

## DESCRIPTION

PolySpec® FLOR is a decorative, 100% solid, polymeric floor, which consists of a colored base coat and a series of clear epoxy resin applications into which colored vinyl chips are imbedded. PolySpec® FLOR is installed at a minimum thickness of 1/16". PolySpec® FLOR is on the Federal Government's Qualified Products List under MIL-D-24613, Type I, Class 2.

## TYPICAL APPLICATION

• Primer (optional)	PolySpec® TITE M-50
• Color Coat	400/401 @ 16 mils
• Receiving Coat	700/710 @ 16 mils
• Broadcast	Color Chip (flakes)
• Sealer Coat	400/401 @ 16 mils
• Polyurethane Top Coat	TuffRez® 236 @ 4 – 5 mils

## PERFORMANCE DATA

Fire Resistance (MIL D-24613) ..... Fire retardant  
Adhesive Strength (MIL D-24613) ..... 365 psi  
Indentation ..... 0.002" (.69%)  
Impact Resistance (MIL D-24613) ..... 0.006" – No chipping, cracking or

delamination

Electrical Resistivity (NFPA Bulletin #56) ..... D-electric  
Non-Slip Properties ..... Will vary, depending on surface finish.

Typical surface texture should yield these minimum resistance factors:

<u>Static Friction</u>	Dry	Wet	Oily
Leather .56	0.83	---	
Rubber	0.86	0.78	0.56
<u>Sliding Friction</u>			
Leather	0.56	0.87	---
Rubber	0.86	0.72	0.61

## STORAGE & INSTALLATION

Storage Environment ..... Dry area, 65–80°F  
Application Temperature, ambient ..... 50–85°F  
Application Temperature, substrate ..... Minimum 5°F above dew point  
Service Temperature ..... Maximum 150°F  
Shelf Life ..... 12 months  
Pot Life, @ 77°F ..... 30 minutes  
Foot Traffic, @ 77°F ..... 12-16 hours  
Full Service, @ 77°F ..... 24-36 hours

*Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65°F to 80°F prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.*

## CONSIDERATIONS & LIMITATIONS

1. Do not thin with solvents unless advised to do so by PolySpec.
2. Confirm product performance in specific chemical environment prior to use.
3. Prepare substrate according to "Surface Preparation" portion of this document.
4. Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
5. For industrial/commercial use. Installation by trained personnel only.

# PolySpec® FLOR

TECHNICAL DATA SHEET

## Decorative Chip Seamless Epoxy Floor

### BENEFITS

- Very light weight
- Zero VOC's, almost no odor
- Good wear qualities and chemical resistance
- Fire retardant properties
- Decorative, seamless appearance
- No waxing or stripping required

### RECOMMENDED USES

- Laboratories
- Nurseries
- Snack areas
- Janitor closets
- Living areas on a ship

### GENERIC DESCRIPTION

Seamless Epoxy Flooring System

### STANDARD COLORS

Light Blue, Medium Blue, Navy Blue, Terrace Green, Light Gray, Sand, Tan

### PACKAGING / COVERAGE

#### Color Coat @ 12 mils

400/401 1 – Gallon Unit / 100 sq. ft.

#### Receiving Coat @ 16 mils

700/710 1 – Gallon Unit/ 100 sq. ft.

#### Color Chips (flakes)

10 - pound bag / 640 sq. ft.  
55 - pound bag / 3000 sq. ft.

#### Sealer Coat @ 12 mils

700/710 1 – Gallon Unit / 100 sq. ft.

#### Top Coat @ 4-5 mils

TuffRez® 236 1 – Gallon Unit / 350 sq. ft

## SURFACE PREPARATION

**Steel:** For steel surfaces, a “Near White Metal” ultra high-pressure wash or abrasive blast with anchor profile of 2–4 mils in accordance with Steel Structures Painting Council Specification SP-10 or NACE No. 2 is required.

*This product can be applied to the following substrate(s) that have been prepared according to PolySpec Surface Preparation Guidelines:*

Existing deck covering shall be totally removed. It is imperative that, before installation begins, all surfaces to which PolySpec decking product(s) will be applied — including deck, bulkheads, pipes, protrusions, etc. — are cleaned of all foreign matter such as dirt, dust, plaster, cement, paint, oil, grease, wax, rust, scale, moisture, concrete curing compounds or release agents, and other contamination.

