

FOUNTAIN BEACH RESORT

313 South Atlantic Avenue
Daytona Beach, Florida 32118

16 Stack Restoration Project
Project No. 25-1441

BID SET



Prepared By:

UNITED ENGINEERING CONSULTANTS, INC

4240 South Ridgewood Avenue, Suite 4

Port Orange, Florida 32127

Timothy J. Snook, P.E., S.I. Limited

Florida License No: 83208

Florida Certificate of Authorization No. 6607

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January 30, 2026

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313 South Atlantic Avenue
Daytona Beach, Florida 32118

16 STACK RESTORATION PROJECT

PROJECT NO: 25-1441

BID SET**TABLE OF CONTENTS**

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INVITATION TO BID

DATE: January 30, 2026

Attention:

You are invited to submit a STIPULATED SUM bid with applicable unit rates at the **Fountain Beach Resort**. The project includes but is not limited to: Replacing (3) balconies, miscellaneous concrete repairs, waterproofing and painting on the 16 stack. You are requested to submit unit rate bids with the Base Bid as indicated on the Bid Form, Section 00300. The Owners desire the work be to start as soon as possible.

Project: 16 Stack Restoration Project

The Owner will receive sealed proposals from their selected bidders:

BID DUE DATE: **TBD at 11:00 AM**

SUBMIT BIDS TO: manager@pmdmgt.com, Becky Lewis, CAM
Kristina@unitedengineeringconsultants.com

CONSULTANT FOR CONTRACT ADMINISTRATION:

United Engineering Consultants, Inc.
4240 South Ridgewood Avenue, Suite 4
Port Orange, Florida 32127
Ph: (386) 256-7684
Timothy J. Snook, P.E. FL Li#83208
TJ@unitedengineeringconsultants.com

Proposals received after the bid due date will not be accepted. Bids will be evaluated by the Owner based on the stipulated sum, unit prices, schedule, experience and quality of the Contractor.

A pre-bid meeting and walk-thru will be conducted at the project site. Bidders are required to attend.

PRE-BID MEETING DATE: **March 9, 2026 at 1:30pm**

PRE-BID MEETING LOCATION: Fountain Beach Resort
313 South Atlantic Avenue
Daytona Beach, Florida 32118

The Owner reserves the right to reject any or all bids and to waive any informality therein.

END OF SECTION 00020

SECTION 00100: INSTRUCTIONS TO BIDDER

SPECIFICATION TERMINOLOGY

Definition of Terms: Whenever the following terms (or pronouns which replace these terms) are used in these specifications, their intent and meaning shall be interpreted as follows:

Owner: **FOUNTAIN BEACH RESORT CONDOMINIUM ASSOCIATION**

Engineer: The firm of United Engineering Consultants Inc., acting directly or through a duly authorized representative.

Contractor: Any individual, firm, partnership or corporation entering into an agreement to perform the work specified herein.

Project Representative: An authorized representative of the Engineer assigned to assist the Engineer in carrying out his responsibilities at the project sites.

Bidder: Any individual, firm, partnership or corporation submitting a proposal for the work contemplated.

Surety: The corporate body which is bound with and for the Trade Contractor, which is primarily liable and which guarantees the faithful performance of the Agreement.

Proposal: A bid for the work contemplated which the Bidder shall submit on approved forms.

Drawings: The drawings or reproductions thereof pertaining to the work to be performed and which have been prepared or approved by the Engineer.

Specifications: The Conditions of the Contract, Detailed Technical Specifications, and other such descriptions of the work as are set forth in any of the Contract Documents.

Approved or Approval: Conforms to design concept.

Agreement: "Agreement" shall mean the document entitled "Form of Agreement between Contractor and Owner for Construction of Buildings".

Contract: "Contract" shall mean the Contract Documents as defined and listed in the Agreement. For this agreement, the current version of the AIA shall be used.

Project Manual: The compilation of documents listed in the table of contents of this manual including separate bound drawings.

FAMILIARITY WITH LAWS

The Bidder is required to be familiar with all Federal, State, and Local Laws, ordinances, rules, and regulations that in any manner affect the work. Ignorance on the part of the Bidder will in no way relieve him from responsibility.

QUALIFICATIONS OF BIDDERS

Bidding firm must hold a Class A General Contractors license and be pre-approved by the

Engineer.

BIDDING DOCUMENTS

Drawings, specifications and informational documents furnished to the Bidder for his use in preparing a bid for the work involved in the project comprise the bidding documents.

ALTERNATES

If the Owner wishes to learn the relative or additional cost of an alternate method of construction, an alternate use or type of material or an increase or decrease in scope of the project described by the drawings and/or the specifications. Alternates will be listed in the Proposal Form in a manner that the Bidder shall be able to clearly indicate the sums to add to (or deduct from) his Base Bid.

ADDENDA

In case the Engineer finds it expedient to supplement, modify, or interpret any portion of the Bidding Documents during the bidding period, such procedure will be accomplished by the issuance of written Addenda to the Bidding Documents which will be emailed, delivered or mailed to all prospective Bidders at the respective addresses furnished for such purposes.

INTERPRETATION OF BIDDING DOCUMENTS

No interpretation of the meaning of the Drawings, Specifications, or other Bidding Documents, no correction of any apparent ambiguity, inconsistency or error therein, will be made to any Bidder orally. Every request for such interpretation or correction should be addressed in writing, to the Engineer. All such interpretations and supplemental instruction will be in the form of written Addenda to the Bidding Documents.

Only the interpretation or correction so given by the Engineer, in writing, shall be binding and prospective Bidders are advised that no other source is authorized to give information concerning, or to explain or interpret the Bidding Documents.

EXAMINATION OF BIDDING DOCUMENTS AND SITE OF WORK

Bidders are required, before submitting their proposals, to visit the site of the proposed work and completely familiarize themselves with the nature and extent of the work and any local conditions that may in any manner affect the work to be performed and the equipment, materials, and labor required. They are also required to examine carefully, the drawings, specifications, and other bidding documents in order to inform themselves thoroughly regarding any and all conditions and requirements that may in any manner affect the work.

PREBID MEETING:

A pre-bid conference will be held at the project site. All invited bidders are required to attend. Bidders will be afforded the opportunity to ask questions regarding the project and tour the facilities to familiarize the bidders with the work and the existing conditions. This tour will not substitute for the bidders on-site inspection of the site.

BASIS FOR BIDDING - TRADE NAMES

For clarity of description and as a standard of comparison, certain materials have been specified by

trade name or manufacturer. To insure a uniform basis for bidding, the Bidder shall base his Proposal on the particular material specified. After the contract is let, other materials by other manufacturers may be accepted only if, in the opinion of the Engineer, same is equivalent in quality and workmanship and will perform satisfactorily its intended purpose.

PREPARATION AND SUBMISSION OF BIDS

Each bidder shall submit in duplicate, the Bid Schedule, Section 00300; indicate their bid prices thereon in proper spaces for the entire work and for alternates on which he bids. Each bid must give the full business address of the Bidder and state whether he is an individual, corporation or partnership. Proposals by a corporation must be signed with the legal name and seal of the corporation followed by the name of the State of its incorporation and the manual signature and designation of an officer, agent, or other person authorized to bind the Corporation.

In every case, the name of the person signing and his designation shall be typed or printed below his signature. A person who affixes to his signature the work "President", "Secretary", "Agent" or other designation, without disclosing his principal may be held individually responsible for such bid. Electronic copies of the bid shall be emailed to the Owner and a copy sent to the Engineer.

SUBCONTRACTORS:

Submitted with the bid, the bidder shall submit a list of subcontractors to be utilized on the project. Only one subcontractor shall be listed for a specialty work item. The list of subcontractors may be changed only by the written approval of the Owner. The bidders will submit only experienced and qualified subcontractors that the bidder has determined to his own complete satisfaction are technically and financially capable of performing and satisfactorily completing the work and the Owner will consider the quality, experience, and demonstrated performance of the subcontractors in deciding the award of the contract. Bidders listing their own company in certain areas of subcontract or specialty contract performance may be asked to demonstrate, to the satisfaction of the Owner and Engineer, their past experience and competence in these areas.

BID AMOUNT MODIFICATIONS

Bid amount modifications will be accepted from Bidders, received prior to the Opening of Bids. Modifications may be in the form of email or may be indicated on the Proposal Form. All amount modifications must be signed by an Authorized Representative of the Bidder. Modification printed on the outside of the sealed bid envelope and unsigned modifications will have no status and will not be a consideration of the bid award, but will not serve to disqualify the Bidder. Modifications to a bid will be read by Owner prior to the reading of the formal bid.

WITHDRAWAL OF BIDS

Bids may be withdrawn on written or email request received from Bidders prior to the time fixed for opening. Negligence on the part of the Bidder in preparing the bid confers no right for withdrawal of the bid after it has been opened.

DISQUALIFICATION OF BIDDERS

More than one bid from an individual, firm, partnership, corporation or association under the same or different names will not be considered. Reasonable grounds for believing a Bidder is interested in more than one proposal for the same work will cause the rejection of all proposals in which such Bidder is believed to be interested.

Bids will be opened privately by the Owner. No responsibility will be attached to any officer for the premature opening of a bid not properly addressed and identified.

REJECTION OF BIDS

AWARD OF CONTRACT

The Agreement will only be entered into with responsible contractor(s), found to be satisfactory by the Owner, qualified by experience and in a financial position to do the work specified. Each bidder shall, if so requested by the Owner, present additional evidence of his experience, qualifications and ability to carry out the terms of the contract, including a financial statement. The Contract will be awarded as soon as possible to the Owner selected Bidder. The Owner reserves the right to waive any informality in bids received when such waiver is in the interest of the Owner.

The successful bidder, as Contractor, will be required to execute the current version of the AIA A101 and A201.

The work to be performed under this contract shall be commenced as stated in the Contractors bid and shall be completed as indicated in the Contact.

The insurance required shall be written for no less than the following limits of liability, or those required by law, whichever is greater:

1. Worker's Compensation:
Employer's Liability \$ 1,000,000 (Per Accident)
\$ 1,000,000 (Aggregate)
2. Umbrella Liability:
\$ 2,000,000 (Per Accident)
\$ 2,000,000 (Aggregate)
3. Comprehensive General Liability (including Premises - Operations; Independent Contractor's Protective; Products and Completed Operations; Broad Form Property Damage):

Bodily Injury:	\$ 1,000,000	Each Occurrence
	\$ 2,000,000	Aggregate
Property Damage:	\$ 1,000,000	Each Occurrence
	\$ 2,000,000	Aggregate Operations
	\$ 2,000,000	Aggregate Protective
	\$ 2,000,000	Aggregate Contractual

4. Comprehensive Automobile Liabilities

Bodily Injury	\$ 1,000,000	Each Person
	\$ 1,000,000	Each Occurrence
Property Damage:	\$ 1,000,000	Each Occurrence

END OF SECTION 00100

BID DOCUMENTS

SECTION 00200: INSTRUCTIONS TO CONTRACTOR

SCOPE OF WORK

The work provisioned within these Contract Documents includes all labor, material, equipment and services required to perform the work as indicated on the drawings and as specified in the project documents including all necessary work incidental as complementary thereto.

GOVERNMENTAL FEES

The Owner will pay IMPACT FEES imposed by local government authority. The Contractor shall inform the Engineer of all such fees when imposed to allow sufficient time for payment by Owner without delay of work.

The Contractor will pay for all building permits or other fees imposed by local Government, all costs for electrical service connections if required, and all licenses and application fees as may be required to perform the work.

COORDINATION

These specifications and the plans in Appendix A, Drawings and Details, of these specifications are co-operative and what is required by either shall be as binding as though required by both. Contractor shall carefully check for any discrepancies at time of bidding and secure information and clarification from the Engineer.

RECORDS

The Contractor shall keep record copies of all shop drawings bearing the Engineer's approval stamp at the Site Office at all times. These drawings shall be available for reference by the Engineer's Inspector at all times during the progress of the job. (Refer to Section 01300 "Submittals".)

COMPLETION

In the event the Contractor fails to maintain the approved schedule or if the progress or performance of the work or the procedure employed in the work is such that, in the judgment of the Engineer, the work will not be completed by the time stated in the contract; upon the Owner's request, and without additional cost to the Owner, the Contractor shall work such overtime, additional shifts, and/or hire additional employees, and/or revise his procedure as necessary to restore adherence to such schedule or to insure such completion.

PROTECTING THE BUILDING

The Contractor shall assume the responsibility of keeping areas in and around the building properly protected for the duration of the project. The Contractor shall furnish and maintain all necessary equipment and materials to protect the building and adjacent structures from damage caused by the work or from weather that would not have occurred except for the work. Damage to the building or site caused by the work shall be repaired to the Owner's satisfaction at the Contractor's expense.

In the event of Hurricanes or named storms, the Contractor shall take extra precautions agreeable to the Owner and at the Owner's additional expense. The Contractor shall not be held responsible for wind or water damage resulting from a hurricane unless the Contractor neglected to take

reasonable precautions.

PROTECTION OF REPAIRED STRUCTURES

The new or repaired construction shall be enclosed or covered as soon as possible and the Contractor shall enclose all exterior wall openings to protect the construction and building interior from damage during normal rain, wind, etc., until the building is permanently enclosed. The Contractor shall take reasonable measures to protect the building from damage during repair by securing materials stored on site and securing his work by whatever means necessary.

PROTECTION OF MATERIALS

The Contractor shall assume responsibility for the adequate protection of all work, and all materials stored on the site or erected in the work from weather. The Contractor shall furnish, place and maintain, and later remove temporary bulkheads in openings, protection of masonry and concrete items newly laid and placed as conditions shall dictate and when required.

MATERIALS, APPLIANCES, EMPLOYEES

The Contractor shall furnish all materials, labor, tools, equipment, transportation, and other facilities necessary for the execution and completion of the work. All materials shall be new, and both workmanship and materials shall be of good quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

Labor shall be performed in the best workmanlike manner by workmen skilled in their respective trades. Standards of work required throughout shall be of the best grade of their respective kinds. The Contractor shall agree that none but competent workmen be employed.

INTERPRETATION AND PRECEDENCE

Should it appear that work intended to be described, or any of the matters relative thereto, are not sufficiently detailed or explained on the Drawings or in the Specifications, the Contractor must apply to the Engineer for such further Drawings necessary, and shall conform to the same so far as they may be consistent with the original drawings; and should any doubt or question arise in the true meaning of the Drawings and Specifications, reference shall be made to the Engineer, whose decisions thereon shall be final and conclusive. Work must not proceed if there is any uncertainty.

Where no dimensions or memoranda are given, the Drawings shall be followed according to scale, but figures or memoranda shall take precedence over scale measurements in all cases.

The Contractor and each Subcontractor shall review drawings and read complete Specifications for all branches of construction work to be done, in order to inform him as to the work to be done by others and the full extent of his work and its connection therewith.

DIMENSIONS AND MEASUREMENTS

The Drawings, together with the sizes given in the Drawings and Specifications, are understood to be obtained from the originally designed and permitted documents and may not be the same dimensions as constructed. The Contractor shall obtain his own measurements, dimensions, and determine his own quantities required to perform the work; but the Contractor and/or each Subcontractor, without extra compensation, shall make such changes as may be necessary to bring the various parts and kind or work to fit each other in the very best manner, but no alterations shall

be made without the advice and consent of the Engineer.

Before ordering material or doing work, the Contractor shall verify and be responsible for the correctness of measurements. No extra charge or compensation will be allowed due to a difference between actual dimensions and measurements indicated on the Drawings. Any difference found shall be submitted to the Engineer for consideration before proceeding with the work.

STORAGE OF MATERIALS

The Contractor shall be responsible for the proper care and protection of all of his materials, equipment, etc. Neither the Contractor nor any Subcontractor shall store his materials, equipment, etc., so they impede the work of any other Subcontractor or so they impede the use of the building by the Owner. Materials and equipment which have been placed so they interfere with the progress of the work or the Owner's use of the building without previous consent will be promptly removed.

CLEAN UP

The Contractor shall be totally responsible to see to the daily clean up of debris accumulated by himself and by all Subcontractors. (Refer to Section 01700 "Project Close Out".)

WORK HOURS AND DAYS

The Owner will allow daily work hours starting at 10:00 AM until 5:00 PM, Monday through Friday. Noise can commence starting at 10:00 AM. Weekend work will require pre-approval by the Owner.

END OF SECTION 00200

SECTION 00300: BID FORM

TO: Fountain Beach Resort
313 South Atlantic Avenue
Daytona Beach, Florida 32118

FOR: 16 Stack Restoration Project

Gentlemen:

The undersigned BIDDER hereby declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the place where the work is to be done and that he has examined the Specifications for the Work and the Contract Documents. This BIDDER further declares that the only persons, company or parties interested in this Proposal or the Contract to be entered into as principals are named herein; that this Proposal is made without connection with any other person, company or parties making a Bid or Proposal; and it is in all respect fair and in good faith, without collusion or fraud. This BIDDER further certifies that he has familiarized himself with the Federal, State & Local laws pertaining to the Work proposed.

