TNEMEC

PRODUCT DATA SHEET

ULTRA-TREAD® MVT SERIES 241

PRODUCT PROFILE

GENERIC DESCRIPTION Polyurethane Modified Concrete

COMMON USAGE Ultra-Tread MVT is a high performance moisture control system designed to reduce moisture vapor emissions prior to the application of non-breathing, polymer floor topping finishes. Ultra-Tread MVT is a low odor, self-priming, base coat that can be applied to 10 day old concrete. It can withstand moisture vapor transmission up to 10 lbs (per ASTM F 1869) and relative humidity up to 90% (per ASTM F 2170). This unique, self-leveling slurry system is typically applied by V-notch trowel or squeegee, backrolled with a loop roller and broadcast to refusal with 30/50 mesh aggregate, colored quartz or decorative flake yielding a 1/8" thick base layer. **Note:** Series 241 **must** be broadcast to refusal with aggregate, colored quartz or decorative flake. Colored quartz and/or decorative flake systems will require an additional broadcast layer to obtain a uniform appearance before applying the desired clear finish coats. This will result in a total system thickness closer to 3/16".

COLORS Neutral/Tan

COATING SYSTEM

SURFACER/FILLER/PATCHER Series 243, 245 or 241 mixed with additional aggregate. 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 mixed with fumed silica, may be used for small patches or crack repairs.

PRIMERS Self-priming

INTERMEDIATE Series 222, 223, 224, 237, 237SC, 238, 239, 239SC, 252SC, 256. **Note:** Series 241 must be broadcast to refusal with aggregate, colored quartz or decorative flake. Broadcast aggregate or colored quartz at an approximate rate of 0.8 lb per sq ft and decorative flake at an approximate rate of 0.25 lb per sq ft. The Series 241 base coat will account for approximately 1/8" of the desired system thickness.

TOPCOATS Series 246, 256, 280, 282, 284, 286. **Note:** To ensure a pinhole free surface, two topcoats (grout and finish) are required when applied directly to Series 241 broadcast with aggregate, quartz, or flake.

SURFACE PREPARATION

Prepare surfaces by method suitable for exposure and service.

CONCRETE Allow new cast-in-place concrete to cure a minimum of 10 days at 75°F (24°C). Verify concrete dryness and prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Ultra-Tread MVT may be installed in areas where high rates of moisture vapor transmission would prevent the use of non-breathing flooring systems. Moisture vapor transmission should not exceed 10 lbs per 1,000 sq ft in a 24 hour period (Reference ASTM F 1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride"). Relative humidity should not exceed 90% (Reference ASTM F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes"). Shot-blast 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.

TECHNICAL DATA

VOLUME SOLIDS 87% ± 2.0%

RECOMMENDED DFT 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.

CURING TIME

Temperature	To Topcoat
75°F (24°C)	6-8 hours

Curing time varies with surface temperature, air movement, humidity and film thickness.
For full resistance to chemicals and heavy traffic, 24 hour cure is needed.

VOLATILE ORGANIC COMPOUNDS Parts A & B: 0.2 lbs/gallon (23 grams/litre)
Parts A, B & C: 0.12 lbs/gallon (15 grams/litre)

THEORETICAL COVERAGE 70-80 sq ft (6.50-7.43 m²) per small kit

NUMBER OF COMPONENTS Three: Liquids: Part A & Part B, Aggregate: Part C

PACKAGING

	PART A	PART B	PART C (Aggregate)	Mixed Yield
Small Kit	1-1 gallon jug (partially filled)	1-1 gallon jug (partially filled)	1-14.7 lb bag	2.3 gal

NET WEIGHT PER GALLON 13.06 ± 0.25 lbs (5.92 ± .11 kg) (mixed)

STORAGE TEMPERATURE Minimum 35°F (2°C) Maximum 110°F (43°C)
Material should be stored at temperatures between 70°F and 90°F (21°C and 32°C) for at least 48 hours prior to use.

TEMPERATURE RESISTANCE Continuous 235°F (112°C)

SHELF LIFE Part A: 12 months Part B: 12 months Part C: 12 months

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.

