**COATING SYSTEM**

**SURFAKER/FILLER/PATCHER**

Series 241 (extended with aggregate) or Series 243. Patching should be allowed to cure a minimum of six hours prior to placement of the Series 241 to avoid blistering or doming of the Series 241. Series 215, or 201 or 208 mixed with fumed silica, may be used for small patches or crack repairs. Certain high early strength, cementious repair mortars are also acceptable. Contact Tnemec for further qualifications.

**PRIMERS**

Self-priming

**INTERMEDIATE**

Series 222, 223, 224, 233, 237, 238, 252SC, 256. **Note:** Series 241 must be broadcast to refusal with aggregate, colored quartz or decorative flake if topcoating. Broadcast aggregate or colored quartz at an approximate rate of 0.8 lb per sq ft for a decorative flake at an approximate rate of 0.25 lb per sq ft or 4 to 5 sq ft per pound. The Series 241 base coat will account for approximately 1/8”-3/16” of the desired system thickness.

**TOPCOATS**

Series 235, 237, 238, 246, 247, 248, 252SC, 256, 280, 281, 282, 284, 285, 290, 291, 294, 295, 296, 297. **Note:** These topcoats may only be used when recommended aggregate has been broadcast to refusal into the wet Series 241. **Note:** If Series 247 (tinted), 248 (tinted), 290, 291 or 297 is selected for the finish coat over a broadcast system, a grout coat of Series 222, 223, 224, 233, 237, 238, 252SC, 256. **Note:** Series 241 must be broadcast to refusal with aggregate, colored quartz or decorative flake yielding an approximate 1/8” thick base layer.

**SURFACE PREPARATION**

**CONCRETE**

Prepare surfaces by method suitable for exposure and service. Allow new poured-in-place concrete to cure a minimum of 10 days at 75°F (24°C). Ultra-Tread MVT may be installed in areas where high rates of moisture vapor transmission would prevent the use of non-breathing flooring systems. 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 20 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 90%), or D 4265 “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 4-5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

**ALL SURFACES**

Must be clean, dry and free of oil, grease and other contaminants. Do not apply over existing coatings. **Note:** Substrate conditions which can adversely affect the adhesion of Series 241 Ultra-Tread MVT include: concrete that is structurally unsound, wet, damp, contaminated, or inadequately profiled at the time of application, absent or inadequate under slab moisture vapor barrier, hydrostatic pressure, Alkali Silica Reaction (ASR), and migration of oils, chemicals, and other contaminants.

**TECHNICAL DATA**

**VOLUME SOLIDS**

100% (mixed)

46.0 to 52.0 mls (1168 to 1320 microns) applied neat. Film thickness, after broadcasting with aggregate, is approximately 1/8”. Refer to coverage rates table for more information. **Note:** Exceeding the recommended coating thickness may result in blistering of the product. Avoid excessive coating thickness by thoroughly filling voids, depressions and cracks with recommended filler or surfacer prior to Series 241 application.

**CURING TIME**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Min. Recoil</th>
<th>Light Traffic</th>
<th>Place in Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°F (24°C)</td>
<td>6 hours</td>
<td>8 hours</td>
<td>12 hours</td>
</tr>
</tbody>
</table>

For full resistance to chemicals and heavy traffic, 24 hour cure is needed. Curing time varies with surface temperature, air movement, humidity and film thickness. **Note:** For faster curing and low temperature applications, add No. 44-714 Ultra-Tread Accelerator, see separate product data sheet for cure information.

**VOLATILE ORGANIC COMPOUNDS**

Parts A & B: 0.05 lbs/gallon (5.6 grams/litre)

Parts A, B & C: 0.05 lbs/gallon (5.9 grams/litre)
### Application

**Coverage Rates**

Before commencing, obtain and thoroughly read the Series 241 Installation and Application Guide.

