



## Betonfix DM

ST7-0221

*Expansive mortar for silent, non-explosive demolitions*

### DESCRIPTION

**Betonfix DM** is a very expansive mortar which is suitable for demolition works, rock and concrete cutting. When water is added to **Betonfix DM**, the product increases its volume considerably, creating a pressure of 80 MPa on the walls containing the hole. It does not emit gases or leave harmful residues.

### USES

**Betonfix DM** is used for demolition works where it is not possible to use explosives or heavy vibration. **Betonfix DM** can be used for the excavation of foundations and trenches; removal of large rocks; demolition of stone materials, concrete and reinforced concrete works (taking the necessary precautions); demolition of works in clay bricks and refractory bricks; underground and underwater excavations.

### APPLICATION

	Manual application		Mixing water: 1,5 lt/ 5Kg
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**Betonfix DM** is a powder which have to be mixed with clean water according to the quantities shown in the table. Its operating temperature is between + 5 °C and + 20 °C. It is advisable to test it in case of lower temperatures, in this case preliminary tests have to be made with hot water. If temperature is above + 20 °C test it with cold water. Mix to obtain a creamy, fluid and no lumps mortar. Pour into the holes previously prepared within 5 to 10 minutes. Horizontal holes must be sloped to facilitate insertion of **Betonfix DM**; It is not necessary to tap the hole and only in case of rain should be covered with waterproof material. When using on absorbent materials such as concrete, the holes must be dampened before pouring the product. There should be no water in the holes: in case of large infiltrations or if there are cracks that avoid the holes to be filled, it is advisable to put in the hole a PVC bag and fill it. The distance between one hole and another changes according to their diameter (generally Ø32 - Ø50) and the type of material to be demolished or cut.

For instance, rocks and concrete:

- Ø32: centre to centre 40 cm;
- Ø35: centre to centre 50 cm;
- Ø40: centre to centre 60 cm;
- Ø45: centre to centre 70 cm;
- Ø50: centre to centre 80 cm.

**Betonfix DM** exerts a swelling pressure of 800 kg/cm<sup>2</sup>. The tensile strength of different kinds of rocks:

Kinds of rocks	Tensile strength
Granite	150 Kg/cm <sup>2</sup>
Porphiry	190 Kg/cm <sup>2</sup>
Trachyte	95 Kg/cm <sup>2</sup>
Sandstone	75 Kg/cm <sup>2</sup>
Limestone	120 Kg/cm <sup>2</sup>

Dolomite	100 Kg/cm <sup>2</sup>
Gneiss	180Kg/cm <sup>2</sup>
Marbles	140 Kg/cm <sup>2</sup>
Concrete	30 Kg/cm <sup>2</sup>

Ensure that the breaking-plan is parallel to the main iron rebars to prevent that the action of the product takes place in the same direction of the iron since its action in this case would be ineffective.

## AVAILABLE VERSIONS

Beside the standard version the product is available in two variants. **Betonfix DM WINTER** which is suitable for temperatures lower than 5C° and **Betonfix DM SUMMER** for temperatures between 20-35 C°.

## CONSUMPTION

Estimated consumption of **Betonfix DM** per linear metre of hole according to its diameter:

Φ	30	32	34	38	40	50
Kg/m	1,1	1,3	1,5	1,8	2,0	3,0

## PACKAGING

5 Kg plastic pails

## STORAGE

Store **Betonfix DM** in closed containers and away from humidity. In these containers the product will maintain its stability for 12 months.

## WARNING

Product for professional use. Different batches may have different shades of colour. This does not affect technical features in any way. Do not pour **Betonfix DM** already mixed into containers which are narrow or have a smaller opening than its base.

For further information and advice on safe handling, storage and disposal of chemical products, the user must refer to the most recent Safety Data Sheet, containing physical, ecological, toxicological and other data related to safety.

All technical data shown in this Technical Data Sheet are based on laboratory tests. Actual measurement data may vary due to circumstances beyond our control.

The information and requirements indicated in this Technical Data Sheet are based on our current knowledge and experience and are to be considered, in any case, purely indicative. They cannot guarantee the final result of the applied product and they have to be confirmed by exhaustive practical applications; therefore the user must test the suitability of the product for the intended application and its purpose. Users must always refer to the latest version of the local technical data sheet related to the product.