This BIDDER proposed and agrees, if this Proposal is accepted in part or in total, to Contract with the OWNER in the form of CONTRACT specified, to furnish work in full and complete accordance with shown, noted, described and reasonably intended requirements of these Specifications, Contract Documents and all Addenda thereto for the following prices:

Base Bid: Includes all items described in Summary of Work and addenda as shown on the attached Plans with no substitutions or limitations.

The foregoing bid represents a stipulated sum/unit rate bid inclusive of all costs of work described in Section 01010 SUMMARY OF WORK including project management, overhead, labor, materials, and disposal of debris, equipment, insurance, permits, transportation, and any other cost incurred by the Contractor. The contract amount shall be based on the above bid amount, plus or minus the unit rates for variable work submitted by the Contractor below. In addition to the above, the following Unit Rates and additions/deletions are submitted to be applicable to the above work:

UNIT COSTS

Unit Cost #1: Concrete Repair, Top: Amount to repair 5 CF and 5 minimum topside areas IAW Section 03730. Price includes shoring, demolition, disposal of debris, installation of reinforcement as directed, including epoxy doweling, local MCI treatment in repair area only and placement of repair mortar. Minimum size is less than ½ CF.

Unit Cost #2: Concrete Repair, Ceiling: Amount to repair 5 CF and 5 minimums of concrete ceiling, spalls IAW Section 03730. Price includes all shoring, demolition, forming, debris disposal, installing epoxy doweled reinforcement as required, local treatment with MCI, placement of repair mortar and stucco application local to the repair area. Minimum size is less than ½ CF.

- Unit Cost #3: Concrete Repair, Slab Edge: Amount to repair 5 CF and 5 minimums of concrete slab edge spalls IAW Section 03730. Price includes all shoring, demolition, forming, debris disposal, installing epoxy doweled reinforcement as required, local treatment with MCI, placement of repair mortar and stucco application local to the repair area. Minimum size is less than ½ CF.
- Unit Cost #4: Concrete Repair, Column and Wall: Amount to repair 15 CF and 5 minimums of concrete column and wall spalls IAW Section 03730. Price includes all shoring, demolition, forming, debris disposal, installing epoxy doweled reinforcement as required, local treatment with MCI, placement of repair mortar and stucco application local to the repair area. Minimum size is less than ½ CF.
- Unit Cost #6: Repair Stucco: Amount to repair 250 SF of stucco IAW ASTM C926 and the Manufacturer's specifications. New stucco to match the existing thickness and texture as close as possible.
- Unit Cost #7: Rust Spot Removal: Amount to drill-out or grind-out 15 rust spots a minimum of ¾" depth and backfill with approved repair mortar to a "ready to paint finish".
- Unit Cost #8: Rout and Seal Cracks: Amount to rout 200 LF of cracks and seal with an approved urethane sealant.
- Unit Cost #9: Strip Paint: Amount to strip 500 SF of blistered or failed paint. Price to include feathering the edges of the removed paint to blend once repainted and the use of a high build coating to regain some of the lost millage.

FIXED COSTS

- Fixed Cost #1: Balcony Slab Replacement: Amount to remove the existing balconies (Units 316, 416 and 516) and up to 2' on the interior of the unit and recast a new balcony slab as shown on the attached drawings IAW Section 03300. Include removal of the boundary wall and knee wall below the window and replacement of the columns as shown on the attached drawings. Price to include application of stucco to the edge and bottom of the slabs and columns IAW Section 03355 and ASTM C926. Provide positive drainage on the balconies. Once the concrete is removed, the Engineer is to evaluate the condition of the steel to determine final depth of repair.
- Fixed Cost #2: Knee Wall Replacement: Amount to replace the knee wall as shown on the attached drawings at Units 216, 316, 416 and 516. The wall under the window shall match the existing height and have an opening to reinstall the PTAC. Include a precast window sill matching the aesthetics of the existing. Price to include application of stucco to the exterior of the walls IAW Section 03355 and ASTM C926. Include installation of insulation and ½" drywall on the interior of the unit. Match the existing texture in the unit.
- Fixed Cost #3: Guard Wall Replacement: Amount to replace the balcony guard wall as shown on the attached drawings at Units 316, 416 and 516. Price to include application of stucco to all sides of the wall IAW Section 03355 and ASTM C926.
- Fixed Cost #4: Hard Wall Barriers: Amount to construct/install temporary hard wall barriers at

the affected units (Units 216, 316, 416 and 516) to protect the interior from any weather damage. Include retexturing at wall and ceiling if finish is damaged. Unit Owners are responsible for paint and trim finishes and floor coverings unless Contractor negligence occurs.

Fixed Cost #5: Metal Framing: Amount to replace the metal framing above the balcony swing door as shown on the attached drawings at Units 216, 316, 416 and 516. All framing to be G90. Install new 5/8" Densglass Gold sheathing on the exterior and 1/2" drywall on the interior. Apply a waterproof coating to the exterior of the sheathing. Bring the drywall to a ready to paint surface matching the existing texture in the unit. Install R19 insulation in the wall.

Fixed Cost #6: Balcony Deck Coating: Amount to prepare the existing balcony surface of Units 216, 316, 416 and 516 and apply a new pedestrian grade urethane deck coating system IAW the Manufacturer's Specification. Price to include a new floor to wall cant bead and coating over the cant beads. The new system is to achieve a 5-year Manufacturer's Warranty. Owner to select color from standard color options.

Fixed Cost #7: Guardrail Removal/Storage/Reinstallation: Amount to remove the existing guardrails at Units 216, 316, 416 and 516, temporarily store and reinstall. The cost includes removal of the existing core and wall mount fasteners, patching the holes and installation of new grout and new stainless-steel fasteners matching the existing size. Include drilling a weep hole in the bottom of each post and applying self-leveling urethane to the bottom of the hole.

Fixed Cost #8: Paint Balconies: Amount to paint the affected balconies (Units 216, 316, 416 and 516) exterior walls and ceilings IAW Section 09900 and the Manufacturer's Specifications. Price includes pressure wash, mildewcide treatment and treating tight, hairline cracks as needed. Provide a 7-year paint material warranty and a 5-year labor warranty. The guardrails not included to be painted.

Fixed Cost #9: PTAC Reinstallation: Amount to remove, store and reinstall the existing PTAC units and sleeves. Reconnect the PTAC drain to the existing drain line on the West side of the building to match existing.

Fixed Cost #10: Mobilization and General Conditions: Contractors cost for mobilization and general conditions.

ALLOWANCES

Allowance #1: Electrical: \$12,000 allowance for the repair of electrical components within the slabs or columns or for PTAC. Provide Contractors percent mark-up on Sub-contractor. Contractor shall provide Sub-contractor invoices with each draw.

ALTERNATES

Alt. FC #6A: Balcony Deck Coating, Hybrid Urethane: Amount to prepare the existing balcony surface of Units 216, 316, 416 and 516 and apply a new pedestrian grade hybrid urethane deck coating system IAW the Manufacturer's Specification. Price to include a new floor to wall cant bead and coating over

the cant beads. The new system is to achieve a 5-year Manufacturer's Warranty. Finish shall be a knock down. Owner to select color from standard color options.

Alt. FC #7A: Guardrail Replacement, Balconies: Amount to remove and dispose of the existing guardrails on the balconies at Units 216, 316, 416 and 516. Replace with a new kynar coated aluminum, surface mounted system IAW Section 07520. Guardrail to have a 5 year warranty on material and installation and a 10 year warranty on the coating. Provide shop drawings signed and sealed by a Florida licensed Professional Engineer. Include removal of the existing attachment and backfilling with a repair mortar. Isolate dissimilar metals. All fasteners and washers to be 316 or 410 grade stainless steel. Color to be selected by Owners from the standard kynar colors. The nuts and washers on the base plate fasteners will be excluded from the warranty. The Contractor will leave two boxes of spare nuts and washers for maintenance. Include in the cost the reduction for scrapping the aluminum. Guardrails to match existing aesthetics.

BID SCHEDULE

ITEM #	DESCRIPTION	QTY	UNIT	UNIT \$	AMOUNT
UC#1	Concrete Repair, Top	5	CF	\$0.00	\$0.00
UC#1A	Concrete Repair, Top, MINIMUM	5	EA	\$0.00	\$0.00
UC#2	Concrete Repair, Ceiling	5	CF	\$0.00	\$0.00
UC#2A	Concrete Repair, Ceiling, MINIMUM	5	EA	\$0.00	\$0.00
UC#3	Concrete Repair, Slab Edge	5	CF	\$0.00	\$0.00
UC#3A	Concrete Repair, Slab Edge, MINIMUM	5	EA	\$0.00	\$0.00
UC#4	Concrete Repair, Column & Wall	15	CF	\$0.00	\$0.00
UC#4A	Concrete Repair, Column & Wall, MINIMUM	5	EA	\$0.00	\$0.00
UC#5	Concrete Repair, Window Sill	15	EA	\$0.00	\$0.00
UC#6	Stucco Repair	250	SF	\$0.00	\$0.00
UC#7	Rust Spot Removal	15	EA	\$0.00	\$0.00
UC#8	Rout and Seal Cracks	200	LF	\$0.00	\$0.00
UC#9	Strip Paint	500	SF	\$0.00	\$0.00
FC#1	Balcony Slab Replacement	1	LS	\$0.00	
FC#2	Knee Wall Replacement	1	LS	\$0.00	

FC#3	Guard Wall Replacement	1	LS	\$0.00
FC#4	Hard Wall Barriers	1	LS	\$0.00
FC#5	Metal Framing	1	LS	\$0.00
FC#6	Balcony Deck Coating	1	LS	\$0.00
FC#7	Guardrail Removal/Storage/Reinstallation	1	LS	\$0.00
FC#8	Paint Balconies			\$0.00
FC#9	PTAC Reinstallation			\$0.00
FC#10	Mobilization and General Conditions	1	LS	\$0.00
ALLOWANCES				
All. #1	Electrical	1	LS	\$12,000.00
	TOTAL BASE BID COST			\$12,000.00
	TOTAL TIME TO COMPLETE BASE BID			MONTHS

ALTERNATE - NOT IN BASE BID ITEMS				
Alt. FC#6A	Balcony Deck Coating, Hybrid Urethane	1	LS	\$0.00
Alt. FC#7A	Guardrail Replacement, Balconies	1	LS	\$0.00
TIME & MATERIALS RATE			HOURLY RATE FOR MH	\$0.00
TIME & MATERIALS RATE			MATERIAL MARKUP	0%
SUBCONTRACTOR MARK-UP				0%
CONTRACTORS EARLIEST START DATE			Day, Month	Year
NAME OF FULL TIME SUPERINTENDENT COMMITTED TO PROJECT				ENTER NAME HERE
NAME OF BONDING COMPANY				ENTER NAME HERE
RATING OF BONDING COMPANY				ENTER RATE HERE
BOND RATING OF BIDDER				ENTER RATE HERE
BIDDERS ELECTRONIC SIGNATURE				ENTER SIGNATURE HERE

NAME OF SIGNER & TITLE			ENTER NAME & TITLE HERE
BUSINESS NAME			ENTER NAME HERE
BUSINESS ADDRESS			ENTER ADDRESS HERE
TELEPHONE NUMBER			ENTER TELEPHONE HERE

SUBCONTRACTORS TO BE USED		
		ENTER NAME HERE
		ENTER NAME HERE

MATERIALS & PRODUCTS PROPOSED		
Concrete Repair		ENTER NAME HERE
Sealants		ENTER NAME HERE
Paint Manufacturer		ENTER NAME HERE
Balcony Deck Coating		ENTER NAME HERE
Stucco Repair		ENTER NAME HERE

Change in committed Superintendent without approval will be considered a breach of contract.

The undersigned BIDDER hereby certifies that his firm will be directly responsible for more than 50% of the bid amount for the proposed work unless an attached statement advises otherwise

BID GUARANTEE

The undersigned agrees that the Owner shall have the right to retain this bid for a period of 30 days from the Bid Opening Date and guarantee the amount or amounts set forth herein to be firm for the same 30 day period.

PERFORMANCE BOND

The Contractor shall provide a letter from a State of Florida Registered and Licensed Bonding Company having a B or better rating attesting that the Bidder is Bondable and will be provided a Bond if required. (DO NOT PURCHASE BOND)

BID ACCEPTANCE

If written notice of the acceptance of this bid is mailed, telegraphed or delivered to the undersigned within the time noted herein, after the date of the opening of bids, the undersigned agrees that he will execute a construction contract in accordance with the Bid as accepted, all within 30 days from date of such written notice. It is understood and agreed that the Owner reserves the right to award the contract to his best interests, to reject any or all bids, to waive any informalities in bidding, and to hold all bids for the bid guarantee period.

END OF SECTION 00300

BID DOCUMENTS

SECTION 01010: SUMMARY OF WORK

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including Contractual Conditions and other Division-1 Specification Sections, apply to this Section.

PROJECT DESCRIPTION

The Fountain Beach Resort consists of a six-story resort with a lobby and community rooms on the first floor. No original building plans exist. The building appears to be constructed with conventionally reinforced cast-in-place concrete slabs and columns. The exterior walls appear to be infill masonry reinforced block walls (CMU). The exterior walls have a stucco façade.

Balconies have tile applied over the concrete substrate, except Unit 216.

Aluminum, cored guardrails are located along the perimeter of the balconies, as well as a CMU knee wall on one side of the balcony.

This project includes replacing balcony slabs at Units 316, 416 and 516, repairing miscellaneous areas of concrete damage on the walls on those units, repairing the stucco façade, deck coating the balconies and painting the balconies. The unit owners are responsible for the swing door and window replacement.

The work is to commence as soon as possible and after the permit has been approved and notice of commencement has been filed and posted. Units will be occupied throughout the work period. The Contractor is required to obtain his own measurements and perform his own estimates of the work and shall participate in pre-construction planning meetings with the Owner's Representative and Engineer.

OWNERS RESPONSIBILITIES

Remove all items not attached to the balconies.

Remove any light/fan attached within 5' of the wall for hard wall barrier installation.

Move any furniture or décor within 5' of the wall for hard wall barrier installation.

Remove blinds/treatments from windows.

Mark sprinkler lines in landscape areas and have all underground utilities marked as needed.

Provide water, electricity, parking and storage area for the Contractor's personnel and material.

Keep guests and Owners informed of planned activities that may limit access and of areas that are designated as off-limits.

The Association is responsible for landscaping repair unless damage is caused by negligence. Contractor will work with Management to minimize any necessary damage.

CONTRACTORS RESPONSIBILITIES

The Contractor's shall:

1. Obtain Permits required to perform the Scope of Work.
2. Perform work in accordance with OSHA standards per 29 CFR 1926 and all local, State and Federal regulations and codes.
3. Construct and maintain a barrier to keep unauthorized personnel from entering the work area.
4. Coordinate for the EOR to inspect the balconies at Units 216, 316, 416 and 516 and mark all locations of concrete and stucco damage.
5. Construct shoring and bracing as needed to support structural elements being replaced or repaired. Shoring and bracing to be inspected by the Engineer before demolition.
6. Install hard wall barriers in Units 216, 316, 416 and 516.
7. Remove the windows and swing doors from the balconies of Units 216, 316, 416 and 516. The owner is responsible for their replacement.
8. Remove, store and reinstall the PTAC units and sleeves after the walls are replaced. Reconnect the PTAC drain to the existing drain line on the West side of the building to match existing.
9. Replace electric associated with the PTAC units as needed for repairs.
10. Remove, store and reinstall the existing guardrails at Units 216, 316, 416 and 516. Include drilling a weep hole in the bottom of each post and applying self-leveling urethane to the bottom of the hole.
11. Remove and replace the balconies, columns and knee walls from the balconies at Units 316, 416 and 516 as shown on the attached drawings.
12. Excavate damaged concrete to obtain sound concrete and un-corroded reinforcing steel. Shape repair areas and prepare the surfaces of the concrete and reinforcing steel in general accordance with the ICRI guidelines as shown on the drawings and in accordance with Section 03730. Concrete within the area of excavation shall have open pore surfaces with a 1/8th inch minimum fractured aggregate profile.
13. Lap new horizontal reinforcing steel as directed by the Engineer to existing reinforcing steel that has less than 85% effective cross-sectional area. Tension development shall be achieved by epoxy doweling wherever insufficient lap exists. Cleanliness and depth of epoxy dowel holes shall be verified and accepted by the Engineer before injection of epoxy. Install, support and tie new grade 60 reinforcing steel IAW CRSI Manual of practice.
14. Excavation surface preparation, geometry, reinforcing steel layout, support, spacing, tying and cleaning shall be inspected by Engineer before concrete placement. Cast excavated repair areas with an approved polymer modified repair mortar in accordance with Section 03730. Repair mortar may be extended IAW manufacturer's instructions with clean washed pea-rock.

The minimum depth of repair shall not be less than two inches.

