

Addendum Number 2

July 8, 2020

USC Library Annex – Implement Exterior Repairs

Owner Project Number: FP00000324

Prepared by:

The Building Envelope Enclosure Group
1226 Yeamans Hall Road, Suite C
Hanahan, SC 29410

To Bidders:

This Addendum forms a part of the Contract Documents and modifies the original Procurement Documents dated June 15, 2020 as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of 2 pages and the attachments listed.

Changes to Prior Addenda:

1. Addendum Number 1, dated June 26, 2020.

Changes to Procurement Requirements:

2. SE-330, Lump Sum Bid Form, Page BF-1:
 - a. Replace with the revised, attached SE-330, Lump Sum Bid Form, Page BF-1.

Changes to Contracting Requirements:

3. Add the attached Answers / Clarifications to Questions Raised.

Changes to Specifications:

4. Section 01 20 05, Abbreviated Scope of Work for Selective Sealant Replacement and Interim Wall Repairs, Page 3:
 - a. Replace with the revised, attached Section 01 20 05, Abbreviated Scope of Work for Selective Sealant Replacement and Interim Wall Repairs, Page 3.
5. Section 07 14 23, Fluid Applied Coating for Exterior Walls:
 - a. Add the attached, accepted as noted Substitution for MAPEI, Elastocolor Flex and Elastocolor Primer WB.

Changes to Drawings:

6. Sheet W305, Details/Sections
 - a. Replace with revised, attached Sheet W305, Details/Sections.

7. ADD the following Sheets:
 - a. Sheet W204, Sealant Joint Photographs
 - b. Sheet W205, Concrete Photographs
 - c. Sheet W206, Exterior Door Photographs
 - d. Sheet W306, Details/Sections.

End of Addendum Number 2

SE-330

LUMP SUM BID FORM

Addendum Number 2

Bidders shall submit bids on only Bid Form SE-330.

§ 6.2 **BID ALTERNATES** as indicated in the Bidding Documents and generally described as follows:

ALTERNATE # 1 (Brief Description): Alternate Number 1 work includes complete removal and replacement of three insulated steel doors including all new hardware, weatherstripping and seals. Also replace one steel door with glass, to solid steel door.

ADD 0 Calendar Days

☐ ADD TO or ☐ DEDUCT FROM BASE BID: \$ _____

(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)

ALTERNATE # 2 (Brief Description): N/A

☐ ADD TO or ☐ DEDUCT FROM BASE BID: \$ _____

(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)

ALTERNATE # 3 (Brief Description): N/A

☐ ADD TO or ☐ DEDUCT FROM BASE BID: \$ _____

(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)

§ 6.3 UNIT PRICES:

BIDDER offers for the Agency's consideration and use, the following UNIT PRICES. The UNIT PRICES offered by BIDDER indicate the amount to be added to or deducted from the CONTRACT SUM for each item-unit combination. UNIT PRICES include all costs to the Agency, including those for materials, labor, equipment, tools of trades and labor, fees, taxes, insurance, bonding, overhead, profit, etc. The Agency reserves the right to include or not to include any of the following UNIT PRICES in the Contract and to negotiate the UNIT PRICES with BIDDER prior to including in the Contract.

No.	ITEM	UNIT OF MEASURE	ADD	DEDUCT
<u>1.</u>	<u>Concrete Repair (<1")</u>	<u>SF</u>	<u>\$</u>	<u>\$</u>
<u>2.</u>	<u>Crack > 1/16"</u>	<u>LF</u>	<u>\$</u>	<u>\$</u>
<u>3.</u>	<u>Sealant Joints</u>	<u>LF</u>	<u>\$</u>	<u>\$</u>
<u>4.</u>	<u>Tape Joint</u>	<u>LF</u>	<u>\$</u>	<u>\$</u>
<u>5.</u>	_____	_____	<u>\$</u>	<u>\$</u>
<u>6.</u>	_____	_____	<u>\$</u>	<u>\$</u>

Answers / Clarifications to Questions Raised

- 1. Are there photographs of the door conditions?**
 - a. Yes. See Sheet W206, Exterior Door Photographs included in Addendum Number 2.
- 2. Can we get a more specific specification for the new steel doors and hardware – size, fire rating, etc.? Door suppliers say they cannot quote replacement doors and hardware from this spec.**
 - a. See Addendum 1, Question 16 for door hardware requirements. Door sizes and fire rating to match existing, contractor to verify conditions in field.
- 3. Is there a cleanout accessible for the French drain work?**
 - a. Unknown.
- 4. Is there roof access from the interior when we make a site visit?**
 - a. Yes. Note the site visit requirements listed in Addendum Number 1.
- 5. Detail 13/W305 Coping Detail show extending the metal with a continuous cleat. Is there a detail for the North East and South West wall at the gutter?**
 - a. There is no separate detail for the gutters. Install new counterflashing and extend under gutter similar to Coping Detail 13/W305. Existing gutters and coping are to remain in place.
- 6. Detail 6/W305 shows widening the joint. It does not allow for the preformed joint (double seal) to be installed. Should this be cut to a depth so as to install the system noted on 11/305?**
 - a. No. See Addendum 1, Item 10 and Question 5 of Addendum 1 for preformed joint requirements.
- 7. Will downspouts need to be removed to coat foundation wall?**
 - a. Yes. Removal and reinstallation of downspouts as required to complete the work shall be included in the base bid.
- 8. Is the weep system some type of tube or wafer, or just an opening?**
 - a. Provide 1-inch weep opening per Details 11 and 12/W305.

Answers / Clarifications to Questions Raised

9. Detail 13/W305 shows and states to install a continuous cleat to fasten the new extender counter flashing. To do this the coping would have to be removed. Is the intent to remove and re-install the existing coping to perform this installation?

- a. No, existing coping shall remain in place. Added new sheet metal leg to be installed up under existing coping and underlayment and fastened through existing coping. Provide new continuous cleat along base of new sheet metal leg.

