

## DESCRIPTION

PolySpec® TWEDE 41 is a decorative quartz broadcast decking system, combining a clear 100% solids epoxy resin binder with color quartz aggregates, and sealed with clear epoxy finish coats. The color quartz aggregate is composed of spherical, translucent particles coated with a pigmented film. They can be combined in various colors to provide a seamless, low maintenance surface with a pleasing, textured appearance.

PolySpec® TWEDE 41 is on the Federal Government's Qualified Products List under MIL-D-24613, Type I, Class I.

## TYPICAL APPLICATION

• Receiving Coat	700/710 @ 16 mils
• Broadcast	Color Quartz
• 1 <sup>st</sup> Seal Coat	700/710 @ 20 mils
• 2 <sup>nd</sup> Seal Coat	700/710 @ 12 mils
• Polyurethane Topcoat (Optional)	TuffRez® 236 @ 4-5 mils

## PERFORMANCE DATA

Compressive Strength (ASTM C-579) .....	12,900 psi
Tensile Strength (ASTM C-638).....	System: 1,160 psi
..... Pure Polymer:	9,700 psi
Flexural Strength (ASTM D-790) .....	System: 4,600 psi
..... Pure Polymer:	12,900 psi
Water Absorption .....	Nil
Impact Resistance (MIL-D-24613) .....	No chipping, cracking or delamination
Indentation (MIL-D-24613) .....	Initial: 0.000163"
..... 24 hr Residual:	0.0008"
Adhesion (ASTM D 4541) .....	410 psi (concrete failure)
Oil Absorption (MIL-D-3135).....	Nil
Thermal Compatibility (ASTM C 884) .....	No chipping, cracking or delamination
Fire Resistance (MIL-D-24613) .....	Fire retardant
Service Temperature .....	170°F
Non-Slip Properties (ASTM D-2047) ...	>0.6 (Will vary with selected finish)
Abrasion Resistance .....	1000 gram load 1000 cycles
..... CS-17 wheels	<.060 gm loss

## 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. Floors should be sloped to drain to prevent standing water or chemicals. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard.
2. Do not thin with solvents unless advised to do so by PolySpec.
3. Confirm product performance in specific chemical environment prior to use.
4. Prepare substrate according to "Surface Preparation" portion of this document.
5. Apply system according to TWEDE 41 Application Instructions.

# PolySpec® TWEDE 41

## TECHNICAL DATA SHEET

## Decorative Quartz Broadcast Seamless Floor

### BENEFITS

- Requires no waxing or stripping
- Available in a wide variety of color combinations
- Fire retardant
- Good non-slip properties
- Excellent impact resistance
- Available with waterproof membrane

### RECOMMENDED USES

- Corridors
- Toilet areas
- Auditoriums
- Cafeterias
- Laboratories
- Mechanical equipment rooms
- Change rooms

### GENERIC DESCRIPTION

Quartz Broadcast Epoxy Floor

### STANDARD COLORS

Please refer to the Polyspec Decorative Quartz color chart for TWEDE blends available

### PACKAGING / COVERAGE

#### Receiving Coat @ 16 mils

700/710 1 – Gallon Unit / 100 sq. ft.

#### Broadcast

Quartz 50 – Pound bags / 100 sq. ft.

#### 1<sup>st</sup> Seal Coat @ 20 mils

700/710 1 – Gallon Unit / 80 sq. ft.

#### 2<sup>nd</sup> Seal Coat @ 12 mils

700/710 1 – Gallon Unit / 135 sq. ft.

#### Optional Top Coat @ 4-5 mils

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

- 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.
- For industrial/commercial use. Installation by trained personnel only.

#### 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.

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

#### INSTALLATION STEPS

- 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 mix four Parts A and one Part 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).

- 1st Receiving Coat – Self Priming:** All products must be used promptly once the hardener has been added to the resin to avoid having the material set up in the container. Mix Part B (710) into Part A (700) using a jiffy style mixer and 1/4" variable speed drill thoroughly for 1-2 minutes. Scrape the sides and bottom of the can to insure complete mixing.

Apply 700/710 with squeegee or spring trowel. Back roll with 3/8" nap roller to a uniform thickness of approximately 16 mils. Broadcast decorative granules to dry appearance. It is very important that no wet areas are left during the curing process. Puddling will cause smooth areas in the finish floor. Allow to cure 10–12 hours @ 75°F (24°C). Sweep or vacuum all loose granules from surface.

- 2nd Receiving Coat:** Workers should wrap their shoes in polyethylene, masking tape or other suitable covering to protect the surface (or remove shoes). Mix Part B (710) into Part A (700) using a jiffy style mixer and 1/4" variable speed drill thoroughly for 1-2 minutes. Apply 700/710 with squeegee or spring trowel. Broadcast decorative granules to dry appearance making sure to leave no visible puddles. Allow to cure 8-10 hours @ 75°F (24°C). Sweep or vacuum all loose granules. Scrape with trowel or lightly sand to remove any partially adhered granules.
- 1st Seal Coat:** Workers should wrap their shoes in polyethylene, masking tape or other suitable covering to protect the surface (or remove shoes). It is acceptable to use spike shoes during the application. Mix Part B (710) into Part A (700) using a jiffy style mixer and 1/4" variable speed drill thoroughly for 1-2 minutes. Apply 700/710 with squeegee or spring trowel. Back roll with 3/8" nap, phenolic core roller to remove any lap marks and bring grout coat to a uniform appearance. Allow to cure 8–10 hours @ 75°F (24°C).
- 2nd Seal Coat:** Mix Part B (710) into Part A (700) using a jiffy style mixer and 1/4" variable speed drill thoroughly for 1-2 minutes. Apply 700/710 with squeegee or spring trowel. Back roll with 3/8" nap, phenolic core roller to remove any lap marks and bring grout coat to a uniform appearance. Use spiked shoes while rolling. Allow to cure 24 hours @ 75°F (24°C) before opening to foot traffic.
- 6. Top Coat (Optional):**
  - Apply PolySpec® 1757 Flat Finish Epoxy for a durable matte finish.
  - Apply FLEX FR urethane Top Coat (TuffRez 236) for a durable satin finish.

Please refer to separate Installation Instructions and Technical Data Sheets for further information.

*Note: All liquids should be mixed with a low speed (300 rpm) drill and jiffy blade for 1-1/2 minutes per batch.*

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