15. Repair areas of stucco damage IAW ASTM C926. Stucco the replaced ceiling, slab edges, column and walls IAW ASTM C926. Match the existing texture as close as possible.
16. Remove corroded fasteners or rust spots from surfaces to be painted.
17. Install a new metal framed header above the swing door as shown on the attached drawings. All framing to be G90. Install new 5/8" Densglass Gold sheathing on the exterior and 1/2" drywall on the interior. Apply a waterproof coating to the exterior sheathing. Bring the drywall to a ready to paint surface matching the existing texture in the unit. Install R19 insulation in the wall.
18. Install new 1/2" drywall and insulation on the interior of the replaced knee wall. Match the existing texture as close as possible.
19. Replace all swing door and window perimeter sealants with an approved urethane sealant IAW Section 07900.
20. Rout and seal cracks as directed by the Engineer with an approved urethane sealant.
21. Strip blistered or failed paint. Include feathering the edges of the removed paint to blend once repainted and the use of a high build coating to regain some of the lost millage.
22. Pressure wash all previously painted surfaces on the exterior of Units 216, 316, 416 and 516. Apply new paint to the affected exterior walls and ceilings as specified in Section 09900 and by the Manufacturer. The guardrails are not included to be painted.
23. Prepare the balcony slabs at Units 216, 316, 416 and 516 as directed by the Manufacturer and apply a pedestrian grade urethane waterproofing deck coating system in an Owner selected color in accordance with Section 07570 and the Manufacturer's Specification. Include the replacement of the floor to wall cant bead with an approved urethane sealant. The top coat shall cover the cant bead to protect them from UV degradation. Owner to select color from the standard colors.

COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK

The Contractor is required to commence work, prosecute the work diligently, and complete the scheduled work to ready for use condition as required in the Contract. The time stated for completion shall include final inspection and cleanup of the premises. The Contractor will not be allowed to commence work at the site before certificates of insurance, required permits, and the intents to warrantee have been reviewed and approved and a Notice to Proceed has been issued. The contract time for purposes of fixing the completion date shall be the date stipulated in the Contract regardless of when the notice to proceed has been issued. Any delay in issuance of the Notice to Proceed because of the Contractor's failure to submit the required submittals within the time specified will not be cause for extension of the contract completion date.

LIQUIDATED DAMAGES: N/A

PROJECT STAFFING: A penalty in the amount of \$250.00 per day shall be charged to the

Contractor in the event the job-site staffing is not provided as agreed-upon.

WORK SEQUENCE

Schedule of Work: During the work, the Contractor shall endeavor to protect work in-progress and adjacent areas exposed from exposure to aggressive environmental conditions. Work activities will be scheduled and sequenced so work in progress and new work is protected from chloride ion intrusion and inclement weather. Work shall progress so that painting, clean up and all phases and elements are completed in a timely manner acceptable to the Owner and in accordance with the Contractor's initially submitted schedule.

CONTRACTOR USE OF PREMISES

General: The Building will be occupied during the work. Limit use of the premises to construction activities in areas indicated.

Schedule deliveries to minimize space and time requirements for storage materials and equipment on site. The Owner shall provide designated storage areas for the Contractor's materials and equipment and designated parking areas for Contractor's vehicles.

Use of the Existing Building: Maintain the existing building in a weather-tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building during the construction period.

The administrative offices, units, and common areas are off limits to the Contractor's personnel. When access to a unit is required as a part of the work, the Contractor's personnel must be accompanied by the Property Manager or her representative. The Contractor will be required to coordinate such access and accompaniment. Use of toilets within Units by the Contractor's personnel will not be permitted.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01010

SECTION 01027: APPLICATIONS FOR PAYMENT

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including Contractual Conditions and other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies administrative and procedural requirements governing the Contractor's Applications for Payment.

Coordinate the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, List of Subcontracts, and Submittal Schedule. The Contractor's Construction Schedule and Submittal Schedule are included in Section "Submittals".

SCHEDULE OF VALUES

Coordinate preparation of the Schedule of Values with preparation of the Contractor's Construction Schedule. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:

- Contractor's construction schedule.
- Application for Payment form.
- List of subcontractors.
- Schedule of allowances.
- Schedule of alternates.
- List of products.
- List of principal suppliers and fabricators.
- Schedule of submittals.

Submit the Schedule of Values to the Engineer no later than 7 days before the date scheduled for mobilization or submittal of the initial Application for Payment, whichever occurs first.

Sub-Schedules: Where the Work is separated into phases that require separately phased payments, provide sub-schedules showing values correlated with each phase of payment.

Format and Content: Use the Project Bid Form as a guide to establish the format for the Schedule of Values. Break down elements of tasks that you intend to bill for partial payment of a line item; ie; unit rate for excavations and unit rate for application of repair mortar.

Identification: Include the following Project identification on the Schedule of Values:

- Project name and location
- Name of the Engineer
- Project number
- Contractor's name and address
- Date of submittal

Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Break principal subcontract amounts down into several line items.

The total shall equal the Contract Sum.

Unit Cost Allowances: Show line item value of unit cost allowances as a product of unit cost times measured quantity as estimated from the best indication in the Contract Documents.

Change Orders: Approved change orders and Construction Change Directives shall be listed as separate line items at the end of the Application for Payment on each payment request. Updating and resubmitting the Schedule of Value will not be required.

APPLICATIONS FOR PAYMENT

Each Application for Payment shall be consistent with previous applications and payments as certified by the Engineer and paid for by the Owner.

Submit lien waivers from sub-Contractors and Venders with each application for payment with the exception of the first pay application.

Submit updated project schedules with application for payment, when schedule has changed from last schedule submitted.

The initial Application for Payment, the Application for Payment at time of Substantial Completion, and the final Application for Payment involve additional requirements.

Payment Application Times: Each progress payment date is as indicated in the Agreement. The period of construction Work covered by each Application or Payment is the period indicated in the Agreement.

Payment Application Forms: Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment.

Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the Owner. Incomplete applications will be returned without action.

Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions have been made.

Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.

Transmittal: Submit Application for Payment to the Engineer by means ensuring receipt within 24 hours; one copy shall be complete with waivers of lien and other attachments, when required.

Construction Schedule: Submit updated construction schedule with each application for payment, if schedule has changed from last submitted schedule. Refer to Section 01300 "Submittals".

Initial Application for Payment: Administrative actions and submittals that must precede or

coincide with submittal of the first Application for Payment include the following:

- List of subcontractors
- Schedule of Values
- Contractor's Construction Schedule (preliminary if not final)
- Schedule of unit prices
- Submittal Schedule (preliminary if not final)
- Copies of building permits
- Copies of authorizations and licenses from governing authorities for performance of the Work
- Certificates of insurance and insurance policies

Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment; this application shall reflect any Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

Administrative actions and submittals that shall proceed or coincide with this application include:

- Punch-out list
- Application for reduction of retainage and consent of surety
- List of incomplete Work, recognized as exceptions to Engineer's Certificate of Substantial Completion

Final Payment Application: Administrative actions and submittals which must precede or coincide with submittal of final payment Application for Payment include the following:

- Completion of Project closeout requirements
- Completion of items specified for completion (**Punch List**) after Substantial Completion
- Transmittal of required Project construction records to Owner
- Removal of surplus materials, rubbish and similar elements
- Release from bonding company, if required
- Final release and waivers of liens
- Warrantees with a start date coinciding with the date of Substantial Completion
- Cleaning, Care and Maintenance Binder

PART 2 - PRODUCTION (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01027

SECTION 01045: CUTTING AND PATCHING

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including Contractual Conditions and other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies administrative and procedural requirements for cutting and patching.

Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work. Requirements of this Section apply to concrete repair Division-03

SUBMITTALS

Prior to cutting structural components, notify the Engineer for approval.

PART 2 - PRODUCTS

MATERIALS

Use materials specified or submit requests for substitutions that can be verified as better or equal by technical data sheets and documented previous history.

PART 3 - EXECUTION

INSPECTION

Before cutting, examine existing surfaces to be cut and patched and conditions under which cutting, and patching is to be performed. Where cutting may affect structural integrity, contact the Engineer before proceeding. If unsafe or unsatisfactory conditions exist or are encountered during the work, halt work and take corrective action.

PREPARATION

Temporary Support: Provide temporary support and shoring to maintain structural stability and sufficient strength in the member to be cut.

Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.

Avoid interfering with use of adjoining areas or interruption of free passage to adjoining areas. Carefully remove items as required to perform the work. Perform the removal in a manner to minimize damage or breakage. Store and protect removed items for reinstallation. The reinstallation may be by others.

Take all precautions necessary to avoid cutting existing pipe, conduit, reinforcing steel or duct-work serving the building, but scheduled to be removed or relocated until provisions have been

made to bypass them. Where cutting and patching enters interior building areas, protect interior finishes and furnishings from dust and/or spills.

PERFORMANCE

General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.

Cutting: Cut existing construction using methods least likely to damage elements to be retained or adjoining construction. Where possible review proposed procedures with the original installer; comply with the original installer's recommendations. Cut through concrete and masonry using a cutting machine such as a carborundum saw or diamond core drill.

Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

CLEANING

Thoroughly clean areas and spaces where cutting and patching is performed or within areas accessed. Remove completely construction material or spatter from construction materials, paint, mortar, oils, putty, dust, debris and items of similar nature from all surfaces. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore disturbed ceiling, floor, and/or wall substrates to a ready to finish condition.

END OF SECTION 01045

SECTION 01300: SUBMITTALS

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including Contractual Conditions and other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including:

I. Pre-Construction Submittals

- Contractor's construction schedule
- Schedule of Values
- Submittal schedule
- Shop Drawings for Fabricated Items
- Product Data Sheets
- Intents to Warrant for all products used
- Unexecuted Copies of Warrantees to be issued upon Substantial completion

Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

- Permits
- G702/703 Applications for payment
- Performance and payment bonds, if required
- Insurance certificates

Construction Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for construction submittals. Such submittals include, but are not limited to:

- Concrete Mix Design for each mix used
- Manufacturer's Technical Data Sheets for any products or materials

SUBMITTAL PROCEDURES

Coordination: Coordinate, preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay. The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

Shop drawings shall be prepared by a Professional Engineer registered in the State of Florida. Each shop drawing sheet shall bear the Engineer's signature and be sealed by him.

Processing: Allow sufficient review time so that installation will not be delayed because of the time required to process submittals, including time for re-submittals.

Allow two weeks for initial review. Allow additional time if processing must be delayed for coordination with subsequent submittals. The Engineer will promptly advise the Contractor when a submittal being processed must be delayed for coordination.

If an intermediate submittal is necessary, process the same as the initial submittal.

Allow two weeks for reprocessing each submittal.

No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the Work to permit processing.

Submittal Preparation: Prepare a letter of transmittal or package with table of contents. Include the following information on the label for processing and recording action taken:

Project name
Date
Name and address of Contractor
Number and title of appropriate Specification Section
Drawing number and detail references, as appropriate

Submittal Transmittal: Transmit each submittal, after Contractor approval, from Contractor to Engineer using a transmittal form. Submittals received from sources other than the Contractor will be returned without action. On the transmittal, record relevant information and requests for data. On a separate sheet, attached to the transmittal, record deviations from Contract Document, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

SHOP DRAWINGS

Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.

Do not submit Shop Drawings until compliance with requirements of the Contract Documents has been confirmed, and the Contractors approval stamp has been affixed. Shop drawings will include the following:

Dimensions
Identification of products and materials included
Compliance with specified standards
Notation of coordination requirements
Notation of dimensions established by field measurement

Submittals: Submit 1 copy electronically to the Engineer. Drawings on sheets at least 8 1/2" x 11" sheets or larger are permitted.

Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.

PRODUCT DATA

Submit Product Data that verifies conformance to the specifications a minimum of 2 weeks in advance. Mark each copy to show applicable choices and options. Where Product Data includes several products, some of which are not required, mark which products are intended for use and where the products will be used. Include the following information:

- Manufacturer's printed recommendations
- Compliance with recognized trade association standards
- Compliance with recognized testing agency standards
- Application of testing agency labels and seals
- Notation of dimensions verified by field measurement
- Notation of coordination requirements
- Certificate of Compliance with specification when requested
- Specifically, where product is intended to be used

Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed, and the Engineer's approval stamp has been affixed.

Submittals: Submit 1 copy electronically to the Engineer.

SAMPLES

Submit full-size, fully fabricated samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, color range sets on stucco or concrete of the desired color, texture and pattern. Include the following:

- Generic description of the Sample
- Sample source
- Product name or name of manufacturer
- Compliance with recognized standards
- Where intended use

Install Mock-up in area intended for use for Owner review and acceptance of kind, color, pattern, and texture for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.

ENGINEER'S ACTION

Except for submittals for record, information or similar purposes, where action and return is required or requested, the Engineer will review each submittal, mark to indicate action taken, and return promptly.

Action Stamp: The Engineer will send a letter of transmittal describing the review, as follows, to indicate action taken:

Final Unrestricted Release: Where submittals are marked "Conforms with Design Concept", that part of the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance.

Final-But-Restricted Release: When submittals are marked "Conforms with Design Concept As Noted", that part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.

Returned for Resubmittal: When submittal is marked "Revise and Resubmit As Noted", do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations and resubmit. Contractor will be responsible for all additional costs associated with all re-submittals.

Other Action: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned, without stamp.

PART 2 - PRODUCTS (Not Applicable.)

PART 3 - EXECUTION (Not Applicable.)

END OF SECTION 01300

SECTION 01450: STRUCTURAL INSPECTION

PART 1 – GENERAL

A. SCOPE

This document is the threshold inspection plan and is not intended to be an all-inclusive inspection checklist. The Special Inspector shall use his professional judgement, knowledge of the jobsite and the Contractor's performance and capabilities to decide what items require additional attention. These services do not relieve the Contractor of the responsibility for compliance with Contract Document requirements pertaining to the Contractor's quality control. Requirements for the Contractor to provide quality control services required by the Engineer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

General Objectives: The general objective of the inspection plan laid out herein is to observe the placement of structural components. This is to determine and report to the concerned parties that the structure is being repaired in conformance with the structural documents, and if not, the locations and descriptions of variations. Variations from plans and specifications shall be reported as well as actions taken by the Contractor with respect to these.

Limitations: The following plan is outlined as a minimum only and may be supplemented by special requirements as noted. Contractor performance and capability may only increase Special Inspector involvement in any project.

B. SPECIAL INSPECTOR

The Special Inspector shall be registered in the State of Florida as a Professional Engineer, in addition to being authorized by the Florida Board of Professional Engineers to perform structural inspections on threshold buildings as required by Section 553.79 F.S. The Special Inspector may send an authorized representative to the site, but that person shall be experienced and knowledgeable in the structural systems being used. Both the actual visiting representative and the Special Inspector shall sign the report and all reports will be signed and sealed by the registered Special Inspector.

The Special Inspector shall not direct the Contractor's work, nor be responsible for construction means and methods. The Contractor remains solely responsible for any deviations from the Contract Documents.

The Special Inspector shall be retained by the Owner and report to the enforcing agency. The Engineer of Record may act as the Special Inspector.

The Special Inspector shall not make design decisions. Should any questions arise as to the design intent, the Special Inspector shall refer such to the Architect or Structural Engineer of Record for clarification.

C. REPORTS

The Inspector shall submit reports to the Owner, Contractor, the Building Department, and Engineer of Record, if other than the Special Inspector.

Reports shall include date, time and a list of persons involved in the inspection, such as job superintendent, project manager, design professionals, materials testing representatives, etc. Reports shall identify area inspected and observations specifically as related to the permit drawings. Deviations from the permit documents shall be reported to all parties and any corrective actions taken or not taken shall be noted.

Final Statement of Compliance

In accordance with the state laws, the Special Inspector will prepare and issue a final report upon completion of construction of the structural components which will, in effect, be a summary of the field review reports. The Special Inspector shall have performed his duties properly, to the extent that he shall file a true, signed and sealed statement, in accordance with current State requirements, in substantially the following form:

"To the best of my knowledge and belief, the above described construction of all structural load-bearing components complies with the permitted documents and the shoring and re-shoring complies with the shoring and re-shoring plans submitted to the Enforcing Agency."

D. APPLICABLE DRAWINGS, SPECIFICATIONS AND REFERENCES

Prior to commencement of construction the Special Inspector will be provided with a complete set of design documents including:

1. Structural drawings prepared by United Engineering Consultants, Inc.
2. All related addenda

Following review and approval by the Engineer of Record, the Special Inspector will be provided with approved copies of applicable shop drawings including:

1. Formwork and shoring plans provided by the Contractor
2. All approved structural shop drawings
3. Concrete mix design(s)
4. Reinforcing steel shop drawings

E. SUBMISSIONS/ALTERNATES/REVISIONS

Submissions for alternates as provided by the Contractor or Subcontractors shall be processed by the design professionals of record. Documentation regarding acceptance or denial of proposed alternatives shall be provided to the Special Inspector as they become available.

The Special Inspector shall be advised of any structural design changes or revisions to the permitted documents.

