

SETTLEMENT AGREEMENT

(Suffolk City of Port St. Lucie and Community Redevelopment Agency of PSL)

This Settlement Agreement (“Agreement”) is made on the ____ day of _____, 2024, by and between, **Suffolk Construction Company, Inc.**, a Massachusetts corporation (“Contractor” or “Suffolk”) and **City of Port St. Lucie**, a Florida Municipal Corporation and **Community Redevelopment Agency of the City of Port St. Lucie** (collectively “PSL”) (Contractor and PSL are collectively referred to as the “Parties”).

RECITATIONS

A. **WHEREAS**, on or about May 01, 2007, PSL entered into a design-build contract with Suffolk to design and construct a Civic Center (the “Main Civic Center Building”) for PSL located in Port St. Lucie, St. Lucie County, Florida (the “Design-Build Contract”);

B. **WHEREAS**, on August 20, 2007, PSL and Suffolk entered into a change order to the Design-Build Contract identified as “Change Order 3”, which amended the Design-Build Contract by adding a parking garage (the “Parking Garage”) at the Main Civic Center Building site;

C. **WHEREAS**, for the remainder of this Agreement, the Design-Build Contract and Change Order 3 shall collectively be referred to as the “Contract” unless otherwise specified, and the construction to be performed by Suffolk pursuant to the Design-Build Contract and Change Order 3 will be collectively referred to as the “Project”;

D. **WHEREAS**, PSL performed an inspection and investigation of the design development, construction, maintenance, operation and physical condition of the Project and all of the improvements therein;

E. **WHEREAS**, as part of such inspection and investigation, PSL retained the services of Jezerinac Group, PLLC and Steven H. Kahn Forensic Building Experts, Inc. (collectively the “Engineers” unless otherwise specified). The Engineers, based upon their review(s) and inspection(s), prepared reports alleging certain defects in design, development, construction, maintenance, repair, and operation of the Project (the “Report(s)”). A copy of Jezerinac Group’s February 14, 2023, Structural Conditional Assessment is attached hereto as **Exhibit “A”** and both reports are incorporated herein by reference. Pursuant to such Reports, as supplemented and amended and together with subsequent inspections by the Engineer, PSL alleged certain defects with respect to the design and construction of the Project;

F. **WHEREAS**, on or about April 24, 2018, PSL prepared and submitted to Contractor a letter titled “Statutory Notice Pursuant to Section 558, Florida Statutes 2016”, with an enclosed copy of a report dated January 19, 2018, of the Jezerinac Group titled “Port St. Lucie Civic Center Parking Garage REPORT OF STRUCTURAL OBSERVATIONS” (the “First Chapter 558 Notice”) alleging construction defects with Parking Garage built pursuant to Change Order 3;

G. **WHEREAS**, on October 09, 2018, PSL filed a four Count Complaint against Contractor for Breach of Contract, Breach of Implied Warranty to Construct in Good, Workmanlike Manner, Violation of Building Code, and Negligence, in the Circuit Court of the Nineteenth Judicial Circuit in and for St. Lucie County, Florida in a case styled *City of Port St. Lucie, a Florida Municipal Corporation and Community Redevelopment Agency of the City of Port St. Lucie v. Suffolk Construction Company, Inc.* Case Number 562018CA001895AXXXHC (the “Lawsuit”);

H. **WHEREAS**, on January 31, 2019, PSL filed an Amended Complaint (the “First Amended Complaint”) which included an additional Count for fraud to the Lawsuit and additional allegations concerning the alleged defects with the Parking Garage;

I. **WHEREAS**, on May 8, 2019, PSL prepared and submitted to Contractor an Amended Statutory Notice Pursuant to Chapter 558, Florida Statutes (the “Second Chapter 558 Notice”) alleging construction defects with both the Main Civic Center Building as well as the Parking Garage as reported by the Engineers as of May 8, 2019;

J. **WHEREAS**, on May 11, 2020, PSL filed a Second Amended Complaint and requested leave of court to formally file the Second Amended Complaint (the “Second Amended Complaint”), which was granted on June 11, 2020. The Second Amended Complaint contained additional allegations regarding the construction defects alleged by PSL to be occurring at the Main Civic Building;

K. **WHEREAS**, the claims of PSL raised in the First Chapter 558 Notice, the Second Chapter 558 Notice, and the Lawsuit including without limitation, PSL’s original complaint, First Amended Complaint, and Second Amended Complaint are collectively referred to as the “Claims”;

L. **WHEREAS**, the Contractor and its Subcontractors, their subcontractors, design professionals and their respective insurers dispute their liability for the PSL Claims but wish to resolve any differences and avoid prolonged, costly, and uncertain litigation and have agreed to settle and release all matters in accordance with the terms of this Agreement;

NOW, THEREFORE, in consideration of the foregoing, the mutual covenants, promises and considerations hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and with the intent to be legally bound, it is hereby agreed by and between the Parties as follows:

TERMS

1. **Recitals**. Each of the foregoing recitals is accurate, correct, and true and each is incorporated herein by this reference.

2. **Contractor’s Settlement Work (Exhibit B-1)**. All repairs shall be performed in accordance with the repair protocols attached hereto as detailed in **Exhibit B-1** and **Exhibit B-2**. Further, attached to this Agreement as **Composite Exhibits “A-1 and A-2”** are the Repair Protocols PSL’s Engineers (the “Repair Protocols.”) Contractor hereby agrees to perform work at the Main Civic Center Building and Parking Garage in accordance with the Repair Protocols and as further described in this Agreement. The work to be performed by Contractor is divided into two (2) categories: 1. “No Cost Settlement Work” (*see* paragraph 2.a. of this Agreement), and 2. “Actual Cost Settlement Work” (*see* paragraph 2.b. of this Agreement). The “No Cost Settlement Work” and “Actual Cost Settlement Work” to be performed by Contractor will be collectively referred to as the “Settlement Work.” For all Settlement Work, Contractor shall furnish for all labor, supervision, materials, equipment, and all other things necessary to prosecute and complete the Settlement Work as further described in this Agreement. Contractor must perform all Settlement Work in a good and workmanlike manner in accordance with the Repair Protocols attached to this Agreement as **Composite Exhibits “B-1 and B-2”** and approved Design-Build drawings originally created when the Project was originally conceived and implemented in 2007. In the event of a conflict between the Repair Protocols and the approved Design-Build drawings originally

created when the Project was originally conceived and implemented in 2007, the Repair Protocols will control over the approved Design-Build drawings originally created when the Project was originally conceived and implemented in 2007. Additionally, Contractor must perform all Settlement Work in accordance with all Florida laws and building codes applicable at the time the Project was originally permitted unless not permitted by the Government Authority having jurisdiction over the Project (“AHJ”). If the AHJ requires the Contractor’s Settlement Work to be performed in accordance with building codes currently in effect at the date of this Settlement Agreement or subsequent to the date of this Settlement Agreement, PSL will be responsible for the payment of the incremental costs increase of performing the Work to the current building code. By way of example, if under the original building code, the cost would have been \$100.00 and performing the Settlement Work under the new building code is \$110.00, the Contractor would be entitled to an increased Change Order of \$10.00.

*** As further detailed below, the Chord Plate Repairs identified on Repair Protocols SK-2 through SK-4 may fall under either the No Cost Settlement Work Category or the Actual Cost Settlement Work Category depending on the findings of the Third-Party Engineer selected by PSL and Suffolk.**

a. **No-Cost Settlement Work (Exhibit B-1)**: Contractor at its sole cost and expense will perform the following No-Cost Settlement Work:

Repair Type	Repair Description	Unit
SK-6	Corbel Spall Replace	4ea
SK-7	Wall Corbel Cracking Repair	33ea
SK-8	Corroded Weld Repairs	46ea
SK-9	Vertical Spall Repair (TEE BRG)	123ea
SK010	Vertical/Horizontal Spall Repair	14ea
SK-10 Below	Precast Concrete Panels	1 ea
SK-11	Spandrel Conn Covering Repair	15ea
SK-12	Crack Repair	8ea
SK-13	Plate Covering Replacement (except 136 locations at roof level 6 at Grids A-D)	28ea
SK-14	Vertical Reinforcement Spall at Top of Wall or Column Repair	19ea
N/A	Inverted Tee Girder	20ea

At Civic Center	Reversed Bearing Plates	16ea
At Civic Center	Loading Dock Cracks	29ea

b. **Actual Cost Settlement Work (Exhibit B-2):** Contractor will perform the following Actual Cost Settlement Work identified below at a discounted rate to PSL that does not include Contractor's usual Contractor's Fee¹ charged with performing such work.² However, PSL will be responsible for paying Contractor's discounted rate for the value of the Actual Cost Settlement Work as further described below. PSL must pay Contractor within 30 days of Contractor's completion of the Actual Cost Settlement Work and PSL's acceptance of the Actual Cost Settlement Work.

Repair Type	Repair Description	Unit	Unit Cost	Value
SK-2*	Chord Plate Repairs determined by <u>third party engineer to not be caused by improper installation.</u>	38ea	ea	\$30,400

¹ For reference only, Contractor's usual Contractor's Fee, which will not be charged to PSL for the Actual Cost Settlement Work contemplated by this Agreement including without limitation, Fee on subcontract costs, insurance related costs, general conditions, general requirements, and bonds, if necessary.

² The Work Actual Cost of Work shall mean costs necessarily incurred by the Contractor the Work. The Cost of the Work shall include (i) Wages or salaries of the Construction Manager's personnel regardless of where they are stationed, at the stipulated rates stated in **Exhibit C** attached, (ii) general conditions and general requirements (iii) Costs paid or incurred by the Construction Manager for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary benefits such as medical and health benefits and pensions, are included in the stipulated rates attached as **Exhibit C**, provided that the Owner shall make payment to Construction Manager for vacation, sick leave and holiday hours taken by such personnel at the rates set forth in **Exhibit C** as a Cost of the Work; (iv) Payments made by the Construction Manager to Subcontractors in accordance with the requirements of the subcontracts; (v) Contractors cost for insurances, or property insurance shall be charged as a Cost of the Work at an agreed -upon stipulated of one and four-tenths percent (1.4%) of all Costs of the Work;(vi) if applicable, costs of payment and performance bonds In the event that the Contractor is required to obtain property insurance in accordance with this Agreement such insurance shall be reimbursed as a separate Cost of the Work and shall not be considered to be included in the stipulated rates set forth in this Agreement

SK-3*	Chord Plate Repairs determined by <u>third party engineer to not be caused by improper installation.</u>	199ea	\$800/ea	\$159,200
SK-4*	Chord Plate Repairs determined by <u>third party engineer to not be caused by improper installation.</u>	183ea	\$800/ea	\$146,400
SK-16-20 & 23-27	Standard Caulking at Level 6 (Roof)	7000lf	\$12/LF	\$84,000
SK-28	Joint Sealant Around Stair Doors	12ea	\$2000/ea	\$24,000
	Restriping	420ea	\$250/ea	\$105,000
	TOTAL Cost of Work			\$549,000
	Third Party Review			\$75,000
	General Conditions		20%	\$109,800
	TOTAL			\$733,800
	The Actual Cost Settlement Work is a Rough Order of Magnitude and has not been vetted with any subcontractor trades as to pricing and is subject to price increases.			

SK-2*	Chord Plate Repairs identified by third party engineer to be defective due to improper installation.	Unknown number out of 38 suspected occurrences
SK-3*	Chord Plate Repairs identified by third party engineer to be defective due to improper installation.	Unknown number out of 199 suspected occurrences
SK-4*	Chord Plate Repairs identified by third party engineer to be defective due to improper installation.	Unknown number out of 183 suspected occurrences

c. **Chord Plate Inspection Repairs:** Prior to the commencement of the work, the Parties shall select a mutually agreeable third-party engineer (the “Third Party Engineer”) to inspect the chord plate repairs identified in SK-2 through SK-4 of the Repair Protocols. The Third-Party Engineer shall have sufficient education, training and experience in the design and construction of precast concrete structures and their sealant joints. The costs of retaining the Third-Party Engineer shall be equally shared between PSL and Contractor. Further, the date and time of the Third-Party Engineer’s inspection shall be coordinated with both parties so that each may have their designated representatives attend the evaluation of evaluations. The Third-Party Engineer shall not perform any evaluation without the representatives of Port St. Lucie and the contractor present. In the event that the Third Party Engineer determines that any defect related to the Chord Plate Repairs identified in SK-2 through SK-4 of the Repair Protocols was the result of improper installation by the Contractor, then such repair will be categorized as “No Cost Settlement Work” and Contractor must undertake the repair of any such Chord Plate so identified by the Third Party Engineer as defective due to improper installation by Contractor at Contractor’s own cost and expense along with all other terms and conditions associated with all other “No Cost Settlement Work” further described in paragraph 2.a. of this Agreement. In the event that the Third Party Engineer determines that any defect related to the Chord Plate Repairs identified in SK-2 through SK-4 of the Repair Protocols was **NOT** due to the improper installation by the Contractor, then such repair will be categorized as “Actual Cost Settlement Work” and PSL will be responsible for paying for such Chord Plate Repair at the rates described in paragraph 2.b. of this Agreement.

d. **Notice to Proceed:** The Settlement Work shall commence from the later of the following dates 1) the date when all permits to perform the Settlement Work are issued by the governmental authority having jurisdiction over the Project necessary to commence uninterrupted construction on the Settlement Work or 2) the date Suffolk receives a written Notice to Proceed from PSL wherein PSL directs Suffolk to proceed with the Settlement Work. In the event that the Parties agree that Settlement Work can commence following Suffolk’s receipt of a written Notice to Proceed from PSL, but all permits and governmental approvals have not yet been obtained and only to the extent the work can proceed without permits, PSL will be responsible for obtaining such permits and governmental approvals after-the-fact, and Suffolk will provide reasonable cooperation in the procurement of any such after-the-fact permits, governmental approvals, and any inspections required for any such after-the-fact permits or governmental approvals. Contractor shall not be liable for any penalties and/or fines for commencing non-permitted work that is directed to be performed by PSL.

e. **Warranty:** Contractor shall provide the PSL with a one (1) year warranty of materials and workmanship in connection with the Contractor’s Settlement Work (from the date of completion of the Settlement Work in the form attached as **Exhibit “D”** upon completion and acceptance of the particular Settlement Work item as set forth in Section 3 below. For the purpose of clarity, of the Chord Plate work is completed on January 01, 2024 and the waterproofing work is completed on January 01, 2025, Suffolk’s warranty for the Chord Plate Work expired January 01, 2025 and its warranty for the waterproofing expires January 01, 2026. If the Settlement Work is found to be defective within the warranty period, Contractor shall correct it properly after receipt of written notice from PSL at Contractor’s cost.

f. **Completion of Settlement Work:** Following the Contractor’s completion of each item of the Settlement Work identified on the tables in paragraphs 2.a. and 2.b. of this Agreement and the corresponding Repair Protocols, the Contractor will give PSL and Engineer written notice of

completion for each line item of Settlement Work completed and PSL and/or PSL's Engineer shall have a period of ten (10) days following such written notice to inspect the completed line item of Settlement Work (the "Inspection Period"). In the event PSL notifies the Contractor in writing within the Inspection Period that PSL or PSL's Engineer is unable to inspect the completed line item of Settlement Work, then, PSL and/or PSL's Engineer may inspect the completed line item of Settlement Work during an additional inspection period of ten (10) days (the "Additional Inspection Period"). PSL's inspection by PSL or PSL's Engineer of a completed line item of Settlement Work that occurs during either the Inspection Period or the Additional Inspection Period will be referred to as an "Inspection." In the event PSL rejects any completed line item of Settlement Work (the "Rejected Item of Settlement Work"), then within ten (10) days of the date of PSL's Inspection of the Rejected Item of Settlement Work, PSL shall provide written notice to the Contractor of the Rejected Item of Settlement Work identifying with particularity the reason for such rejection (the "Rejection Notice"). Should PSL fail to provide Contractor with the Rejection Notice within ten (10) days following an Inspection or in the event that PSL does not conduct an Inspection during either the Inspection Period or the Additional Inspection Period and PSL fails to provide a Rejection Notice during the Inspection Period then said completed line item of Settlement Work shall be automatically deemed complete to the satisfaction of PSL with no further action required on the part of the Contractor to perform any additional work for said completed line item of Settlement Work.

3. Payment. Contractor shall be paid within twenty (20) days after the last of each calendar month the value of the Work completed at the Project site by Contractor per the Schedule of Values attached as **Exhibit "E"**, provided that a properly executed Application For Payment for such Work, and an executed partial waiver of lien, shall be delivered to the Owner on or before the 25th day projecting all work to the last day of the calendar month during which the Work, covered by such Application For Payment, was performed. PSL may hold back from each payment retainage equal to Ten 10% of the value of the Work performed by Subcontractors. There shall be no retainage on Contractor's General Conditions, General Requirements, insurances, bond (if applicable) or direct material and/or appliance purchases per the Schedule of Values.

A final payment, consisting of the unpaid balance of the Contract Price as adjusted by Change Orders, shall be made within twenty (20) days after the last of the following to occur: (a) completion of the Work by Contractor in accordance with the Contract Documents and the Repair Protocols , (b) acceptance thereof by PSL (c) furnishing of a final waiver of lien satisfactory to PSL that there are no claims, obligations, liens outstanding or unsatisfied for labor, services, materials, equipment, taxes or other items performed, furnished or incurred in connection with the Work, and (d) delivery of all guarantees, warranties, bonds, instruction manuals, as-built drawings and similar items required of Contractor or of Contractor's suppliers by the Contract Documents.

4. Resolution of Rejected and Disputed Settlement Work: Upon receipt of a timely Rejection Notice, Contractor must either a) correct the Rejected Item of Settlement Work within forty-five (45) days from receipt of the Rejection Notice and provide written notice of completion for each line item of Settlement Work completed and restart the process outlined in the preceding paragraph above, or alternatively b) in the event that PSL and Suffolk disagree regarding a Rejected Item of Settlement Work (the "Disputed Settlement Work"), then PSL and Contractor shall engage a mutually agreeable third-party engineer to inspect the disputed Settlement Work. Said third-party engineer may also be the engineer hired by PSL and Suffolk to serve as the Third-Party Engineer to review the Chord Plate repairs as further

described in paragraph 2.c. of this Agreement, but PSL and Suffolk may choose a different engineer so long as PSL and Suffolk both agree on the proposed engineer. In the event that Suffolk and PSL cannot agree on the engineer to review the Disputed Settlement Work, then the default engineer will be the engineer selected by PSL and Suffolk to review the Chord Plate repairs as further described in paragraph 2.c. of this Agreement. Should the third-party engineer determine that the Disputed Settlement Work was performed with good workmanship in compliance with the Repair Protocols, , the approved Design-Build drawings originally created when the Project was originally conceived and implemented in 2007, and all Florida laws and building codes at the time the original Project was permitted unless otherwise directed by the governmental authority having jurisdiction of the Project , then the repair relating to that Item of Disputed Settlement Work shall be deemed accepted by PSL and the cost of retaining the third-party engineer shall be borne by PSL. Conversely, should the third-party engineer determine that the Disputed Settlement Work is unacceptable, then the Contractor, within 14 days of the report of the third-party engineer, will undertake additional repairs to remedy the Item of Disputed Settlement Work in accordance with the third party engineer's recommendation and the cost of retaining the third-party engineer shall be borne by the Contractor.

5. Schedule for Settlement Work. The Contractor shall apply to obtain all necessary permits, where applicable, from the Building Department for the Work within thirty (30) days of execution of this Agreement (which will occur after the approval by the Port St. Lucie City Commission) and will complete all Settlement Work within 365 days thereafter. To the extent permit fees are required for the Settlement Work, PSL shall pay such fees. The time period shall commence upon the parties having identified all of the Chord Plates to be repaired and the issuance of the Notice to proceed with construction work. Time is of the essence for the deadlines provided by this Paragraph. Failure to comply with the deadlines set forth in this Paragraph, subject to extensions of time to which the Contractor is entitled to under this Agreement, shall be deemed a breach of this Agreement. In the event that the Contractor shall fail to achieve Completion by the agreed upon date, subject to extensions of time to which it is entitled, Contractor shall be liable to Owner for liquidated damages of Twenty-Five Dollars (\$25.00) per day until such date as Contractor shall achieve Completion, provided that the total amount of liquidated damages for which Contractor may be liable shall not exceed \$15,000.00. Recovery of such liquidated damages shall be Owner's sole and exclusive remedy in the event of Contractor's unexcused delay in achieving Completion as of the date herein. However, if the Work is delayed as a result of weather, failure by PSL to provide adequate access, or delays caused or imposed by PSL, or delays caused or imposed by any other governmental entity having jurisdiction over the Work to issue a permit and/or inspect the Work to be performed by Contractor or other similar factors beyond Contractor's control (an "Excusable Delay"), the time for Contractor to complete the Work shall be extended by an amount of time equal to the amount of time of the Excusable Delay and Contractor shall be entitled to its extended general conditions and general requirements for the Actual Cost Settlement Work.

a. Contractor shall provide PSL's counsel with written notice five (5) business days prior to the scheduled commencement of the Settlement Work.

b. Upon completion of the Settlement Work by Suffolk and acceptance of all Settlement Work by PSL, as further described in this Agreement, PSL shall execute and deliver to Contractor a Notice of Acceptance of All Settlement Work and Final Release within 10 days of PSL's acceptance of the last completed line item of Settlement Work in the form attached as **Exhibit "F"**.

6. **Insurance.** Before commencing the Settlement Work, Contractor shall furnish PSL with an insurance certificate showing at least the following coverage, listing PSL as Additional Insureds:

Workmen's Compensation:	Statutory Limits
Employer's Liability	\$500,000
Commercial General Liability:	Bodily Injury - \$1,000,000/\$2,000,000 Property Damage- \$1,000,000/\$2,000,000
Comprehensive Automobile:	Combined Single Limit - \$1,000,000
Excess Liability:	Umbrella - \$5,000,000

Contractor shall bear all costs for obtaining and maintaining the insurance outlined above for all Settlement Work including the Actual Cost Settlement Work described in paragraph 2.b. of this Agreement.

7. **Builders Risk.** Contractor shall maintain at PSL's expense Builder's Risk or other appropriate property insurance coverage for the full replacement value of the Work and PSL shall be responsible for all deductibles. Each party agrees to waive subrogation against the other with respect to claims covered by the Builder's Risk and/or other property insurance coverage. PSL shall not be liable or responsible for loss or damage to the equipment, tools, facilities, or other personal property owned, rented, or used by Contractor, or anyone employed by Contractor, in the performance of the Work, except to the extent of any proceeds received under policy of Builders' Risk or property insurance.

8. **Indemnity.** To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless PSL from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from the performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable. The Parties acknowledge the amount of the indemnity provided herein shall not exceed an amount equal to the limits of aggregate insurance provided by Contractor under this Agreement or \$1,000,000, whichever is greater and that the requirements of F.S. Sec. 725.06 (effective July 2001) have been fulfilled and apply to this section.

9. **Safety.** Contractor shall establish and implement safety measures, policies and standards conforming to those required by governmental and quasi-governmental authorities having jurisdiction.

10. **Cleaning up.** Contractor shall at all times keep the Project Site free from and shall promptly cause to be removed from the Project site, any accumulation of waste material or debris arising out of the operations or Work of Contractor. Contractor shall remove all trash, rubbish and debris caused by its Work.

11. **Settlement, Accord, and Satisfaction – Release of PSL in Favor of Suffolk.** Effective on the date this Agreement is fully executed by PSL and Suffolk, PSL unconditionally releases, remises, settles, acquits, discharges, satisfies, covenants not to sue and not to participate in or cooperate with any suit against Suffolk, its Subcontractors, and Contractor's design professionals and their former, present and future partners (including without limitation their parent companies, affiliates, subsidiaries, owners,

attorneys, insurers and, sureties, subcontractors, sub-subcontractors, their sureties, material suppliers affiliated entities, entities, officers, directors, employees, agents, parent corporations, subsidiary corporations, and affiliated entities, and each of their respective and collective successors and assigns (collectively the “**Releasees**”), of and from and for and regarding any claims, demands, damages, lawsuits, obligations, liabilities, promises, administrative actions, representations, warranties, agreements, contracts, charges, causes and causes of action in law and in equity, known or unknown, latent or patent, matured or unmatured, contingent or fixed, for, upon or by reason of, caused by, relating to, or arising out of any and all claims and causes of action for, upon or by reason of, caused by, relating to, or arising out of: (1) the design and construction of the Project, it being the express intention of the Parties to release all latent or unknown defects relative to the Project and all negligent and intentional tort claims; (2) the Claims raised by PSL and (3) any “Third Party Claims” (defined as any Claim or Potential Claim³ brought by persons or entities other than PSL) against the Contractor, Subcontractors, and Contractor’s design professionals and Releasees, that may be brought in the future by or on behalf of any Third Party against the Contractor, Subcontractors, and Contractor’s design professionals and Releasees concerning any matter released in this Settlement Agreement.

Notwithstanding the foregoing, this Agreement is not intended to and does not settle or resolve or release the following matters (“Matters Not Settled”):

- a. The obligations of Contractor to PSL under this Agreement including without the obligations of Contractor to perform all Settlement Work with good workmanship and in compliance with all Florida laws and building codes;
- b. Contractor’s indemnity obligations with respect to the Settlement Work; and
- c. Contractor’s One Year Warranty for the Settlement Work performed pursuant to this Agreement.

12. Settlement, Accord, and Satisfaction – Release of Suffolk in Favor of PSL. Upon PSL’s satisfaction of its payment obligations for the Actual Cost Settlement Work described in paragraph 2.b. of this Agreement, the Contractor remises, releases, acquits, satisfies, and forever discharges PSL of and from all and all manner of action and actions, claims, causes and causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, executions, claims and demands whatsoever, in law or in equity, which the Contractor ever had against PSL for, upon or by reason of any matter, cause or thing relating to the construction and development and operations of the Project and the Settlement Work.

13. Dismissal With Prejudice of the Lawsuit. Within ten (10) business days from the full execution of this Settlement Agreement by all the Parties, the Parties shall execute and provide to counsel

³ For the purposes of this Agreement, “**Potential Claim**” shall mean any and all claims, demands, damages, lawsuits, fees (including for all attorney fees and costs at the trial and appellate levels), obligations, actions, debts, sums of money, accounts, reckonings, bonds, bills, specialties, consents, controversies, covenants, promises, judgments, executions, demands, liabilities, promises, administrative actions, representations, warranties, agreements, contracts, charges, causes and causes of action whatsoever in law or in equity, known or unknown, matured or unmatured, contingent or fixed, of any kind whatsoever whether by reason of any matter, cause or thing whatsoever, including but not limited to claims for latent and patent defects.

for the Contractor the executed Stipulation for Dismissal with Prejudice of the Lawsuit in the form attached hereto as **Exhibit “G”** (the “Dismissal and Final Order”). Notwithstanding the entry of a final order of dismissal, the Parties agree that the Court will retain jurisdiction to enforce the terms of this Agreement.

14. No Admission of Liability. It is expressly understood and agreed that this settlement is the compromise of a doubtful and disputed claim with the intent to merely avoid litigation and buy peace. Therefore, it is agreed that the payments made by Parties and the actions taken by the Parties pursuant to this Agreement, as well as the Parties’ execution of this Agreement, shall NOT be construed as an admission of liability on the part of the Party or Parties hereby released. The Parties deny that they are liable to each other for any sums of money or claim and signing of this Agreement by the Parties is not, and shall not, be deemed to be an admission by them as to any of the alleged defects or matters contained in the Notice, Reports (as amended and supplemented), and Lawsuit or to the validity thereof, or to any matter as is or may otherwise be claimed, asserted, or alleged by the PSL.

15. City Commission Approval. Upon execution of this Agreement by the Contractor, PSL shall, in accordance with its Governing Documents and Florida Law, properly convene a meeting of its City Council (the “**Board**”) within thirty (30) days, to approve this Agreement unless previously approved by the Board. By signing this Agreement on behalf of PSL, the signing individual warrants and represents to the Contractor that PSL has duly approved the Agreement and that the individual signing this Agreement on behalf of PSL has all requisite power and authority to enter into this Agreement on behalf of PSL and to bind PSL to the terms of this Agreement.

16. Notice. All notices to be given by one party to this Agreement to the other party hereto shall be in writing and sent either by U.S. Certified Mail return receipt requested or by nationally recognize courier such as FedEx or UPS. Any notice required to be given under any provision of this Agreement will only be effective when actually delivered to the following addresses:

If to PSL City of Port St. Lucie
121 Southwest Port St. Lucie Boulevard
Port St. Lucie, Florida 34984
Attn: City Manager

With a copy to: Jeffrey S. Weiss, Esquire
Garganese Weiss D’Agresta & Salzman, P.A
111 North Orange Avenue, Suite 2000
Orlando, Florida 32802-2873

If to Suffolk: Suffolk Construction Company, Inc.
One Biscayne Tower
2 South Biscayne Boulevard
Suite 2700
Miami, Florida 33131
Attn: Jay Fayette, President, East Coast

With a copy to: Juan Diaz, Esq.
General Counsel-South and National Gaming

Suffolk Construction Company, Inc.
Legal Department
426 Clematis Street
West Palm Beach, Florida 33401

17. Miscellaneous. The parties further agree as follows:

a. The Parties acknowledge and agree that this Agreement is fully and adequately supported by consideration and is fair and reasonable. The Parties further acknowledge and agree that: (i) each party has had the opportunity to consult with, and has in fact consulted with, such professionals, experts and legal counsel of its choice as such party may have desired with respect to all matters settled and resolved herein, (ii) each party has participated fully in the negotiation and preparation of this Agreement, and (iii) each party has carefully reviewed this Agreement and is entering into same freely. Accordingly, this Agreement shall not be more strictly construed against any party.

b. Each party represents and warrants to the other that the execution and delivery of this Agreement has been duly approved by all requisite corporate and/or partnership action (as applicable) required to be taken by such party. In addition, PSL represents and warrants to the Contractor that the execution and delivery of this Agreement and the release to be executed by it pursuant hereto have been formally approved by the City Council in accordance with all requirements of the City's requirements and appropriate Florida law.

c. This Agreement may be signed in counterparts, and each signatory affirms that he or she is fully authorized to settle the claim(s) referenced herein, and that none of the Parties have assigned or sold their right to enter into this Agreement.

d. This Agreement shall be construed and governed in accordance with the laws of the State of Florida.

e. In the event any term or provision of this Agreement be determined by appropriate judicial authority to be illegal or otherwise invalid, such provision shall be given its nearest legal meaning or be construed as deleted as such authority determines, and the remainder of this Agreement shall be construed to be in full force and effect.

f. In construing this Agreement, the singular shall be held to include the plural, the plural shall be held to include the singular, the use of any gender shall be held to include every other and all genders, and captions and paragraph headings shall be disregarded.

g. All of the exhibits attached to this Agreement are incorporated in, and made a part of, this Agreement.

18. Mutual Waiver of Consequential Damages. Owner and Contractor mutually waive recovery of consequential damages arising out of or relating to this Contract. This mutual waiver includes: (a) damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and (b) damages incurred by the Contractor for principal office expenses including the compensation of

personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

19. Entire Agreement. This Agreement constitutes the full and entire agreement and understanding between the Parties with respect to the subject matter hereof and there are no agreements, representations, or warranties except as specifically set forth herein. All prior discussions, negotiations, letters, demands and writings of any kind are fully merged into this Agreement and are to be construed to be of no further force or effect, it being the intention of the parties that this Agreement shall serve as the sole and entire expression of their agreement and understanding. This Agreement may not be amended or modified except by an instrument in writing signed by the parties hereto.

[Signature Blocks on Following Pages]

In the presence of a licensed notary public, the duly authorized representative of **City of Port St. Lucie**, a Florida Municipal Corporation has caused this Settlement Agreement to be executed on the dates written below.

City of Port St. Lucie, a Florida Municipal Corporation

_____ (Signature of Authorized Representative)	_____ (Print Name of Authorized Representative)
_____ (Date)	

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2024, by (print name) _____ as (title) _____ of the **City of Port St. Lucie, a Florida Municipal Corporation** by means of physical presence or online notarization.

AFFIX NOTARY STAMP

Signature of Notary Public

Print Notary Name

My Commission Expires: _____

Commission No.: _____

Personally known, or
 Produced Identification
Type of Identification Produced

In the presence of a licensed notary public, the duly authorized representative of the **Community Redevelopment Agency of the City of Port St. Lucie** has caused this Settlement Agreement to be executed on the dates written below.

Community Redevelopment Agency of the City of Port St. Lucie

_____ (Signature of Authorized Representative)	_____ (Print Name of Authorized Representative)
_____ (Date)	

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2024, by (print name) _____ as (title) _____ of **Community Redevelopment Agency of the City of Port St. Lucie** by

means of physical presence or online notarization.

AFFIX NOTARY STAMP

Signature of Notary Public

Print Notary Name

My Commission Expires: _____

Commission No.: _____

Personally known, or
 Produced Identification
Type of Identification Produced

In the presence of a licensed notary public, the duly authorized representative of **Suffolk Construction Company, Inc.** identified below has caused this Settlement Agreement to be executed on the dates written below.

Suffolk Construction Company, Inc.

_____ (Signature of Authorized Representative)	_____ (Print Name of Authorized Representative)
_____ (Date)	

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2024, by (print name) _____ as (title)

_____ of **Suffolk Construction Company, Inc.** by means of physical presence or online notarization.

AFFIX NOTARY STAMP

Signature of Notary Public

Print Notary Name

My Commission Expires: _____

Commission No.: _____

- Personally known, or
 - Produced Identification
- Type of Identification Produced

Table of Contents

01 EXHIBIT A-1: No-Cost Settlement Work

02 EXHIBIT A-2: Actual Cost Settlement Work

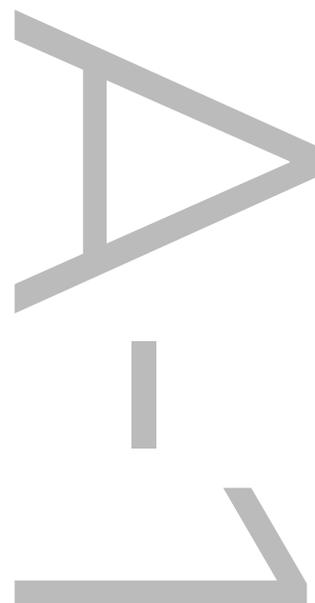
03 EXHIBIT B: Stipulated Labor Rates

04 EXHIBIT C: Warranty

05 EXHIBIT D: Schedule of Values

06 EXHIBIT E: Notice of Acceptance of All Settlement Work and Release

07 EXHIBIT F: Stipulation of Dismissal and Final Order



No-Cost Settlement
Work



**Port St. Lucie Civic Center
Repair Protocol – Corbel Spall Repair**

Report Date: 2022.02.10
Revision 01: 2023.03.10

RP ID SK06 Corbel Spall Repair

Observation: Corbel spalls were observed at multiple levels.

Location: Level 5, Column C14
Level 4, Column B14 & C14
Level 3, Column B14

Repair Protocol/Procedure:

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Durastress will provide a letter from their engineer confirming shoring is not necessary. If shoring is required, Shoring Contractor shall provide signed and sealed shoring sequence drawings and calculations.
- Chip existing substrate to sound concrete. If reinforcing is exposed, ensure minimum 1/2" clear space is provided behind the exposed bar.
- If corrosion is observed on exposed reinforcement, it will be removed.
- Roughen exposed concrete to edge of patch and prepare surface to manufacturers recommendations.
- Exposed reinforcing will be coated with Sika Armatec 110 Epocem.
- Apply Sikacrete 211 SCC Plus in accordance with manufacturer's recommendations.
- Clean work area of any construction debris.

List of Attachments:

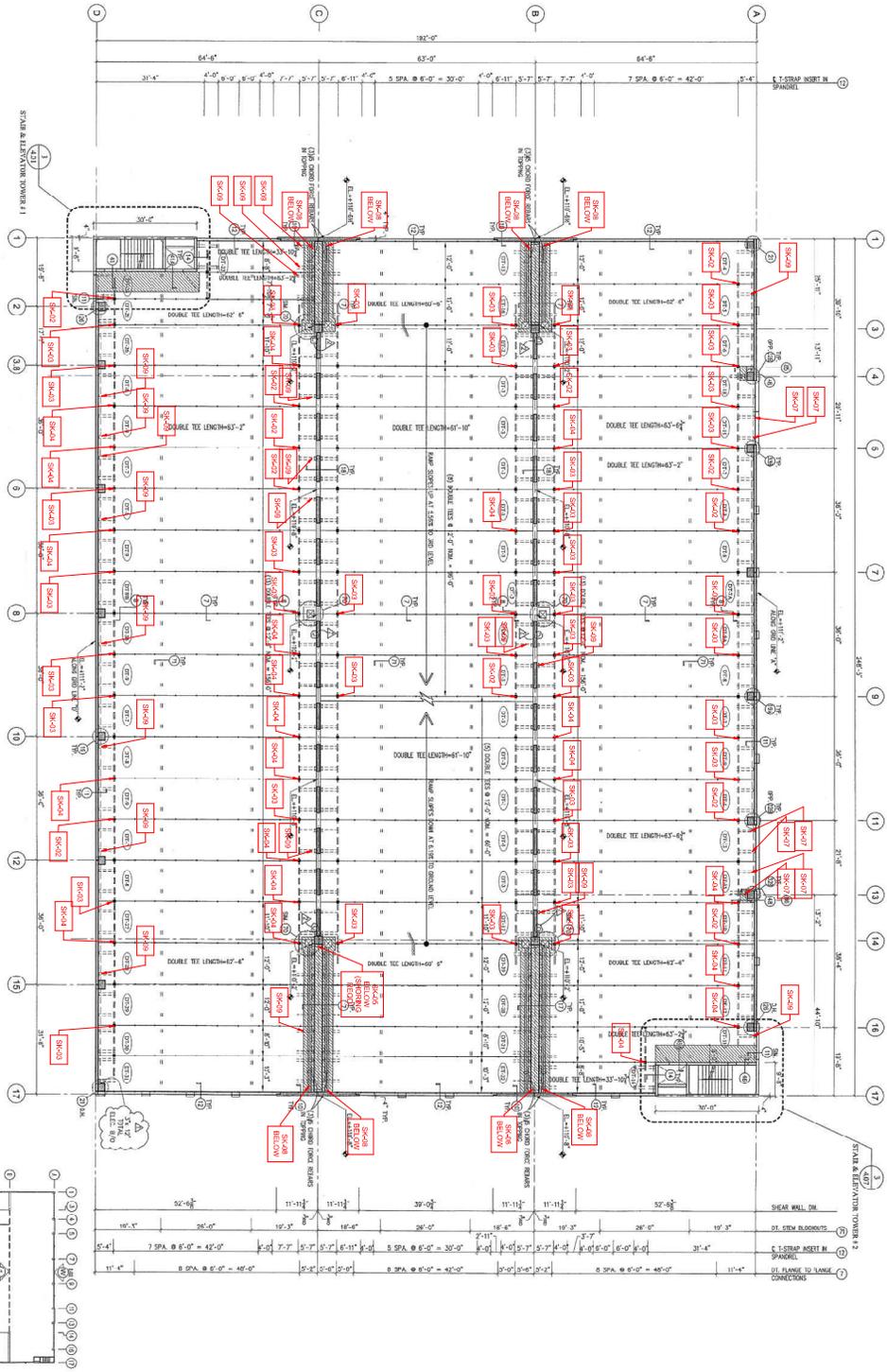
Jezerinac Location Markup
Sika Armatec 110 Epocem
Sikacrete 211 SCC Plus

Approvals:

Owner: _____ Date: _____

Owner's Consultant: _____ Date: _____

General Contractor: _____ Date: _____



2nd Level Framing Plan



APPENDIX A: REPAIR SURVEY

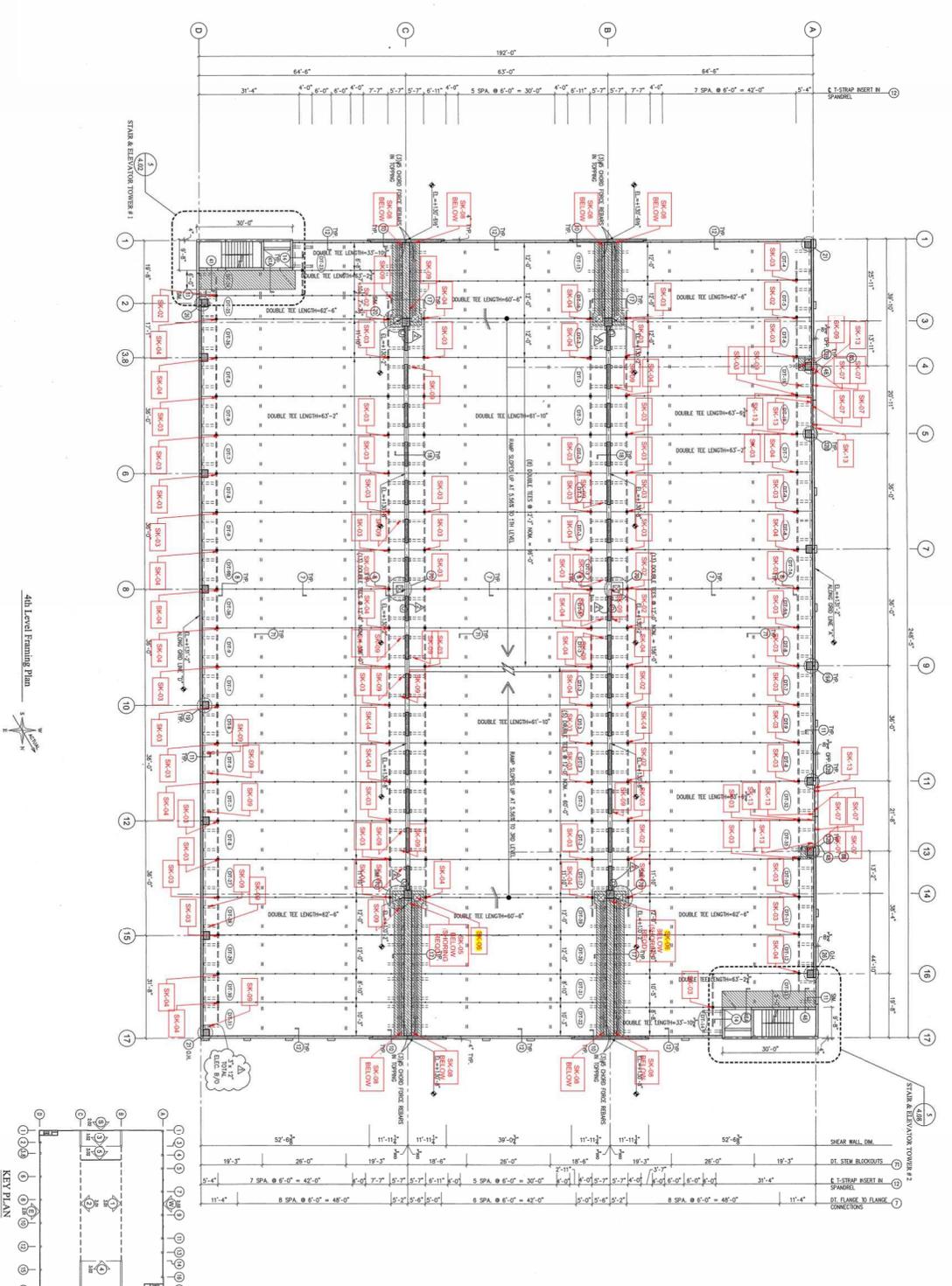
THIS PROJECT IS THE PROPERTY OF JEZERINAC GROUP. ANY REVISIONS TO THE PLANS AND SPECIFICATIONS SHALL BE MADE BY THE ORIGINAL DESIGNER. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATORY AGENCIES APPROVALS.

ISSUANCE SCHEDULE	
NO.	DATE

LEVEL 2 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage





APPENDIX A: REPAIR SURVEY

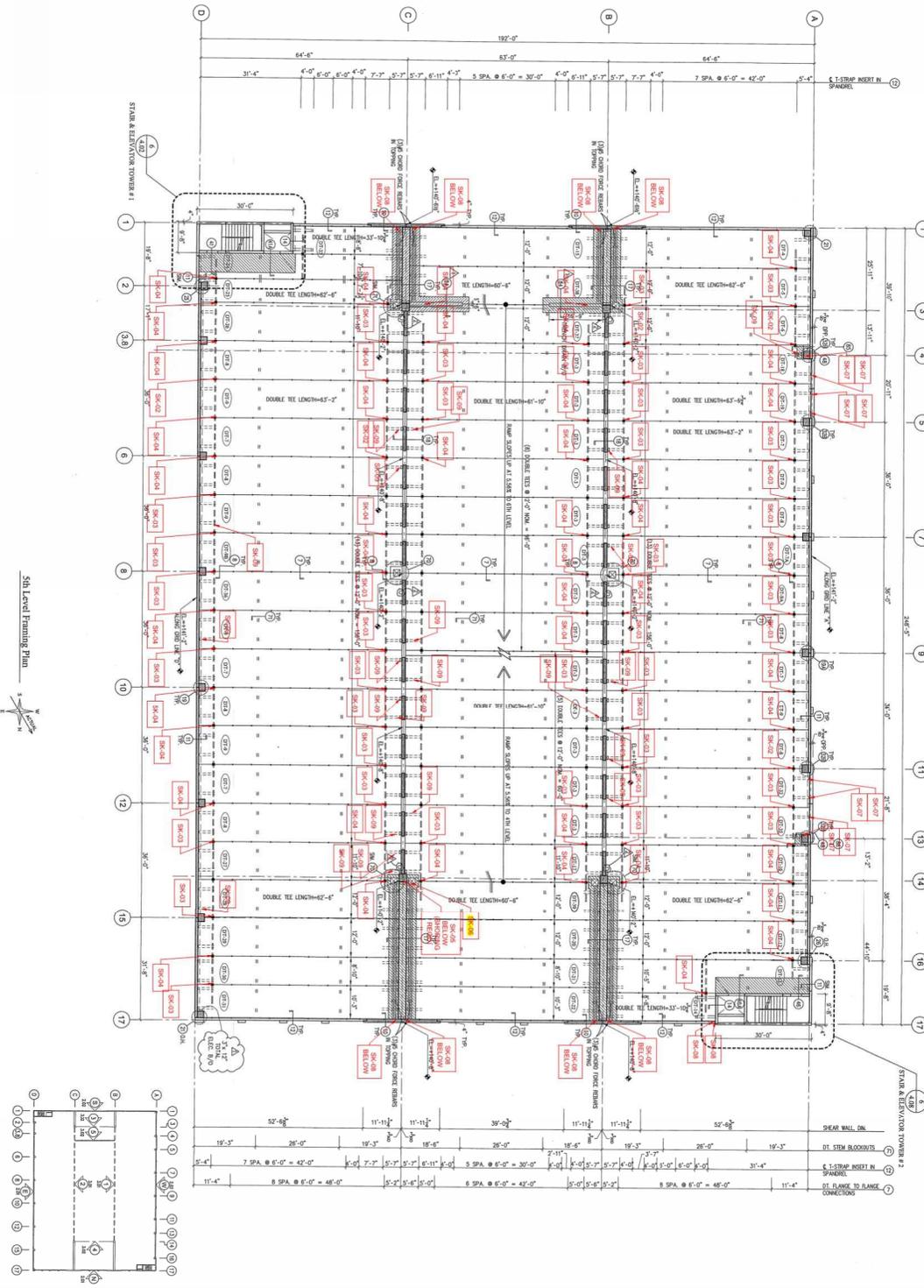
TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH ALL APPLICABLE CODES AND MATERIAL SPECIFICATIONS.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

LEVEL 4 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
Parking Garage





5th Level Framing Plan

APPENDIX A: REPAIR SURVEY

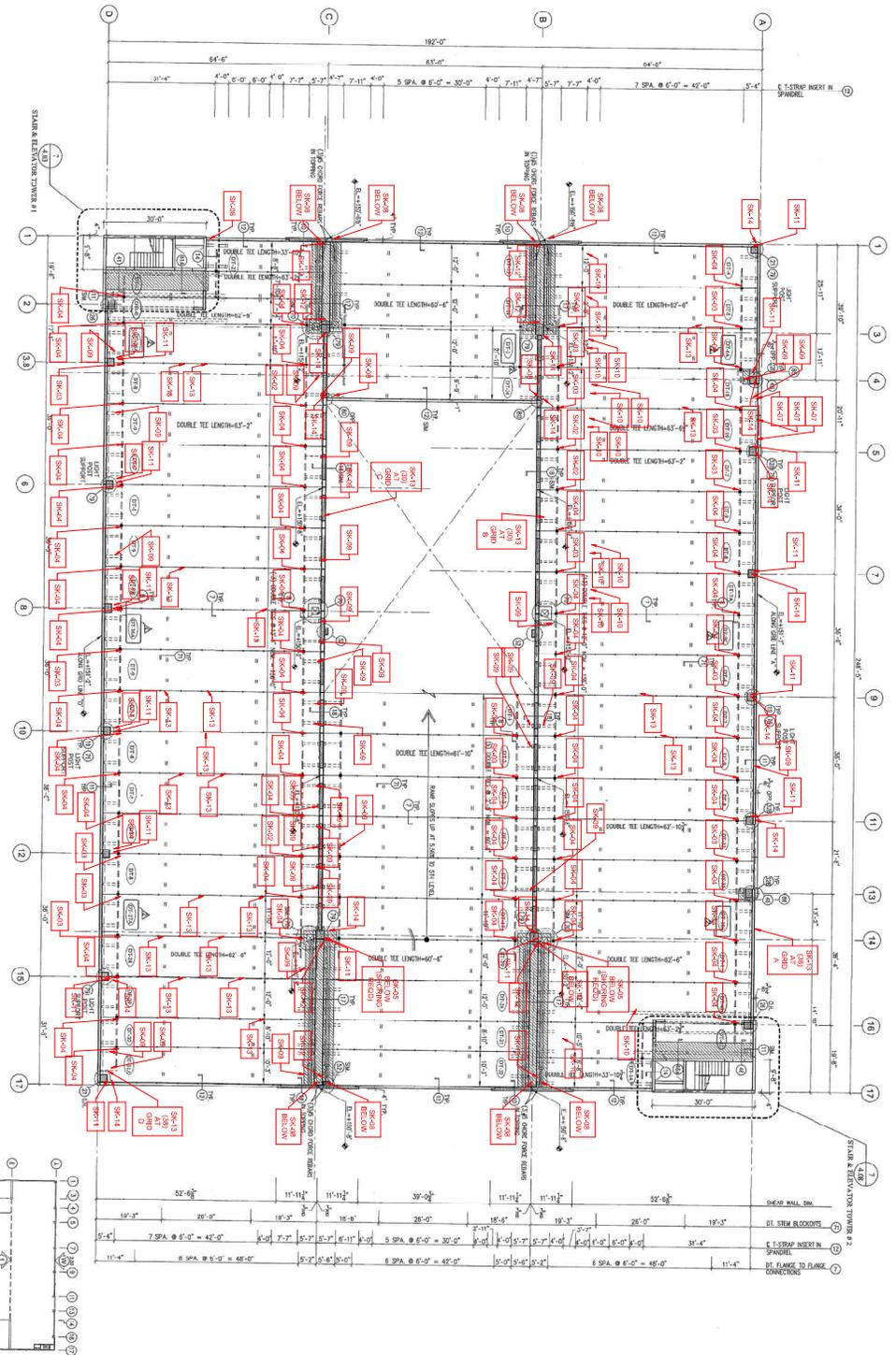
TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MATERIAL SPECIFICATIONS.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

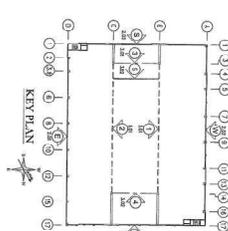
LEVEL 5 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage





6th Level Framing Plan



APPENDIX A: REPAIR SURVEY

IN WITNESS WHEREOF, THE ENGINEER HAS HEREUNTO SET HIS HAND AND SEAL THIS 14TH DAY OF FEBRUARY, 2023.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

LEVEL 6 KEY PLAN	

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

Project Number: 19.01.010
 Date: 02.14.2023
 Drawn By: CN
 Checked By: WJR

Scale: **S-06**
 1/4" = 1'-0"



JEZERINAC GROUP
 Engineering, Inspection & Construction
 400 HILLOCKS STREET, SUITE 200
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #14009

PRODUCT DATA SHEET

SikaTop® Armatec®-110 EpoCem®

REINFORCEMENT CORROSION PROTECTION AND BONDING PRIMER

PRODUCT DESCRIPTION

SikaTop® Armatec®-110 EpoCem® is a cementitious epoxy resin compensated 3-component coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

USES

- Suitable for control of anodic areas (Principle 11, method 11.1 EN 1504-9)
- Suitable in concrete repair as corrosion protection for reinforcement.
- Suitable as a bonding primer on concrete and mortar

CHARACTERISTICS / ADVANTAGES

- Contains EpoCem® technology - improved bonding agent
- Extended open times for repair mortars
- Compatible with most Sika MonoTop® repair mortars
- Excellent adhesion to concrete and steel
- Contains corrosion inhibitor
- Certified for application under dynamic load conditions
- Good resistance to water and chloride penetration
- High shear strength
- Long pot life
- Easy to mix
- Can be brushed on or applied using spray gun

APPROVALS / STANDARDS

SikaTop® Armatec®-110 EpoCem® meets the requirement of EN 1504-7.