10. How do we differentiate full depth epoxy crack repair quantities (3/W302) from <1/16" clean and seal quantities (2/W301) from >1/16" rout and seal quantities (1/W301) on elevation drawings? All crack lines are shown in red on elevation drawings.

- a. Non-moving, cracks < 1/16", random throughout, prepare filler and treat per manufacturer's printed requirements to adhere to Detail 2/W301. All locations at foundation.

Non-moving cracks > 1/16", field verify and prepare per Detail 1/W301 at all cracks shown on elevations and an additional quantity of 100 LF per Unit Prices.

Eliminate Detail 3/W302 and requirement for epoxy joint repairs.

Also see Section 07 14 23 Fluid Applied Coating for Exterior Walls, 3.02, Preparation.

- D. The contract shall be a lump sum contract for the Base Bid and Alternate Number 1.
- E. Specific quantities are included in the contract documents for various items. These quantities are included in the Bid.
- F. Contractor shall provide the required Three-Year Contractor Warranty and any required Manufacturer Warranties listed.

1.05 QUANTITIES

- A. Specific quantities are listed below for this project and are to be included in the Base Bid.

No.	Item	Base Bid QTY.	Unit of Measure
1.	Concrete Repair (<1")	50*	SF
2.	Crack > 1/16"	100	LF
3.	Sealant Joints	50*	LF
4.	Tape Joint	100	LF

*in addition to the areas noted/shown in Contract Documents.

- 1. The contractor shall maintain a daily log of all quantities used based on contract requirements.
- 2. Contractor shall notify Owner in writing when 80% of contract quantity is used for each item.
- 3. Owner is not responsible for quantities which exceed 80% unless Owner is notified in writing, prior to exceeding these quantities, and contractor receives written approval to proceed.
- 4. Provide photographs or videotape documentation of actual quantities used.
- 5. Locate quantities, and show their locations on plan view drawings.
- 6. Provide actual used quantities on each Application for Payment request.

1.06 ALLOWANCE

- A. Contractor shall include an allowance of \$2,500 in addition to the current scope of work and unit price quantities.

Abbreviated Scope of Work for Selective Sealant Replacement and Interim Wall Repairs

Substitution Request Form Review

The
**BUILDING
ENVELOPE
ENCLOSURE**
Group

THIS PAGE IS FOR USE BY CONSULTANT/ ENGINEER

Project Title: USC Library Annex – Implement Exterior Repairs
Owner Project No.: FP00000324
BEE Project No.: 20026
Project Manager: Mr. Richard L. Cook, Jr. Email: rickc@thebeegroup.org

☐ Prior approval is not required.

☐ Accepted.

☒ Accepted as noted.

☐ Not accepted. Your request is being returned for the following reason(s). Resubmit if appropriate:

☐ Received after deadline.

☐ Not submitted by general contractor as required.

☐ Form incomplete.

☐ Insufficient information to review.

☐ Improperly submitted. (See Instructions to Bidders).

☐ Questions to be answered before approval as noted below.

THE SYSTEM SHALL CONFORM WITH AND BE INSTALLED PER CONTRACT DOCUMENTS AND
MANUFACTURER'S INSTRUCTIONS. TESTING AND CERTIFICATION
OF COMPATIBILITY OF EXISTING SUBSTRATES/SURFACES/FINISHES PRIOR TO
FULL SCALE WORK.

REVIEWED BY: 

Signature

7-7-2020

Date

Substitution Request Form
01 60 01-2

20026

Substitution Request Form



Project Title: USC Library Annex – Implement Exterior Repairs
Owner Project No.: FP00000324
BEE Project No.: 20026
Project Manager: Mr. Richard L. Cook, Jr. **Email:** rickc@thebeegroup.org
The BEE Group

Complete and submit a copy of this form for approval of each proposed substitute item.

We submit for your consideration the following product instead of the specified item for this project:

	Specified Item	Proposed Substitution
Section:	071423	071423
Paragraph:	2.01	2.01 - B
Manufacturer:	Various	MAPEI
Product:	Fluid Applied Coating for Exterior Walls	MAPEI Elastocolor Flex and Elastocolor Primer WB

Attached are complete technical data for proper installation of proposed substitution. Laboratory tests and complete information on changes to drawings and/or specifications are included if applicable.

A. What is the total cost difference considering the overall project requirements?

Products are cost comparable

B. What effect does substitution have on the overall project and schedule?

None

C. Differences between proposed substitution. Substantiate that the product/system proposed is equal or better than the specified item/system and meets all other contract requirements.

No major differences - products are very similar

D. Manufacturer's warranties/guarantees of proposed and specified items:

Same

E. What is the advantage/benefit for the owner to select/approve the proposed substitution?

Give the owner another option for a high quality product

The undersigned states that the function, appearance and quality are equivalent to or superior to the specified item.

SUBMITTED BY David Hartis
Signature

RSG Building Solutions
Firm

7/6/2020
Date

Notification of Accepted Substitutions prior to bid will be by Addendum

Substitution Request Form
01 60 01-1

20026





SUBSTITUTION REQUEST (During the Bidding Phase)

Project: USC Library Annex-Implement Exterior Repairs
Columbia, SC
To: Mr. Rick Cook
The BEE Group
Re: Substitution Request for Fluid Applied Coating
for Exterior Walls

Substitution Request Number: 1
From: David Hartis
Date: 7/6/2020
A/E Project Number: 20026
Contract For: Division 7 Materials

Specification Title: Division 7
Section: 071423 Page: 071423 - 4&5
Description: Fluid Applied Coating for Exterior Walls
Article/Paragraph: 2.01 - B-a (Primer)

Proposed Substitution: Elastocolor Primer WB
Manufacturer: MAPEI Address: Deerfield Beach, FL Phone: 888-876-2734
Trade Name: Elastocolor Primer WB Model No.: _____

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: David Hartis
Signed by: David Hartis
Firm: RSG Building Solutions
Address: 9333-F Forsyth Park Drive
Charlotte, NC 28273
Telephone: 877-314-9435

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by:

Date:

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____



Elastocolor[®] Primer WB

**Water-Based, 100%-Acrylic
Primer for *Elastocolor*
Coatings**



DESCRIPTION

Elastocolor Primer WB is a water-based, 100%-acrylic primer for use with *Elastocolor* coatings. *Elastocolor Primer WB* improves adhesion on porous, dusting and new substrates.

