

1. PRODUCT NAME

ProSpec® Slab Dowel Grout

2. MANUFACTURER

H.B. Fuller Construction Products Inc.
1105 South Frontenac Street
Aurora, IL 60504-6451 U.S.A.

1-800-552-6225 Office
1-800-952-2368 Fax
prospec.com

3. PRODUCT DESCRIPTION

ProSpec® Slab Dowel Grout is a non-shrink, high compressive strength, non-metallic grout used for placing prefabricated concrete pavements and typical structural grouting applications.

Features and Benefits

- High early compressive strength at 73°F (23°C) and 45°F (7°C)
- High fluid – can be pumped through 1 1/4" (32 mm) grout hole ports
- Excellent bond
- Non-shrink
- Non-metallic
- Cement-based, non-corrosive – not a chemical concrete
- Resists freeze/thaw damage
- Special mix design formulated to meet the requirements of the Fort Miller Co. Inc. Super Slab System®
- Meets ASTM C 928, Standard Specification for Packaged, Dry, Very Rapid Hardening Cementitious Materials for Concrete Repair
- Conforms to ASTM C 827

Uses

- Specifically designed to complement precast concrete slab placement
- Fill inverted dovetail slots in precast slabs

For grouting:

- Column bases
- Equipment bases
- Compressors and generators
- Steel bearing plates
- Rebar
- Crane rails
- Anchor bolts
- Tilt-up panels
- Pumps
- Structural columns
- Sole plates
- Bug hole repair

SAFETY

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT.

SDS Sheets are available on our website prospec.com or contact Medical Emergency Phone Number (24 Hours): 1-888-853-1758, Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300 or contact ProSpec® Technical Services at 800-832-9023.

CAUTIONS

Read complete cautionary information printed on product container prior to use. For medical emergency information, call 1-888-853-1758.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered ProSpec® brand product(s) under normal environmental and working conditions. Because each project is different, H.B. Fuller Construction Products Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

Working Time @ 70°F (21°C)	30 minutes, Pumpable for 20 minutes	
Flow - (5 drops) ASTM C 1437	132%	>145%
Set Time (vicat) - ASTM C 191	45°F	73°F
Initial Set	Approx. 40 min	Approx. 35 min
Final Set	Approx. 50 min	Approx. 45 min
Compressive Strength - ASTM C 109 (Moist Cured)	45°F	73°F
2 hours	2,000 psi (13.8 MPa)	2,500 psi (17.2 MPa)
3 hours	3,000 psi (20.7 MPa)	4,000 psi (27.6 MPa)
1 day	4,500 psi (31.0 MPa)	5,200 psi (35.9 MPa)
7 days	6,000 psi (41.4 MPa)	6,200 psi (42.8 MPa)
28 days	7,000 psi (48.3 MPa)	7,600 psi (52.4 MPa)
Linear Shrinkage- ASTM C 928 (28 day)		
Water Storage	0.04%	
Air Storage	-0.01%	
Differential	0.05%	
Bonding Strength (Caltrans Test 551-part 5)	>500 psi (3.5MPa) @ 1 day >600 psi (4.1MPa) @ 28 days	
Flexural Strength (Caltrans Test 551-part 4)	>1200 psi (8.3MPa) @ 28 days	

Freeze/Thaw - (7d/72°F/50%RH) NYDOT 701-13F/502-3P	10% NaCl Solution
Loss after 25 cycles	No loss (weight gain +1.43%), Condition of specimens: no visible degradation
Loss after 50 cycles	No loss (weight gain +2.38%); Condition of specimens: slight popping, <5%
Freeze-Thaw Resistance ASTM C 666 Procedure A	Durability factor @ 300 cycles 96.7
Abrasion Loss (Caltrans Test 550)	21 grams

Greater than: > Greater than or equal to: ≥ Less than: < Less than or equal to: ≤

Note: Test results obtained under controlled laboratory conditions at 73°F (22.7°C) and 50% relative humidity unless otherwise specified. Tested using 4 qt (3.8 L) water per 50 lb (22.7 kg) powder. Reasonable variations can be expected due to atmospheric and job site conditions

LEED® Eligibility¹

- Regional Materials (MR-c5)

Product Enhancement



Expansion Stabilization Technology (EST™) – special additive designed to reduce the potential for cracking and shrinkage.

