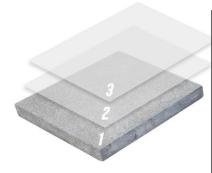


TECHNICAL SYSTEM SHEET CP TSS CPF 71 006

CrownSeal™ 8105 CrownSeal™ Standard Grind and Seal Polyurethane Acrylic Hybrid Two Coat Sealer Flooring System

DESCRIPTION

CrownSeal™ 8105 CrownSeal™ Standard Grind and Seal Polyurethane Acrylic Hybrid Two Coat Sealer Flooring System. It is designed seal properly prepared concrete, polished concrete, and cementitious overlays by providing a long-term low maintenance sealer. It is UV Stable. It inhibits the growth of bacteria, fungus, mildew and mold and qualifies for LEED® Indoor Emitting Materials Credits. It is available in Clear Gloss or Clear Satin. It is impervious and reducing concrete dusting, bodily fluids and house chemicals from penetrating the floor. For slip resistant an optional sprinkle course of aluminum oxide. It can be reapplied when needed by simple cleaning the surfaces, it does not have to be abraded. It is VOC Compliant in all states and provinces in North America.



CrownSeal™ 8105 CrownSeal™ Standard Grind and Seal Polyurethane Acrylic Flooring System

- Concrete Substrate Profile ICRI Concrete Surface Profile CSP 1 to CSP 2
- 2. Primer 8105 CrownSeal™ Clear Gloss 300 sq. ft. (27.9 sq. m.) 5.3 mils (0.14 mm)
- 3. Top Coat 8105 CrownSeal™ Clear Gloss or 8105 CrownSeal™ Clear Satin 350 sq. ft. (32.5 sq. m.) 4.6 mils (0.12 mm) and Skid-Resistance SP635 (60 Mesh) bleached white aluminum oxide placed as a sprinkle course of 4 to 6 pounds per 100 sq. ft.

TYPICAL USES

- Aircraft Hangars Floors
- Automotive Garage Floors
- Commercial Retail Indoor and Outdoor Floors
- Driveways Slabs
- Hospital and Health Care Facility Floors
- Patio Slabs
- Schools and Universities
- Warehouse Floors

BENEFITS

- Complies with USDA, FDA, Food Safety Modernization Act. See Crown Polymers Technical Bulletin: 3 Food and Beverage Compliance.
- Slip Resistance (ADA) See Crown Polymers Technical Bulletin: 4 Coefficient of Friction.
- LEED® and Green Seal® requirements. See Crown Polymers Technical Bulletin: 5 LEED and Green Seal Information.
 - VOC and EPA Compliant. Cures to an inert finish. See Crown Polymers Technical Bulletin: 2 VOC Compliance
 - All components are VOC Compliant in all states and provinces in North America
 - Designed for new floors and for resurfacing old floors
 - Surface only needs to be clean and free of bond breaking substance to be reapplied.

- These systems are best suited for applications in temperatures between 60°F to 90°F (16°C to 32°C).
- Higher temperatures will result in shortened working time and faster drying time.
- Do not use as a primer when concrete slab exceeds 3 lbs. or 80% RH.

COLORS

Clear Gloss and Clear Satin. Cannot be pigmented.

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 an approximately a 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.

LIMITATIONS

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 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 bonding.

- Contaminants include, but are not limited to: organic hydrocarbon materials, calcium chlorides and aluminum stearates.
- Concrete flooring slabs 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. See Crown Polymers Technical Bulletin: 1 Concrete Surface Preparation.

Mechanical Properties at 77°F (25°C) 7 Day Cure (8105 CrownSeal™) For Complete Details See 8105 CrownSeal™ Technical Data Sheet

Surface Preparation ICRI Guideline No. 310.2R (CSP 2 to CSP 4), Depending on System being Installed and Concrete Condition.

