

# **INJECTION MORTAR (VIM)**

## **Retroactive damp-proof course**

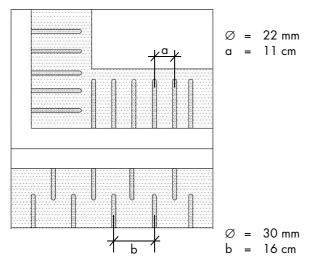
- barrier against rising damp in any type of masonry
- suited also for stonework
- ready-mix powder for making injection mortar

#### **PRODUCT DESCRIPTION**

VANDEX INJECTION MORTAR (VIM) is a product specially developed to stop rising damp in old brick- and stonework structures, granite boulder walls etc.

VANDEX INJECTION MORTAR (VIM) consists of Portland cement, specially treated quartz sand and a compound of active chemicals. By means of a chemical reaction between reactive salts in the structure, moisture and the Vandex chemicals a crystalline growth will take place which will block all pores and fine cracks. When VANDEX INJECTION MORTAR (VIM) is injected into holes drilled at regular intervals where the damp-proof course (DPC) is required, this crystalline growth will spread into the area adjacent to each core of VANDEX INJECTION MORTAR (VIM) and will thus create a barrier which moisture cannot pass. The mortar will tend to fill any fine cracks and voids and will set to form a solid plug thus replacing the material removed by the drilling operation.

#### **DRILLING OF THE HOLES**

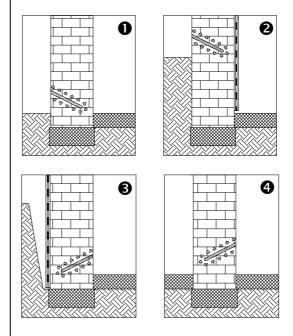


Drilling is normally done from one side only, but under certain circumstances it may be advantageous to drill from both sides – for instance in random stonework with rubble infill.

In both cases the holes should be drilled at no more than 11 cm or 16 cm centres respectively (see sketches) 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. When drilling from one side only the holes should be drilled to the thickness of the wall less 5 cm. If drilling from both sides, the depth of the holes should be <u>more than half</u> the thickness of the wall and drilled in such a way that a staggered pattern is obtained (see sketch above). Following drilling, the holes are blown out with compressed air and repeatedly filled with whitewash until the masonry along the hole level appears moist. Surplus liquid no longer absorbed by the masonry is then removed with compressed air.

## **POSITIONING OF THE DAMP PROOF COURSE**

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 in addition to the DPC to install a Vandex surface treatment to prevent lateral moisture penetration.



## MIXING

Add 9.5–11 litres of water to 20 kg VANDEX INJECTION MORTAR (VIM) 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.

## **APPLICATION**

For injecting the VANDEX INJECTION MORTAR (VIM) a hand caulking gun or a grout pump can be used. Alternatively VANDEX INJECTION MORTAR (VIM) can be injected by means of a funnel connected with 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 drill hole. As VANDEX INJECTION MORTAR (VIM) has the ability to fill out the fine cracks and voids it will normally be necessary to partly refill the holes a few minutes after the initial VANDEX INJECTION MORTAR (VIM) installation. Excess material should be removed before setting. VANDEX INJEC-TION MORTAR (VIM) should not be applied a temperatures below 5 °C, and during the curing period it must be protected against frost. Clean tools, buckets, etc. immediately after use.

Once the packed VANDEX INJECTION MORTAR (VIM) begins to stiffen a plastic foil has to be inserted, following which the holes are sealed with a plug of VANDEX UNI MORTAR 1, to which 2.5 kg of VANDEX ANTI SULPHATE per 25 kg of mortar were added.

Necessary refurbishing or waterproofing work should not be performed before the DPC has become effective i.e. before the masonry starts to dry out. Any efflorescence should be brushed off dry and removed immediately.

### CONSUMPTION

The consumption of VANDEX INJECTION MORTAR (VIM) will naturally 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 drill

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

## PACKAGING

20 kg PE-lined paper bag

### **STORAGE**

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

### **HEALTH AND SAFETY**

VANDEX INJECTION MORTAR (VIM) 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 on www.vandex.com.

TECHNICAL DATA		
Aggregate state		powder
Colour		cement grey
Bulk density	[kg/l]	approx. 1.0
Setting time	[min]	60

All data is averaged from several tests under laboratory conditions. In practice, climatic variations such as temperature, humidity, and porosity of substrate may affect these values.

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.



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