PRODUCT INFORMATION

Chemical Base	Portland cement, epoxy resin, selected aggregates and additives
Packaging	20 kg: A (1.14 kg) + B (2.86 kg) + C (16 kg)
Appearance / Colour	Mixed components dark grey
	Component A <u>white liquid</u>
	Component B <u>colourless liquid</u>
	Component C <u>dark grey powder</u>
Shelf Life	12 months
Storage Conditions	Store properly in undamaged original sealed packaging, in dry cool conditions between +5 °C and +25 °C.
Density	A+B+C density: ~2.0 kg/l at 23 °C

TECHNICAL INFORMATION

Tensile Adhesion Strength	≥ 1.5 N/mm ² (MPa) (after 28 days)	(EN 1542)
Lap Shear Strength	Pass	
Coefficient of Thermal Expansion	~18 x 10 ⁻⁶ 1/K	(EN 1770)
Diffusion Resistance to Water Vapour	μH ₂ O ~500	
Corrosion Test	Pass	(EN 15183)

SYSTEM INFORMATION

System Structure	SikaTop® Armatec®-110 EpoCem® is part of the Sika® repair system complying with the relevant part of European Standard EN 1504 and comprising of:	
	Bonding Primer / Reinforcement	SikaTop® Armatec®-110 EpoCem®
	Corrosion Protection	
	Hand placed repairs	Sika MonoTop® series
	Flowable repairs	Sika MonoTop® series
	Sprayed repairs	SikaCem® Gunitite series

APPLICATION INFORMATION

Consumption	As reinforcement corrosion protection coating: ~ 2 kg per m ² and application layer (~1 mm thick) In total minimum 2 layer thickness (~2 mm thick) As a bonding primer, substrate: > 1.5 to 2.0 kg per m ² /mm dependent on substrate conditions										
Ambient Air Temperature	+5 °C minimum; +30 °C maximum										
Substrate Temperature	+5 °C minimum; +30 °C maximum										
Pot Life	~ 3 hours (at +20 °C)										
Waiting Time / Overcoating	Maximum waiting time before application of repair mortar Sika repair mortars and non-fast setting concrete can be applied on SikaTop® Armatec®-110 EpoCem® within a maximum time of: <table><thead><tr><th>Temperature</th><th>Maximum Waiting Time</th></tr></thead><tbody><tr><td>+5 °C</td><td>6 hours</td></tr><tr><td>+10 °C</td><td>5 hours</td></tr><tr><td>+20 °C</td><td>2 hours</td></tr><tr><td>+30 °C</td><td>1 hour</td></tr></tbody></table>	Temperature	Maximum Waiting Time	+5 °C	6 hours	+10 °C	5 hours	+20 °C	2 hours	+30 °C	1 hour
Temperature	Maximum Waiting Time										
+5 °C	6 hours										
+10 °C	5 hours										
+20 °C	2 hours										
+30 °C	1 hour										

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete:

The concrete shall be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.

The surface shall be thoroughly pre-wetted and not be allowed to dry before application of the concrete repair mortar. The surface shall achieve a dark matt appearance without glistening and surface pores and pits

shall not contain water.

Steel reinforcement:

Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed and reinforcement cleaned to SA 2 in accordance with ISO 8501-1. Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting.

MIXING

SikaTop® Armatec®-110 EpoCem® can be mixed with a low speed (< 250 rpm) electric drill mixer. Shake components A and B thoroughly before opening. Pour liquid components A and B into a suitable

mixing vessel and mix for 30 seconds. While still mixing components A and B slowly add powder component C. Mix the three components together for a minimum 3 minutes, minimising addition of air. Leave to stand for 5–10 minutes until mixed coating material exhibits a brush-able, weakly dripping consistency. DO NOT ADD WATER

APPLICATION

As reinforcement corrosion protection:
Apply first layer approx. 1 mm thick, using medium hard brush or spray gun to the cleaned reinforcement. Apply 2nd layer when the first coat is fingernail hard (~2–3 hours at +20 °C). Apply subsequent repair mortars wet on dry (so not to wipe off the protection layer).

As a bonding primer:
Apply using medium hard brush or spray gun to prepared substrate. To achieve good bond, SikaTop® Armatec®-110 EpoCem® must be applied well into the substrate, filling all pores (minimum layer thickness 0.5 mm). Apply subsequent repair mortars wet on wet. Freshly applied SikaTop® Armatec®-110 EpoCem® must be protected against contamination and rain until application of the repair mortar.

Application under dynamic loading:
SikaTop® Armatec®-110 EpoCem® has been tested with the following Sika repair mortars and is certified for dynamic loading applications. Refer to separate product data sheets for further information.

Dry Spray Process:	
Corrosion Protection:	SikaTop® Armatec®-110 EpoCem®
Repair and overlay:	SikaCem®-133S Gunit

Wet Spray Process:	
Corrosion Protection and/or Bonding Primer:	SikaTop® Armatec®-110 EpoCem®
Repair and Overlay:	Sika MonoTop®-600 series

CURING TREATMENT

Protect from rain until the material has hardened.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

SIKA LIMITED
Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited



Product Data Sheet
SikaTop® Armatec®-110 EpoCem®
February 2020, Version 03.02
020302020050000001

LIMITATIONS

- For more information regarding substrate preparation refer to the recommendations provided in EN 1504-10
- Avoid application in direct sun and/or strong wind and/or rain.
- Do not add water.
- Apply only to sound, prepared substrates.
- NOT recommended for use with fast setting concrete.

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

SikaTopArmatec-110EpoCem-en-GB-(02-2020)-3-2.pdf





PRODUCT DATA SHEET

Sikacrete[®]-211 SCC Plus

One-component, cementitious, polymer-modified, self consolidating concrete mix with an integral migrating corrosion inhibitor

PRODUCT DESCRIPTION

Sikacrete[®]-211 SCC Plus is a one-component, self consolidating concrete containing factory blended coarse aggregate. This self consolidating concrete bag is silica fume and polymer modified and also contains a migrating corrosion inhibitor.

USES

- Full depth repairs
- On grade, above and below grade on concrete
- On horizontal surfaces
- Vertical and overhead surfaces when formed and pumped or poured
- As a structural repair material for parking facilities, industrial plants, walkways, bridges, tunnels, dams, and balconies
- Filler for voids and cavities

CHARACTERISTICS / ADVANTAGES

- Self Consolidating Concrete - Excellent placement characteristics
- Polymer-modified
- Integral penetrating corrosion inhibitor
- Silica fume enhanced
- Prepackaged coarse aggregate. Eliminates the need to extend material in the field. Eliminates the risk of reactive aggregate
- Can be pumped or poured into forms and gets excellent consolidation without vibrating

PRODUCT INFORMATION

Packaging	65 lb. (29.5 kg) bag
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging
Storage Conditions	Store dry at 40–95 °F (4–35 °C) Protect from moisture. If damp, discard material

Appearance / Color

Gray powder

TECHNICAL INFORMATION

Compressive Strength	1 day	2,000 psi (13.8 MPa)	(ASTM C-39)
	7 days	5,500 psi (37.9 MPa)	73 °F (23 °C)
	28 days	6,500 psi (44.8 MPa)	50 % R.H.
Flexural Strength	1 day	500 psi (3.4 MPa)	(ASTM C-293)
	7 days	750 psi (5.2 MPa)	73 °F (23 °C)
	28 days	1,000 psi (6.9 MPa)	50 % R.H.
Splitting tensile strength	7 days	750 psi (5.2 MPa)	(ASTM C-496)
	28 days	1,000 psi (6.9 MPa)	73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	1 day	250 psi (1.7 MPa)	(ASTM C-1583)
	7 days	300 psi (2.1 MPa)	73 °F (23 °C) 50 % R.H.
Slant Shear Strength	1 day	1,000 psi (6.9 MPa)	(ASTM C-882 modified)*
	7 days	1,500 psi (10.3 MPa)	
	28 days	2,500 psi (17.2 MPa)	
* Mortar scrubbed into substrate at 73 °F (23 °C) and 50 % R.H.			
Shrinkage	28 days	< 0.05 %	(ASTM C-157 modified)
Rapid Chloride Permeability	28 days	< 650 Coulombs	(ASTM C-1202 AASHTO T-277)
Sulfate Resistance	0.006*		(ASTM C-1012)
*Length change after 6 months at 73 °F (23 °C) and 50 % R.H.			
Freeze-Thaw Stability	300 cycles	> 99 %	(ASTM C-666)
Freeze Thaw De-Icing Salt Resistance	50 cycles	2	(ASTM C-672)

APPLICATION INFORMATION

Mixing Ratio	5.5-6 pints (2.6-2.8 L)		
Coverage	0.50 ft ³ (0.01 m ³) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste)		
Layer Thickness	Min.	Max.	
	1" (25 mm)	8" (203 mm)	
<ul style="list-style-type: none"> ▪ Thicker applications have been done successfully. ▪ Please consult Sika® Technical Service. 			
Consistency	Initial spread	25-30" (6.4-7.6 cm)	(ASTM C-1611)
	Spread at 30 min.	> 15" (3.9 cm)	
Product Temperature	65–75 °F (18–24 °C)		
Ambient Air Temperature	> 45 °F (7 °C)		
Substrate Temperature	> 45 °F (7 °C)		
Pot Life	~ 60 minutes As the temperature will affect the pot life, application temperature:		

Product Data Sheet
Sikacrete®-211 SCC Plus
August 2022, Version 01.05
020302020010000040

BUILDING TRUST



- Above 73 °F (23 °C) will reduce the pot life and slump
- Below 73 °F (23 °C) will extend the pot life and slump

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

LIMITATIONS

- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts, with an appropriate epoxy such as Sikadur® 32 Hi-Mod.
- Refer to Sika® Antisol®-250 W product data sheet for use.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/L (EPA Method 24)

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete

- Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired.
- Be sure repair area is not less than 1" (25 mm) deep.
- Preparation work should be done by appropriate means. Obtain an exposed aggregate surface with a minimum surface profile of $\pm 1/8"$ (3 mm) (CSP-7-8) on clean, sound concrete.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.

Reinforcing Steel

- Steel reinforcement should be thoroughly prepared by mechanical cleaning to remove all traces of rust.
- Where corrosion has occurred, the steel should be high-pressure washed with clean water after mechanical cleaning.
- For priming and protection of reinforcing steel use

Sika® Armatec® 110 EpoCem (consult PDS).

MIXING

- Start mixing with 5.5 pints (2.6 L) of water.
- An additional 0.5 pint (0.2 L) can be added if needed.
- Do not over water as excess water will cause segregation.
- Add Sikacrete®-211 SCC Plus while continuing to mix.
- Mechanically mix to a uniform consistency, for 3 minutes with a low-speed drill (400–600 rpm) and paddle or in appropriate-size mortar mixer or concrete mixer.

APPLICATION

- Pre-wet surface to SSD.
- Ensure good intimate contact with the substrate is achieved. To accomplish this, material should be scrubbed into the substrate or other suitable means should be employed such as vibration of the material or pumping under pressure.
- Tap form lightly while pouring or pumping, do not vibrate.
- Pump with a variable pressure pump.
- Continue pumping until a 3 to 5 psi increase in normal line pressure is evident then STOP pumping.
- Form should not deflect.
- Vent to be capped when steady flow is evident, and forms stripped when appropriate.

CURING TREATMENT

- As per ACI recommendations for Portland cement concrete, curing is required.
- Moist cure with wet burlap and polyethylene, a fine mist of water or Sika® Antisol®-250 W*.
- Curing compounds adversely affect the adhesion of following layers of mortar, leveling mortar or protective coatings.
- Moist curing should commence immediately after finishing.
- Protect newly applied material from direct sunlight, wind, rain and frost.

* Pretesting of curing compound is recommended.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

Sika Corporation

201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com



Product Data Sheet

Sikacrete®-211 SCC Plus
August 2022, Version 01.05
020302020010000040

Sikacrete-211SCCPlus-en-US-(08-2022)-1-5.pdf





**Port St. Lucie Civic Center
Repair Protocol – Secondary Wall Corbel Crack Repair**

Report Date: 2022.02.10
Revision 01: 2023.03.10

RP ID – SK07 Secondary Wall Corbel Crack Repair

Observation: Repair of cracks in existing secondary wall corbels at double tees.

Location: Level 6, 3 occurrences
 Level 5, 30 occurrences

Repair Protocol/Procedure:

Review of cracks observed on site indicates a simpler repair may be adequate. Suffolk reserves the right to submit an additional protocol where injection may not be necessary.

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Pedestrian access to the work area and immediate level below will be restricted.
- Durastress is to confirm that steel embed plate is present within the corbel.
- Prepare surfaces in accordance with epoxy supplier’s recommendations.
- Set porting devices over cracks and place epoxy resin adhesive over crack and around each injection port to a minimum 1” wide by ¼” thick and allow to set.
- Inject Sikadur Crack Repair in accordance with the manufacturer’s recommendations.
- Cut ports and grout penetrations.
- Clean work area of any construction debris.

List of Attachments:

Jezerinac Level 6 Repair Locations
Jezerinac Level 5 Repair Locations
Sikadur Crack Repair Product Data

Approvals:

Owner: _____ Date: _____

Owner’s Consultant: _____ Date: _____

General Contractor: _____ Date: _____

PRODUCT DATA SHEET

Sikadur[®] Crack Repair Kit

Concrete crack repair system

PRODUCT DESCRIPTION

Sikadur[®] Crack Repair Kit is a two multicomponent, low viscosity, fast curing, epoxy sealing system for the repair of cracks that occur in solid concrete and solid masonry substrates.

USES

Sikadur[®] Crack Repair Kit may only be used by experienced professionals.

Sikadur[®] Crack Repair Kit may only be used by experienced professionals.

- For manual, low pressure injection of horizontal flat and/or vertical static cracks in solid concrete, solid masonry, wood, etc.
- For gravity feed of static cracks (using the Sikadur[®] Injection Resin component only) in horizontal flat concrete, solid masonry, wood, etc.
- For the sealing of minor, static surface cracks, voids or gaps (using the Sikadur[®] Capseal component only) in horizontal flat, vertical and/or overhead surfaces in concrete, masonry, wood, etc.
- As a flowable, liquid epoxy grout to fill thin voids below baseplates

CHARACTERISTICS / ADVANTAGES

- Convenient easy to use, single tube cartridges that fit standard caulk guns
- Easily mixed when dispensed through flow restrictor (needed for the Sikadur[®] Injection Resin component only) and static mixers
- Up to three times stronger than existing concrete when cured
- Penetrating and bonding of cracks in concrete when injected (reference: ACI Rap Bulletin 1)
- Excellent for notch and fill, isolated crack repair by gravity feed method using the Sikadur[®] Injection Resin component (reference: ACI Rap Bulletin 2)
- Early strength developing adhesives for “can’t dry” surfaces (i.e. tolerates dampness with no standing water present)
- Excellent chemical resistance; prevents chloride ion intrusion and further water absorption when cured
- Prolongs life of cracked concrete elements

APPROVALS / STANDARDS

Sikadur[®] Injection Resin conforms to the current requirements of ASTM C881 / M 235, Types I and II, Grade 1, Class C.*

* except for Gel Time and Slant Shear (Bond) Strength

PRODUCT INFORMATION

Packaging

Kit contents:

- Sikadur[®] Capseal 300 ml cartridge (2 pcs)
- Sikadur[®] Injection Resin 250 ml cartridge (2 pcs)
- Sikadur[®] Capseal mixer nozzle (2 pcs)
- Sikadur[®] Capseal applicator fan (2 pcs)
- Cartridge flow restrictor (2 pcs)
- Sikadur[®] Injection Resin mixer nozzle with extended tube (2 pcs)
- Push fit connector (1 pc)

Product Data Sheet

Sikadur[®] Crack Repair Kit

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- Injection ports (16 pcs)
- Pair of gloves (2 pcs)
- Wooden applicator (Spatula) (2 pcs)

Shelf Life	18 months from date of production if stored properly in original, unopened and undamaged, sealed packaging.	
Storage Conditions	Store in cool, dry, well ventilated conditions, out of direct sunlight at 40 - 75°F (4 - 24 °C).	
Color	Sikadur® Capseal (Parts A+B mixed)	Concrete grey
	Sikadur® Injection Resin (Parts A+B mixed)	Transparent / Amber
Density	Sikadur® Capseal (A+B mixed)	~1.6 g/cm ³
	Sikadur® Injection Resin (A+B mixed)	~1.1 g/cm ³
Viscosity	Sikadur® Capseal (A+B mixed)	Non-sag Consistency
	Sikadur® Injection Resin (A+B mixed)	~500 cps (0.500 Pa-sec)

TECHNICAL INFORMATION

Compressive Strength	Sikadur® Injection Resin			(ASTM D695)
	Time	Temperature		
		+40°F (5°C)	+68°F (20°C)	
4 hours			500 psi (3.4 MPa)	
8 hours			2000 psi (13.7 MPa)	
16 hours		2000 psi (13.7 MPa)	3500 psi (24.1 MPa)	
1 day		3000 psi (20.7 MPa)	5000 psi (34.5 MPa)	
3 days	1500 psi (10.3 MPa)	8500 psi (58.6 MPa)	5500 psi (37.9 MPa)	
7 days	6500 psi (44.8 MPa)	9000 psi (62.1 MPa)	7000 psi (48.3 MPa)	
14 days	7500 psi (51.7 MPa)	9500 psi (65.5 MPa)	7500 psi (51.7 MPa)	
28 days	9000 psi (62.1 MPa)	10,000 psi (68.9 MPa)	10,000 psi (68.9 MPa)	

Product cured and tested at temperatures indicated in table. Test specimen size: 1/2" x 1/2" x 1"

Modulus of Elasticity in Compression	200,000 psi	(ASTM D 695)
Tensile Strength	6,000 psi	(ASTM D 638)
Elongation at Break	25 %	(ASTM D 638)
Heat deflection temperature	~110 ° F (~43 °C)	(ASTM D 648)
Water Absorption	0.24 %	(ASTM D 570)

APPLICATION INFORMATION

Mixing Ratio	Sikadur® Capseal	Part A : Part B = 10:1
	Sikadur® Injection Resin	Part A : Part B = 1:1

Coverage

Sikadur® Capseal: Placed at 1 inch (25 mm) wide x 1/8 inch (3 mm) thick yields approximately 10 linear feet (3 linear meters) per cartridge*
Sikadur® Injection Resin: Injected or gravity fed into a 1/8 inch (3 mm) wide (3 mm) wide x 1 inch (25 mm) deep crack yields approximately 10 linear feet (3 linear meters) per cartridge*
(1) Sikadur® Crack Repair Kit kit typically repairs approximately 15 to 20 linear feet (4.5 to 6.0 linear meters) of cracked concrete.*
* Estimates based on theoretical calculation. Actual field coverage rates may vary based on actual concrete conditions.

Layer Thickness	Sikadur® Capseal	5/16" (8 mm)		
	Sikadur® Injection Resin	1/32" - 1/4" (0.1–6 mm)		
Sag Flow	Sikadur® Capseal (A+B mixed)	Non-sag, including overhead		
	Sikadur® Injection Resin (A+B mixed)	Liquid		
Product Temperature	Condition cartridges to 65 - 75 °F (18 - 24 °C) before set-up and mixing / dispensing.			
Ambient Air Temperature	40 °F (4 °C) minimum / 95 °F (35 °C) maximum			
Dew Point	Beware of surface condensation! To avoid dew point conditions during application, substrate temperature must be at least 5 °F (3 °C) above measured dew point temperature.			
Substrate Temperature	40 °F (4 °C) minimum / 95 °F (35 °C) maximum			
Cure Time	Sikadur® Capseal			
	Temperature	Open time - T_{gel}	Curing time - T_{cur} (Injection Time)	
	+86 °F (30 °C)	4 minutes	30 minutes	
	+77 °F (25 °C)	5 minutes	40 minutes	
	+68 °F (20 °C)	6 minutes	50 minutes	
	+50 °F (10 °C)	10 minutes	85 minutes	
	+41 °F (5 °C)	18 minutes	145 minutes	
	Sikadur® Injection Resin			
	Temperature	Open time - T_{gel}	Peel-off time (Capseal removal)	Curing time - T_{cur}
	+86 °F (30 °C)	20 minutes	3 hours	12 hours
	+68 °F (20 °C)	30 minutes	6 hours	24 hours
	+41 °F (5 °C)	2 hours	18 hours	72 hours

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

LIMITATIONS

- Minimum recommended ambient and substrate temperature is 40 °F (4 °C).
- Maximum recommended ambient and substrate temperature is 95 °F (35 °C).
- Avoid application in direct sunlight, during precipitation and/or when high winds prevail.
- Not for treating cracks under hydrostatic pressure (i.e. actively leaking or with the presence of standing water) at time of installation. Do not apply over wet, glistening surfaces.
- Do not gravity feed or inject cracks greater than 1/4 inch (6 mm) wide. Contact Sika's Technical Services Department.
- Preferred minimum age of concrete is 21 - 28

- days, depending on curing and drying conditions.
- Use fine oven dried aggregate only for filling cracks greater than 1/8 inch (3 mm) wide prior to gravity feed, and to seed (i.e. broadcast). When following up with another construction product or creating slip resistance, sprinkle or broadcast fine oven dried aggregate only.
- Not for use in dynamic (i.e. moving; expanding and contracting) cracks or joints.
- Not an aesthetic product. Blotchy and hazy appearances may develop. Color may alter due to variations in lighting and/or UV exposure.
- The Sikadur® Injection Resin cartridge is a uniquely designed package. It stores two liquid epoxy components within a single tube and fits standard caulk gun dispensers. Be aware this cartridge does not behave identically to typical sealant caulk tubes. As the installer dispenses the mixed epoxy, there will be a point approximately half way into the length of the cartridge where the caulk gun will no longer advance. At this point, the contents of the cartridge have been exhausted. To avoid damage to the caulk gun, make no further attempt to force additional epoxy out.
- Occasionally actual concrete crack conditions will result in an imbalance where the Sikadur® Crack Repair Kit kit does not include enough Sikadur® Injection Resin to complete the installation. It is permissible to use cartridges of Sikadur® Crack Fix [PRO SELECT] to continue an injection procedure provided the tip of the static mixer is pressed directly into the injection port. The static mixer for the Sikadur® Crack Fix [PRO SELECT] cartridge will not permit secure attachment to the Sikadur® Crack Repair Kit Push Fit Connector. For additional information, please consult the current Product Data Sheet for Sikadur® Crack Fix [PRO SELECT] cartridges.
- Beyond 48 hours of cure time and based on actual temperature and relative humidity conditions, the cured surfaces of Sikadur® Injection Resin and/or Sikadur® Capseal tend to develop an amine blush (i.e. a slight oily residue). Amine blush may prevent Sikadur® Injection Resin and/or Sikadur® Capseal from bonding to itself, and/or prevent adhesion by a follow-up construction product (e.g. protective coating, cementitious mortar, etc.). To avoid additional Substrate Preparation, after a gravity feed installation of Sikadur Injection Resin, seed, sprinkle or broadcast oven dried aggregate onto the wetted surface while the adhesive is still tacky and uncured.

After cure, remove unadhered aggregate before proceeding with follow-up construction product installation. Otherwise, cured Sikadur® Injection Resin and/or Sikadur® Capseal surfaces may require light mechanical abrasion (e.g. sanding, screening, etc.) and/or a solvent wipe (i.e. dampening a clean, white cloth with an approved solvent mentioned in the Cleaning Equipment section of this

document). Contact Sika's Technical Services Department for additional information.

- **NOT FOR USE AS AN ANCHORING ADHESIVE.**

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

Product Data Sheet

Sikadur® Crack Repair Kit

October 2022, Version 01.04

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APPLICATION INSTRUCTIONS

General:

- Surfaces must be clean, sound, dust-free and as dry as possible. Surfaces may be damp, but free of standing water and frost.
- Remove dust, laitance, grease, oil, tar, curing compounds, impregnations, waxes, loosely adhering bond inhibiting foreign particles, disintegrated materials and all other contaminants.
- If a wet method of substrate preparation is considered, allow surfaces to thoroughly dry for a minimum 24 to 48 hours.
- Mask off and protect any adjacent surfaces that should not receive contact with Sikadur® Capseal or Sikadur® Injection Resin.

Solid Concrete, Solid Masonry:

Pressure Injection of static (i.e. nonmoving) cracks

- Cracked substrate must be solid and not allow Sikadur® Injection Resin to pass through its thickness and/or escape when injected.
- Mechanically prepare (i.e. roughen; profile to a minimum ICRI CSP-2 to CSP-3) surfaces using a wire brush, abrasive grinder or similar.
- Remove dust, standing water and obstructions visible within the crack void using brushes, a wet/dry vacuum and/or oil free compressed air.
- After injection ports are mounted and cap seal gel adhesive is sufficiently cured, use oil free compressed air to force any standing water that may be present out of the crack void. Start at injection port located at the highest elevation to force standing water downward and out of lower injection ports.

Gravity Feed of static (i.e. nonmoving) cracks

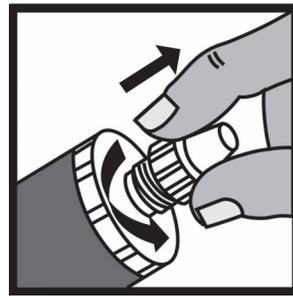
- Cracked substrate must be solid and not allow Sikadur® Injection Resin to pass through its thickness and/or escape when gravity fed.
- Notch cracks open to approximately 1/8 inch (3 mm) wide by 1/8 inch (3 mm) deep minimum. Do not exceed 1/4 inch (6 mm) wide by 1/4 inch (6 mm) deep maximum.
- Remove dust, standing water and obstructions visible within the crack void using brushes, a wet/dry vacuum and/or oil free compressed air.

SUBSTRATE QUALITY

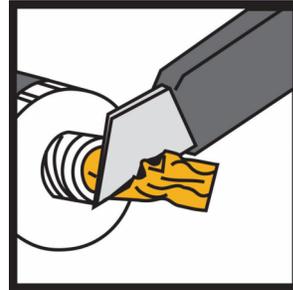
- Minimum age of concrete must be 21–28 days, depending on curing and drying conditions.
- Substrate surfaces along the line of the crack required for the Sikadur® Capseal, must be sound, clean and dry. Free from standing water, ice, dirt, oil, grease, coatings, laitance, efflorescence, old surface treatments, all loose particles and any other surface contaminants that could affect adhesion of the injection ports.
- Cracks must be clean. Horizontal cracks, which are filled by the 'gravity feed' technique, should be v-notched along the entire crack length with grinding equipment.

MIXING

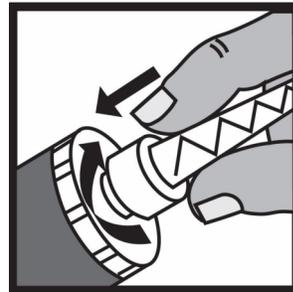
Preparing the Sikadur® Capseal Cartridge



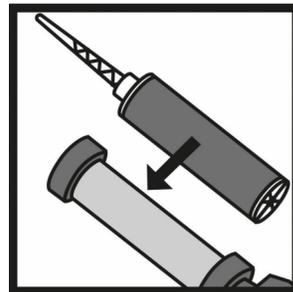
1. Unscrew and remove the cap



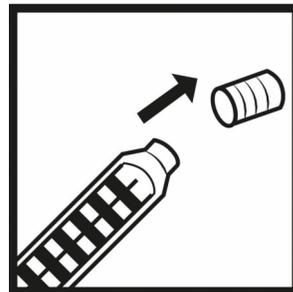
2. Cut the end off the protective film



3. Screw on the square mixing nozzle



4. Place the cartridge into the application gun ready for use. Pump gun until both resin parts are extruded as one mixed consistent colour. Do not use unmixed material.



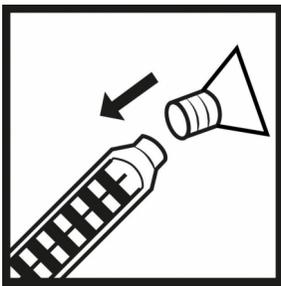
5. After bonding on the injection ports, remove the tip from the static mixing nozzle

Product Data Sheet

Sikadur® Crack Repair Kit

October 2022, Version 01.04

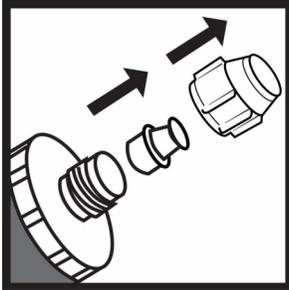
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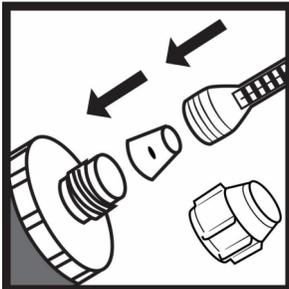
6. Fit the applicator fan onto the square mixing nozzle then start the crack sealing application.

Note: When the work is interrupted, the square mixing nozzle can remain on the cartridge after the gun pressure has been released. If the resin has hardened in the nozzle when work is resumed, a new square mixing nozzle must be attached.

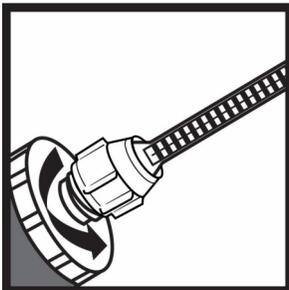
Preparing the Sikadur® Injection Resin cartridge



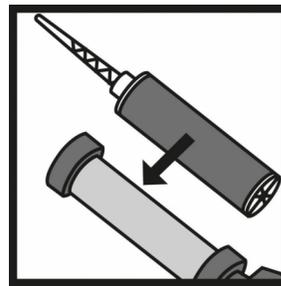
1. Unscrew the screwcap (do not throw away) and remove the plug from the cartridge outlet



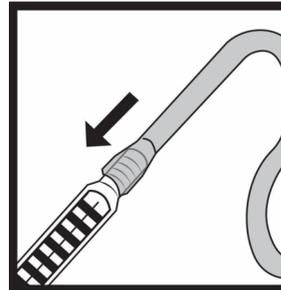
2. Fit the cartridge outlet plug into the cartridge then place injection resin mixer nozzle onto the cartridge



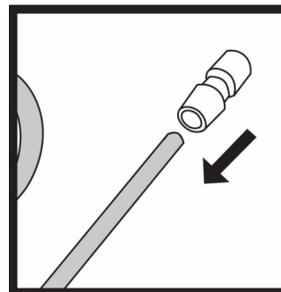
3. Slide the screwcap over the injection resin mixer nozzle and screw onto the cartridge



4. Place the Sikadur® Injection Resin cartridge into the application gun ready for use



5. Fit the flexible extension hose onto the injection resin mixer nozzle



6. Fit push fit connector onto the hose. Pump gun until both resin parts are extruded as one mixed consistent colour. Do not use unmixed material. Place connector over an injection port and start the injection application.

APPLICATION METHOD / TOOLS

Important: The Sikadur® Injection Resin is specially designed to flow into all areas of a crack and small fissures. When using the product in very porous substrates, it is likely to be absorbed by the substrate. This may result in a loss of volume of the resin in the crack, leading to an under filled crack.

Note: The distance between the injection ports is generally greater than the estimated depth of the crack (typically 1,5 times).

Vertical cracks (walls, columns, beams)

Crack sealing

1. Apply Sikadur® Capseal to the base of the injection ports. Perforations in the packaging box can be used to hold the injection ports.
2. Bond the injection ports onto the prepared substrate. Make sure the port positioning needle is inserted into the crack.
3. Apply the Sikadur® Capseal over the crack between the injection ports. Use wooden applicator to smooth surface and close any voids which could cause leaking of the resin during application.

Injection

1. Allow Sikadur® Capseal to cure. Refer to the curing table on the cartridge.
2. Inject resin into the first (lower) port. When resin begins to flow from the adjacent port, close off the first port and disconnect the injection cartridge hose.
3. Reconnect injection cartridge hose to the second port
4. Inject resin until resin starts to flow from the third port.
5. Repeat the process working along the length of the crack until the complete crack has been injected.
6. Allow Sikadur® Injection Resin to cure. Refer to the curing table.
7. If necessary, remove the injection ports and crack sealer with grinder or similar equipment.
8. Fill any holes or voids with Sikadur® or SikaQuick® repair products.

Horizontal cracks (floors, slabs etc)

Important: If the crack extends through the substrate, if possible, seal the underside of the substrate with Sikadur® Capseal before filling the crack with Sikadur® Injection Resin.

Note: The crack seal and injection ports may not be required for this application as the resin could be introduced into the crack by the 'gravity feed' technique.

Option 1: Injection

1. Allow Sikadur® Capseal to cure. Refer to the curing table.

2. Inject resin into the first port. When resin begins to flow from the adjacent port, close off the first port and disconnect the injection cartridge hose.
3. Reconnect injection cartridge hose to the second port
4. Inject resin until resin starts to flow from the third port.
5. Repeat the process working along the length of the crack until the complete crack has been injected.
6. Allow Sikadur® Injection Resin to cure. Refer to the curing table on the cartridge.
7. If necessary, remove the injection ports and crack sealer with grinder or similar equipment.
8. Fill any holes or voids with Sikadur® or SikaQuick® repair products.

Option 2: Gravity feed

1. Pour the injection resin slowly into the vee-notched crack.
2. Continue filling until crack is completely filled.
3. Fill the vee-notch if not completely filled with resin using Sikadur® or SikaQuick® repair products

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended

use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

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usa.sika.com

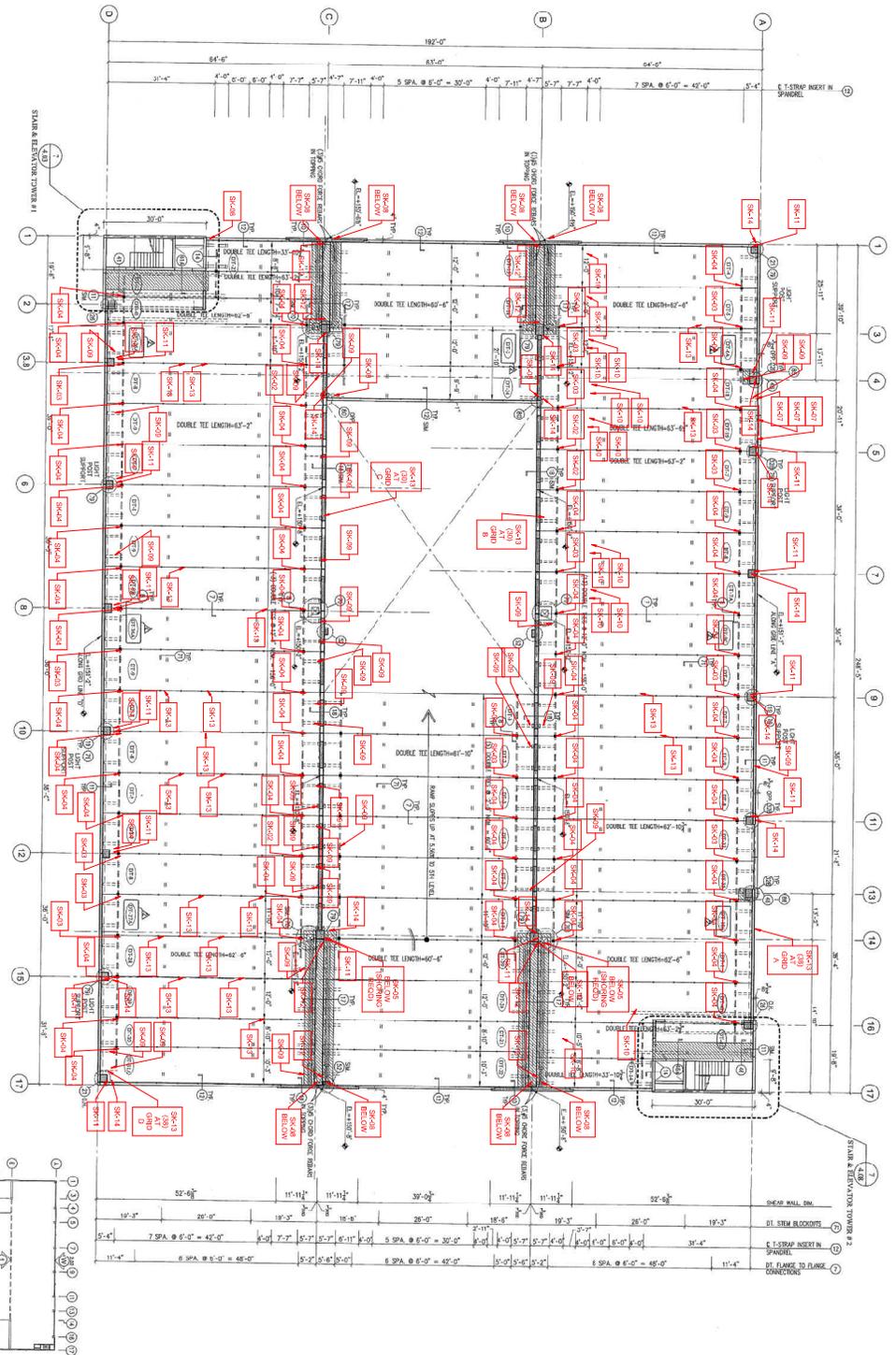


Product Data Sheet

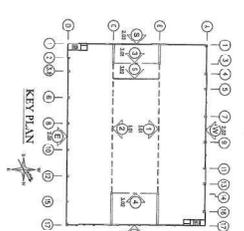
Sikadur® Crack Repair Kit
October 2022, Version 01.04
020205010020000014

SikadurCrackRepairKit-en-US-(10-2022)-1-4.pdf





6th Level Framing Plan



APPENDIX A: REPAIR SURVEY

IN WITNESS WHEREOF, THE ENGINEER HAS HEREUNTO SET HIS HAND AND SEAL THIS 14th DAY OF FEBRUARY, 2023.

JEZERINAC GROUP
 Engineering, Inspection & Construction
 400 HILLCREST STREET, SUITE 200
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #1400018

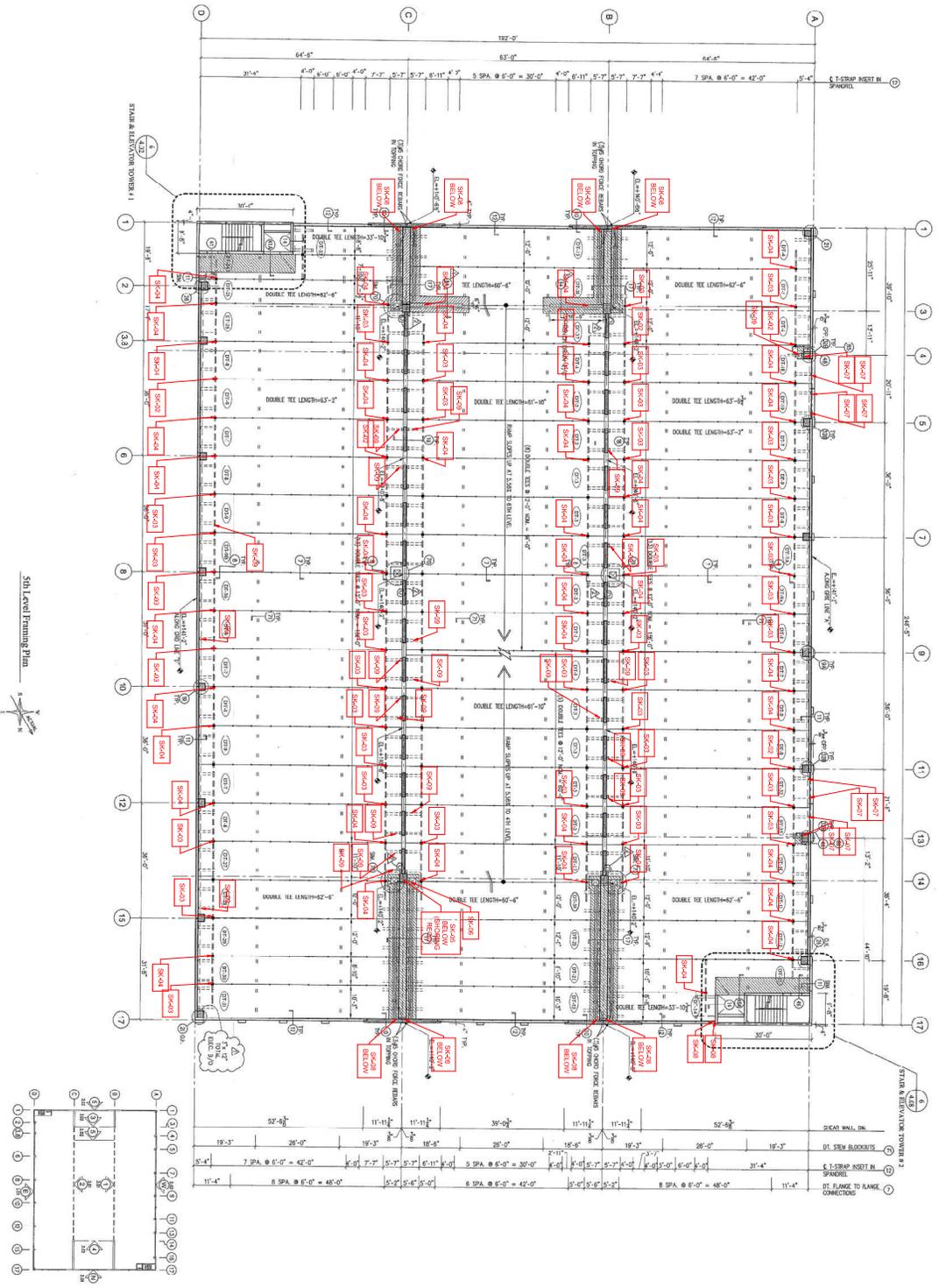
City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

ISSUANCE SCHEDULE		
NO.	DESCRIPTION	DATE

LEVEL 6 KEY PLAN

Project Number: 19.01.010
 Date: 02.14.2023
 Drawn By: CN
 Checked By: WJR

Scale: **S-06**
 1/4" = 1'-0"



APPENDIX A: REPAIR SURVEY

IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, THE ENGINEER HAS REVIEWED THE REPAIRS AND MATERIALS SUBMITTED FOR THIS PROJECT. THE ENGINEER'S REVIEW IS LIMITED TO THE INFORMATION PROVIDED AND DOES NOT CONSTITUTE A GUARANTEE OF THE QUALITY OF THE REPAIRS OR MATERIALS.

NO.	ISSUANCE SCHEDULE	DATE

NO.	ISSUANCE SCHEDULE	DATE

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

Scale: 1/16" = 1'-0"

JEZERINAC GROUP
 Engineering | Inspection | Construction
 400 HILLCREST STREET, SUITE 200
 PORT ST. LUCIE, FL 34956
 CERTIFICATE OF AUTHORIZATION #14000000000000000000



**Port St. Lucie Civic Center
Repair Protocol – Corroded Weld Repair**

Report Date: 2022.02.10
Revision 01: 2023.03.10

RP ID – SK08 Corroded Weld Repair

Observation: Corrosion of weld plate located at the spandrel seat pocket was observed.

Location: Level 6 - Column B1 x2, B17 x2, C1 x2, C17 x2 (below)
Column C.5-1, Column B-4 to B-14, Column C4 to C14

Level 5 – Column B1 x2, B17 x2, C1 x2, C17 x2 (below)
Column A.5-17 x2

Level 4 – Column B1 x2, B17 x2, C1 x2, C17 x2 (below)

Level 3 – Column B1 x2, B17 x2, C1 x2, C17 x2 (below)
Column C.5-1

Level 2 – Column B1 x2, B17 x2, C1 x2, C17 x2 (below)

Repair Protocol/Procedure:

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Corrosion will be cleaned with a wire brush and weld and plate painted with cold galvanizing compound.
- Clean work area of any construction debris.

