

# 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 water.
- Easy to use, just mix with water, pour into holes, then it expands.
- Cracks reinforced concrete and rocks safely and quietly.
- An alternative to blasting, diamond blade saw, hydraulic breaker and jackhammer, which is safer, more efficient, works without noise, vibration, or dust by providing silent expansive cracking.
- No special permits, insurance, training, or equipment needed.
- · SDS (Safety Data Sheet) is available upon request.

#### CONTENTS: Page What is Dexpan? 2 Job Photos ♦ Concrete Demolition 3 ♦ Rock Breaking and Excavating 7 ♦ Stone Quarrying and Mining 9 ♦ Underwater Demolition 11 How to use Dexpan? 12 15 **Drilling Designs** Back **Introducing Archer PRO Diamond Tools**

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Tel: 575-528-5454 (Se Habla Español)

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# What is Dexpan<sup>®</sup>?

**Dexpan**<sup>®</sup> 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



- \* Packing I: 44 lb. box (includes Four 11 lb. bags) \* Packing II: 11 lb. plastic container \* Packing III: 44 lb. plastic container

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 the demolition, concrete cutting and excavating industry, Dexpan® helps break reinforced concrete and rock into chunks, making the job easier to

expose rebar to enable cutting and removing without damaging existing areas / parts i.e. footings, foundations, walls.

In the mining and quarrying industry, Dexpan® helps to achieve almost perfect slabs and blocks from limestone, onyx, marble, granite or any other type of stone you are working with. Compared to blasting, Dexpan® helps conserve the waste of valuable stone, the cost of high insurance, costly storage, and labor.

Dexpan® can also be applied along with traditional methods like primer cord, hydraulic breakers, diamond blade saws and jackhammers to help cut cost, work time and increase safety. Dexpan® can make the job more efficient and cost effective.

# 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 rock / concrete temperature)

**Dexpan® I** 77 to 104 F° (25 to 40 C°) **Dexpan<sup>®</sup> II** 50 to 77 F° (10 to 25 C°) **Dexpan® III** 23 to 50 F° (-5 to 10 C°) For Demolition, Reinforced Concrete Cutting, Excavating, Rock Breaking, Stone Quarrying, Mining and More ...

## Non-Explosive Demolition of Highway Bridge Piers At Biggs Army Airfield, El Paso, Texas United States 2007









Concrete Removal of Ferry Ballast Concrete Opening Magazine, United States 2006













## Noiseless Concrete Breaking in Residential Area West Virginia, United States 2003









## **Interior Demolition of Concrete Foundation** Houston, TX United States 2009









# Demolition of Street Light Posts New Mexico, United States 2008





# **Demolition of Reinforced Concrete Foundations**United States 2004



# **Demolition of Downstream Water Dam**United States 2010



Swimming Pool Demolition United States 2005





# Non-Explosive Demolition of a School Stadium

Dallas, Texas United States 2002



## **Concrete Wall Demolition with Horizontal Holes**

El Paso, Texas United States 2011





## Removal of Concrete Wall that close to pumps & pipes New York, United States 2003

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.

## Non-Explosive Rock Blasting United States 2004





**Granite Boulder Breaking**United States 2004



Page 7 - Job Photos

# **Rock Breaking for Swimming Pool Project**



Construction Site Preparation & Rock Breaking
United States 2005



Rock Trenching and Excavating United States 2008



Page 8 - Job Photos

## Non-Explosive Limestone Quarrying

Missouri, United States 2004









Non-Explosive Granite Quarrying Idaho, United States 2004





Non-Explosive Limestone Quarrying Arkansas, United States 2008









Page 9 - Job Photos

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## **Non-Explosive Marble Quarrying**

Torréon, Mexico 1995













# Non-Explosive Sandstone Quarrying







Dexpan is Perfect for controlled mining and quarrying to avoid waste of valuable stone and to work safer.

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## \*Underwater Demolition of Bridge Piers

United States 2007 \*Used plastic tubing to keep Dexpan from water.