Part II – MINIMUM REVIEW REQUIREMENTS

A. STRUCTURAL COMPONENTS

1. Reinforced Concrete

The Special Inspector shall be notified a minimum of 48 hours prior to the casting of any

structural concrete.

Inspection shall include review of preparations prior to concrete placement, adequate inspection during concrete placement and verification of proper protection and treatment of concrete after placement.

Prior to casting:

- Repairs:
 - o Verify all repairs conform to the International Concrete Repair Institute standards
- Forms:
 - o Location and required dimensions
 - o Alignment
 - o Form-ties and spacers
 - o Formwork and shoring per approved shoring plans
 - o Openings: Locations and added reinforcement where required
 - o Embedded items: size, location, chairing, secured. If conflicts – verify that no cutting or modification of detailed reinforcement is done without approval of the EOR
 - o Forms cleaned prior to placement
- Joints:
 - o Locations of construction, contraction and expansion joints
 - o Added bars where required
 - o Preparation of joint surface
- Reinforcement:
 - o Location, size, spacing, bends, laps and embedment lengths
 - o Cleaned to white metal
 - o Tied and supported securely
 - o Cover and clearances

During placement:

- Concrete quality:
 - o Material testing per specifications
 - o Periodic checking of mixing and material times
 - o No water added after initial mixing
 - o If utilizing bag mix materials, verify materials are approved by EOR.
- Conveying and placing:
 - o Review method(s) of placement – to prevent segregation due to free drop of concrete, to prevent displacement of reinforcement and/or formwork during concrete placement
 - o Rate of concrete placement to avoid cold joints
 - o Adequate vibration and consolidation
 - o If utilizing bag mix materials, spot check compliance with data sheets for mixing time and amount of water added.

After Placement:

- Curing: Application and duration per specifications
- Strength: Strength testing and results per specification

- Repair of defective areas: Cutting, patching and curing per EOR's directions
- Formwork removal: Adequate concrete strength prior to removal. Formwork and shoring removal and reshoring per approved plans.

B. MATERIALS TESTING

- All testing requirements, as defined in the structural documents, shall be carried out by an independent inspection and testing laboratory, in accordance with current code requirements and standards of practice. Reports shall be prepared in accordance with current applicable industry standards. Copies of test reports will be provided to the Special Inspector.
- The specified level of testing shall be a minimum and the Special Inspector may direct additional tests as required. The intent of this is to allow the Special Inspector to state the materials used are in conformance with the requirements of the structural documents.

END OF SPECIAL INSPECTOR PLAN

SECTION 01700: PROJECT CLOSEOUT

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including Contractual Conditions and other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies administrative and procedural requirements for project closeout, including but not limited to:

- Inspection procedures
- Project record document submittal
- Submittal of warranties
- Final cleaning

SUBSTANTIAL COMPLETION

Definition: Substantial completion occurs when all work in the summary of work section and all change orders have been completed and accepted by the Engineer, less minor punch-out work that does not affect the Owners full use of the Building or any component of the building.

Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, Contractor shall complete the following. List exceptions in the request.

In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for all portions of the Work and a reduction of retainage from 10% to 5%. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.

If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, the reasons the Work is not complete and a schedule for the completion of the un-completed items.

Submit specific fully executed warranties for all products, materials and workmanship and final releases of lien from any vender or subcontractor that has filed "Notice to Owner".

Submit the Contractor's punch-out inspection list, signed off by Contractor as having been completed.

Complete final clean up requirements, including touch-up painting. Touch-up and otherwise repair and restore marred exposed finishes.

Schedule Engineer and Owner for the verification and acceptance of substantial completion punch-out inspection. Schedule the Engineer at a time when the Superintendent or Contractor and Owner can accompany the Engineer's Inspector during the entire inspection.

The Engineer shall inform the Owner of the date scheduled for the punch-out inspection and request the Owner provide a list of any issues or defects that the Owner may be aware of to the

Engineer prior to the Engineer's inspection. The Engineer shall make the Owner aware that defects that arise or are noted after this inspection shall be considered warranty issues and are to be referred to the Contractor as warranty issues in accordance with Section 01740 of the Specifications.

Inspection Procedures: On receipt of a request for inspection, the Engineer will either proceed with inspection or advise the Contractor of unfilled requirements. The Engineer will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.

The punch-out inspection will form the basis of requirements for final acceptance.

FINAL ACCEPTANCE

Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.

Submit an updated final statement, accounting for final additional changes to the Contract Sum.

Submit a copy of the Engineer's punch-out inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.

Schedule the Engineer to perform a Final Inspection of the work to verify items noted on the punch-out inspection have been completed.

Submit two copies of a close-out binder containing the cleaning, care and maintenance procedures for all products used, the instructions to the Owner for making a warranty claim, an index of all products and the period of the warranty for each product, executed copies of warranties commencing on the date of substantial completion unless indicated otherwise and all final lien releases.

Re-inspection Procedure: If a re-inspection is required, the Engineer will re-inspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the Engineer and the cost for the re-inspection will be paid for by the Owner but deducted from the Contractor's retainage.

PART 2 - PRODUCTS (Not Applicable.)

PART 3 - EXECUTION

FINAL CLEANING

General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities".

Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

Complete the following cleaning operations before requesting inspection for Certification of Substantial Completion.

Clean transparent materials, including glass in doors and windows. Removing glazing compound and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.

Clean exposed exterior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Leave concrete floors broom clean. Vacuum carpeted surfaces.

Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.

Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.

Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.

Where extra materials of value remain after completion of associated Work, dispose of these materials as directed by Owner.

END OF SECTION 01700

SECTION 01740: WARRANTIES

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including Contractual Conditions and other Division-1 Specification Sections, apply to this Section.

SUMMARY

This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents.

Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.

General closeout requirements are included in Section "Project Closeout".

Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign joint and severance warranties with the Contractor.

WARRANTY REQUIREMENTS

Owner: Warranties shall be made out to the Association as Owner and shall be fully transferable to successive Association Boards over the life of the warranty.

Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged because of such failure or that must be removed and replaced to provide access for correction of warranted Work.

Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty of the repaired work by written endorsement. The reinstated warranty shall be equal to the original warranty adjusted for depreciation.

Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from its use through a portion of its useful service life.

Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.

Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is

presented that entities required to countersign such commitments are willing to do so.

Provide the Following Warranties Per Product:

- Contractor: 5-year workmanship warranty
- Concrete Repair: 5-year labor and material warranty
- Sealants: 5-year labor and material warranty
- Paint: 7-year material warranty and a 5-year workmanship warranty
- Stucco: 5-year labor and material warranty
- Deck Coating: 5-year labor and material warranty

SUBMITTALS

Submit intent to Warrantee by Material Supplier/Manufacturer within 15 days of notice to proceed.

Submit copies of Unexecuted warranties to the Engineer with the Manufacturers Letter of Intent to warranty the work or product. The unexecuted warranty shall be the exact same form of the warranty to be issued upon substantial completion, listing all provisions of the warranty including all terms, limitations and exclusions clearly stated.

Submit written Executed warranties to the Engineer with the Application for Payment for Substantial Completion. If the Engineer's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Engineer.

When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, the supplier of the warranty shall prepare a written document that contains appropriate terms and responsibilities, ready for execution by the required parties. Submit a draft to the Owner through the Engineer for approval prior to final execution.

Refer to individual Sections of Divisions 2 through 16 for specific content requirements, and requirements for submittal of special warranties.

Form of Submittal: At Substantial Completion compile two copies of each required warranty and bond properly executed by the Contractor or subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the Project Manual table of contents and submit one copy to the Engineer and one copy to the Owner.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION (Not Applicable).

END OF SECTION 01740

SECTION 03355: STUCCO/PLASTER

PART 1 - GENERAL

SUMMARY

This Section specifies stucco materials, mix design, placement procedures, curing, and testing where stucco repair or replacement is performed.

REFERENCE STANDARDS

ASTM C 926 "Standard Specification for Application of Portland Cement-Based Plaster
PCA Portland Cement Plaster (Stucco) Manual
PCA Concrete Masonry Handbook

SUBMITTALS

General: Submit all product data for materials and items, including reinforcement, admixtures, patching compounds, joint systems, curing compounds, sealants, waterproofing coatings, paint and finishing materials, and others requested by Engineer.

QUALITY ASSURANCE

Standards: Comply with provisions of the Portland Cement Plaster (Stucco) Manual, Portland Cement Association, except where more stringent requirements are specified here-in.

Warranty: Contractor shall provide a 5-year labor and material warranty. Contractor shall warrant that stucco shall be free of defects for the length of the warranty and shall maintain proper bond to substrate. Contractor warrants that he/she will repair any defects or loss of bond during the warranty period at no expense to the Owner, to include texture and painting to match surrounding.

PART 2 - PRODUCTS

Portland Cement: ASTM C 150, Type I, II or I-II with or without Air Entrainment

Sand: ASTM C 897 Provide aggregates from a single source.

Gradation Retained	Min	Max
No. 8	0	10
No. 16	10	40
No. 30	30	65
No. 50	70	90
No. 100	95	100
No. 200	97	100

Water: Potable. Mix 1 part Acrylok by W. R. Meadows to 3 parts water

Admixtures, General: Concrete admixtures shall contain not more than 0.1 percent chloride ions.

Acrylok, WR Meadows, to replace 25% of water (3 parts water to 1 part Acrylok)

AcrylBond, Lambert, to replace 25% of water (3 parts water to 1 part Acrylbond)

Air-Entraining Admixture: ASTM C 260, certified by manufacturer to be compatible with other required admixtures. Products that may be incorporated in the Work include, but are not limited to, the following:

Air-Mix or Perma-Air, Euclid Chemical Co.
Darex AEA or Daravair, W.R. Grace & Co.
MB-VR or Micro-Air, Master Builders, Inc.
Sika AER, Sika Corp.

Plasticizers: for Portland Cement only

Special finishing Hydrated Lime, ASTM C 206, Type S
Hydrated Lime for Masonry, ASTM C 207, Type S

Primers/Bonding Agents: Apply to substrate before stucco application

Mixing shall be performed in a paddle type mixer for three to five minutes, after all ingredients have been added to the mixer.

Fiber Reinforcement: Add to mix at rate of 1.0 lb per cu. yd. Or as recommended by manufacturer.

Air-entraining admixture will improve the work-ability and durability of the plaster and reduce the plaster porosity and shall be at manufacturer's prescribed rate to result in plaster having an air content of 3 - 5 percent.

PLASTER MIXING

When air temperature is between 85 deg F (30 deg C) and 90 deg F (32 deg C), reduce authorized working time from 1-1/2 hours to 75 minutes, and when air temperature is above 90 deg F (32 deg C), reduce authorized working time to 60 minutes.

PART 3 - EXECUTION

Surface Preparation:

1. Remove all disbonded stucco to sound and firm substrate or firmly bonded stucco.
2. Clean the surface of the substrate to which the plaster is to be applied until free of any debris, surface contaminants such as soot, mildew, fungus, oil, and any foreign matter that would inhibit the proper bonding of stucco to the substrate.
3. Apply Latex primer/bonding agent to substrate according to Manufacturer's directions. Area to be stucco-ed within 8 hours or re-apply according to written Manufacturer's directions.

Batching Procedures: 1st Coat

1. Place 3/4ths of the water in the mixer
2. Place 1/2 of the sand in the mixer

3. Add all cement, lime and admixtures
4. Place remaining sand
5. Add additional water to achieve proper mixture consistency
6. Mix for not less than three minutes after the final water is added.

Batching Procedures: Finish Coat

Same as above, except add 1 pint acryl bond for every 3 pints water in the mix water.

Apply Plaster: Apply the stucco IAW ASTM C 926

Note: The interval between applying and troweling is critical since consolidation is only feasible while the stucco is in the plastic state. After rodding, the compressive floating should occur when the trowel does not adhere to unworked plaster.

1. Apply plaster such that no stoppage or delay occurs within a panel.
2. Apply all stucco within a working time of not greater than 90 minutes. After 90 minutes discard all un-applied plaster.

Construction Joints: Locate and install construction joints at all interfaces of dissimilar materials:

Joint spacings will not span greater than 10 feet or form a square of greater than 150 Square feet. The length to width ratio shall not exceed 1.5 to 1

CURING AND PROTECTION

General: Protect freshly placed stucco from premature drying and excessive cold or hot temperatures. In hot, dry, and windy weather protect concrete from rapid moisture loss before and during finishing operations by fogging such that the surface remains moist. In other weather, fog at the beginning and end of each day for three consecutive days.

Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting; keep continuously moist for not less than 3 days.

END OF SECTION 03355

SECTION 03730: CONCRETE REPAIR

PART 1 - GENERAL

1.1 SUMMARY

This section specifies requirements for the repair of reinforced concrete slabs, columns, beams and other structural members not being replaced.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. The Division 1 administrative portions of the specification including General and Contractual Conditions apply to this section.

1.2.1 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 615	Specification for Deformed and Plain Billet Steel Bars for Concrete Reinforcing
ASTM C 31	Making and Curing Concrete Test Specimens in the Field
ASTM C 33	Concrete Aggregates
ASTM C 39	Compressive Strength of Cylindrical Concrete Specimens
ASTM C 78	Standard Test Method for Flexural Strength of Concrete
ASTM C 94	Standard Specification for Ready Mix Concrete
ASTM C 109	Standard Test Method for Compressive Strength of Hydraulic Cement Mortars
ASTM C 143	Standard Test Method for Determining Slump of Fresh Concrete
ASTM C-150	Standard Specifications for Portland Cement

1.2.2 AMERICAN CONCRETE INSTITUTE (ACI)

ACI 301,	Standard Specifications for Structural Concrete for Buildings
ACI 318,	Building Code Requirements for Reinforced Concrete
ACI 530/ASCE 5-11	Building Code Requirements for Masonry Structures
ACI 530.1/ASCE 6-11	Specifications for Masonry Structures
ACI 562,	Code Requirements for the Assessment, Repair and Rehabilitation of Existing Concrete Structures

1.2.3 CONCRETE REINFORCING STEEL INSTITUTE (CRSI)

CRSI Manual of Standard Practice

1.2.4 INTERNATIONAL CONCRETE REPAIR INSTITUTE (ICRI) Technical Guidelines (TG):

TG No. 03730 "Surface Preparation for the Repair of Deteriorated Concrete"
TG No. 03733 "Selecting and Specifying Materials for Concrete Repair"

1.3 SUBMITTALS: The following are required at least 15 days prior to their intended use;

Manufacturer's Technical Data Sheets for Manufactured Repair Products
Mix Designs for Plant Batched

1.4 QUALITY ASSURANCE

- 1.4.1 Testing: Testing and Inspection of the work will be performed by the Contractor, Repair Product Manufacturer's Representative (MFR) and the Owner's Engineer (OE). Quality assurance inspections and tests by the OE do not relieve the Contractor or Contractor's MFR of their responsibility to perform quality control testing and inspections to verify conformance to the specifications. The MFR shall perform inspections during start-up and following phases as necessary for the MFR to document Contractor's proper use and application of materials and as necessary to validate the MFR's warranty. The MFR shall provide written reports of inspections or observations that document that the Contractor's use and application of materials conforms substantially to the MFR's instructions. It shall be the MFR's responsibility to identify and correct any mis-use of the product that would affect the products proper and intended performance. The Contractor shall forward a copy of the MFR's report to the Engineer of Record within 72 hours of receipt.
- 1.4.2 Qualifications: The Contractor and Contractor's Personnel shall be qualified to perform the work specified by training provided by the product MFR and have a minimum of two years experience with the product. The Contractor's personnel will be experienced in the storage, handling, conditioning, mixing, and application of the materials approved for use. The contractor shall submit laboratory tests or MFR's certifications that validate product compliance with the criteria specified herein.
- 1.4.3 Warranty: Contractor to provide a five-year labor and material warranty. Contractor shall warrant that concrete repairs shall be free of defects for the length of the warranty and shall maintain proper bond to substrate. Contractor warrants that he/she will repair any defects or loss of bond during the warranty period at no expense to the Owner, to include stucco, texture and painting or coating to match surrounding.

1.5 DELIVERY, STORAGE AND HANDLING

Products shall be delivered in original un-opened factory waterproof packaging bearing MFR identification of product, batch number, and expiration date. MSDS shall accompany shipment for each product. Store in a manner and location to protect from damage, precipitation and direct sunlight in accordance with the MFR's recommendations. Do not open until the day of use. Do not store opened bags for re-use.

Prior to use, condition the product to appropriate temperature for use in accordance with the MFR's recommendations. Handle material in accordance with MFR's instructions.

1.6 WEATHER AND PROJECT CONDITIONS:

Do not use products during precipitation or freezing weather. Protect concrete work from exposure to potentially damaging or deteriorating conditions including weather, chloride ions or other conditions. Do not apply material at temperatures below 40 or above 90 degrees F. Protect adjacent work while mixing and handling the materials.

1.7 EQUIPMENT:

Use equipment recommended by the manufacturer as the mixing vessel. Use a power driven propeller or paddle type blade recommended by the manufacturer for mixing. Maintain a translucent or opaque container for mixing water that is marked with the

amount of water to be added to one bag of mix.