List of Attachments:

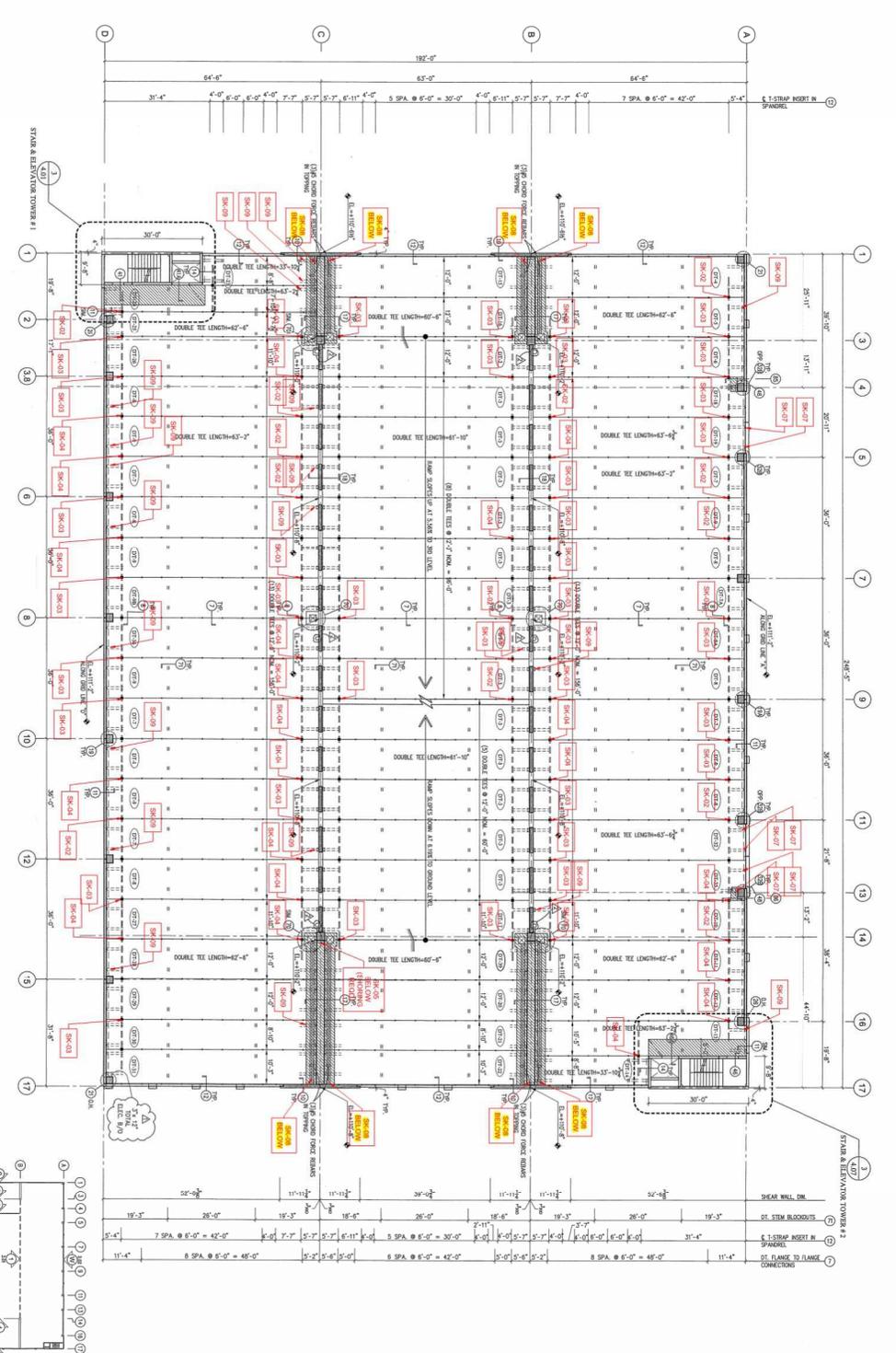
Lanco Galvacon GC-243 Product Data

Approvals:

Owner: _____ Date: _____

Owner’s Consultant: _____ Date: _____

General Contractor: _____ Date: _____



2nd Level Framing Plan



APPENDIX A: REPAIR SURVEY

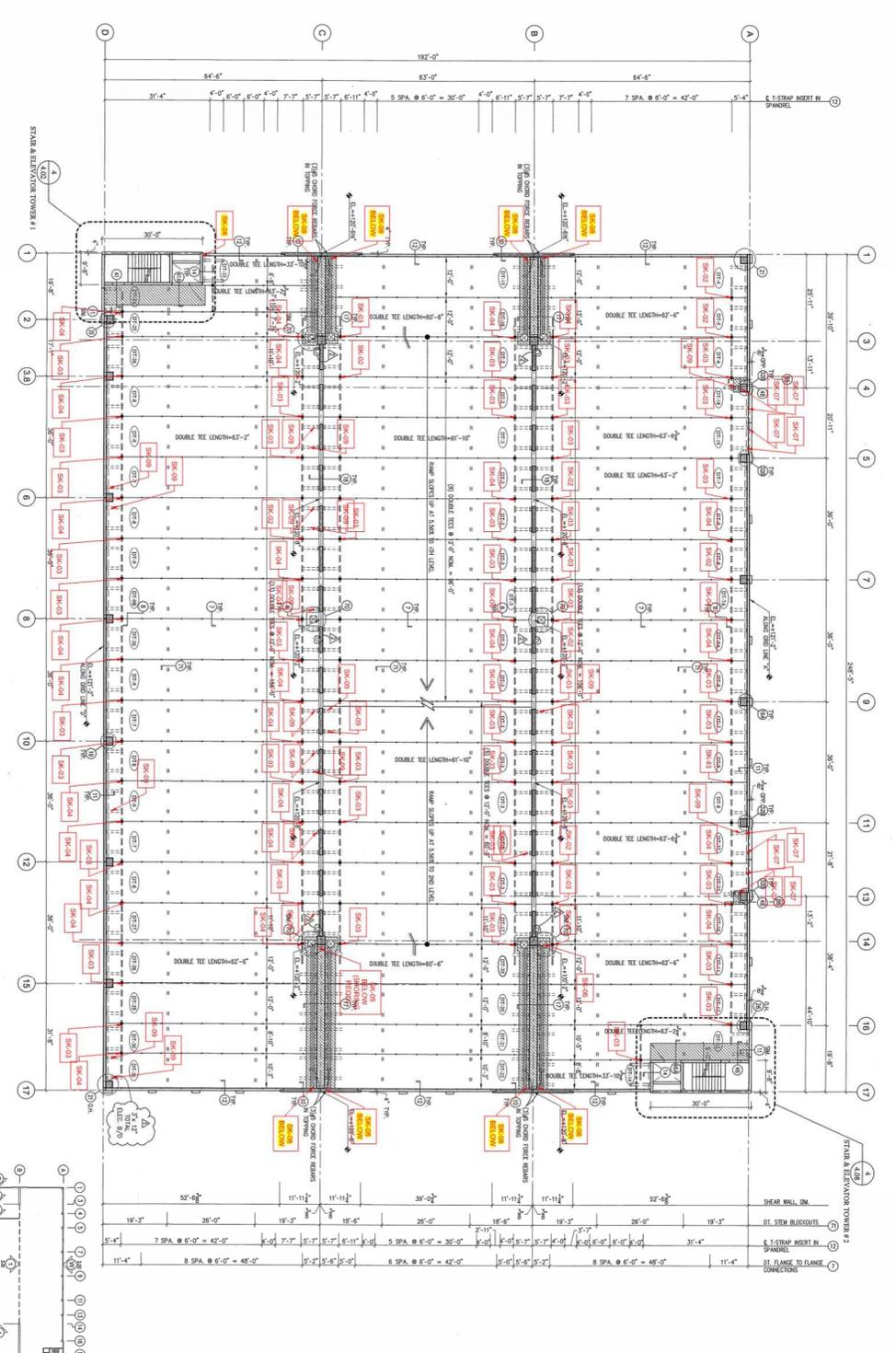
TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH ALL APPLICABLE CODES AND MATERIAL SPECIFICATIONS.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

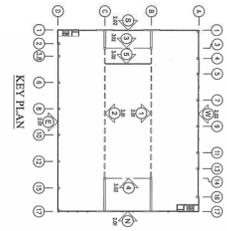
LEVEL 2 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

JEZERINAC GROUP
 Engineering, Inspection & Construction
 400 HOBSON STREET, SUITE 200
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #143098



3rd Level Framing Plan



APPENDIX A: REPAIR SURVEY

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MATERIAL SPECIFICATIONS.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR

Scale	S-03
	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage





4th Level Framing Plan

APPENDIX A: REPAIR SURVEY

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH ALL APPLICABLE CODES AND MATERIAL SPECIFICATIONS.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

LEVEL 4 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

JEZERINAC GROUP
 Engineering, Inspection, & Construction
 400 HOBSON STREET, SUITE 100
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION # 14,400,000



5th Level Framing Plan

APPENDIX A: REPAIR SURVEY

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MATERIAL SPECIFICATIONS.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION DATE

LEVEL 5 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

JEZERINAC GROUP
 Engineering, Inspection, Maintenance
 400 HOBSON STREET, SUITE 200
 PORT ST. LUCIE, FL 34956
 CERTIFICATE OF AUTHORIZATION, FL #00018



Galvacon™ GC-243

Cold Galvanizing Compound for Iron and Steel

Description:

Galvacon™ is a ready to apply organic zinc compound for cold galvanizing on iron and steel. Is an equivalent to hot-dip galvanizing containing 97% pure zinc metal for interior and exterior. Excellent for treatment of rust; will stop rust expansion on iron and steel metals.

Meets Requirements for:

MPI:	N/A
Green Performance 1:	N/A
Green Performance 2:	N/A
VOC Compliant (<400g/L):	Yes
SCAQMD:	N/A
AIM & OTC:	N/A

Product Advantages:

- 97% pure zinc metal
- Equivalent protection to hot-dip galvanizing
- Anti-corrosive protection for weldments
- For direct use on prepared iron and steel
- High performance and lead free base coat
- Resistant to oxidation
- Impact and abrasion resistant
- Fast-drying

Performance:

DOD-P-21035A	Yes
MIL-P-21035A	Yes
ASTM D 3960	Yes
TT-P-641 G Type I	Yes

Uses:

Galvacon™ is widely used to repair or replace hot-dip galvanizing. As an extreme duty primer for abraded or damaged areas on galvanized steel. Excellent protection treatment for rust in welded or abraded areas where the protective galvanizing has been removed from the metal surface. Also recommended for long-term protection of structural steel, water and waste facilities, power plants, steel decking and bridges.

Technical Data:

Product Type:	Alkyd Resin
Finish:	Flat (1° - 3°) *Geometry 60°
Solids (%):	88 ± 2% by weight 58 ± 2% by volume
Weight/Gallon:	24 ± 0.05 lbs. (10.89 ± 0.02 kg.)
Colors:	Gray
Drying Time:	To touch: 25 - 30 min. To topcoat: 20 - 24 hrs.
Coverage:	Theoretical: Up to 930 ft. ² per gallon @ 1 mil Recommended: 400-450 ft. ² /gal. (37-41 m ² /gal.) @ 2.1 dry mils, 3.6 wet mils
Sizes:	1 gallon 1 quart
Thinning:	Lacquer Thinner LT-102
Flash Point:	83 °F TOC
Viscosity:	98 - 102 Ku's
Percent Pigment by Weight:	80 ± 2%
VOC:	<320 g/L

Notice: The technical data contained herein are true and accurate to the best of our knowledge. Published technical data and instructions are subject to change without prior notice.

S.D.S.: Available upon request.

Surface Preparation:

All surfaces must be dry, clean, sound and free of contaminants. Remove all dirt, grease, chalk, mildew, oil, rust, dust, and other soluble contaminants from steel surfaces by solvent cleaning or other method.

SSPC-SP1 Solvent Cleaning

Use this method to remove off all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants from steel surfaces with solvent Lanco® Lacquer Thinner LT-102, vapor cleaning, alkali, emulsifying agent, or steam.

SSPC-SP3 Power Tool Cleaning

Use this method to remove all loose mill scale, loose rust, loose paint, and other loose detrimental foreign matter by power wire brushing, power sanding, power grinding, power tool chipping, and power tool descaling.

SSPC-SP6 / Commercial Blast Cleaning

Use this method to remove mill scale with commercial blast cleaning method. Preparing metal surfaces for coating by the use of abrasives propelled through nozzles or by centrifugal wheels. It requires the removal of all visible scale, rust and other surface contaminants. Generally evenly dispersed very light shadows, streaks and discoloration caused by stains of rust, stains of mill scale and stain of previously applied paint may remain on no more than 33% of the surface. Slight residues of rust and paint may also be left in the craters or pits if the original surface is pitted.

SSPC-SP10 Brush-Off Blast Cleaning

Use this method to remove old coating completely for best performance near white blast cleaning. Blasted surfaces should be coated within 8 hours after blasting or before rusting or other contamination of the surface occurs.

Method of Application:

Clean all surfaces as recommended. Lanco® Galvacon™ GC-243 must be thoroughly stirred, until pure zinc content is completely dispersed. Apply Lanco® Galvacon™ GC-243 to clean and dry metal surfaces.

Brush: Use a good quality nylon or polyester brush.

Roller: Use a Lanco® All-Purpose 1/4" Nap Enamel Roller PA-565.

Conventional spray: Reduce Lanco® Galvacon™ GC-243 at a ratio of four parts Lanco® Galvacon™ GC-243 to one part of Lanco® Lacquer Thinner LT-102. For pressure feed, use DeVilbiss MBC gun with E-tip and needle and 704 air cap or equivalent at 40-45psi atomizing pressure, 3/8" ID material hose, double regulated pressure tank with oil and moisture separator. Special packing may be necessary due to the abrasive nature of the zinc dust in this product.

Airless Spray: No reduction required when spraying. Minimum of 28:1 ratio pump, .013"-.015" tip, 1/4" ID Teflon material hose.

Dipping: Because of individual requirements, call the lab at Lanco® Mfg. Corporation for instructions.

Note: During lunch, breaks or any period of work stoppage, material should be removed from hoses. Release pressure from equipment and flush hoses and equipment with Lanco® Lacquer Thinner LT-102.

Drying Time: Lanco® Galvacon™ GC-243 dries fast (set to touch in 25 minutes). Allow 24 hours before applying topcoat.

Disposal: Keep container closed when not in use. In case of spilling, absorb with inert material and dispose of in accordance with applicable local, state and federal regulations.

Precaution: Keep away from heat, sparks, and open flame. Vapor is heavier than air. Prevent build-up of vapor — open windows and doors. Use only in cross-ventilated areas. Extinguish all flames and pilot lights, and turn off stoves, heaters, and/or electric motors, and eliminate all other sources of ignition during use and until all vapor is gone. Keep container closed when not in use.

Danger: Use only with adequate ventilation. Avoid prolonged or repeated breathing of vapor. Do not take internally. Swallowing may cause injury, illness or death. Avoid prolonged or repeated contact with skin. Do not allow contact with eyes or product to in eyes. Do not eat, drink or smoke in work areas.





Port St. Lucie Civic Center
Repair Protocol – Double Tee Stem or Inverted Tee Girder Spall Repair

Report Date: 2022.02.10
Revision 01: 2023.03.10

RP ID SK09 Double Tee Stem or Inverted Tee Girder Spall Repair

Observation: Double tee stem cracks and spalls were observed at multiple levels.

Location: Level 6, 32 occurrences
Level 5, 23 occurrences
Level 4, 27 occurrences
Level 3, 21 occurrences
Level 2, 20 occurrences

Repair Protocol/Procedure:

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Prior to start of these repairs, Jezerinac will be scheduled to identify and mark locations requiring repair and verify conditions require concrete removal.
- Chip existing substrate to sound concrete. If reinforcing is exposed, ensure minimum 1/2" clear space is provided behind the exposed bar.
- If corrosion is observed on exposed reinforcement, it will be removed.
- Roughen exposed concrete to edge of patch and prepare surface to manufacturer's recommendations.
- Exposed reinforcing will be coated with Sika Armatec 110 Epocem.
- Apply Sikatop 123 Plus in accordance with manufacturer's recommendations. Where multiple lifts are required, each layer will be scored as required to meet ICRI roughness specifications.
- Clean work area of any construction debris.

List of Attachments:

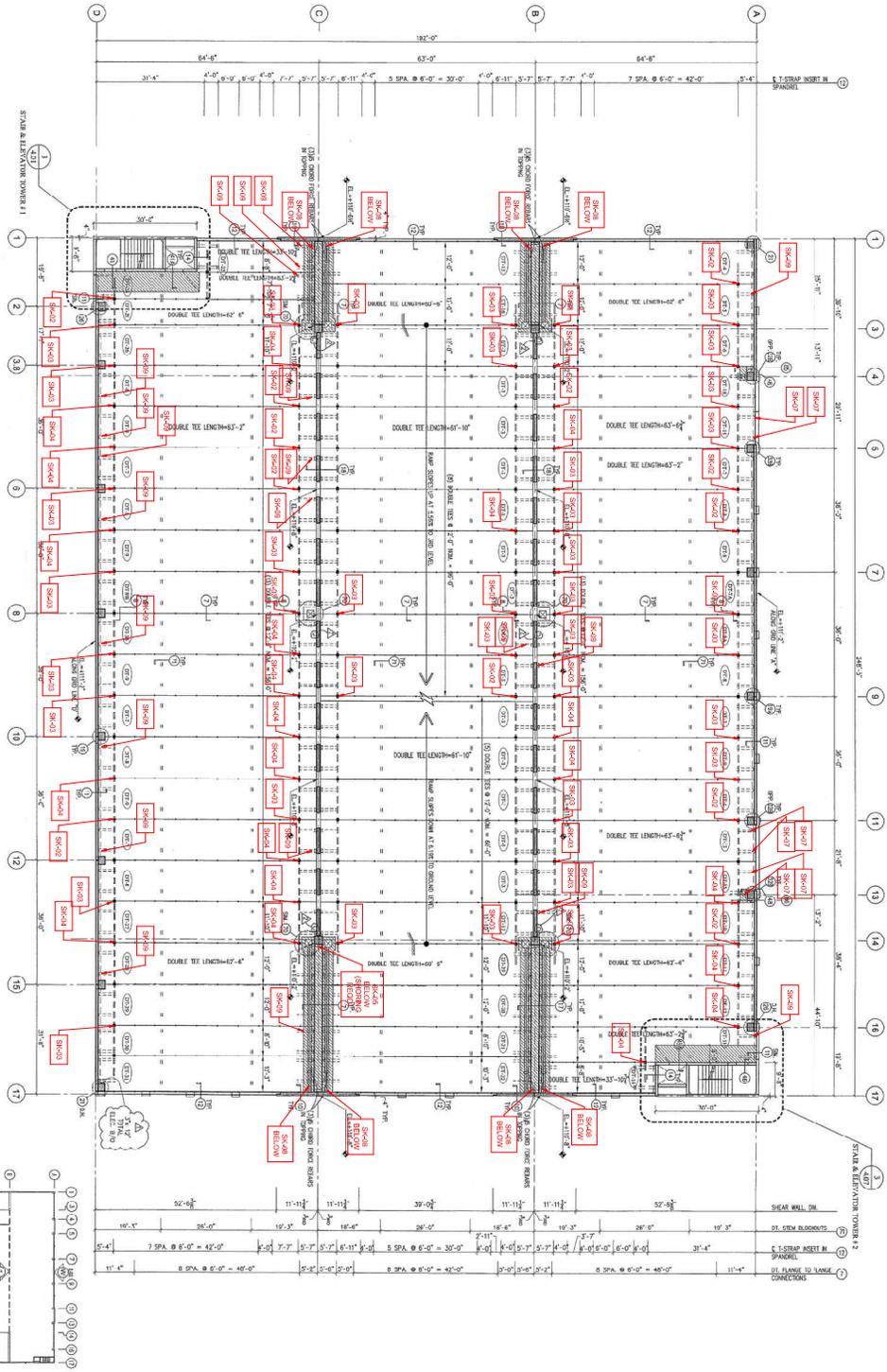
Jezerinac Location Markup
Sika Armatec 110 Epocem
Sikatop 123 Plus

Approvals:

Owner: _____ Date: _____

Owner's Consultant: _____ Date: _____

General Contractor: _____ Date: _____



2nd Level Framing Plan



APPENDIX A: REPAIR SURVEY

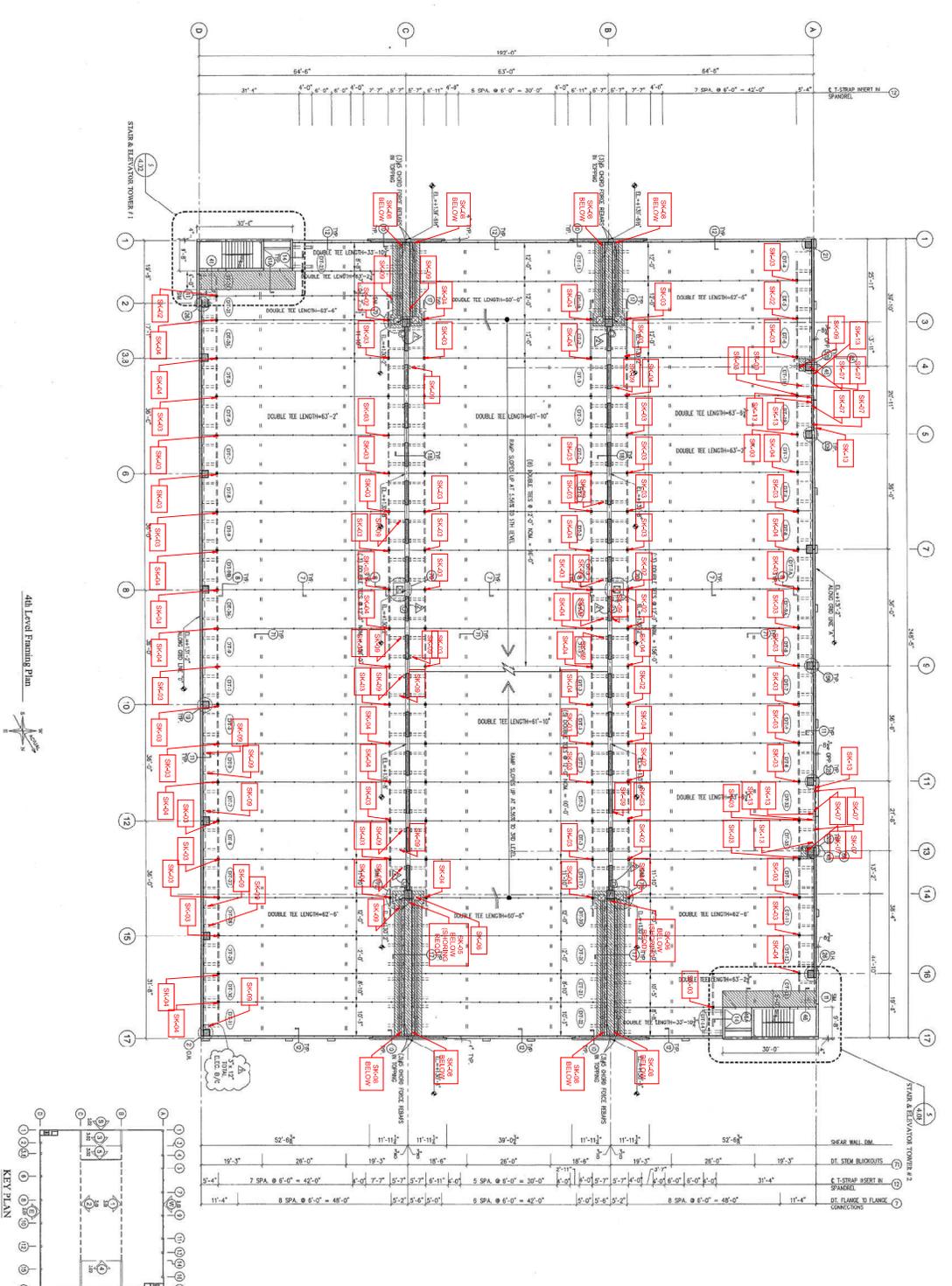
THIS PROJECT IS THE PROPERTY OF JEZERINAC GROUP. ANY REVISIONS TO THE PLANS AND SPECIFICATIONS SHALL BE MADE BY THE ORIGINAL DESIGNER. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

ISSUANCE SCHEDULE	
NO.	DATE

LEVEL 2 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage





APPENDIX A: REPAIR SURVEY

THIS PROJECT IS THE PROPERTY OF JEZERINAC GROUP. ANY REVISIONS TO THE PLAN SHALL BE MADE BY THE ORIGINAL DESIGNER. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION AND MATERIALS SHOWN HEREON.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

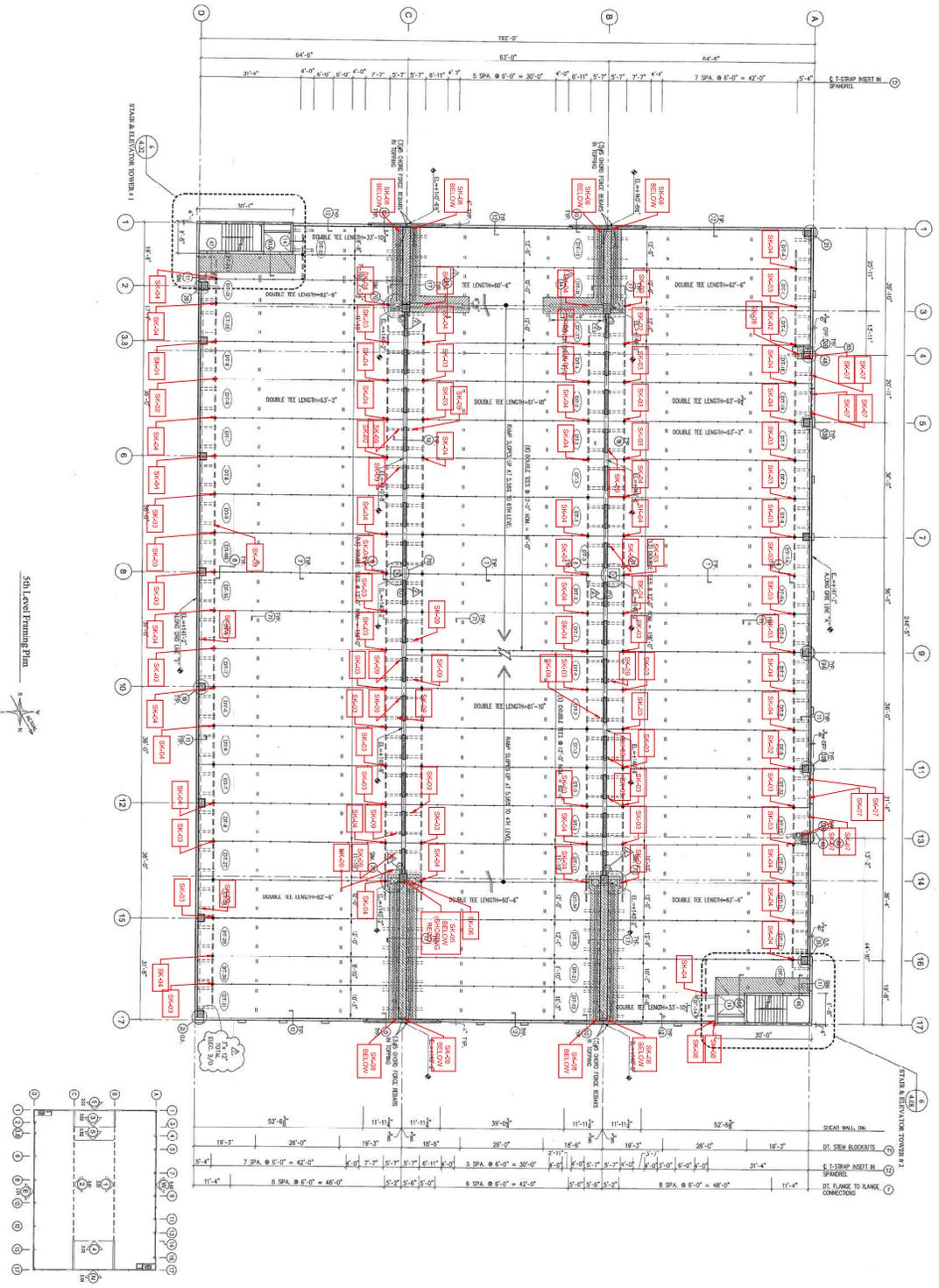
Project Number	1901.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR

Scale	S-04 1/16" = 1'-0"
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LEVEL 4 KEY PLAN

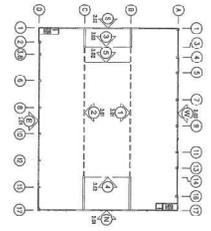
City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage





APPENDIX A: REPAIR SURVEY

5th Level Framing Plan



IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, THE ENGINEER HAS REVIEWED THE REPAIR AND REPAIR SCHEDULE FOR THE 5TH LEVEL. THE REPAIR SCHEDULE IS SUBJECT TO THE MATERIAL SPECIFICATIONS.

NO.	ISSUANCE SCHEDULE	DATE

LEVEL 5 KEY PLAN

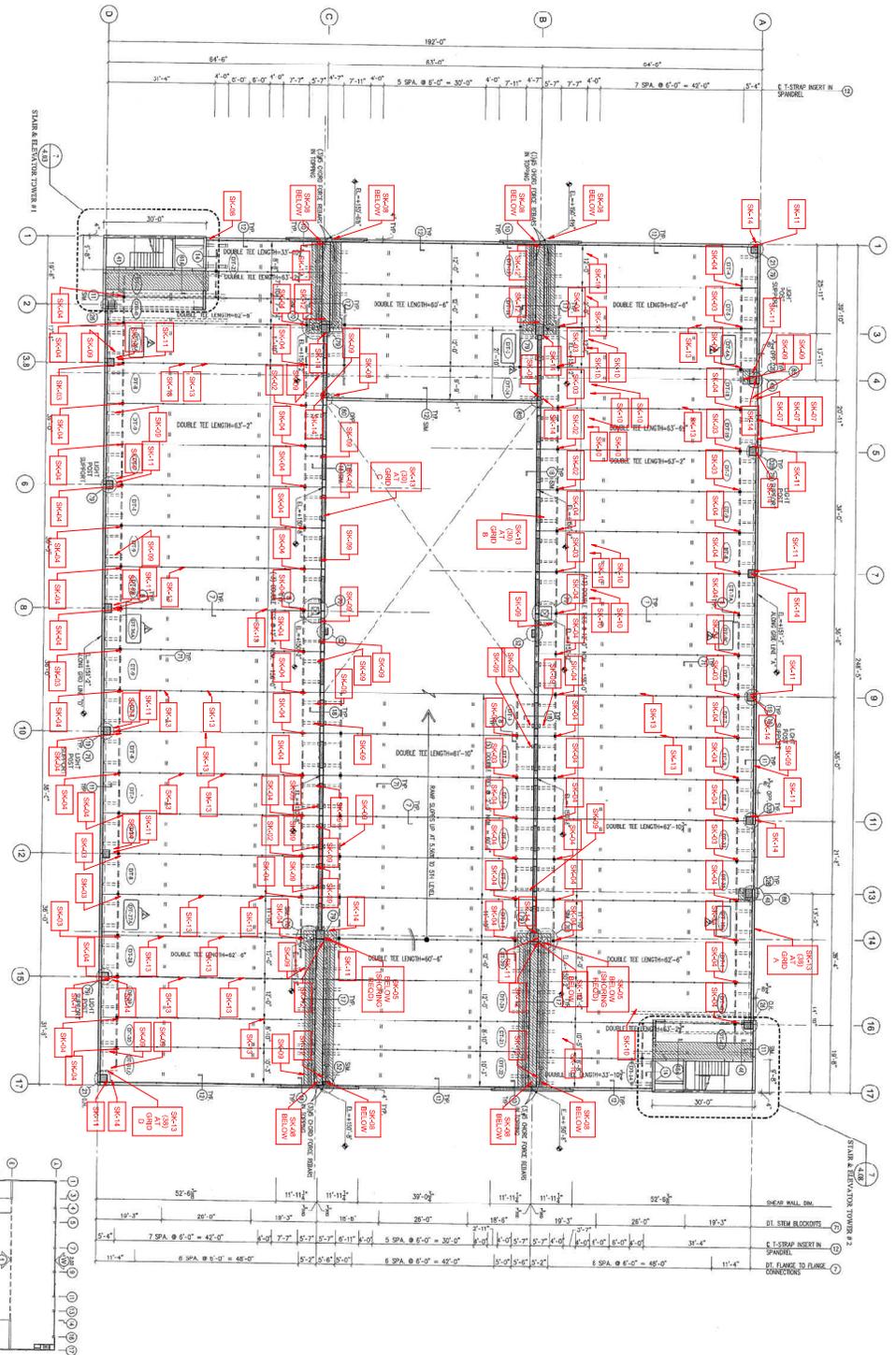
Project Number: 19.01.010
 Date: 02.14.2023
 Drawn By: CN
 Checked By: WJR

S-05

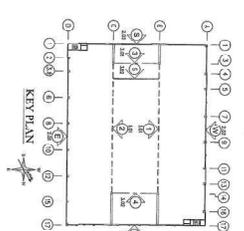
Scale: 1/4" = 1'-0"

City of Port St. Lucie
 MIDFLORIDA Credit Union Event Center
 Parking Garage





6th Level Framing Plan



APPENDIX A: REPAIR SURVEY

IN WITNESS WHEREOF, THE ENGINEER HAS HEREUNTO SET HIS HAND AND SEAL THIS 14th DAY OF FEBRUARY, 2023.

ISSUANCE SCHEDULE	
NO.	DATE

LEVEL 6 KEY PLAN	

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

Project Number: 19.01.010
 Date: 02.14.2023
 Drawn By: CN
 Checked By: WJR

Scale: **S-06**
 1/4" = 1'-0"

400 HILLOCKS STREET, SUITE 210
 PORT ST. LUCIE, FLORIDA 34956
 CENTRAL FLORIDA AUTHORITY, FLA. A00018

PRODUCT DATA SHEET

Sika® Armatec®-110 EpoCem

BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION

PRODUCT DESCRIPTION

Sika® Armatec®-110 EpoCem is a cementitious epoxy resin compensated 3-component, solvent-free, coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

USES

- Suitable in concrete repair as corrosion protection for reinforcement
- Suitable as a bonding primer on mortar, steel, and on placing fresh, plastic concrete to existing hardened concrete
- Protection to reinforcing steel in areas of thin concrete cover

CHARACTERISTICS / ADVANTAGES

- Contains EpoCem® technology - improved bonding agent
- Extended open times for repair mortars
- Excellent adhesion to concrete and steel
- Contains corrosion inhibitor
- Good resistance to water and chloride penetration
- High shear strength
- Long pot life
- Can be brushed on or applied using spray gun
- Can be used exterior on-grade
- Excellent bonding bridge for cement or epoxy based repair mortars
- High strength, unaffected by moisture when cured
- Non-flammable, solvent free

PRODUCT INFORMATION

Chemical Base	Portland cement, epoxy resin, selected aggregates and additives.				
Packaging	Unit	A	B	C	ABC
	3.5 gal (13.2 L)	47.6 oz (1.4 L)	122.1 oz (3.6 L)	46.82 lb (21.3 kg)	A + B in carton, C in bag
	1.65 gal (6.2 L)	22.7 oz (0.67 L)	57.6 oz (1.7 L)	5.5 lb (2.5 kg) (4 bags)	Factory- proportioned units in a pail
Appearance / Color	Component A		White liquid		
	Component B		Colorless liquid		
	Component C		Gray powder		
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging				
Storage Conditions	Store dry at 40–95 °F (4–35 °C)				

Protect Component A and B from freezing. If frozen, discard.
Protect Component C from moisture. If damp, discard.

TECHNICAL INFORMATION

Compressive Strength	3 days	4,500 psi (31.0 MPa)	(ASTM C-109)
	7 days	6,500 psi (44.8 MPa)	73 °F (23 °C)
	28 days	8,500 psi (58.6 MPa)	50 % R.H.
Flexural Strength	28 days	1,250 psi (8.6 MPa)	(ASTM C-348) 73 °F (23 °C) 50 % R.H.
Splitting Tensile Strength	28 days	600 psi (4.1 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	Bond of steel reinforcement on concrete		
	Sika® Armatec® 110 EpoCem coated	625 psi (4.3 MPa)	(ASTM C-1583) 73 °F (23 °C)
	Epoxy coated	508 psi (3.5 MPa)	50 % R.H.
	Plain reinforcement	573 psi (4.0 MPa)	
Slant Shear Strength	Bonding agent properties (14 d. moist cure, plastic to hardened concrete)		
	Wet on wet	2,800 psi (19.3 MPa)	(ASTM C-882)
	24 hr. open time	2,600 psi (17.9 MPa)	73 °F (23 °C) 50 % R.H.
Permeability to Water Vapor	Control	7.32 x 10 ⁻¹⁰ ft/sec	
	145 psi (10 bar)	8.92 x 10 ⁻¹⁵ ft/sec	
Diffusion Resistance to Water Vapor	μ H ₂ O ~100		
Permeability to CO₂	μ CO ₂ ~14,000		
Corrosion Test	Time-to-Corrosion Study		
	<ul style="list-style-type: none"> ▪ Sika® Armatec®-110 EpoCem more than tripled the time to corrosion ▪ Reduced corrosion rate by over 40 % 		

APPLICATION INFORMATION

Fresh Mortar Density	A+B+C ~125 lb/ft ³ (~2.0 kg/l)		
Coverage	Bonding agent	80 ft ² /gal (7.4 m ² /l)	
	Corrosion Protection	40 ft ² /gal (3.7 m ² /l)	
(Coverage figures do not include allowance for surface profile and porosity or material waste)			
Layer Thickness		Min. thickness of 1 coat	Coat
	Bonding agent	20 mils	1
	Corrosion Protection	20 mils	2
Product Temperature	65°-75°F (18°-24°C)		
Ambient Air Temperature	40–95 °F (5–35 °C)		
Substrate Temperature	40–95 °F (5–35 °C)		
Pot Life	~ 90 minutes		
Waiting / Recoat Times	Sika repair mortars and non-fast setting concrete can be applied on Sika® Armatec®-110 EpoCem within a maximum time of:		

Temperature	Maximum Waiting Time
80°- 95 °F (26°- 35 °C)	6 hours
65°-79 °F (18°- 26 °C)	12 hours
50°- 64° F (10°- 17° C)	16 hours
40°- 49° F (4°- 9° C)	wet-on-wet

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete

- Free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials.
- Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.
- Substrate must be Saturated Surface Dry (SSD) with no standing water.

Steel reinforcement

- Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed by blast cleaning or other means of mechanical abrasion and reinforcement.
- Should be fully exposed and have all corrosion removed.

MIXING

- Sika® Armatec®-110 EpoCem can be mixed with a low-speed (< 250 rpm) electric drill mixer.
- Shake components A and B thoroughly before opening.
- Pour liquid components A and B into a suitable mixing vessel and mix for 30 seconds.
- While still mixing components A and B slowly add powder component C.
- Mix the three components together for a minimum 3 minutes until blend is uniform and free of lumps, minimizing addition of air.
- Mix only the quantity that you can be applied within the pot life.
- DO NOT ADD WATER.

APPLICATION

As reinforcement corrosion protection

- Apply by stiff-bristle brush or spray at 80 ft² /gal.
- Take special care to properly coat the underside of the totally exposed steel.
- Allow coating to dry 2-3 hours at 73 °F, then apply a second coat at the same coverage.
- Allow to dry again before the repair mortar or concrete is applied.
- Pour or place repair within 7 days

As a bonding primer

- Apply using a stiff-bristle brush or broom. To achieve good bond, Sika® Armatec®-110 EpoCem must be applied well into the substrate, filling all pores and ensure complete coverage of all surface irregularities (minimum layer thickness 1/64" (0.5 mm).
- Spray apply with Goldblatt Pattern Pistol or equal equipment.
- Apply the freshly mixed patching mortar or concrete wet on wet, or up to the maximum recommended open time, onto the bonding slurry.

CURING TREATMENT

Sika® Armatec®-110 EpoCem must be protected against contamination and rain until application of the repair mortar.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LIMITATIONS

- Avoid application in direct sun and/or strong wind and/or rain.
- Do not add water.
- Not a vapor barrier.
- Apply only to sound, prepared substrates.
- Not recommended for use with expansive grouts and SikaQuicks
- Use of semi-dry mortars onto Sika® Armatec®-110 EpoCem must be applied "wet on wet"
- When used in overhead applications with hand placed patching mortars, use "wet on wet" for maximum mortar built thickness.
- Substrate profile as specified by the overlay or repair material is still required.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® Hi-Mod 32.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

A+B+C combined _____ 50 g/l _____

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

Sika Corporation

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usa.sika.com

Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

Sika® Armatec®-110 EpoCem
March 2020, Version 01.02
020302020050000003

SikaArmatec-110EpoCem-en-US-(03-2020)-1-2.pdf



PRODUCT DATA SHEET

SikaTop[®]-123 Plus

Two-component, polymer-modified, cementitious, non-sag mortar plus Sika FerroGard[®] 901 penetrating corrosion inhibitor

PRODUCT DESCRIPTION

SikaTop[®]-123 Plus is a two-component, polymer-modified, Portland cement-based, fast-setting, non-sag mortar. It is a high performance repair mortar for vertical and overhead surfaces and offers the additional benefit of Sika FerroGard[®] 901, a penetrating corrosion inhibitor included in its formulation.

USES

- On grade, above and below grade on concrete and mortar.
- On vertical and overhead surfaces.
- As a structural repair material for parking structures, industrial plants, walkways, bridges, tunnels, dams and ramps.
- Approved for repairs over cathodic protection systems

CHARACTERISTICS / ADVANTAGES

- Extremely low shrinkage proven by four industry standard test methods.
- High compressive and flexural strengths.
- Increased freeze/thaw durability and resistance to deicing salts.
- Increased density - improved carbon dioxide resistance (carbonation) without adversely affecting water vapor transmission (not a vapor barrier).
- Enhanced with Sika FerroGard[®] 901, a penetrating corrosion inhibitor - reduces corrosion even in the adjacent concrete.
- Compatible with coefficient of thermal expansion of concrete - Passes ASTM C 884.

APPROVALS / STANDARDS

- USDA certifiable for incidental food contact
- ANSI/NSF Standard 61 potable water approved compliant.
- Tested per ICRI Guideline NO. 320.3R for inorganic repair material data sheet protocol

PRODUCT INFORMATION

Packaging	Component A	1 gal (3.68 L) jug - 4/carton
	Component B	44 lb. (20 kg) bag
Appearance / Color	Gray powder	
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging	
Storage Conditions	Store dry at 40–95 °F (4–35 °C).	

Protect Component 'B' from moisture. If damp, discard material
Protect Component 'A' from freezing. If frozen, discard.



TECHNICAL INFORMATION

Compressive Strength	1 day	3,000 psi (20.7 MPa)	(ASTM C-109) 73 °F (23 °C) 50 % R.H.	
	7 days	4,000 psi (27.6 MPa)		
	28 days	6,000 psi (41.4 MPa)		
Modulus of Elasticity in Compression	2.94 x 10 ⁶ psi		(ASTM C-469)	
Flexural Strength	28 days	1,500 psi (10.3 MPa)	(ASTM C-293) 73 °F (23 °C) 50 % R.H.	
Splitting tensile strength	28 days	900 psi (6.2 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.	
Tensile Adhesion Strength	28 days	2,000 psi (13.8 MPa)	(ASTM C-882 modified)	
* Mortar scrubbed into substrate at 73 °F (23 °C) and 50 % R.H.				
Pull-Out Resistance	28 days	500 psi (3.4 MPa) Substrate failure	(ASTM C-1583)	
Shrinkage	28 days	1x1x11-1/4" specimen	0.05 % 0.038 %	(ASTM C-157, mod. ICRI 320.3R)
	28 days	3x3x11-1/4" specimen		
Ring test	> 70 days		(ASTM C-1581)	
	Average Max Strain			- 36 µstrain
	Average Stress Strain			4.92 psi/day
	Potential for Cracking			Low
Baenziger block	90 days	No cracking		
Freeze-Thaw Stability	300 cycles	98 %	(ASTM C-666)	
Rapid Chloride Permeability	28 days	< 500 C	(ASTM C-1202 AASHTO T-277)	

APPLICATION INFORMATION

Fresh mortar density	132 lb/ft ³ (2.2 kg/l)	(ASTM C-138)
Coverage	0.39 ft ³ (0.01 m ³) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste)	
Layer Thickness	Min.	Max.
	1/8" (3 mm)	1.5" (38 mm)
Product Temperature	65–75 °F (18–24 °C)	
Ambient Air Temperature	> 45 °F (7 °C)	
Substrate Temperature	> 45 °F (7 °C)	
Set Time	15 - 40 min.	(ASTM C-266)
Final set time	< 60 min.	(ASTM C-266)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/l

(EPA method 24)

LIMITATIONS

- Do not use solvent-based curing compound.
- Size, shape and depth of repair must be carefully considered and consistent with practices recommended by ACI or ICRI.
- For additional information on substrate preparation, refer to ICRI Guideline No. 310.2R.
- If aggressive means of substrate preparation is employed, substrate strength should be tested in accordance with ACI 503 Appendix A prior to the repair application.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® 32, Hi-Mod.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface preparation

- Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired.
- Be sure repair area is not less than 1/8" (3 mm) in depth.
- Preparation work should be done by high pressure water blast, scabblor or other appropriate mechanical means to obtain an exposed aggregate surface profile of $\pm 1/16"$ (1.6 mm) (CSP-5).
- To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test.
- Saw cutting of edges is preferred and a dovetail is recommended.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.

Priming

- Reinforcing steel: Steel reinforcement should be thoroughly prepared by mechanical cleaning to remove all traces of rust. Where corrosion has occurred due to the presence of chlorides, the steel should be high pressure washed with clean water after mechanical cleaning. For priming of reinforcing steel use Sika® Armatec® 110 EpoCem (consult PDS).
- Concrete Substrate:
 - Prime the prepared substrate with a brush or sprayed

applied coat of Sika® Armatec® 110 EpoCem (consult PDS).

- Alternately, a scrub coat of SikaTop®-123 Plus can be applied prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.

MIXING

- Pour Component 'A' into mixing container.
- Add Component 'B' while mixing continuously.
- Mix mechanically with a low-speed drill (400–600 rpm) and mixing paddle or mortar mixer.
- Mix to a uniform consistency, maximum 3 minutes.
- Manual mixing can be tolerated only for less than a full unit. Thorough mixing and proper proportioning of the two components is necessary.

APPLICATION

- SikaTop®-123 Plus must be scrubbed into the substrate, filling all pores and voids.
- Force material against edge of repair, working toward center.
- After filling repair, consolidate, then screed.
- Material may be applied in multiple lifts.

Multiple lifts

- Where multiple lifts are required score top surface of each lift to produce a roughened surface for next lift.
- Allow preceding lift to reach initial set, 30 minutes minimum, before applying fresh material.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.
- Scrub fresh mortar into preceding lift.
- Allow mortar or concrete to set to desired stiffness, then finish with wood or sponge float for a smooth surface.

CURING TREATMENT

- As per ACI recommendations for Portland cement concrete, curing is required.
- Moist cure with wet burlap and polyethylene, a fine mist of water or a water based* compatible curing compound (ASTM C-309).
- Curing compounds adversely affect the adhesion of following lifts of mortar, leveling mortar or protective coatings.
- Moist curing should commence immediately after finishing.
- Protect freshly applied mortar from direct sunlight, wind, rain and frost.

* Pretesting of curing compound is recommended.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always

read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

SikaTop®-123 Plus
November 2020, Version 01.03
020302040070000022

SikaTop-123Plus-en-US-(11-2020)-1-3.pdf





**Port St. Lucie Civic Center
Repair Protocol – Vertical Spall Repair**

Report Date: 2022.02.10
Revision Date:

RP ID SK10 Vertical Spall Repair

Observation: Repair for vertical spalls in existing precast panels as reported by Jezerinac.

Location: Level 6, 14 occurrences
Level 5, 1 occurrence (Marked “Below” on Location Plan)

Repair Protocol/Procedure:

Suffolk was not able to verify these conditions in the field and Jezerinac will be made available to identify locations for repair limited to the quantity above. If conditions at cracks observed are found to be minor enough to repair through other means, Suffolk reserves the right to modify this protocol based on field conditions.

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Prior to start of these repairs, Jezerinac will be scheduled to identify and mark locations requiring repair and verify conditions require concrete removal.
- Chip existing substrate to sound concrete. If reinforcing is exposed, ensure minimum 1” clear space is provided behind the exposed bar.
- If corrosion is observed on exposed reinforcement, it will be removed.
- Roughen exposed concrete to edge of patch and prepare surface to manufacturer’s recommendations.
- Exposed reinforcing will be coated with Sika Armatec 110 Epocem.
- Apply Sikatop 123 Plus in accordance with manufacturer’s recommendations. Where multiple lifts are required, each layer will be scored as required to meet ICRI roughness specifications.
- Clean work area of any construction debris.

