Non-Explosive Controlled Demolition Agent
By providing silent expansive cracking
For Demolition, Reinforced Concrete Cutting, Excavating, Rock Breaking, Stone Quarrying, Mining and More …

HIGHLIGHTS

- Amazing 18,000 PSI expansive strength when mixed with common water.
- Easy to use, just mix with water, pour into holes, then it expands.
- Cracks reinforced concrete, limestone, flagstone, granite, marble and onyx safely and quietly.
- An alternative to blasting, diamond sawing and jackhammering, which is safer, more efficient, works without noise, vibration, dust by providing silent expansive cracking.
- No special permit, insurance, training or equipment needed.
- MSDS (Material Safety Data Sheet) is available upon request.

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Archer Company USA Inc is the manufacturer of Dexpan®
Toll-Free: 1-866-272-4378
Web: www.archerusa.com
Tel: +1-505-874-9188 (USA)
What is Dexpan®?

Dexpan® is a powder with amazing 18,000 PSI expansive strength when mixed with common water. Poured into holes, Dexpan® breaks reinforced concrete & rock safely and quietly, while providing silent cracking. Since Dexpan® provides controlled demolition according to drilling patterns, it is very easy to break reinforced concrete and all kinds of stone into desired sizes and shapes, without noise, vibration or dust. In demolition, concrete cutting & excavating industry, Dexpan® helps you to break reinforced concrete and rock into chunks, so you may easily cut off rebar, haul it away with a crane or truck without damage remaining part. In mining and quarrying industry, Dexpan® helps to achieve perfect slabs and blocks from limestone, onyx, marble, granite or any other type of stone you are working with. Compares to blasting, Dexpan® avoids waste of valuable stone, high insurance, costly storage and labor. Dexpan® can also be applied along with traditional methods like primer cord, hydraulic breaker, diamond blade saw and jackhammer to help cut cost, work time and increase safety. Plus silent operation, Dexpan® is perfect for residential, school and airport area. Dexpan® helps your work to become more efficient and cost effective.

*Packing 1: 44 lbs box (includes Four 11 lbs bags)  
* Packing 2: 11 lbs plastic container

What can Dexpan help you with?

**Demolition and Concrete Cutting**
- Demolition of mass reinforced concrete, foundations for machinery, piers, pillars, beams, bridges, retaining walls
- Partial demolition of various concrete structures
- Reinforced concrete cutting

**Excavating and Rock Breaking**
- Excavation of rock
- Splitting of boulders
- Rock and slab breaking for road expansion
- For resident development
- Excavation associated with tunneling
- Trenching shaft sinking
- For various types of construction work

**Stone Quarrying and Dimension**
- Non-Explosive limestone, onyx, marble, granite quarrying
- Controlled expansive cracking to avoid waste of Valuable stone

**Types of Dexpan® (Depending on temperature)**
- Dexpan® I 77 to 104 F° (25 to 40 C° )
- Dexpan® II 50 to 77 F° (10 to 25 C° )
- Dexpan® III 23 to 50 F° (-5 to 10 C° )
Demolition of Reinforced Concrete Foundation
United States 2004

These concrete bases were reinforced with rebar.

This base was 4' wide x 7'3" long x 2' high. Reinforced with rebar. Look at the great results of Dexpan.

This motor base was 3' x 3' x 3', with a few holes and Dexpan. It came apart in short order.

This base is 7'3" on the long sides and 4'7" wide and 10" high. It had 3 mats of #6 rebar with dowels every 12" around the perimeter. Take note of the heaving in the center of the base. Approximately 1 1/2 cases of Dexpan were used. The holes were drilled in 12" deep.

This is a side view showing the first of 4 layers of rebar in this base. These are #6 rebar (3/4" diameter). The dowels coming out of the footing are #8 rebar (1" diameter). They are not shown in this photo.

*Send us your photos to get $50 discount on your next purchase!

Visit us at www.archerusa.com
St. Vincent Hospital Parking Lot Demolition
Oregon, United States 2004

St. Vincent Hospital parking lot ledge needed to be removed. This containing reinforced concrete.