PART 2 - PRODUCTS

2.1 CONCRETE REPAIR MATERIALS

2.1.1 CONCRETE PATCH MATERIALS:

Portland Cement: ASTM C 150, Type I, II or I-II with or without Air Entrainment. Use one brand of cement throughout Project unless otherwise acceptable to Engineer.

Fly Ash: ASTM 495, Class C or F

Silica Fume: Force 10,000 by W.R. Grace or MCSF by Masterbuilders

Normal-Weight Aggregates: ASTM C 33. Provide aggregates from a single source.

Do not use fine or coarse aggregates that contain deleterious substances that cause alkali-silica reaction. Local aggregates not complying with ASTM C 33 that have been shown to produce concrete of adequate durability by tests or actual service may be used when acceptable to Engineer.

Water: Potable.

2.1.2 PACKAGED POLYMER MODIFIED CONCRETE REPAIR MORTAR MATERIALS

Subject to compliance with requirements, acceptable products include, but are not limited to, the following. Alternates to acceptable manufacturer will be considered on basis of written substantiation of product performance as listed in section 2.1.3 below.

- MasterEmaco N 425 by BASF for overhead or vertical repair.
- MasterEmaco T 1061, 466 for horizontal repair.
- Tamms/Euclid Speedcrete PM for overhead repair.
- Tamms/Euclid Form and Pour for horizontal
- Mapei Planitop per Engineers Approval

2.1.3 PERFORMANCE CRITERIA

Properties of mixed cementitious repair materials shall meet or exceed the following:

- A. Working time: Not less than 30 minutes at 70 degrees F
- B. Compressive Strength (ASTM C-109 Mortar) Minimum
 - a. 1 day: 1,200 psi
 - b. 28 days: 5,000 psi but not greater than 7,000 psi
- C. Flexural Strength (ASTM C348) Minimum
 - a. 1 day: 500 psi
 - b. 28 days: 1,000 psi
- D. Bond Strength (ASTM C-882 Modified) Minimum
 - a. 1 day: 400 psi
 - b. 28 days: 1200 psi
- E. Chloride Permeability - coulombs (AASHTO T-277)
Low range according to ASTM C1202, Table 1

- F. Length Change (ASTM 157) 0 to 28 day Modified
a. 1 day: 0.000075 inches/inch positive
b. 28 days: 0.00015 inches/inch positive
- G. Modulus of Elasticity (ASTM C215) 1.4×10^6 psi
- H. Linear Coefficient of Thermal Exp. (ASTM C531) 5.44×10^{-6} in/in/degree F

2.2 RELATED MATERIALS

2.2.1 Reinforcing:

ASTM A 615, Grade 60 deformed reinforcing steel
Fiberglass Reinforcing in locations acceptable to the Engineer

2.2.2 Anchoring Adhesives:

Adhesives for doweling rebar or anchoring threaded rod shall meet ACI 355.4.
Acceptable products are as follows:

- Hilti RE500-SD
- Simpson Strong-Tie AT-XP or SET-XP

2.2.3 Formwork: Plywood or metal form free of defects sufficient for structural and visual requirements. Form-work shall be straight, level and flat to provide a finished product meeting finished tolerances established in ACI 301.

2.2.4 Moisture-Retaining Cover: One or several of the following, complying with ASTM C 171.

- Burlap, Waterproof paper or blanket.
- Confilm Evaporation Reducer, Master Builder
- Polyethylene film

2.2.5 Liquid Membrane-Forming Curing Compound: Complying with ASTM C 309, Type I, Class B. Moisture loss not more than 0.55 kg/sq. meter when applied at 200 sq. ft./gal. Subject to compliance with requirements, products that may be incorporated in the Work include, but are not limited to, the following:

- FX 15 Water Based Curing and Sealing Compound, Simpson Strong-Tie
- Vocomp 25, W. R. Meadows
- Masterkure 200W, Master Builders.
- Eucocure, Euclid Chemical Co.
- Crystal Clear Seal 1315, Lambert Corp.
- Kure-N-Seal, Sonneborn-Chemrex.

2.2.6 Migrating Corrosion Inhibitors:

- MCI 2020, Cortec

2.2.7 Concrete Finishes: Smooth hard trowel finish. Flatness less than 1/8 inch in 6 linear feet in any direction and evenly adjoined to match surrounding surfaces. Sloped to drain and prevent ponding or bird-baths. No ponding will be acceptable.

PART 3 - EXECUTION

3.01 General:

The Contractor and Engineer shall identify the location and boundaries of repair before concrete demolition or excavation. The Engineer, or his representative, shall establish limits of the repair area that the Contractor shall not exceed without the authorization of the Engineer or his representative. All repairs shall extend to sound concrete as verified by concrete hardness or application of phenolphthalein applied by the Contractor.

3.02 Shoring:

The Contractor shall erect and maintain shoring where needed before beginning any repair work. The shoring shall be inspected by the Engineer before beginning concrete demolition or excavation. Shoring shall extend continuously through all lower floors while work is being performed and until the Engineer authorizes removal of the shoring. Shoring shall be free of defects that would affect performance. Floor loads shall be transmitted through bearing sill plates of not less than 1.5 SF spanning perpendicular to main reinforcement placements. One inch thick wood planks or steel plates with a minimum half inch thickness are acceptable.

3.1 PREPARATION:

- a. Contractor and Engineer mark areas of unsound concrete to be removed.
- b. Remove loose, damaged or deteriorated concrete with light weight pneumatic chipping hammer or hydro-demolition. Saw cut around the perimeter of the area to be repaired to a depth of at least $\frac{1}{2}$ inch or greater. No feather edges will be permitted. Sand-blast or roughen saw cut edges to promote bond with repair material.
- c. The depth of removal shall not be less than 2 inches. The removal shall extend to sound concrete and fully around reinforcing steel having at least 85 percent effective cross sectional area.
- d. Obtain a fractured aggregate profile at the surfaces of the excavation. The horizontal plane formed at the bottom of the excavation shall be chipped to a near flat surface forming rectangular shaped repair areas, as indicated on the drawings and as referenced in ICRI technical repair guidance document No. 03730. Clean steel to remove all contaminants and rust. A tight oxide remaining on steel will be acceptable. Chip under reinforcing steel so that the area under the rebar will be equal to or greater than $\frac{3}{4}$ inch. Position bar so at least one inch of concrete cover is maintained.
- e. Apply corrosion inhibitor directly to reinforcing steel and all adjacent concrete surfaces within 12 inches of the termination of the excavation as indicated in the Manufacturer's instructions.
- f. Remove all loose material so no dust, latence, loose aggregate or particles remain. Clean the area to be repaired by water blast to remove all debris.
- g. Soak surfaces of excavation by ponding to allow surface to become S.S.D before placing patch material.
- h. Engineer to inspect preparation of repair surface prior to repair mortar placement to approve for concrete placement and to record volume or Unit measurement of repair.

3.2 APPLICATION

3.2.1 PROPORTIONING CONCRETE MIXES

Dry Pack Mixes: Use 1 part cement to 2-1/2 parts sand/aggregate. Limit use of silica fume to not exceed 4.0 percent of cement content by weight and not be less than 2.0 percent by weight. Limit use of fly ash to not exceed 20 percent of cement content by weight and not be less than 12 percent by weight. Substitute 1.25 to 1.5 pounds of silica fume and/or fly ash for each pound of cement replaced. Optimum target 16% fly ash and 3% silica fume.

3.2.2 CONCRETE MIXING

Dry Pack Mixes: Prepare dry pack mix by blending all ingredients, except silica fume, dry and thoroughly mixing until the mixture is uniformly homogeneous. Add slight moisture to reduce dustiness of mix. Add Force 10,000 silica fume by WR Grace and mix at least five minutes to thoroughly blend. Attempt to form a ball with the mixture using hand pressure. The ball should form firmly and not crumble or crack with moderate hand pressure. When firmly squeezed, no excess water should be squeezed from the mixture. If the mixture is to dry to be cohesive and hold together when squeezed, slowly add slight additional water and thoroughly mix until a cohesive ball can be formed.

Mixing Polymer modified Repair Material: Mix packaged repair mortars in strict accordance with manufacturer's instructions. Contractor shall provide a clean translucent container marked with the volume of water per bag required by the Manufacturer. Mix continuously at slow speed to avoid air entrainment. Avoid over mixing that could cause aeration of the mix. Mix will appear dry until full mix time is accomplished. No additional water shall be added and any improperly mixed material shall not be used in the work.

Mix no less than one full bag. No field proportioning of partial bags will be permitted. Mix no more material than can be placed in 30 minutes at 70 degrees F.

3.3 PLACEMENT

1. Remove standing water from pre-dampened patch area.
2. Do not prime patch area.
3. Apply mortar in lifts of not less than 1/4 inch and not greater than 2 inches. Where successive layers are required, key in and compact thoroughly to secure bond. Score successive lifts and allow to initially (30 minutes) set before applying next lift.
4. Continue expansion and/or control joints through repairs.
5. Trowel to smooth hard troweled finish after initial set compatible with the surrounding surface and even with adjoining edges.

3.4. CURING:

1. Wet cure horizontal patch for 72 hours after placement by fogging or placement of wet burlap or saturated blanket (carpet remnant) covered by a polypropylene sheet to reduce evaporation.

2. Cure overhead and vertical patches with membrane sealer.
3. Protect from rain and temperatures below 40° F.

4.0 ACCEPTANCE

1. Repair Surfaces: Inspect repair surfaces for smoothness and verify surface tolerances specified for each surface and finish. Correct low and high areas as specified. Test unformed surfaces sloped to drain for trueness of slope and smoothness by using a straight edge and by ponding water.
2. Repair finished unformed surfaces containing defects that affect the concrete's durability. Surface defects include crazing and cracks in excess of 0.01 inch wide or that penetrate to the reinforcement or completely through non-reinforced sections shall be removed and replaced. Patch areas that exhibit spalling, disbondment at edge, popouts, honeycombs, rock pockets, and other objectionable conditions shall be removed and replaced with new patch mortar.
3. Correct high areas in surfaces by grinding after concrete has cured at least 1 day.
4. Correct low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
5. Repair methods not specified above may be used, subject to acceptance of Engineer.

PART 4 - PAYMENT

The repair work shall be paid for at the contract unit bid cost per cubic foot as provided in the Contract. Said payments shall be full compensation for furnishing and installing all labor, materials, tools, and equipment utilized in completing this project. Payment will be made based on the percentage of work completed and accepted by the Engineer during each period in accordance with the General Conditions in these documents.

END OF SECTION 03730

SECTION 07570

POLYURETHANE WATERPROOF COATING

This guide specification is for waterproofing balconies with a waterproof, wear resistant coating. This system provides positive waterproofing and some limited crack-bridging capabilities.

GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Waterproofing traffic coating for exterior elevated slabs.
- B. Related Sections:
 - 1. Section 03730 – Concrete Repair.
 - 2. Section 07900 – Sealants.

1.2 SUBMITTALS

- A. Comply with Section 01300.
- B. Product Data: Submit manufacturer's technical data sheets.
- C. Quality Control Submittals: Provide protection plan of surrounding areas and non-work surfaces.

1.3 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer Qualifications:
 - a. Company with minimum of 15 years experience in manufacturing of specified products and systems.
 - b. ISO 9001:2015 Certified.
 - 2. Applicator Qualifications: Company with minimum of 5 years' experience in application of specified products and systems on projects of similar size and scope and is acceptable to product manufacturer.
 - a. Successful completion of a minimum of 5 projects of similar size and complexity to specified work.
- B. Field Sample:
 - 1. Install field sample at project site or pre-selected area of building, as directed by architect/engineer.
 - a. Provide mock-up of at least 16 square feet to include surface profile, sealant joint, crack, flashing and juncture details and allow for evaluation of slip resistance and appearance.
 - b. Apply material in accordance with manufacturer's written application instructions.
 - 2. Manufacturer's representative or designated representative shall review technical aspects, surface preparation, application and workmanship.
 - 3. Field sample shall be standard for judging workmanship on remainder of project.
 - 4. Maintain field sample during construction for workmanship comparison.
 - 5. Do not alter, move or destroy field sample until work is completed and approved by architect/engineer.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
- B. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Store materials in unopened packaging in clean, dry area protected from sunlight.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements:
 - 1. Do not apply when substrates are over 110 degrees F (32 degrees C) or under 40 degrees F (4 degrees C).
 - 2. Do not apply in rain or when rain is expected within 24 hours.

PRODUCTS

1.6 MANUFACTURERS

- A. Subject to compliance with requirements, provide products from the following manufacturer:
Sika Corporation
889 Valley Park Drive
Shakopee, MN 55379 USA
Customer Service: 800-433-9517
Technical Service: 800-243-6739
Direct Phone: 952-496-6000
Website: www.master-builders-solutions.com/en-us
- B. Substitutions: Must be submitted to Engineer for approval. All substitutions must meet or exceed this specification.
- C. Specifications and drawings are based on manufacturer's proprietary literature from Sika Corporation. Other manufacturers shall comply with minimum levels of material, color selection and detailing indicated in specifications or on drawings. Architect/engineer will be sole judge of appropriateness of substitutions.

1.7 MATERIALS

- A. Acceptable Products:
 - 1. Fluid-applied, moisture, polyurethane, waterproofing, traffic-bearing, membrane deck coating system:
 - a. Base Coat: Sikalastic M 200. One-component, moisture-curing polyurethane.
 - b. Top Coat: Sikalastic TC 225. One-component, aliphatic, moisture-curing polyurethane.
 - c. Aggregate: Sikalastic 941DR
 - d. Cementitious and Epoxy Patching Materials: Sika Corporation repair mortars and epoxies.
 - e. Sealant Primer: Sikalastic P 173.
 - f. Sealant: Sikalastic SL2 or Sikalastic CR 195.
 - g. Deep Joint Sealant: Sikalastic SL2 or Sikalastic NP2.
 - h. Clean-up: Sikalastic 990.

2. Polymer Modified Portland Cement Coating (Sika Flexcoat):
 - a. Component 'A' shall be a liquid polymer emulsion of an acrylic co-polymer base and additives.
 - b. Component 'B' shall be a blend of selected Portland cements, specially graded aggregates and admixtures to control setting time and handling.
 - c. Follow the technical guidelines for mixing.
 - d. The material shall be non-combustible before, during and after cure.
3. Acrylic Top Coat (ATC): This single component shall be an acrylic based top coat. The Owner shall choose from the option of colors available from Sika Corporation.
4. Clear Coat (CC): This single component shall be an acrylic based top coat. The Owner shall choose from the option of colors available from Sika Corporation.
5. Embedding Mesh: Should be made of polypropylene and shall be available in the 10" wide rolls.
- B. Sikalastic Traffic 1500 complies with the following requirements:
 1. Compliances:
 - a. UL 790, Class A fire rating.
 - b. ASTM C 957.
 - c. ASTM E 108.
 - d. ASTM E 84.
 - e. CSA S413
 2. Properties:
 - a. Weight per Gallon, ASTM D 1475:
 - 1) Base Coat: 9.9 lbs (4.5 kg).
 - 2) Top Coat: 9.1 lbs (4.1 kg).
 - b. Specific Gravity:
 - 1) Base Coat: 1.19 kg/L.
 - 2) Top Coat: 1.09 kg/L.
 - c. Solids Content, ASTM D 1259:
 - 1) Base Coat, By Weight: 84 percent.
 - 2) Base Coat, By Volume: 81 percent.
 - 3) Top Coat, By Weight: 77 percent.
 - 4) Top Coat, By Volume: 75 percent.
 - d. Viscosity, ASTM D 2393:
 - 1) Base Coat: 4,000 to 9,000 cps.
 - 2) Top Coat: 2,000 to 4,000 cps.
 - e. Flash Point, ASTM D 56:
 - 1) Base Coat: 104 degrees F (40 degrees C).
 - 2) Top Coat: 105 degrees F (40.5 degrees C).
 - f. VOC Content:
 - 1) Base Coat, Self-Leveling Grade: 1.63 lbs per gal (196 g/L), less water and exempt solvents.
 - 2) Base Coat, Flash/Slope Grade: 1.7 lbs per gal (203.3 g/L), less water and exempt solvents.
 - 3) Top Coat: 0.59 lbs per gal (71 g/L), less water and exempt solvents.