List of Attachments:

Jezerinac Location Markup
Sika Armatec 110 Epocem
Sikatop 123 Plus



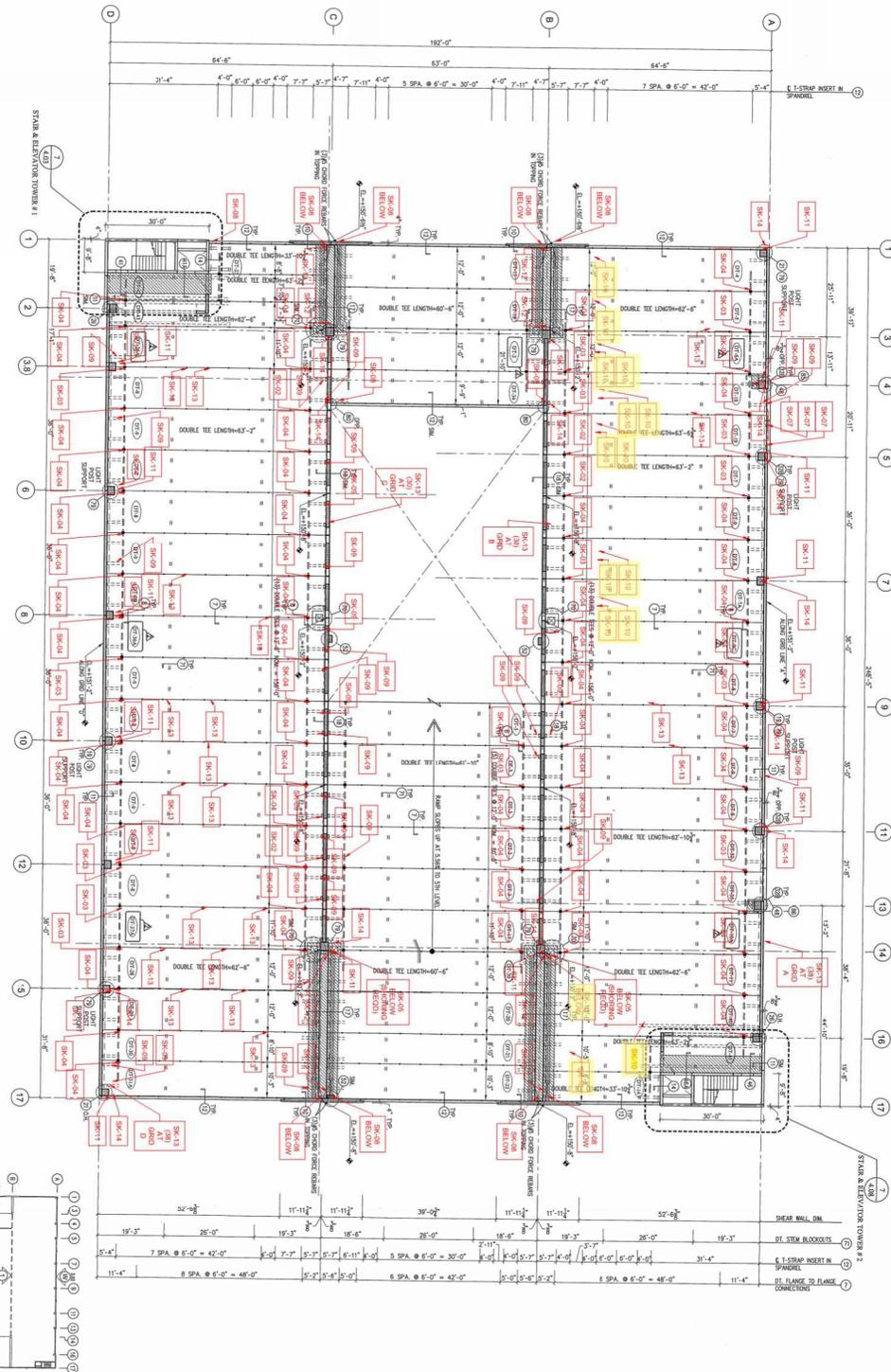
**Port St. Lucie Civic Center
Repair Protocol – Vertical Spall Repair**

Approvals:

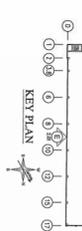
Owner: _____ Date: _____

Owner's Consultant: _____ Date: _____

General Contractor: _____ Date: _____



6th Level Framing Plan



APPENDIX A: REPAIR SURVEY

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MATERIAL SPECIFICATIONS.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR

Scale	S-06 1/16" = 1'-0"
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City of Port St. Lucie

MIDFLORIDA Credit Union Event Center

Parking Garage

JEZERINAC GROUP

Engineering | Inspection | Maintenance

400 HERRICK STREET, SUITE 200
PORT ST. LUCIE, FL 34956
CERTIFICATE OF AUTHORIZATION #16,400815

PRODUCT DATA SHEET

Sika® Armatec®-110 EpoCem

BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION

PRODUCT DESCRIPTION

Sika® Armatec®-110 EpoCem is a cementitious epoxy resin compensated 3-component, solvent-free, coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

USES

- Suitable in concrete repair as corrosion protection for reinforcement
- Suitable as a bonding primer on mortar, steel, and on placing fresh, plastic concrete to existing hardened concrete
- Protection to reinforcing steel in areas of thin concrete cover

CHARACTERISTICS / ADVANTAGES

- Contains EpoCem® technology - improved bonding agent
- Extended open times for repair mortars
- Excellent adhesion to concrete and steel
- Contains corrosion inhibitor
- Good resistance to water and chloride penetration
- High shear strength
- Long pot life
- Can be brushed on or applied using spray gun
- Can be used exterior on-grade
- Excellent bonding bridge for cement or epoxy based repair mortars
- High strength, unaffected by moisture when cured
- Non-flammable, solvent free

PRODUCT INFORMATION

Chemical Base	Portland cement, epoxy resin, selected aggregates and additives.				
Packaging	Unit	A	B	C	ABC
	3.5 gal (13.2 L)	47.6 oz (1.4 L)	122.1 oz (3.6 L)	46.82 lb (21.3 kg)	A + B in carton, C in bag
	1.65 gal (6.2 L)	22.7 oz (0.67 L)	57.6 oz (1.7 L)	5.5 lb (2.5 kg) (4 bags)	Factory- proportioned units in a pail
Appearance / Color	Component A		White liquid		
	Component B		Colorless liquid		
	Component C		Gray powder		
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging				
Storage Conditions	Store dry at 40–95 °F (4–35 °C)				

Protect Component A and B from freezing. If frozen, discard.
Protect Component C from moisture. If damp, discard.

TECHNICAL INFORMATION

Compressive Strength	3 days	4,500 psi (31.0 MPa)	(ASTM C-109)
	7 days	6,500 psi (44.8 MPa)	73 °F (23 °C)
	28 days	8,500 psi (58.6 MPa)	50 % R.H.
Flexural Strength	28 days	1,250 psi (8.6 MPa)	(ASTM C-348) 73 °F (23 °C) 50 % R.H.
Splitting Tensile Strength	28 days	600 psi (4.1 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	Bond of steel reinforcement on concrete		
	Sika® Armatec® 110 EpoCem coated	625 psi (4.3 MPa)	(ASTM C-1583) 73 °F (23 °C)
	Epoxy coated	508 psi (3.5 MPa)	50 % R.H.
	Plain reinforcement	573 psi (4.0 MPa)	
Slant Shear Strength	Bonding agent properties (14 d. moist cure, plastic to hardened concrete)		
	Wet on wet	2,800 psi (19.3 MPa)	(ASTM C-882)
	24 hr. open time	2,600 psi (17.9 MPa)	73 °F (23 °C) 50 % R.H.
Permeability to Water Vapor	Control	7.32 x 10 ⁻¹⁰ ft/sec	
	145 psi (10 bar)	8.92 x 10 ⁻¹⁵ ft/sec	
Diffusion Resistance to Water Vapor	μ H ₂ O ~100		
Permeability to CO₂	μ CO ₂ ~14,000		
Corrosion Test	Time-to-Corrosion Study		
	<ul style="list-style-type: none"> ▪ Sika® Armatec®-110 EpoCem more than tripled the time to corrosion ▪ Reduced corrosion rate by over 40 % 		

APPLICATION INFORMATION

Fresh Mortar Density	A+B+C ~125 lb/ft ³ (~2.0 kg/l)		
Coverage	Bonding agent	80 ft ² /gal (7.4 m ² /l)	
	Corrosion Protection	40 ft ² /gal (3.7 m ² /l)	
(Coverage figures do not include allowance for surface profile and porosity or material waste)			
Layer Thickness		Min. thickness of 1 coat	Coat
	Bonding agent	20 mils	1
	Corrosion Protection	20 mils	2
Product Temperature	65°-75°F (18°-24°C)		
Ambient Air Temperature	40-95 °F (5-35 °C)		
Substrate Temperature	40-95 °F (5-35 °C)		
Pot Life	~ 90 minutes		
Waiting / Recoat Times	Sika repair mortars and non-fast setting concrete can be applied on Sika® Armatec®-110 EpoCem within a maximum time of:		

Temperature	Maximum Waiting Time
80°- 95 °F (26°- 35 °C)	6 hours
65°-79 °F (18°- 26 °C)	12 hours
50°- 64° F (10°- 17° C)	16 hours
40°- 49° F (4°- 9° C)	wet-on-wet

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete

- Free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials.
- Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.
- Substrate must be Saturated Surface Dry (SSD) with no standing water.

Steel reinforcement

- Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed by blast cleaning or other means of mechanical abrasion and reinforcement.
- Should be fully exposed and have all corrosion removed.

MIXING

- Sika® Armatec®-110 EpoCem can be mixed with a low-speed (< 250 rpm) electric drill mixer.
- Shake components A and B thoroughly before opening.
- Pour liquid components A and B into a suitable mixing vessel and mix for 30 seconds.
- While still mixing components A and B slowly add powder component C.
- Mix the three components together for a minimum 3 minutes until blend is uniform and free of lumps, minimizing addition of air.
- Mix only the quantity that you can be applied within the pot life.
- DO NOT ADD WATER.

APPLICATION

As reinforcement corrosion protection

- Apply by stiff-bristle brush or spray at 80 ft² /gal.
- Take special care to properly coat the underside of the totally exposed steel.
- Allow coating to dry 2-3 hours at 73 °F, then apply a second coat at the same coverage.
- Allow to dry again before the repair mortar or concrete is applied.
- Pour or place repair within 7 days

As a bonding primer

- Apply using a stiff-bristle brush or broom. To achieve good bond, Sika® Armatec®-110 EpoCem must be applied well into the substrate, filling all pores and ensure complete coverage of all surface irregularities (minimum layer thickness 1/64" (0.5 mm).
- Spray apply with Goldblatt Pattern Pistol or equal equipment.
- Apply the freshly mixed patching mortar or concrete wet on wet, or up to the maximum recommended open time, onto the bonding slurry.

CURING TREATMENT

Sika® Armatec®-110 EpoCem must be protected against contamination and rain until application of the repair mortar.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LIMITATIONS

- Avoid application in direct sun and/or strong wind and/or rain.
- Do not add water.
- Not a vapor barrier.
- Apply only to sound, prepared substrates.
- Not recommended for use with expansive grouts and SikaQuicks
- Use of semi-dry mortars onto Sika® Armatec®-110 EpoCem must be applied "wet on wet"
- When used in overhead applications with hand placed patching mortars, use "wet on wet" for maximum mortar built thickness.
- Substrate profile as specified by the overlay or repair material is still required.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® Hi-Mod 32.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

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DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

A+B+C combined _____ 50 g/l _____

LEGAL DISCLAIMER

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- FOR INDUSTRIAL USE ONLY
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SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

Sika® Armatec®-110 EpoCem
March 2020, Version 01.02
020302020050000003

SikaArmatec-110EpoCem-en-US-(03-2020)-1-2.pdf



PRODUCT DATA SHEET

SikaTop[®]-123 Plus

Two-component, polymer-modified, cementitious, non-sag mortar plus Sika FerroGard[®] 901 penetrating corrosion inhibitor

PRODUCT DESCRIPTION

SikaTop[®]-123 Plus is a two-component, polymer-modified, Portland cement-based, fast-setting, non-sag mortar. It is a high performance repair mortar for vertical and overhead surfaces and offers the additional benefit of Sika FerroGard[®] 901, a penetrating corrosion inhibitor included in its formulation.

USES

- On grade, above and below grade on concrete and mortar.
- On vertical and overhead surfaces.
- As a structural repair material for parking structures, industrial plants, walkways, bridges, tunnels, dams and ramps.
- Approved for repairs over cathodic protection systems

CHARACTERISTICS / ADVANTAGES

- Extremely low shrinkage proven by four industry standard test methods.
- High compressive and flexural strengths.
- Increased freeze/thaw durability and resistance to deicing salts.
- Increased density - improved carbon dioxide resistance (carbonation) without adversely affecting water vapor transmission (not a vapor barrier).
- Enhanced with Sika FerroGard[®] 901, a penetrating corrosion inhibitor - reduces corrosion even in the adjacent concrete.
- Compatible with coefficient of thermal expansion of concrete - Passes ASTM C 884.

APPROVALS / STANDARDS

- USDA certifiable for incidental food contact
- ANSI/NSF Standard 61 potable water approved compliant.
- Tested per ICRI Guideline NO. 320.3R for inorganic repair material data sheet protocol

PRODUCT INFORMATION

Packaging	Component A	1 gal (3.68 L) jug - 4/carton
	Component B	44 lb. (20 kg) bag
Appearance / Color	Gray powder	
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging	
Storage Conditions	Store dry at 40–95 °F (4–35 °C).	

Protect Component 'B' from moisture. If damp, discard material
Protect Component 'A' from freezing. If frozen, discard.



TECHNICAL INFORMATION

Compressive Strength	1 day	3,000 psi (20.7 MPa)	(ASTM C-109)
	7 days	4,000 psi (27.6 MPa)	73 °F (23 °C)
	28 days	6,000 psi (41.4 MPa)	50 % R.H.
Modulus of Elasticity in Compression	2.94 x 10 ⁶ psi		(ASTM C-469)
Flexural Strength	28 days	1,500 psi (10.3 MPa)	(ASTM C-293) 73 °F (23 °C) 50 % R.H.
Splitting tensile strength	28 days	900 psi (6.2 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	28 days	2,000 psi (13.8 MPa)	(ASTM C-882 modified)
* Mortar scrubbed into substrate at 73 °F (23 °C) and 50 % R.H.			
Pull-Out Resistance	28 days	500 psi (3.4 MPa) Substrate failure	(ASTM C-1583)
Shrinkage	28 days	1x1x11-1/4" specimen	0.05 %
	28 days	3x3x11-1/4" specimen	0.038 %
Ring test	> 70 days		(ASTM C-1581)
	Average Max Strain		- 36 µstrain
	Average Stress Strain		4.92 psi/day
	Potential for Cracking		Low
Baenziger block	90 days	No cracking	
Freeze-Thaw Stability	300 cycles	98 %	(ASTM C-666)
Rapid Chloride Permeability	28 days	< 500 C	(ASTM C-1202 AASHTO T-277)

APPLICATION INFORMATION

Fresh mortar density	132 lb/ft ³ (2.2 kg/l)	(ASTM C-138)
Coverage	0.39 ft ³ (0.01 m ³) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste)	
Layer Thickness	Min.	Max.
	1/8" (3 mm)	1.5" (38 mm)
Product Temperature	65–75 °F (18–24 °C)	
Ambient Air Temperature	> 45 °F (7 °C)	
Substrate Temperature	> 45 °F (7 °C)	
Set Time	15 - 40 min.	(ASTM C-266)
Final set time	< 60 min.	(ASTM C-266)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/l

(EPA method 24)

LIMITATIONS

- Do not use solvent-based curing compound.
- Size, shape and depth of repair must be carefully considered and consistent with practices recommended by ACI or ICRI.
- For additional information on substrate preparation, refer to ICRI Guideline No. 310.2R.
- If aggressive means of substrate preparation is employed, substrate strength should be tested in accordance with ACI 503 Appendix A prior to the repair application.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® 32, Hi-Mod.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface preparation

- Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired.
- Be sure repair area is not less than 1/8" (3 mm) in depth.
- Preparation work should be done by high pressure water blast, scabblor or other appropriate mechanical means to obtain an exposed aggregate surface profile of $\pm 1/16"$ (1.6 mm) (CSP-5).
- To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test.
- Saw cutting of edges is preferred and a dovetail is recommended.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.

Priming

- Reinforcing steel: Steel reinforcement should be thoroughly prepared by mechanical cleaning to remove all traces of rust. Where corrosion has occurred due to the presence of chlorides, the steel should be high pressure washed with clean water after mechanical cleaning. For priming of reinforcing steel use Sika® Armatec® 110 EpoCem (consult PDS).
- Concrete Substrate:
 - Prime the prepared substrate with a brush or sprayed

applied coat of Sika® Armatec® 110 EpoCem (consult PDS).

- Alternately, a scrub coat of SikaTop®-123 Plus can be applied prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.

MIXING

- Pour Component 'A' into mixing container.
- Add Component 'B' while mixing continuously.
- Mix mechanically with a low-speed drill (400–600 rpm) and mixing paddle or mortar mixer.
- Mix to a uniform consistency, maximum 3 minutes.
- Manual mixing can be tolerated only for less than a full unit. Thorough mixing and proper proportioning of the two components is necessary.

APPLICATION

- SikaTop®-123 Plus must be scrubbed into the substrate, filling all pores and voids.
- Force material against edge of repair, working toward center.
- After filling repair, consolidate, then screed.
- Material may be applied in multiple lifts.

Multiple lifts

- Where multiple lifts are required score top surface of each lift to produce a roughened surface for next lift.
- Allow preceding lift to reach initial set, 30 minutes minimum, before applying fresh material.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.
- Scrub fresh mortar into preceding lift.
- Allow mortar or concrete to set to desired stiffness, then finish with wood or sponge float for a smooth surface.

CURING TREATMENT

- As per ACI recommendations for Portland cement concrete, curing is required.
- Moist cure with wet burlap and polyethylene, a fine mist of water or a water based* compatible curing compound (ASTM C-309).
- Curing compounds adversely affect the adhesion of following lifts of mortar, leveling mortar or protective coatings.
- Moist curing should commence immediately after finishing.
- Protect freshly applied mortar from direct sunlight, wind, rain and frost.

* Pretesting of curing compound is recommended.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always

read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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Sika Corporation

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Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

SikaTop®-123 Plus
November 2020, Version 01.03
020302040070000022

SikaTop-123Plus-en-US-(11-2020)-1-3.pdf





**Port St. Lucie Civic Center
Repair Protocol – Spandrel Connection Cover Repair**

Report Date: 2022.02.10
REVISION 02: 2023.03.10

RP ID No. SK11 Spandrel Connection Cover Repair

Observation: Connection cover material was observed cracked.

Location: Level 6

Repair Protocol/Procedure:

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Chip existing substrate to sound concrete.
- If corrosion is observed on steel components, it will be removed.
- Prepare surface to manufacturers recommendations.
- Exposed steel components will be coated with Sika Armatec 110 Epocem.
- Apply Sikatop 123 Plus in accordance with manufacturer's recommendations. Install and score each lift layer in accordance with ICRI roughness specifications.
- Clean work area of any construction debris.

List of Attachments:

Photos of typical conditions
Jezerinac Location Markup
Sika Armatec 110 Epocem Product Data
Sikatop 123 Product Data



**Port St. Lucie Civic Center
Repair Protocol – Spandrel Connection Cover Repair**

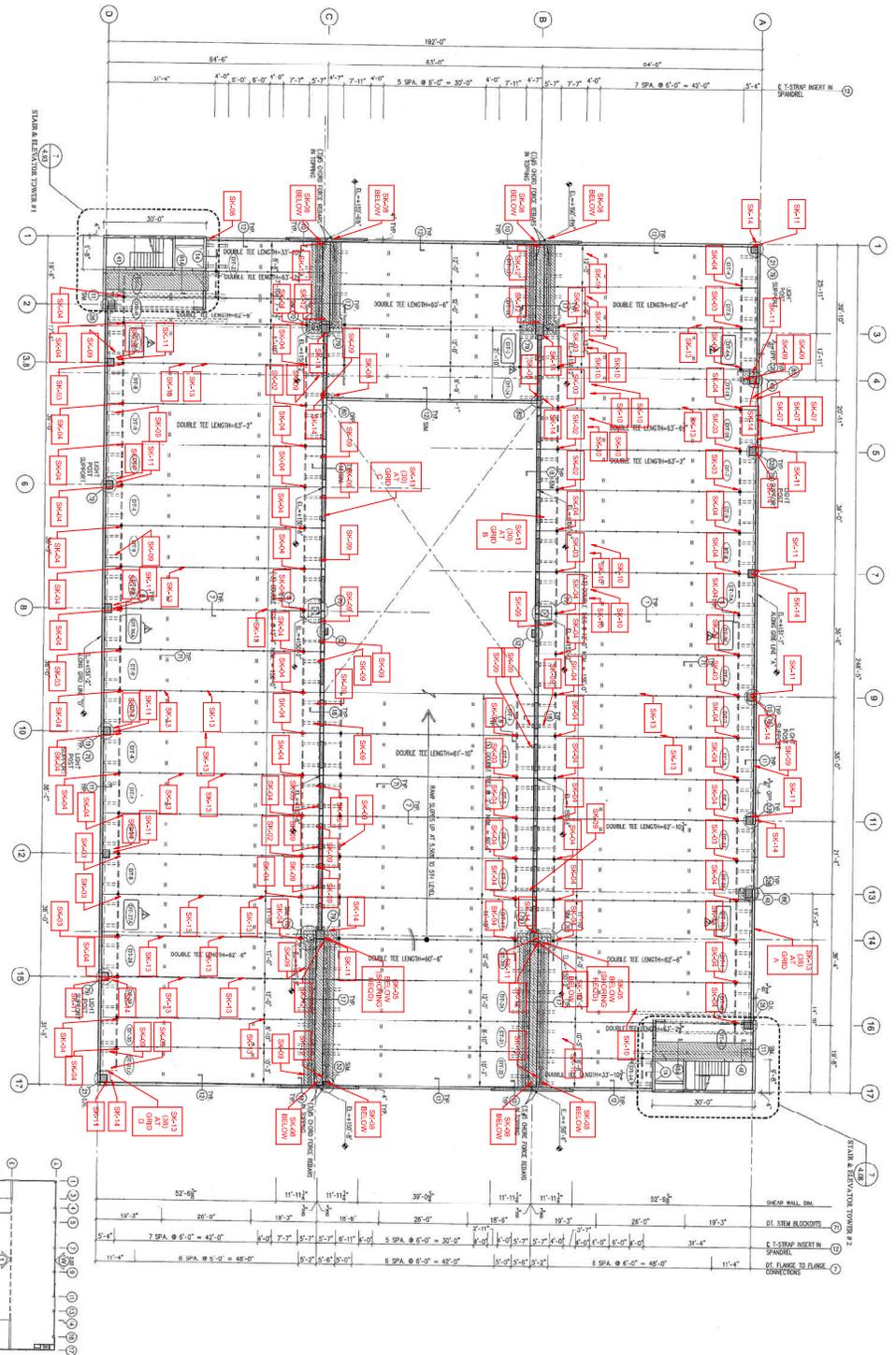


Approvals:

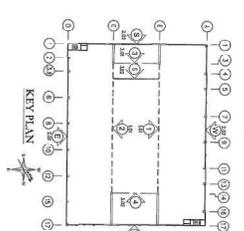
Owner: _____ Date: _____

Owner's Consultant: _____ Date: _____

General Contractor: _____ Date: _____



6th Level Framing Plan



APPENDIX A: REPAIR SURVEY

IN WITNESS WHEREOF, THE ENGINEER HAS AFFIXED HIS SIGNATURE AND SEAL TO THIS DRAWING ON THE DATE OF 02/14/2023.

ISSUANCE SCHEDULE	
NO.	DATE

LEVEL 6 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

JEZERINAC GROUP
 Engineering, Inspection, & Construction
 400 HILLOCKS STREET, SUITE 200
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #14009

PRODUCT DATA SHEET

Sika® Armatec®-110 EpoCem

BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION

PRODUCT DESCRIPTION

Sika® Armatec®-110 EpoCem is a cementitious epoxy resin compensated 3-component, solvent-free, coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

USES

- Suitable in concrete repair as corrosion protection for reinforcement
- Suitable as a bonding primer on mortar, steel, and on placing fresh, plastic concrete to existing hardened concrete
- Protection to reinforcing steel in areas of thin concrete cover

CHARACTERISTICS / ADVANTAGES

- Contains EpoCem® technology - improved bonding agent
- Extended open times for repair mortars
- Excellent adhesion to concrete and steel
- Contains corrosion inhibitor
- Good resistance to water and chloride penetration
- High shear strength
- Long pot life
- Can be brushed on or applied using spray gun
- Can be used exterior on-grade
- Excellent bonding bridge for cement or epoxy based repair mortars
- High strength, unaffected by moisture when cured
- Non-flammable, solvent free

PRODUCT INFORMATION

Chemical Base	Portland cement, epoxy resin, selected aggregates and additives.				
Packaging	Unit	A	B	C	ABC
	3.5 gal (13.2 L)	47.6 oz (1.4 L)	122.1 oz (3.6 L)	46.82 lb (21.3 kg)	A + B in carton, C in bag
	1.65 gal (6.2 L)	22.7 oz (0.67 L)	57.6 oz (1.7 L)	5.5 lb (2.5 kg) (4 bags)	Factory- proportioned units in a pail
Appearance / Color	Component A		White liquid		
	Component B		Colorless liquid		
	Component C		Gray powder		
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging				
Storage Conditions	Store dry at 40–95 °F (4–35 °C)				

Protect Component A and B from freezing. If frozen, discard.
Protect Component C from moisture. If damp, discard.

TECHNICAL INFORMATION

Compressive Strength	3 days	4,500 psi (31.0 MPa)	(ASTM C-109)
	7 days	6,500 psi (44.8 MPa)	73 °F (23 °C)
	28 days	8,500 psi (58.6 MPa)	50 % R.H.
Flexural Strength	28 days	1,250 psi (8.6 MPa)	(ASTM C-348) 73 °F (23 °C) 50 % R.H.
Splitting Tensile Strength	28 days	600 psi (4.1 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	Bond of steel reinforcement on concrete		
	Sika® Armatec® 110 EpoCem coated	625 psi (4.3 MPa)	(ASTM C-1583) 73 °F (23 °C)
	Epoxy coated	508 psi (3.5 MPa)	50 % R.H.
	Plain reinforcement	573 psi (4.0 MPa)	
Slant Shear Strength	Bonding agent properties (14 d. moist cure, plastic to hardened concrete)		
	Wet on wet	2,800 psi (19.3 MPa)	(ASTM C-882)
	24 hr. open time	2,600 psi (17.9 MPa)	73 °F (23 °C) 50 % R.H.
Permeability to Water Vapor	Control	7.32 x 10 ⁻¹⁰ ft/sec	
	145 psi (10 bar)	8.92 x 10 ⁻¹⁵ ft/sec	
Diffusion Resistance to Water Vapor	μ H ₂ O ~100		
Permeability to CO₂	μ CO ₂ ~14,000		
Corrosion Test	Time-to-Corrosion Study		
	<ul style="list-style-type: none"> ▪ Sika® Armatec®-110 EpoCem more than tripled the time to corrosion ▪ Reduced corrosion rate by over 40 % 		

APPLICATION INFORMATION

Fresh Mortar Density	A+B+C ~125 lb/ft ³ (~2.0 kg/l)		
Coverage	Bonding agent	80 ft ² /gal (7.4 m ² /l)	
	Corrosion Protection	40 ft ² /gal (3.7 m ² /l)	
(Coverage figures do not include allowance for surface profile and porosity or material waste)			
Layer Thickness		Min. thickness of 1 coat	Coat
	Bonding agent	20 mils	1
	Corrosion Protection	20 mils	2
Product Temperature	65°-75°F (18°-24°C)		
Ambient Air Temperature	40-95 °F (5-35 °C)		
Substrate Temperature	40-95 °F (5-35 °C)		
Pot Life	~ 90 minutes		
Waiting / Recoat Times	Sika repair mortars and non-fast setting concrete can be applied on Sika® Armatec®-110 EpoCem within a maximum time of:		

Temperature	Maximum Waiting Time
80°- 95 °F (26°- 35 °C)	6 hours
65°-79 °F (18°- 26 °C)	12 hours
50°- 64° F (10°- 17° C)	16 hours
40°- 49° F (4°- 9° C)	wet-on-wet

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete

- Free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials.
- Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.
- Substrate must be Saturated Surface Dry (SSD) with no standing water.

Steel reinforcement

- Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed by blast cleaning or other means of mechanical abrasion and reinforcement.
- Should be fully exposed and have all corrosion removed.

MIXING

- Sika® Armatec®-110 EpoCem can be mixed with a low-speed (< 250 rpm) electric drill mixer.
- Shake components A and B thoroughly before opening.
- Pour liquid components A and B into a suitable mixing vessel and mix for 30 seconds.
- While still mixing components A and B slowly add powder component C.
- Mix the three components together for a minimum 3 minutes until blend is uniform and free of lumps, minimizing addition of air.
- Mix only the quantity that you can be applied within the pot life.
- DO NOT ADD WATER.

APPLICATION

As reinforcement corrosion protection

- Apply by stiff-bristle brush or spray at 80 ft² /gal.
- Take special care to properly coat the underside of the totally exposed steel.
- Allow coating to dry 2-3 hours at 73 °F, then apply a second coat at the same coverage.
- Allow to dry again before the repair mortar or concrete is applied.
- Pour or place repair within 7 days

As a bonding primer

- Apply using a stiff-bristle brush or broom. To achieve good bond, Sika® Armatec®-110 EpoCem must be applied well into the substrate, filling all pores and ensure complete coverage of all surface irregularities (minimum layer thickness 1/64" (0.5 mm).
- Spray apply with Goldblatt Pattern Pistol or equal equipment.
- Apply the freshly mixed patching mortar or concrete wet on wet, or up to the maximum recommended open time, onto the bonding slurry.

CURING TREATMENT

Sika® Armatec®-110 EpoCem must be protected against contamination and rain until application of the repair mortar.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LIMITATIONS

- Avoid application in direct sun and/or strong wind and/or rain.
- Do not add water.
- Not a vapor barrier.
- Apply only to sound, prepared substrates.
- Not recommended for use with expansive grouts and SikaQuicks
- Use of semi-dry mortars onto Sika® Armatec®-110 EpoCem must be applied "wet on wet"
- When used in overhead applications with hand placed patching mortars, use "wet on wet" for maximum mortar built thickness.
- Substrate profile as specified by the overlay or repair material is still required.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® Hi-Mod 32.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

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DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

A+B+C combined _____ 50 g/l _____

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Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

Sika® Armatec®-110 EpoCem
March 2020, Version 01.02
020302020050000003

SikaArmatec-110EpoCem-en-US-(03-2020)-1-2.pdf



PRODUCT DATA SHEET

SikaTop[®]-123 Plus

Two-component, polymer-modified, cementitious, non-sag mortar plus Sika FerroGard[®] 901 penetrating corrosion inhibitor

PRODUCT DESCRIPTION

SikaTop[®]-123 Plus is a two-component, polymer-modified, Portland cement-based, fast-setting, non-sag mortar. It is a high performance repair mortar for vertical and overhead surfaces and offers the additional benefit of Sika FerroGard[®] 901, a penetrating corrosion inhibitor included in its formulation.

USES

- On grade, above and below grade on concrete and mortar.
- On vertical and overhead surfaces.
- As a structural repair material for parking structures, industrial plants, walkways, bridges, tunnels, dams and ramps.
- Approved for repairs over cathodic protection systems

CHARACTERISTICS / ADVANTAGES

- Extremely low shrinkage proven by four industry standard test methods.
- High compressive and flexural strengths.
- Increased freeze/thaw durability and resistance to deicing salts.
- Increased density - improved carbon dioxide resistance (carbonation) without adversely affecting water vapor transmission (not a vapor barrier).
- Enhanced with Sika FerroGard[®] 901, a penetrating corrosion inhibitor - reduces corrosion even in the adjacent concrete.
- Compatible with coefficient of thermal expansion of concrete - Passes ASTM C 884.

APPROVALS / STANDARDS

- USDA certifiable for incidental food contact
- ANSI/NSF Standard 61 potable water approved compliant.
- Tested per ICRI Guideline NO. 320.3R for inorganic repair material data sheet protocol

PRODUCT INFORMATION

Packaging	Component A	1 gal (3.68 L) jug - 4/carton
	Component B	44 lb. (20 kg) bag
Appearance / Color	Gray powder	
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging	
Storage Conditions	Store dry at 40–95 °F (4–35 °C).	

Protect Component 'B' from moisture. If damp, discard material
Protect Component 'A' from freezing. If frozen, discard.



TECHNICAL INFORMATION

Compressive Strength	1 day	3,000 psi (20.7 MPa)	(ASTM C-109) 73 °F (23 °C) 50 % R.H.	
	7 days	4,000 psi (27.6 MPa)		
	28 days	6,000 psi (41.4 MPa)		
Modulus of Elasticity in Compression	2.94 x 10 ⁶ psi		(ASTM C-469)	
Flexural Strength	28 days	1,500 psi (10.3 MPa)	(ASTM C-293) 73 °F (23 °C) 50 % R.H.	
Splitting tensile strength	28 days	900 psi (6.2 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.	
Tensile Adhesion Strength	28 days	2,000 psi (13.8 MPa)	(ASTM C-882 modified)	
* Mortar scrubbed into substrate at 73 °F (23 °C) and 50 % R.H.				
Pull-Out Resistance	28 days	500 psi (3.4 MPa) Substrate failure	(ASTM C-1583)	
Shrinkage	28 days	1x1x11-1/4" specimen	0.05 % 0.038 %	(ASTM C-157, mod. ICRI 320.3R)
	28 days	3x3x11-1/4" specimen		
Ring test	> 70 days		(ASTM C-1581)	
	Average Max Strain			- 36 µstrain
	Average Stress Strain			4.92 psi/day
	Potential for Cracking			Low
Baenziger block	90 days	No cracking		
Freeze-Thaw Stability	300 cycles	98 %	(ASTM C-666)	
Rapid Chloride Permeability	28 days	< 500 C	(ASTM C-1202 AASHTO T-277)	

APPLICATION INFORMATION

Fresh mortar density	132 lb/ft ³ (2.2 kg/l)	(ASTM C-138)
Coverage	0.39 ft ³ (0.01 m ³) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste)	
Layer Thickness	Min.	Max.
	1/8" (3 mm)	1.5" (38 mm)
Product Temperature	65–75 °F (18–24 °C)	
Ambient Air Temperature	> 45 °F (7 °C)	
Substrate Temperature	> 45 °F (7 °C)	
Set Time	15 - 40 min.	(ASTM C-266)
Final set time	< 60 min.	(ASTM C-266)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

ENVIRONMENTAL, HEALTH AND SAFETY

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DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/l

(EPA method 24)

LIMITATIONS

- Do not use solvent-based curing compound.
- Size, shape and depth of repair must be carefully considered and consistent with practices recommended by ACI or ICRI.
- For additional information on substrate preparation, refer to ICRI Guideline No. 310.2R.
- If aggressive means of substrate preparation is employed, substrate strength should be tested in accordance with ACI 503 Appendix A prior to the repair application.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® 32, Hi-Mod.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface preparation

- Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired.
- Be sure repair area is not less than 1/8" (3 mm) in depth.
- Preparation work should be done by high pressure water blast, scabblor or other appropriate mechanical means to obtain an exposed aggregate surface profile of $\pm 1/16"$ (1.6 mm) (CSP-5).
- To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test.
- Saw cutting of edges is preferred and a dovetail is recommended.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.

Priming

- Reinforcing steel: Steel reinforcement should be thoroughly prepared by mechanical cleaning to remove all traces of rust. Where corrosion has occurred due to the presence of chlorides, the steel should be high pressure washed with clean water after mechanical cleaning. For priming of reinforcing steel use Sika® Armatec® 110 EpoCem (consult PDS).
- Concrete Substrate:
 - Prime the prepared substrate with a brush or sprayed

applied coat of Sika® Armatec® 110 EpoCem (consult PDS).

- Alternately, a scrub coat of SikaTop®-123 Plus can be applied prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.

MIXING

- Pour Component 'A' into mixing container.
- Add Component 'B' while mixing continuously.
- Mix mechanically with a low-speed drill (400–600 rpm) and mixing paddle or mortar mixer.
- Mix to a uniform consistency, maximum 3 minutes.
- Manual mixing can be tolerated only for less than a full unit. Thorough mixing and proper proportioning of the two components is necessary.

APPLICATION

- SikaTop®-123 Plus must be scrubbed into the substrate, filling all pores and voids.
- Force material against edge of repair, working toward center.
- After filling repair, consolidate, then screed.
- Material may be applied in multiple lifts.

Multiple lifts

- Where multiple lifts are required score top surface of each lift to produce a roughened surface for next lift.
- Allow preceding lift to reach initial set, 30 minutes minimum, before applying fresh material.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.
- Scrub fresh mortar into preceding lift.
- Allow mortar or concrete to set to desired stiffness, then finish with wood or sponge float for a smooth surface.

CURING TREATMENT

- As per ACI recommendations for Portland cement concrete, curing is required.
- Moist cure with wet burlap and polyethylene, a fine mist of water or a water based* compatible curing compound (ASTM C-309).
- Curing compounds adversely affect the adhesion of following lifts of mortar, leveling mortar or protective coatings.
- Moist curing should commence immediately after finishing.
- Protect freshly applied mortar from direct sunlight, wind, rain and frost.

* Pretesting of curing compound is recommended.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

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Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

SikaTop®-123 Plus
November 2020, Version 01.03
020302040070000022

SikaTop-123Plus-en-US-(11-2020)-1-3.pdf





**Port St. Lucie Civic Center
Repair Protocol – Crack Repair**

Report Date: 2022.02.10
Revision 01: 2023.03.10

RP ID – SK12 Crack Repair

Observation: Cracks ranging from 0.02” to ¼” were observed at bottom of double-tee flanges, double tee stems, panels and corbels.

Location: Level 6

Repair Protocol/Procedure:

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Jezerinac will be scheduled to identify and mark locations requiring repair and verify injection is necessary based on crack size observed.
- Clean area adjacent to crack of bond inhibiting materials with trisodium phosphate and water solution.
- Set porting devices over cracks.
- Place epoxy resin adhesive over cracks and around each injection port a minimum of 1” wide by ¼” thick. Allow to set.
- Inject Sikadur crack weld in accordance with manufacturer’s recommendations.
- Remove ports and grout penetrations.
- Clean work area of any construction debris.

List of Attachments:

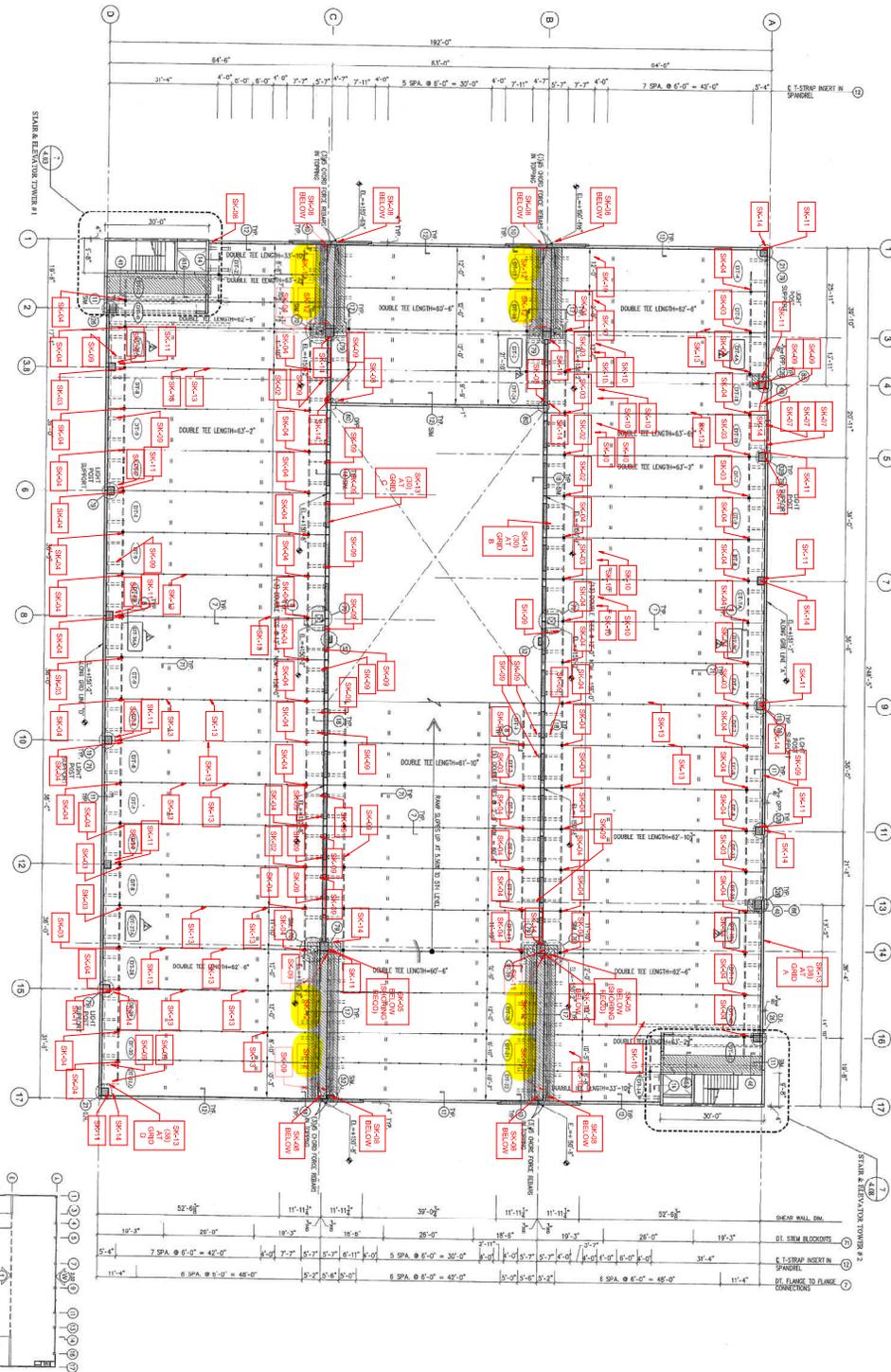
Jezerinac Location Markup
Sikadur Crack Weld

Approvals:

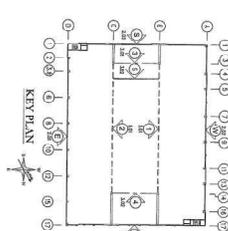
Owner: _____ Date: _____

Owner’s Consultant: _____ Date: _____

General Contractor: _____ Date: _____



6th Level Framing Plan



APPENDIX A: REPAIR SURVEY

IN WITNESS WHEREOF, THE ENGINEER HAS HEREUNTO SET HIS HAND AND SEAL THIS 14th DAY OF FEBRUARY, 2023.

ISSUANCE SCHEDULE	
NO.	DATE

LEVEL 6 KEY PLAN	

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

Project Number: 19.01.010
 Date: 02.14.2023
 Drawn By: CN
 Checked By: WJR

Scale: **S-06**
 1/16" = 1'-0"

400 HILLOCKS STREET, SUITE 210
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #140098

Sikadur® Crack Weld

Crack Injection Kit

Construction

Description	Two component, low viscosity, fast curing epoxy sealing system for repairs to cracks in concrete and solid masonry. Conforms to ASTM C-881.
Where to Use	<ul style="list-style-type: none"> ■ Low pressure injection of cracks in structural concrete and solid masonry. ■ Gravity feed cracks in horizontal concrete and horizontal solid masonry.
Advantages	<ul style="list-style-type: none"> ■ As strong as concrete. ■ Convenient mix in the nozzle cartridge system. ■ Cartridges fit standard caulking guns.
Coverage	Capseal will yield Approx. 300 mL Injection resins will yield Approx. 250 mL (See Charts for specific coverage rates)
Packaging	<ul style="list-style-type: none"> ■ Capseal (x2) 300 ml ■ Injection Resin (x2) 250 ml ■ Capseal mixer nozzle (x2) ■ Capseal applicator fan (x2) ■ Cartridge Flow Restrictor (x1) ■ Injection resin mixers with extended tube (x2) ■ Push fit connector (x1) ■ Injection Ports (x16) ■ Pair of Gloves (x2) ■ Wooden Applicator (Tongue Depressor) (x2) ■ Instructional DVD (x1)

Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Shelf Life 18 months in original, unopened containers.

Storage Conditions Store dry at 40° -75° F (5° -24° C)

Product Conditioning Condition dry at 40° -75° F (5° -24° C)

For Sikadur Injection Resin:

Compressive Strength (ASTM D-695), psi MPa	40° F	68° F	95° F
4 hours	-	-	500 (3.4)
8 hours	-	-	2000 (13.7)
16 hours	-	2000 (13.7)	3500 (24.1)
1 day	-	3000 (20.7)	5000 (34.5)
3 days	1500 (10.3)	8500 (58.6)	5500 (37.9)
7 days	6500 (44.8)	9000 (62.1)	7000 (48.3)
14 days	7500 (51.7)	9500 (65.5)	7500 (57.7)
28 days (68.9)	9000 (62.1)	10,000 (68.9)	10,000
Compressive Modulus (ASTM D-695)	200,000 psi		
Viscosity Mixed (ASTM D-2393)	500 cps		
Pot Life (ASTM C-881)	25-30 min. (60g mass)		
Tensile Strength (ASTM D-638)	6000 psi		
Elongation at Break (ASTM D-638)	25 %		
Tensile Modulus (ASTM D-638)	250,000 psi		
Flexural Strength (ASTM D-732)	10,000 psi		

Bond Strength (ASTM D-897)
2 day 350 psi (concrete failure)
14 days 450 psi (concrete failure)

Water Absorption (ASTM D-570) 0.24%

Heat Deflection Temp. (ASTM D-648) 109.7° F

VOC:
Capseal: 30 g/L
Inj. Resin: 5 g/L



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

For Sikadur Capseal:

Temp. (°F)	Gel Time (min)	Ready for Injection (min)
40	18	145
50	10	85
68	6	50
77	5	40
86	4	35

Coverage Rates:

Consumption of Crack Injection Resin in a crack					
	Length (in)	Width (in)	Depth (in)	Cu. Inches	# of Tubes
1/16" wide crack - 1" deep and 10 ft. Long	120	0.062	1	7.44	0.4
1/16" wide crack - 1.5" deep and 10 ft. Long	120	0.062	1.5	11.16	0.6
1/16" wide crack - 2" deep and 10 ft. Long	120	0.062	2	14.88	0.8
1/8" wide crack - 1" deep and 10 ft. Long	120	0.125	1	15	0.8
1/8" wide crack - 1.5" deep and 10 ft. Long	120	0.125	1.5	22.5	1.2
1/8" wide crack - 2" deep and 10 ft. Long	120	0.125	2	30	1.6
1/4" wide crack - 1" deep and 10 ft. Long	120	0.25	1	30	1.6
1/4" wide crack - 1.5" deep and 10 ft. Long	120	0.25	1.5	45	2.4
1/4" wide crack - 2" deep and 10 ft. Long	120	0.25	2	60	3.2

Consumption of Crack Injection Paste on a crack					
	Length (in)	Width (in)	Depth (in)	Cu. Inches	# of Tubes
1" Wide Strip - 10 ft. Long and 1/8" thick	120	1	0.125	15	0.8
1" Wide Strip - 10 ft. Long and 1/4" thick	120	1	0.25	30	1.6
1.5" Wide Strip - 10 ft. Long and 1/8" thick	120	1.5	0.125	22.5	1.2
1.5" Wide Strip - 10 ft. Long and 1/4" thick	120	1.5	0.25	45	2.4
2.0" Wide Strip - 10 ft. Long and 1/8" thick	120	2	0.125	30	1.6
2.0" Wide Strip - 10 ft. Long and 1/4" thick	120	2	0.25	60	3.2

How to Use

Surface Preparation

Substrate Preparation - For a successful application, very thorough preparation is a must. The crack to be treated must be dry and free from oil, grease, dust and other contaminants. Any loose material must be blown or brushed clear.

For Vertical Cracks (walls, columns, beams) - The surface of the crack should be sealed with the fast setting Sikadur Capseal supplied. The Capseal should also be used to affix the injection ports. The distance between the injection ports should be greater than the estimated depth of the crack (typically 1.5 times. If depth is not known, consult technical services).

For Horizontal Cracks (floors, slabs, etc.) - The Sikadur Capseal and injection ports may not be required as the resin may be introduced into the crack by gravity.

Mixing

Cartridge Set Up:

Sikadur Capseal - Open screw cap, cut film to remove metal clip and attach nozzle, extrude waste until a uniform color is achieved.

Sikadur Injection Resin - Remove screw cap, insert outlet plugs, attach mixer nozzle with extension tube*. Extrude waste to form a homogeneous mix. Use the push fit connector to connect to injection port.

*For horizontal cracks (floor, slab, etc.), remove the extension tube.

Application

For Vertical Cracks (walls, columns, beams) - The resin should be injected into the first (lower) port. When the resin begins to flow from the adjacent port, close off the first port and disconnect the hose. Reconnect to the second port and inject until resin starts to flow from the third; this process is repeated until the whole crack has been injected. After the resin has been allowed to cure, the injection ports and capseal should be removed and any holes or voids should be filled.



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Construction

	For Horizontal cracks (floors, slabs, etc.) - To gravity feed cracks, seal the underside of the substrate prior to filling if the crack reflects through. Dispense the injection resin slowly into the vee-notched crack. Continue injecting until completely filled.
Removal	After the resin has been allowed to cure, the injection ports and capseal should be mechanically removed and any holes or voids should be filled.
Limitations	<ul style="list-style-type: none">■ Minimum substrate and ambient temperature 40°F (5°C). Maximum substrate temperature 95° F (45°).■ Minimum age of concrete must be 21-28 days, depending on curing and drying conditions.■ Do not apply over wet, glistening surfaces.■ Not for injection of cracks subjected to osmotic or hydrostatic pressure during application.■ Do not inject cracks greater than 1/4 in (6mm). Consult Sika Technical Services.■ Not an aesthetic product. Color may alter due to variations in lighting and/or UV exposure.■ NOT FOR USE AS AN ANCHORING ADHESIVE.

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KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. FOR PROFESSIONAL USE ONLY.

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at <http://usa.sika.com/> or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

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**Port St. Lucie Civic Center
Repair Protocol – Plate Cover Replacement: Flat, Vertical**

Report Date: 2022.02.10
REV 02 Date: 2023.03.10

RP ID – SK13 Plate Cover Replacement: Flat, Vertical

Observation: Flat, vertical and overhead spalls at existing patches.

Location: Level 6, 20 occurrences*
Level 5, 4 occurrences
Level 4, 4 occurrences

*Excludes unidentified locations at ‘Grid A’, ‘Grid B’, ‘Grid C’ and ‘Grid D’

Repair Protocol/Procedure:

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Chip existing substrate to sound concrete.
- Where reinforcement or other metal is exposed, material may need to be cut to ensure minimum of 1” clear can be provided.
- If corrosion is observed on exposed reinforcement, it will be removed.
- Roughen exposed concrete to edge of patch and prepare surface to manufacturers recommendations.
- Exposed reinforcing will be coated with Sika Armatec 110 Epocem.
- Apply patch material in accordance with manufacturers recommendations. Use Sikatop 123 Plus at horizontal applications. Use Sikatop 123 Plus at vertical applications.
- Clean work area of any construction debris.