FEATURES AND BENEFITS

- Promotes adhesion on substrates to enhance bonding
- Recommended for substrates exhibiting chalk and dusting after cleaning, for new or porous substrates, and in hot windy conditions
- Odorless, solvent-free liquid ideal for enclosed or poorly ventilated environments
- Algae-resistant
- Mold and mildew resistance
- VOC-compliant
- Water-vapor permeable
- Can be applied by roller, brush or sprayer

INDUSTRY STANDARDS AND APPROVALS

LEED v3 Points Contribution LEED Points

MR Credit 5, Regional Materials* Up to 2 points

IEQ Credit 4.2, Low-Emitting Materials –

Paints & Coatings 1 point

* Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

WHERE TO USE

- Concrete, brick, masonry, mortar and EIFS systems
- Above-grade vertical surfaces (exterior and interior)

LIMITATIONS

- Do not apply *Elastocolor Primer WB* when ambient or substrate temperatures are below 40°F (4°C) or expected to fall below 40°F (4°C) within 24 hours, or when these temperatures are higher than 95°F (35°C).
- Do not apply *Elastocolor Primer WB* if the relative humidity is higher than 90%.
- Do not apply *Elastocolor Primer WB* on horizontal traffic-bearing surfaces.
- Do not apply *Elastocolor Primer WB* during inclement weather or when rain is expected within 24 hours following application.
- Do not use *Elastocolor Primer WB* where hydrostatic pressure from the underside of the substrate may be present.
- Protect *Elastocolor Primer WB* from freezing and discard it if it freezes.
- Do not use *Elastocolor Primer WB* in total immersion or when subject to migrating moisture or rising dampness.
- Substrates must be dry before application of *Elastocolor Primer WB*. Allow substrates sufficient time to dry after rain; if it rains, at least 24 hours of drying time is recommended.

Consult MAPEI's Technical Services Department for installation recommendations regarding any substrates and conditions not listed.

SUITABLE SUBSTRATES

- Clean, sound, stable, frost-free and fully cured concrete and masonry substrates, as well as brick-mortar and EIFS systems

SURFACE PREPARATION

- Substrates should be clean and free of dirt, residue, oils, grease, curing compounds, laitance and any contaminant that may interfere with the adhesion of *Elastocolor Primer WB*.
- Use proper surface-preparation methods to achieve a texture of medium 100-grit sandpaper, or an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #1 to #3.
- Chemical removal may be required on some stains and contaminants. Be sure to neutralize these removal compounds and rinse the treated surface thoroughly with clean water.
- Before application of *Elastocolor Primer WB*, repair holes, spalls and damaged concrete with appropriate MAPEI concrete repair products. Remove any protruding concrete areas and smooth out any irregularities. Detail cracks with the appropriate surface fillers.
- Apply as required (for example, on new or porous substrates and in hot, windy conditions).

MIXING

Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for details.

- Appropriately mix *Elastocolor Primer WB* to ensure color uniformity and minimize air entrapment.
- *Elastocolor Primer WB* is ready to use. No dilution is required.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Air, material and substrate temperatures during application must be between 40°F and 95°F (4°C and 35°C).
2. Apply *Elastocolor Primer WB* by brush, roller or sprayer directly onto the substrate.

CLEANUP

Clean tools and equipment immediately after use with water. Dried material may require mechanical means for removal.

Product Performance Properties

Laboratory Tests	Results
Density	1,01 g per cm ³

Shelf Life and Properties (before application)

Shelf life	2 years in original, unopened container in a dry, covered location at 73°F (23°C) and 50% relative humidity
Consistency	Pourable liquid
Color	Milky (dries clear)
VOCs (Rule #1168 of California's SCAQMD)	≤ 50 g per L

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

Application Properties

Temperature range for application	40°F and 95°F (4°C and 35°C)
Drying time at 70°F (21°C) and 50% relative humidity	4 hours under normal conditions

CSI Division Classification

Concrete Finishing	09 97 23
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Packaging

Size
Plastic bucket: 5 U.S. gals. (18,9 L)

Approximate Coverage*

Coverage
300 to 400 sq. ft. per U.S. gal. (7,35 to 9,8 m ² per L)

* Coverage varies depending on the surface porosity and texture of the surface as well as on job requirements.

Elastocolor® Primer WB



Refer to the SDS for specific data related to VOCs, health and safety, and handling of product.

STATEMENT OF RESPONSIBILITY

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith.

**ANY CLAIM SHALL BE DEEMED WAIVED UNLESS
MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS
FROM DATE IT WAS, OR REASONABLY SHOULD HAVE
BEEN, DISCOVERED.**

We proudly support the following industry organizations:



MAPEI Headquarters of the Americas

1144 East Newport Center Drive
Deerfield Beach, Florida 33442
1-888-US-MAPEI (1-888-876-2734) /
(954) 246-8888

Technical Services

1-800-992-6273 (U.S. and Puerto Rico)
1-800-361-9309 (Canada)

Customer Service

1-800-42-MAPEI (1-800-426-2734)

Services in Mexico

0-1-800-MX-MAPEI (0-1-800-696-2734)

Edition Date: January 19, 2015

PR: 7210 MKT: 14-1421

For the most current BEST-BACKED™ product data and warranty information, visit www.mapei.com.