Installed and Concrete Condition.	
Gloss Index, 60 Degrees Clear Gloss, ASTM D523	90 - 95
Gloss Index, 60 Degrees Clear Satin, ASTM D523	40 – 70
Pencil Hardness, ASTM D3363	3Н
Adhesion, ASTM D7234	>300 psi (2.1 MPa)
Flexibility, Bend Mandrel Coating Test, ASTM D522	Pass 1/8 Inch
Microbial (fungi) Resistance, ASTM G21 without an anti-microbial agent)	Pass < 1
Dynamic Coefficient of Friction, ANSI 326.3, Depends on Finished Coat	>0.45 (inclines)
Texture. This test must be run in the field after placement of the Finish	>0.42 (level)
Coat by a BOT 3000E Third Party Testing Firm to Validate.	
Moisture Vapor Emission Rate, ASTM F1869*	3 lbs.
Moisture Relative Humidity, ASTM F2170*	80% rh

*If moisture or relative humidity exceeds the test limits consult a Crown Polymers representative and refer to Crown Polymers Technical Bulletin 6 Moisture Mitigation Negative Side Moisture Barrier.

Note: Although testing is critical, it is not guaranteed against future Problems. This is especially true if there is not a positive side vapor barrier installed per ACI 302.2R and ASTM F1754. Concrete must be sound and durable per ACI 201.2R and be free of bond breaking properties and/or concrete contamination from oil, chemical spills, densifiers, excessive salts and other bond breakers.

CHEMICAL RESISTANCE DATA

See Crown Polymers Technical Bulletin: 9
Chemical Resistance Guidelines and Chart.

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 and Crown Polymers Technical Bulletin: 6 Moisture Mitigation Negative Side Moisture Barrier.

CHECK TEMPERATURE and HUMIDITY

Floor and material temperature must be at or above the published Technical Data Sheet. Relative Humidity must be $5^{\circ}F$ ($3^{\circ}F$) below the dew point. Do not apply if humidity is at or above 95%. See Crown Polymers Technical Bulletin: 7 Temperature and Relative Humidity Limits.

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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. See Crown Polymers Technical Bulletin: 1 Concrete Surface Preparation.

OPTIONAL ANTIMICROBIAL

The antimicrobial additive Silver® (sodium hydrogen zirconium phosphate) is a non-heavy metal biocide that can be added during the manufacturing process. (EPA Regulation Number 11631.2. and US Patent Number US 9,247,736 B2). The antimicrobial agent can be added to the top coat 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. See Crown Polymers Technical Bulletin: 11 Understanding Silver® the Optional Antimicrobial Additive.

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. See Crown Polymers Technical Bulletin: 10 Mixing Guidelines.

APPLICATION

Place all steps per Crown Polymer Installation Guidelines.

SKID-RESISTANCE

Skid-Resistance – Field (in situ) Wet Dynamic Coefficient of Friction (DCOF), ANSI A326.3. See Crown Polymers Technical Bulletin: 4 Coefficient of Friction.

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. See Crown Polymers Technical Bulletin: 8 Care and Maintenance.



TECHNICAL SUPPORT

For questions, contact a Crown Polymers Representative.

DISCLAIMER

All technical bulletins, installation guidelines, guidelines, recommendations, statements, specifications, and technical data contained herein are based on information and tests. The accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, expressed or implied. It is the responsibility of the user to document information and tests to determine the intent of the product for ones' own use. The application, job conditions and user assume all risks and liability resulting from use of the product. We do not suggest or guarantee any hazards 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 written or verbal, 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 Crown Polymers makes no claim that these tests or any other tests accurately represent all environments. Not responsible for any typographical errors.

LIMITED WARRANTY

Crown Polymers warrants its products to be free of manufacturing defects and meets all Crown Polymers current published physical properties. Crown Polymers' sole responsibility shall be to replace the portion of any product proved to be defective. There are no other warranties by Crown Polymers of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Crown Polymers 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. Crown Polymers shall not be responsible for the use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee pertaining to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator will be issued. 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. Crown Polymers reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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