Packaging

Gray: 50 lb (22.7 kg) bag - Product #7160434858

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.

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

Job Mockups

The manufacturer 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

- Ideal mixed product temperature at placement is 65°F - 70°F (18°C - 21°C), where the initial setting time is approximately 35 minutes. Hot temperatures will shorten setting time, while cold temperatures will extend setting time.

Hot Weather:

- Keep bagged Slab Dowel Grout cool. Mix Slab Dowel Grout using ice water to extend working time.

Cold Weather:

- Do not use antifreeze or accelerators and keep Slab Dowel Grout warm. Combine the warmed repair material with 90°F (32°C) mixing water.

Mixing (cont.)

1. Mix as close to the area being repaired as possible. Slab Dowel Grout requires only the addition of potable water.
2. Use 4 qt (3.8 L) of clean potable water per 50 lb (22.7 kg). Place the potable water into the mixing container and then while mixing add the grout.
3. Slab Dowel Grout can be mixed in a mortar mixer or by using a paddle attached to a heavy duty 1/2" drill (650 rpm).
4. Mix for 2 - 3 minutes to a lump-free consistency.
5. Do not retemper or overwater.
6. Ideal ambient, surface and material temperatures are in the range of 40°F - 100°F (4°C - 38°C) for mixing and placing.

For application deeper than 2 in. (5 cm), the Slab Dowel Grout should be extended 60% by weight with pea gravel with an approximate size of 3/8 in (9.5 mm) which is clean, SSD, and conforms to the requirements of ASTM C 33.

Application

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

- Slab Dowel Grout completes the structural connection between adjacent precast concrete slab on grade systems. It is a special pumpable rapid strength mix designed for filling and connecting dowels and must completely fill the inverted dovetail slots and do the job that cast in place concrete normally does. It must reach strength quickly and perform as well as cast-in-place concrete. Slab Dowel Grout minimizes down time and ensures durability.
- Place immediately after mixing, working the grout firmly into the sides and bottom of the cavity eliminating air pockets and insuring bond and coverage. Slab Dowel Grout can also be placed by pumping. Because of the early strength gain, the grout must be pumped rapidly to avoid having the grout set-up in the pump or hose. It is important to pre-test insuring that the technique and equipment is suitable for the task.
- Install the Slab Dowel Grout by placing the hose nozzle in the back port of each slab until grout extrudes from the port near the joint. Continue pumping until the grout fills the joint. After several slots have been filled, monitor the grout level in previously grouted ports and add material as required.

CAUTION Do not drive on any freshly grouted slab with any construction equipment or vehicle until the specified grout strength of 2,500 psi (17.2 MPa) has been reached. To do so may compromise future efficiency of load transfer between slabs. For Super Slab Systems® installations, follow installation instructions as outlined by the Fort Miller Co. Inc. Super Slab System® pertaining to precast concrete placement slab installation (518.695.5000).

Cleaning

Use water to clean all tools immediately after use.

Limitations

- Do not retemper after mixing.
- Do not overwater or add other cements or additives.

Coverage

50 lb (22.7 kg) yields approximately 0.45 ft³ (0.012 m³).

50 lb (22.7 kg) extended with 30 lb (14 kg) of 3/8" (9.5 mm) pea gravel yields approximately 0.65 ft³ (0.018 m³).

6. AVAILABILITY

To locate ProSpec® products in your area, please contact:

Phone: 800-832-9002

Website: prospec.com

7. WARRANTY

For warranty details, see your sales associate or prospec.com

8. MAINTENANCE

Not applicable

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the Technical Support Hotline.

Toll Free: 800-832-9023

Fax: 630-952-1235

Technical and safety literature

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

10. FILING SYSTEM

Division 3

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

©Copyright 2014
H.B. Fuller Construction Products Inc.

ProSpec® and EST™ are trademarks of
H.B. Fuller Construction Products Inc.

LEED® is a registered trademark of
U.S. Green Building Council.

Data Sheets are subject to change
without notice. For the latest revision,
check our website at prospec.com



H.B. Fuller Construction Products Inc.
1105 South Frontenac Street
Aurora, IL 60504-6451 U.S.A.
prospec.com