List of Attachments:

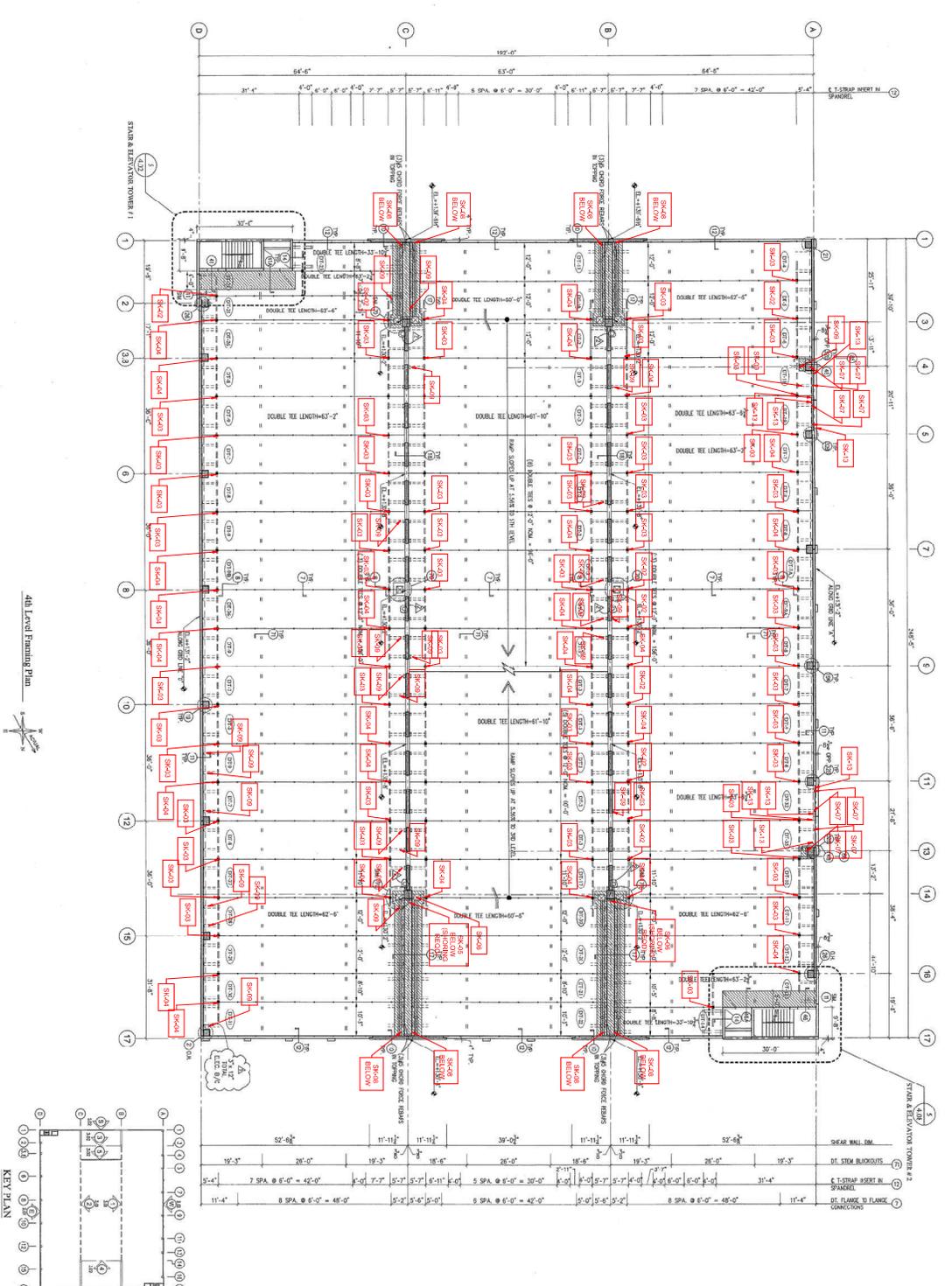
Sika Armatec 110 Epocem Product Data
Sikatop 123 Plus Product Data

Approvals:

Owner: _____ Date: _____

Owner’s Consultant: _____ Date: _____

General Contractor: _____ Date: _____



APPENDIX A: REPAIR SURVEY

THIS PROJECT IS THE PROPERTY OF JEZERINAC GROUP. ANY REVISIONS TO THE PLAN SHALL BE MADE BY THE ORIGINAL DESIGNER. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION AND MATERIALS SHOWN HEREON.

NO.	ISSUANCE SCHEDULE	DATE

NO.	ISSUANCE SCHEDULE	DATE

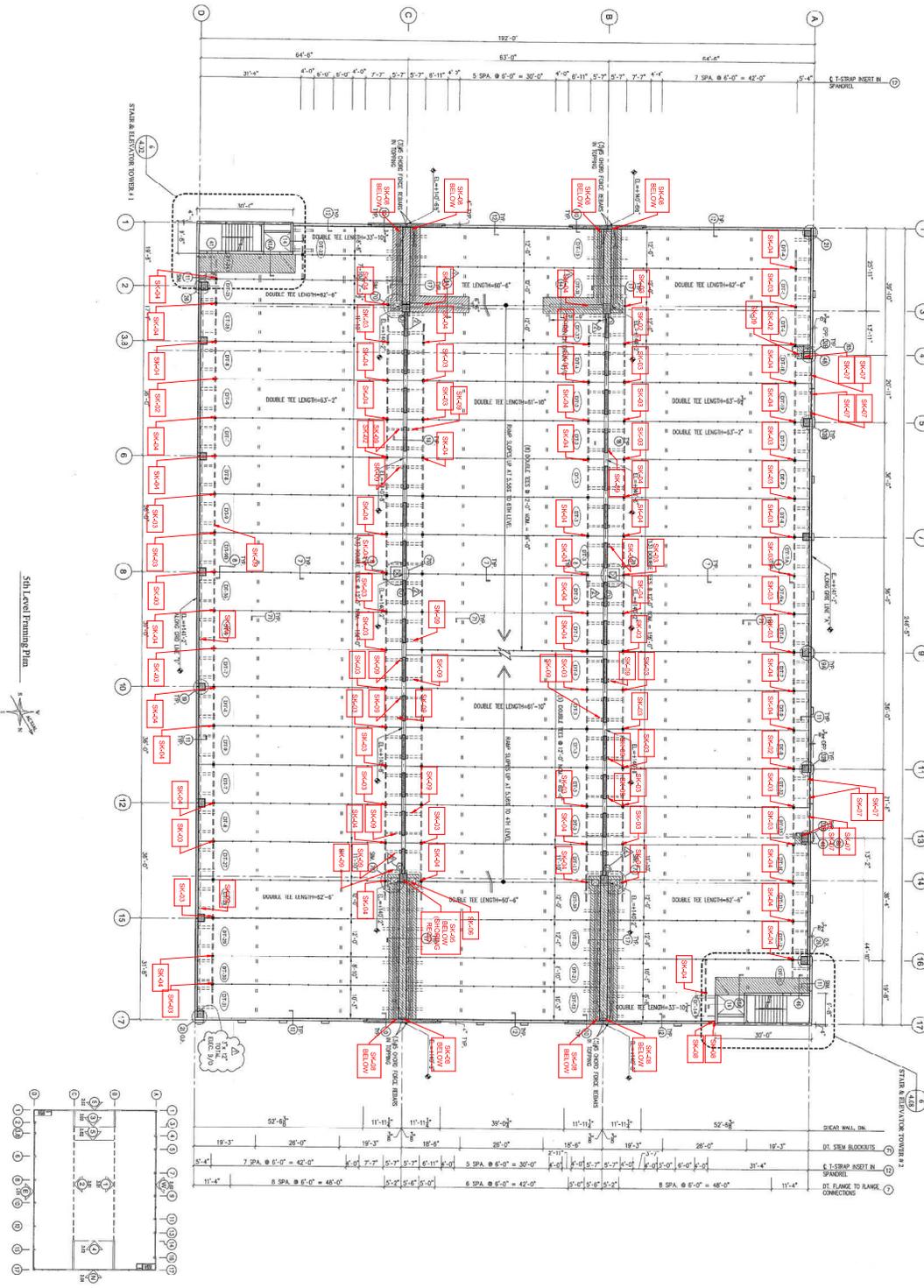
City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
Parking Garage

JEZERINAC GROUP
 Engineering, Inspection, & Construction
 400 HILLOCKS STREET, SUITE 200
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #14-00000000

LEVEL 4 KEY PLAN

Project Number: 1901.010
 Date: 02.14.2023
 Drawn By: CN
 Checked By: WJR

S-04
 1/16" = 1'-0"



APPENDIX A: REPAIR SURVEY

IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, THE ENGINEER HAS REVIEWED THE REPAIR SURVEY AND MATERIAL SPECIFICATIONS.

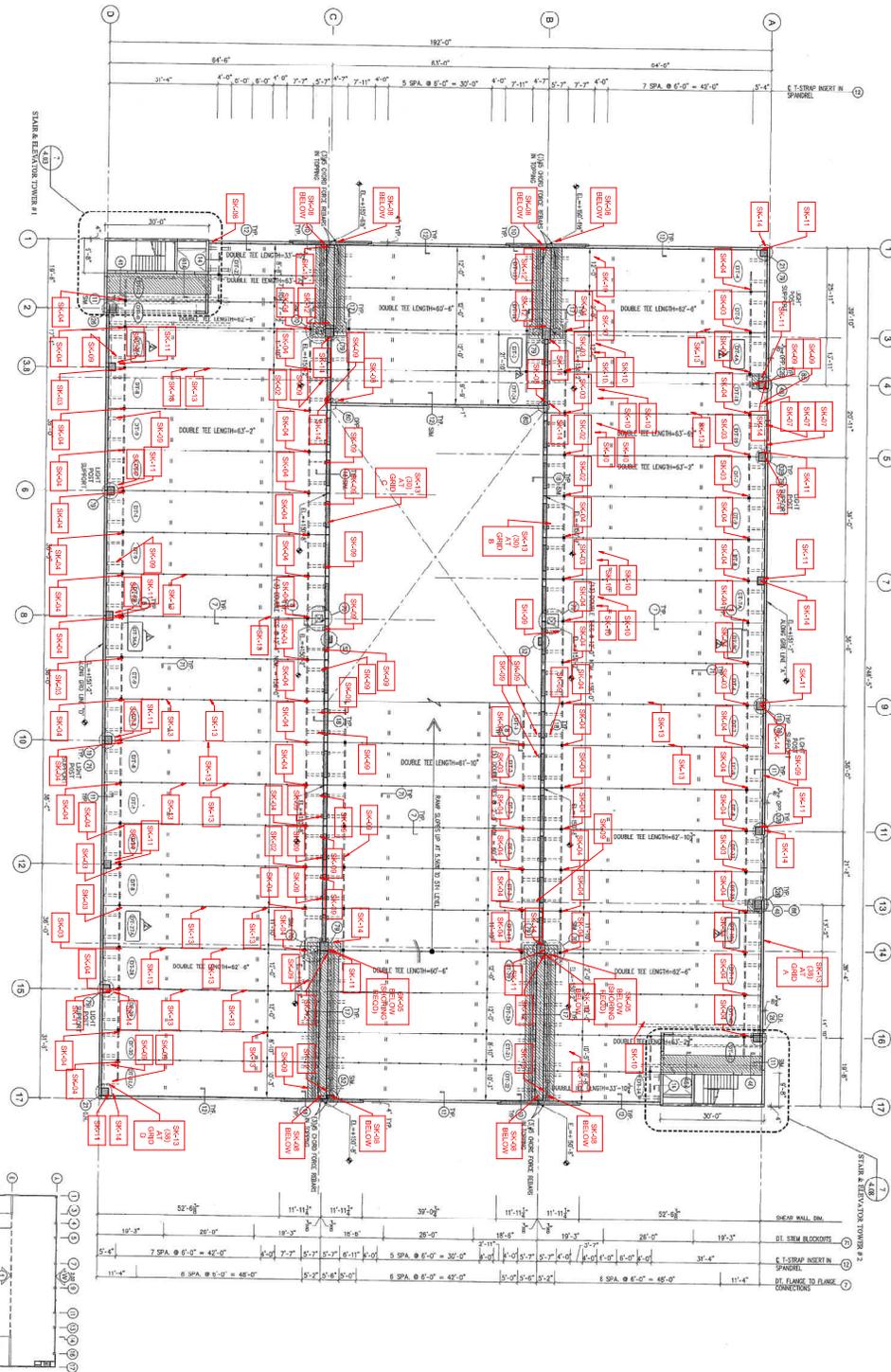
NO.	ISSUANCE SCHEDULE	DESCRIPTION	DATE

LEVEL 5 KEY PLAN	

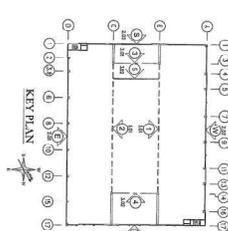
City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
Parking Garage

Scale: 1/16" = 1'-0"


 400 HILLCREST STREET, SUITE 200
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #140008



6th Level Framing Plan



APPENDIX A: REPAIR SURVEY

NOT TO SCALE. FOR THE CONTRACTOR'S REFERENCE ONLY. THE PLANS AND SPECIFICATIONS SHALL BE THE BASIS FOR THE REPAIR SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MATERIAL SPECIFICATIONS.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

LEVEL 6 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

JEZERINAC GROUP
 Engineering, Inspection, & Construction
 400 HILLOCK STREET, SUITE 200
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #14009

PRODUCT DATA SHEET

Sika® Armatec®-110 EpoCem

BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION

PRODUCT DESCRIPTION

Sika® Armatec®-110 EpoCem is a cementitious epoxy resin compensated 3-component, solvent-free, coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

USES

- Suitable in concrete repair as corrosion protection for reinforcement
- Suitable as a bonding primer on mortar, steel, and on placing fresh, plastic concrete to existing hardened concrete
- Protection to reinforcing steel in areas of thin concrete cover

CHARACTERISTICS / ADVANTAGES

- Contains EpoCem® technology - improved bonding agent
- Extended open times for repair mortars
- Excellent adhesion to concrete and steel
- Contains corrosion inhibitor
- Good resistance to water and chloride penetration
- High shear strength
- Long pot life
- Can be brushed on or applied using spray gun
- Can be used exterior on-grade
- Excellent bonding bridge for cement or epoxy based repair mortars
- High strength, unaffected by moisture when cured
- Non-flammable, solvent free

PRODUCT INFORMATION

Chemical Base	Portland cement, epoxy resin, selected aggregates and additives.				
Packaging	Unit	A	B	C	ABC
	3.5 gal (13.2 L)	47.6 oz (1.4 L)	122.1 oz (3.6 L)	46.82 lb (21.3 kg)	A + B in carton, C in bag
	1.65 gal (6.2 L)	22.7 oz (0.67 L)	57.6 oz (1.7 L)	5.5 lb (2.5 kg) (4 bags)	Factory- proportioned units in a pail
Appearance / Color	Component A		White liquid		
	Component B		Colorless liquid		
	Component C		Gray powder		
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging				
Storage Conditions	Store dry at 40–95 °F (4–35 °C)				

Protect Component A and B from freezing. If frozen, discard.
Protect Component C from moisture. If damp, discard.

TECHNICAL INFORMATION

Compressive Strength	3 days	4,500 psi (31.0 MPa)	(ASTM C-109)
	7 days	6,500 psi (44.8 MPa)	73 °F (23 °C)
	28 days	8,500 psi (58.6 MPa)	50 % R.H.
Flexural Strength	28 days	1,250 psi (8.6 MPa)	(ASTM C-348) 73 °F (23 °C) 50 % R.H.
Splitting Tensile Strength	28 days	600 psi (4.1 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	Bond of steel reinforcement on concrete		
	Sika® Armatec® 110 EpoCem coated	625 psi (4.3 MPa)	(ASTM C-1583) 73 °F (23 °C)
	Epoxy coated	508 psi (3.5 MPa)	50 % R.H.
	Plain reinforcement	573 psi (4.0 MPa)	
Slant Shear Strength	Bonding agent properties (14 d. moist cure, plastic to hardened concrete)		
	Wet on wet	2,800 psi (19.3 MPa)	(ASTM C-882)
	24 hr. open time	2,600 psi (17.9 MPa)	73 °F (23 °C) 50 % R.H.
Permeability to Water Vapor	Control	7.32 x 10 ⁻¹⁰ ft/sec	
	145 psi (10 bar)	8.92 x 10 ⁻¹⁵ ft/sec	
Diffusion Resistance to Water Vapor	μ H ₂ O ~100		
Permeability to CO₂	μ CO ₂ ~14,000		
Corrosion Test	Time-to-Corrosion Study		
	<ul style="list-style-type: none"> ▪ Sika® Armatec®-110 EpoCem more than tripled the time to corrosion ▪ Reduced corrosion rate by over 40 % 		

APPLICATION INFORMATION

Fresh Mortar Density	A+B+C ~125 lb/ft ³ (~2.0 kg/l)		
Coverage	Bonding agent	80 ft ² /gal (7.4 m ² /l)	
	Corrosion Protection	40 ft ² /gal (3.7 m ² /l)	
(Coverage figures do not include allowance for surface profile and porosity or material waste)			
Layer Thickness		Min. thickness of 1 coat	Coat
	Bonding agent	20 mils	1
	Corrosion Protection	20 mils	2
Product Temperature	65°-75°F (18°-24°C)		
Ambient Air Temperature	40–95 °F (5–35 °C)		
Substrate Temperature	40–95 °F (5–35 °C)		
Pot Life	~ 90 minutes		
Waiting / Recoat Times	Sika repair mortars and non-fast setting concrete can be applied on Sika® Armatec®-110 EpoCem within a maximum time of:		

Temperature	Maximum Waiting Time
80°- 95 °F (26°- 35 °C)	6 hours
65°-79 °F (18°- 26 °C)	12 hours
50°- 64° F (10°- 17° C)	16 hours
40°- 49° F (4°- 9° C)	wet-on-wet

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete

- Free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials.
- Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.
- Substrate must be Saturated Surface Dry (SSD) with no standing water.

Steel reinforcement

- Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed by blast cleaning or other means of mechanical abrasion and reinforcement.
- Should be fully exposed and have all corrosion removed.

MIXING

- Sika® Armatec®-110 EpoCem can be mixed with a low-speed (< 250 rpm) electric drill mixer.
- Shake components A and B thoroughly before opening.
- Pour liquid components A and B into a suitable mixing vessel and mix for 30 seconds.
- While still mixing components A and B slowly add powder component C.
- Mix the three components together for a minimum 3 minutes until blend is uniform and free of lumps, minimizing addition of air.
- Mix only the quantity that you can be applied within the pot life.
- DO NOT ADD WATER.

APPLICATION

As reinforcement corrosion protection

- Apply by stiff-bristle brush or spray at 80 ft² /gal.
- Take special care to properly coat the underside of the totally exposed steel.
- Allow coating to dry 2-3 hours at 73 °F, then apply a second coat at the same coverage.
- Allow to dry again before the repair mortar or concrete is applied.
- Pour or place repair within 7 days

As a bonding primer

- Apply using a stiff-bristle brush or broom. To achieve good bond, Sika® Armatec®-110 EpoCem must be applied well into the substrate, filling all pores and ensure complete coverage of all surface irregularities (minimum layer thickness 1/64" (0.5 mm).
- Spray apply with Goldblatt Pattern Pistol or equal equipment.
- Apply the freshly mixed patching mortar or concrete wet on wet, or up to the maximum recommended open time, onto the bonding slurry.

CURING TREATMENT

Sika® Armatec®-110 EpoCem must be protected against contamination and rain until application of the repair mortar.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LIMITATIONS

- Avoid application in direct sun and/or strong wind and/or rain.
- Do not add water.
- Not a vapor barrier.
- Apply only to sound, prepared substrates.
- Not recommended for use with expansive grouts and SikaQuicks
- Use of semi-dry mortars onto Sika® Armatec®-110 EpoCem must be applied "wet on wet"
- When used in overhead applications with hand placed patching mortars, use "wet on wet" for maximum mortar built thickness.
- Substrate profile as specified by the overlay or repair material is still required.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® Hi-Mod 32.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

A+B+C combined _____ 50 g/l _____

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

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Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

Sika® Armatec®-110 EpoCem
March 2020, Version 01.02
020302020050000003

SikaArmatec-110EpoCem-en-US-(03-2020)-1-2.pdf



PRODUCT DATA SHEET

SikaTop[®]-123 Plus

Two-component, polymer-modified, cementitious, non-sag mortar plus Sika FerroGard[®] 901 penetrating corrosion inhibitor

PRODUCT DESCRIPTION

SikaTop[®]-123 Plus is a two-component, polymer-modified, Portland cement-based, fast-setting, non-sag mortar. It is a high performance repair mortar for vertical and overhead surfaces and offers the additional benefit of Sika FerroGard[®] 901, a penetrating corrosion inhibitor included in its formulation.

USES

- On grade, above and below grade on concrete and mortar.
- On vertical and overhead surfaces.
- As a structural repair material for parking structures, industrial plants, walkways, bridges, tunnels, dams and ramps.
- Approved for repairs over cathodic protection systems

CHARACTERISTICS / ADVANTAGES

- Extremely low shrinkage proven by four industry standard test methods.
- High compressive and flexural strengths.
- Increased freeze/thaw durability and resistance to deicing salts.
- Increased density - improved carbon dioxide resistance (carbonation) without adversely affecting water vapor transmission (not a vapor barrier).
- Enhanced with Sika FerroGard[®] 901, a penetrating corrosion inhibitor - reduces corrosion even in the adjacent concrete.
- Compatible with coefficient of thermal expansion of concrete - Passes ASTM C 884.

APPROVALS / STANDARDS

- USDA certifiable for incidental food contact
- ANSI/NSF Standard 61 potable water approved compliant.
- Tested per ICRI Guideline NO. 320.3R for inorganic repair material data sheet protocol

PRODUCT INFORMATION

Packaging	Component A	1 gal (3.68 L) jug - 4/carton
	Component B	44 lb. (20 kg) bag
Appearance / Color	Gray powder	
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging	
Storage Conditions	Store dry at 40–95 °F (4–35 °C).	

Protect Component 'B' from moisture. If damp, discard material
Protect Component 'A' from freezing. If frozen, discard.



TECHNICAL INFORMATION

Compressive Strength	1 day	3,000 psi (20.7 MPa)	(ASTM C-109)
	7 days	4,000 psi (27.6 MPa)	73 °F (23 °C)
	28 days	6,000 psi (41.4 MPa)	50 % R.H.
Modulus of Elasticity in Compression	2.94 x 10 ⁶ psi		(ASTM C-469)
Flexural Strength	28 days	1,500 psi (10.3 MPa)	(ASTM C-293) 73 °F (23 °C) 50 % R.H.
Splitting tensile strength	28 days	900 psi (6.2 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	28 days	2,000 psi (13.8 MPa)	(ASTM C-882 modified)
	* Mortar scrubbed into substrate at 73 °F (23 °C) and 50 % R.H.		
Pull-Out Resistance	28 days	500 psi (3.4 MPa) Substrate failure	(ASTM C-1583)
Shrinkage	28 days	1x1x11-1/4" specimen	0.05 %
	28 days	3x3x11-1/4" specimen	0.038 %
Ring test		> 70 days	(ASTM C-1581)
	Average Max Strain	- 36 µstrain	
	Average Stress Strain	4.92 psi/day	
	Potential for Cracking	Low	
Baenziger block	90 days	No cracking	
Freeze-Thaw Stability	300 cycles	98 %	(ASTM C-666)
Rapid Chloride Permeability	28 days	< 500 C	(ASTM C-1202 AASHTO T-277)

APPLICATION INFORMATION

Fresh mortar density	132 lb/ft ³ (2.2 kg/l)	(ASTM C-138)
Coverage	0.39 ft ³ (0.01 m ³) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste)	
Layer Thickness	Min.	Max.
	1/8" (3 mm)	1.5" (38 mm)
Product Temperature	65–75 °F (18–24 °C)	
Ambient Air Temperature	> 45 °F (7 °C)	
Substrate Temperature	> 45 °F (7 °C)	
Set Time	15 - 40 min.	(ASTM C-266)
Final set time	< 60 min.	(ASTM C-266)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

ENVIRONMENTAL, HEALTH AND SAFETY

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DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/l

(EPA method 24)

LIMITATIONS

- Do not use solvent-based curing compound.
- Size, shape and depth of repair must be carefully considered and consistent with practices recommended by ACI or ICRI.
- For additional information on substrate preparation, refer to ICRI Guideline No. 310.2R.
- If aggressive means of substrate preparation is employed, substrate strength should be tested in accordance with ACI 503 Appendix A prior to the repair application.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® 32, Hi-Mod.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface preparation

- Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired.
- Be sure repair area is not less than 1/8" (3 mm) in depth.
- Preparation work should be done by high pressure water blast, scabblor or other appropriate mechanical means to obtain an exposed aggregate surface profile of $\pm 1/16"$ (1.6 mm) (CSP-5).
- To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test.
- Saw cutting of edges is preferred and a dovetail is recommended.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.

Priming

- Reinforcing steel: Steel reinforcement should be thoroughly prepared by mechanical cleaning to remove all traces of rust. Where corrosion has occurred due to the presence of chlorides, the steel should be high pressure washed with clean water after mechanical cleaning. For priming of reinforcing steel use Sika® Armatec® 110 EpoCem (consult PDS).
- Concrete Substrate:
 - Prime the prepared substrate with a brush or sprayed

applied coat of Sika® Armatec® 110 EpoCem (consult PDS).

- Alternately, a scrub coat of SikaTop®-123 Plus can be applied prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.

MIXING

- Pour Component 'A' into mixing container.
- Add Component 'B' while mixing continuously.
- Mix mechanically with a low-speed drill (400–600 rpm) and mixing paddle or mortar mixer.
- Mix to a uniform consistency, maximum 3 minutes.
- Manual mixing can be tolerated only for less than a full unit. Thorough mixing and proper proportioning of the two components is necessary.

APPLICATION

- SikaTop®-123 Plus must be scrubbed into the substrate, filling all pores and voids.
- Force material against edge of repair, working toward center.
- After filling repair, consolidate, then screed.
- Material may be applied in multiple lifts.

Multiple lifts

- Where multiple lifts are required score top surface of each lift to produce a roughened surface for next lift.
- Allow preceding lift to reach initial set, 30 minutes minimum, before applying fresh material.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.
- Scrub fresh mortar into preceding lift.
- Allow mortar or concrete to set to desired stiffness, then finish with wood or sponge float for a smooth surface.

CURING TREATMENT

- As per ACI recommendations for Portland cement concrete, curing is required.
- Moist cure with wet burlap and polyethylene, a fine mist of water or a water based* compatible curing compound (ASTM C-309).
- Curing compounds adversely affect the adhesion of following lifts of mortar, leveling mortar or protective coatings.
- Moist curing should commence immediately after finishing.
- Protect freshly applied mortar from direct sunlight, wind, rain and frost.

* Pretesting of curing compound is recommended.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always

read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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Corregidora, Queretaro
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Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

SikaTop®-123 Plus
November 2020, Version 01.03
020302040070000022

SikaTop-123Plus-en-US-(11-2020)-1-3.pdf





**Port St. Lucie Civic Center
Repair Protocol – Vertical Reinforcement Spall at Top of Wall or Columns**

Report Date: 2022.02.10
REVISION 02: 2023.03.10

RP ID No. SK 14 Vertical Reinforcement Spall at Top of Wall or Columns

Observation: The presence of embedded ferrous materials has been reported at the roof level.

Location: Level 6, 19 occurrences

Repair Protocol/Procedure:

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Chip existing substrate to expose minimum 3/4" clear cover to the top of the concrete element.
- If corrosion is observed on exposed reinforcement, it will be removed.
- Roughen exposed concrete to edge of patch and prepare surface to manufacturers recommendations.
- Exposed reinforcing will be coated with Sika Armatec 110 Epocem.
- Apply Sikatop 123 Plus in accordance with manufacturer’s recommendations.
- Clean work area of any construction debris.

List of Attachments:

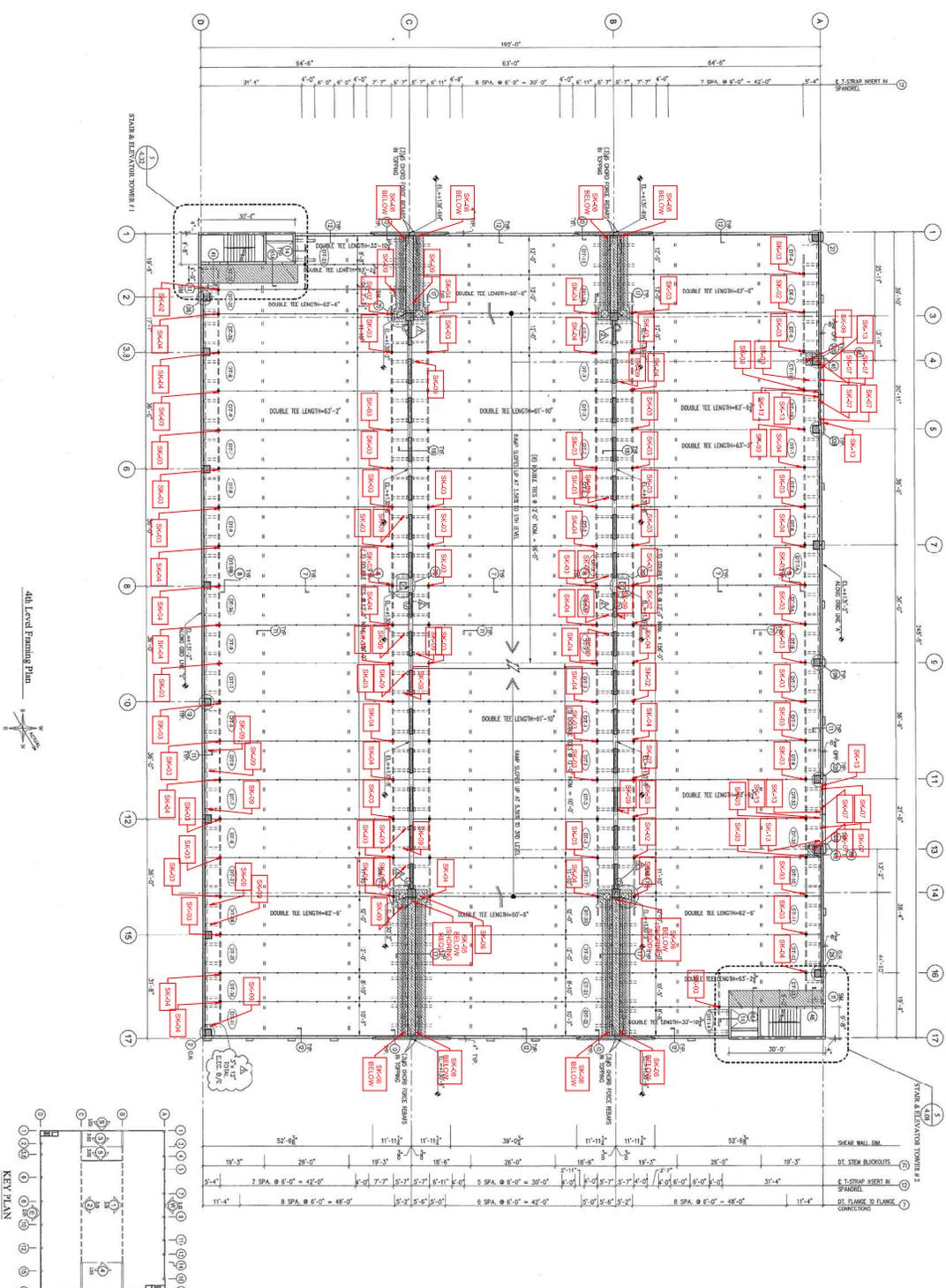
Jezerinac Location Markup
Sika Armatec 110 Epocem Product Data
Sikatop 123 Product Data

Approvals:

Owner: _____ Date: _____

Owner’s Consultant: _____ Date: _____

General Contractor: _____ Date: _____



APPENDIX A: REPAIR SURVEY

THIS PROJECT IS THE PROPERTY OF JEZERINAC GROUP. ANY REVISIONS TO THE PLAN SHALL BE MADE BY THE ORIGINAL DESIGNER. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION AND MATERIALS SHOWN HEREON.

ISSUANCE SCHEDULE	
NO.	DESCRIPTION

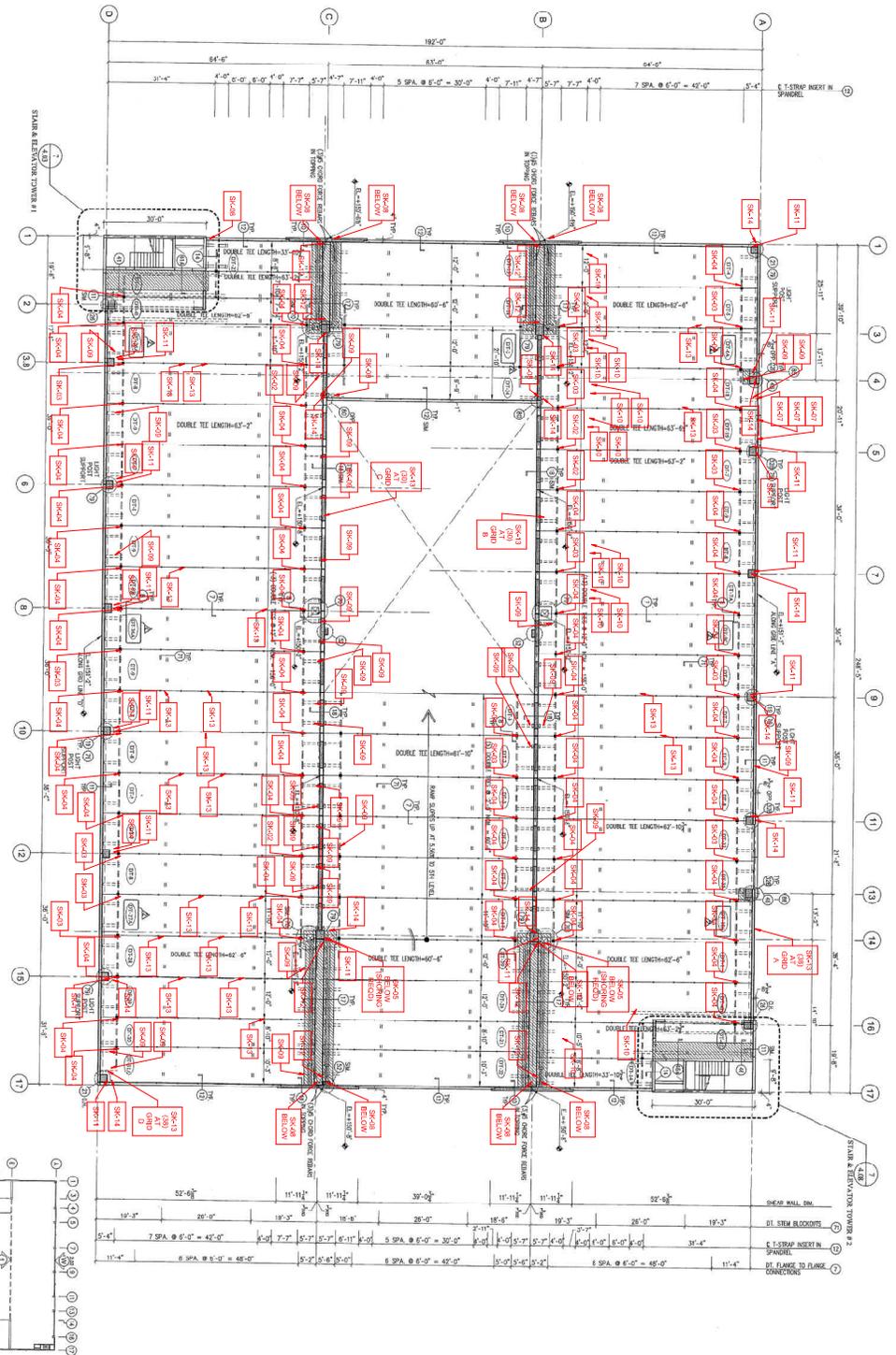
Project Number	1901.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR

Scale	S-04 1/16" = 1'-0"
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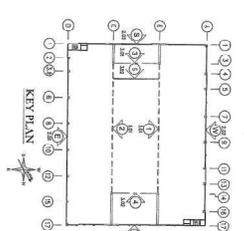
LEVEL 4 KEY PLAN

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage





6th Level Framing Plan



APPENDIX A: REPAIR SURVEY

IN WITNESS WHEREOF, THE ENGINEER HAS SIGNED AND SEALED THIS PLAN ON THIS 14th DAY OF FEBRUARY, 2023.

ISSUANCE SCHEDULE	
NO.	DATE

LEVEL 6 KEY PLAN	
Project Number	19.01.010
Date	02.14.2023
Drawn By	CN
Checked By	WJR
Scale	1/16" = 1'-0"

City of Port St. Lucie
MIDFLORIDA Credit Union Event Center
 Parking Garage

JEZERINAC GROUP
 Engineering, Inspection, & Construction
 400 HILLOCKS STREET, SUITE 200
 PORT ST. LUCIE, FLORIDA 34956
 CERTIFICATE OF AUTHORIZATION #14009

PRODUCT DATA SHEET

Sika® Armatec®-110 EpoCem

BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION

PRODUCT DESCRIPTION

Sika® Armatec®-110 EpoCem is a cementitious epoxy resin compensated 3-component, solvent-free, coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

USES

- Suitable in concrete repair as corrosion protection for reinforcement
- Suitable as a bonding primer on mortar, steel, and on placing fresh, plastic concrete to existing hardened concrete
- Protection to reinforcing steel in areas of thin concrete cover

CHARACTERISTICS / ADVANTAGES

- Contains EpoCem® technology - improved bonding agent
- Extended open times for repair mortars
- Excellent adhesion to concrete and steel
- Contains corrosion inhibitor
- Good resistance to water and chloride penetration
- High shear strength
- Long pot life
- Can be brushed on or applied using spray gun
- Can be used exterior on-grade
- Excellent bonding bridge for cement or epoxy based repair mortars
- High strength, unaffected by moisture when cured
- Non-flammable, solvent free

PRODUCT INFORMATION

Chemical Base	Portland cement, epoxy resin, selected aggregates and additives.				
Packaging	Unit	A	B	C	ABC
	3.5 gal (13.2 L)	47.6 oz (1.4 L)	122.1 oz (3.6 L)	46.82 lb (21.3 kg)	A + B in carton, C in bag
	1.65 gal (6.2 L)	22.7 oz (0.67 L)	57.6 oz (1.7 L)	5.5 lb (2.5 kg) (4 bags)	Factory- proportioned units in a pail
Appearance / Color	Component A		White liquid		
	Component B		Colorless liquid		
	Component C		Gray powder		
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging				
Storage Conditions	Store dry at 40–95 °F (4–35 °C)				

Protect Component A and B from freezing. If frozen, discard.
Protect Component C from moisture. If damp, discard.

TECHNICAL INFORMATION

Compressive Strength	3 days	4,500 psi (31.0 MPa)	(ASTM C-109)
	7 days	6,500 psi (44.8 MPa)	73 °F (23 °C)
	28 days	8,500 psi (58.6 MPa)	50 % R.H.
Flexural Strength	28 days	1,250 psi (8.6 MPa)	(ASTM C-348) 73 °F (23 °C) 50 % R.H.
Splitting Tensile Strength	28 days	600 psi (4.1 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	Bond of steel reinforcement on concrete		
	Sika® Armatec® 110 EpoCem coated	625 psi (4.3 MPa)	(ASTM C-1583) 73 °F (23 °C)
	Epoxy coated	508 psi (3.5 MPa)	50 % R.H.
	Plain reinforcement	573 psi (4.0 MPa)	
Slant Shear Strength	Bonding agent properties (14 d. moist cure, plastic to hardened concrete)		
	Wet on wet	2,800 psi (19.3 MPa)	(ASTM C-882)
	24 hr. open time	2,600 psi (17.9 MPa)	73 °F (23 °C) 50 % R.H.
Permeability to Water Vapor	Control	7.32 x 10 ⁻¹⁰ ft/sec	
	145 psi (10 bar)	8.92 x 10 ⁻¹⁵ ft/sec	
Diffusion Resistance to Water Vapor	μ H ₂ O ~100		
Permeability to CO₂	μ CO ₂ ~14,000		
Corrosion Test	Time-to-Corrosion Study		
	<ul style="list-style-type: none"> ▪ Sika® Armatec®-110 EpoCem more than tripled the time to corrosion ▪ Reduced corrosion rate by over 40 % 		

APPLICATION INFORMATION

Fresh Mortar Density	A+B+C ~125 lb/ft ³ (~2.0 kg/l)		
Coverage	Bonding agent	80 ft ² /gal (7.4 m ² /l)	
	Corrosion Protection	40 ft ² /gal (3.7 m ² /l)	
(Coverage figures do not include allowance for surface profile and porosity or material waste)			
Layer Thickness		Min. thickness of 1 coat	Coat
	Bonding agent	20 mils	1
	Corrosion Protection	20 mils	2
Product Temperature	65°-75°F (18°-24°C)		
Ambient Air Temperature	40–95 °F (5–35 °C)		
Substrate Temperature	40–95 °F (5–35 °C)		
Pot Life	~ 90 minutes		
Waiting / Recoat Times	Sika repair mortars and non-fast setting concrete can be applied on Sika® Armatec®-110 EpoCem within a maximum time of:		

Temperature	Maximum Waiting Time
80°- 95 °F (26°- 35 °C)	6 hours
65°-79 °F (18°- 26 °C)	12 hours
50°- 64° F (10°- 17° C)	16 hours
40°- 49° F (4°- 9° C)	wet-on-wet

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete

- Free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials.
- Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.
- Substrate must be Saturated Surface Dry (SSD) with no standing water.

Steel reinforcement

- Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed by blast cleaning or other means of mechanical abrasion and reinforcement.
- Should be fully exposed and have all corrosion removed.

MIXING

- Sika® Armatec®-110 EpoCem can be mixed with a low-speed (< 250 rpm) electric drill mixer.
- Shake components A and B thoroughly before opening.
- Pour liquid components A and B into a suitable mixing vessel and mix for 30 seconds.
- While still mixing components A and B slowly add powder component C.
- Mix the three components together for a minimum 3 minutes until blend is uniform and free of lumps, minimizing addition of air.
- Mix only the quantity that you can be applied within the pot life.
- DO NOT ADD WATER.

APPLICATION

As reinforcement corrosion protection

- Apply by stiff-bristle brush or spray at 80 ft² /gal.
- Take special care to properly coat the underside of the totally exposed steel.
- Allow coating to dry 2-3 hours at 73 °F, then apply a second coat at the same coverage.
- Allow to dry again before the repair mortar or concrete is applied.
- Pour or place repair within 7 days

As a bonding primer

- Apply using a stiff-bristle brush or broom. To achieve good bond, Sika® Armatec®-110 EpoCem must be applied well into the substrate, filling all pores and ensure complete coverage of all surface irregularities (minimum layer thickness 1/64" (0.5 mm).
- Spray apply with Goldblatt Pattern Pistol or equal equipment.
- Apply the freshly mixed patching mortar or concrete wet on wet, or up to the maximum recommended open time, onto the bonding slurry.

CURING TREATMENT

Sika® Armatec®-110 EpoCem must be protected against contamination and rain until application of the repair mortar.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LIMITATIONS

- Avoid application in direct sun and/or strong wind and/or rain.
- Do not add water.
- Not a vapor barrier.
- Apply only to sound, prepared substrates.
- Not recommended for use with expansive grouts and SikaQuicks
- Use of semi-dry mortars onto Sika® Armatec®-110 EpoCem must be applied "wet on wet"
- When used in overhead applications with hand placed patching mortars, use "wet on wet" for maximum mortar built thickness.
- Substrate profile as specified by the overlay or repair material is still required.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® Hi-Mod 32.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

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DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

A+B+C combined _____ 50 g/l _____

LEGAL DISCLAIMER

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- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
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SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

Sika® Armatec®-110 EpoCem
March 2020, Version 01.02
020302020050000003

SikaArmatec-110EpoCem-en-US-(03-2020)-1-2.pdf



PRODUCT DATA SHEET

SikaTop[®]-123 Plus

Two-component, polymer-modified, cementitious, non-sag mortar plus Sika FerroGard[®] 901 penetrating corrosion inhibitor

PRODUCT DESCRIPTION

SikaTop[®]-123 Plus is a two-component, polymer-modified, Portland cement-based, fast-setting, non-sag mortar. It is a high performance repair mortar for vertical and overhead surfaces and offers the additional benefit of Sika FerroGard[®] 901, a penetrating corrosion inhibitor included in its formulation.

USES

- On grade, above and below grade on concrete and mortar.
- On vertical and overhead surfaces.
- As a structural repair material for parking structures, industrial plants, walkways, bridges, tunnels, dams and ramps.
- Approved for repairs over cathodic protection systems

CHARACTERISTICS / ADVANTAGES

- Extremely low shrinkage proven by four industry standard test methods.
- High compressive and flexural strengths.
- Increased freeze/thaw durability and resistance to deicing salts.
- Increased density - improved carbon dioxide resistance (carbonation) without adversely affecting water vapor transmission (not a vapor barrier).
- Enhanced with Sika FerroGard[®] 901, a penetrating corrosion inhibitor - reduces corrosion even in the adjacent concrete.
- Compatible with coefficient of thermal expansion of concrete - Passes ASTM C 884.

APPROVALS / STANDARDS

- USDA certifiable for incidental food contact
- ANSI/NSF Standard 61 potable water approved compliant.
- Tested per ICRI Guideline NO. 320.3R for inorganic repair material data sheet protocol

PRODUCT INFORMATION

Packaging	Component A	1 gal (3.68 L) jug - 4/carton
	Component B	44 lb. (20 kg) bag
Appearance / Color	Gray powder	
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging	
Storage Conditions	Store dry at 40–95 °F (4–35 °C).	

Protect Component 'B' from moisture. If damp, discard material
Protect Component 'A' from freezing. If frozen, discard.



TECHNICAL INFORMATION

Compressive Strength	1 day	3,000 psi (20.7 MPa)	(ASTM C-109) 73 °F (23 °C) 50 % R.H.	
	7 days	4,000 psi (27.6 MPa)		
	28 days	6,000 psi (41.4 MPa)		
Modulus of Elasticity in Compression	2.94 x 10 ⁶ psi		(ASTM C-469)	
Flexural Strength	28 days	1,500 psi (10.3 MPa)	(ASTM C-293) 73 °F (23 °C) 50 % R.H.	
Splitting tensile strength	28 days	900 psi (6.2 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.	
Tensile Adhesion Strength	28 days	2,000 psi (13.8 MPa)	(ASTM C-882 modified)	
* Mortar scrubbed into substrate at 73 °F (23 °C) and 50 % R.H.				
Pull-Out Resistance	28 days	500 psi (3.4 MPa) Substrate failure	(ASTM C-1583)	
Shrinkage	28 days	1x1x11-1/4" specimen	0.05 % 0.038 %	(ASTM C-157, mod. ICRI 320.3R)
	28 days	3x3x11-1/4" specimen		
Ring test	> 70 days		(ASTM C-1581)	
	Average Max Strain			- 36 µstrain
	Average Stress Strain			4.92 psi/day
	Potential for Cracking			Low
Baenziger block	90 days	No cracking		
Freeze-Thaw Stability	300 cycles	98 %	(ASTM C-666)	
Rapid Chloride Permeability	28 days	< 500 C	(ASTM C-1202 AASHTO T-277)	

APPLICATION INFORMATION

Fresh mortar density	132 lb/ft ³ (2.2 kg/l)	(ASTM C-138)
Coverage	0.39 ft ³ (0.01 m ³) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste)	
Layer Thickness	Min.	Max.
	1/8" (3 mm)	1.5" (38 mm)
Product Temperature	65–75 °F (18–24 °C)	
Ambient Air Temperature	> 45 °F (7 °C)	
Substrate Temperature	> 45 °F (7 °C)	
Set Time	15 - 40 min.	(ASTM C-266)
Final set time	< 60 min.	(ASTM C-266)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

ENVIRONMENTAL, HEALTH AND SAFETY

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DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/l

(EPA method 24)

LIMITATIONS

- Do not use solvent-based curing compound.
- Size, shape and depth of repair must be carefully considered and consistent with practices recommended by ACI or ICRI.
- For additional information on substrate preparation, refer to ICRI Guideline No. 310.2R.
- If aggressive means of substrate preparation is employed, substrate strength should be tested in accordance with ACI 503 Appendix A prior to the repair application.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® 32, Hi-Mod.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface preparation

- Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired.
- Be sure repair area is not less than 1/8" (3 mm) in depth.
- Preparation work should be done by high pressure water blast, scabblor or other appropriate mechanical means to obtain an exposed aggregate surface profile of $\pm 1/16"$ (1.6 mm) (CSP-5).
- To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test.
- Saw cutting of edges is preferred and a dovetail is recommended.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.

Priming

- Reinforcing steel: Steel reinforcement should be thoroughly prepared by mechanical cleaning to remove all traces of rust. Where corrosion has occurred due to the presence of chlorides, the steel should be high pressure washed with clean water after mechanical cleaning. For priming of reinforcing steel use Sika® Armatec® 110 EpoCem (consult PDS).
- Concrete Substrate:
 - Prime the prepared substrate with a brush or sprayed

applied coat of Sika® Armatec® 110 EpoCem (consult PDS).

- Alternately, a scrub coat of SikaTop®-123 Plus can be applied prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.

MIXING

- Pour Component 'A' into mixing container.
- Add Component 'B' while mixing continuously.
- Mix mechanically with a low-speed drill (400–600 rpm) and mixing paddle or mortar mixer.
- Mix to a uniform consistency, maximum 3 minutes.
- Manual mixing can be tolerated only for less than a full unit. Thorough mixing and proper proportioning of the two components is necessary.

APPLICATION

- SikaTop®-123 Plus must be scrubbed into the substrate, filling all pores and voids.
- Force material against edge of repair, working toward center.
- After filling repair, consolidate, then screed.
- Material may be applied in multiple lifts.