<table>
<thead>
<tr>
<th>Application Neat</th>
<th>Broadcast to Refusal</th>
<th>Small Kit Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 mils (1188 microns)</td>
<td>1/8” (3.0 mm)</td>
<td>80 sq ft (7.45 m²)</td>
</tr>
<tr>
<td>52 mils (1321 microns)</td>
<td>1/8” (3.0 mm)</td>
<td>70 sq ft (6.50 m²)</td>
</tr>
</tbody>
</table>

Application below minimum or above maximum recommended thicknesses may adversely affect performance. Above rates are based on theoretical coverage. Actual coverage will vary based on condition of substrate.

- **Broadcast (1/8” System):** Series 241 must be broadcast to refusal with aggregate, colored quartz or decorative flake. This is typically completed within 10 to 15 minutes of application. **Note:** To reduce the potential for pinholes in the grout or lock coat a lower viscosity product such as Series 222, 237, 238, 252SC, 256 or 281 should be used over the seeded Series 241 when building a 1/8” thick system. **Important:** When broadcasting into Series 241 at 1/8” thickness, it is critical that a rounded, less angular, uniform size silica sand or colored quartz be used. This will reduce the potential for pinholes in the grout or lock coat.

- **Broadcast (3/16” System):** Colored quartz and/or decorative flake systems will require an additional broadcast layer using Series 222, 224, 237, 238, 239, 252SC, 256 or 281 to obtain a uniform appearance and texture before applying the desired clear finish coats. This will typically result in a total system thickness closer to 3/16”.

### Mixing

Using a variable speed 850-RPM drill and four inch (4”) dispersion blade, slowly mix the entire contents of both the A and B components for a minimum of one minute. Continue agitation and slowly add the Part C aggregate and mix until material is uniform and no dry aggregate is present. The entire mixing procedure should take approximately three minutes. **Note:** Part B is moisture sensitive. Do not open until ready to mix. **Caution:** Do not attempt to split kits and do not reseal mixed material.

- **Colorant:** If tinting Series 241 with Series 244 Part D colorant, add one color pack to each kit of Series 241. Start by mixing Part A liquid and Part C aggregate, while under agitation, slowly add Part D colorant, continue to mix material one to two minutes before adding Part B liquid. Mix until material is uniform and no dry aggregate is present.

- **Accelerator:** For accelerated cure on low temperature applications, add Series 44-714 Ultra-Tread Accelerator to the Series 241 Part A prior to mixing. The proper amount of Series 44-714 is based upon ambient temperature: At 68°F (20°C) with 40% relative humidity 1 oz per kit will result in an 8 hour maximum cure time, 2 oz per kit will result in a 6 hour maximum cure time, 3 oz per kit will result in a 4 hour maximum cure time. **Note:** Material will set up quickly if not applied immediately after mixing.

### Thinking

**DO NOT THIN.**

Without 44-714: 10 minutes at 75°F (24°C)

Higher material temperatures will significantly reduce the pot life and working time.

With 44-714: With using maximum amount (3 oz): 15 minutes at 60°F (16°C) 10 minutes at 70°F (21°C)

### Application Equipment

Spread using a 3/8” to 1/2” V-notch squeegee or trowel. Immediately backroll with a loop roller to level and work out any trowel marks or waves. Immediately follow by broadcasting to refusal with 30/50 mesh aggregate colored quartz or decorative flake. **Note:** Series 241 must be broadcast to refusal with aggregate, colored quartz or decorative flake.

Broadcast 30/50 aggregate or colored quartz at a rate of 0.8 lbs per sq ft and decorative flake at a rate of 0.25 lbs or 1/4 lb per sq ft.

### Surface Temperature

Minimum of 40°F (4°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 85°F (29°C). The substrate temperature should be at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature.

### Material Temperature

For optimum application, handling and performance, the material temperature during application should be between 60°F and 80°F (16°C and 27°C). Temperature will affect the workability. Warm temperatures will decrease viscosity and significantly shorten pot life and working time.

### Ambient Humidity

Humidity must be below 85%.

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