Demolition of Reinforced Concrete Wall
Close to pump and pipes
New York, United States 2003

The need for DEXPAN on this job was in an area where no pneumatic dust or noise was allowed and it was an area with pumps, the area was not accessible for machines.

Visit us at www.archerusa.com to view more job photos in full size.
Reinforced Concrete Slab Demolition
United States 2004

Our customer quotes: “I received the boxes of Dexpan as promised. I am very impressed with this product. Even though I am only a homeowner, it saved me a lot of extra expenses and extensive labor. The slab was 16 inches thick and very hard. I tried a jackhammer and it was useless. My next option was to hire someone with a backhoe. Then a friend of mine has seen Dexpan work at a hospital expansion project. Thank you for your help.”

Concrete Foundation Demolition
United States 2004

Visit us at www.archerusa.com
School Stadium Demolition (Noise Restricted Area)
Dallas, Texas United States 2002

Rock Breaking
Idaho, United States 2005

Visit us at www.archerus.com to view more job photos in full size.
“Today we worked on an area that required non-explosive rock excavation in the area of the north courtyard. We drilled a large area of what appeared to be pinnacle or bed rock. The rock being very steeply sloped and irregular it is hard to be extremely accurate on yards, but the holes (varying from 6 to 10 feet) are easily measured. We drilled the rock on an 18” pattern. We used (39) 11-pound bags (429 lbs.) of Dexpan to fill 183.83 lineal feet of hole today. 1 track-mounted drill w/ operator worked 7 hrs. and 6 men worked approximately 2.5 hrs. to perform the necessary operations. An air compressor was also used to clean rock surface and holes before filling. Jessie Scarborough from S&ME was on site monitoring operations.”

*Archer Company USA Inc is the manufacturer of DEXPAN.*

Visit us at [www.archerusa.com](http://www.archerusa.com)
Non-Explosive Controlled Granite Quarrying
Idaho, United States 2004

Non-Explosive Controlled Demolition Agent
By providing silent expansive cracking
For Demolition, Reinforced Concrete Cutting, Excavating, Rock Breaking, Stone Quarrying, Mining and More …

Land Clearing & Rock Breaking
United States 2005

Visit us at www.archerusa.com
Non-Explosive Controlled Limestone Quarrying
Missouri, United States 2004
DEXPAN is designed for controlled mining and quarrying to avoid waste of valuable stone and to work safer.

Land Clearing & Rock Breaking
United States 2005
Non-Explosive Controlled Limestone Quarrying
Wisconsin, United States 2004

Non-Explosive Controlled Flagstone Quarrying
Corolado, United States 2005

Visit us at www.archerusa.com
Non-Explosive Controlled Marble Quarrying
Torréon, Mexico 1995

Non-Explosive Controlled Demolition Agent
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For Demolition, Reinforced Concrete Cutting, Excavating, Rock Breaking, Stone Quarrying, Mining and More ...

Land Clearing & Rock Breaking Mexico 2005

Visit us at www.archerusa.com
3 Easy Steps to SUCCEED: Drill, Mix & Fill

1) Drilling
- Drill holes using a hammer drill and appropriate drill bit specific to the rock or concrete type. (Diagram 1)
- Holes should be drilled no further than 1 ft (30 cm) apart. Note: In reinforced concrete recommended no more than 8 in (20 cm) apart.
- Recommended hole diameter is 1.5 in (3.8 cm), not to exceed 2 in (5 cm). Drill holes should be 80-90% of the depth, do not go through.

2) Mixing
- In a flat bottom bucket, combine 0.4 gal (1.5 l) of water with one 11 lbs (5 kgs) bag of Dexpan®. (Diagram 2)
- Mix well (a drill and paddle is recommended). If mixing with a stick or other method, make sure Dexpan® is completely dissolved into the water. Mix to a slurry.

