

**PRODUCT DATA**

**1. PRODUCT NAME**

Dramatic Surface Products™  
DSPTM 520 Premium Self-Leveling Underlayment

**2. MANUFACTURER**

H.B. Fuller Construction Products Inc.  
1105 South Frontenac Street  
Aurora, IL 60504-6451 U.S.A.  
800.323.7407 Office  
800.952.2368 Fax  
www.DramaticSurfaceProducts.com

**3. DESCRIPTION**

DSP 520 is a premium pumpable/pourable cement based, self-leveling underlayment designed for use over a wide variety of substrates. The resulting smooth finished surface is ideal for the installation of all types of floor covering, including carpet, ceramic or natural stone tile, resilient, laminate flooring and wood flooring (for interior dry area use only).

Note: All surfaces must be primed with Dramatic Surface Products DSP 500 Primer before installing DSP 520 Premium Self-Leveling Underlayment.

**Product Features**

- Calcium aluminate technology for rapid strength development
- Superior flow properties
- Use directly over green concrete (<95% RH)
- Featheredge up to 1-1/2" depth in a single pour, or up to 5" with proper aggregate
- Cures to a smooth, consistent finish
- Walkable in 2-4 hours, install flooring in 12-16 hours
- Contributes to LEED® project points
- 5-year limited warranty

**Packaging**

50 lb. Moisture Resistant Bag (22.67 kg)  
Product # 70-5007-3111  
2200 lb. Super Sack - Available upon request\*

\*Contact your DSP representative for further information.

**Coverage**

Coverage shown is approximate.  
Actual coverage may vary based on substrate conditions.

Thickness	1/8" (3mm)	1/4" (6 mm)	1/2" (12 mm)	1" (24 mm)
Approximate Coverage per 50 lb. (22.67kg) Bag	44-50 ft² (4.1 - 4.6 m²)	22-27 ft² (2.0 - 2.5 m²)	11-13 ft² (1.0 - 1.2 m²)	5-6 ft² (0.5 - 0.6 m²)

**Suitable Substrates**

- Concrete
- Ceramic or quarry tile
- Cement terrazzo
- Cement backer board
- Epoxy terrazzo
- VCT or full glued down, non-cushioned vinyl sheet goods
- Exterior grade plywood (with reinforcement mesh)
- Oriented Strand Board (OSB) (with reinforcement mesh)
- Gypsum substrates - minimum tensile bond strength 72 psi (0.5 MPa)

**Storage/Shelf Life**

Store in a cool dry area away from direct sunlight. Maximum shelf life is 6 months from date of manufacture in unopened package.

**Limitations**

For interior use only. Do not apply when the temperature is below 50°F (10°C). Not for use in conditions of hydrostatic pressure or excessive moisture. Do not use as a wear surface.

**Cautions**

Read complete cautionary information printed on product container prior to use. For medical emergency call 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 guidelines for the proper use and application of the covered Dramatic Surface Products 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**

Performance	Test Standard	Typical Results
28 Day Compressive Strength	ASTM C-109	5,000 psi
28 Day Flexural Strength	ASTM C-580	1,100 psi
Bond Strength (Concrete)	ASTM D-3931	350-400 psi
28 Day Shrinkage	ASTM C-531 (Modified)	0.025 - 0.045%
Walkable Hardness	N/A	2-4 hours
Working Time	N/A	15-20 minutes
Flooring Installation*	N/A	12-16 hours
Ideal Slump Range**	N/A	11.5"-12.5"

\*Flooring material installation within 12-16 hours after application is dependent on thickness, drying conditions, and type of flooring.

\*\*Ideal slump range is based on 2" diameter plastic/metal pipe by 4" high.

# DSP™ 520

## Premium Self-Leveling Underlayment

### PRODUCT DATA

#### 5. INSTALLATION INSTRUCTIONS

##### Preparation of Surfaces

It is required that all surfaces be structurally sound and free from any contaminants that may inhibit bond, including oil, grease, dust, loose or peeling paint, sealers, gypsum compounds, floor finishes, or curing compounds, etc. Minimum tensile bond strength of 72 psi (0.5 MPa) is required. Substrate temperature should be a minimum of 43°F (6°C) during application and air temperature maintained above 50°F (10°C). DO NOT cover existing building expansion or control joints. Provide control joints where specified. Create 1/8" to 1/4" (3-6 mm) wide gap where DSP 520 abuts walls, columns, and fixtures by installing a self-sticking foam weather stripping tape or damp sand (vacuum up sand after self-leveling underlayment has cured). **Surfaces must be primed with DSP 500 Primer prior to installation of DSP 520.** See Primer label for application instructions.

