

# HYDROPLUG

Single component, extremely fast setting, non-shrink, expansive type, hydraulic cement for repair of underwater concrete or concrete subject to hydrostatic water pressure.

## HOW IT WORKS

HYDROPLUG immediately reacts with water to form a water tight seal to stop the flow of water. Repairs concrete which is actively leaking or is underwater.

## APPLICATIONS

- ◆ Use to patch leaks in concrete basements, tunnels, mines, dams, tanks, swimming pools, walls, hydroelectric structures, oil platforms, sea walls, aquariums and man made concrete-lined lakes and ponds.
- ◆ Use to stop leaks in underground concrete pipes.
- ◆ Used to anchor ornamental iron, dowels, rods, bolts or parts.
- ◆ Used to patch roads, bridge decks, parking garage driving surfaces and refrigerated and freezer floors at temperatures below 32° F (0° C).

## ADVANTAGES

- ◆ Develops extremely high early strength.
- ◆ Sets up at temperatures below 32° F (0° C). Excellent for low temperature patching and repair work.
- ◆ Sets up underwater.
- ◆ Develops high bond strength and seals off the flow of water in 3-6 minutes.
- ◆ Firmly anchors bolts, railings, dowels, etc.

## ▲ PRECAUTIONS ▲

- ◆ Do not featheredge. Minimum thickness is 1/2 inch (13 mm).
- ◆ Do not mix more HYDROPLUG than can be applied immediately.
- ◆ Do not add plasticizers, accelerators, retarders or additional cement.
- ◆ Do not retemper with water.
- ◆ Do not add more than the recommended amount of water.

## USE INSTRUCTIONS

- ◆ Request current product literature, labels and material safety data sheets from manufacturer and read thoroughly before product use.

- ◆ Site environmental conditions, substrate conditions and construction have a major effect on product selection, application methods, procedures and rates, appearance and performance. Product literature provides general information applicable to some conditions. However, an adequate site test application by the purchaser or installer in advance of field scale use is mandatory (irrespective of any other verbal or written representations) to verify that product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- ◆ Remove all unsound concrete, grease, oil, dirt, laitance and other foreign contamination from the surface.
- ◆ Mechanically roughen area to be patched.
- ◆ Before placing HYDROPLUG, thoroughly saturate concrete bonding area with water. Remove excess water and allow concrete bonding surface to dry slightly before HYDROPLUG is placed. When concrete substrate is below 32° F (0° C), do not dampen bonding surface.
- ◆ Cavities and voids should be a minimum of 1/2 inch (13 mm) in depth.
- ◆ Pre-wet mixing containers and drain excess water prior to mixing initial batch.
- ◆ Add the appropriate amount of clean mixing water (see technical data) to mixer and slowly add dry HYDROPLUG while continuously mixing. Mix for 30 seconds to 1 minute or until a uniform consistency is achieved.
- ◆ The optimum mixing water temperature is 70° F (21° C). At temperatures above 100° F (38° C), mix with cold water to increase working time. At temperatures below 40° F (4° C), add 70° F (21° C) mixing water to speed up the set time and to prevent product from freezing. Once HYDROPLUG begins to react with water, the heat of hydration will keep it from freezing.
- ◆ To repair small holes, form the material to a suitable shape in your hand. Once firm and warm, force the material into the area being repaired.
- ◆ To stop active water leaks, maintain constant pressure behind the material for a full 6 minutes.

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concrete restoration/patching



chemical solutions to concrete problems

- ◆ For underwater repairs, wait until the material begins to get warm before placement. The use of a plastic bag may be beneficial.
- ◆ To cure HYDROPLUG, keep the repaired area damp for 15 minutes.

### TECHNICAL DATA

| Test Method | Parameter            | Test Results                |
|-------------|----------------------|-----------------------------|
| ASTM C109   | Compressive Strength | Temperature - 70° F (21° C) |
|             | 10 Minutes           | 800 psi (5.5MPa)            |
|             | 30 Minutes           | 900 psi (6.2MPa)            |
|             | 1 Hour               | 1,000 psi (6.9MPa)          |
|             | 1 Day                | 1,800 psi (12.4MPa)         |
|             | 7 Days               | 4,000 psi (27.6MPa)         |

### Water Requirement\*

| HYDROPLUG        | Mix Water       |
|------------------|-----------------|
| 10 lbs. (4.5 kg) | 0.9 qt. (0.8 l) |
| 20 lbs. (9.1 kg) | 1.8 qt. (1.7 l) |

\*Note: Jobsite conditions may affect actual quantities of water needed. Above mixing water recommendations are intended only as a guide.

### Mixed Yield

Mixed Pail 23.8 lbs. (10.8 kg) - 0.18 ft.<sup>3</sup> (5.1 l)

### PACKAGING

Packaged in 20 lb. (9.1 kg) resealable, plastic pails.

### SHELF LIFE

One year from date of manufacture in properly stored conditions. Use before expiration date stenciled on the bag.

### HANDLING/STORAGE

Read Material Safety Data Sheet (MSDS) prior to using. Contains cement and silica sand. Use proper safety equipment (gloves, goggles or glasses and dust masks). Store in a cool, dry area.

### AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, NOX-CRETE Products Group also maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, phone (800) 669-2738 or (402) 341-1976.

### LIMITED WARRANTY

#### NOTICE-READ CAREFULLY

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