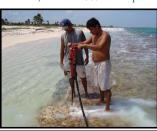






# \*Underwater Rock Breaking

Cancun, Mexico 2007 \*Used plastic tubing to keep Dexpan from water.











## Please ALWAYS wear







Rubber Gloves Safety Goggles

Concrete Demolition and Rock Breaking has never been EASIER!

3 Easy Steps to SUCCEED: Drill, Mix & Fill

## 1) Drilling:

- Use 1.5 inches (3.8 cm) drill bit, holes should be drilled 1 ft. (30 cm) apart. 80-90% of the depth, do not go through. (Diagram 1)
- \* Using smaller drill bit will reduce Expanding Strength.
- \* Please call for applications with depths less than 6 inch.

## 2) Mixing:

- In a bucket, combine 0.4 gallons (1.5 liters) of cold water with one 11 lb. (5 kg.) bag of Dexpan<sup>®</sup>. (Diagram 2)
- Mix well to a slurry, no lumps. (a drill and paddle is recommended)

### 3) Filling:

 Dexpan® slurry should be poured into holes within 10-15 minutes after mixing. (Diagram 3)

#### Coverage:

Normally one 11 lb. (5 kg.) bag of Dexpan<sup>®</sup> can fill up to **9 lineal feet** (2.5 meters) of 1.5 inches (3.8 cm) diameter holes.

### **Cracking Or Breaking Time:**

Properly mixed, the cracks may appear after 2~8 hours. Allow **24 hours** for best results. If Dexpan® completely dries into powder and did NOT crack, pour additional water onto filled holes. DO NOT remove Dexpan® from holes.

## <u>Warning!</u> Improper use may cause serious injury Important Safety Precautions and First Aid:

- FORCEFUL BLOWOUTS may occur once mixed with water!
   Keep a safe distance. DO NOT look directly into filled holes. Use of Dexpan® in hot weather could increase chances of blowouts. DO NOT pour into hot holes. Use iced water in summer.
- Alkaline Burns may occur. DO NOT breathe in dust. AVOID eye and skin contact. If eye or skin contact should occur, rinse it off IMMEDIATELY with plenty of water for at least 20 minutes, and consult doctor. Refer to SDS.
- Choose correct type of Dexpan based on rock / concrete temperature.
- Keep Dexpan<sup>®</sup> in DRY storage. Seal box / bag after use.
- Keep out of reach of children and pets.







SDS (Safety Data Sheet) is available upon request.

For technical support, Please call 575-528-5454 (Se Habla Español)

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### **Limited Warranty**

- For best results, drilling and mixing are critical to Dexpan®.
   First time users are highly recommended to call our FREE technical support group before use (Tel: 575-528-5454).
- All products of Archer Company USA (DBA Dexpan USA) are warranted to be free from defects in materials or workmanship for one year from the date of purchase.
- Within this period, Archer (Dexpan) will, at its sole option, replace any products that fail in proper and normal use. Such replacement will be made at no charge to the customer, provided that the customer shall be responsible for any transportation cost.
- This warranty does not cover failures due to abuse, misuse, accident, or unauthorized alterations. Always follow safety precautions and usage instruction on our website.
- Written description of problem and supporting job photos are necessary to warrant this claimer.

#### Disclaimer

- Dexpan® may be used to break concrete including reinforced concrete, rocks including limestone, granite, marble, onyx, and flagstone. Call before you try on other material. (i.e. porous or decomposed rocks.)
- Breakage or cracks vary due to drilling pattern done by customer.
   Archer (Dexpan) is not responsible for any unexpected results.
- Cracking Time is not guaranteed. Allow at least 24 hours for complete set time. Archer (Dexpan) is not responsible for any job delay lost.

