



Rapid Time Exports

Rapid Like Lightning



ROCK BREAKING AND CONCRETE CUTTING

RAPID-CRACK (EXPANSIVE MORTAR) IS SAFE, EASY TO USE AND COST EFFECTIVE.

IT DOES NOT NEED HEAVY EQUIPMENT, PERMITS AND SPECIAL CERTIFICATION.

For Demolishing work in construction in tight quarters, the use of explosive agents is very restricted due to safety and environmental issues. A unique product like "Rapid-Crack" comes as the ultimate solution. Sand stone, Marble, granite, limestone, plain concrete, reinforced concrete, boulders, ledge, are fractured overnight without noise, vibration or flying debris.

What is Rapid-Crack / Expansive Mortar / Non Explosive Demolition Agent?

Rapid-Crack (Expansive Mortar) is a kind of powder with amazing 18,000 PSI expansive strength when mixed with common water. Poured into holes, Rapid-Crack breaks reinforced concrete & rock safely and quietly, while providing Silent Cracking, Since Rapid-Crack provides controlled demolition according to drilling patterns, it is very easy to break reinforced concrete and all kind of stone into desired sizes and shapes, without noise, vibration or dust.

METHODOLOGY

DRILLING → MIXING → POURING



Where can Rapid-Crack be used ?

Rapid-Crack provides the most technically suitable and cost effective solution in:

- Restricted demolition of rock and concrete structures where nearby structures must be protected from shock waves generated by explosions.
- Pre-splitting of rock formations, to create isolated blocks that can then be more easily demolished.
- Cutting blocks of marble and granite more economically than with the traditional helicoidal wire cutting method.

Advantage of using Rapid-Crack

With an unlimited range of applications, it is particularly suitable for breaking, cutting or demolishing stones, concrete and reinforced concrete.

1. Rapid-Crack is a safe substance :

It is not controlled by any legal regulation requirements. It is non-explosive, making supervision of trained personnel non-essential. It requires no special storage precautions if kept in a dry place. The product is not sensitive to electrical discharge or currents.

2. It is a non explosive demolition agent :

Unlike the existing methods of demolition, Rapid-Crack does not make any noise, vibration, flying debris, dust or gas. It demolishes rock or concrete with its expansive stress which continues even after crack initiation. The crack opening distance becomes wider as time passes.

3. It can be easily handled :

No capping is necessary after Rapid-Crack is poured nor is tamping required. It exerts its strength in a short time. Due to its strong adhesion and frictional resistance, spurs due to heat-generation do not occur when used properly. The expansive stress along the hole depth is almost constant except near the hole entrance.

4. As easy to use as mixing, pouring and cracking :

Just mix Rapid-Crack with common water, pour into pre-drilled holes and it expands to crack. Neither capping with mortar or sand nor tamping with a bar is necessary. No need of licenses unlike explosives, explosive agents, etc. Environment friendly, it releases no toxic or harmful substances of any kind.

5. Generates highly expansive stress :

Rapid-Crack generates highly expansive stress of more than 11 MT/m². The tensile fracture stress of rocks and concrete is very small, in the range of 40 to 70 T/m² in concrete. Since demolition by Rapid-Crack is based on fracture mechanism due to a tensile stress, all kinds of rocks and concrete can easily be cracked and broken using Rapid-Crack.

6. Controlled shape cracking and breaking :

Rapid-Crack makes it very easy to control the shape of the to-be cracked objects according to requirements. The fracture cracks develop along the line of holes and hence it is easy to control the shape of the cracked objects. Cracked rock or concrete can then easily be broken with breakers. Rapid-Crack can demolish rock or concrete systematically, and also demolition work in water is possible.



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Comparison of Rapid-Crack

Type of Demolition Agent	Demolition Breaking/ Powder	Conditions Created at the work site					Protection Needed at job site	Economy
		Noise	Ground vibration	Dust/Gas	Flying Particle	Safety		
Explosive (Dynamite)	Very High	Very High	Very High	Very High	Very High	Very High	Very High	Very High
Explosive (Concrete Cracker)	High	High	High	Very High	High	Low	Very High	High
Rock breaker	Low	High	Low	Low	Very low	High	Low	Low
Hydraulic splitter	High	Low	Low	Almost nil	Almost nil	High	Low	Very low
*Rapid-Crack	High	Almost nil	Almost nil	Almost nil	Almost nil	Almost nil	Almost nil	High