- *Metal surfaces must be cleaned until bright metal is exposed.*
- *Surface preparation should include vertical surfaces three inches up from the deck.*
- *Surface preparation shall be by the methods most feasible, such as grinding, abrasive vacuum blasting, sanding, or using a needle gun or other appropriate hand tool(s) to clean the deck.*
- *Remove all dust and other loose material so that adhesion is assured.*

If existing substrate or deck covering cannot be removed, material must be cleaned and inspected for soundness prior to installing PolySpec product.

If PolySpec product is to be installed over an existing system, it is imperative that the coating be thoroughly sanded, cleaned and wiped with isopropyl alcohol before installation of the PolySpec decking product(s).

Urethane topcoats must be completely removed to ensure adhesion of the system.

### Refer to PolySpec Surface Preparation Guidelines for more details.

## INSTALLATION STEPS

1. **Priming (optional):** When installing over bare steel, a primer (such as PolySpec TITE M-50) will be required.

PolySpec TITE M-50: Using a Jiffy mixer blade and a 1/4" variable speed drill, thoroughly Component A and Component B together for 1–2 minutes. Scrape the sides and bottom of the can to be sure that all material is thoroughly mixed together.

Apply to the deck at 4-5 mils using a short nap roller. Coverage will be 200-250 square feet per gallon. Allow to cure for 10-12 hours at 75°F (25°C). PolySpec® FLOR 400/401 will adhere to primed steel.

2. **Underlayment (optional):** PolySpec® FLOR is applied over PolySpec® LITE LATEX underlayment or PolySpec® CLAD epoxy underlayment. Decks can be either 100% underlayment or partially leveled. Sand any imperfections in the underlayment as they may show through the basecoat.
3. **Color Coat:** If underlayment has been used, seal the underlayment with 700/710 before proceeding to 400/410 Color Coat. Refer to PolySpec 700/710 Data Sheet document. Premix Component A 400 separately prior to combining, using a low-speed drill and Jiffy type mixer for one minute and until uniform. Pour Component B Curing Agent into Component A Resin and mix thoroughly with a low-speed drill and Jiffy type mixer for 1-2 minutes until uniform. Normal pot life is 35 minutes at 77°F (25°C). Apply by spring steel trowel, short nap roller, brush, or squeegee to properly prepared substrate at 16 mils. Apply evenly with no puddles. Allow to cure for 8-12 hours at 77°F (25°C). Lower temperatures may require longer curing times.
4. **Clear Receiving Coat & Flake Broadcast:** Pour Component B Curing Agent into Component A Resin and mix using a low speed drill and a Jiffy type mixer. Mix thoroughly for 1-2 minutes and until uniform. Normal pot life is 30 minutes at 75°F (24°C). Apply by using a spring steel trowel, squeegee or roller at a spread rate of 100 square feet per gallon or an average of 16 mils, and smooth with a short nap mohair type roller.  
  
Broadcast pre-blended flakes uniformly by hand to a consistent coverage. Backroll with a short nap mohair roller to encapsulate the flakes and ensure adhesion. Make sure roller is pre-primed with catalyzed 700/710 clear epoxy prior to backrolling.
5. **Seal Coat:** Before applying the final seal coat, it may be necessary to lightly sand the flake coat to remove any high or rough spots. Vacuum or wipe with a dry cloth to remove dust or other contaminants. It may be necessary to solvent wipe with isopropyl alcohol (99% anhydrous) to ensure a clean surface prior to seal coat. Mix and apply 700/710 receiving coat at 16 mils (see first two paragraphs of step four for detailed instructions). Finished deck covering system should cure 36 hours at 75°F (24°C) before opening to foot traffic. Completed system must be protected from exposure and/or immersion to water and chemicals until thoroughly cured, a minimum of 7 days.
6. **Top Coat:** TuffRez 236 Topcoat is a three-component material. Pre-mix Component A thoroughly. Using a Jiffy mixer blade and a 1/4 inch variable speed drill, mix Component A with Component B. Mix for one minute at low speed. Add Component C and mix well for another minute. Spread Topcoat evenly onto the deck at a rate of 350 square feet per unit using a short nap roller. It is important to remove any loose hair from the roller before the installation. Make sure to roll the material evenly and DO NOT go back over an area, which has been down for more than a couple of minutes. (This may reduce the gloss level in that area) Do not install the Topcoat at more than 5-7 mils, the material will become cloudy and physical properties as well as cure time will be effected.  
  
*Note: Allow 16 hours cure time before opening to light foot traffic. Open to full service in 24-36 hours. Ultimate cure is 72 hours. Cure times are based on 75°F (24 °C) and 50% relative humidity.*
7. Use PolySpec All Purpose Cleaner for cleaning tools and equipment. Always wear gloves when using this product.

C / DOC FLOR 04011-0206-TDS

Rev 11/06

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