

# **Vinyl Concrete Patch**

#### **1. PRODUCT NAME**

ProSpec® Vinyl Concrete Patch

#### **2. MANUFACTURER**

Bonsal American 8201 Arrowridge Blvd. Charlotte, NC 28273-5678 USA

Tech Services:	1.800.334.0784
Fax:	1.704.529.5261
Internet:	www.prospec.com

## **3. PRODUCT DESCRIPTION**

ProSpec Vinyl Concrete Patch is a fast-setting, one-component, polymer-modified, calcium aluminate cement-based, horizontal concrete patching compound.

#### **Features and Benefits**

- Designed for horizontal applications
- Can be applied from 1/16" (2 mm) 2" (51 mm) in one lift
- Ready for pedestrian traffic in 8-12 hours
- Ready for vehicle traffic in 48 hours
- Excellent abrasion resistance
- Excellent resistance to deicing salts
- · Shrinkage compensating
- Exceeds ASTM C 928 for High Strength Mortar

## Uses

**Repair of:** 

- Balcony/decks
- · Overlayment and underlayment applications
- Industrial floors
- Driveways
- Tunnels
- Loading docks
- Concrete pipes
- Concrete beams and columns
- · Resetting/pointing of brick, block or stone
- Walkways
- Curbs
- Ramps
- Concrete roof tile

## Safety

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website www. prospec.com or contact CHEMTREC (24 hours availability) 800-424-9300 for International inquiries +011-703-527-3887, or contact Bonsal American Technical Services at 800-334-0784 (8:00 AM to 5:00 PM Eastern US Time).

## 4. TECHNICAL DATA

Set Time ASTM C 191	
Final set	60 - 70 minutes
Compressive Strength ASTM C 109	
24 hours air cured	>2,400 psi (16.5 MPa)
7 days	>5,000 psi (34.5 MPa)
28 days	>5,500 psi (37.9 MPa)
Flexural Strength ASTM C 78	
7 days	>1,400 psi (9.7 MPa)
28 days	>1,850 psi (12.8 MPa)
Tensile Strength ASTM C 190	
7 days	>500 psi (3.4 MPa)
28 days	>600 psi (4.1 MPa)
Shear Bond Strength ASTM C 882	
28 days	>1,800 psi (12.2 MPa)
Length Change Percent ASTM C 157	
Air cured	-0.003%
Splitting Tensile ASTM C 496	
28 days	>450 psi (3.1 MPa)
Resistance to Deicing Salts ASTM C 672	
25 cycles	0 visual rating
Modulus of Elasticity ASTM C 469	2.46 x 10 <sup>6</sup>
Abrasion Resistance ASTM C 944	
28 days	2.3 g loss

Test results obtained under controlled laboratory conditions. Tested using 3 qts (2.8 L) of water. Reasonable variations can occur due to atmospheric and job site conditions.

## LEED Eligibility<sup>1</sup>

• Regional Materials (MR-c5)

## Packaging

Gray: 40 lb (18.1 kg) bag - Product #60200770

## Shelf Life

12 months from the date of manufacture when stored in the original, unopened container, away from moisture, under cool, dry conditions and out of direct sunlight.

#### 5. INSTALLATION Preparation

All materials should be stored at 40°F (4°C) to 80°F (27°C) 24 hours prior to installation.

- 1. Clean area and remove all unsound concrete, grease, oil, paint and any other foreign materials that will inhibit performance.
- 2. Slick or sealed surfaces must be thoroughly roughened to CSP 3-5. Completely expose and clean all reinforced steel, ensuring a minimum clearance of 3/4" (19 mm) behind reinforcing steel.
- 3. Perform reinforcing steel preparation in accordance with International Concrete Repair Institute Technical Guideline No. 03730.
- 4. Surface should be brought to a saturated surface dry (SSD) condition with clean potable water.
- 5. For difficult to bond substrates or 1/16" repair applications, mix with ProSpec B-730 Mortar / Acrylic Additive.