3. Properties of Cured Membranes:
 - a. Hardness, Shore A, ASTM D 2240:
 - 1) Base Coat: 60.
 - 2) Top Coat: 89.
 - b. Tensile Strength, ASTM D 412:
 - 1) Base Coat: 752 psi (5.2 MPa).
 - 2) Top Coat: 2,500 psi (17.2 MPa).
 - c. Elongation, ASTM D 412:
 - 1) Base Coat: 595 percent.
 - 2) Top Coat: 502 percent.
 - d. Tear Strength, ASTM D 1004:
 - 1) Base Coat: 74 pli.
 - 2) Top Cat: 199 pli.
 - e. Weight Loss, Maximum 40:
 - 1) Base Coat: 16 percent.
 - 2) Top Coat: 17 percent.
 - f. Low Temperature Flexibility and Crack Bridging:
 - 1) Base Coat: No cracking.
 - 2) Top Coat: No cracking.
 - g. Adhesion in Peel After Water Immersion:
 - 1) Base Coat, Primed Mortar: 43 pli.
 - 2) Base Coat, Plywood: 34 pli.
 - h. Pull-Out Adhesion, ASTM D 4541:
 - 1) Base Coat: 275 psi.
4. Chemical Resistance Tensile Retention, ASTM C 957:
 - a. Ethylene Glycol, Minimum 70:
 - 1) Base Coat: 88.
 - 2) Top Coat: 92.
 - b. Mineral Spirits, Minimum 45:
 - 1) Base Coat: 47.
 - 2) Top Coat: 60.
 - c. Water, Minimum 70:
 - 1) Base Coat: 96.
 - 2) Top Coat: 83.
5. Coating System Weathering Resistance and Elongation Recovery, ASTM C 957:
 - a. Elongation Recovery, Minimum 90 Percent: 94 percent.
 - b. Tensile Retention, Minimum 80 Percent: 151 percent.
 - c. Elongation Retention, Minimum 90 Percent: 94 percent.
 - d. Abrasion Resistance, (CS-17 Wheel, 1,000 g load, 1,000 cycles), Maximum 50 mg lost: 1 mg lost.
 - e. Crack Bridging (1,000 cycles): System passes.
6. Color: To be selected from standard colors
 - a. Gray.
 - b. Charcoal Gray.
 - c. Tan.
 - d. Dark Tan.

C. Polymer Modified Portland Cement Coating (Sika Flexcoat)

1. Properties of the mixed Polymer-modified Portland cement coating:

- | | |
|--|------------------------------------|
| a. Yield | 250 ft ² /unit |
| b. Application Thickness | 30 mils coat |
| c. Application Temp | > 50°F (10°C) |
| d. Bond strength (ASTM C-882 modified) | 515 psi |
| e. Absorption (Weight gain by 4" coated concrete cube after 21 days water immersion) | <2% |
| f. Weathering (ASTM G23) | 60 cycles - No visible degradation |
| g. Spot Open Test (ASTM D-1308) | No softening or attack |
| h. Compressive Strength (ASTM C-109) | 2,440 psi |
| i. Tensile Strength (ASTM C-190) | 430 psi |
| j. Elongation (ASTM D-412) | 12% |
| k. Shore Hardness (ASTM D-2240) | No cracking or detachment |
| l. Water Vapor Permeability (E-96) | 1.96 perms/in |

D. Properties of the Acrylic Top Coat

- | | |
|-------------------------|---|
| 1. Yield | 300 ft ² /gal/coat |
| 2. Dry film thickness | 2.5 mils |
| 3. Color | Ivory Cream, Sandpiper Beige, Provincial Tan, Adobe, Toffee, Spanish Tile, Redwood Tile, Speedway Gray, Bright Gray, Dodge City Tan, Fired Brick, and Slate Green |
| 4. Gloss 60 Gloss Meter | 90+ |
| 5. Flexibility | Excellent |
| 6. Weather | Excellent |
| 7. Abrasion | Excellent |
| 8. Dry to touch (77°F) | 1 hr |
| 9. Recoat (77°F) | 4 hrs |
| 10. Traffic (77°F) | 24 hrs |
| 11. Color Retention | No fading or deleterious effect. Atlas Twin-Arc Weatherometer, 20 mins.
Cycle; 17 mins. Dry - 3 min., Wet - 300 hrs. |

Environment	Immersion	Splash & Spillage	Exterior Weathering
Weak Acid	NR	LR	R
Alkali	LR	R	R
Solvent	NR	NR	NR
Salts	R	R	R
Water	R	R	R
R - Recommended NR - Not recommended LR - Limited recommendation			

E. Properties of the Clear Coat

- | | |
|------------------------|-------------------------------|
| 1. Yield | 300 ft ² /gal/coat |
| 2. Color | Gloss and Satin finishes |
| 3. Weather | Excellent |
| 4. Abrasion | Excellent |
| 5. Dry to touch (77°F) | 30 min |
| 6. Recoat (77°F) | 1 hrs |
| 7. Traffic (77°F) | 4 hrs |

Note: Tests above were performed with the material and curing conditions @ 71°F – 75°F and 45 - 55% relative humidity.

EXECUTION

1.8 SURFACE PREPARATION

- A. Prepare substrates in accordance with manufacturer's instructions.
- B. Substrates: Sound and free of dust, dirt, laitance, paints, oils, grease, curing compounds or other contaminants.
- C. Verify substrate has properly cured. Mechanically remove efflorescence before proceeding. For extreme cases where this is not adequate, contact manufacturer.
- D. Concrete:
 1. Minimum Compressive Strength: 3,000 psi (21 MPa).
 2. Cure for a minimum of 28 days or 80 percent of design strength.
- E. Mechanically prepare substrate to remove previous coatings, laitance and miscellaneous surface contamination. Provide surface profile to achieve specified adhesion equal to International Concrete Repair Institute surface profile CSP 3.
 1. Roughen or brush blast extremely smooth surfaces to ensure good mechanical adhesion.
 2. Patch holes and cracks before installation.
- F. Repair voids and delaminated areas with cementitious and epoxy patching materials.

1.9 MIXING

- A. Mix materials in accordance with manufacturer's instructions.

1.10 APPLICATION – GENERAL

- A. Apply materials in accordance with manufacturer's instructions.
- B. Do not apply materials to damp, wet or contaminated substrates.
- C. Surface Prestripping and Detailing:
 - 1. Prestripe with primer 1 inch (25 mm) beyond surfaces that require detail work.
 - 2. For nonmoving joints and cracks less than 1/16 inch (1.6 mm) wide, apply 25 wet mils (0.6 mm) prestripping of base coat over cured primer. Apply base coat to fill and overlap joint or crack 3 inches (76 mm) on each side. Feather the edges.
 - 3. Dynamic cracks and joints over 1/16 inch (1.6 mm) wide shall be routed to a minimum of 1/4 inch by 1/4 inch (6 mm by 6 mm) and cleaned. Install bond breaker tape to prevent adhesion to bottom of joint. Prime joint faces only with sealant primer and fill with sealant. Fill joints deeper than 1/4 inch (6 mm) with backer rod and deep joint sealant. For cracks, sealant shall be flush with adjacent surface. For expansion joints, sealant shall be slightly concave.
 - 4. Sealed joints 1 inch (25 mm) or less shall be coated over with deck coating system.
 - 5. Expansion joints exceeding 1 inch (25 mm) wide, including primary wide expansion-joint system, shall not be coated.
 - 6. Where coating system will be terminated and no wall, joint or other break exists, cut 1/4 inch by 1/4 inch (6 mm by 6 mm) keyway into concrete. Fill and coat keyway as application of base coat progresses.

1.11 1500 UNDERTILE / DECORATIVE SYSTEM

- A. Honor all expansion joints during installation. Whenever possible, if a design pattern is applied, the design patterns should allow for the termination of the system at expansion joints. Tape off and do not apply the coating system over moving joints. In no instances, should the system be used over any joint larger than 1/2".
- B. Apply 25 wet mils (0.6 mm) of base coat. Immediately backroll to level base coat. Allow to cure overnight.
- C. Apply 25 wet mils (0.6 mm) of top coat. Immediately backroll to level and while the topcoat is still wet, broadcast aggregate into the topcoat until refusal (approximately 50-60 lbs. / 100 sq. ft.). Allow to cure overnight.
- D. On the following day, removal all loose aggregate by vacuuming, sweeping, blowing or combination of the same.
- E. Mixing of Decorative Topcoat: Follow mixing instructions on the technical data sheet for Flexcoat. Under normal circumstances, full quantities of both components are mixed together, a slurry consistency will result. For a trowelable consistency, adjust liquid accordingly. Mix in a clean container by slowly adding the powder component to the liquid component and mixing with a slow speed (440-600 rpm) drill and mixing paddle.
- F. Application of Cementitious Coat: Apply leveling coat of Flexcoat cementitious texture with a magic trowel, notched trowel or stiff bristle brush at 30 mils per coat. Work material into

the prepared substrates filling all pores and voids and leave to harden. Allow leveling coat to cure (approx. 4 hours).

- G. Texture: Spray textured coat in a uniform pattern evenly over the entire area, recommended 10% coverage at 30 mils per coat. For knock down texture, use a pool trowel after material has begun to set. Allow texture to cure (approx. 4 hours).
- H. Topcoat: Once dry, apply Sikagard Flexcoat ATC at 2-3 mils. Apply two coats. Allow 2 hours of drying time between coats. Optional clear coats, apply Sikagard CC at 2-3 mils for a gloss or satin finish. Do not exceed the Manufacturer's recommended coverage rates.
- I. When applying the coating, never stop the application until the entire surface has been coated. Always stop application at an edge, corner or joint. Never let a previously coated film dry, always coat to a wet film. Always apply the coating at a 45 degree angle to an edge, corner or joint.
- J. Adhere to all limitations and cautions for the polymer modified cement coating in the manufacturer's printed literature.

1.12 CLEANING

- A. General: Keep the area clean during repair operations. Remove and clean promptly all mortar or coating spills. Collect and maintain site in a clean and orderly condition.
- B. Final Cleaning: Remove all mortar or coating splatters, spills from the repair area and adjacent areas acceptable to the Engineer.
- C. The uncured polymer modified Portland cement coating can be cleaned from tools with water. The cured polymer modified Portland cement coating can only be removed mechanically.

1.13 MAINTENANCE

- A. Depending on traffic volume and wear patterns, sealer may need to be reapplied every 2-3 years.

1.14 PROTECTION

- A. Pedestrian Traffic: Allow minimum curing time of 48 hours before pedestrian use.
- B. Extend curing time in cool-weather conditions.
- C. Protect system from damage during construction.

END OF SECTION

SECTION 07570

POLYURETHANE WATERPROOF COATING

This guide specification is for waterproofing balconies with a waterproof, wear resistant coating. This system provides positive waterproofing and some limited crack-bridging capabilities.

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Waterproofing traffic coating for exterior elevated slabs.

B. Related Sections:

1. Section 03730 – Concrete Repair.
2. Section 07900 – Sealants.

1.2 SUBMITTALS

A. Comply with Section 01300.

B. Product Data: Submit manufacturer's technical data sheets.

C. Quality Control Submittals: Provide protection plan of surrounding areas and non-work surfaces.

1.3 QUALITY ASSURANCE

A. Qualifications:

1. **Manufacturer Qualifications:**
 - a. Company with minimum of 15 years experience in manufacturing of specified products and systems.
 - b. ISO 9001:2015 Certified.
2. **Applicator Qualifications:** Company with minimum of 5 years' experience in application of specified products and systems on projects of similar size and scope and is acceptable to product manufacturer.
 - a. Successful completion of a minimum of 5 projects of similar size and complexity to specified work.

B. Field Sample:

1. Install field sample at project site or pre-selected area of building, as directed by architect/engineer.
 - a. Provide mock-up of at least 16 square feet to include surface profile, sealant joint, crack, flashing and juncture details and allow for evaluation of slip resistance and appearance.
 - b. Apply material in accordance with manufacturer's written application instructions.
2. Manufacturer's representative or designated representative shall review technical aspects, surface preparation, application and workmanship.
3. Field sample shall be standard for judging workmanship on remainder of project.

4. Maintain field sample during construction for workmanship comparison.
5. Do not alter, move or destroy field sample until work is completed and approved by architect/engineer.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
- B. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Store materials in unopened packaging in clean, dry area protected from sunlight.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements:
 1. Do not apply when substrates are over 110 degrees F (32 degrees C) or under 40 degrees F (4 degrees C).
 2. Do not apply in rain or when rain is expected within 24 hours.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products from the following manufacturer:
Sika Corporation
889 Valley Park Drive
Shakopee, MN 55379 USA
Customer Service: 800-433-9517
Technical Service: 800-243-6739
Direct Phone: 952-496-6000
Website: www.master-builders-solutions.com/en-us
- B. Substitutions: Must be submitted to Engineer for approval. All substitutions must meet or exceed this specification.
- C. Specifications and drawings are based on manufacturer's proprietary literature from Sika Corporation. Other manufacturers shall comply with minimum levels of material, color selection and detailing indicated in specifications or on drawings. Architect/engineer will be sole judge of appropriateness of substitutions.

2.2 MATERIALS

- A. Fluid-applied, moisture-curing, polyurethane, waterproofing, traffic-bearing, membrane deck coating system.
 1. Acceptable Products:
 - a. Base Coat: Sikalastic M 200. One-component, moisture-curing polyurethane.
 - b. Top Coat: Sikalastic TC 225. One-component, aliphatic, moisture-curing polyurethane.
 - c. Aggregate: Sikalastic 941DR or Sikalastic Flake Or Quartz blends

- d. Cementitious and Epoxy Patching Materials: Sika Corporation repair mortars and epoxies.
 - e. Sealant Primer: Sikalastic P 173.
 - f. Sealant: Sikalastic SL2 or Sikalastic CR 195.
 - g. Deep Joint Sealant: Sikalastic SL2 or Sikalastic NP2.
 - h. Clean-up: Sikalastic 990.
- B. Sikalastic Traffic 1500 complies with the following requirements:
- 1. Compliances:
 - a. UL 790, Class A fire rating.
 - b. ASTM C 957.
 - c. ASTM E 108.
 - d. ASTM E 84.
 - e. CSA S413
 - 2. Properties:
 - a. Weight per Gallon, ASTM D 1475:
 - 1) Base Coat: 9.9 lbs (4.5 kg).
 - 2) Top Coat: 9.1 lbs (4.1 kg).
 - b. Specific Gravity:
 - 1) Base Coat: 1.19 kg/L.
 - 2) Top Coat: 1.09 kg/L.
 - c. Solids Content, ASTM D 1259:
 - 1) Base Coat, By Weight: 84 percent.
 - 2) Base Coat, By Volume: 81 percent.
 - 3) Top Coat, By Weight: 77 percent.
 - 4) Top Coat, By Volume: 75 percent.
 - d. Viscosity, ASTM D 2393:
 - 1) Base Coat: 4,000 to 9,000 cps.
 - 2) Top Coat: 2,000 to 4,000 cps.
 - e. Flash Point, ASTM D 56:
 - 1) Base Coat: 104 degrees F (40 degrees C).
 - 2) Top Coat: 105 degrees F (40.5 degrees C).
 - f. VOC Content:
 - 1) Base Coat, Self-Leveling Grade: 1.63 lbs per gal (196 g/L), less water and exempt solvents.
 - 2) Base Coat, Flash/Slope Grade: 1.7 lbs per gal (203.3 g/L), less water and exempt solvents.
 - 3) Top Coat: 0.59 lbs per gal (71 g/L), less water and exempt solvents.
 - 3. Properties of Cured Membranes:
 - a. Hardness, Shore A, ASTM D 2240.
 - 1) Base Coat: 60.
 - 2) Top Coat: 89.
 - b. Tensile Strength, ASTM D 412:
 - 1) Base Coat: 752 psi (5.2 MPa).
 - 2) Top Coat: 2,500 psi (17.2 MPa).
 - c. Elongation, ASTM D 412:
 - 1) Base Coat: 595 percent.
 - 2) Top Coat: 502 percent.

- d. Tear Strength, ASTM D 1004:
 - 1) Base Coat: 74 pli.
 - 2) Top Coat: 199 pli.
- e. Weight Loss, Maximum 40:
 - 1) Base Coat: 16 percent.
 - 2) Top Coat: 17 percent.
- f. Low Temperature Flexibility and Crack Bridging:
 - 1) Base Coat: No cracking.
 - 2) Top Coat: No cracking.
- g. Adhesion in Peel After Water Immersion:
 - 1) Base Coat, Primed Mortar: 43 pli.
 - 2) Base Coat, Plywood: 34 pli.
- h. Pull-Out Adhesion, ASTM D 4541:
 - 1) Base Coat: 275 psi.
- 4. Chemical Resistance Tensile Retention, ASTM C 957:
 - a. Ethylene Glycol, Minimum 70:
 - 1) Base Coat: 88.
 - 2) Top Coat: 92.
 - b. Mineral Spirits, Minimum 45:
 - 1) Base Coat: 47.
 - 2) Top Coat: 60.
 - c. Water, Minimum 70:
 - 1) Base Coat: 96.
 - 2) Top Coat: 83.
- 5. Coating System Weathering Resistance and Elongation Recovery, ASTM C 957:
 - a. Elongation Recovery, Minimum 90 Percent: 94 percent.
 - b. Tensile Retention, Minimum 80 Percent: 151 percent.
 - c. Elongation Retention, Minimum 90 Percent: 94 percent.
 - d. Abrasion Resistance, (CS-17 Wheel, 1,000 g load, 1,000 cycles), Maximum 50 mg lost: 1 mg lost.
 - e. Crack Bridging (1,000 cycles): System passes.
- 6. Color: To be selected from standard colors
 - a. Gray.
 - b. Charcoal Gray.
 - c. Tan.
 - d. Dark Tan.