© November 12, 2013 by Tnemec Co., Inc.

Published technical data and instructions are subject to change without notice. The online catalog at www.tnemec.com should be referenced for the most current technical data and instructions or you may contact your Tnemec representative for current technical data and instructions.

ULTRA-TREAD® MVT | SERIES 241

APPLICATION

COVERAGE RATES

Wet Film Thickness	Dry Film Thickness	Small Kit Coverage
46 mils (1168 microns)	40 mils (1016 microns)	80 sq ft (7.43 m²)
52 mils (1321 microns)	45 mils (1143 microns)	70 sq ft (6.50 m²)

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.

MIXING

Using a variable speed 850 RPM drill and four inch (4") dispersion blade, mix the entire contents of both the A and B components for a minimum of one minute. **Note:** Part B is moisture sensitive. Do not open until ready to mix. While under agitation, slowly add the Part C aggregate and mix until material is uniform and no dry aggregate is present. The entire mixing procedure should not exceed three minutes.
Note: Material will set up quickly if not applied immediately after mixing.
Caution: Do not attempt to split kits and do not reseal mixed material.

THINNING

DO NOT THIN.

POT LIFE

10 minutes at 75°F (24°C)
Higher material temperatures will significantly reduce the pot life and working time.

APPLICATION EQUIPMENT

Spread using a 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. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and significantly shorten pot life and working time.

AMBIENT HUMIDITY

Humidity must be below 85%.

CLEANUP

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

WARRANTY & LIMITATION OF SELLER'S LIABILITY: Tnemec Company, Inc. warrants only that its coatings represented herein meet the formulation standards of Tnemec Company, Inc. THE WARRANTY DESCRIBED IN THE ABOVE PARAGRAPH SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The buyer's sole and exclusive remedy against Tnemec Company, Inc. shall be for replacement of the product in the event a defective condition of the product should be found to exist and the exclusive remedy shall not have failed its essential purpose as long as Tnemec is willing to provide comparable replacement product to the buyer. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, ENVIRONMENTAL INJURIES OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. Technical and application information herein is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and Tnemec Company makes no claim that these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.

© November 12, 2013 by Tnemec Co., Inc.

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

096723-010
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

096723
SPECIFICATION SECTION / PARAGRAPH

MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ◯ Shop Drawings
- ◯ Samples (_____ copies)
- ◯ LEED Submittal
- ◯ Certification / Qualifications
- ◯ Record Documents
- ◉ Product Data
- ◯ Coordination Drawing
- ◯ Calculations
- ◯ Schedules
- ◯ O&M Manuals
- ◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ◯ Information Only ◯ Record

REMARKS OR DEVIATIONS

Resubmitted from 096623-004

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick — REVIEWED BY
1/16/17 — DATE

To be completed by Reviewer

09 6723-010
CANNON DESIGN SUBMITTAL NUMBER

1/17/17
RECEIVED DATE

- ◉ A. No Exceptions Taken
  No further review of submittal is required.
- ◯ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ◯ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ◯ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ◯ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ◯ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ◯ See attached sheet(s) for additional comments

approved

spellman brady & company
8251 Maryland Avenue | Suite 300
St. Louis, MO 63105

DATE: _____
1. APPROVED AS SUBMITTED: _____
2. APPROVED AS NOTED: _____
3. CLARIFICATIOIN NEEDED: _____
4. RESUBMIT OR REJECT: _____
5. ARCHITECT TO REVIEW: _____
NOTES: _____

Reviewed By: L. Stanton

www.spellmanbrady.com

REVIEWED BY

02.07.17 — DATE

77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0451

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 01/16/2017

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

Fax;
314-241-2203

RE: TNMEC Product for Resinous Flooring Product Data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☑ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	*Package*	*Code*	*Rev.*	*Copies*	*Date*	*Description*	*Status*
Submittal		096723-010	1		01/16/2017	TNMEC Product for Resinous Flooring Product Data	Submitted

NOTES:

CC:

Signed: _____

Devin Gates