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SUBSTITUTION REQUEST (During the Bidding Phase)

Project: USC Library Annex-Implement Exterior Repairs Substitution Request Number: 1
Columbia, SC From: David Hartis
 To: Mr. Rick Cook Date: 7/6/2020
The BEE Group A/E Project Number: 20026
 Re: Substitution Request for Fluid Applied Coating Contract For: Division 7 Materials
for Exterior Walls

Specification Title: Division 7 Description: Fluid Applied Coating for Exterior Walls
 Section: 071423 Page: 071423 - 4&5 Article/Paragraph: 2.01 - B-b (Coating)

Proposed Substitution: Elastocolor Flex
 Manufacturer: MAPEI Address: Deerfield Beach, FL Phone: 888-876-2734
 Trade Name: Elastocolor Flex Model No.: _____

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: David Hartis
 Signed by: David Hartis
 Firm: RSG Building Solutions
 Address: 9333-F Forsyth Park Drive
Charlotte, NC 28273
 Telephone: 877-314-9435

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by:

Date:

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

Version: April 18, 2019



Elastocolor[®] Flex

**Water-Based, 100%-Acrylic,
Elastomeric Waterproof
Coating**

High elongation and recovery

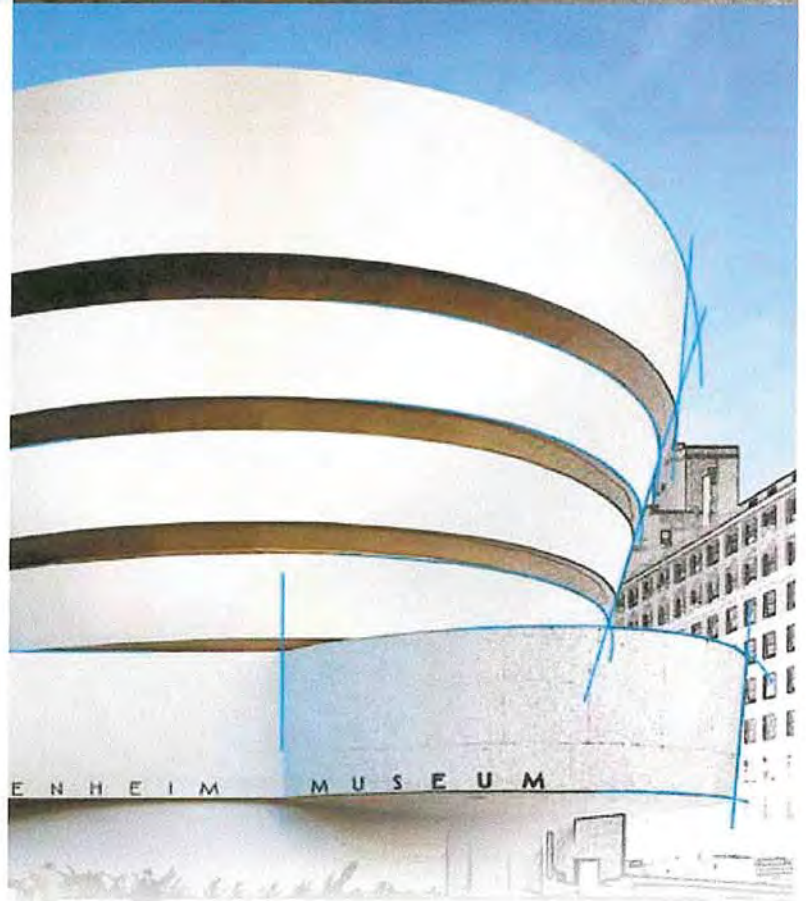
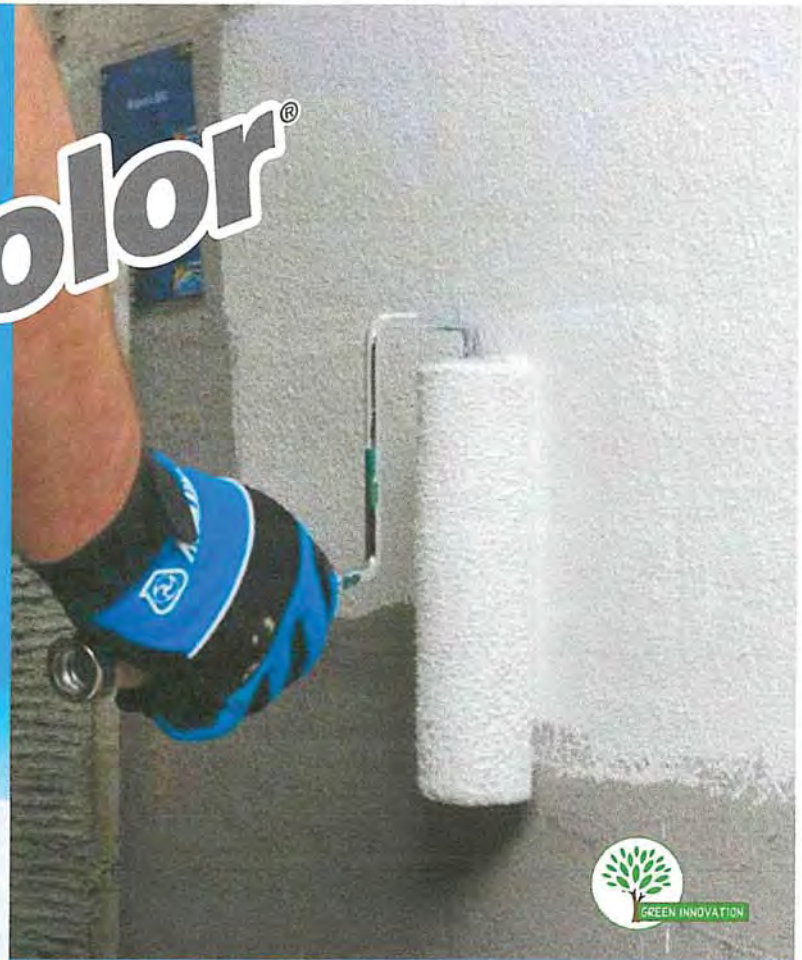
Enhanced aesthetics, waterproofing and protection

DESCRIPTION

Elastocolor Flex is an elastomeric, high-build, water-based, 100%-acrylic coating to protect and decorate above-grade, vertical exterior concrete, masonry, stucco and EIFS systems. *Elastocolor Flex* is available in two textures (smooth and fine), in a wide range of standard colors and in an unlimited number of custom colors to increase its design versatility.

