



### 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 StrataShield 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 and texture will depend on the type, film thickness and number of clear finish coats selected.

### COATING SYSTEM

- SURFACER/FILLER/PATCHER** Series 206, 215. **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, 208, 241
- TOPCOATS** Series 247, 248, 284, 285, 294, 295, 296. **Note:** If Series 247, 248, 285, 294, 295 or 296 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

- CONCRETE** Prepare surfaces by method suitable for exposure and service. Refer to the appropriate primer data sheet for specific recommendations.  
Allow new poured-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride" (moisture vapor transmission should not exceed three pounds per 1,000 square feet in a 24 hour period), F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes" (relative humidity should not exceed 80%), or D 4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method" (no moisture present). **Note:** The testing listed above cannot guarantee avoidance of future moisture related problems particularly with existing concrete slabs. This is especially true if the use of an under slab moisture vapor barrier cannot be confirmed or concrete contamination from oils, chemical spills, unreacted silicates, chlorides or Alkali Silica Reaction (ASR) is suspected.  
"Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 3 or greater surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer. Note: For moisture content exceeding 3 lbs per 1,000 sq ft or relative humidity in excess of 80%, Series 208 or 241 may be substituted for the primer. Refer to the Series 208 or 241 product data sheet for more information.
- 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	To Topcoat	To Place in Service
75°F (24°C)	12 to 24 hours	24 hours

**Note:** If more than 24 hours have elapsed between coats, the coated surface must be mechanically abraded before topcoating. Curing time varies with surface temperature, air movement, humidity and film thickness.
- VOLATILE ORGANIC COMPOUNDS** **Unthinned:** 0.13 lbs/gallon (15 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

# DECO-TROWEL® | SERIES 223

**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.**

## APPLICATION

**COVERAGE RATES** 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.

**MIXING** 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.

**Note:** A large volume of material will set up quickly if not applied or reduced in volume.

**Caution: Do not reseat mixed material. An explosion hazard may be created.**

**Aggregate:** 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.

**THINNING** Do not thin.

**POT LIFE** 25 to 30 minutes at 75°F (24°C)

**APPLICATION EQUIPMENT** Screed and hand trowel. For detailed instructions, refer to the StrataShield Installation and Application Guide for floors.

**SURFACE TEMPERATURE** 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. To avoid outgassing, concrete temperature should be stabilized or in a descending temperature mode. Material should not be applied in direct sunlight.

**MATERIAL TEMPERATURE** 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.

**CLEANUP** Flush and clean all equipment immediately after use with xylene or MEK.

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