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

- A. Prepare substrates in accordance with manufacturer's instructions.
- B. Substrates: Sound and free of dust, dirt, laitance, paints, oils, grease, curing compounds or other contaminants.
- C. Verify substrate has properly cured. Mechanically remove efflorescence before proceeding. For extreme cases where this is not adequate, contact manufacturer.

- D. Concrete:
 - 1. Minimum Compressive Strength: 3,000 psi (21 MPa).
 - 2. Cure for a minimum of 28 days or 80 percent of design strength.
- E. Mechanically prepare substrate to remove previous coatings, laitance and miscellaneous surface contamination. Provide surface profile to achieve specified adhesion equal to International Concrete Repair Institute surface profile CSP 3.
 - 1. Roughen or brush blast extremely smooth surfaces to ensure good mechanical adhesion.
 - 2. Patch holes and cracks before installation.
- F. Repair voids and delaminated areas with cementitious and epoxy patching materials.

3.2 MIXING

- A. Mix materials in accordance with manufacturer's instructions.

3.3 APPLICATION – GENERAL

- A. Apply materials in accordance with manufacturer's instructions.
- B. Do not apply materials to damp, wet or contaminated substrates.
- C. Surface Prestripping and Detailing:
 - 1. Prestripe with primer 1 inch (25 mm) beyond surfaces that require detail work.
 - 2. For nonmoving joints and cracks less than 1/16 inch (1.6 mm) wide, apply 25 wet mils (0.6 mm) prestripping of base coat over cured primer. Apply base coat to fill and overlap joint or crack 3 inches (76 mm) on each side. Feather the edges.
 - 3. Dynamic cracks and joints over 1/16 inch (1.6 mm) wide shall be routed to a minimum of 1/4 inch by 1/4 inch (6 mm by 6 mm) and cleaned. Install bond breaker tape to prevent adhesion to bottom of joint. Prime joint faces only with sealant primer and fill with sealant. Fill joints deeper than 1/4 inch (6 mm) with backer rod and deep joint sealant. For cracks, sealant shall be flush with adjacent surface. For expansion joints, sealant shall be slightly concave.
 - 4. Sealed joints 1 inch (25 mm) or less shall be coated over with deck coating system.
 - 5. Expansion joints exceeding 1 inch (25 mm) wide, including primary wide expansion-joint system, shall not be coated.
 - 6. Where coating system will be terminated and no wall, joint or other break exists, cut 1/4 inch by 1/4 inch (6 mm by 6 mm) keyway into concrete. Fill and coat keyway as application of base coat progresses.

3.4 HEAVY-DUTY TRAFFIC SYSTEM

- A. Apply 25 wet mils (0.6 mm) of base coat. Immediately backroll to level base coat. Allow to cure overnight.
- B. Apply 20 wet mils (0.5 mm) of intermediate top coat.
- C. Immediately backroll to level top coat. While coating is still wet, broadcast aggregate to refusal. Allow to cure overnight.
- D. Remove loose aggregate. Apply 20 wet mils (0.5 mm) of top coat.

3.5 PROTECTION

- A. Pedestrian Traffic: Allow minimum curing time of 48 hours before pedestrian use.
- B. Extend curing time in cool-weather conditions.
- C. Protect system from damage during construction.

END OF SECTION

BID DOCUMENTS

SECTION 07900: JOINT SEALANT

PART 1 - GENERAL

1.01 SUMMARY

This Section specifies the requirements for sealing joints formed between wall and floor, wall to aluminum, aluminum to aluminum, changes to interior plane and expansion joints. Contractor is to furnish labor, materials, equipment, and supervision to install all sealant, caulk, and gaskets as specified or shown in drawings.

1.02 REFERENCES

American Standard Test Methods (ASTM)

1. ASTM C 790: Guide for Use of Latex Sealing Compounds.
2. ASTM C 804: Practice for Use of Solvent-Release Type Sealants.
3. ASTM C 920: Practice for use of Elastomeric Joint Sealants
4. ASTM C 1083: Water Absorption of Cellular Elastomeric Gaskets and Sealants
5. ASTM C1253: Standard Test Method for Determining the Out-gassing Potential of Sealant Backing.
6. ASTM D 1056: Flexible Cellular Materials - Sponge or Expanded Rubber.
7. ASTM D 1565: Flexible Cellular Materials - Vinyl Chloride Polymers and Copolymers (Open-Cell Foam).
8. ASTM E 96: Standard Test for Water Vapor Permeance

Sealant Waterproofing and Restoration Institute (SWRI)

Sealant and caulking guide specification

1.03 SUBMITTALS

- A. Submit product data indicating sealant chemical characteristics, performance criteria, limitations, and color availability.
- B. Submit samples illustrating colors selected.
- C. Submit laboratory tests or data that validate product compliance with the compliance criteria specified.

1.04 QUALIFICATIONS

Applicator: Company specializing in applying sealants with minimum 3 years experience.

1.05 QUALITY CONTROL

Applicator shall have first application inspected for acceptance of preparation of substrate, proper thickness of sealant bead, uniformity in width and smoothness of bead before proceeding to apply sealants elsewhere. Applicator shall promptly re-do

any areas deemed unacceptable by the Engineer or Owners Agent. The accepted application shall be the standard for remaining sealant application.

1.06 REQUIREMENTS

Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

1.07 WARRANTY

- A. Provide five-year labor and material warranty. Contractor shall warrant that sealants shall be free of defects for the length of the warranty and shall maintain proper bond to substrate. Submit the manufacturer's standard material warranty for replacement of sealant materials which fail to achieve a water tight seal, exhibit loss of adhesion or cohesion, or do not cure.
- B. Warranty exclusions: warranty does not apply where failure results from structural cracks or defects, faulty construction, faulty design, faulty materials (other than sealant), misuse of the structure, settlement, accident, fire or other casualty or physical damage.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable manufacturers – urethane sealants:
 - BASF: MasterSeal
 - Tremco: Dymonic
- B. Acceptable manufacturers – silicone sealants:
 - Dow Corning

2.02 MATERIALS

- A. Sealant
 - 1. ASTM C 920, Type M and S, Grade NS, Class 25, uses NT, M A, O.
 - 2. TT-S-00227E (COM-NBS) Interim Federal Specification for Sealing Compound: Elastomeric Type, Multi-Component
 - 3. Joint movement capability: plus or minus 50 percent
 - 4. Expansion joint movement capability: +100 percent, -50 percent
- B. Joint Sealant:
 - 1. Closed cell polyethylene non impregnated waterproofing material.
 - 2. Adhesive used to adhere sealants to surfaces approved by manufacturer.

2.03 ACCESSORIES

- A. Joint cleaner: non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- B. Backer rod: Provide soft, closed-cell polyethylene rod designed for use with cold applied joint sealants passing ASTM C1253-93 of size required for joint design as recommended by sealant manufacturer.
- C. Bond breaker: pressure sensitive tape recommended by sealant manufacturer to suit application.

2.04 COLOR

Color of sealants will be selected from manufacturer's standard color range to match existing.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Remove loose materials and foreign matter which impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Where the possibility of primer or sealant staining of adjacent areas or materials exists, mask joints prior to application. Do not remove masking tape before joints have been tooled and initial cure of sealant has taken place. Work stained due to failure of proper masking precautions will not be accepted.
- D. Perform preparation in accordance with manufacturer's instructions.
- E. Protect elements surrounding work of this section from damage.

3.02 APPLICATION

- A. Back-up Material
 - 1. Verify compatibility of back-up material with sealant before installation.
 - 2. Use back-up material 25 percent wider than width of joint to provide substantial resistance to displacement.
- B. Release Agent: apply release agent or bond-breaker strip in joint to be sealed on top of back-up material to prevent adhesion of sealant to back-up material per manufacturer's recommendations.
- C. Prepare sealants that require mixing following manufacturer's recommended procedures, mixing thoroughly.

1. Mix only as much material as can be applied within manufacturer's recommended application time period.
 2. Apply materials in accordance with manufacturer's recommendations taking care to produce beads of proper width and depth, to tool as recommended by manufacturer and to immediately remove surplus sealant.
 3. Apply materials only within manufacturer's specified application life period. Discard sealant after application life is expired or if prescribed application period has elapsed.
- D. Use silicone-based sealants for expansion joints, glass to metal and metal to metal joints. Use urethane-based sealants for concrete to concrete, concrete to EIFS or concrete to metal joints and when ever the sealant is to be painted.

END OF SECTION 07900

SECTION 09900: PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

Section 07900 applies to this Section

Paint Manufacturers specifications apply to this section.

1.2 SUMMARY

This Section includes surface preparation, caulking joints, painting stucco walls and ceilings and all exterior surfaces as specified here-in and in the Manufacturer's specifications.

1.3 SUBMITTALS

- A. Submit the following data for each paint system specified, including primers and sealers.
 - 1. Provide the Manufacturer's technical information including label and instructions for handling, storage, preparation and application of each material proposed for use.
 - 2. Identify each material by the manufacturer's number and general classification.
 - 3. Submit letter of intent to warranty from Paint and Sealant Manufacturer and a copy of the unexecuted warranty to be issued.
 - 4. Manufacturer's color charts for Owners selection of colors.
 - 5. Samples for Verification Purposes: Provide mock-up of each color and material to be applied on the actual substrate for the Owners acceptance before painting.

1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: The Paint Applicator must have an Occupational license, \$1,000,000 general liability and worker compensation insurance in force for buildings over three stories from a A++ Company registered in Florida, be recommended by the Paint Manufacturer and have a verifiable record of success on similar projects.
- B. Single-Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats.
- C. Manufacturer's Inspections: Schedule inspections by Manufacturer's Representative (MR) not less than: one pre-paint meeting to review paint manufacturers specifications and requirements, one visit to inspect the preparation of the substrate before painting, one site visit to inspect the application while painting is in progress and a final visit to inspect the finished application. The MR shall conduct additional visits as necessary

to ascertain that the product has been applied according to the Mfr's requirements and as necessary to issue the Manufacturer's warranty. The project Engineer shall be notified of the pre-paint meeting date and all inspection dates.

- D. Warranty: The Contractor shall provide a 5-year workmanship warranty and a 7-year material warranty. Contractor shall warrant that paint application shall be free of defects for the length of the warranty and shall maintain proper bond to substrate. Paint coating shall be warranted to not peel, flake or loose adhesion from the material to which it is applied. Blistering paint caused from previous paint coatings losing adhesion to the substrate is excluded from the warranty.

1.5 WORKMANSHIP

- A. The following is the minimum acceptable standard:
1. All material shall be applied free from runs, sags, wrinkles, streaks, shiners and shall exhibit a uniform appearance in color and sheen.
 2. All material shall be applied uniformly. Reduction of the coating viscosity shall occur only at the Manufacturer's written authorization and direction.
 3. After scraping and sanding existing coatings, all primers are to be sanded to feather the edge as necessary to achieve a visually seamless transition from one area to another.
 4. No exterior painting shall be undertaken if temperatures are below 50 degrees Fahrenheit, nor immediately following rain or until dew or condensation has evaporated and has a dry surface

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing Manufacturer's name and label, and the following information:
1. Product name or title of material.
 2. Product description (generic classification or binder type).
 3. Manufacturer's stock number and date of manufacture.
 4. Contents by volume, for pigment and vehicle constituents.
 5. Thinning instructions.
 6. Application instructions.
 7. Color name and number.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.
- C. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards from handling, mixing, and application.

1.7 JOB CONDITIONS

- A. Apply water-based paints when the temperature of surfaces to be painted and surrounding air temperatures are between 50 deg F and 90 deg F.

- B. Apply solvent-thinned paints when the temperature of surfaces to be painted and surrounding air temperatures are between 45 deg F and 95 deg F.
- C. Do not apply paint in or immediately after rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F above the dew point; or to wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

See paint schedule at end of this section for manufacturer paint products. Subject to compliance with requirements, provide products of one of the following:

- 1. Sherwin-Williams
- 2. Benjamin Moore
- 3. Florida Paints

2.2 PAINT MATERIALS, GENERAL

- A. Material Compatibility: Provide primers, sealers, sealants and finish coat materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by the Manufacturer.
- B. Material Quality: Provide the manufacturer's best-quality material of the coating specified. Paint containers not displaying manufacturer's product label will not be acceptable.
- C. Colors: Owner to select colors.

2.3 MASONRY BLOCK FILLER

Filler Coat Materials: Provide the manufacturer's recommended factory-formulated, latex-type concrete masonry block fillers that are compatible with the finish materials indicated.

2.4 PRIMERS

Provide the manufacturer's recommended factory-formulated primers that are compatible with the substrate and finish coats indicated.

2.5 UNDERCOAT MATERIALS

Undercoat Materials: Provide the manufacturer's recommended factory-formulated undercoat materials that are compatible with the substrate and finish coats indicated.

2.6 EXTERIOR FINISH PAINT MATERIAL

Finish Paint: Provide the manufacturer's recommended factory-formulated 100% solids acrylic satin finish-coat materials that are compatible with the substrate and undercoats indicated for walls and ceilings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions in which painting will be performed for compliance with paint Manufacturer's requirements. Surfaces receiving paint must be thoroughly dry before paint is applied.
 - 1. Do not begin to apply paint until unsatisfactory conditions have been corrected.
 - 2. If painting Contractor considers any surface unsuitable for proper finishing, he is to notify the Owners Representative in writing.
 - 3. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. Notify the Engineer about anticipated problems using the materials specified over substrates primed by others.

3.2 PREPARATION

- A. General: The Painting Contractor shall be wholly responsible for the quality of his work and shall not commence any part of it until surfaces to be painted are in proper condition
- B. Remove hardware, hardware accessories, plates, metal surfaces, lighting fixtures, and similar items already installed that are not to be painted, or provide protection prior to painting. Remove these items, if necessary, to completely paint the items and adjacent surfaces. Following completion of painting operations in each space or area, have items reinstalled by workers skilled in the trades involved.
- C. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease prior to cleaning. Areas exhibiting mildew, algae or mold shall be cleaned as directed by the Manufacturer to remove all dirt and organic contaminant. Allow 30 minutes of saturation of solution before rinsing. Protect shrubs and plants from harmful solutions. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces. Call for inspection and acceptance of surface cleaning from Owners Representative when all contaminants or bond inhibiting substances have been removed.
- D. Surface Preparation: Clean and prepare surfaces to be painted according to the manufacturer's instructions for each particular substrate condition and as specified. Apply fungicide and mildew resistive treatments to substrates. Rinse vegetation before and after application of mildew resistive treatments.
 - 1. Remove all blistered, sagging and delaminated coatings to bare sound substrate and sand tightly adhered coatings around the perimeter to not have a visible ridge that transfers through the finish coat.
 - 2. Remove efflorescence, chalk, dust, dirt, grease, oils.
 - 3. Inspect for cracks. Hairline cracks shall not be treated. Cracks less than 1/8th inch thick shall be skimmed with butter grade elastomeric patching compound troweled

to force the material into the crack. Cracks greater than 1/8th inch in width shall have a knife grade elastomeric patching material troweled into the crack and a one- inch wide band of patching compound applied over the crack so the crack is centered in the middle of the band.

4. Provide barrier coats over incompatible primers or remove and re-prime. Notify Engineer in writing about anticipated problems using the specified material.
5. Apply prime coat within 12 hours after surface cleaning has been accepted to prevent contamination.

E. Materials Preparation: Mix and prepare paint according to manufacturer's directions.

1. Maintain containers in a clean condition, free of foreign materials and residue.
2. Stir material before application to produce a uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.
3. Use of thinners must be approved by the paint manufacturer and only within recommended limits.

3.3 APPLICATION

- A. General: Apply paint according to manufacturer's directions. Use rollers for painting masonry and concrete. Use applicators and techniques best suited for substrate and type of material being applied.
- B. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.

1. Paint colors, surface treatments, and finishes as indicated by the Owner.
2. Provide finish coats that are compatible with primers used.
3. The number of coats and the film thickness required are the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Sand between applications where sanding is required to produce a smooth even surface according to the manufacturer's directions. Seed coating with sand over cracks to blend elastomeric band with adjacent finish.
4. Apply additional coats as necessary until final painted surface is of uniform finish, color, and appearance. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners, receive a dry film thickness equivalent to that of flat surfaces.
5. The term exposed surfaces includes areas visible when permanent or built-in fixtures, convactor covers, covers for finned tube radiation, grilles, and similar components are in place. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.

6. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 7. Paint interior surfaces of ducts, where visible through registers or grilles, with a flat, non-specular black paint.
 8. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
 9. Finish exterior doors on tops, bottoms, and side edges same as exterior faces.
 10. Sand lightly between each succeeding enamel or varnish coat.
 11. Omit primer on shop primed metal surfaces.
- C. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration. Allow sufficient time between successive coats to permit proper drying. Do not re-coat until paint has dried.
- D. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to the manufacturer's directions.
1. Brushes: Use brushes best suited for the material applied.
 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- E. Minimum Coating Thickness: Apply materials no thinner than the manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.
- F. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.
- G. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime-coated by others. Re-coat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
- H. Pigmented (Opaque) Finishes: Completely cover to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- I. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with specified requirements.