FEATURES AND BENEFITS

- High elongation and recovery for durable performance over dynamic cracks
- Flexible at low temperatures for suitability in most climates
- Effective carbon dioxide diffusion and chloride barrier to protect reinforcing steel from corrosion
- Excellent adhesion to all approved substrates to bond for long-term durability
- Excellent color retention, hiding power and resistance to UV light
- Resists wind-driven rain and helps to prevent water penetration into substrates
- VOC-compliant
- Water-vapor permeable
- Algae-resistant
- BioBlock[®] technology for mold and mildew resistance
- Freeze/thaw-stable and suitable for cold climates
- Can be applied by roller, brush or sprayer



The name "The Solomon R. Guggenheim Foundation" / "The Solomon R. Guggenheim Museum" / "Guggenheim Museum" is a registered trademark of The Solomon R. Guggenheim Foundation. Used by permission.

INDUSTRY STANDARDS AND APPROVALS

- SWR Institute validated product

WHERE TO USE

- Concrete, brick, masonry, stucco and EIFS systems
- Above-grade vertical exterior surfaces
- Civil engineering structures subject to dynamic cracking
- For enhancing aesthetics, waterproofing and general protection
- Over new and existing coatings

LIMITATIONS

- Do not apply *Elastocolor Flex* when ambient or substrate temperatures are below 40°F (4°C) or expected to fall below 40°F (4°C) within 24 hours, or when these temperatures are higher than 95°F (35°C).
- Do not apply *Elastocolor Flex* if the relative humidity (RH) is higher than 90%.
- Do not apply *Elastocolor Flex* on horizontal traffic-bearing surfaces.
- Do not apply *Elastocolor Flex* when inclement weather is expected or when rain is expected within 24 hours following application.
- Do not use *Elastocolor Flex* where hydrostatic pressure from the underside of the substrate may be present.
- Protect *Elastocolor Flex* from freezing and discard it if it freezes.
- Do not use *Elastocolor Flex* in total immersion or when subject to migrating moisture or rising dampness.
- Substrates must be dry before application of *Elastocolor Flex*. Allow substrates sufficient time to dry after rain; if it rains, at least 24 hours of drying time is recommended.

Consult MAPEI's Technical Services Department for installation recommendations regarding any substrates and conditions not listed.

SUITABLE SUBSTRATES

- Clean, sound, stable, frost-free and fully cured concrete, masonry and stucco substrates, as well as brick-mortar and EIFS systems

SURFACE PREPARATION

- Substrates should be clean and free of dirt, residue, oils, grease, curing compounds, laitance and any contaminant that may interfere with the adhesion of *Elastocolor Flex*.
- Use proper surface-preparation methods to achieve a texture of medium 100-grit sandpaper, or an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #1 to #3.
- Chemical removal may be required on some stains and contaminants. Be sure to neutralize these removal compounds and rinse the treated surface thoroughly with clean water.

- Before application of *Elastocolor Flex*, repair holes, spalls and damaged concrete with appropriate MAPEI concrete repair products. Remove any protruding concrete areas and smooth out any irregularities. Detail cracks with the appropriate surface fillers.
- Apply *Elastocolor Primer WB* as required (for example, on new or porous substrates and in hot, windy conditions).

MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

- Appropriately mix *Elastocolor Flex* to ensure color uniformity and minimize air entrapment.
- *Elastocolor Flex* is ready to use. No dilution is required.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation. Contact MAPEI's Technical Services Department for more detailed recommendations.

1. Air, material and substrate temperatures during application must be between 40°F and 95°F (4°C and 35°C).
2. Apply *Elastocolor Flex* by brush, roller or sprayer onto a dried coat of *Elastocolor Primer WB* (if a primer is required). Otherwise, apply *Elastocolor Flex* directly to the substrate.
3. Apply to achieve a wet film thickness (WFT) of 12 to 23 mils for the smooth version, and a WFT of 15 to 27 mils for the fine version (per coat).
4. Ensure that the application is always worked to a natural break and that a wet edge is maintained throughout the application.
- 5a. Brush application: Apply with this method only in small areas.
- 5b. Roller application: Use a 3/4" to 1-1/4" (19-mm to 3.2-cm) nap roller cover depending on surface texture and desired film build. Maintain a uniform WFT during application, finishing the coated area by lightly rolling the surface in one direction. Always work to a natural break and maintain a wet edge.
- 5c. Spray application: *Elastocolor Flex* Smooth can be applied by airless spray using a 0.0019 to 0.0021 tip. *Elastocolor Flex* Fine should only be spray-applied using the appropriate texture spray equipment. Spray-apply using a cross-hatch technique to the desired WFT. Back-rolling with a 3/4" to 1-1/4" (19-mm to 3.2-cm) nap roller cover is recommended as necessary to ensure uniform coverage and texture.

CLEANUP

Clean tools and equipment immediately after use with water. Dried material may require mechanical means for removal.

