



# SLABSEAL® 200

## TECHNICAL DATA SHEET

Waterborne Polyurethane Clear, Clear Satin and Opaque Matte Finish

PRODUCT ID: SS-1010B, SS-1011A, SS-1021A, SS-1031A



### PRODUCT DESCRIPTION

**SLABSEAL® 200** is a two-component, low odor, abrasion and chemical resistant, UV stable, waterborne aliphatic polyurethane finish coat. It is available in clear gloss, satin, and matte and it can be factory pigmented. It cures to an inert, tough, impact, abrasion and chemical resistant finish coat. *Excellent adhesion direct to concrete, cementitious mortars and epoxies.* It is used as an upgraded finish coat on Desert Polymer Flooring products and systems used in aircraft hangars, industrial kitchens, showrooms, shop floors, commercial laboratories, research facilities, medical facilities, food processing facilities, and other commercial environments subject to heavy foot traffic, forklift traffic, and chemical attack. It is VOC Compliant in all states and provinces in North America.

### TYPICAL USES

- Aircraft Hangar and Maintenance Floors
- Automotive Show Room and Repair Floors
- Commercial Food Preparation and Kitchen Floors
- Hospital and Health Care Facility Floors
- Laboratory and Research Floors
- Manufacturing and Warehouse Floors
- Pharmaceutical Floors
- Schools and Universities
- Anywhere Decorative Cementitious and Polymer Overlays are used

### BENEFITS

- Can be applied direct to concrete.
- Complies with USDA, FDA, Food Safety Modernization Act, Slip Resistance (ADA), LEED® and Green Seal® requirements.
- VOC and EPA Compliant all states and provinces in North America. Cures to an inert finish.
- UV Stable
- Excellent Chemical and Abrasion Resistance
- Designed for new floors and for resurfacing old floors

### LIMITATIONS

- This product is best suited for applications when the temperature is between 60°F to 90°F (16°C to 32°C). Do not apply when Relative Humidity exceeds 85%.
- To get a satin or matte finish coat, SLABSEAL™ 200 Clear Gloss must be applied to the surface first as a primer.
- Higher temperatures will result in shortened working time and drying time.

### FINISHES

- Available as a Clear Gloss, Clear Satin or Matte sealer.

### COVERAGE RATE PER GALLON

- Clear Gloss and Pigmented Finish Coat: 300 to 350 sq. ft. (27.9 to 32.5 sq. m) WFT 4.6 to 5.3 mils (0.12 to 0.13 mm)
- Satin and Matte Finish Coat: 400 to 450 sq. ft. (37.2 to 41.8 sq. m) WFT 4 to 3.6 mils (0.10 to 0.9 mm)

### CONCRETE

Concrete must be structurally sound and free of curing agents, coatings, sealers, densifiers and other bond breakers.

### New Concrete:

- Place concrete per ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Floor Materials.
- Water Cement Ratio 0.4 to 0.5, and an approximate 4,000 psi (28 MPa) strength level.
- Requiring a positive side moisture barrier in direct contact with the concrete meeting ASTM E1745 Standard Specification for Plastic Water Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- The moisture barrier needs to be placed per ASTM E1643 Standard Practice for Selection, Design, Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs, Class A 15 mils (0.38mm)

## Existing Concrete:

If field tests or laboratory analysis reveals inferior concrete flooring slabs containing contaminants from previously applied unreacted silicate materials that will interfere with the bond, use SLABLOC® 50.

- Contaminants include, but are not limited to: organic hydrocarbon materials, calcium chlorides and aluminum stearates.
- Concrete flooring slab can lose their structural strength over time, caused by conditions beyond the control of the flooring manufacturer or the installation contractor.
- If the concrete substrate deteriorates sufficiently, it will no longer support the bond of the remediation floor system.

Such conditions are detailed in ACI 201.2R "Guide to Durable Concrete" published by the American Concrete Institute.

### PHYSICAL PROPERTIES @ 77°F (25°C) 7 DAY CURE (UNLESS OTHERWISE STATED)

VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM D3960)	<100 gr./lt.
Viscosity, Mixed	400 cps
Solids Content, by Volume (Clear Gloss and Clear Satin)	51.0%
Mix Density, Mixed	9.2 lb./gal
Pot Life, 1 gallon (3.79 liters) Mass, Pot Life is Reduced by Increases in Mass & Temperature	45 Minutes
Mix Ratio, by Volume	2:1
Minimum Application Surface Temperature	50°F
Dry to Touch 50°F to 90°F (10°C to 32°F)	5 to 10 Hours
Recoat Time 50°F to 90°F (10°C to 32°F)	10 to 16 Hours
Light Traffic 50°F to 90°F (10°C to 32°F)	24 Hour Minimum
Full Cure 50°F to 90°F (10°C to 32°F)	7 to 14 Days
Shelf Life (shipped and stored) at 40°F to 100°F (4.4°C to 38°C)	1 Years
Packaging 1.5-gal, 15 gal. (5.7 lt, 56.8 lt.)	

