restore workability.

4. Climatic Conditions

Do not apply VANDEX SUPER at temperatures below 40 °F (+5 °C) or to a frozen substrate. Protect from freezing during the cure cycle.

5. Application Methods

5.1 Dry shake application on split slabs

5.11 Base Slab

The base slab is poured and screeded as usual. The layer thickness should be a minimum of 4" (10 cm).

5.12 VANDEX SUPER is applied just before pouring the concrete.

5.13 VANDEX SUPER Application

VANDEX SUPER is sprinkled dry over the surface with a sieve having a mesh of 1/25" (1 mm).

5.14 Concrete casting

The top slab concrete is poured and vibrated as usual using care not to displace the VANDEX SUPER during placement.

5.2 Dry shake application on horizontal top slabs

5.21 Concrete casting

The concrete is poured, vibrated, and screeded as usual.

5.22 Timing of the VANDEX SUPER application

VANDEX SUPER is applied when the concrete has reached its initial set, which is normally when the concrete will carry the weight of a man without leaving footprints deeper than 80 mils (2 mm). It is essential that excess water collecting in puddles on the concrete surface is removed prior to application of the VANDEX SUPER.

5.23 VANDEX SUPER dry shake application

VANDEX SUPER is broadcast dry over the surface with a sieve with a mesh size of 1/25" (1 mm). Vandex Super powder may be broadcast by other mechanical means, such as a garden type fertilizer spreader.

5.24 Power trowelling and finishing operation

As soon as the dry shake process has taken place, the finishing operation can begin and the slab can be trowelled to the specified finish. It is essential that the Vandex powder is worked into the surface either by power trowel or by hand trowel.

5.3 Brush application

Apply VANDEX SUPER using a masonry brush as a slurry in one or two coats according to specification. Spread the material evenly and work it well into the surface. If more than one coat is required, apply the second coat while the first is still green.

5.4 Spray application

VANDEX SUPER may be applied using appropriate compressed air spray equipment (e.g. hoppergun).

The required air pressure is approx. 72.5 psi (0.5 MPa) and the delivery of air 18 ft³/min (500 l/min).

Spray on two coats according to the specification in circular movements. Apply the second coat while the first is still green.

6. Yield

Structural element and relevant application method:	Site Conditions:	Approx. min quantity to be applied:	N° of coats:
Basement slab: Dry sprinkled on split slab concrete	Positive water pressure	2.2 lb/yd ² (1.2 kg/m ²)	1
Basement slab: Dry sprinkled and power trowelled	Negative water pressure	2.2 lb/yd ² (1.2 kg/m ²)	1
Basement slab: Brush or spray applied	Negative water pressure	2.2 lb/yd ² (1.2 kg/m ²)	1
Basement slab: Brush or spray applied	Moisture, no water pressure	1.5 lb/yd ² (0.8 kg/m ²)	1
Walls: Brush or spray applied	Positive or negative water pressure	2.8 lb/yd ² (1.5 kg/m ²)	2
Slab: Brush or spray applied	Positive or negative water pressure	2.8 lb/yd ² (1.5 kg/m ²)	2

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

7. Curing and Protection

VANDEX SUPER/SUPER WHITE is cement based and will cure and harden in the same way as ordinary concrete. Setting and Curing will depend upon environmental and site conditions.

For maximum effectiveness from the VANDEX SUPER/SUPER WHITE treatment, it is essential that the material be kept damp for at least 5 days.

Wet cure at intervals according to site conditions immediately following final set, usually commencing the day following the application. VANDEX SUPER/SUPER WHITE can be cured using standard concrete curing practices such as wet spray or covering with polyethylene sheeting, burlap or wet mats.

The freshly treated surfaces should be protected from rain for a minimum period of 24 hours. Surfaces treated with VANDEX SUPER/SUPER WHITE should be protected from frost for at least 5 days. If necessary, cover with insulation mats.

8. Topical Treatments

All surfaces treated with VANDEX SUPER which are to be coated or painted must be left to cure for at least 4 weeks. At the end of the curing period, the surfaces should be saturated with water and neutralised with a 1:8 solution of hydrochloric acid and thoroughly rinsed with potable water.

Precautions: When spraying with hydrochloric (muriatic) acid solution, use protective rubber clothing and goggles.

When a plaster or stucco finish is required on top of the VANDEX SUPER treatment, it is essential to apply a thin rough cast of sand and cement on the final VANDEX SUPER layer when it has reached initial set.

If this is not practical, carefully clean the cured VANDEX SUPER surface and apply an appropriate bonding agent prior to application.

9. Backfilling

Backfilling can be carried out 3 days after completion of the VANDEX SUPER treatment. VANDEX SUPER must be protected from the backfill process by approved means according to jobsite conditions.

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)
- Remove all cleaning water
- Disinfect all internal surfaces with approved disinfectants
- Remove all disinfectant

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

11. Additional Information

VANDEX SUPER treatments are not decorative finishes. Discoloration of the treated surface may occur because of the crystalline reactions between VANDEX SUPER and the concrete and contact with water. Discoloration in no way detracts from the waterproofing effect.

12. Health and Safety

VANDEX SUPER/SUPER WHITE contains cement which is irritating to eyes and skin and may cause sensitization by skin contact. Avoid contact with skin and eyes. In case of contact with the eyes rinse immediately with plenty of water and seek medical attention. VANDEX SUPER/SUPER WHITE contains silica sand. Do not inhale dust. Provide good ventilation of working area. In dusty environments or poor ventilation use approved respirator. Wear suitable gloves and safety glasses. Keep out of reach of children. For further information please refer to Material Safety Data Sheet of VANDEX SUPER/SUPER WHITE.

Important

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. Contact Vandex USA for Job Specific Extended Warranties.



CONCRETE PROTECTION AND WATERPROOFING

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