#### Procedure for Claims under Limited Warranty

Archer (Dexpan) will help customer to resolve the problem:

- In the event Dexpan® does not work, allow an extra 48 hours. If it
  fails after 48 hours, contact technical support before you try other
  means. Do not remove Dexpan® from holes. This may void the
  warranty if the Dexpan® is removed.
- Take photos showing job was done according to proper procedures. A
  written description showing purpose of the job, dimensions, drilling
  patterns, depth of holes, water mixing rate, weather and temperature.
  Both description and job photos are necessary to obtain warranty
  service.
- Archer (Dexpan) gives customer an analysis report showing what could be the problem. Onsite technical support may be requested for larger projects.
- Archer (Dexpan) will honor this warranty based on the evidence provided and approval.

Video 1: What is Dexpan?



Video 2: How to use Dexpan?



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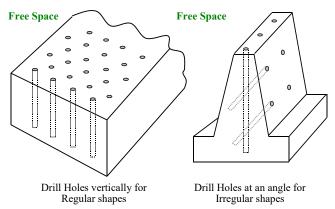
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More Info: (call 575-528-5454 if you have any questions)

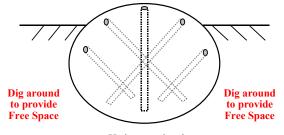
- Well Designed Hole Drilling Pattern will minimize consumption of Dexpan® by cutting into desired sizes.
- To insure success, drilled perimeter holes or angled holes may be needed to provide Expansion Space.
- For better results, it is important to note both air and material temperature. Material temperature is the temperature inside of the rock or concrete which can be different from the air temperature.
- In summer, Dexpan<sup>®</sup> should be used in the morning when material temperature is cool.
- In summer, provide shade to filled holes. But allow the holes to have space to breathe. DO NOT Plug or constrict holes.
- If Dexpan<sup>®</sup> completely dries into powder and did NOT crack, pour additional water onto Dexpan<sup>®</sup> filled holes.

#### **Hole Drilling Designs:**

Objects have Free Space for Dexpan to Expand to:



## **Objects DO NOT have Free Space for Dexpan to Expand to:**



Underground rock Excavation

Hole filled with DEXPAN

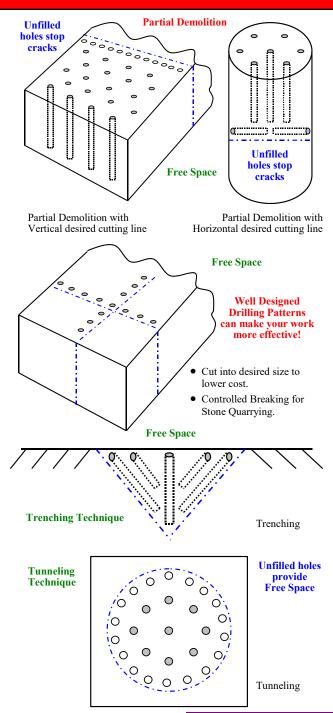
Empty Hole

Desired cutting line



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Premium Quality Diamond Tools





#### Diamond Blades

- General Purpose Blades, Demolition Blades
- Concrete Blades, Asphalt Blades
- Tile Blades, Masonry Blades, Granite Blades
- · Crack Chaser, Tuck Pointing Blades
- Bridge Saw Blades, Ductile Iron Blades, Ring Saw Blades

## **Diamond Wire**

Diamond Wires for sawing reinforced concrete, granite & marble

#### **Core Bits**

- Concrete Core Bits
- Stone Core Bits

## **Diamond Grinding Tools**

- Cup Wheels, Drum Wheels
- · Antique Brushes, Diamond Burr Sculpting Kit
- Floor Grinding Plates, Grinding Blocks, Grinding Shoes

## **Polishing Pads**

- 3-STEP, Dry Use and Wet Use Polishing Pads, Convex Polish Pads
- Backers
- Concrete Floor Polishing Discs

#### **Router Bits**

- Router Bits for Portable Routers with M8 or M10 Adaptors
  - Router Bits for Angle Grinders with 5/8"-11 Thread