Multiple lifts

- Where multiple lifts are required score top surface of each lift to produce a roughened surface for next lift.
- Allow preceding lift to reach initial set, 30 minutes minimum, before applying fresh material.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.
- Scrub fresh mortar into preceding lift.
- Allow mortar or concrete to set to desired stiffness, then finish with wood or sponge float for a smooth surface.

CURING TREATMENT

- As per ACI recommendations for Portland cement concrete, curing is required.
- Moist cure with wet burlap and polyethylene, a fine mist of water or a water based* compatible curing compound (ASTM C-309).
- Curing compounds adversely affect the adhesion of following lifts of mortar, leveling mortar or protective coatings.
- Moist curing should commence immediately after finishing.
- Protect freshly applied mortar from direct sunlight, wind, rain and frost.

* Pretesting of curing compound is recommended.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always

read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

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Product Data Sheet

SikaTop®-123 Plus
November 2020, Version 01.03
020302040070000022

SikaTop-123Plus-en-US-(11-2020)-1-3.pdf





**PSL Civic Center Garage
Repair Protocol**

Report Date: 2022.02.10
REV 01 Date: 2022.03.11

RP ID No. Cracked Secondary Concrete Pour at Inverted T-Beam

Observation: The occurrence of cracks at inverted T-Beams has been reported at multiple levels.

Location: Column Line B3, B14, C3 and C14 at Level 6, 5, 4, 3 & 2.

Repair Protocol/Procedure:

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Work area will be adequately protected for pedestrians as needed.
- Chip existing substrate to sound concrete. If reinforcing is exposed, ensure minimum ½” clear space is provided behind the exposed bar.
- If corrosion is observed on exposed reinforcement, it will be removed.
- Roughen exposed concrete to edge of patch and prepare surface to manufacturers recommendations.
- Exposed reinforcing will be coated with Sika Armatec 110 Epocem.
- Apply Sikatop 123 Plus in accordance with manufacturer’s recommendations.
- Cold joint will be sawcut to ½” and the new joint will be sealed with polyurethane sealant.
- Clean work area of any construction debris.

List of Attachments:

Sika Armatec 110 Epocem
Sikatop 123 Plus

Approvals:

Owner: _____ Date: _____

Owner’s Consultant: _____ Date: _____

General Contractor: _____ Date: _____

PRODUCT DATA SHEET

SikaTop® Armatec®-110 EpoCem®

REINFORCEMENT CORROSION PROTECTION AND BONDING PRIMER

PRODUCT DESCRIPTION

SikaTop® Armatec®-110 EpoCem® is a cementitious epoxy resin compensated 3-component coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

USES

- Suitable for control of anodic areas (Principle 11, method 11.1 EN 1504-9)
- Suitable in concrete repair as corrosion protection for reinforcement.
- Suitable as a bonding primer on concrete and mortar

CHARACTERISTICS / ADVANTAGES

- Contains EpoCem® technology - improved bonding agent
- Extended open times for repair mortars
- Compatible with most Sika MonoTop® repair mortars
- Excellent adhesion to concrete and steel
- Contains corrosion inhibitor
- Certified for application under dynamic load conditions
- Good resistance to water and chloride penetration
- High shear strength
- Long pot life
- Easy to mix
- Can be brushed on or applied using spray gun

APPROVALS / STANDARDS

SikaTop® Armatec®-110 EpoCem® meets the requirement of EN 1504-7.

PRODUCT INFORMATION

Chemical Base	Portland cement, epoxy resin, selected aggregates and additives	
Packaging	20 kg: A (1.14 kg) + B (2.86 kg) + C (16 kg)	
Appearance / Colour	Mixed components	dark grey
	Component A	white liquid
	Component B	colourless liquid
	Component C	dark grey powder
Shelf Life	12 months	
Storage Conditions	Store properly in undamaged original sealed packaging, in dry cool conditions between +5 °C and +25 °C.	
Density	A+B+C density: ~2.0 kg/l at 23 °C	

TECHNICAL INFORMATION

Tensile Adhesion Strength	≥ 1.5 N/mm ² (MPa) (after 28 days)	(EN 1542)
Lap Shear Strength	Pass	
Coefficient of Thermal Expansion	~18 x 10 ⁻⁶ 1/K	(EN 1770)
Diffusion Resistance to Water Vapour	μH ₂ O ~500	
Corrosion Test	Pass	(EN 15183)

SYSTEM INFORMATION

System Structure	SikaTop® Armatec®-110 EpoCem® is part of the Sika® repair system complying with the relevant part of European Standard EN 1504 and comprising of:	
	Bonding Primer / Reinforcement	SikaTop® Armatec®-110 EpoCem®
	Corrosion Protection	
	Hand placed repairs	Sika MonoTop® series
	Flowable repairs	Sika MonoTop® series
	Sprayed repairs	SikaCem® Gunitite series

APPLICATION INFORMATION

Consumption	As reinforcement corrosion protection coating: ~ 2 kg per m ² and application layer (~1 mm thick) In total minimum 2 layer thickness (~2 mm thick) As a bonding primer, substrate: > 1.5 to 2.0 kg per m ² /mm dependent on substrate conditions										
Ambient Air Temperature	+5 °C minimum; +30 °C maximum										
Substrate Temperature	+5 °C minimum; +30 °C maximum										
Pot Life	~ 3 hours (at +20 °C)										
Waiting Time / Overcoating	Maximum waiting time before application of repair mortar Sika repair mortars and non-fast setting concrete can be applied on SikaTop® Armatec®-110 EpoCem® within a maximum time of: <table><thead><tr><th>Temperature</th><th>Maximum Waiting Time</th></tr></thead><tbody><tr><td>+5 °C</td><td>6 hours</td></tr><tr><td>+10 °C</td><td>5 hours</td></tr><tr><td>+20 °C</td><td>2 hours</td></tr><tr><td>+30 °C</td><td>1 hour</td></tr></tbody></table>	Temperature	Maximum Waiting Time	+5 °C	6 hours	+10 °C	5 hours	+20 °C	2 hours	+30 °C	1 hour
Temperature	Maximum Waiting Time										
+5 °C	6 hours										
+10 °C	5 hours										
+20 °C	2 hours										
+30 °C	1 hour										

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete:

The concrete shall be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.

The surface shall be thoroughly pre-wetted and not be allowed to dry before application of the concrete repair mortar. The surface shall achieve a dark matt appearance without glistening and surface pores and pits

shall not contain water.

Steel reinforcement:

Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed and reinforcement cleaned to SA 2 in accordance with ISO 8501-1. Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting.

MIXING

SikaTop® Armatec®-110 EpoCem® can be mixed with a low speed (< 250 rpm) electric drill mixer. Shake components A and B thoroughly before opening. Pour liquid components A and B into a suitable

mixing vessel and mix for 30 seconds. While still mixing components A and B slowly add powder component C. Mix the three components together for a minimum 3 minutes, minimising addition of air. Leave to stand for 5–10 minutes until mixed coating material exhibits a brush-able, weakly dripping consistency. DO NOT ADD WATER

APPLICATION

As reinforcement corrosion protection:
Apply first layer approx. 1 mm thick, using medium hard brush or spray gun to the cleaned reinforcement. Apply 2nd layer when the first coat is fingernail hard (~2–3 hours at +20 °C). Apply subsequent repair mortars wet on dry (so not to wipe off the protection layer).

As a bonding primer:
Apply using medium hard brush or spray gun to prepared substrate. To achieve good bond, SikaTop® Armatec®-110 EpoCem® must be applied well into the substrate, filling all pores (minimum layer thickness 0.5 mm). Apply subsequent repair mortars wet on wet. Freshly applied SikaTop® Armatec®-110 EpoCem® must be protected against contamination and rain until application of the repair mortar.

Application under dynamic loading:
SikaTop® Armatec®-110 EpoCem® has been tested with the following Sika repair mortars and is certified for dynamic loading applications. Refer to separate product data sheets for further information.

Dry Spray Process:	
Corrosion Protection:	SikaTop® Armatec®-110 EpoCem®
Repair and overlay:	SikaCem®-133S Gunit

Wet Spray Process:	
Corrosion Protection and/or Bonding Primer:	SikaTop® Armatec®-110 EpoCem®
Repair and Overlay:	Sika MonoTop®-600 series

CURING TREATMENT

Protect from rain until the material has hardened.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

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Product Data Sheet
SikaTop® Armatec®-110 EpoCem®
February 2020, Version 03.02
020302020050000001

LIMITATIONS

- For more information regarding substrate preparation refer to the recommendations provided in EN 1504-10
- Avoid application in direct sun and/or strong wind and/or rain.
- Do not add water.
- Apply only to sound, prepared substrates.
- NOT recommended for use with fast setting concrete.

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

SikaTopArmatec-110EpoCem-en-GB-(02-2020)-3-2.pdf



PRODUCT DATA SHEET

SikaTop[®]-123 Plus

Two-component, polymer-modified, cementitious, non-sag mortar plus Sika FerroGard[®] 901 penetrating corrosion inhibitor

PRODUCT DESCRIPTION

SikaTop[®]-123 Plus is a two-component, polymer-modified, Portland cement-based, fast-setting, non-sag mortar. It is a high performance repair mortar for vertical and overhead surfaces and offers the additional benefit of Sika FerroGard[®] 901, a penetrating corrosion inhibitor included in its formulation.

USES

- On grade, above and below grade on concrete and mortar.
- On vertical and overhead surfaces.
- As a structural repair material for parking structures, industrial plants, walkways, bridges, tunnels, dams and ramps.
- Approved for repairs over cathodic protection systems

CHARACTERISTICS / ADVANTAGES

- Extremely low shrinkage proven by four industry standard test methods.
- High compressive and flexural strengths.
- Increased freeze/thaw durability and resistance to deicing salts.
- Increased density - improved carbon dioxide resistance (carbonation) without adversely affecting water vapor transmission (not a vapor barrier).
- Enhanced with Sika FerroGard[®] 901, a penetrating corrosion inhibitor - reduces corrosion even in the adjacent concrete.
- Compatible with coefficient of thermal expansion of concrete - Passes ASTM C 884.

APPROVALS / STANDARDS

- USDA certifiable for incidental food contact
- ANSI/NSF Standard 61 potable water approved compliant.
- Tested per ICRI Guideline NO. 320.3R for inorganic repair material data sheet protocol

PRODUCT INFORMATION

Packaging	Component A	1 gal (3.68 L) jug - 4/carton
	Component B	44 lb. (20 kg) bag
Appearance / Color	Gray powder	
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging	
Storage Conditions	Store dry at 40–95 °F (4–35 °C).	

Protect Component 'B' from moisture. If damp, discard material
Protect Component 'A' from freezing. If frozen, discard.



TECHNICAL INFORMATION

Compressive Strength	1 day	3,000 psi (20.7 MPa)	(ASTM C-109) 73 °F (23 °C) 50 % R.H.	
	7 days	4,000 psi (27.6 MPa)		
	28 days	6,000 psi (41.4 MPa)		
Modulus of Elasticity in Compression	2.94 x 10 ⁶ psi		(ASTM C-469)	
Flexural Strength	28 days	1,500 psi (10.3 MPa)	(ASTM C-293) 73 °F (23 °C) 50 % R.H.	
Splitting tensile strength	28 days	900 psi (6.2 MPa)	(ASTM C-496) 73 °F (23 °C) 50 % R.H.	
Tensile Adhesion Strength	28 days	2,000 psi (13.8 MPa)	(ASTM C-882 modified)	
* Mortar scrubbed into substrate at 73 °F (23 °C) and 50 % R.H.				
Pull-Out Resistance	28 days	500 psi (3.4 MPa) Substrate failure	(ASTM C-1583)	
Shrinkage	28 days	1x1x11-1/4" specimen	0.05 % 0.038 %	(ASTM C-157, mod. ICRI 320.3R)
	28 days	3x3x11-1/4" specimen		
Ring test	> 70 days		(ASTM C-1581)	
	Average Max Strain			- 36 µstrain
	Average Stress Strain			4.92 psi/day
	Potential for Cracking			Low
Baenziger block	90 days	No cracking		
Freeze-Thaw Stability	300 cycles	98 %	(ASTM C-666)	
Rapid Chloride Permeability	28 days	< 500 C	(ASTM C-1202 AASHTO T-277)	

APPLICATION INFORMATION

Fresh mortar density	132 lb/ft ³ (2.2 kg/l)	(ASTM C-138)
Coverage	0.39 ft ³ (0.01 m ³) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste)	
Layer Thickness	Min.	Max.
	1/8" (3 mm)	1.5" (38 mm)
Product Temperature	65–75 °F (18–24 °C)	
Ambient Air Temperature	> 45 °F (7 °C)	
Substrate Temperature	> 45 °F (7 °C)	
Set Time	15 - 40 min.	(ASTM C-266)
Final set time	< 60 min.	(ASTM C-266)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

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DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/l

(EPA method 24)

LIMITATIONS

- Do not use solvent-based curing compound.
- Size, shape and depth of repair must be carefully considered and consistent with practices recommended by ACI or ICRI.
- For additional information on substrate preparation, refer to ICRI Guideline No. 310.2R.
- If aggressive means of substrate preparation is employed, substrate strength should be tested in accordance with ACI 503 Appendix A prior to the repair application.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® 32, Hi-Mod.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface preparation

- Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired.
- Be sure repair area is not less than 1/8" (3 mm) in depth.
- Preparation work should be done by high pressure water blast, scabblor or other appropriate mechanical means to obtain an exposed aggregate surface profile of $\pm 1/16"$ (1.6 mm) (CSP-5).
- To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test.
- Saw cutting of edges is preferred and a dovetail is recommended.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.

Priming

- Reinforcing steel: Steel reinforcement should be thoroughly prepared by mechanical cleaning to remove all traces of rust. Where corrosion has occurred due to the presence of chlorides, the steel should be high pressure washed with clean water after mechanical cleaning. For priming of reinforcing steel use Sika® Armatec® 110 EpoCem (consult PDS).
- Concrete Substrate:
 - Prime the prepared substrate with a brush or sprayed

applied coat of Sika® Armatec® 110 EpoCem (consult PDS).

- Alternately, a scrub coat of SikaTop®-123 Plus can be applied prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.

MIXING

- Pour Component 'A' into mixing container.
- Add Component 'B' while mixing continuously.
- Mix mechanically with a low-speed drill (400–600 rpm) and mixing paddle or mortar mixer.
- Mix to a uniform consistency, maximum 3 minutes.
- Manual mixing can be tolerated only for less than a full unit. Thorough mixing and proper proportioning of the two components is necessary.

APPLICATION

- SikaTop®-123 Plus must be scrubbed into the substrate, filling all pores and voids.
- Force material against edge of repair, working toward center.
- After filling repair, consolidate, then screed.
- Material may be applied in multiple lifts.

Multiple lifts

- Where multiple lifts are required score top surface of each lift to produce a roughened surface for next lift.
- Allow preceding lift to reach initial set, 30 minutes minimum, before applying fresh material.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.
- Scrub fresh mortar into preceding lift.
- Allow mortar or concrete to set to desired stiffness, then finish with wood or sponge float for a smooth surface.

CURING TREATMENT

- As per ACI recommendations for Portland cement concrete, curing is required.
- Moist cure with wet burlap and polyethylene, a fine mist of water or a water based* compatible curing compound (ASTM C-309).
- Curing compounds adversely affect the adhesion of following lifts of mortar, leveling mortar or protective coatings.
- Moist curing should commence immediately after finishing.
- Protect freshly applied mortar from direct sunlight, wind, rain and frost.

* Pretesting of curing compound is recommended.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

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SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

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Product Data Sheet

SikaTop®-123 Plus
November 2020, Version 01.03
020302040070000022

SikaTop-123Plus-en-US-(11-2020)-1-3.pdf





**PSL Civic Center Main Building
Repair Protocol**

Report Date: 2022.02.10
Revision Date: 2022.11.15

RP ID – Reversed Bearing Plate Direction

Observation: At the gymnasium portion of the main building, just below the high roof along grid lines X5 and X6, the direction of the joist bearing is reversed. The vertical leg is parallel with the outside face of the wall.

Location: Roof, Column Line X5

Repair Protocol/Procedure:

Following a site visit performed by Suffolk Construction, this condition was not observed on Column line X6. Cracking noted appears to only be present in the textured coating and not in the concrete panels themselves.

- All work to be coordinated with the city. Roof access will be provided.
- At each location requiring repair-
 - The existing textured coating will be removed.
 - Once exposed, the existing bearing plate will be cleaned of loose rust and surface contaminants that would affect adhesion.
 - Two coats of Sherwin Williams Macropoxy HS will be applied to the plate.
 - A bead of Tremco Dymonic polyurethane sealant will be applied at the joint between the plate and concrete at perimeter of the plate.
 - Once adequate cure time has been provided the textured finish will be reapplied and finish paint completed in accordance with manufacturer’s recommendations. The city to confirm color used in recent repaint.
 - Paint repairs to extend 12” into existing coating.
- Clean work area of any construction debris.

List of Attachments:

Plan marking quantity and location for repairs
Sherwin Williams Macropoxy HS Product Data
Texcote TC100 Product Data
Texcote of America Color chart
Tremco Dymonic 100 Product Data

Approvals:

Owner: _____ Date: _____

Owner’s Consultant: _____ Date: _____



**PSL Civic Center Main Building
Repair Protocol**

General Contractor: _____ Date: _____



Protective & Marine Coatings

MACROPOXY® HS HIGH SOLIDS EPOXY

PART A
PART B

B58-400
B58V400

SERIES
HARDENER

Revised: April 2, 2019

PRODUCT INFORMATION

4.51

PRODUCT DESCRIPTION

MACROPOXY HS HIGH SOLIDS EPOXY is an epoxy polyamide mastic designed for application to properly prepared steel surfaces. May be used as a one or two coat, direct-to-metal protective coating. Can be applied to marginally prepared surfaces.

- Long-term durability
- Corrosion resistant
- Resistant to many solvents and chemicals
- Barrier coat or universal primer when applying high performance coating over alkyls, to prevent lifting
- Outstanding application properties

PRODUCT CHARACTERISTICS

Finish:	Semi-Gloss
Color:	Wide range of colors available, including safety colors
Volume Solids:	80% ± 2%, mixed, may vary by color
Weight Solids:	82% ± 2%, mixed, may vary by color
VOC (EPA Method 24):	Unreduced: <250 g/L; 2.08 lb/gal mixed Reduced 10%: <300 g/L; 2.50 lb/gal
Mix Ratio:	1:1 by volume

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	4.0 (100)	8.0 (200)
Dry mils (microns)	3.0* (75)	6.0* (150)
~Coverage sq ft/gal (m ² /L)	215 (5.2)	425 (10.4)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	1280 (31.4)	

*See Performance Tips section

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 6.0 mils wet (150 microns):

	@ 50°F/10°C	@ 77°F/25°C 50% RH	@ 100°F/38°C
To touch:	7 hours	4-6 hours	2-4 hours
To stencil:	8 hours	4-6 hours	4 hours
To recoat:			
minimum:	24 hours	18 hours	8 hours
maximum:	30 days	30 days	21 days
To cure:	7 days	7 days	5 days
<i>If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.</i>			
Pot Life:	6 hours	45 minutes	30 minutes
	N/A	4 hours*	2 hours*
*Reduced 10% with MEK			
Sweat-in-time:	30 minutes	15 minutes	5 minutes

Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	105°F (40.5°C), PMCC, mixed
Reducer/Clean Up:	Reducer #54 (R7K54) or MEK (R6K10)
In California:	Use Oxsol 100 (exempt solvent) or R7K111

RECOMMENDED USES

For use over prepared substrates such as steel and concrete in industrial environments.

- Structural steel
- Refineries
- Railcars
- Power plants
- Self-priming coating for marginally prepared substrates
- Suitable for use in USDA inspected facilities
- Conforms to AWWA D102, OCS #5
- Paper mills
- Tanks
- Vessels
- Marine applications

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP6/NACE 3

System Tested*:

1 ct. Macropoxy HS @ 5.0-6.0 mils (125-150 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycle, 1 kg load	60 mg loss
Adhesion	ASTM D4541	750 psi
Dry Heat Resistance	ASTM D2485	225°F (107°C)
Exterior Durability	1 year at 45° South	Excellent, chalks
Flexibility	ASTM D522, 180° bend, 5/8" mandrel	Passes
Moisture Condensation Resistance	ASTM D4585, 100°F (38°C), 1000 hours	Passes, no blistering, rust, or delamination
Pencil Hardness	ASTM D3363	H
Salt Fog Resistance	ASTM B117, 1000 hours	Passes-no cracking, softening or delamination, no more than 1/16" rust creepage at scribe

Epoxy coatings may darken or yellow following application and curing.



Protective & Marine Coatings

MACROPOXY[®] HS HIGH SOLIDS EPOXY

PART A **B58-400** **SERIES**
PART B **B58V400** **HARDENER**

Revised: April 2, 2019

PRODUCT INFORMATION

4.51

RECOMMENDED SYSTEMS

	Dry Film Thickness / ct.	
	Mils	(Microns)
Steel, light/moderate service:		
1 ct. Macropoxy HS	3.0-6.0	(75-150)
Steel, severe service:		
2 cts. Macropoxy HS	3.0-6.0	(75-150)
Steel:		
1 ct. Macropoxy 920 Pre-Prime	1.5	(40)
1-2 cts. Macropoxy HS	3.0-6.0	(75-150)
Steel, zinc primer:		
1 ct. Zinc Clad II Plus	3.0-5.0	(75-125)
1-2 cts. Macropoxy HS	3.0-6.0	(75-150)
Concrete:		
1 ct. Kem Cati-Coat HS	10.0-20.0	(250-500)
1-2 cts. Macropoxy HS	3.0-6.0	(75-150)
Aluminum/Galvanized:		
1-2 cts. Macropoxy HS	2.0-4.0	(50-100)
Other Acceptable Topcoats over Macropoxy if required:		
Pro Industrial DTM Acrylic Coating		
Sherthane 2K Urethane		
Acrolon 218 HS Polyurethane		

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

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SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel SSPC-SP2
Concrete/Masonry: SSPC-SP13/NACE 6, or ICRI
No. 310.2R, CSP 1-3
Aluminum: SSPC-SP1
Galvanized: SSPC-SP1

Surface Preparation Standards

Condition of Surface	ISO 8501-1	Swedish Std.	SSPC	NACE
	BS7079:A1	SIS055900		
White Metal	Sa 3	Sa 3	SP 5	1
Near White Metal	Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast	Sa 2	Sa 2	SP 6	3
Brush-Off Blast	Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	SP 2	-
Pitted & Rusted	D St 2	D St 2	SP 2	-
Rusted	C St 3	C St 3	SP 3	-
Power Tool Cleaning	Pitted & Rusted	D St 3	SP 3	-

TINTING

Tint with Maxitoner colorants at 150% tint strength into Part A. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 100°F (38°C) maximum
(air, surface, and material)
At least 5°F (2.8°C) above dew point
Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:
Parts A & B: 1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight: 11.7 ± 0.2 lb/gal ; 1.4 Kg/L
mixed, may vary by color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



Protective & Marine Coatings

MACROPOXY® HS HIGH SOLIDS EPOXY

PART A **B58-400** **SERIES**
PART B **B58V400** **HARDENER**

Revised: April 2, 2019

APPLICATION BULLETIN

4.51

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel

Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel within 8 hours or before flash rusting occurs.

Concrete and Masonry

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910.

Aluminum

Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1.

Galvanized Steel

Allow to weather a minimum of six months prior to coating. Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 100°F (38°C) maximum (air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up Reducer #54 (R7K54) or MEK (R6K10)
In California..... Use Oxsol 100 (exempt solvent)

Airless Spray

Pressure..... 2400-2600 psi
Hose..... 3/8"-1/2" ID
Tip017"-.019"
Filter 60 mesh
Reduction..... As needed up to 10% by volume

Conventional Spray

Gun Binks 95
Fluid Nozzle 68
Air Nozzle..... 68 PB
Atomization Pressure..... 60 psi
Fluid Pressure..... 10-20 psi
Reduction..... As needed up to 10% by volume

Brush

Brush..... Natural Bristle
Reduction..... Not recommended

Roller

Cover 3/8"-1/2" woven with solvent resistant core
Reduction..... Not recommended

If specific application equipment is not listed above, equivalent equipment may be substituted.

Surface Preparation Standards

Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal	Sa 3	Sa 3	SP 5	1
Near White Metal	Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast	Sa 2	Sa 2	SP 15	3
Brush-Off Blast	Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	St 2	St 2	SP 2	-
Pitted & Rusted	St 2	St 2	SP 2	-
Rusted	St 3	St 3	SP 3	-
Power Tool Cleaning	St 3	St 3	SP 3	-
Pitted & Rusted	St 3	St 3	SP 3	-



Protective & Marine Coatings

MACROPOXY® HS HIGH SOLIDS EPOXY

PART A **B58-400** **SERIES**
PART B **B58V400** **HARDENER**

Revised: April 2, 2019

APPLICATION BULLETIN

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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitator. Make certain no pigment remains on the bottom of the cans. Then combine one part by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated. Re-stir before using.

If reducer solvent is used, add only after both components have been thoroughly mixed, after sweat-in.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	4.0 (100)	8.0 (200)
Dry mils (microns)	3.0* (75)	6.0* (150)
~Coverage sq ft/gal (m ² /L)	215 (5.2)	425 (10.4)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	1280 (31.4)	

*See Performance Tips section

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 6.0 mils wet (150 microns):

	@ 50°F/10°C	@ 77°F/25°C 50% RH	@ 100°F/38°C
To touch:	7 hours	4-6 hours	2-4 hours
To stencil:	8 hours	4-6 hours	4 hours
To recoat:			
minimum:	24 hours	18 hours	8 hours
maximum:	30 days	30 days	21 days
To cure:	7 days	7 days	5 days

If maximum recoat time is exceeded, abrade surface before recoating.

Drying time is temperature, humidity, and film thickness dependent.

Pot Life:	6 hours	45 minutes	30 minutes
	N/A	4 hours*	2 hours*

*Reduced 10% with MEK

Sweat-in-time:	30 minutes	15 minutes	5 minutes
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Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #54, R7K54. Clean tools immediately after use with Reducer #54, R7K54. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

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PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

Insufficient ventilation, incomplete mixing, miscatalyzation, and external heaters may cause premature yellowing.

Excessive film build, poor ventilation, and cool temperatures may cause solvent entrapment and premature coating failure.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #54, R7K54.

Quik-Kick Epoxy Accelerator is acceptable for use. See data page 4.99 for details.

When coating over aluminum and galvanizing, recommended dft is 2-4 mils (50-100 microns).

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

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CORPORATE OFFICES & EASTERN PLANT

2422 E. 15th Street
Panama City, Florida 32405
PHONE: (850) 769-0347
FAX: (850) 913-8619

COMMERCIAL SALES OFFICE

4101 Ravenswood Rd, Ste. 101A
Ft. Lauderdale, Florida 33312
PHONE: (850) 581-0771
FAX: (954) 581-9516

WESTERN PLANT

5950 S Avalon Blvd.
Los Angeles, CA 90003
PHONE: (323) 233-3111
FAX: (323) 232-1071

TC 100 TEXTURED COATING

TC 100 Textured Coating is a high-build plasticized, oil-base, polyester-resin system specially formulated to provide excellent water resistance, durability, low-maintenance and long life.

TC 100 Textured Coating is recommended for use over concrete, cement plaster, block systems, brick systems, metal surfaces and other manufacturer approved surfaces. Masonry, including mortar, concrete and cement plaster must cure a minimum of 28 days prior to coating.

Unless otherwise directed, Primers #27, #62 or TEX•STOP™ PREMIUM STAIN BLOCKING PRIMER must be used.

LIMITATIONS: APPLICATION OF THE COATING MUST BE UNDER THE FOLLOWING IDEAL WEATHER CONDITIONS:

1. Rain is not imminent and surfaces are not damp or frozen.
2. Temperature is within a 45°F and rising, not to exceed 100°F (7°C to 38°C) range.
3. Incompatible substrate release agents, from oils, and any foreign matters are removed prior to priming and coating.
4. Roof and parapet top caps are installed and sealed against water penetration prior to priming and coating.
5. Primer that has been exposed to ultraviolet rays more than four (4) weeks must be re-primed.
6. Material use is above grade only. Do not use below grade.
7. Joint sealant must cure 48 hours prior to priming surfaces and be compatible with selected TEX•COTE® products.
8. Retaining walls, planter boxes, etc. must be waterproofed on the backside with a below grade asphaltic type material prior to backfilling.

CAUTION: This product, in liquid form, contains petroleum distillate which will cause serious illness or death if swallowed, or if large quantities are absorbed into ones body. Use only in well ventilated areas. In liquid form, keep away from heat sources and children. If swallowed do not induce vomiting. Call physician at once. For additional information see MSDS, available upon request.

Note: product must be used within 12 months: store and handle as specified by manufacturer.

RECOMMENDED EQUIPMENT

Spray Application – Equipment similar to Graco President, 10:1 pump and Graco 204-000 spray gun. TEX•COTE® application manual available upon request.

Tip sizes: 1/16" to 3/8" depending on the texture, i.e. FT, CT, XX

SURFACE PREPARATION

1. All surfaces must be sound, clean and dry prior to application of primer and coating.
2. Such surface contaminants as dust, dirt, mildew*, form oils and loose substrates should be thoroughly removed. ***Mildew must be killed using a mildewcide or bleach solution prior to application of primer or coating.**
3. Painted surfaces exhibiting loose, flaking, or oxidized paint surfaces must be thoroughly removed by water blasting, electric sanding, or wire brushing as required by manufacturer.
4. All surfaces to be coated must be primed.
5. Large cracks, holes or voids must be filled with the appropriate patching compound and Tex•Bond Cement Adhesive.
6. The texture of the patched areas should match the existing surrounding finish. Cracks less than one-eighth (1/8) of an inch should be filled with FLEX•PATCH Patching Compound.
7. Interfacing of wall joints should be sealed with a urethane sealant.



The information and suggestions contained herein are believed to be accurate based upon our current Knowledge and experience. However, such information and suggestions may not be pertinent, suitable or complete as to any particular construction substrate, application, application process or conditions. SELLER HEREBY DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES or merchantability and fitness for a particular purpose. It shall be buyer's responsibility to ascertain the suitability of any mentioned products and the completeness of any information and/or suggestions for its customers use and uses.

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FAX: (954) 581-9516

WESTERN PLANT

5950 S Avalon Blvd.
Los Angeles, CA 90003
PHONE: (323) 233-3111
FAX: (323) 232-1071

TC 100 TEXTURED COATING**DRYING TIME UNDER IDEAL CONDITIONS**

Set to touch: overnight – Fully cured: 10 – 14 days

COVERAGE RATE

40-50 sf/gal. Coverage rates may vary due to wall surface textures and porosity. A minimum of 16.5 – 20.5 mils (.42 - .52mm) dry film thickness is required.

QUANTITY AND COLORS

Container size:

- Five (5) gallon cans
- Thirty (30) gallon drums

Colors

TCA stock colors or TCA will match your special colors upon request for additional charge.

TECHNICAL DATA

- Passes Federal Specifications TT-C-555b, Type I and II.
- Passes 98 miles per hour wind driven rain test.
- Water vapor permeability; no less than 0.4 metric perms.
- Solids, By Weight 61%; By Volume 53%
- Mandrel Bend Test: One (1) inch.
- Accelerated Weathering:
TEX•COTE® 100 – 5,000 Hours.
- Freeze/Thaw Test : 50 cycles.
- Flame Spread: ASTM E84; NFPA Class A; Uniform building code Class A.
- Salt Spray: ASTM B 117-64
TC-100 – 300 hours.
- Abrasion ASTM D 968 Falling Sand:
TC-100 – 1,160 liters.

CLEAN UP

1. Use mineral spirits for cleaning wet materials.
2. Methyl Ethyl Ketone (MEK) for dry materials.

WARRANTY

Warranty: This warranty will be for material only. Textured Coatings of America, Inc. shall have no obligation to otherwise participate in labor or cost associated with effecting repairs. Specimen copy of warranty available upon request.

MAINTENANCE

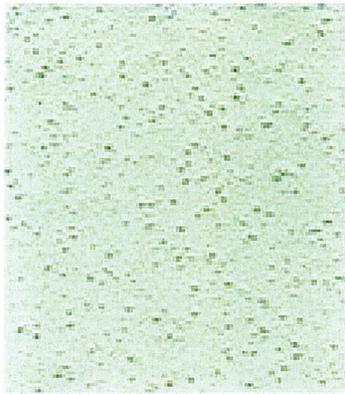
No particular maintenance is required. However should any of the products become soiled, simply clean with light water pressure and mild detergent.

TECHNICAL ASSISTANCE

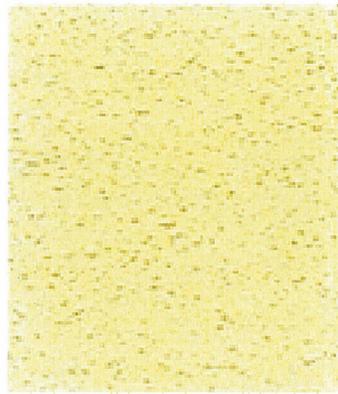
Technical assistance is available from the manufacturer's facilities or sales representatives throughout the United States. For assistance call the factory nearest you. Florida, call 800-219-0492, California call 800-906-1444

Additional product information is available upon request.

All TEX•COTE® products comply with federal and state Volatile Organic Compound (VOC) rules and regulations; please contact your nearest TCA office for assistance on the local VOC compliance in the area of intended use.



MISTY BAY T-141



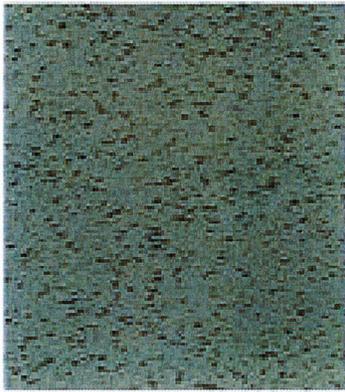
SUNNY YELLOW T-129



PALOMINO BEIGE T-103



MIAMI PEACH T-128



MOUNTAIN GRAY T-105



FLORIDA WHITE T-121



MINT GREEN T-107



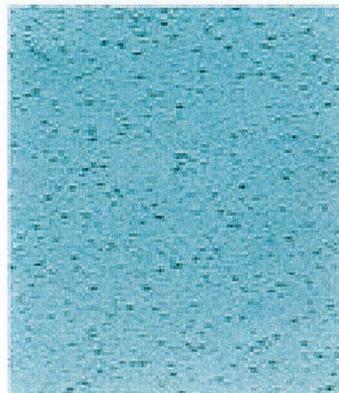
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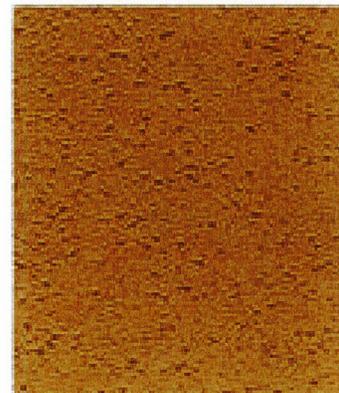
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FRENCH WHITE T-142



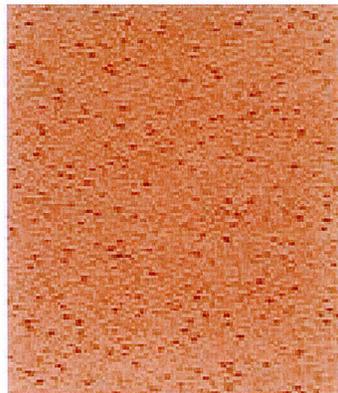
MISSION BLUE T-130



SANDALWOOD T-114



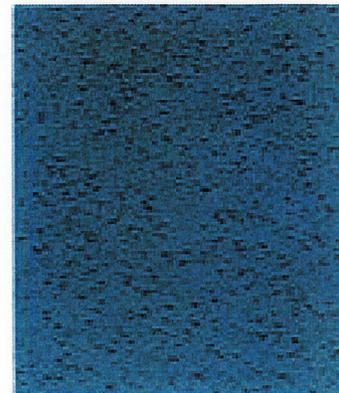
WHISPER GRAY T-127



SAHARA ROSE T-116



CHAMOIS T-125



CAPE COD BLUE T-126

Dymonic® 100

High-Performance, High-Movement, Single-Component, Polyurethane Sealant

Product Description

Dymonic® 100 is a high-performance, high-movement, single-component, medium-modulus, low-VOC, UV-stable, non-sag polyurethane sealant.

Basic Uses

Dymonic 100 is a durable, flexible sealant that offers excellent performance in moving joints and exhibits tenacious adhesion once fully cured. Typical applications for Dymonic 100 include expansion and control joints, precast concrete panel joints, perimeter caulking (windows, doors, and panels), aluminum, masonry and vinyl siding. Dymonic 100 is also an excellent choice as a fluid applied flashing material in rough opening perimeters for fenestration/window, door and curtain wall applications.

Features and Benefits

- Can adhere to damp or green concrete and has a skin time of 2 hr with a tack-free time of 6 to 8 hr to significantly reduce dirt attraction.
- Movement capability of +100/-50% in typical field conditions, is low VOC, paintable, jet fuel-resistant, and will not crack, craze or yellow under extreme UV exposure.
- Suitable for water immersion and will not out gas.
- Formulated with an innovative polymer technology, similar to TREMproof® 250GC and Vulkem® 45SSL, Dymonic 100 is highly versatile and has a unique capability to adhere to damp or green concrete and will not out gas.
- Compatible and can be coated over with Tremco's Vulkem Deck Coatings, ExoAir® Air Barrier products and the cold, fluid-applied TREMproof® line of below-grade waterproofing products.

Availability

Dymonic 100 is immediately available from your local Tremco Sales Representative, distributor, or warehouse.

Coverage Rates

308' of joint per gallon for a 1/4" x 1/4" (6 mm x 6 mm) joint. For specific coverage rates that include joint size, and usage efficiencies, visit our website usage calculator at www.tremcosealants.com

Packaging

- 10.1-oz (300-mL) cartridges
- 20-oz (600-mL) sausages

Colors

Almond, Aluminum Stone, Anodized Aluminum, Beige, Black, Bronze, Buff, Dark Bronze, Gray, Gray Stone, Hartford Green, Ivory, Light Bronze, Limestone, Natural Clay, Off White, Precast White, Redwood Tan, Sandalwood, Stone, and White.

Shelf Life

1 year when stored at 40 to 110 °F (5 to 43 °C)

Storage

Store Dymonic 100 in original, undamaged packaging in a clean, dry, protected location with temperatures between 40 to 110 °F (5 to 43 °C).

Applicable Standards

- Dymonic 100 meets or exceeds the requirements of the following specifications:
- ASTM C920 Type S, Grade NS, Class 50, Use NT, T, M, A, O, I
- U.S. Federal Specification TT-S-00230C, Class A, Type II
- CAN/CGSB-19,13-M87
- International Code Council (ICC) Section R703.8 Flashing
- AAMA 714-15 Specification for Liquid-Applied Flashing
- NFPA 285 Listed Component

SWRI
INSTITUTE
**SEALANT · WATERPROOFING
& RESTORATION INSTITUTE**

Issued to: Tremco Incorporated
Product: Dymonic® 100

C719: Pass ✓ **Ext:+50%** **Comp:-50%**

Substrate: Mortar, Anodized Aluminum, Unpolished Granite
*[mortar and unpolished granite substrates primed with Vulkem 171,
anodized aluminum substrate primed with Non Porous Primer]*

Validation Date: 2/26/19 - 2/25/24

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SEALANT VALIDATION
www.swrionline.org

Fire Rated Systems

FF-D-1186, FW-D-1117, HW-D-1122, WW-D-1200, and BW-S-0006

Limitations

- Use with adequate ventilation.
- Always utilize the accompanying MSDS for information on Personal Protective Equipment (PPE) and Health Hazards.
- Not recommended for use in chlorinated, potable, heavy or waste water.
- Although Dymonic 100 is paintable, this does not imply adhesion to and compatibility with all paints. Consult Tremco Technical Bulletin No. S-09-05 for more information.

Substrate Preparation

Surfaces must be sound and clean. All release agents, existing waterproofing, dust, loose mortar, paints, other finishes or field applied coating must be removed. This can be accomplished with a thorough wire brushing, grinding, sandblasting, or solvent washing, depending on the contamination.

Tremco recommends that surface temperatures be 40 °F (5 °C) or above at the time the sealant is applied. If sealant must be applied in temperatures below 40 °F, please refer to the Tremco Technical Bulletin for Applying Sealants in Cold Conditions (No. S-08-44 rev 1) that can be found on our website at www.tremcosealants.com

Dymonic® 100

High-Performance, High Movement, Single-Component, Polyurethane Sealant

Priming

Dymonic 100 typically adheres to common construction substrates without primers; anodized aluminum may require the use of primer. However, Tremco always recommends that a mock-up or field adhesion test be performed on the actual materials being used on the job to verify the need for a primer, proper cleaning and prep requirements. A description of the field adhesion test can be found in appendix X1 of ASTM C1193, Standard Guide for Use of Joint Sealants.

Where deemed necessary, use Vulkem® Primer #191 Low-VOC on porous substrates and TREMPreme® Non-Porous Primer for metals or plastics.

Application

Dymonic 100 is easy to apply with conventional caulking equipment. Ensure that the backer rod is fitted properly for friction and that any necessary primers have been applied.

Fill the joint completely with a proper width-to-depth ratio, and then tool to ensure intimate contact of sealant with joint substrates.

Dry tooling is always preferred, although compatible wetting agents can be used in limited amounts to slick the spatula if needed after an initial pass.

For a cleaner finish, mask the sides of the joint with tape prior to filling.

Joint Design

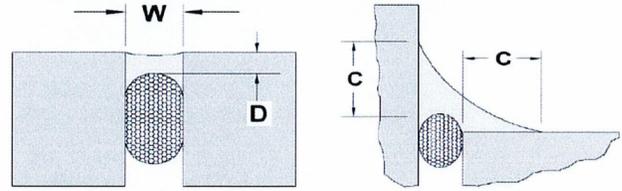
Dymonic 100 may be used in vertical or horizontal joints designed in accordance with accepted architectural/engineering practices. Joint width should be 4 times anticipated movement but not less than 1/4" (6 mm).

Joint Backing

Polyethylene backer rod is recommended as joint backing to control sealant depth and ensure intimate contact of sealant with joint substrate when tooling. Where depth of joint will prevent the use of backer rod, an adhesive backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at the time of sealant application.

Sealant Dimensions

W = Sealant width, D = Sealant depth, C = Contact area.



Expansion Joints- The minimum width and depth of any sealant application should be 1/4" x 1/4" (6 mm x 6 mm). The depth (D) of sealant may be equal to width (W) of joints less than 1/2" wide. For joints from 1/2" to 1" (13 mm to 25 mm) wide, the sealant depth should be approximately one-half of the joint width. The maximum depth (D) of any sealant application should be 1/2" (13 mm). For Joints that are wider than 1" (25 mm) contact Tremco Technical Services or your local Tremco Sales Representative.

Window Perimeter- For fillet beads, or angle beads around windows and doors, the sealant should exhibit a minimum surface contact area [C] of 1/4" (6 mm) onto each substrate, with provisions for release at the heel of the angle using backer rod or bond breaker tape.

Cure Time

Dymonic 100 generally cures at a rate of 3/32" per day at 75 °F (24 °C) and 50% RH. It will skin in 2 hr and be tack free in 6 to 8 hr. The cure time will increase as temperatures and/or humidity decrease. A typical rule of thumb is one additional day for every 10 °F decrease in temperature.

Clean Up

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

Warranty

Tremco warrants its Products to be free of defects in materials but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or refund the purchase price of the quantity of Tremco Products proven to be defective, and Tremco shall not be liable for any loss or damage.

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

Dymonic® 100

High-Performance, High Movement, Single-Component, Polyurethane Sealant

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUES
Type		Single component polyurethane sealant
Color		21 Standard Colors
Solids		98%
Specific Gravity		1.3302
Application		gun-grade sealant, applied with typical caulking equipment
Rheological Properties	ASTM C639	non-sag (NS), 0" of sag in channel
Hardness Properties	ASTM C661	40 +/-5
Weight Loss	ASTM C1246	Pass
Skin Time	ASTM C679	2 to 3 hr
Tack Free Time	73.4°F (23°C) 50% RH	6 to 8 hr
Stain and Color Change	ASTM C510	Pass
Adhesion to Concrete	ASTM C794	35 pli
Adhesion to Concrete After Immersion	ASTM C794	30 pli
Adhesion to Green Concrete	ASTM C794	>25 pli
Adhesion to Damp Concrete	ASTM C794	>20 pli
Effects of Accelerated Aging	ASTM C793	Pass
Movement Capability	ASTM C719	+/-50%
Movement Capability	ASTM C719* Modified	+100/-50%
Tensile Strength	ASTM D412	350 to 450 psi
% Elongation	ASTM D412	800 to 900%
Modulus at 100%	ASTM D412	75 to 85 psi
Tear Strength	ASTM D412	65 to 75 psi
Service Temperature		-40 to 180 °F (-40 to 82 °C)
Application Temperature		40 to 100 °F (4 to 37 °C) *
Smoke Development	ASTM E84	5
Fire Spread	ASTM E84	5
Fire Resistance of Assembly	NFPA 285	PASS
Smoke Development	CAN S102	10
Fire Spread	CAN S102	10
Crack Bridging	ASTM C1305	PASS
Nail Sealability	ASTM D1970 Section 7.9	PASS

*For temperatures below 40 °F, please refer to the Technical Bulletin, Cold Temperature Sealant Application Recommendations.

0619/D100DS-STPlease refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.**Tremco Commercial Sealants & Waterproofing**

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 Beachwood OH 44122
 216.292.5000 / 800.321.7906

1451 Jacobson Ave
 Ashland OH 44805
 419.289.2050 / 800.321.6357

220 Wicksteed Ave
 Toronto ON M4H1G7
 416.421.3300 / 800.363.3213

1445 Rue de Coulomb
 Boucherville QC J4B 7L8
 514.521.9555



**Port St. Lucie Civic Center
Repair Protocol – Loading Dock Panel Cracks**

Report Date: 2018.01.15

Revision 01: 2022.11.15

RP ID. – Loading Dock Panel Cracks

Observation: While investigating the cause of hairline cracks observed in the panels at the Loading Dock, reinforcement was exposed that was installed without providing adequate cover.

Location: Main Building Loading Dock
NE Elevation of Main Building

Repair Protocol/Procedure:

- All work to be coordinated with the City of Port St. Lucie.
- Concrete surrounding the exposed rebar will be removed until 1-1/2” cover can be provided.
- Additional concrete may need to be removed at the ends of the rebar which may allow the bar to be pushed into the panel in order to ensure 1-1/2” cover is provided.
- If 1-1/2” cover can not be provided, the exposed bar may be cut out.
- Clean the rebar to ensure no rust or loose concrete is present.
- Apply Sika Armatec 110 on the exposed rebar and surrounding concrete adhering to the product specification.
- Patching of the panel will be completed with Eucorepair V100 (or equal) adhering to the product specification.
- Existing textured finish will be removed along the upper panel. Sealants applied will also be removed.
- Existing cracks will be routed to 1/16” ensuring a sound surface.
- Openings will be flushed out with clean water and allowed to dry.
- Sherwin Williams Textured Elastomeric patch will be applied over the routed crack and feathered over the surface of the panel.
- Patching compound will be allowed to cure for 24 hours.
- Tex-Cote TC100 will then be reapplied to the panel.
- The upper panel will then receive two coats of Loxon XP applied in accordance with the manufacturer’s recommendations.
- The work area will be cleaned of any trash or debris that has been created during the scope of work. Trash and debris will be removed from the property and properly disposed of.

List of Attachments:



**Port St. Lucie Civic Center
Repair Protocol – Loading Dock Panel Cracks**

Sika Armatec 110 Product Data
Eucorepair V100 Product Data
Sherwin Williams Elastomeric Patch Product Data
Tex-Cote TC100 Product Data
Sherwin Williams Loxon XP Product Data

Approvals:

Owner: _____ Date: _____

Owner's Consultant: _____ Date: _____

General Contractor: _____ Date: _____

PRODUCT DATA SHEET

SikaTop® Armatec®-110 EpoCem®

BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION

DESCRIPTION

SikaTop® Armatec®-110 EpoCem® is a cementitious, epoxy resin compensated 3-component coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

SikaTop® Armatec®-110 EpoCem® meets the requirement of EN 1504-7.
Suitable for use in hot and tropical climatic conditions.

USES

- Suitable for control of anodic areas (Principle 11, method 11.1 EN 1504-9)
- Suitable in concrete repair as corrosion protection for reinforcement.
- Suitable as a bonding primer on concrete and mortar

CHARACTERISTICS / ADVANTAGES

- Contains EpoCem® technology - improved bonding agent
- Extended open times for repair mortars
- Compatible with most Sika® repair mortars
- Excellent adhesion to concrete and steel
- Contains corrosion inhibitor
- Certified for application under dynamic load conditions
- Good resistance to water and chloride penetration
- High shear strength
- Long pot life
- Easy to mix
- Can be brushed on or applied using spray gun

APPROVALS / CERTIFICATES

- Testing according to BS 1881, Part 207 : 1992, Cl. 8

PRODUCT INFORMATION

Composition	Portland cement, epoxy resin, selected aggregates and additives	
Packaging	20 kg: A (1.14 kg) + B (2.86 kg) + C (16 kg)	
Appearance / Colour	Mixed components grey	
	Component A:	white liquid
	Component B:	colourless liquid
	Component C:	grey powder
Shelf life	12 months	
Storage conditions	Store properly in undamaged original sealed packaging, in dry cool conditions between +5 °C and +25 °C.	

