

TROWEL GRADE UNDERLAYMENT

Description

ProSpec® Trowel Grade Underlayment is a sanded polymer modified cement based floor underlayment for interior floor repair applications.

Features

- Fast setting
- Bonds to concrete and wood
- Leveling and smoothing floors
- Apply ceramic tile within 3-4 hours and moisture sensitive floor coverings in 16-24 hours
- Apply 1/8" to 2" (51 mm)
- Excellent surface hardness
- High tensile strength and compressive strength
- Superior workability

Uses

Over

- Concrete
- Cementitious backerboard
- Exterior grade plywood**

Under

- Asphalt tile
- Vinyl flooring
- Carpet
- Wood flooring

** Requires priming with Level Set Primer Plus

Technical Data

	Water		Water
Set Time ASTM C 266		Flexural Strength C 78	
Initial set	20-25 min	7 days	>1500 psi (10 MPa)
Final set	25-30 min	28 days	>1600 psi (11 MPa)
Compressive Strength ASTM C 109		Shear Bond Strength ASTM C 882	
4 hours	>1600 psi (11 MPa)	28 days	>860 psi (6 MPa)
24 hours	>2000 psi (14 MPa)		
7 days	>3600 psi (25 MPa)		
28 days	>5000 psi (34 MPa)		

NOTE: Test results obtained under controlled laboratory conditions at 72° F (4° C) and 50% relative humidity. Reasonable variations can occur due to atmospheric and job site conditions.

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Preparation

- Clean area and remove all unsound concrete, grease, oil, paint and any other foreign materials that will inhibit performance.

Over Concrete

- Slick or sealed surfaces must be thoroughly roughened to an ICRI CSP 2-5 profile.
- New concrete slabs must be properly cured before installation may be attempted.
- Depending on atmospheric conditions and water content, slabs may require up to six weeks curing time.
- Only when acceptable moisture levels and effective restrictions on moisture transmission are in place may floor coverings be installed.
- Concrete floors on or below grade must have an effective vapor barrier under the slab. Testing may be required to determine if adequate moisture barriers are present.
- Prime with Level Set Primer

- For porous or highly porous substrates 2 coats of ProSpec Level Set Primer may be necessary. The dilution rate may vary from 1:1 to 1:3 (primer to water).
- For non-porous substrates, use Level Set Primer Plus.

Suspended Wood Floors

- The floor must be structurally sound. Remove materials that prevent bond. Where the sub-floor boards are more than 4" (102 mm) wide, cover with sheet underlayment per project requirements or in accord with Tile Council of America recommendations for Installation of Interior Wood Subflooring and applicable sections of ANSI AN-3 Floors of Plywood. Allowable deflection is L/360 maximum.
- Prime with Level Set Primer Plus

Refer to

- ASTM D 4259 [Abrading Concrete](#)
- ICRI Guideline No. 03732 [Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings and Polymer Overlays](#)
- ACI 201.1R [Guide for Making a Condition Survey of Concrete in Service](#)

Mixing

1. Add dry material to clean potable water per 25 lb. (11.3 kg) bag as recommended below.

Thick applications: 3.5 qts. to 4 qts. (3.3 L to 3.8 L)

2. Mix mechanically with a low speed electric drill not to exceed 350 r.p.m. to achieve a homogenous blend.

3. Re-temper as pot life nears the set time without additional water.

NOTE: For small repairs, mix the dry compound with water to a soft putty-like consistency.

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Placement

1. Place the mixed material at desired thickness up to 2" (51 mm).
2. For repairs greater than 2" (51 mm) thick, use ProSpec Acrylic Additive or apply in multiple lifts.

NOTE: When vinyl, wood or other types of floor coverings are to be installed over ProSpec Trowel Grade Underlayment, the requirements of the floor covering manufacture are to be followed with respect to but not limited to levels of moisture.

Refer to

- RFCI (Resilient Floor Covering Institute publication MRP - Nov 95) [Addressing Moisture Related Problems Relevant to Resilient Floor Coverings Installed Over Concrete](#)
- NOFMA (National Oak Flooring Institute) publication [Installing Hardwood Flooring, Re. March 98/10](#)

Curing

Air cure for a minimum of 2 hours depending on thickness of application. Consult the floor covering manufacturer for substrate moisture content requirements.

Color

Gray

Yield

25 sq. ft. (2.3 m²) at 1/8" (3 mm) thickness per 25 lb. (11.3 kg) bag

Packaging

25 lbs. (11.3 kg) bag

Shelf Life

One year from the date of manufacture.

Best Performance

- Apply when air or substrate temperature is between 40° F (4° C) and 100° F (38° C) within 24 hours of application. For applications outside this range of temperatures, contact ProSpec Technical Service.
- Colder temperatures or higher humidity conditions will retard set times
- Use only clean mixing container and tools.
- Do not over trowel.
- For use only in interior applications.
- Do not add any materials other than clean potable water or ProSpec Acrylic Additive.
- Do not apply over concrete cured less than 7 days.
- Do not use over concrete slabs where hydrostatic pressure exists. Do not apply over substrates containing a moisture level above 80% Relative Humidity (RH)

NOTE: Proper application and installation of all ProSpec products are the responsibility of the end user.



TROWEL GRADE UNDERLAYMENT

Caution

KEEP OUT OF REACH OF CHILDREN AND ANIMALS. Product is alkaline and may burn or irritate upon contact with eyes or skin. Do not take internally. Use of safety goggles, rubber gloves and dust respirator is recommended. Avoid prolonged

contact with clothing. This product contains crystalline silica. Take measures to contain and reduce dust. Prolonged exposure to crystalline silica may cause silicosis or other serious delayed lung injury.

Avoid breathing dust. For prolonged exposure wear a respirator approved for protection against crystalline silica dust. Crystalline silica has been classified by IARC and NTP as a carcinogen.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes and SEEK IMMEDIATE MEDICAL ATTENTION. For skin contact, wash thoroughly with soap and water. If swallowed,

SEEK IMMEDIATE MEDICAL ATTENTION. For additional information, call Bonsal American at 704-525-1621 or CHEMTREC at 800-424-9300 or 703-527-3887 outside of the USA.

Refer to Material Safety Data Sheet (MSDS) for further information.

LIMITED 1 YEAR WARRANTY FROM DATE OF MANUFACTURE: Bonsal American warrants that this product and the materials used therein meet or exceed the applicable standards listed and enforced at the time of manufacture. Bonsal American will replace any product or part which proves defective due to quality of ingredients used or due to the manufacturing process itself. This Warranty shall apply only if the product is used in strict accordance with applicable specifications and instructions provided by Bonsal American for its use, and Bonsal American shall not be liable otherwise. Replacement of any defective product, or, at Bonsal American's option, refund of the purchase of any defective product shall be the buyer's sole remedy under this Warranty, and Bonsal American shall in no event be liable for any damages in excess of the purchase price of the defective product. BONSAL AMERICAN SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES INCLUDING LOSS OF PROFITS OF ANY KIND. Product demonstrations are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. This Warranty constitutes the sole warranty given by Bonsal American in connection with this product. No modification of this Warranty in favor of any buyer shall be valid unless given in writing and signed by an officer of Bonsal American. Bonsal American has authorized no person to make or give any other warranties or representation, oral or written on its behalf. IN PARTICULAR, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT EXCEPTION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.