



# DECO-TROWEL® SERIES 223

## PRODUCT PROFILE

**GENERIC DESCRIPTION** Colored Quartz-Filled Modified Polyamine Epoxy

**COMMON USAGE** A decorative mortar floor-topping system installed at 3/16" to 1/4" thickness. Protects against impact, abrasion and mild chemicals with an aesthetically pleasing appearance.

**COLORS** Available in 12 standard colors. Refer to Tnemec Decorative Quartz color card. custom colors also available. **Note:** Series 223 aggregate is larger than that used in Series 222.  
**Note:** Epoxies chalk and yellow with age, extended exposure to UV and artificial lighting. Lack of ventilation, incomplete mixing, miscatalyzation or the use of heaters that emit carbon dioxide and carbon monoxide during application and initial stages of curing may cause amine blush, possibly affecting adhesion of subsequent topcoats.

**FINISH** Decorative quartz—multi-colored appearance. The finished appearance will depend on the type, film thickness and number of clear finish coats selected.

## COATING SYSTEM

**SURFACER/FILLER/PATCHER** Series 63-1500, 206, 218, 219. **Note:** A repair kit of 201, with Part C fumed silica, is available for small patching/surfacing repairs. For more extensive repairs and additional information, contact your Tnemec representative or Tnemec Technical Services.

**PRIMERS** **Concrete:** Series 201

**TOPCOATS** Series 284, 285, 295. **Note:** If Series 285 or 295 is selected for the finish coat, an intermediate coat of Series 284 is required. Refer to the StrataShield Installation and Application Guide for floors.

## SURFACE PREPARATION

Prepare surfaces by method suitable for exposure and service. Refer to the appropriate primer data sheet for specific recommendations.

**CONCRETE** Allow new concrete to cure 28 days. Verify dryness by testing for moisture with a "plastic film tape-down test." (Reference ASTM D 4263) Should moisture be detected, perform "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride." (Reference ASTM F 1869) Moisture content not to exceed three pounds per 1,000 sq ft in a 24 hour period. Shot-blast or mechanically abrade to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide surface profile. Large voids, cracks and other surface imperfections should be filled with recommended filler or surfacer. (Reference SSPC-SP13, ICRI CSP4-9).

**ALL SURFACES** Must be clean, dry and free of oil, grease and other contaminants.

## TECHNICAL DATA

**VOLUME SOLIDS** 100% (mixed)

**RECOMMENDED DFT** Suggested 1/4"

**CURING TIME**

Temperature	Between Broadcasts/Topcoats	Place in Service
75°F (24°C)	12 to 24 hours	24 hours

**VOLATILE ORGANIC COMPOUNDS** **Unthinned:** 0.15 lbs/gallon (18 grams/litre)

**THEORETICAL COVERAGE** 1,604 mil sq ft/gal (39.4 m<sup>2</sup>/L at 25 microns). See APPLICATION for coverage rates.

**NUMBER OF COMPONENTS** Three—Liquids: Part A & Part B (2 Parts A to 1 Part B by volume). Colored quartz: Part C  
The Part C colored quartz (ChromaQuartz) is available from Tnemec or can be purchased from a different supplier.

**PACKAGING**

	PART A	PART B	Yield (mixed)
Extra Large Kit	2-55 gallon drums	1-55 gallon drum	165 gallons
Large Kit	2-5 gallon pails	1-5 gallon pail	15 gallons
Small Kit	2-1 gallon cans	1-1 gallon can	3 gallons

The Part C mortar aggregate is based on a nominal amount calculated at 60-80 lbs. per gallon when mixed or a 6.5 to 1 – 9.0 to 1 (rock to resin) ratio by weight. Part C mortar aggregate purchased from Tnemec is packaged in 50 lb. bags.

**NET WEIGHT PER GALLON** 9.33 ± 0.25 lbs (4.23 ± .11 kg) mixed

**STORAGE TEMPERATURE** Minimum 40°F (4°C) Maximum 90°F (32°C)

**TEMPERATURE RESISTANCE** (Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

**SHELF LIFE** 12 months at recommended storage temperature.

**FLASH POINT - SETA** N/A

**HEALTH & SAFETY** This product contains chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product.  
**Keep out of the reach of children.**

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## APPLICATION

<b>COVERAGE RATES</b>	Before commencing, obtain and thoroughly read the StrataShield Installation and Application Guide for floors. The mixed liquids (Part A and B) and aggregate (Part C) are spread at a rate of approximately 25 to 35 sq ft per gallon at a thickness of 1/4" based on a 6.5 to 1 – 9.0 to 1 rock to resin ratio by weight.
<b>MIXING</b>	Use a variable speed drill with a PS Jiffy blade. Slowly mix 2 parts A component, and while under agitation add 1 part B component and mix for a minimum of two minutes. Ensure that all Part B is blended with Part A by scraping the pail walls with a flexible spatula. <b>Note:</b> A large volume of material will set up quickly if not applied or reduced in volume. <b>Caution: Do not reseal mixed material. An explosion hazard may be created.</b> <b>Aggregate:</b> Use an appropriate type mortar mixer and slowly blend Part C aggregate thoroughly with properly proportioned Part A and Part B mixed liquids. The Part C colored quartz aggregate is based on a nominal amount calculated at 60 to 80 lbs per gallon when mixed or a 6.5 to 1 – 9.0 to 1 (rock to resin) ratio by weight.
<b>THINNING</b>	Do not thin.
<b>POT LIFE</b>	25 to 30 minutes at 75°F (24°C)
<b>APPLICATION EQUIPMENT</b>	Screed and hand trowel. For detailed instructions, refer to the StrataShield Installation and Application Guide for floors.
<b>SURFACE TEMPERATURE</b>	Minimum of 55°F (13°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). The substrate temperature should be at least 5°F (3°C) above the dew point.
<b>MATERIAL TEMPERATURE</b>	For optimum application, handling and performance, the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.
<b>CLEANUP</b>	Flush and clean all equipment immediately after use with xylene or MEK.

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