# P R O D U C T D A T A

## **FEATHER PATCH**

Single component, acrylic polymer modified, portland cement based repair mortar.

## **HOW IT WORKS**

Feather Patch incorporates a dry acrylic polymer, portland cement, special graded aggregates and a special blend of admixtures to achieve maximum strength and substrate adhesion.

## **APPLICATIONS**

- Use to patch and restore surface defects in concrete floors, walls, precast and tilt-up panels, masonry and stucco.
- Use to fill static cracks, spalls, bug holes and shallow honeycombs.
- Use to resurface freeze-thaw related scaling damage on driveways, walkways, median barriers, bridge spandrels and curbs
- Use in precast applications for patching air voids (bug holes) and other minor surface defects.

## **ADVANTAGES**

- Exceptional bond to concrete and masonry.
- Can be featheredged.
- Resistant to freeze/thaw related scaling.
- Resistant to water absorption and the damaging effects of deicing salts.
- Long working life (in excess of 1 hour).
- Self-curing in most applications.
- Easy to use single component formulation.
- Color blended to match concrete.

#### A PRECAUTIONS A

- ◆ Do not use for patches over 1/2 inch (13 mm) in depth unless placed in layers with a maximum thickness of 1/2 inch (13 mm) each. Use Acrylic Patch for horizontal repairs greater than 1/2 inch (13 mm) in depth. For vertical and overhead surface repairs greater than 1/2 inch (13 mm) in depth, use Vertical Patch. Refer to specific product data for application details.
- Do not add plasticizers, accelerators, retarders or additional cement.
- Do not apply directly over dynamic cracks, control joints, expansion joints or isolation joints.
- Do not use Feather Patch where the patched area will be subject to continuous immersion in water.

- Do not use where patches may be subjected to heavy traffic or concentrated/point loading.
- Do not retemper with 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.
- Prepare the area to be repaired in accordance with ICRI guidelines by square cutting all perimeter edges.
- Remove all unsound concrete, grease, oil, dirt, laitance and other foreign contamination from the surface to be repaired.
- ◆ Before placing Feather Patch, thoroughly saturate concrete bonding area with water for 4 hours. Remove excess water and allow concrete bonding surface to dry slightly before Feather Patch is placed.
- 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 Feather Patch while continuously mixing. Mix for 2-3 minutes or until a uniform consistency is achieved.
- Apply Feather Patch with a trowel from feather edge to 1/2 inch (13 mm) in thickness. Rough finish Feather Patch with a wood or rubber float to allow surface to breathe. Final finishing with a steel trowel should be delayed until material starts to set to prevent blistering.
- Avoid overworking the surface.
- Do not add water to the surface being finished.
- Best results are obtained if Feather Patch is applied in the shade. Schedule applications to avoid applying Feather Patch in direct sunlight or under windy conditions.



- Under normal conditions, Feather Patch is self curing.
  Under hot and/or windy conditions, patches should be kept moist with water and covered with polyethylene for 48 hours.
- Follow recommendations from ACI-305 for hot weather concreting and ACI-306 for cold weather concreting.

#### WATER REQUIREMENT

Desired Thickness	Feather Patch	Mixing Water
1/4 in 1/2 in. (6-13 mm)	20 lb. (9.1 kg)	1.6 qt. (1.5 L)
Feather to 1/4 in. (0-6 mm)	20 lb. (9.1 kg)	1.7 qt. (1.6 L)
Feather to 1/8 in. (0-3 mm)	20 lb. (9.1 kg)	1.7 qt. (1.6 L)

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

## **MIXED YIELD**

Wixed Pail   25.5 lbs. (10.7 kg)   0.16 lt. (5.1 L)	Mixed Pail 2	23.5 lbs. (10.7 kg)	0.18 ft.3 (5.1 L)
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Approx. 8.6 ft.2 (0.8 m2) at an average thickness of 1/4 inch (06 mm).

#### **TECHNICAL DATA**

Test Method	Parameter	Test Results
	Compressive Strength	Temp. 70° F (21°C)
ASTM	10 Minutes	800 psi (5.5MPa)
C109	7 Days	4,000 psi (27.5MPa)
	28 Days	6,500 psi (44.8MPa)
ASTM	Slant Shear Bond Strength	
C882	7 Days	1,200 psi (8.3MPa)

#### **PACKAGING**

Packaged in 20 lb (19.1kg) resealable, plastic bags.

#### SHELF LIFE

Shelf life is one year. Use before the "USE BY" date stated on product packaging.

#### HANDLING/STORAGE

Read Material Safety Data Sheet (MSDS) prior to using. Contains portland 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 maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, call 800-669-2738 or 402-341-2080.

#### LIMITED WARRANTY

#### NOTICE-READ CAREFULLY

#### CONDITIONS OF SALE

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