Product Performance Properties

Laboratory Tests	Results
Appearance – ASTM D523	Flat < 5 @ 60
Density	
Smooth texture	11.0 lbs. per U.S. gal. (1.32 g per cm ³)
Fine texture	11.4 lbs. per U.S. gal. (1.37 g per cm ³)
Solids, by weight	
Smooth texture	58.5%
Fine texture	62.5%
Solids, by volume – ASTM D2697	
Smooth texture	48.0%
Fine texture	48.6%
Carbon dioxide diffusion – EN 1062-6, Method A	
CO ₂ resistance coefficient	445,109
R (equivalent air layer thickness)	394 ft. (120 m)
Sc (equivalent concrete thickness)	11.8 in. (30 cm)
Water vapor transmission – ASTM D1653	10.8 grains/h.ft ² (26.2 perms)
Weathering – ASTM D6695 (Xenon Arc: 10,000 hours)	Passed
Salt spray (fog) resistance – ASTM B117	Passed
Resistance to wind-driven rain – ASTM D6904	Passed (0 lb. [0 g] of weight gain)
Fungal resistance – ASTM D3273	No growth
Elongation (at break) at 73°F (23°C) and 50% RH	
ASTM D638	825%
ASTM D412	529%
Tensile strength	
ASTM D638	65 psi (0.45 MPa)
ASTM D412	113 psi (0.78 MPa)
Mandrel bend test – ASTM D522	Passed (no cracking)
Crack bridging – EN 1062-7	
At 73°F (23°C)	30 mils
At 32°F (0°C)	73 mils
At -15°F (-26°C)	32 mils

Shelf Life and Product Characteristics

Shelf life	2 years in original, unopened container in a dry, covered location at 73°F (23°C) and 50% RH
Consistency	Thick liquid
Color	3 bases (pastel, medium and transparent) and 25 standard colors available – or a broad range of colors using the ColorMap™ automatic coloring system
VOCs (Rule #1113 of California's SCAQMD)	≤ 50 g per L for white and colors tinted with low/zero-VOC colorant

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.


Application Properties

Drying time at 70°F (21°C) and 50% relative humidity	
Dry to the touch	6 hours
Before recoating or applying topcoat	12 to 24 hours
Until full cure	7 days

CSI Division Classifications

Painting and Coatings	09 90 00
Elastomeric Coatings	09 96 53

Elastocolor[®]
Flex


**SEALANT, WATERPROOFING
& RESTORATION INSTITUTE**

Issued to: MAPEI
Product: Elastocolor Flex - Smooth

ASTM D 6904: Resistance to Wind Driven Rain
 Weight Gain: 0.0 oz. Water Leaks: None **Pass ✓**

ASTM D 412: Tensile Properties
 Tensile Strength: 113 psi Elongation: 529% **Pass ✓**

EN 1062-7: Crack Bridging Ability
 Results: No cracking **Pass ✓**

ASTM D 2697: Solids Content by Volume
 Results: 48% Density: 11 lbs/gal. **Pass ✓**

ASTM D 1653: Moisture Vapor Transmission
 WVT (grains/h.ft²): 10.8 Perms: 26.2 **Pass ✓**

Validation Date: 01/22/19 - 01/21/24
No. 119-FLEX124 Copyright © 2019

WALL COATINGS VALIDATION
www.swrionline.org



Elastocolor[®] Flex



Packaging

Size (plastic bucket with tint included)

Smooth texture

Pastel base, 5 U.S. gals. (18.9 L)
Medium base, 5 U.S. gals. (18.9 L)
Transparent base, 5 U.S. gals. (18.9 L)

Fine texture

Pastel base, 5 U.S. gals. (18.9 L)
Medium base, 5 U.S. gals. (18.9 L)
Transparent base, 5 U.S. gals. (18.9 L)

Approximate Coverage*

Smooth texture, per coat

Thickness (wet film and dry film)	Coverage
12 mils WFT or 5 mils dry film thickness (DFT)	140 sq. ft. per U.S. gal. (3.44 m ² per L)
18 mils WFT or 8 mils DFT	90 sq. ft. per U.S. gal. (2.20 m ² per L)
23 mils WFT or 11 mils DFT	70 sq. ft. per U.S. gal. (1.71 m ² per L)

Fine texture, per coat

Thickness (wet film and dry film)	Coverage
15 mils WFT or 7 mils DFT	110 sq. ft. per U.S. gal. (2.69 m ² per L)
20 mils WFT or 10 mils DFT	80 sq. ft. per U.S. gal. (1.96 m ² per L)
27 mils WFT or 14 mils DFT	60 sq. ft. per U.S. gal. (1.47 m ² per L)

* Coverage varies depending on the surface porosity and texture of the surface as well as on job requirements.

Refer to the SDS for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI meets the health and well-being requirements of product certification programs, contact the MAPEI Sustainability Team at 1-800-992-6273.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at

www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use,

and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

We proudly support the following industry organizations:



ICRI



TTMAC ACTTM



American Concrete Institute®



CTDA



MAPEI Headquarters of North America

1144 East Newport Center Drive
Deerfield Beach, Florida 33442
1-888-US-MAPEI (1-888-876-2734) /
(954) 246-8888

Technical Services

1-888-365-0614 (U.S. and Puerto Rico)
1-800-361-9309 (Canada)

Customer Service

1-800-42-MAPEI (1-800-426-2734)

Services in Mexico

0-1-800-MX-MAPEI (0-1-800-696-2734)

Edition Date: April 15, 2019

PR: 7216 MK 3006625 (19-1360)

For the most current BEST-BACKED™ product data and warranty information, visit www.mapei.com.

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SWR Institute
400 Admiral Blvd
Kansas City, MO 64106
816.472.7974
info@swrionline.org

Product Name: Elastocolor Coat - Smooth

Submitted by: MAPEI
1144 E. Newport Center
Deerfield, Florida 33442
rjays@mapei.com
<http://www.mapei.com/US-EN/>

Test Results

ASTM D 6904 Resistance to Wind Driven Rain
Weight gain 0.00 oz.
Water Leaks: None
Pass: Yes

ASTM D 412 Tensile Properties
Tensile Strength: 398 psi
Elongation: >269%
Pass: Yes

EN 1062-7 Crack Bridging Ability
Results: No cracking
Pass: Yes

ASTM D 2697 Solids Content by Volume
Results: 47.3%
Perms: 11.3 lbs/gal.