### MECHANICAL PROPERTIES @ 77°F (25°C)

Surface Preparation ICRI Guideline No. 310.2R - Concrete Surface Profile (CSP 2 and above) Depending on System to be Installed and Condition of Concrete.	
Gloss Index, 60 Degrees Clear Gloss, ASTM D523	90 - 95
Gloss Index, 60 Degrees Clear Stain, ASTM D523	40 - 60
Gloss Index, 60 Degrees Pigmented, ASTM D523	80 - 90
Adhesion, ASTM D7234, Concrete Failure	>400 psi
Pencil Hardness, ASTM D3363	2H
Abrasion Resistance, ASTM D4060 500 cycles, Wheel No. CS17, 1000 gr. Load	0.02 gr.
Flexibility, Bend Mandrel Coating Test, ASTM D522	Pass 1/8 Inch
Microbial (fungi) Resistance, ASTM G21 (Without the Anti-Microbial Agent)	Pass #1
Wet Dynamic Coefficient of Friction, ASNI 326.3 Depends on texture of system selected, ranging from smooth or aggressive. Measured with BOT 3000E equipment.	>0.45 (inclines) >0.42 (level)
Moisture Vapor Emission Rate, ASTM F1869*	3 lbs.
Moisture Relative Humidity, ASTM F2170*	80% RH
*If moisture or relative humidity exceeds the limits consult a Desert Polymer Flooring representative.	

Note: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is not a positive side vapor barrier or it is not functioning properly and/or concrete has contamination from oils, chemical spills, densifiers, excessive salts or other bond breakers.

### CHECK CONCRETE MOISTURE

Concrete must be dry before application of this floor coating material. Concrete moisture tests are required, either ASTM

F1869 (calcium chloride) or ASTM F2170 (in situ RH probe). Refer to appropriate Technical Data Sheet limits.

### **CHECK TEMPERATURE & HUMIDITY**

Floor and material temperature must be at or above the published Technical Data Sheet. Dew Point must be 5°F (3°F) or more below the surface temperature. Do not apply if humidity is at or above 85%.

### **SURFACE PREPARATION**

Surface preparation in accordance with: ICRI Guideline No. 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair. The pH of the concrete substrate should be at 9 or above. All bond-breaking material must be removed.

### **APPLICATION EQUIPMENT**

Depending on system applied:

- Variable low speed drill (450 rpm) with Jiffy® type impeller mixing paddle
- A disposable 3-inch brush for cutting in
- A 3/8-inch nap non-shedding phenolic core roller
- A 5-7 mil notched squeegee
- A clean 5-gallon pail or roller pan

### **OPTIONAL ANTIMICROBIAL**

The antimicrobial additive Silver® (sodium hydrogen zirconium phosphate) is a non-heavy metal biocide that can be added during the manufacturing process. The antimicrobial agent can be added to the topcoat only for an economical application or it can be added to each step of the application, primer, body coat and top coat, which is recommended for abusive environments.

### **MIXING**

For ease of mixing and placement, the temperature of the "A" and "B" components should be between 70°F to 80°F (20°C to 26°C). Pre-mix the "A" and "B" component to ensure all raw material and pigments are dispersed uniformly.

### **APPLICATION**

After thoroughly mixing the product for 2 minutes at low speed, immediately pour all liquid material on to the properly prepared concrete substrate. Next, squeegee and back-roll to an even coat. Please note: Dip-n-Roll application should only be attempted by installers experienced with this product, as unattractive lap lines and roller marks can easily occur.

### **SKID RESISTENCE**

If broadcasting slip-resistant resin sand such as 40-mesh or 60-mesh, sprinkle into the wet material. (NOT full broadcast.)

Skid-Resistance – Field (in situ) Wet Dynamic Coefficient of Friction (DCOF), ANSI A326.3.

### **SHIPPING AND STORAGE**

Ship and store material between 40°F to 90°F (4°C to 32°C). Store in a dry environment and out of direct sunlight.

### **SHELF LIFE**

Shelf life is 1 year from the date of manufacturer, provide the containers are unopened.

### **CLEAN-UP**

Clean-up mixing station, tools and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, and health and safety precautions when handling or storing solvents and materials, particularly in confined spaces. Make sure the working areas are well ventilated at all times during placement and curing time.

### **DISPOSAL**

Dispose of empty packaging and other waste in accordance with federal, state, provinces and local regulations.

### **MAINTENANCE**

Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong life of the flooring system, a daily maintenance program is highly recommended to ensure the floor is safe for its intended purposes.

**TECHNICAL SUPPORT**

For questions, contact a Desert Polymer Flooring representative.

**WARRANTY AND DISCLAIMER**

Please read all information in the Safety Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. Desert Polymer Flooring Products are for "Professional Use Only" and preferably applied by professionals who have prior experience with the Desert Polymer Flooring Products or have undergone training in application of Desert Polymer Flooring Products. Published technical data and instructions are subject to change without notice. Contact your local Desert Polymer Flooring representative or visit our website for current technical data, instructions, and project specific recommendations.

**LIMITED WARRANTY**

Desert Polymer Flooring warrants its products to be free of manufacturing defects and that they will meet Desert Polymer Flooring current published physical and chemical properties. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by Desert Polymer Flooring of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Desert Polymer Flooring shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Desert Polymer Flooring shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Desert Polymer Flooring reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

**DISCLAIMER**

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and

correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Desert Polymer Flooring makes no claim that these tests or any other tests, accurately represent all environments.

**FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. KEEP CONTAINERS TIGHTLY CLOSED.**

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