#### **Refer to:**

- ASTM D 4259 Abrading Concrete
- ICRI Guideline 03730 <u>Surface Preparation Guidelines for</u> <u>Repair of Deteriorated Concrete Resulting from Reinforcing</u> <u>Steel Oxidation</u>
- ICRI Guideline 03731 <u>Selecting Application Methods for the</u> <u>Repair of Concrete Surfaces</u>
- ICRI Guideline 03732 <u>Selecting and Specifying Concrete</u> <u>Surface Preparation for Sealers, Coatings and Polymer</u> <u>Overlays</u>
- ACI 201.1R <u>Guide for Making a Condition Survey of Concrete</u> in Service

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

## Job Mockups

Bonsal American, Inc. requires that when its ProSpec products are used in any application or as part of any system that includes other manufacturers' products, the contractor and/or design professional shall test all the system components collectively for compatibility, performance and long-term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the tests performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project-specific conditions being addressed, and standardized tests performed for each proposed system or variation.

#### Mixing

- 1. Add dry material to 3 4 qts (2.8 3.7 L) of clean potable water per 40 lb (18.1 kg) bag.
- 2. For enhanced performance substitute 1 qt (0.9 L) of B-730 Mortar / Acrylic Additive for 1 qt (0.9 L) of water per 40 lb (18.1 kg) bag.
- 3. Mix mechanically with a high torque electric drill not to exceed 600 rpm with a paddle type mixing blade or an appropriately sized mortar mixer.
- 4. Mix for a maximum of 3 minutes to ensure a homogenous consistency. Addition of cold water at high temperatures or warm water at low temperatures will aid in adjusting the mix temperature.
- 5. For broom applications: Mix 3 qts of B-730 Mortar / Acrylic Additive with 3 qts of clean potable water and gradually add the 40 lb (18.1 kg) bag of ProSpec Vinyl Concrete Patch.

## Application

Apply when air and substrate temperature is between 40°F (4°C) and 100°F (38°C). For applications outside this range of temperatures, contact ProSpec Technical Services.

- 1. Mix only the amount of material that can be placed in 20 minutes.
- 2. For placements greater than 2" (50 mm) in depth, preblend 16 lbs (7.3 kg) of washed SSD of 3/8" (9.5 mm) graded aggregate per 40 lb (18.1 kg) bag or place in lifts to a maximum of 2" (50 mm) in depth.
- 3. To obtain a non-skid surface use a damp sponge, rubber float or a damp broom.
- 4. For brush or broom coat resurfacing, dampen the broom and spread the material to an even thickness.
- 5. If other materials are to be installed over the substrate, consult that manufacturer for recommendations.
- 6. Do not apply on substrates that are frozen or contain frost.
- 7. Do not bridge over existing expansion or control joints.

Note: For vertical applications use ProSpec BlendCrete.

#### Curing

- Do not wet the surface before the material has reached final set.
- Maintain a minimum of 40°F (4°C) for 48 hours after application.
- Product should be air cured unless hot and/or drying winds or low humidity are present. Under such conditions, lightly fog spray.

## Cleaning

Use water to clean all tools immediately after use.

#### **Coverage**

1 lb (0.45 kg) covers approximately 1 ft<sup>2</sup> (0.09 m<sup>2</sup>) @ 1/8" (3.17 mm). 40 lbs (18.1 kg) yields 0.36 ft<sup>3</sup> (0.01 m<sup>3</sup>).



## Limitations

- Do not retemper.
- Do not over trowel.
- Do not apply over substrates that are frozen or contain frost.
- Do not add any materials other than clean potable water or recommended additive.
- Do not apply over non-structural light weight concrete.
- Do not apply over concrete cured less than 7 days.

## **6. TECHNICAL SERVICES**

<u>Technical assistance:</u> Information is available by calling ProSpec Technical Services Hotline (Hours - 8:00 AM to 5:00 PM EST):

Toll Free: 1.800.334.0784 Fax: 1.704.945.0309

Technical and safety literature:

To acquire technical and safety literature, please visit our website at **www.prospec.com**.

<sup>1</sup> ProSpec products can contribute to LEED credits within the Material Resource, (Recycled Content & Regional Materials) and Indoor Environmental Quality (Low Emitting Materials).





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