ASTM D 1653 Moisture Vapor Transmission
WVT (grains/h.ft²): 10.2
Perms: 24.8

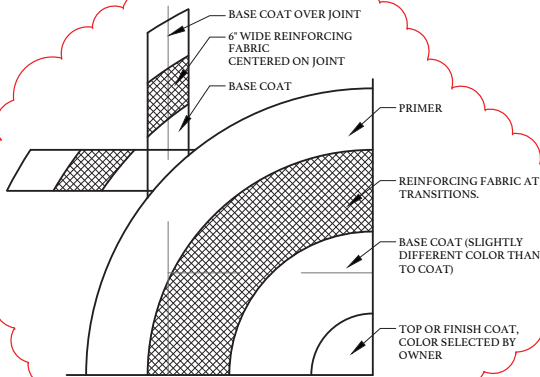
Validation Date: 1/22/2019

Expiration Date: 1/21/2024

Lab Details: PRI Construction Materials Technologies LLC
6412 Badger Drive

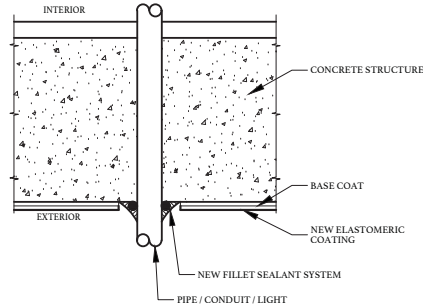
Tampa, FL 33647
Phone: 813.621.5777

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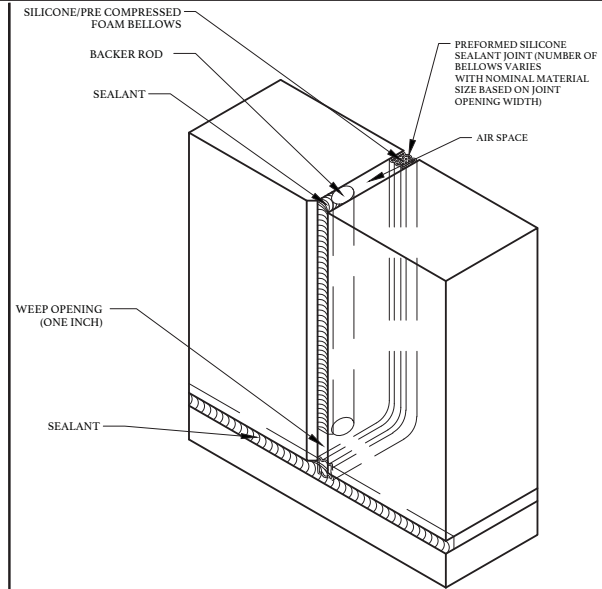
- NOTES:**
1. PREPARE ALL EXTERIOR SURFACES IN ACCORDANCE WITH THE SPECIFICATION REQUIREMENTS.
 2. WORK INCLUDES WALL REPAIRS AND COATING SYSTEM ON THE SELECT AREAS OF THE EXTERIOR FOUNDATION WALLS FOR THE BASE BID.

9 ELASTOMERIC COATING SYSTEM (TYPICAL)
W305 NOT TO SCALE

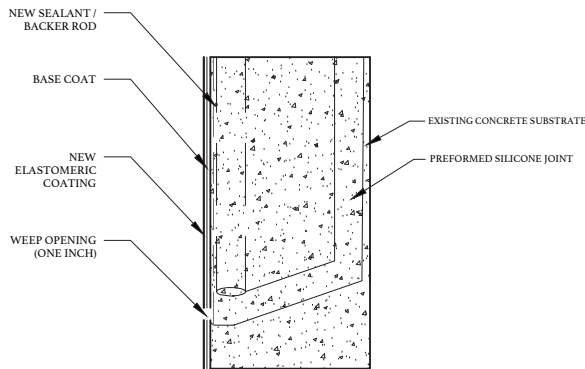


- NOTES:**
1. INCLUDES PIPES, CONDUITS, RAILS, LANTERNS, PHOTO-ELECTRIC EYES, FIRE ALARMS ON EXTERIOR OF BUILDING.
 2. LESS THAN 4" DIAMETER, AND ALL ELECTRICAL ITEMS.

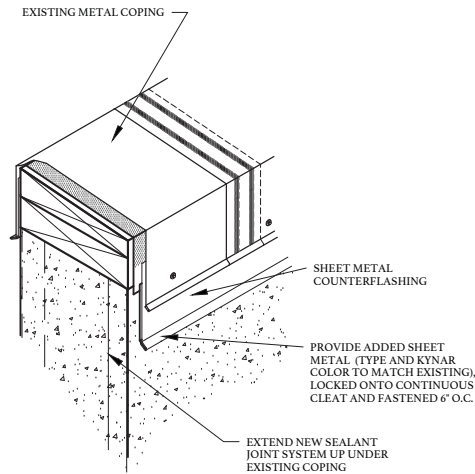
10 SMALL PENETRATION THRU CONCRETE DETAIL (TYPICAL)
W305 NOT TO SCALE



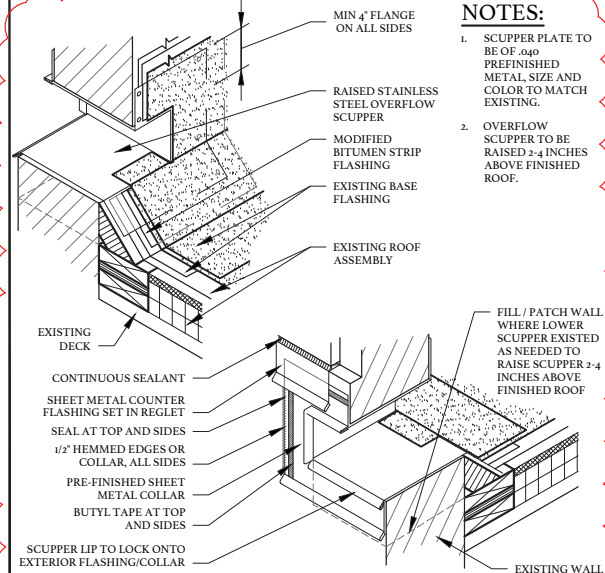
11 DOUBLE JOINT DETAIL (TYPICAL)
W305 NOT TO SCALE