TECHNICAL INFORMATION

Tensile Adhesion Strength	≥ 1.5 N/mm ² (MPa) (after 28 d)	(EN 1542)
Shear Adhesion Strength	Pass	(EN 15184)
Coefficient of Thermal Expansion	~18 x 10 ⁻⁶ 1/K	(EN 1770)

Diffusion Resistance to Water Vapour	μ_{H_2O} ~500	
Diffusion resistance to carbon dioxide	μ_{CO_2} ~7300	
Corrosion Test	Pass	(EN 15183)

SYSTEMS

System Structure	SikaTop® Armatec®-110 EpoCem® is part of the Sika® repair system complying with the relevant part of European Standard EN 1504 and comprising of:	
	Bonding Primer / Reinforcement Corrosion Protection	SikaTop® Armatec®-110 EpoCem®
	Light Weight Repair Mortar	Sika MonoTop®, SikaRep® series
	Structural Repair Mortar	Sika MonoTop®, SikaRep®, Sikadur® series
	Pore Sealer and Levelling Mortar	Sika MonoTop®, SikaRep®, Sikagard® series

APPLICATION INFORMATION

Fresh Mortar Density	A + B + C mixed: ~2.0 kg/l (23 °C)		
Consumption	As reinforcement corrosion protection coating: ~2 kg per m ² and application layer (~1 mm thick) In total min. 2 layer thickness (~2 mm thick)		
	As a bonding primer, substrate: > 1.5 to 2.0 kg per m ² /mm dependent on substrate conditions		
Ambient Air Temperature	+5 °C min. / +35 °C max.		
Substrate Temperature	+5 °C min. / +35 °C max.		
Pot Life	~3 h (at +20 °C)		
Waiting Time / Overcoating	Maximum waiting time before application of repair mortar Sika repair mortars and non-fast setting concrete can be applied on SikaTop® Armatec®-110 EpoCem® within a maximum time of:		
	+5 °C	+10 °C	+20 °C
	6 h	5 h	2 h
			+30 °C
			1 h

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete:
The concrete shall be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.
The surface shall be thoroughly pre-wetted and not be allowed to dry before application of the concrete repair mortar. The surface shall achieve a dark matt appearance without glistening and surface pores and pits shall not contain water.

Steel reinforcement:
Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed and reinforcement cleaned to SA 2 in accordance with ISO 8501-1. Surfaces shall be prepared using abrasive blast cleaning

techniques or high pressure water-blasting.

MIXING

SikaTop® Armatec®-110 EpoCem® can be mixed with a low speed (< 250 rpm) electric drill mixer.
Shake components A and B thoroughly before opening. Pour liquid components A and B into a suitable mixing vessel and mix for 30 seconds. While still mixing components A and B slowly add powder component C. Mix the three components together for minimum 3 minutes, minimising addition of air. Leave to stand for 5 to 10 minutes until mixed coating material exhibits a brush-able, weakly dripping consistency. DO NOT ADD WATER!

APPLICATION

As reinforcement corrosion protection:
Apply first layer approximately 1 millimeter thick, using medium hard brush or spray gun to the cleaned reinforcement. Apply 2nd layer when the first coat is hard to the fingernail (approximately 2 to 3 hours at +20 °C). Apply subsequent repair mortars wet on dry

(so not to wipe off the protection layer).

As a bonding primer:

Apply using medium hard brush or spray gun to prepared substrate. To achieve good bond, SikaTop® Armatec®-110 EpoCem® must be applied well into the substrate, filling all pores (minimum layer thickness 0.5 millimeter). Apply subsequent repair mortars wet on wet freshly applied SikaTop® Armatec®-110 EpoCem® must be protected against contamination and rain until application of the repair mortar.

Application under dynamic loading:

SikaTop® Armatec®-110 EpoCem® has been tested with the following Sika repair mortars and is certified for dynamic loading applications. Refer to separate sheets for further information.

Dry Spray Process:

Corrosion Protection:	SikaTop® Armatec®-110 EpoCem®
Repair and overlay:	SikaCem®-Gunitex 133

Wet Spray Process:

Corrosion Protection and/or Bonding Primer:	SikaTop® Armatec®-110 EpoCem®
Repair and Overlay:	Sika MonoTop®-412 series

CURING TREATMENT

Protect the fresh mortar from rain while the material has not yet set.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

IMPORTANT CONSIDERATIONS

- Refer to the Method Statement for Concrete Repair using Sika MonoTop® system for more information regarding substrate preparation or refer to the recommendations provided in EN 1504-10.
- Avoid application in direct sun and/or strong wind and/or rain.

- Do not add water.
- Apply only to sound, prepared substrates.
- NOT recommended for use with fast setting concrete or mortars example Sika MonoTop®-211 FG / RFG.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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ISO 9001: Sika UAE LLC,
Sika Gulf B.S.C. (c),
Sika Saudi Arabia Co. Ltd.,
Sika Qatar LLC
ISO 14001: Sika UAE LLC,
Sika Gulf B.S.C. (c),
Sika Saudi Arabia Co. Ltd.
OHSAS: Sika UAE LLC,
Sika Gulf B.S.C. (c)

All products are supplied
under a management
system certified to conform
to the requirements of the
quality, environmental and
occupational health &
safety standards ISO 9001,
ISO 14001 and OHSAS
18001.

Product Data Sheet
SikaTop® Armatec®-110 EpoCem®
May 2018, Version 03.01
020302020050000001

SikaTopArmatec-110EpoCem-en-AE-(05-2018)-3-1.pdf



EUCOREPAIR V100

LOW SHRINKAGE, FIBER REINFORCED, NSF/ANSI STANDARD 61 EUCLID CHEMICAL
CERTIFIED VERTICAL & OVERHEAD REPAIR MORTAR

PACKAGING

- 46 lb (21 kg) bag
Code: 161V 46
- 46 lb (21 kg) pail
Code: 161V 05 (MTO)
- 10 lb (4.5 kg) pail
Code: 161V 10

APPROXIMATE YIELD

46 lb (21 kg) unit: 0.45 ft³ (0.013 m³) per unit when mixed with 1 gal (3.8 L) of potable water.

MINIMUM/MAXIMUM APPLICATION THICKNESS

Vertical: 1/8 to 4 inches (3.2 mm to 10 cm) per lift
Overhead: 1/8 to 2 inches (3.2 mm to 5 cm) per lift

CLEAN UP

Clean tools and equipment with water before the material hardens.

SHELF LIFE

1 year in original, unopened package

SPECIFICATIONS AND COMPLIANCES

- NSF/ANSI 61 certified for use with potable water
- ASTM C928 Standard Specification for Rapid Hardening Cementitious Materials for Concrete Repairs

DESCRIPTION

EUCOREPAIR V100 is a single-component, quick-setting, low shrinkage repair mortar formulated with unique polymers and fiber reinforcement for vertical and overhead repairs requiring high performance.

PRODUCT CHARACTERISTICS

FEATURES/BENEFITS

- Single-component for easy mixing and handling
- Excellent freeze-thaw resistance for difficult climates
- Polymer modified with fiber reinforcement
- NSF/ANSI Standard 61 certified
- Contains an integral corrosion inhibitor
- Low permeability helps protect rebar from corrosion
- High bond strength provides excellent adhesion
- Apply coatings after 6 hours at 70 °F (21 °C)

PRIMARY APPLICATIONS

- Vertical and overhead repairs
- Parking structures & bridges
- Water and wastewater treatment facilities
- Marine structures, tunnels, and dams
- Above and below grade applications

APPEARANCE

EUCOREPAIR V100 is a free-flowing powder designed to be mixed with water. After mixing and placing, the color may appear darker than the surrounding concrete. While this color will lighten as EUCOREPAIR V100 cures and dries out, the repair may always appear darker than the surrounding concrete.

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Test Method	Test Property	Values
ASTM C109M 2" (50 mm) cubes	Compressive Strength	3 hours 2,000 psi (13.8 MPa) 1 day 3,000 psi (20.7 MPa) 7 days 4,500 psi (31.0 MPa) 28 days 6,000 psi (41.4 MPa)
ASTM C496	Split Tensile Strength	28 days > 400 psi (2.8 MPa)
ASTM C348	Flexural Strength	7 days > 500 psi (3.4 MPa) 28 days > 600 psi (4.1 MPa)
ASTM C882	Bond Strength	7 days > 1,400 psi (9.7 MPa) 28 days > 1,800 psi (12.4 MPa)
ASTM C157M*	Length Change	28 days - 0.020%
	Unit Weight	~120 lb/ft ³ (1922 kg/m ³)
	Approximate Set Times	Initial Set 20 minutes Final Set 35 minutes

*3" x 3" x 11.25" specimens

WARRANTY: The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid's installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid's products for the Buyer's intended purposes.

DIRECTIONS FOR USE

Surface Preparation: Concrete surfaces must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. Mechanically abrade the surface to achieve a surface profile equal to CSP 5 - 7 in accordance with ICRI Guideline 310.2. Properly clean profiled area.

Priming & Bonding (Saw Cut & Chipped Out Repairs): Thoroughly clean any exposed reinforcing steel, and apply DURALPREP A.C. to the concrete and the reinforcing steel within the repair area. Refer to the DURALPREP A.C. technical data sheet for full instructions. Alternatively, application of EUCOWELD 2.0 to a dry substrate or a scrub coat of EUCOREPAIR V100 to the saturated surface dry (SSD) concrete surface may be used for bonding. The repair material must be placed on the scrub coat before the scrub coat dries out.

Priming & Bonding (Vertical & Overhead Skim Coats/Toppings): Apply EUCOWELD 2.0 to a dry substrate or a scrub coat of EUCOREPAIR V100 to the saturated surface dry (SSD) concrete surface. The repair material must be placed on the scrub coat before the scrub coat dries out.

Mixing: One 46 lb (21 kg) unit requires 0.9 to 1.0 gal (3.40 to 3.79 L) of potable water. All materials should be in the proper temperature range of 65 to 85 °F (18 to 29 °C). Single 46 lb (21 kg) units may be mixed with a drill and “jiffy” mixer. A paddle type mortar mixer may be used for large jobs. Add the appropriate amount of potable water to a clean mixing vessel, then gradually add the dry product. Do not exceed maximum water or add any additional additives. Mix for 3 to 5 minutes. Do not retemper. Do not mix more material than can be placed within 15 minutes.

Placement: Ambient and surface temperatures should be at least 45 °F (7 °C). Working time at 72 °F (22 °C) is approximately 10 to 15 minutes. After mixing, place the mortar into the prepared area to be repaired. Work the material firmly into the bottom and sides of the repair area to ensure good adhesion. EUCOREPAIR V100 should be placed in 1/8” to 4” (3 to 100 mm) lifts. If placing overhead, maximum depth per lift is 2” (5 cm). If multiple lifts are to be applied, score the previous lift after placing to provide a suitable surface for mechanically bonding subsequent lifts.

Finishing: Finish the repair material to the desired texture. Do not add water to the surface during the finishing operation. When placing under hot and windy conditions, the use of EUCOBAR evaporation retarder is recommended to prevent the loss of surface moisture.

Curing and Sealing: Curing is required. Proper curing procedures are important to ensure the durability and quality of the repair. For best results cure with wet burlap, plastic, or a water-based curing compound such as DIAMOND CLEAR VOX or SUPER DIAMOND CLEAR VOX. Do not use a solvent based curing compound on this product. If a curing compound is not desired, wet cure for a minimum of three days. When curing EUCOREPAIR V100 in potable water vessels, it is recommended to wet cure for 3 days, followed by 4 days of air cure prior to filling the vessel.

PRECAUTIONS/LIMITATIONS

- Store in a dry place.
- For optimum results, condition material to 65 to 85 °F (18 to 29 °C) at least 24 hours prior to use.
- Minimum application temperature is 45 °F (7 °C) and rising at time of application.
- Do not allow repairs to freeze until the material has reached a minimum of 1,000 psi (7 MPa) compressive strength.
- When necessary, follow the recommendations in ACI 305R “Guide to Hot Weather Concreting” or ACI 306R “Guide to Cold Weather Concreting”.
- Do not use as a horizontal topping.
- Do not use a solvent based curing compound on this product.
- In all cases, consult the Safety Data Sheet before use.

Rev. 03.22

WARRANTY: The Euclid Chemical Company (“Euclid”) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid’s installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid’s products for the Buyer’s intended purposes.

112.74

CONCRETE & MASONRY SMOOTH AND TEXTURED ELASTOMERIC PATCHES



**SHERWIN
WILLIAMS.**

PRODUCT DESCRIPTION

Concrete & Masonry Patches & Sealants bridge and seal cracks, joints and other openings in masonry substrates. Use to prevent further moisture penetration and damage. Products provide a repaired, paintable surface where cracks will not reappear.

PRODUCT ADVANTAGES

- Outstanding long-term protection
- Easy workability, application and clean-up
- Flexes with substrate movement
- Works with acrylic or elastomeric topcoats
- Seals cracks measuring 1/16" to 3/8"

FOR USE ON A WIDE VARIETY OF NON-STRUCTURAL MASONRY SUBSTRATES:

- Stucco
- EIFS
- Concrete block
- Brick
- Precast concrete
- Tilt-up concrete
- Commercial/Residential
- Interiors/Exteriors

PRODUCT AVAILABILITY:

Gun-Grade Textured

WL70010GT 6501-87388

10.1 oz Cartridge

Gun-Grade Smooth

WL70010GS 6501-87370

10.1 oz Cartridge

Brush-Grade, Smooth

WL700GLSB 6501-71788

Gallon Plastic Tub

Brush-Grade, Textured

WL700GLTB 6501-86117

Gallon Plastic Tub

Knife-Grade, Smooth

WL700GLSK 6501-87347

Gallon Plastic Tub

Knife-Grade, Textured

WL700GLTK 6501-87362

Gallon Plastic Tub

Color:

Off White

Coverage:

varies with surface

Drying Time, @ 77°F, 50% RH:

temperature and humidity dependent

Touch:

4 hours

Recoat with Concrete & Masonry Products:

24 hours

Topcoat with paint or primer:

12 hours

Flash Point:

N/A

Vehicle Type:

Acrylic

VOC (less exempt solvents):

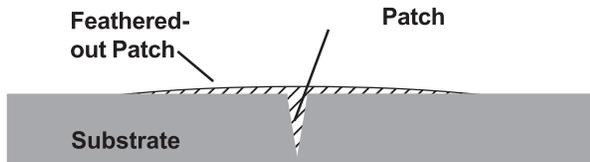
Product	Number	g/L	lb/gal
Gun-Grade Textured	WL70010GT	25	0.20
Gun-Grade Smooth	WL70010GS	25	0.20
Brush-Grade, Smooth	WL700GLSB	21	0.18
Brush-Grade, Textured	WL700GLTB	21	0.17
Knife-Grade, Smooth	WL700GLSK	25	0.20
Knife-Grade, Textured	WL700GLTK	24	0.20

CONCRETE & MASONRY SMOOTH AND TEXTURED ELASTOMERIC PATCHES

INSTALLATION: JOINT DESIGN

Small openings and cracks - up to 1/16" wide

Bridge over voids and small cracks up to 1/16" wide using Concrete & Masonry Patch. To ensure that the repaired area blends into the surrounding surface, provide sufficient crest over the opening to allow for shrinkage. The Patch must be feathered to zero at the edges using a brush, knife, or trowel, to prevent the repaired opening from telegraphing through the subsequent finishes. When tooling the Patch, use dry tools, or if needed, clean water can be used with the tool. Concrete & Masonry Patch sets up quickly, tool as soon as possible to provide the smoothest appearance. Do not apply more than 1/4" in depth in one application.



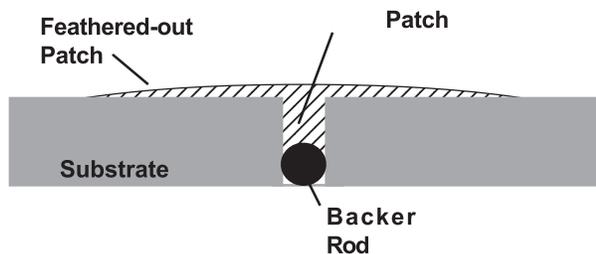
Large Openings and Cracks - from 1/16" to 3/8" wide

Cracks and voids between 1/16" and 3/8" wide should be opened to a sound surface. Flush out the opening to remove all dust. If dust is still evident, seal the surface with Loxon® Conditioner to bind the dust to the surface.

Fill the opening with Concrete & Masonry Patch. To ensure that the repaired area blends into the surrounding surface, provide sufficient crest over the opening to allow for shrinkage. The Patch must be feathered to zero at the edges using a brush, knife, or trowel, to prevent the repaired opening from telegraphing through the subsequent finishes. When tooling the Patch, use dry tools, or if needed, clean water can be used with the tool. Concrete & Masonry Patch sets up quickly, tool as soon as possible to provide the smoothest appearance. Allow this to cure 24 hours. Do not apply more than 1/4" in depth in one application.

The depth of the opening should be 1/2 the width of the opening, with a maximum depth of 1/2". In deep openings, the depth of the Patch should be controlled with a closed cell, "non-gassing" type backer rod. The backer rod should be about 1/8" wider than the opening. Do not apply more than 1/4" in depth in one application.

If the opening is 1/4" or greater, for maximum performance, prevent 3 point adhesion with backer rods or bond breaker tape. Three point adhesion problems occur in cracks when the Patch adheres to the walls and the bottom of a crack, and a significant amount of flexibility is lost. Two point adhesion - wall to wall in a crack - using backer rods or bond breaker tape offers the maximum flexibility and performance.



CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water.

CAUTIONS

Apply at temperatures above 50°F and humidity less than 90%

Do not apply to wet, frozen or frost covered surfaces.

Protect from freezing.

Do not use below grade or underwater.

Not for use as a structural repair.

Do not use soapy water for tooling.

Avoid over-tooling which may change the final appearance.

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Sheet.



The information and suggestions contained herein are believed to be accurate based upon our current Knowledge and experience. However, such information and suggestions may not be pertinent, suitable or complete as to any particular construction substrate, application, application process or conditions. SELLER HEREBY DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES or merchantability and fitness for a particular purpose. It shall be buyer's responsibility to ascertain the suitability of any mentioned products and the completeness of any information and/or suggestions for its customers use and uses.

CORPORATE OFFICES & EASTERN PLANT

2422 E. 15th Street
Panama City, Florida 32405
PHONE: (850) 769-0347
FAX: (850) 913-8619

COMMERCIAL SALES OFFICE

4101 Ravenswood Rd, Ste. 101A
Ft. Lauderdale, Florida 33312
PHONE: (850) 581-0771
FAX: (954) 581-9516

WESTERN PLANT

5950 S Avalon Blvd.
Los Angeles, CA 90003
PHONE: (323) 233-3111
FAX: (323) 232-1071

TC 100 TEXTURED COATING

TC 100 Textured Coating is a high-build plasticized, oil-base, polyester-resin system specially formulated to provide excellent water resistance, durability, low-maintenance and long life.

TC 100 Textured Coating is recommended for use over concrete, cement plaster, block systems, brick systems, metal surfaces and other manufacturer approved surfaces. Masonry, including mortar, concrete and cement plaster must cure a minimum of 28 days prior to coating.

Unless otherwise directed, Primers #27, #62 or TEX•STOP™ PREMIUM STAIN BLOCKING PRIMER must be used.

LIMITATIONS: APPLICATION OF THE COATING MUST BE UNDER THE FOLLOWING IDEAL WEATHER CONDITIONS:

1. Rain is not imminent and surfaces are not damp or frozen.
2. Temperature is within a 45°F and rising, not to exceed 100°F (7°C to 38°C) range.
3. Incompatible substrate release agents, from oils, and any foreign matters are removed prior to priming and coating.
4. Roof and parapet top caps are installed and sealed against water penetration prior to priming and coating.
5. Primer that has been exposed to ultraviolet rays more than four (4) weeks must be re-primed.
6. Material use is above grade only. Do not use below grade.
7. Joint sealant must cure 48 hours prior to priming surfaces and be compatible with selected TEX•COTE® products.
8. Retaining walls, planter boxes, etc. must be waterproofed on the backside with a below grade asphaltic type material prior to backfilling.

CAUTION: This product, in liquid form, contains petroleum distillate which will cause serious illness or death if swallowed, or if large quantities are absorbed into ones body. Use only in well ventilated areas. In liquid form, keep away from heat sources and children. If swallowed do not induce vomiting. Call physician at once. For additional information see MSDS, available upon request.

Note: product must be used within 12 months: store and handle as specified by manufacturer.

RECOMMENDED EQUIPMENT

Spray Application – Equipment similar to Graco President, 10:1 pump and Graco 204-000 spray gun. TEX•COTE® application manual available upon request.

Tip sizes: 1/16" to 3/8" depending on the texture, i.e. FT, CT, XX

SURFACE PREPARATION

1. All surfaces must be sound, clean and dry prior to application of primer and coating.
2. Such surface contaminants as dust, dirt, mildew*, form oils and loose substrates should be thoroughly removed. ***Mildew must be killed using a mildewcide or bleach solution prior to application of primer or coating.**
3. Painted surfaces exhibiting loose, flaking, or oxidized paint surfaces must be thoroughly removed by water blasting, electric sanding, or wire brushing as required by manufacturer.
4. All surfaces to be coated must be primed.
5. Large cracks, holes or voids must be filled with the appropriate patching compound and Tex•Bond Cement Adhesive.
6. The texture of the patched areas should match the existing surrounding finish. Cracks less than one-eighth (1/8) of an inch should be filled with FLEX•PATCH Patching Compound.
7. Interfacing of wall joints should be sealed with a urethane sealant.



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WESTERN PLANT

5950 S Avalon Blvd.
Los Angeles, CA 90003
PHONE: (323) 233-3111
FAX: (323) 232-1071

TC 100 TEXTURED COATING**DRYING TIME UNDER IDEAL CONDITIONS**

Set to touch: overnight – Fully cured: 10 – 14 days

COVERAGE RATE

40-50 sf/gal. Coverage rates may vary due to wall surface textures and porosity. A minimum of 16.5 – 20.5 mils (.42 - .52mm) dry film thickness is required.

QUANTITY AND COLORS

Container size:

- Five (5) gallon cans
- Thirty (30) gallon drums

Colors

TCA stock colors or TCA will match your special colors upon request for additional charge.

TECHNICAL DATA

- Passes Federal Specifications TT-C-555b, Type I and II.
- Passes 98 miles per hour wind driven rain test.
- Water vapor permeability; no less than 0.4 metric perms.
- Solids, By Weight 61%; By Volume 53%
- Mandrel Bend Test: One (1) inch.
- Accelerated Weathering:
TEX·COTE® 100 – 5,000 Hours.
- Freeze/Thaw Test : 50 cycles.
- Flame Spread: ASTM E84; NFPA Class A; Uniform building code Class A.
- Salt Spray: ASTM B 117-64
TC-100 – 300 hours.
- Abrasion ASTM D 968 Falling Sand:
TC-100 – 1,160 liters.

CLEAN UP

1. Use mineral spirits for cleaning wet materials.
2. Methyl Ethyl Ketone (MEK) for dry materials.

WARRANTY

Warranty: This warranty will be for material only. Textured Coatings of America, Inc. shall have no obligation to otherwise participate in labor or cost associated with effecting repairs. Specimen copy of warranty available upon request.

MAINTENANCE

No particular maintenance is required. However should any of the products become soiled, simply clean with light water pressure and mild detergent.

TECHNICAL ASSISTANCE

Technical assistance is available from the manufacturer's facilities or sales representatives throughout the United States. For assistance call the factory nearest you. Florida, call 800-219-0492, California call 800-906-1444

Additional product information is available upon request.

All TEX·COTE® products comply with federal and state Volatile Organic Compound (VOC) rules and regulations; please contact your nearest TCA office for assistance on the local VOC compliance in the area of intended use.

Loxon® XP

Waterproofing Masonry Coating-Flat

LX11-50 Series


**SHERWIN
WILLIAMS**

CHARACTERISTICS

Loxon XP is an exterior, high build coating that provides excellent flexibility, durability and weather resistance. This product will protect against wind-driven rain when used on concrete, CMU, stucco and shotcrete-gunite. It is highly alkali and efflorescence resistant. This may be applied to a surface with a pH of 6 to 13.

Apply directly to fresh concrete (at least 7 days old). Shotcrete/gunite surfaces may be painted after 3 days.

Can be applied over high pH (up to 13) substrates, no primer required.

Can be applied down to 35°F.

Color: Most Colors

1 coat system, brush, roller, or spray applied, coverage per coat:

Wet mils: 14.5-18.5

Dry mils: 6.5-8.4

Coverage sq.ft. per gallon 85-110

Can be applied up to 40 mils wet.

Coverage will vary with the substrate and the texture. Coverage on porous & rough stucco 80 square feet per gallon.

Drying Schedule @ 50% RH: temperature and humidity dependent.

Touch: @35-45°F @ 45°F+ 6 hrs 4 hrs

Recoat: 24-48 hrs 24 hrs

Drying time is temperature, humidity, and film thickness dependent.

Finish: 0-10 units @ 85°

Tinting with CCE only:

Base	oz. per gallon	Strength
Extra White	0-6	SherColor
Deep Base	4-12	SherColor
Ultra Deep	10-12	SherColor
Light Yellow	0-12	SherColor

Extra White LX11W0051

(may vary by color)

V.O.C. (less exempt solvents):

less than 50 grams per litre; 0.42 lbs. per gallon

As per 40 CFR 59.406

Volume Solids: 45 ± 2%

Weight Solids: 61 ± 2%

Weight per Gallon: 11.46 lb

Flash Point: N.A.

Vehicle Type: Proprietary Acrylic

Shelf Life: 36 months, unopened

Mildew Resistant:

This coating contains agents which inhibit the growth of mildew on the surface of this coating film. Passes ASTM D3273/D3274

COMPLIANCE

As of 2/4/2022, Complies with:

OTC	Yes
OTC Phase II	Yes
S.C.A.Q.M.D	Yes
CARB	Yes
CARB SCM 2007	Yes
CARB SCM 2020	Yes
Canada	Yes
LEED® v4 & v4.1 Emissions	N.A.
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certified	No
MIR-Manufacturer Inventory	No
MPI®	Yes
SWRI®- Wall Coating	Yes

APPLICATION

Temperature:

minimum 35°F

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer: Do not reduce

Airless Spray:

Pressure 2300 p.s.i.

Tip .021 inch

Brush Use a nylon/polyester brush

Roller Cover Use a ½ to 1½ inch nap synthetic roller cover.

The substrate and its condition will determine the application procedure. Considerations to minimize pinholes:

- 2 coat application with overnight drying between coats
- Spray application with backrolling
- Power rolling

Spray and backroll on porous & rough stucco to achieve required film build and a pin-hole free surface.

When the air temperature is at 35°F, substrates may be colder. Prior to painting, check to be sure the air, surface, and material temperatures are above 35°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 2-3 hours.

Do not apply at air or surface temperatures below 35°F or when air or surface temperatures may drop below 35°F within 48 hours.

Do not reduce.

APPLICATION TIPS

For proper waterproofing performance and to resist alkalis, 2 coats of the coating **MUST** be applied between 14.5 -18.5 mils wet per coat.

A total dry film thickness of 13 - 16.8 mils of topcoat and a surface with 10 or less pinholes per square foot is required for a waterproofing system.

For extremely porous block a coat of Loxon Block Surfacers may be required to achieve a pinhole free surface.

For rehabilitating existing concrete water tanks, additional products may be used.

RECOMMENDED SYSTEMS

Concrete, Stucco, Concrete Block, CMU, Split-face Block, and other Cementitious surfaces

1 coat Loxon Acrylic Block Surfacers (if needed) or Loxon Conditioner (if needed)

1-2 coats Loxon XP

Previously Coated in good condition:

After power washing, apply 1 coat of Loxon XP over the surface.

Incidental Wood:

1 coat Exterior Latex Wood Primer-
2 coats Loxon XP

Incidental Metal:

(steel, galvanized, or aluminum):

1 coat Pro Industrial Pro-Cryl Primer

1-2 coats Loxon XP

Waterproofing System:

- Two coats of topcoat
- 6.5 to 8.4 mils d.f.t. per coat
- 13 to 16.8 mils total dry film thickness
- 10 or less pinholes per square foot

Loxon® XP

Waterproofing Masonry Coating-Flat

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull. Seal stains from water, smoke, ink, pencil, grease, etc. with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Concrete, CMU, Stucco:

On tilt-up and poured-in-place concrete, commercial detergents and sandblasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern. Concrete and mortar must be cured at least 7 days at 75°F. Fill bugholes, air pockets, cracks, and other voids with an elastomeric patch or sealant. Rough surfaces can be filled to provide a smooth surface.

Incidental Metal:

Wash to remove any oil, grease, or other surface contamination. All corrosion must be removed with sandpaper, wire brush, or other abrading method. Primer required.

Incidental Wood:

Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth. All patched areas must be primed. Primer required.

Sealing and Patching—After cleaning the surface thoroughly, prime the concrete surface with Loxon XP, apply an elastomeric patch or sealant if needed, allow to dry, then topcoat.

To improve the performance, consider:

- Use caution when preparing the substrate to create a uniform surface.
- Cracks, crevices, and through-wall openings must be patched with an elastomeric patch or sealant.
- Fill voids and openings around window and doors with an elastomeric patch or sealant.
- Stripe coat all inside and outside corners and edges with 1 coat of Loxon XP coating.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

PHYSICAL PROPERTIES

Do not paint on wet surfaces.

LX11W0051

Wind-Driven Rain Test : Pass
Method: ASTM D6904 7 day cure
2 coats Loxon XP @ 8.1 mils d.f.t. per coat

Water Vapor Permeance:
(perms) 18.03 grains/h-ft²-in Hg.
Method: ASTM D1653 7 day cure @ 73°F & 50% RH: Method B, Condition A-Wet cup
2 coats Loxon XP @ 8.1 mils d.f.t. per coat

Elongation : 312%
Method: ASTM D412, 7 day cure @ 72°F & 50% RH 20 inch per minute
2 coats Loxon XP @ 8.1 mils d.f.t. per coat

Tensile Strength : 295 p.s.i.
Method: ASTM D412, 7 day cure @ 72°F & 50% RH 20 inch per minute
2 coats Loxon XP @ 8.1 mils d.f.t. per coat

Flexibility:
Method: ASTM D522, 9 mils d.f.t., 1 day cure
Result: Pass 1/8 inch

Alkali Resistance:
Method: ASTM D1308, 7 day cure,
11.25 mils d.f.t.
Result: Pass

Chloride Ion Permeability:
Result: 243 coulombs
Result: "Very Low" Permeability Class

CO₂ Diffusion (anti-carbonation):
Method: ASTM F2476
Result: 344 meters
equivalent air thickness >50 meters to pass
8.0 g/m²/24 hrs

Crack Bridging: Class A5 Pass
Method: EN 1062-7 Method A
Result: up to 2.5 mm @ -10°C

Efflorescence:
Method: ASTM D7072-19
1 coat, 1 day cure, 7.2 d.f.t.
Result: Pass

Adhesion:
Method: ASTM D4541
2 coats, 7 day cure, 7.2 d.f.t. per coat
Result: 375 average p.s.i.

CAUTIONS

For exterior use only.

Protect from freezing.

Non-photochemically reactive.

Not for use on horizontal surfaces (floors, roofs, decks, etc.) where water will collect.

Not for use below grade. Will not withstand hydrostatic pressure.

Before using, carefully read **CAUTIONS** on label.

ZINC. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

HOTW 2/4/2022 LX11W0051 27 00
FRC, SP

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.



Actual Cost
Settlement Work



**Port St. Lucie Civic Center
Investigative Protocol – Chord Plate Repairs**

Report Date: 2022.02.10
Revision 01: 2023.03.10

IP ID – SK02-SK04 Chord Plate Repair

Location: Level 6

Repair Protocol/Procedure:

This Investigative Protocol will be supplemented with a Repair Protocol once existing conditions have been surveyed.

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Pedestrian access to the work area and immediate level below will be restricted.
- Existing sealant will be removed to expose chord plates at all locations noted for repair in the Jezerinac Floor Plan.
- Suffolk, Durastress and a third party engineer will survey existing conditions to verify installation against Contract Documents and applicable tolerances.
- A report identifying locations as acceptable or not will be produced.
- Repair Protocols will be developed based on recommendations from Trade Partner and Third Party Engineer. However, all repair details will be based on approved details from the Contract Documents.
- Clean work area of any construction debris.

List of Attachments:

Jezerinac Level 6 Repair Locations

Approvals:

Owner: _____ Date: _____

Owner’s Consultant: _____ Date: _____

General Contractor: _____ Date: _____



**Port St. Lucie Civic Center
Repair Protocol – Standard Caulking at Roof**

Report Date: 2022.02.10

Revision 01: 2023.03.10

RP ID – SK16-20, 23-27 Standard Caulking at Roof

Observation: Remove and reinstall joint sealants at Roof Level.

Location: Level 6

Repair Protocol/Procedure:

Product submittals to be submitted for review by the City prior to start of work. Jezerinac SK15 will be used for basis of design. This RP may be modified with additional input from Trade Partner.

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Sealant work in these locations will follow replacement of sealant at Double Tee Flanges.
- Existing sealant will be removed and surfaces properly prepared.
- Joint Sealants will be installed in accordance with manufacturer's recommendations.
- Clean work area of any construction debris.

List of Attachments:

Jezerinac SK15 Sealant Specifications

Jezerinac SK16

Jezerinac SK17

Jezerinac SK18

Jezerinac SK19

Jezerinac SK20

Jezerinac SK23

Jezerinac SK24

Jezerinac SK25

Jezerinac SK26

Jezerinac SK27



**Port St. Lucie Civic Center
Repair Protocol – Standard Caulking at Roof**

Approvals:

Owner: _____ Date: _____

Owner's Consultant: _____ Date: _____

General Contractor: _____ Date: _____

JOINT, SEALANT, AND COATING NOTES

A. PRODUCTS:

1. VEHICULAR TRAFFIC DECK WATERPROOFING
 - VULKEM® 350/346/346, MANUFACTURED BY TREMCO
 - MASTERSEAL® VEHICULAR TRAFFIC 1500, MANUFACTURED BY MASTER BUILDERS
 - SIKALASTIC® - 720 ONE SHOT, MANUFACTURED BY SIKA
2. POLYURETHANE SEALANT (NON-SAG)
 - DYMERIC® 240FC, MANUFACTURED BY TREMCO
 - MASTERSEAL® NP2 OR NP1, MANUFACTURED BY MASTER BUILDERS
 - SIKAFLEX®- 2C NS EZ MIX, MANUFACTURED BY SIKA
3. POLYURETHANE SEALANT (SELF-LEVELING & SEMI-SELF-LEVELING)
 - THC-901 OR VULKEM 445SSL, MANUFACTURED BY TREMCO
 - MASTERSEAL® S1.2, MANUFACTURED BY MASTER BUILDERS
 - SIKAFLEX®- 2C S1, MANUFACTURED BY SIKA
4. BACKER ROD
 - SOF®ROD BI-CELLULAR BACKER ROD, MANUFACTURED BY NOWACO (OR EQUAL)

B. SUBSTRATE PREPARATIONS:

1. SEALANT JOINT REPLACEMENT WILL REQUIRE REMOVAL OF EXISTING SEALANT, THEN MECHANICAL ABRASION OF SUBSTRATES TO REMOVE ALL EXISTING SEALANT RESIDUE AND CONTAMINANTS. MECHANICAL ABRASION MUST RESULT IN EXPOSING CLEAN VIRGIN CONCRETE SUBSTRATES. NEW SEALANT ADHESION SUBSTRATES RESULTING FROM WET-SAW REMOVAL OF SEALANT (AND POTENTIALLY CONCRETE) WILL REQUIRE PRESSURE WASHING TO REMOVE CONTAMINANTS SUSPENDED IN THE WATER PRODUCED BY THE CONCRETE CUTTING PROCEDURE.
2. SEALANT APPLICATIONS MAY REQUIRE PRIMER DEPENDING ON MANUFACTURER RECOMMENDATIONS AND PRE-REPAIR FIELD SEALANT ADHESION TESTING TO VERIFY SUBSTRATE PRIMING AND PREPARATION REQUIREMENTS. FIELD SEALANT ADHESION TESTING SHOULD FOLLOW THE GUIDELINES OF ASTM C 1521 STANDARD PRACTICE FOR EVALUATING ADHESION OF INSTALLED WEATHERPROOFING SEALANT JOINTS.
3. BE MINDFUL THAT THE CONCRETE TRAFFIC DECK SUBSTRATES FOR THE TRAFFIC COATINGS WILL REQUIRE SHOT BLASTING TO ATTAIN AND ICRI SCP-3 SURFACE PROFILE. THE APPLICATION OF THE TRAFFIC COATING TO THE TOPS OF THE TOP DECK COLUMNS WILL REQUIRE THAT THE EXISTING TEXTURED COATING ON THE SPANDREL PANELS BE REMOVED AT SUBSTRATES INTENDED FOR THE TRAFFIC COATING. AT THE LOCATIONS WHERE THE TEXTURED COATING IS REMOVED, THE EXPOSED CONCRETE WILL REQUIRE MECHANICAL ABRASION TO REMOVE ALL EXISTING COATING RESIDUE AND CONTAMINANTS. MECHANICAL ABRASION MUST RESULT IN EXPOSING CLEAN VIRGIN CONCRETE SUBSTRATES. AT UN-COATED CONCRETE AT THE TOPS OF THE COLUMNS, PRESSURE WASHING SHOULD SUFFICE SINCE THERE WILL BE NO VEHICLE TRAFFIC TO ABRASE THE COATING.

C. MOCK-UPS:

1. THE CONTRACTOR SHALL ASSEMBLE MOCK-UPS FOR ALL REPAIR AND REPLACEMENT PROCEDURES. MOCK-UPS SHALL BE APPROVED BY THE OWNER OR OWNERS REPRESENTATIVE BEFORE INSTALLATION BEGINS.
2. PREMOCKUP MEETINGS SHALL BE SCHEDULED BY THE CONTRACTOR BETWEEN ALL APPLICABLE SUB CONTRACTORS AND THE OWNER PRIOR TO ASSEMBLY OF MOCK-UPS.

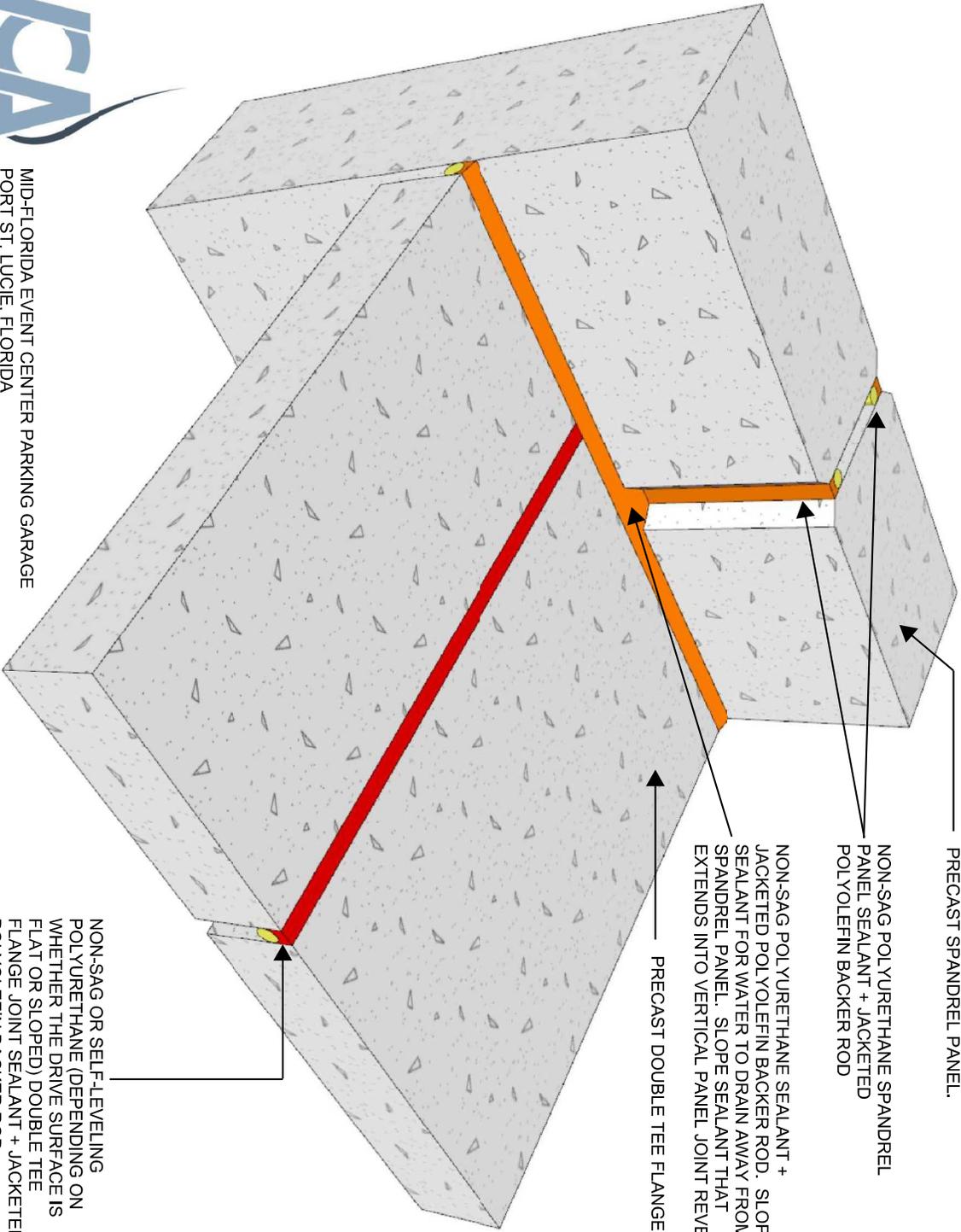


City of Port St. Lucie
MIDDLEFLORIDA Credit Union Event Center Parking
Garage

Date Issued:	02/14/23
Project No:	19.01.010
Drawn By:	WCA
Checked By:	WJR

Sheet No: **SK-15**

TO THE BEST OF THE ENGINEERS KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND MATERIAL SPECIFICATIONS



WCA
 EIGHTIGHT
 STRUCTURE ANALYSTS
 MID-FLORIDA EVENT CENTER PARKING GARAGE
 PORT ST. LUCIE, FLORIDA
 WCA PROJECT NO. 21021 02/03/22 PRC
 SKETCH NO. 21021.1



Engineering | Sophisticated | Human
 480 HIBISCUS STREET, SUITE 107 WEST PALM BEACH, FL 33401
 T 561.622.8888
 CERTIFICATE OF AUTHORIZATION FL #30785

City of Port St. Lucie

MIDFLORIDA Credit Union Event Center
 Parking Garage

Date Issued:	02/14/23
Project No:	19.01.010
Drawn By:	WCA
Checked By:	WJR

Sheet No: SK-16

NON-SAG OR SELF-LEVELING
 POLYURETHANE (DEPENDING ON
 WHETHER THE DRIVE SURFACE IS
 FLAT OR SLOPED) DOUBLE TEE
 FLANGE JOINT SEALANT + JACKETED
 POLYOLEFIN BACKER ROD

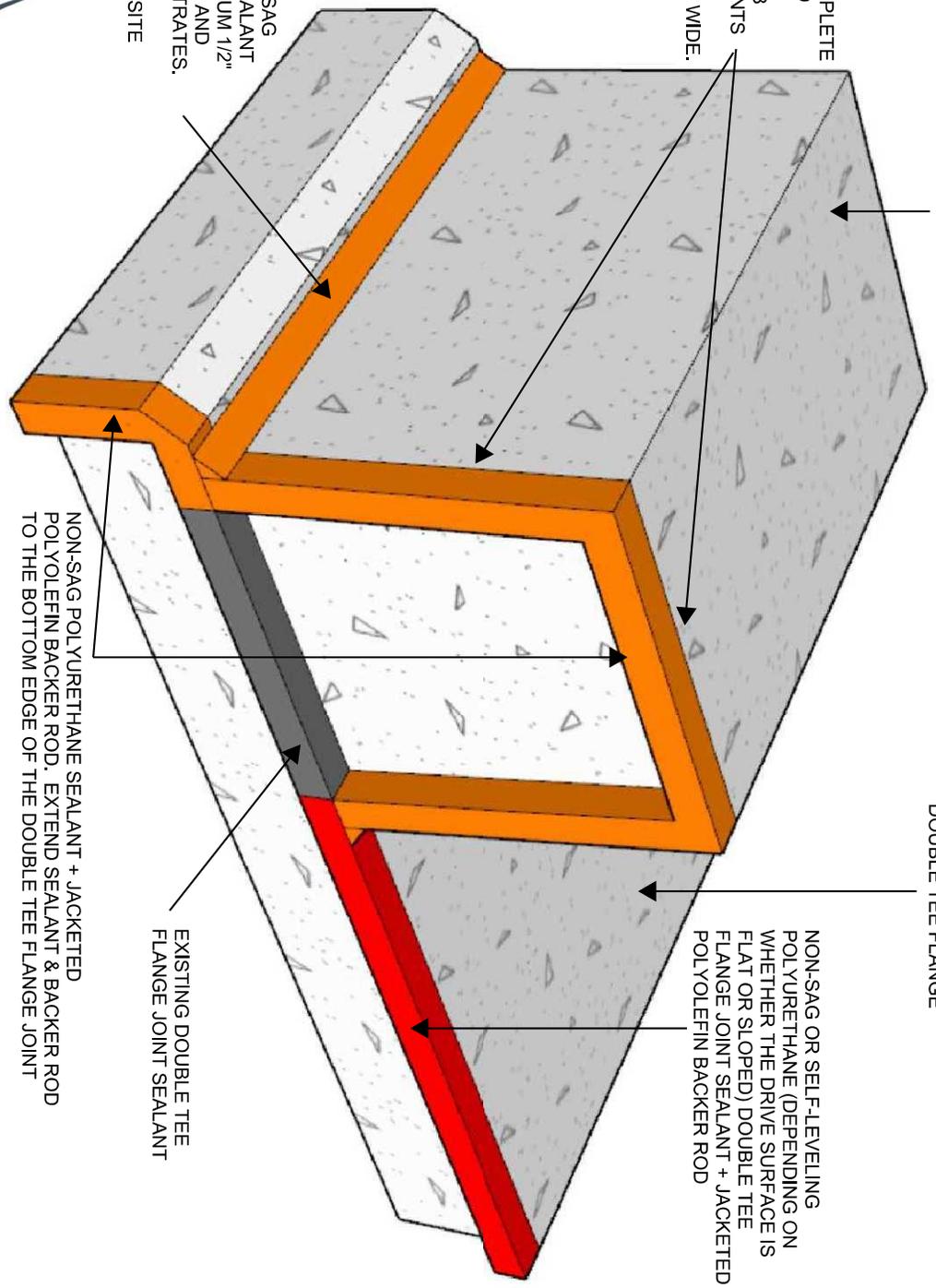
TO THE BEST OF THE ENGINEER'S
 KNOWLEDGE, THE PLANS AND
 SPECIFICATIONS COMPLY WITH THE
 APPLICABLE BUILDING CODES AND
 MATERIAL SPECIFICATIONS

CONCRETE CURB ADJACENT TO LIGHT WALLS

DOUBLE TEE FLANGE

SAW CUT INCOMPLETE CURB JOINTS TO COMPLETELY SEPERATE CURB SEGMENTS. JOINTS SHOULD BE A MINIMUM OF 3/4" WIDE.

NON-SAG OR SELF-LEVELLING POLYURETHANE (DEPENDING ON WHETHER THE DRIVE SURFACE IS FLAT OR SLOPED) DOUBLE TEE FLANGE JOINT SEALANT + JACKETED POLYOLEFIN BACKER ROD



CONTINUOUS NON-SAG POLYURETHANE SEALANT COVE JOINT. MINIMUM 1/2" BOND TO VERTICAL AND HORIZONTAL SUBSTRATES. SEE SKETCH SK-15 FOR VIEW OF OPPOSITE SIDE OF CURB.



WATERTIGHT CONSTRUCTION ANALYSTS

MID-FLORIDA EVENT CENTER PARKING GARAGE
PORT ST. LUCIE, FLORIDA
WCA PROJECT NO. 21021 02/03/22 PRC
SKETCH NO. 21021 2A

NOTE: DOUBLE TEE FLANGE ON OPPOSITE SIDE OF FLANGE TO FLANGE SEALANT JOINT IS NOT SHOWN FOR PURPOSE OF CLARITY.



