

## Application Guidelines

### Related Product Information

- Data Sheet & Material Safety Data Sheet: VANDEX INJECTION MORTAR (VIM)

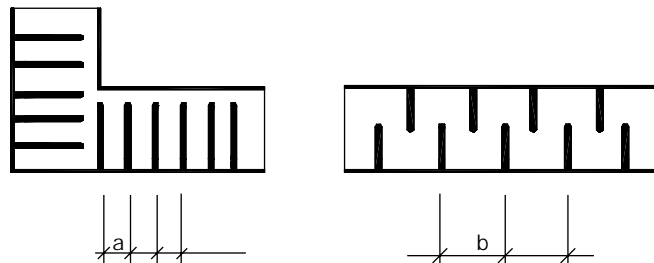
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### 1. Drilling of Holes

Drilling is normally done from one side only, but under certain circumstances it may be advantageous to drill from both sides - for instance in random stonework with rubble infill.

In both cases the holes should be drilled at no more than 11 cm (hole diameter = 22 mm) or 16 cm (hole diameter = 30 mm) centres respectively (see sketches below) and in a downward direction at an angle of approximately 30°. In order to obtain a continuous damp-proof course throughout the structure it is very important to ensure that all the holes are drilled to the full depth at the same downward angle and with a uniform distance between them.



Drilling of the holes:

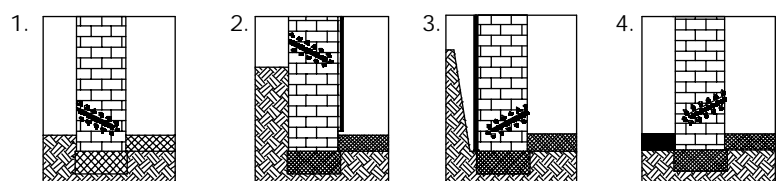
- Hole Ø 22 mm: a = 110 mm
- Hole Ø 30 mm: b = 160 mm

When drilling from one side only the holes should be drilled to within 5 cm of the outer surface. If drilling from both sides the depth of the holes should be **more than half** the thickness of the wall, and drilled in such a way that a staggered pattern is obtained (see sketched above). The hole spacing should remain 110 mm. After drilling, the holes are blown out with compressed air and repeatedly filled with water until the masonry between the holes appears moist. Excess water in the holes is blown out with compressed air.

### 2. Positioning of the Damp-Proof Course (DPC)

Selecting a suitable DPC level depends upon the type of construction. The sketches illustrate four typical situations.

Under certain circumstances (e.g. sketch 2 and 3) it will be necessary to install a Vandex surface treatment in addition to the DPC, to prevent lateral moisture penetration.



### 3. Climatic Conditions

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

### 4. Mixing

Add 20 kg of VANDEX INJECTION MORTAR (VIM) to 9.5 - 11 litres of water and mix thoroughly for 3 - 5 minutes. The material should be completely free from lumps. Mix only sufficient material for a maximum of 15 minutes use.

Stir the mixture frequently, but do not add more water once the mixture begins to set.

### 5. Application Method

For injecting the VANDEX INJECTION MORTAR (VIM) and hand caulking gun or a grout pump can be used. Alternatively VANDEX INJECTION MORTAR (VIM) can be injected by means of a funnel connected to a pipe or hose. The injection pipe is chosen so that its outer diameter and length match the holes drilled. Insert the pipe into the hole to its full depth and slowly withdraw it as the mortar fills the drilled hole.

As VANDEX INJECTION MORTAR (VIM) has the ability to fill fine cracks and voids it will normally be necessary to partly refill the holes a few minutes after the initial VANDEX INJECTION MORTAR (VIM) injection. Excess material should be removed before setting.

VANDEX INJECTION MORTAR (VIM) should not be applied at temperatures below 5°C, and during the curing period it must be protected against frost. Clean all tools, buckets, etc. with water immediately after use.

Once the injected material begins to stiffen a plastic foil has to be inserted, following which the holes are sealed with a plug of VANDEX UNI MORTAR 1, mixed with VANDEX ANTI SULPHATE (25 kg VANDEX UNI MORTAR 1 + 2.5 kg VANDEX ANTI SULPHATE).

Any further replastering or waterproofing work should not be performed until the DPC has become effective. Any efflorescence should be brushed off dry and removed prior to the surface treatment.

### 6. Consumption

The consumption of VANDEX INJECTION MORTAR (VIM) will depend on the porosity of the structure, however, as a guide the following table can be used:

#### Consumption when drilling from one side - 22 mm hole diameter

Wall thickness (m)	0.23	0.29	0.35	0.47
Consumption (kg/linear m)	1.1	1.4	1.8	2.4

### 7. Health and Safety

VANDEX INJECTION MORTAR (VIM) 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.