3) Filling
- Clean holes before filling. Using an air hose to remove excess dust from drilling.
- Dexpan® slurry should be poured into holes within 10-15 minutes after mixing. Do not fill to the top, only fill the holes about 1/2 to 1 inch (2.5 cm) from the top.
- Pour well mixed Dexpan® slurry into holes. Agitating the Dexpan® in the hole to make sure no air is trapped in holes. Suggestion: Use a rod or stick to poke holes. (Diagram 3)
- A grout pump might be required to fill horizontal holes. Caps might be needed for horizontal holes, but only necessary to hold Dexpan® in the holes.

Coverage: Normally one 44 lbs (20 kgs) box of Dexpan® can fill up to 35 lineal feet (10 m) of 1.5 inches (3.8 cm) diameter holes. You might not have to fill every hole depending on application.

Cracking Or Cutting Time: Properly mixed, the cracks may appear after 2 hours of filling drilled holes, depending on ambient temperature, humidity, rock or concrete hardness. Give it 24 hours for best results.

CAUTIONS:
- Read safety and operation instruction CAREFULLY.
- A pair of safety glasses, rubber gloves and a dust mask is required. Avoid eyes, skin contact. Do not breathe dust.
- DO NOT look directly into filled holes as BLOWOUTS may occur.
- Keep Dexpan® in DRY storage. Seal container after use.
- Select the correct type of Dexpan® for your temperature range.

MSDS (Material Safety Data Sheet) and Limited Warranty are available at www.archerusa.com

For technical support please call our Toll-Free 1-866-272-4378 or 505-874-9188 (USA)
Usage Tips: (call 866-272-4378 if you have any questions)

- Well designed hole drilling pattern will minimize consumption of Dexpan® by cutting into desired sizes.
- To insure success, Dexpan® needs Free space to expand to.
- For better results, it is important to note both air and material temperature. Material temperature is the temperature inside of the rock or concrete which can be different from the air temperature.
- In summer, the best time to use Dexpan® is in the morning or evening when material temperature is cool.
- In summer, cover holes from direct sunlight to avoid blow-out. Example: using a tarp or damp hay to provide shade.
- In winter, mix 1% calcium chloride with Dexpan®. Example: 100 lbs of Dexpan® mix with 1 lb of calcium chloride.
- If Dexpan® completely dries into powder and did NOT crack, pour additional water onto Dexpan® filled holes.

Hole Drilling Design:

Regular shaped reinforced concrete demolition

Irregular shaped reinforced concrete demolition

Underground rock Excavation

- Hole filled with DEXPAN
- Empty Hole
- Desired cutting line

Visit us at www.archerusa.com
Partial Demolition with Vertical desired cutting line

Partial Demolition with Horizontal desired cutting line

- Cut reinforced concrete into desired size to lower cost
- Controlled cutting for Stone Quarrying and Dimension

Trenching

Unfilled holes provide Free Space

Visit us at www.archerusa.com
Brief Material Safety Information
Conforms to ANSI Z400.1-2004 Standard (United States, Canada, Mexico)
Complete MSDS, Usage Instruction and Warranty are available at www.archerusa.com

CAUTION: Hazardous to Humans and Domestic Animals

- Causes respiratory tract, eye and skin burns. Do not get in eyes or on skin or clothing. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

- Composition / Information on ingredients:

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<tr>
<th>Name</th>
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<th>%</th>
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<tr>
<td>Calcium Oxide</td>
<td>1305-78-8</td>
<td>60-100</td>
</tr>
<tr>
<td>Silica, Amorphous</td>
<td>60676-86-0</td>
<td>5-10</td>
</tr>
<tr>
<td>Iron (III) Oxide</td>
<td>1309-37-1</td>
<td>1-5</td>
</tr>
<tr>
<td>Aluminum Oxide</td>
<td>1344-28-1</td>
<td>1-5</td>
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First Aid

- **Eye or Skin Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes or skin with plenty of water for at least 20 minutes. Get medical attention immediately.

- **Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

- **Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Environmental Precautions

- NO KNOWN significant effects or critical hazards.
- The product itself and its products of degradation are NOT toxic.

Storage and Waste Disposal

- The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.

We are a member of

- National Demolition Association
- Concrete Sawing & Drilling Association
- American Rental Association
- Better Business Bureau

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