flexible membrane

Sub-Flex EP™ SERIES 206

PERFORMANCE CRITERIA (Confidential — DO NOT DUPLICATE)

StrataShield
ADVANCED FLOOR TECHNOLOGY

ABRASION

Method: ASTM D 4060, (CS-17 Wheel, 1,000 grams load).
System: Series 206 Sub-Flex EP cured 30 days at 75°F (24°C).
Requirement: No more than 73 mg loss after 1,000 cycles, average of three tests.

ADHESION

Method: ASTM D 4541
System: Series 201 Epoxoprime/Series 206 Sub-Flex EP cured 7 days at 75°F (24°C).
Requirement: 400 psi (2.8 MPa) pull, average of three tests.
Note: 100% Concrete Failure

ELONGATION

Method: ASTM D 2370.
System: Series 206 Sub-Flex EP cured 14 days at 75°F (24°C).
Requirement: 94.5% elongation and 382,600 psi (2,637 MPa) tensile modulus of elasticity, average of ten tests.

HARDNESS

Method: ASTM D 2240 (Type A Durometer).
System: Series 206 Sub-Flex EP cured 30 days at 75°F (24°C).
Requirement: No more than Type A durometer hardness of 98, average of three tests.

IMPACT

Method: ASTM D 2794.
System: Series 206 Sub-Flex EP applied to SSPC-SP7 Brush-Off Blast Cleaned steel and cured 7 days at 75°F (24°C).
Requirement: Not less than 157 inch-pounds (17.7 J) direct impact, average of three tests.
System: Series 206 Sub-Flex EP applied to SSPC-SP7 Brush-Off Blast Cleaned steel and cured 30 days at 75°F (24°C).
Requirement: Not less than 87 inch-pounds (9.8 J) direct impact, average of three tests.

TEAR STRENGTH

Method: ASTM D 5601.
System: Series 206 Sub-Flex EP cured 14 days at 75°F (24°C).
Requirement: Not less than 7.5 pounds-force (33 N) tear strength, average of two tests.

TENSILE STRENGTH

Method: ASTM D 2370.
System: Series 206 Sub-Flex EP cured 14 days at 75°F (24°C).
Requirement: Not less than 1,944 psi (13.4 MPa) tensile strength, average of ten tests.

TNEMEC COMPANY INCORPORATED
6800 CORPORATE DRIVE, KANSAS CITY, MISSOURI 64120-1372 TEL: 816 483-3400

(YPFC206) PRINTED IN USA

StrataShield

PRODUCT DATA SHEET

SUB-FLEX EP™ SERIES 206

flexible membrane

PRODUCT PROFILE

GENERIC DESCRIPTION Flexible Epoxy

COMMON USAGE Flexible epoxy underlayment for bridging small substrate cracks in concrete and to provide a protective waterproof membrane under aggregate reinforced flooring systems.

COLORS 33GR Gray. Please contact your Tnemec representative for special colors. **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.

COATING SYSTEM

SURFACER/FILLER/PATCHER Series 215, 218. **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 Series 201, 205.

TOPCOATS Series 210, 222, 223, 237, 238, 239, 247, 248, 270, 290, 291, 294, 295, 297. **Note:** When using 223, 237, 238 and 239 mortars, a tie coat of Series 201 is required.

SURFACE PREPARATION

Prepare surfaces by method suitable for exposure and service.

CONCRETE Allow new cast-in-place concrete to cure a minimum of 28 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. Moisture vapor transmission should not exceed three 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 80% (Reference ASTM F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes"). 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.

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

TECHNICAL DATA

VOLUME SOLIDS 100% (mixed)

RECOMMENDED DFT 30.0 to 80.0 mils (750 to 2000 microns) per coat.

CURING TIME

Temperature	To Recoat	To Place in Service
75°F (24°C)	12-24 hours	24 hours

Note: If more than 24 hours have elapsed between coats, the coated surface must be mechanically abraded before topcoating.

VOLATILE ORGANIC COMPOUNDS **Unthinned:** 0.06 lbs/gallon (7 grams/litre)

THEORETICAL COVERAGE 1,604 mil sq ft/gal (39.4 m²/L at 25 microns). See APPLICATION for coverage rates.

NUMBER OF COMPONENTS Two: Part A and Part B (2 Parts A to 1 Part B by volume.)

PACKAGING KITS CONSIST OF:

	PART A (Partially filled)	PART B (Partially filled)	When Mixed Yield
Large Kit	2-5 gallon pails	1-5 gallon pail	15 gallons (56.8 L)
Small Kit	2-1 gallon cans	1-1 gallon can	3 gallons (11.4 L)

NET WEIGHT PER GALLON 9.45 ± 0.25 lbs (4.29 ± .11 kg) mixed

STORAGE TEMPERATURE Minimum 20°F (-7°C) Maximum 110°F (43°C)
Prior to application, the material temperature should be above 60°F (16°C). It is suggested the material be stored above this temperature at least 48 hours prior to use.

SHELF LIFE 12 months at recommended storage temperature.

FLASH POINT - SETA Part A: N/A Part B: N/A

HEALTH & SAFETY Paint products contain 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.

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m²/Gal)
Suggested	30.0-80.0 (750-2000)	30.0-80.0 (750-2000)	20-53 (1.9-4.9)

Caution: Before applying Series 206, voids and irregularities in the prepared and primed concrete substrate must first be filled using Series 215, 218 or thickened Series 201. Contact Tnemec Technical Service for detailed recommendations. Allow for surface irregularities. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance.

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 reseal mixed material. An explosion hazard may be created.

THINNING

DO NOT THIN.

POT LIFE

30-40 minutes at 75°F (24°C)

APPLICATION EQUIPMENT

Notched squeegee or trowel and porcupine or loop roller (squeegee or trowel and backroll with porcupine or loop roller).

SURFACE TEMPERATURE

Minimum of 55°F (13°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°C (32°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 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

Clean all equipment immediately after use with MEK or xylene.

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

096723-008
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

Samples pending color choice and LEED submittals forthcoming.

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

12/6/16
DATE

To be completed by Reviewer

09 6723-008
CANNON DESIGN SUBMITTAL NUMBER

12/7/16
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

Provide physical samples for Q201, Q205, and Q206.

Kelvin Patel
REVIEWED BY

Digitally signed by Kelvin Patel
DN: C=US, E=kpatel@cannondesign.com, O=Cannon Design, OU=Architect, CN=Kelvin Patel
Date: 2016.12.14 14:37:30-06'00'

12/14/16
DATE

PARIC
EXPERIENCE. EXCELLENCE.
77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0374

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 12/06/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

Fax;
314-241-2203

RE: 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		096723-008	1		12/06/2016	Resinous Flooring Product Data	Submitted

NOTES:

CC:

Signed: _____
Devin Gates