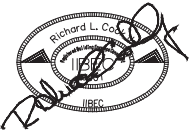
12 DOUBLE JOINT SECTION DETAIL (TYPICAL)
W305 NOT TO SCALE



13 COPING DETAIL (TYPICAL)
W305 NOT TO SCALE



14 RAISED OVERFLOW SCUPPER (TYPICAL)
W305 NOT TO SCALE



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SEALANT JOINT PHOTO 1



SEALANT JOINT PHOTO 2



SEALANT JOINT PHOTO 3



SEALANT JOINT PHOTO 4



SEALANT JOINT PHOTO 5

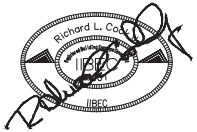


SEALANT JOINT PHOTO 6

SEALANT JOINT PHOTOGRAPHTS

The **BUILDING ENVELOPE ENCLOSURE** Group

1226 YEAMANS HALL ROAD, STE C
HANAHAN, SC 29410



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DATE:	06/15/2020
BEE PROJECT #:	20036
DESIGNED:	RLC
CHECKED:	DMV
DRAWN:	IPO
REVISION:	06/30/2020

SEALANT JOINT
PHOTOGRAPHS

W204

SHEET 8 OF 16

FINAL ABBREVIATED SCOPE OF WORK

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CONCRETE PHOTO 1



CONCRETE PHOTO 2



CONCRETE PHOTO 3



CONCRETE PHOTO 4



CONCRETE PHOTO 5

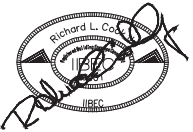


CONCRETE PHOTO 6

CONCRETE PHOTOGRAPHS

The
**BUILDING
ENVELOPE
ENCLOSURE**
Group

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CONCRETE
PHOTOGRAPHS

W205

SHEET 9 OF 16

FINAL ABBREVIATED SCOPE OF WORK

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EXTERIOR DOOR PHOTO 1



EXTERIOR DOOR PHOTO 2



EXTERIOR DOOR PHOTO 3



EXTERIOR DOOR PHOTO 1



EXTERIOR DOOR PHOTO 1

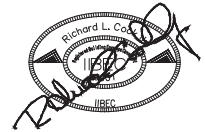


EXTERIOR DOOR PHOTO 1

EXTERIOR DOORS PHOTOGRAPHS
(ALTERNATE #1)

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BEE PROJECT #:	20036
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CHECKED:	DMV
DRAWN:	IPO
REVISION:	06/30/2020

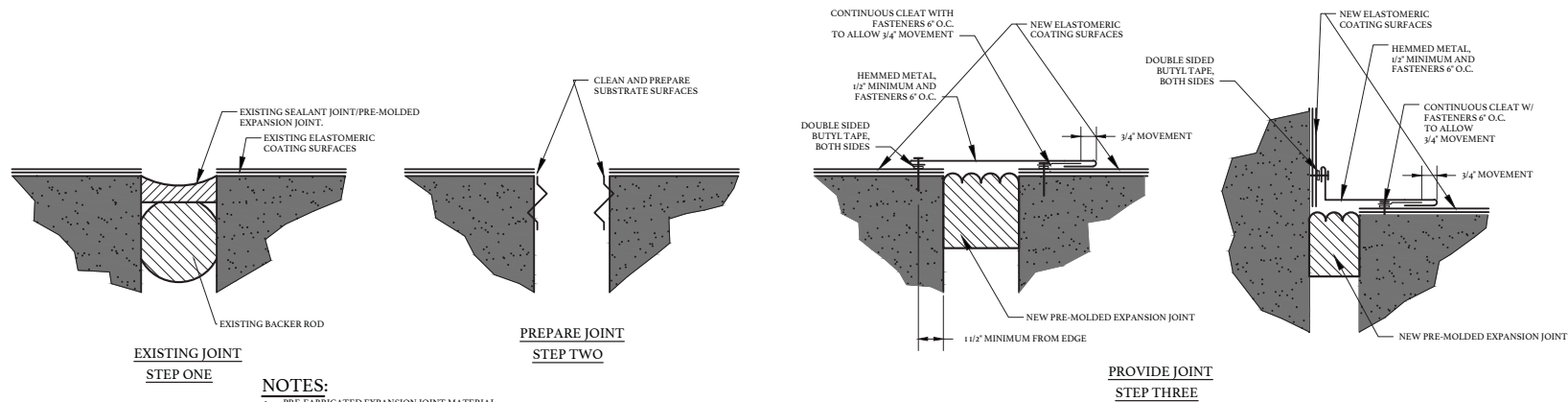
EXTERIOR DOORS
PHOTOGRAPHS
(ALT. #1)

W206

SHEET 10 OF 16

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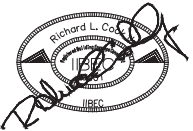


15
W306
NOT TO SCALE

COVER PLATE FOR VERTICAL JOINTS IN WALLS GREATER THAN 1-1/2" WIDE (TYPICAL)

INTENTIONALLY LEFT BLANK

16
W306
NOT USED



UNIVERSITY OF SOUTH CAROLINA
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BEE PROJECT NUMBER: 20026
8500 FARROW RD
COLUMBIA, SOUTH CAROLINA

DATE: 06/15/2020
BEE PROJECT #: 20026
DESIGNED: RLC
CHECKED: DMV
DRAWN: IPO
REVISION: 06/30/2020

DETAILS / SECTIONS

W306

SHEET 12 OF 16

FINAL ABBREVIATED SCOPE OF WORK