Engineering | Sophisticated | Human

480 HIBISCUS STREET, SUITE 107, WEST PALM BEACH, FL 33401
T 561.622.8888
CERTIFICATE OF AUTHORIZATION FL #30785

City of Port St. Lucie

MIDFLORIDA Credit Union Event Center Parking Garage

Date Issued: 02/14/23

Project No: 19.01.010

Drawn By: WCA

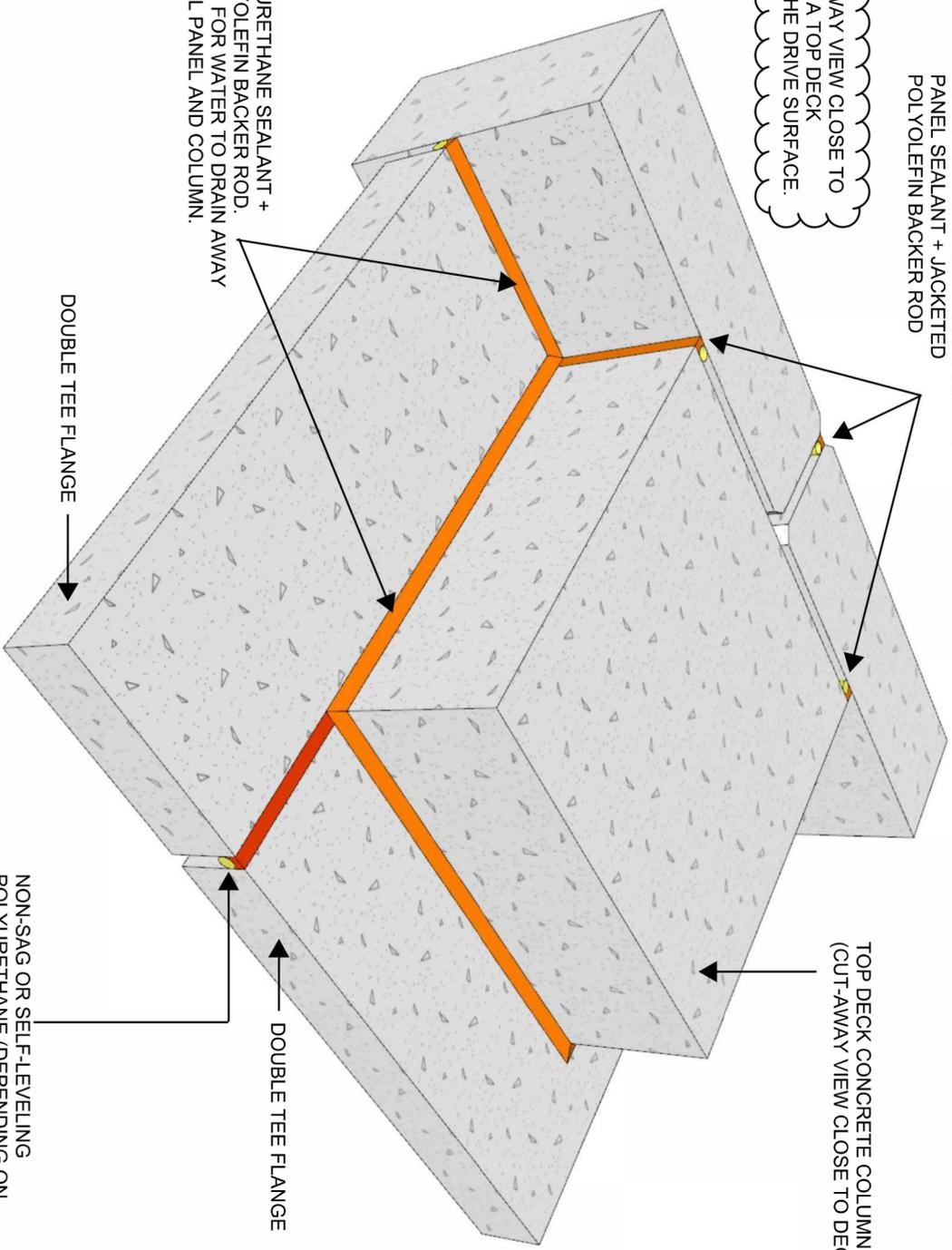
Checked By: WJR

Sheet No: SK-17

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND MATERIAL SPECIFICATIONS

NON-SAG POLYURETHANE SPANDREL
 PANEL SEALANT + JACKETED
 POLYOLEFIN BACKER ROD

THIS IS A CUT-AWAY VIEW CLOSE TO
 THE BOTTOM OF A TOP DECK
 COLUMN NEAR THE DRIVE SURFACE.



NON-SAG POLYURETHANE SEALANT +
 JACKETED POLYOLEFIN BACKER ROD,
 PROVIDE SLOPE FOR WATER TO DRAIN AWAY
 FROM SPANDREL PANEL AND COLUMN.

DOUBLE TEE FLANGE

NON-SAG OR SELF-LEVELLING
 POLYURETHANE (DEPENDING ON
 WHETHER THE DRIVE SURFACE IS
 FLAT OR SLOPED) DOUBLE TEE
 FLANGE JOINT SEALANT + JACKETED
 POLYOLEFIN BACKER ROD

DOUBLE TEE FLANGE

TOP DECK CONCRETE COLUMN
 (CUT-AWAY VIEW CLOSE TO DECK)



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City of Port St. Lucie

MIDFLORIDA Credit Union Event Center
 Parking Garage

Date Issued: 02/14/23

Project No: 19.01.010

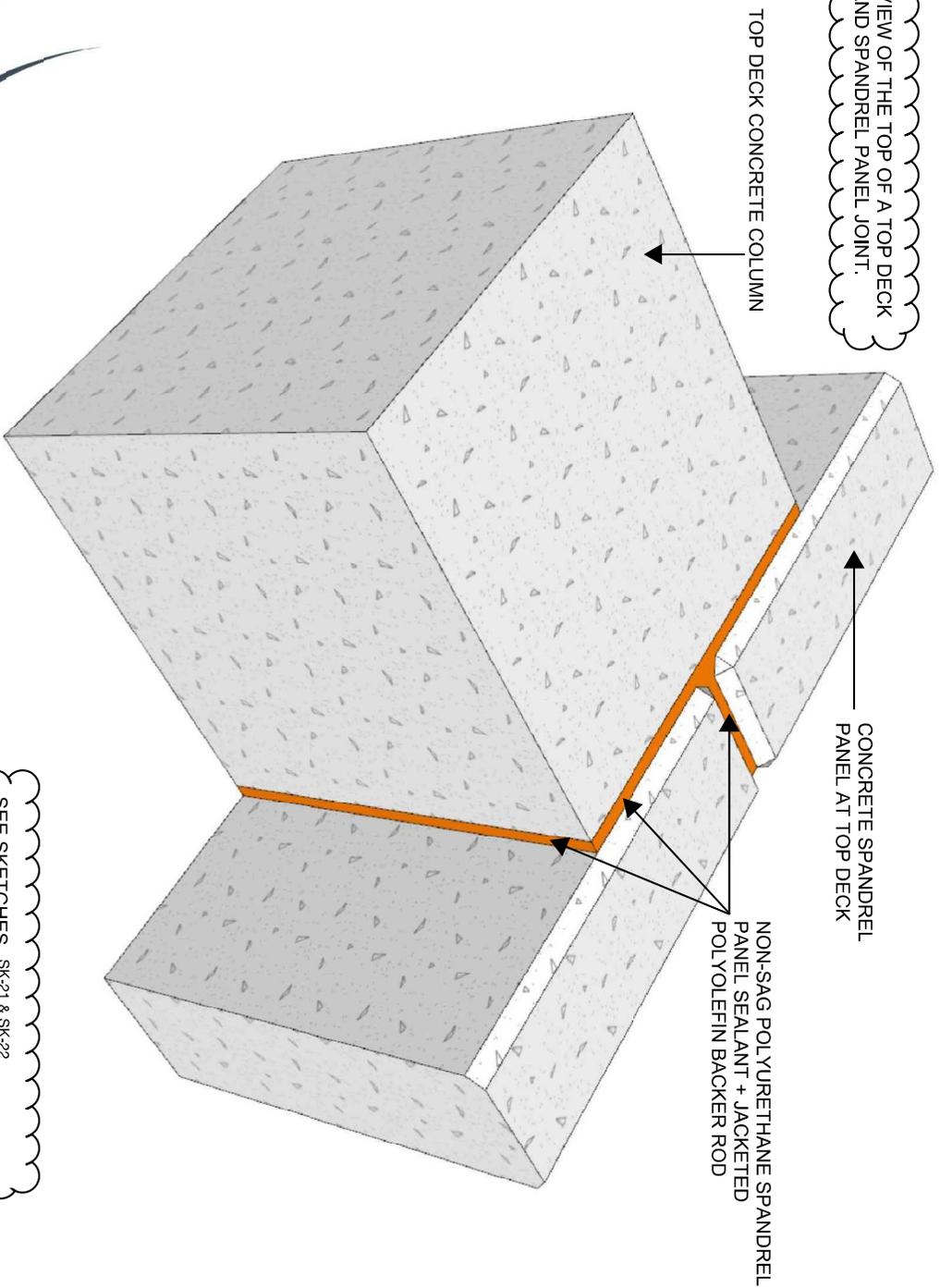
Drawn By: WCA

Checked By: WJR

Sheet No: SK-19

TO THE BEST OF THE ENGINEER'S
 KNOWLEDGE, THE PLANS AND
 SPECIFICATIONS COMPLY WITH THE
 APPLICABLE BUILDING CODES AND
 MATERIAL SPECIFICATIONS

THIS IS A VIEW OF THE TOP OF A TOP DECK COLUMN AND SPANDREL PANEL JOINT.



SEE SKETCHES SK-21 & SK-22 FOR NEXT CONSECUTIVE STEPS.



MID-FLORIDA EVENT CENTER PARKING GARAGE



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 T 561.622.8985
 CERTIFICATE OF AUTHORIZATION FL #30785

City of Port St. Lucie

MIDFLORIDA Credit Union Event Center
 Parking Garage

Date Issued: 02/14/23

Project No: 19.01.010

Drawn By: WCA

Checked By: WJR

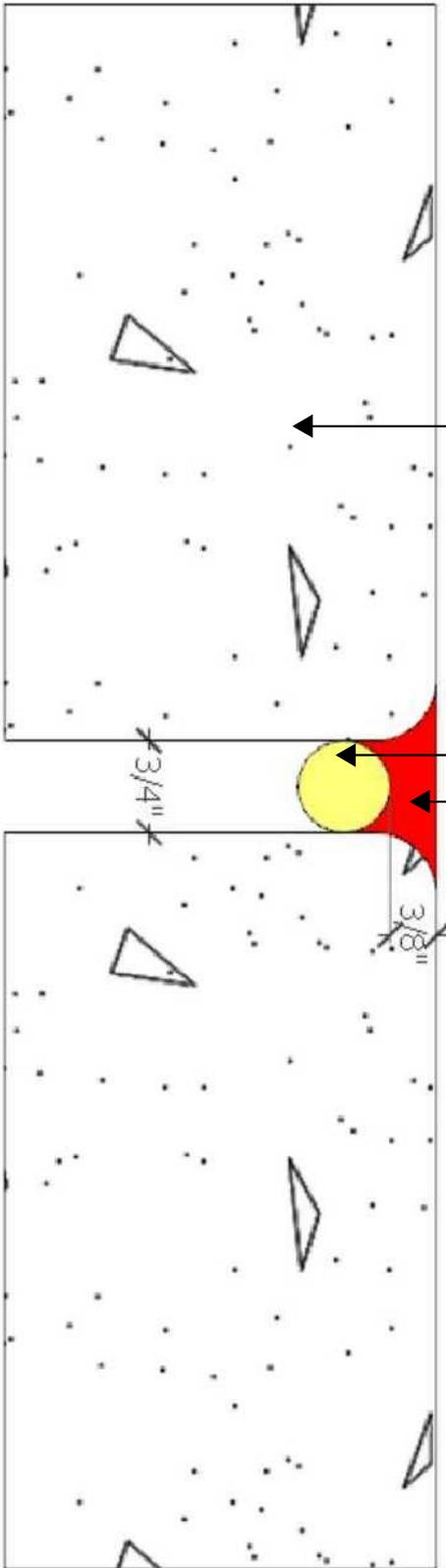
Sheet No: SK-20

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND MATERIAL SPECIFICATIONS

NON-SAG OR SELF-LEVELING (DEPENDING UPON DRIVE RAMP SLOPE) POLYURETHANE SEALANT

NOTE: DOUBLE TEE FLANGE TO INVERTED TEE GIRDER JOINT IS SIMILAR.

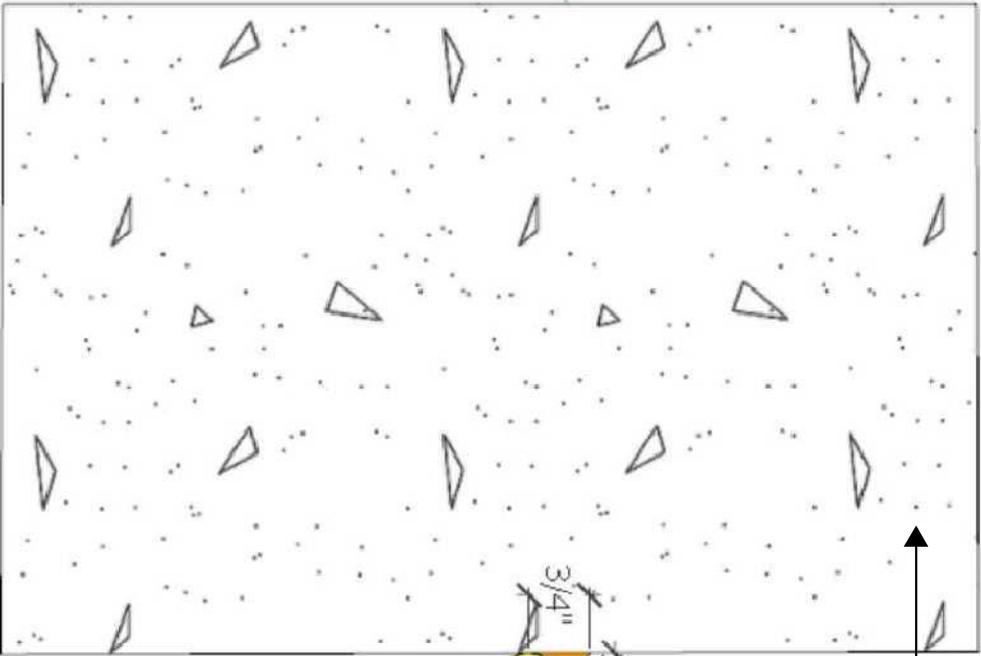
JACKETED POLYOLEFIN BACKER ROD



JEZERINAC GROUP
 Engineering | Sophisticated | Human
 480 HIBISCUS STREET, SUITE 107 WEST PALM BEACH, FL 33401
 T 561.622.8888
 CERTIFICATE OF AUTHORIZATION FL #30785

City of Port St. Lucie
 MIDFLORIDA Credit Union Event Center
 Parking Garage

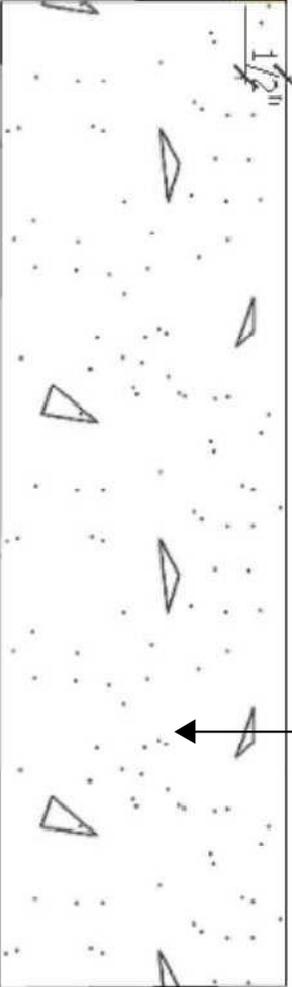
Date Issued:	02/14/23	TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND MATERIAL SPECIFICATIONS
Project No:	19.01.010	
Drawn By:	WCA	
Checked By:	WJR	
Sheet No:	SK-23	



SPANDREL PANEL

DOUBLE TEE FLANGE

NON-SAG POLYURETHANE SEALANT +
JACKETED POLYOLEFIN BACKER ROD.
PROVIDE SLOPE FOR WATER TO DRAIN
AWAY FROM SPANDREL PANEL.



NOTE: INVERTED TEE GIRDER TO
SPANDREL PANEL JOINT IS SIMILAR.



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T 561.622.8888
CERTIFICATE OF AUTHORIZATION FL #30785

City of Port St. Lucie

MIDFLORIDA Credit Union Event Center
Parking Garage

Date Issued:	02/14/23
Project No:	19.01.010
Drawn By:	WCA
Checked By:	WJR
Sheet No:	SK-24

TO THE BEST OF THE ENGINEER'S
KNOWLEDGE, THE PLANS AND
SPECIFICATIONS COMPLY WITH THE
APPLICABLE BUILDING CODES AND
MATERIAL SPECIFICATIONS



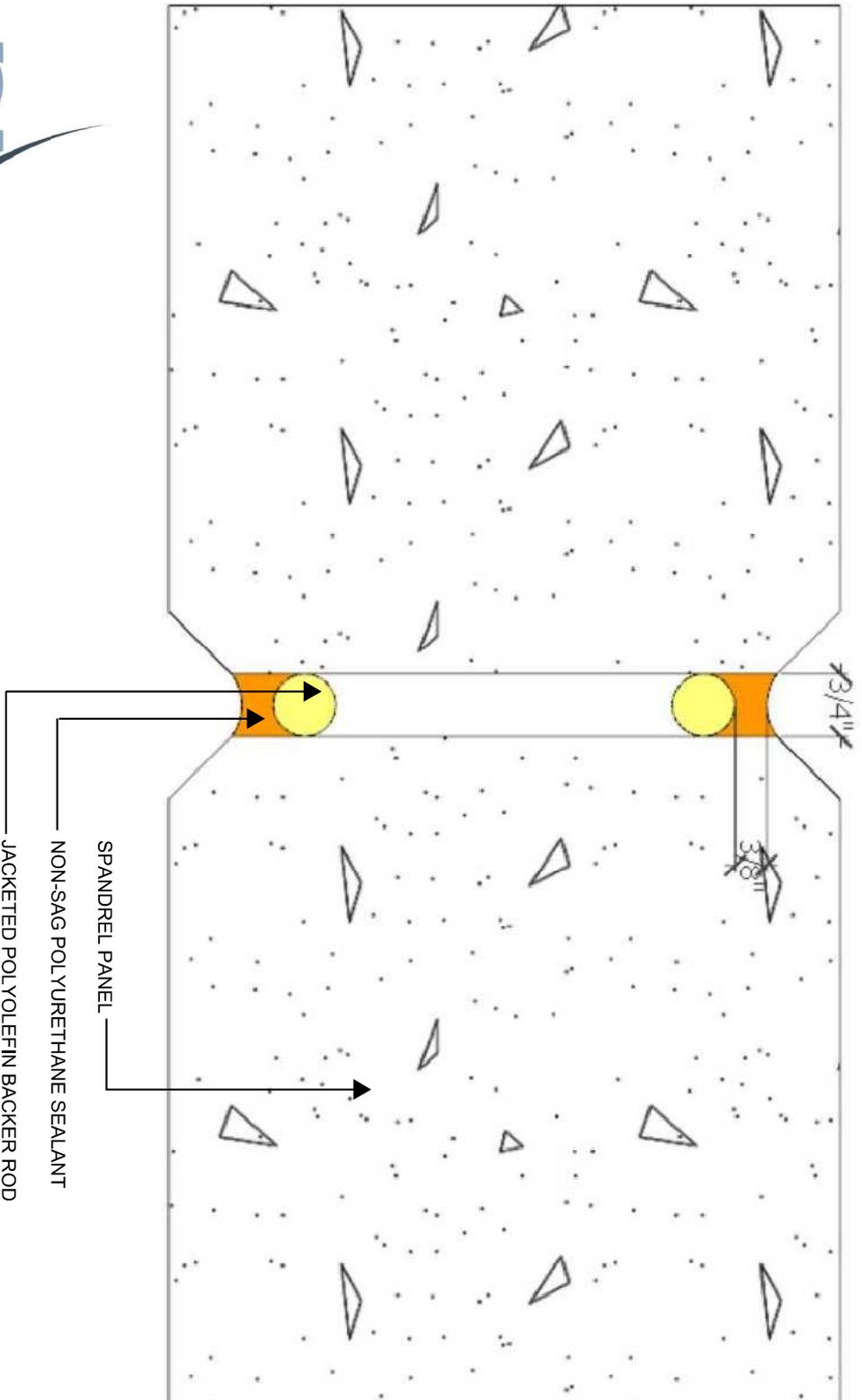
JEZERINAC
GROUP

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T 561.622.8888
CERTIFICATE OF AUTHORIZATION FL #30785

City of Port St. Lucie

MIDFLORIDA Credit Union Event Center Parking Garage



Date Issued: 02/14/23

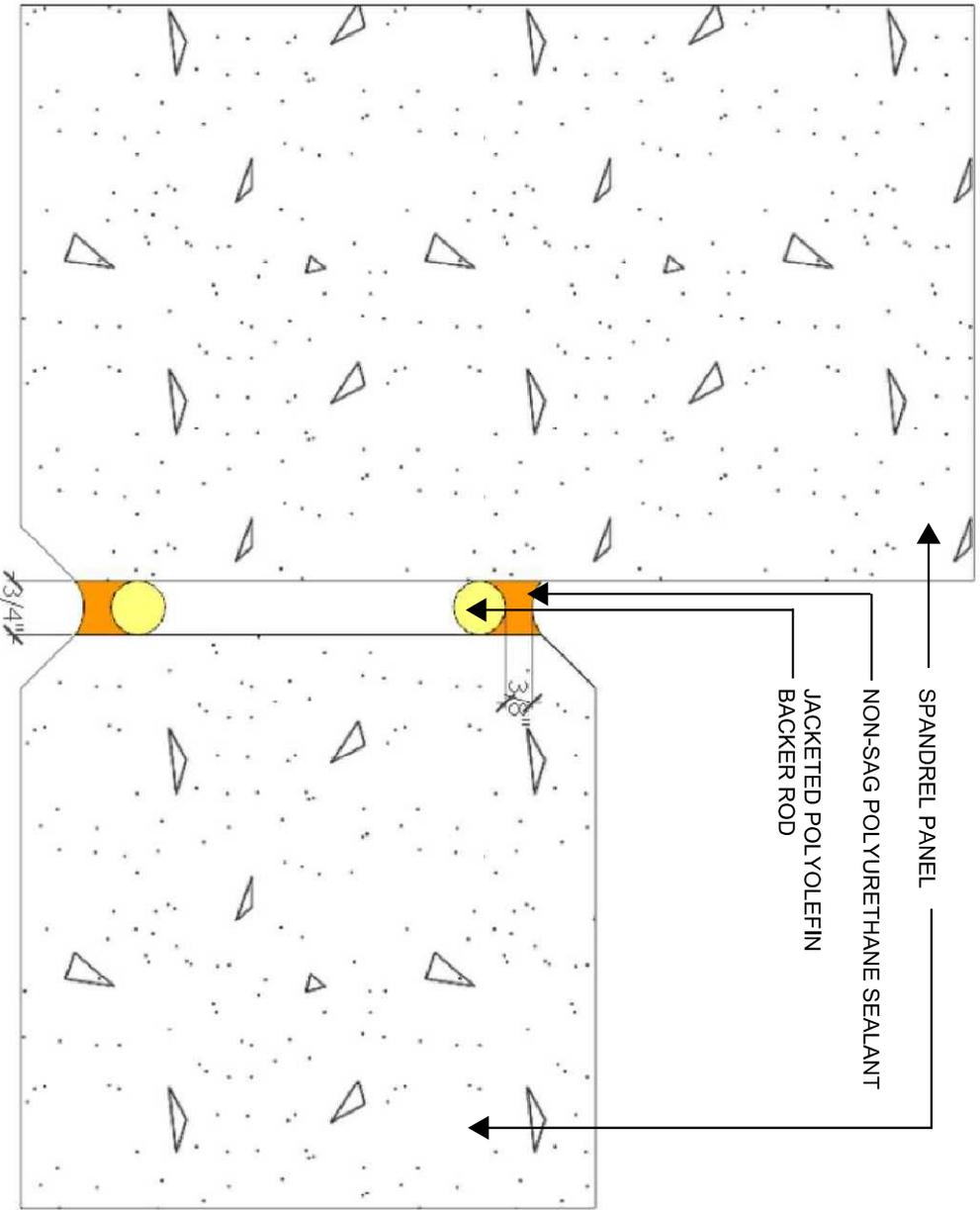
Project No: 19.01.010

Drawn By: WCA

Checked By: WJR

Sheet No: SK-25

TO THE BEST OF THE ENGINEER'S
KNOWLEDGE, THE PLANS AND
SPECIFICATIONS COMPLY WITH THE
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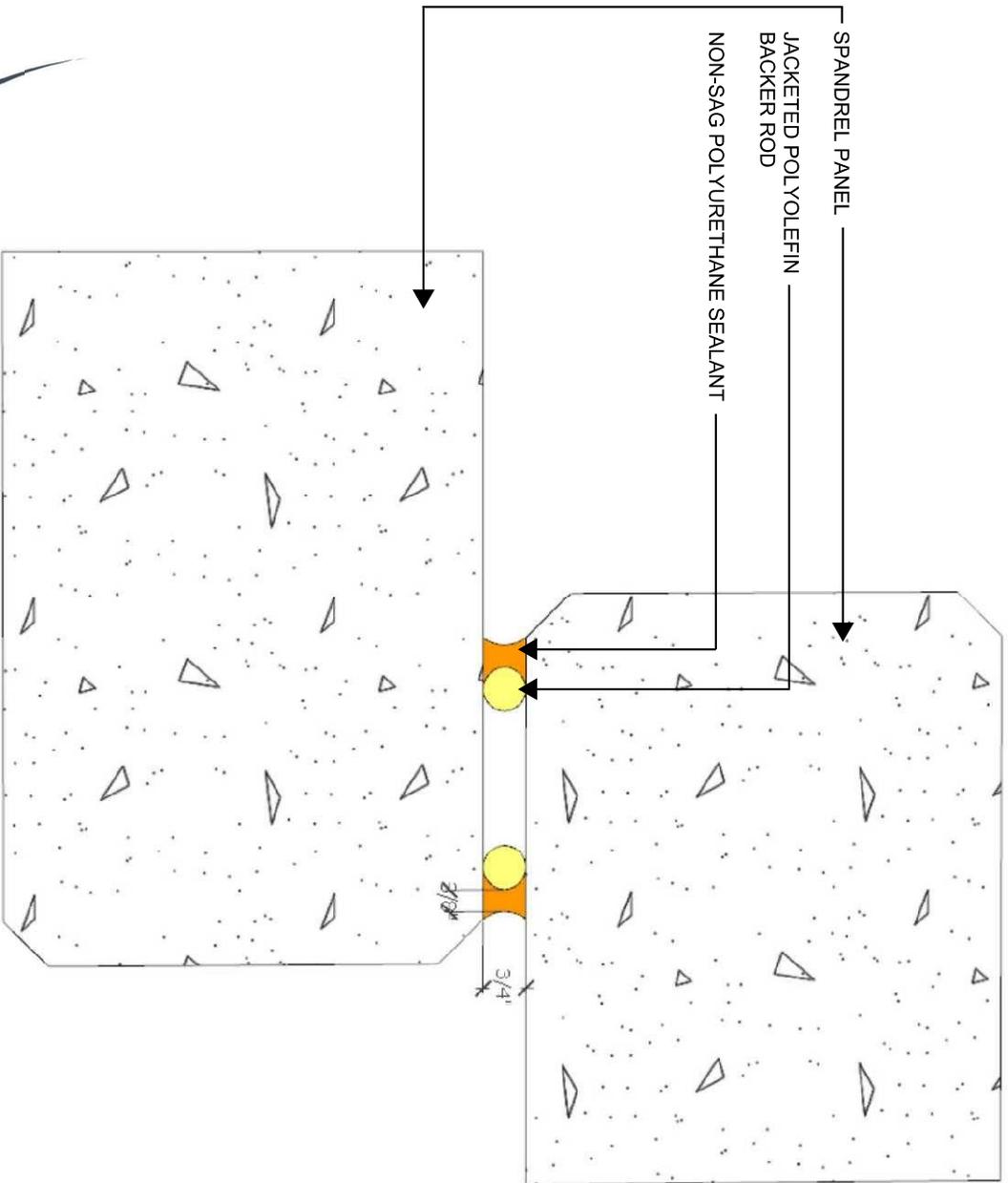
Engineering | Sophisticated | Human
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 T 561.622.8888
 CERTIFICATE OF AUTHORIZATION FL #30785

City of Port St. Lucie

MIDFLORIDA Credit Union Event Center
 Parking Garage

Date Issued:	02/14/23
Project No:	19.01.010
Drawn By:	WCA
Checked By:	WJR
Sheet No:	SK-26

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND MATERIAL SPECIFICATIONS



JEZGERINAC
GROUP

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T 561.622.8888
CERTIFICATE OF AUTHORIZATION FL #30785

City of Port St. Lucie

MIDFLORIDA Credit Union Event Center
Parking Garage

Date Issued: 02/14/23

Project No: 19.01.010

Drawn By: WCA

Checked By: WJR

Sheet No: SK-27

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND MATERIAL SPECIFICATIONS



**Port St. Lucie Civic Center
Repair Protocol – Sealant of Door Frames**

Report Date: 2022.02.10

Revision 01: 2023.03.10

RP ID – SK28 Sealant of Door Frames

Observation: Remove and reinstall sealants at rough openings to door frames.

Location: Level 6 – Stair 1 and Stair 2
Level 5 – Stair 1 and Stair 2
Level 4 – Stair 1 and Stair 2
Level 3 – Stair 1 and Stair 2
Level 2 – Stair 1 and Stair 2
Level 1 – Stair 1, Stair 2, Elevator Equipment Room, Electrical Room

Repair Protocol/Procedure:

Product submittals to be submitted for review by the City prior to start of work. Jezerinac SK15 will be used for basis of design.

- All work to be coordinated with the city. Notice to Garage users will be provided by the City as needed. The City will assist in blocking off parking spots immediately adjacent to work areas to ensure access.
- Sealant work in these locations will follow replacement of sealant at Double Tee Flanges.
- Existing sealant will be removed and surfaces properly prepared.
- Thresholds will be removed and stored for re-use. The City will be notified if reinstall is not feasible following removal.
- Thresholds will be installed in a continuous bed of silicone sealant equal to Dowsil 795.
- Sealant to spandrel panel, frame and threshold will be reinstalled in accordance with manufacturers recommendations.
- Clean work area of any construction debris.

List of Attachments:

Jezerinac SK15 Sealant Specifications



**Port St. Lucie Civic Center
Repair Protocol – Sealant of Door Frames**

Approvals:

Owner: _____ Date: _____

Owner's Consultant: _____ Date: _____

General Contractor: _____ Date: _____

JOINT, SEALANT, AND COATING NOTES

A. PRODUCTS:

1. VEHICULAR TRAFFIC DECK WATERPROOFING
 - VULKEM® 350/346/346, MANUFACTURED BY TREMCO
 - MASTERSEAL® VEHICULAR TRAFFIC 1500, MANUFACTURED BY MASTER BUILDERS
 - SIKALASTIC® - 720 ONE SHOT, MANUFACTURED BY SIKA
2. POLYURETHANE SEALANT (NON-SAG)
 - DYMERIC® 240FC, MANUFACTURED BY TREMCO
 - MASTERSEAL® NP2 OR NP1, MANUFACTURED BY MASTER BUILDERS
 - SIKAFLEX®- 2C NS EZ MIX, MANUFACTURED BY SIKA
3. POLYURETHANE SEALANT (SELF-LEVELING & SEMI-SELF-LEVELING)
 - THC-901 OR VULKEM 445SSL, MANUFACTURED BY TREMCO
 - MASTERSEAL® SL2, MANUFACTURED BY MASTER BUILDERS
 - SIKAFLEX®- 2C SL, MANUFACTURED BY SIKA
4. BACKER ROD
 - SOF®ROD BI-CELLULAR BACKER ROD, MANUFACTURED BY NOWACO (OR EQUAL)

B. SUBSTRATE PREPARATIONS:

1. SEALANT JOINT REPLACEMENT WILL REQUIRE REMOVAL OF EXISTING SEALANT, THEN MECHANICAL ABRASION OF SUBSTRATES TO REMOVE ALL EXISTING SEALANT RESIDUE AND CONTAMINANTS. MECHANICAL ABRASION MUST RESULT IN EXPOSING CLEAN VIRGIN CONCRETE SUBSTRATES. NEW SEALANT ADHESION SUBSTRATES RESULTING FROM WET-SAW REMOVAL OF SEALANT (AND POTENTIALLY CONCRETE) WILL REQUIRE PRESSURE WASHING TO REMOVE CONTAMINANTS SUSPENDED IN THE WATER PRODUCED BY THE CONCRETE CUTTING PROCEDURE.
2. SEALANT APPLICATIONS MAY REQUIRE PRIMER DEPENDING ON MANUFACTURER RECOMMENDATIONS AND PRE-REPAIR FIELD SEALANT ADHESION TESTING TO VERIFY SUBSTRATE PRIMING AND PREPARATION REQUIREMENTS. FIELD SEALANT ADHESION TESTING SHOULD FOLLOW THE GUIDELINES OF ASTM C 1521 STANDARD PRACTICE FOR EVALUATING ADHESION OF INSTALLED WEATHERPROOFING SEALANT JOINTS.
3. BE MINDFUL THAT THE CONCRETE TRAFFIC DECK SUBSTRATES FOR THE TRAFFIC COATINGS WILL REQUIRE SHOT BLASTING TO ATTAIN AND ICRI SCP-3 SURFACE PROFILE. THE APPLICATION OF THE TRAFFIC COATING TO THE TOPS OF THE TOP DECK COLUMNS WILL REQUIRE THAT THE EXISTING TEXTURED COATING ON THE SPANDREL PANELS BE REMOVED AT SUBSTRATES INTENDED FOR THE TRAFFIC COATING. AT THE LOCATIONS WHERE THE TEXTURED COATING IS REMOVED, THE EXPOSED CONCRETE WILL REQUIRE MECHANICAL ABRASION TO REMOVE ALL EXISTING COATING RESIDUE AND CONTAMINANTS. MECHANICAL ABRASION MUST RESULT IN EXPOSING CLEAN VIRGIN CONCRETE SUBSTRATES. AT UN-COATED CONCRETE AT THE TOPS OF THE COLUMNS, PRESSURE WASHING SHOULD SUFFICE SINCE THERE WILL BE NO VEHICLE TRAFFIC TO ABRASE THE COATING.

C. MOCK-UPS:

1. THE CONTRACTOR SHALL ASSEMBLE MOCK-UPS FOR ALL REPAIR AND REPLACEMENT PROCEDURES. MOCK-UPS SHALL BE APPROVED BY THE OWNER OR OWNERS REPRESENTATIVE BEFORE INSTALLATION BEGINS.
2. PREMOCKUP MEETINGS SHALL BE SCHEDULED BY THE CONTRACTOR BETWEEN ALL APPLICABLE SUB CONTRACTORS AND THE OWNER PRIOR TO ASSEMBLY OF MOCK-UPS.



City of Port St. Lucie
 MIDFLORIDA Credit Union Event Center Parking
 Garage

Date Issued:	02/14/23
Project No:	19.01.010
Drawn By:	WCA
Checked By:	WJR

Sheet No: SK-15

TO THE BEST OF THE ENGINEERS KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND MATERIAL SPECIFICATIONS



Stipulated Labor Rates

EXHIBIT B
Billable Rates for Typical Positions

The hourly rates below include base salary, 62% labor burden (taxes, health insurance, 401K, etc.), bonus pool, company IT allocation, company car allowance, company gas card, and company cell phone and IT costs. Paid time off (vacations and holidays) is not included in labor burden and assumed to be billed to project.

STAFF DESCRIPTION

HOURLY RATE*

Project Management Staff:

Project Executive 1	\$193.17/hour
Project Manager – Level 2	\$146.05/hour

On-Site Field Staff:

Superintendent – Level 1	\$103.21/hour
Safety Manager 1	\$107.49/hour

** The hourly rates are for calendar year 2023. Annual increases between 4% and 6% should be anticipated.*



Warranty

EXHIBIT C

[Insert Date]

CITY OF PORT ST. LUCIE
 121 Southwest Port St. Lucie Boulevard
 Port St. Lucie, Florida 34984
 Attn: City Manager

Re: **Warranty Letter- Contractor's Settlement Work**
 Main Civic Center Building *and Parking Garage*

No - Cost Settlement Work (Exhibit A-1):

Repair Protocol ID No. SK-6	Corbel Spall Replace
Repair Protocol ID No. SK-7	Wall Corbel Cracking Repair
Repair Protocol ID No. SK-8	Corroded Weld Repairs
Repair Protocol ID No. SK-9	Vertical Spall Repair (TEE BRG)
Repair Protocol ID No. SK-10	Vertical/Horizontal Spall Repair
Repair Protocol ID No SK-10 Below	Precast Concrete Panels
Repair Protocol ID No. SK-11	Spandrel Conn Covering Repair
Repair Protocol ID No. SK-12	Crack Repair
Repair Protocol ID No. SK-13	Plate Covering Replacement (except 136 locations at roof level 6 at Grids A-D)
Repair Protocol ID No. SK-14	Vertical Reinforcement Spall at Top of Wall or Column Repair
Repair Protocol ID No. N/A	Inverted Tee Girder
Repair Protocol ID No. At Civic Center	Reversed Bearing Plates
Repair Protocol ID No. At Civic Center	Loading Dock Cracks

Actual Cost Settlement Work (Exhibit A-2):

Repair Protocol ID No. SK-2	Chord Plate Repairs determined by <u>third party engineer to not be caused by improper installation.</u>
Repair Protocol ID No. SK-3	Chord Plate Repairs determined by <u>third party engineer to not be caused by improper installation.</u>
Repair Protocol ID No. SK-4	Chord Plate Repairs determined by <u>third party engineer to not be caused by improper installation.</u>
Repair Protocol ID No. SK-16-20 & 23-27	Standard Caulking at Level 6 (Roof)
Repair Protocol ID No. SK-28	Joint Sealant Around Stair Doors Restriping

Gentlemen/Ladies:

Suffolk Construction Company, Inc., in pursuant to the Settlement Agreement between the **City of Port St. Lucie**, a Florida Municipal Corporation and **Community Redevelopment Agency of the City of Port St. Lucie** (collectively "PSL") and Suffolk shall warranty for a period of one (1) year

from the date of completion and acceptance (hereinafter "Acceptance") of each Item referenced above by PSL the material and workmanship of Suffolk's Settlement Work for the above-mentioned facility(s).

During the period of one (1) year from the Acceptance date, Suffolk hereby agrees to promptly repair and/or replace any material or equipment found to be faulty or defective at no charge to PSL, provided that no modifications or alterations have been made and that the material or equipment has been properly maintained.

Sincerely,
SUFFOLK CONSTRUCTION COMPANY, INC.

Juan Diaz
General Counsel-South and National Gaming



Schedule of Values

Application and Certificate for Payment
TO OWNER:
 City of Port St. Lucie

PROJECT: Port St. Lucie
 Civic Center Garage

APPLICATION NO:
PERIOD TO:
CONTRACT FOR: Construction
CONTRACT DATE:
PROJECT NOS:
Distribution to:
 OWNER
 ARCHITECT
 CONTRACTOR
 FIELD
 OTHER
FROM CONTRACTOR:
 Suffolk Construction
 426 Clematis St.
 West Palm Beach, FL 33418

SUBCONTRACTOR'S APPLICATION FOR PAYMENT

 Application is made for payment, as shown below, in connection with the Contract.
 Continuation Sheet, AIA Document G703, is attached.

The undersigned Subcontractor certifies that to the best of the Subcontractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Subcontractor for Work for which previous Certificates for Payment were issued and payments received from the Contractor, and that current payment shown herein is now due.

1. ORIGINAL CONTRACT SUM	\$	<u>0.00</u>
2. Net change by Change Orders	\$	<u>0.00</u>
3. CONTRACT SUM TO DATE (Line 1 ± 2)	\$	<u>0.00</u>
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$	<u>0.00</u>
5. RETAINAGE:		
a. <u>10</u> % of Completed Work (Column D + E on G703)	\$	
b. <u>10</u> % of Stored Material (Column F on G703)	\$	<u>0.00</u>
Total Retainage (Lines 5a + 5b or Total in Column I of G703)	\$	<u>0.00</u>
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)	\$	<u>0.00</u>
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)	\$	
8. CURRENT PAYMENT DUE	\$	<u>0.00</u>
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6)	\$	<u>0.00</u>

SUBCONTRACTOR:

By: _____ Date: _____

 State of: _____ County of: _____
 Subscribed and sworn to before me this _____ day of _____
 Notary Public:
 My Commission expires: _____

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$0.00	
Total approved this Month	\$0.00	
TOTALS	\$0.00	
NET CHANGES by Change Order	\$0.00	

CONTINUATION SHEET

AIA DOCUMENT G703

EXHIBIT E
PAGE 2 OF 2 PAGES

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing

Subcontractor's signed certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:

APPLICATION DATE:

PERIOD TO:

CONTRACTOR'S PROJECT NO:

	B	C	D	E	F	G		H	I
	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D + E + F)	% (G + C)	BALANCE TO FINISH (C - G)	RETAINAGE
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD					
SK-2	Chord Plate Repairs					\$0.00		\$0.00	\$0.00
SK-3	Chord Plate Repairs					\$0.00		\$0.00	\$0.00
SK-4	Chord Plate Repairs					\$0.00		\$0.00	\$0.00
SK16-20, 23-27	Standard Caulking at Level 6 (Roof)					\$0.00		\$0.00	\$0.00
SK-28	Joint Sealants around Stair Doors					\$0.00		\$0.00	\$0.00
	TOTAL BASE CONTRACT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00
Change Orders									
		\$0.00				\$0.00		\$0.00	\$0.00
		\$0.00				\$0.00		\$0.00	\$0.00
		\$0.00				\$0.00		\$0.00	\$0.00
	Total Change Orders	\$0.00	\$0.00	\$0.00	0	\$0.00		\$0.00	\$0.00
	GRAND TOTALS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00
Users may obtain validation of this document by requesting of the license a completed AIA Document D401 - Certification of Document's Authenticity									



Notice of
Acceptance of All
Settlement Work and
Release

Exhibit E
(PSL's Acceptance of Settlement Work and Final Release to Contractor)

FINAL RELEASE

KNOW ALL MEN BY THESE PRESENTS: That, CITY OF PORT ST. LUCIE, a Florida Municipal corporation and COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF PORT ST. LUCIE, a Florida corporation (collectively "**PSL**" or "**City**"), for and in consideration of the Ten (\$10.00) Dollars, and/or other valuable consideration received from or on behalf of SUFFOLK CONSTRUCTION COMPANY, INC. a Massachusetts corporation, **and its parents, sureties, subsidiaries, and affiliates (collectively "Contractor" and/or "Second Party")**, the receipt and sufficiency of which is hereby acknowledged.

(Wherever used herein the terms "first party" and "second party" shall include singular and plural, heirs, legal representatives, and assigns of individuals, and the successors, assigns, directors, officers, employees and agents of corporation, wherever the context so admits or requires.)

PSL unconditionally releases, remises, settles, acquits, discharges, satisfies, covenants not to sue and not to participate in or cooperate with any suit against the **Contractor** of and from and for and regarding any and all manner of claims, demands, damages, lawsuits, obligations, liabilities, promises, administrative actions, representations, warranties, agreements, contracts, charges, causes and causes of action in law and/or in equity, known or unknown, latent or patent, matured or unmatured, contingent or fixed, of any kind whatsoever whether by reason of any matter, cause or thing whatsoever, which **PSL** ever had, now has, or any constituent, member, or the successors, assigns, mortgagees, and/or lessees hereafter can, shall or may have against the **Contractor**, for, upon or by reason of, caused by, relating to, or arising out of the **Settlement Work** any matter, cause or thing whatsoever, including without limitation, any and all claims and causes of action for, upon or by reason of, caused by, relating to, or arising out of the **Settlement Work**, and any subsequent corrective work performed at **Main Civic Center Building and Parking Garage** ("Project") in connection with the **Settlement Work**, IT BEING THE EXPRESS INTENTION OF THE PARTIES TO RELEASE ALL LATENT OR UNKNOWN DEFECTS RELATIVE TO THE SETTLEMENT WORK (WITH THE EXCEPTION OF THE ONE YEAR WARRANTY PROVIDED TO THE CONTRACTOR TO THE CITY FOR THE SETTLEMENT WORK) and all negligent and intentional tort claims; (2) Chapters 558 and 718, *Florida Statutes*; (3) the Claims raised by the **City** against **Contractor** and/or its subcontractors, design professionals, their sureties' and suppliers; and (4) all matters which were raised or could have been raised by the **City**.

The foregoing release inures to the benefit of the **Contractor**, and its former, present and future partners (including without limitation its sureties, owners, attorneys, insurers, sureties, design professionals subcontractors, subcontractors, sub-subcontractors, material suppliers affiliated entities, entities, officers, directors, employees, agents, parent corporations, subsidiary corporations, and affiliated entities, and each of their respective and collective successors and assigns.

[signatures commence on next page]

Exhibit E
(PSL's Acceptance of Settlement Work and Final Release to Contractor)

In the presence of a licensed notary public, the duly authorized representative of **City of Port St. Lucie**, a Florida Municipal Corporation has caused this Settlement Agreement to be executed on the dates written below.

City of Port St. Lucie, a Florida Municipal Corporation

_____ (Signature of Authorized Representative)	_____ (Print Name of Authorized Representative)
_____ (Date)	

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2023, by (print name) _____ as (title) _____ of the **City of Port St. Lucie, a Florida Municipal Corporation** by means of physical presence or online notarization.

AFFIX NOTARY STAMP

Signature of Notary Public

Print Notary Name

My Commission Expires: _____

Commission No.: _____

- Personally known, or
 Produced Identification
Type of Identification Produced

In the presence of a licensed notary public, the duly authorized representative of the **Community Redevelopment Agency of the City of Port St. Lucie** has caused this Settlement Agreement to be executed on the dates written below.

Exhibit E
(PSL's Acceptance of Settlement Work and Final Release to Contractor)

Community Redevelopment Agency of the City of Port St. Lucie

_____ (Signature of Authorized Representative)	_____ (Print Name of Authorized Representative)
_____ (Date)	

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2023, by (print name) _____ as (title) _____ of **Community Redevelopment Agency of the City of Port St. Lucie**

by means of physical presence or online notarization.

AFFIX NOTARY STAMP

Signature of Notary Public

Print Notary Name

My Commission Expires: _____

Commission No.: _____

- Personally known, or
 - Produced Identification
- Type of Identification Produced



Stipulation of
Dismissal and
Final Order

EXHIBIT F

IN THE CIRCUIT COURT OF THE
19th JUDICIAL CIRCUIT IN AND FOR
ST. LUCIE COUNTY, FLORIDA

CASE NUMBER: 2018-CA-001895

CITY OF PORT ST LUCIE, a Florida municipal
corporation and COMMUNITY REDEVELOPMENT
AGENCY OF THE CITY OF PORT ST. LUCIE,

Plaintiffs,

vs.

SUFFOLK CONSTRUCTION
COMPANY, INC., a Massachusetts Corporation,

Defendant.

_____ /

**JOINT STIPULATION
FOR DISMISSAL WITH PREJUDICE**

Plaintiffs, CITY OF PORT ST LUCIE, a Florida municipal corporation and COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF PORT ST. LUCIE (“PSL”) and SUFFOLK CONSTRUCTION COMPANY, INC., a Massachusetts corporation (“SUFFOLK”) by and through their undersigned attorneys, stipulate and agree to a dismissal of this cause with prejudice. The Parties also stipulate and agree that they have resolved, among themselves, all issues regarding taxation of costs or entitlement to attorney’s fees and that none of the Parties to this agreement shall be entitled to tax costs or an award of attorney’s fees against the other. The Parties would show unto the Court that they have been able to amicably resolve their differences as they relate to the issues raised in this action. Further, the Parties also agree that the Court will reserve jurisdiction as to all Parties to enforce the terms of the Settlement Agreement between SUFFOLK and PSL.

Dated this ____ day of _____ 2023



Legal Department
426 Clematis Street, W. Palm Beach, Florida 33401
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GARGANESE, WEISS, D'AGRESTA &
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P.O. Box 2873
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SUFFOLK CONSTRUCTION COMPANY,
INC. LEGAL DEPARTMENT
426 Clematis Street
West Palm Beach, Florida 33401
Telephone: (561) 282-3000
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jdiaz@suffolk.com
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By: /s/ Jeffrey S. Weiss
Jeffrey S. Weiss, Esquire
Florida Bar No. 750565
Counsel for Plaintiff

By: /s/ Juan Diaz
Juan Diaz, Esquire
Florida Bar Number: 0075345
Counsel for Suffolk

Certificate of Service

I HEREBY CERTIFY that on this _____, 202__ I electronically served the foregoing using the Court's e-file system upon all counsel of record.

Respectfully submitted,

/s/ Juan Diaz
Juan Diaz, Esq.



EXHIBIT F

IN THE CIRCUIT COURT OF THE
19th JUDICIAL CIRCUIT IN AND FOR
ST. LUCIE COUNTY, FLORIDA

CASE NUMBER: 2018-CA-001895

CITY OF PORT ST LUCIE, a Florida municipal
corporation and COMMUNITY REDEVELOPMENT
AGENCY OF THE CITY OF PORT ST. LUCIE,

Plaintiffs,

vs.

SUFFOLK CONSTRUCTION
COMPANY, INC., a Massachusetts Corporation,

Defendant.

_____ /

ORDER OF DISMISSAL
WITH PREJUDICE

THIS CAUSE, having come before the Court upon the parties' Joint Stipulation for Dismissal With
Prejudice, it is hereby ORDERED AND ADJUDGED:

1. This matter is hereby **dismissed with prejudice.**
2. The Parties shall bear their own costs and attorneys' fees.
3. The Court reserves jurisdiction as to all Parties to enforce the terms of the Settlement Agreement between SUFFOLK and PSL.

Done and Ordered in Chambers at St. Lucie County, Florida on this ___ day of _____, 2023.

CIRCUIT COURT JUDGE

cc: Counsel of Record