DSP 520 can be installed over green concrete with RH of 95% or less. For moisture sensitive floor coverings refer to the finished floor manufacturer's specifications on moisture limitations. Remediation of excessive moisture conditions must be addressed prior to the installation DSP 520. To reduce moisture vapor emissions to an acceptable level, use DSP 508 Moisture Mitigator (see product data sheet for details). **For installation over cutback adhesive, remove adhesive by scraping until all that remains is a thin transparent layer of adhesive residue.**

Wood sub-flooring must be securely fastened with screw type or ring shank nails and adhesive. Installations of exterior grade plywood or OSB (APA Rated Sturd-Floor OSB, Exposure 1 or better) require 3/4" (19 mm) single layer minimum thickness on bridged floor joists up to 24" (60 cm) on center, with a maximum deflection of L/360 of the span. Allow a gap of 1/8" to 1/4" (3-6 mm) between sheets of plywood or OSB. Long edges of sub-floor must be tongue and groove or supported by bridging between floor joists. Plug all floor openings, gaps and cracks and install termination dams to prevent any seepage. Prime the floor. Allow primer to dry to a clear film. Next, staple 1/4" (6 mm) galvanized diamond metal or plastic lath to the floor overlapping at seams. Then install DSP 520 based upon the following joist spacing in the table below:

Joist Spacing (O.C.)	Minimum SLU Thickness
16" or less	3/8"
20" or less	1/2"
24" or less	5/8"

##### Instructions for Mixing

Slowly add in the entire bag of DSP 520 to 4.75 - 5.25 quarts (4.5 - 5 L) of clean, cool water and mix with a high power drill (650 RPM). Avoid breathing dust and contact with eyes and skin. Mix thoroughly for two (2) to three (3) minutes. Scrape container's sides and remix to ensure a smooth, lump-free consistency. DSP 520 can also be used in most pump equipment, please

consult your Dramatic Surface Products representative to verify equipment compatibility. A slump test should always be performed to ensure that the mix is homogenized and free from separation.

##### How to Apply

Immediately after mixing, pour DSP 520 onto the primed flooring substrate. Spread into place with a long-handled, gauged spreader or smoother covering all high spots on the floor. Working time is approximately 15-20 minutes, depending on ambient temperature and relative humidity of air. High temperatures and low humidity will shorten working time. DSP 520 can be applied from a featheredge up to 1-1/2" (38 mm) depth in a single application. Up to 5" thickness may be poured with the addition of aggregate (well-graded, washed, dry pea gravel 1/8" or larger). To ensure proper bond, all aggregate and substrate must be completely coated with the underlayment mixture. Do not use sand. For further information, please contact your Dramatic Surface Products representative.

##### The Curing Process

DSP 520 dries to walkable hardness in 2 to 4 hours. Most floor coverings can be installed in 12 to 16 hours. DSP 520 is cement-based, and all general rules of concrete work should be observed to achieve maximum results. In hot, dry or drafty conditions protect the installation to avoid fast water loss while curing. Never use forced air to accelerate the drying of DSP self-leveling cement. For best results, always test performance of finished floor systems prior to installation.

##### To Clean

While material is still fresh, wash tools, hands and equipment with warm soapy water.

#### 6. AVAILABILITY AND COST

To locate a distributor in your area, please contact 800-621-0220.

#### 7. WARRANTY

H.B. Fuller Construction Products Inc. (HBF-CP) offers a 5-year limited warranty on this product when installed in accordance with HBF-CP's printed specifications. Ask your sales associate or call 800-621-0220 for a copy of the limited warranty.

#### 8. MAINTENANCE

Not applicable.

#### 9. TECHNICAL SERVICES

Technical Assistance:  
Information is available by calling 800-621-0220.

Technical and Safety Literature:  
To acquire technical and safety literature, please call 800-621-0220.

#### 10. FILING SYSTEM

Division 3 - Concrete  
Division 9 - Finishes

