1 – Site Preparation

Clean and expose the area to be fractured. The element must be accessible with a clear understanding of the cutting geometry. Where water, leakage, or significant moisture is present, ensure proper containment within the borehole, namely by using a plastic sleeve when technically applicable.



2 – Drilling

The use of a rotary-percussive pneumatic hammer with a 32 mm drill bit is recommended.

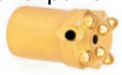
Define the drilling pattern according to:

- Element to be fractured
- Degree of confinement
- Material type
- Desired fracture direction

Typical references
Ø 32–41 mm.
20–30 cm spacing.
depth~ 80% of effective height.
isolated blocks ~ 60% of thickness.

After drilling, the holes must be clean, without excessive dust, debris or free water before filling.

In our online store **https://demolir.store/**, as well as in our physical shop or by phone, you can find and order all the accessories required for the application of expansive mortar.



3 – Mixing

- Add 1.5 L of clean water into a clean container
- Gradually add 5 kg of product while mixing
- Mix mechanically until a homogeneous and fluid paste is obtained

Prepare only the quantity required for immediate use
Do not exceed recommended water dosage

In hot weather, use cold water (< 15 °C).
In cold weather, use lukewarm water (±20 °C).
In the event of rain after filling, protect the holes with plastic.

Application at temperatures below 10 °C

Add powder accelerator: 15–20 g per 5 kg of expansive cement.

Application at temperatures above 25 °C

Add powder retarder: 15–20 g per 5 kg of expansive cement.

Use only the additive supplied with our expansive mortar.

4 - Filling the Holes

Fill the holes immediately after mixing, until they are completely filled.
In holes with water or leakage, adapt the application using a **plastic sleeve** or equivalent solution.

Performance depends on the relationship between:

- pattern,
- depth,
- temperature,
- material strength.



5 - Wait for Cracking

After application, wait for the development of expansion and radial pressure until cracks are formed.
As a reference, cracking may occur within **6–24 h at 20 °C**, depending on temperature, drilling geometry and material type.

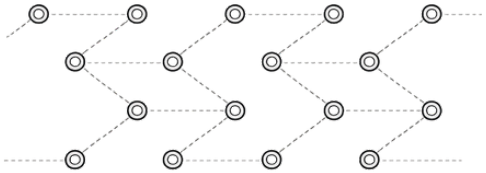
After cracking

Proceed with the removal of the fractured material using the most suitable equipment for the work front.

The data presented are indicative. Performance depends on site conditions, drilling geometry and method of application. Consult the **Technical Data Sheet** and **SDS** before use.

Mixing

5 kg of product + 1.5 L of water (10:3).



Drilling

Typical diameter: Ø 32–41 mm.
Typical spacing: 20–30 cm.

Depth

Approximately 80% of the effective height to be fractured.
For isolated blocks: approximately 60% of the thickness.

Indicative consumption

Ø 32 mm: ±1.2 kg/linear m.
Ø 41 mm: ±2.0 kg/linear m.

Indicative cracking time

6–24 h at 20 °C.



Safety is essential

Product for professional use.
Strongly alkaline mixture.
Always consult the product safety data sheet.

AFTER APPLICATION, DO NOT APPROACH OR CARRY OUT WORK ON TOP OF THE FILLED HOLES.



Always use

- Gloves;
- Eye/face protection;
- Respiratory protection, where applicable;
- Adequate ventilation and dust control.

Storage

Store in the original packaging, tightly closed, in a dry, cool and ventilated place.
Shelf life: 24 months.

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GEOteKnics Expansive Mortar

Quick Technical Application Guide

Controlled demolition

No contamination

No vibrations

No explosives

