

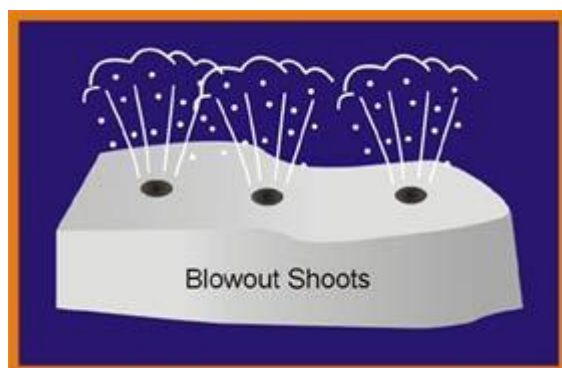
TIPS ON HOW TO USE ROCK FORCE®

For the best possible use and to obtain the best results, it is advisable to experiment with **ROCK FORCE®** before starting work. Do a test run on a smaller portion of the project.

- When using **ROCK FORCE®** with highly absorbent materials like concrete, the holes should be dampened before the mortar is poured, making sure however, that there is no water left in the holes when pouring the mixture.
- Large diameter holes positioned closer together accelerate breaking times.
- Make sure the holes are clean and no water and residue is left in the holes, or use a high-pressure air hose to clean them out.
- Fresh mortar should be poured into holes within 5 minutes after mixing.
- Do not mix more than 2 bags (10 kg) at a time.
- Pre-drilled holes can be filled to the top.
- Do not plug the holes after filling. Cover them only in the event of rain with a waterproof sheet.
- When working on large blocks the workers on duty must try to synchronize the operation, especially when working with hard rock. Limit the number of holes each worker will be responsible for so that they can mix and pour simultaneously. Filling as many holes as possible at the same time, this will guarantee maximum expansive stress on the area.
- **ROCK FORCE®** can only be used in holes. It will not work in existing cracks of stones or concretes.
- Never fill glass or metal containers with **ROCK FORCE®** mixture, or any container which widens towards the bottom. The pressure will shatter the container.
- If mixed **ROCK FORCE®** begins to steam in the mixing container, add some water to dilute it and throw it out an open surface.

HOW TO PREVENT BLOWOUT SHOTS?

Although it's highly unlikely, the mortar might blowout from the filled holes violently if the following instructions have not been followed correctly:



- Using correct type of **ROCK FORCE®** according to the temperature.

Type of ROCK FORCE®	Usable ambient temperature
SCA-4	40°C-50°C (104°F-122°F)
SCA-1	25°C-40°C (77°F-104°F)
SCA-2	10°C-25°C (50°F-77°F)
SCA-3	-5°C-10°C (23°F-50°F)

- If the hole diameter is too large it may result in a blowout.
- If the holes are too shallow it may result in a blowout. Depth must be 4 times the diameter or more.
- Lots of dry dust in the holes will absorb water from the mortar and result in a blowout.
- Cooling **ROCK FORCE®** powder, using ice water, before mixing.
- Using enough mixing water and mixing thoroughly avoiding lump formation.
- Do not manually mix more than 10kg (2 bags) for each lot.
- Pour the mixture into the holes within 5 minutes after mixing.
- Do not over fill the holes.
- Do not plug filled holes with bars or similar tools.

SAFETY PREVENTION

- Make sure that everyone working with **ROCK FORCE®** understands the possibility of blowouts, and has read the technical instructions thoroughly.
- **ROCK FORCE®** is a highly alkaline product, pH reaches 13 after contact with water and can cause severe irritation to mucous membranes, especially the eyes. Skin and eye contacts with **ROCK FORCE®** must be rinsed off with large amounts of cold water immediately without rubbing. Consult a doctor quickly.
- Wear safety goggles and rubber gloves during **ROCK FORCE®** handling, mixing and filling. Dust-proof mask is recommended in poorly ventilated areas such as tunnels or mines.
- Do not get your face close to, or stand near the filled holes for at least 3 hours after filling completion.
- Do not pour Warm or bubbling mortar into holes. Once filled holes start to smoke or steam, that is a sign they may be about to blow out. Clear the area of people immediately.
- Keep people away from the jobsite after filling the holes. In the case where people have to remain in the area, cover the filled holes with a tarpaulin.
- If the rock block is elevated, take care of falling rocks once cracking starts.