3.4 FIELD QUALITY CONTROL

- A. The Owner reserves the right to invoke the following test procedure at any time and as often as the Owner deems necessary during the period when paint is being applied:
1. The Owner may engage the services of an independent inspector and testing agency to inspect paint coatings and sample the paint material being used. Samples of material delivered to the Project will be taken, identified and sealed in the Contractor's presence.
 2. The testing agency will perform appropriate tests for the following characteristics as required by the Owner:
 - a. Quantitative materials analysis.
 - b. Abrasion resistance.
 - c. Apparent reflectivity.
 - d. Flexibility.
 - e. Absorption.
 - f. Accelerated weathering.
 - g. Dry opacity.
 - h. Accelerated yellowness.
 - i. Skinning.
 - j. Color retention.
 - k. Alkali and mildew resistance.
 3. If test results show material being used does not comply with specified requirements, the Contractor may be directed to remove all paint that he applied, pay for testing, and repaint all surfaces with the specified paint.

3.5 CLEANING

Cleanup: At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

3.6 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Engineer.
- B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.7 EXTERIOR PAINT SCHEDULE

- A. See attached Manufacturer's Specification

END OF SECTION 09900



SHERWIN-WILLIAMS®



Paint Schedule/Specification

Fountain Beach Resort (Single Stack Repair)

Presented By:

Ryan Kelly

SALES- Sales Representative PC Property
Management Maintenance

ryan.p.kelly@sherwin.com

SHERWIN-WILLIAMS
2616 S ATLANTIC AVE
DAYTONA BEACH SHOR, FL 32118 5606
(386) 760-5661

January 28, 2026

Exterior Finishes

New Stucco Areas

Primer: LX02W0050 - LXN C&M PRIMER WH

Notes: Use to prime new bare stucco or concrete after 7 days cure.

Finish: A89W03151 - Super Paint Ext Satin

Notes: Use to tie into existing Super Paint on the building. Also available in low sheen if necessary to blend.

Existing Painted Stucco

Primer: LX03W0100 - LXN CONDITION WHT

Notes: Use to tie into existing Super Paint on the building. Also available in low sheen if necessary to blend.

Finish: A89W03151 - Super Paint Ext Satin

Notes: Use to tie into existing Super Paint on the building. Also available in low sheen if necessary to blend.

Patch

Patch: WL700GLTK - Masonry Patch And Seal Knife-Grade, Textured

Notes: Use to repair cracks in stucco and concrete, as needed.



SHERWIN-WILLIAMS.

Basic Surface Preparation

Coating performance is directly affected by surface preparation. Coating integrity and service life will be reduced because of improperly prepared surfaces. As high as 80% of all coating failures can be directly attributed to inadequate surface preparation that affects coating adhesion. Proper product selection, surface preparation, and application affect coating performance. Coating integrity and service life will be reduced because of improperly prepared surfaces. Selection and implementation of proper surface preparation ensures coating adhesion to the substrate and prolongs the service life of the coating system.

The majority of paintable surfaces are concrete, ferrous metal, galvanizing, wood and aluminum. They all require protection to keep them from deteriorating in aggressive environments. Selection of the proper method for surface preparation depends on the substrate, the environment, the coating selected, and the expected service life of the coating system. Economics, surface contamination, and the effect on the substrate will also influence the selection of surface preparation methods. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Verify the existence of lead based paints on the project. Buildings constructed after 1978 are less likely to contain lead based paints. If lead based paints are suspected on the project, all removal must be done in accordance with the EPA Renovation, Repair and Painting and all applicable state and local regulations. State and local regulations may be more strict than those set under the federal regulations. Verify that Owner has completed a Hazardous Material Assessment Report for the project prior to issuing of Drawings. Concluding that no lead based paints were found on project site, delete paragraph regarding lead based paints.

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. Removal must be done in accordance with EPA Renovation, Repair and Painting Rule and all related state and local regulations. Care should be taken to follow all state and local regulations which may be more strict than those set under the federal RRP Rule.

No exterior painting should be done immediately after a rain, during foggy weather, when rain is predicted, or when the temperature is below 50°F, unless the products to be used are designed to be used in those environments.

Aluminum – S-W 1: Remove all oil, grease, dirt, oxide and other foreign material by cleaning per SSPC-SP1, Solvent Cleaning.

Block (Cinder and Concrete) – S-W 3: 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. Concrete and mortar must be cured at least 28 days at 75°F. The pH of the surface should be between 6 and 9. On tilt-up and poured-in-place concrete, commercial detergents and abrasive blasting may be necessary to prepare the surface. Fill bug holes, air pockets, and other voids with a cement patching compound (per ASTM D4261).

Brick – S-W 4: Must be free of dirt, loose and excess mortar, and foreign material. All brick should be allowed to weather for at least one year followed by wire brushing to remove efflorescence. Treat the bare brick with one coat of Loxon Conditioner.

Concrete and Masonry – Concrete, Poured – Exterior or Interior – S-W 5: The preparation of new concrete surfaces is as important as the surface preparation of steel. The following precautions will help assure maximum performance of the coating system and satisfactory coating adhesion:

1. Cure – Concrete must be cured prior to coating. Cured is generally defined as concrete poured and aged at a material temperature of at least 75°F for at least 28 days unless specified products are designed for earlier application.

2. Moisture – Reference ASTM F1869-98 Moisture Test by use of Calcium Chloride or ASTM D4263 Plastic Sheet Method. Concrete must be free from moisture as much as possible (it seldom falls below 15%). Vapor pressures, temperature, humidity, differentials, and hydrostatic pressures can cause coatings to prematurely fail. The source of moisture, if present, must be located, and the cause corrected prior to coating.

3. Temperature – Air, surface and material temperatures must be in keeping with requirements for the selected product during and after coating application, until coating is cured.

4. Contamination – Remove all grease, dirt, paint, oil, laitance, efflorescence, loose mortar, and cement by the recommendations listed in the surface preparation section.

5. Surface Condition – Hollow areas, bug holes, voids, honeycombs, fin form marks, and all protrusions or rough edges are to be ground or stoned to provide a continuous surface of suitable texture for proper adhesion of the coating. Imperfections may require filling, as specified, with a recommended Sherwin-Williams product.

6. Concrete Treatment – Hardeners, sealers, form release agents, curing compounds, and other concrete treatments should be removed to ensure adequate coating adhesion and performance.

Methods of Surface Preparation on Concrete per SSPC-SP13/NACE 6 or ICRI 03732 Surface Cleaning Methods: Vacuum cleaning, air blast cleaning, and water cleaning per ASTM D4258.

Used to remove dirt, loose material, and/or dust from concrete.

Detergent water cleaning and steam cleaning per ASTM D4258.

Used to remove oils and grease from concrete. Prior to abrasive cleaning, and after abrasive cleaning, surfaces should be cleaned by one of the methods described above.

Mechanical Surface Preparation Methods:

Dry abrasive blasting, wet abrasive blasting, vacuum assisted abrasive blasting, and centrifugal shot abrasive blasting per ASTM D4259. Used to remove contaminants, laitance, and weak concrete, to expose subsurface voids, and to produce a sound concrete surface with adequate profile and surface porosity.

High-pressure water cleaning or water jetting per SSPC-SP12-NACE5.

Used to remove contaminants, laitance, and weak concrete, to expose subsurface voids, and to produce a sound concrete surface with adequate profile and surface porosity.

Impact tool methods per ASTM D4259.

Used to remove existing coatings, laitance, and weak concrete. Methods include scarifying, planing, scabbling, and rotary peening. Impact tools may fracture concrete surfaces or cause microcracking requiring surface repair.

Power tool methods per ASTM D4259.

Used to remove existing coatings, laitance, weak concrete, and protrusions in concrete. Methods include circular grinding, sanding, and wire brushing. These methods may not produce the required surface profile to ensure adequate adhesion of subsequent coatings.

Chemical Surface Preparation Methods:

Acid etching per ASTM D4260. Use to remove some surface contaminants, laitance, and weak concrete, and to provide a surface profile on horizontal concrete surfaces. This method requires complete removal of all reaction products and pH testing to ensure neutralization of the acid. Not recommended for vertical surfaces. Etching with hydrochloric acid shall not be used where corrosion of metal in the concrete is likely to occur. Adequate ventilation and safety equipment required.

1. Clean surface per ASTM D4268
2. Wet surface with clean water
3. Etch with 10-15% muriatic acid solution at the rate of 1 gallon per 75 square feet
4. Scrub with stiff brush
5. Allow sufficient time for scrubbing and until bubbling stops
6. If no bubbling occurs, surface is contaminated. Refer to ASTM D4258 or ASTM D4259
7. Rinse surface two or three times. Remove acid/water each time.
8. Surface should have a texture similar to medium grit sandpaper.
9. Neutralize surface with a 3% solution of tri-sodium phosphate and flush with clean water.
10. Allow to dry and check for excess moisture.

Cement Composition Siding/Panels – S-W 6: Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Pressure clean, if needed, with a minimum of 2100 psi pressure to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, and peeling or defective coatings. Allow the surface to dry thoroughly. If the surface is new, test it for pH, many times the pH may be 10 or higher.

Composition Board (Hardboard) – S-W 9: Some composition boards may exude a waxy material that must be removed with a solvent prior to coating. Whether factory primed or unprimed, exterior composition board siding (hardboard) must be cleaned thoroughly and primed with an alkyl primer.

Copper – S-W 7: Remove all oil, grease, dirt, oxide and other foreign material by cleaning per SSPC-SP2, Hand Tool Cleaning.

Drywall—Interior and Exterior – S-W 8: Must be clean and dry. All nail heads must be set and spackled. Joints must be taped and covered with a joint compound. Spackled nail heads and tape joints must be sanded smooth and all dust removed prior to painting. Exterior surfaces must be spackled with exterior grade compounds.

Galvanized Metal – S-W 10: Allow to weather a minimum of 6 months prior to coating. Clean per SSPC-SP1 using detergent and water or a degreasing cleaner, then prime as required. 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 area, priming as required. Allow the coating to dry at least one week before testing. If adhesion is poor, Brush Blast per SSPC-SP16 is necessary to remove these treatments.

Plaster – S-W 11: Must be allowed to dry thoroughly for at least 30 days before painting. Room must be ventilated while drying; in cold, damp weather, rooms must be heated. Damaged areas must be repaired with an appropriate patching material. Bare plaster must be cured and hard. Textured, soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of water. Repeat until the surface is hard, rinse with clear water and allow to dry.

Steel/Ferrous Metal Substrates

SSPC-SP1- Solvent Cleaning: Solvent cleaning is a method for removing all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants. Solvent cleaning does not remove rust or mill scale. Change rags and cleaning solution frequently so that deposits of oil and grease are not spread over additional areas in the cleaning process. Be sure to allow adequate ventilation. Follow manufacturer's safety recommendations when using solvents. For complete instructions, refer to Steel Structures Paint Council Surface Preparation Specification No.1. (Refer to each products cleaning instructions. Many acrylic coatings will state; When cleaning the surface per SSPC-SP1, use only an emulsifying industrial detergent, followed by a water rinse. **Do not use hydrocarbon solvents for cleaning.**)

SSPC-SP2 - Hand Tool Cleaning: Hand Tool Cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Mil scale, rust, and paint are considered adherent if they cannot be removed by lifting with a dull putty knife. Before hand tool cleaning, remove visible oil, grease, soluble welding residues, and salts by the methods outlined in SSPC-SP1. For complete instructions, refer to Steel Structures Paint Council Surface Preparation Specification No.2.

SSPC-SP3 - Power Tool Cleaning: Power Tool Cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Mil scale, rust, and paint are considered adherent if they cannot be removed by lifting with a dull putty knife. Before power tool cleaning, remove visible oil, grease, soluble welding residues, and salts by the methods outlined in SSPC-SP1. For complete instructions, refer to Steel Structures Paint Council Surface Preparation Specification No.3.

SSPC-SP5 / NACE 1 - White Metal Blast Cleaning: A White Metal Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP 1 or other agreed upon methods. For complete instructions, refer to Joint Surface Preparation Standard SSPC-SP5/ NACE No.1.

SSPC-SP6 / NACE 3 - Commercial Blast Cleaning: A Commercial Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining. Staining shall be limited to no more than 33 percent of each square inch of surface area and may consist of light shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP 1 or other agreed upon methods. For complete instructions, refer to Joint Surface Preparation Standard SSPC-SP6/NACE No.3.

SSPC-SP7 / NACE 4 - Brush-Off Blast Cleaning: A Brush-Off Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, loose mill scale, loose rust, and loose paint. Tightly adherent mill scale, rust, and paint may remain on the surface. Mil scale, rust, and coating are considered adherent if they cannot be removed by lifting with a dull putty knife. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP 1 or other agreed upon methods. For complete instructions, refer to Joint Surface Preparation Standard SSPC-SP7/NACE No.4.

SSPC-SP10 / NACE 2 - Near-White Blast Cleaning: A Near White Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining. Staining shall be limited to no more than 5 percent of each square inch of surface area and may consist of light shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP 1 or other agreed upon methods. For complete instructions, refer to Joint Surface Preparation Standard SSPCSP10/ NACE No.2.

SSPC-SP11 - Power Tool Cleaning to Bare Metal: Metallic surfaces that are prepared according to this specification, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxide corrosion products, and other foreign matter. Slight residues of rust and paint may be left in the lower portions of pits if the original surface is pitted. Prior to power tool surface preparation, remove visible deposits of oil or grease by any of the methods specified in SSPC-SP 1, Solvent Cleaning, or other agreed upon methods. For complete instructions, refer to Steel Structures Paint Council Surface Preparation Specification No.11.

SSPC-SP12 / NACE 5 - Surface Preparation and Cleaning of Metals by Waterjetting Prior to Recoating: High- and Ultra-High Pressure Water Jetting for Steel and Other Hard Materials This standard provides requirements for the use of high- and ultra-high pressure water jetting to achieve various degrees of surface cleanliness. This standard is limited in scope to the use of water only, without the addition of solid particles in the stream. For complete instructions, refer to Joint Surface Preparation Standard SSPC-SP12/NACE No.5.

SSPC-SP13 / NACE 6 or ICRI 03732 - Surface Preparation of Concrete: This standard gives requirements for surface preparation of concrete by mechanical, chemical, or thermal methods prior to the application of bonded protective coating or lining systems. The requirements of this standard are applicable to all types of cementitious surfaces including cast-in-place concrete floors and walls, precast slabs, masonry walls and shotcrete surfaces. An acceptable prepared concrete surface should be free of contaminants, laitance, loosely adhering concrete, and dust, and should provide a dry, sound, uniform substrate suitable for the application of protective coating or lining systems. Depending upon the desired finish and system, a block filler may be required. For complete instructions, refer to Joint Surface Preparation Standard SSPC-SP13/NACE No.6 or ICRI 03732

SSPC-SP14 / NACE 8 – Industrial Blast Cleaning: This standard gives requirements for industrial blast cleaning of unpainted or painted steel surfaces by the use of abrasives. This joint standard allows defined quantities of mill scale and/or old coating to remain on the surface. An industrial blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dust, and dirt. Traces of tightly adherent mill scale, rust, and coating residue are permitted to remain on 10% of each unit area of the surface. The traces of mill scale, rust, and coating shall be considered tightly adherent if they cannot be lifted with a dull putty knife. Shadows, streaks, and discolorations caused by stains of rust, stains of mill scale, and stains of previously applied coating may be present on the remainder of the surface.

SSPC-SP16 Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals: This standard covers the requirements for brush-off blast cleaning of uncoated or coated metal surfaces other than carbon steel by the use of abrasives. These requirements include visual verification of the end condition of the surface and materials and procedures necessary to achieve and verify the end condition. A brush-off blast cleaned non-ferrous metal surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, metal oxides (corrosion products), and other foreign matter. Intact, tightly adherent coating is permitted to remain. A coating is considered tightly adherent if it cannot be removed by lifting with a dull putty knife.

High- and Ultra-High Pressure Water Jetting for Steel and Other Hard Materials:

SSPC-SP WJ-1/NACE WJ-1: Clean to Bare Substrate (WJ-1) is intended to be similar to the degree of surface cleanliness of SSPC-SP 5/NACE 1, except that stains are permitted to remain on the surface. This standard is used when the objective is to remove every trace of rust and other corrosion products, coating and mill scale.

SSPC-SP WJ-2/NACE WJ-2: Very Thorough Cleaning (WJ-2) is intended to be similar to the degree of surface cleanliness of SSPC-SP 10/NACE 2, except that tightly adherent material, rather than only stains, is permitted to remain on the surface. This standard is used when the objective is to remove almost all rust and other corrosion products, coating, and mill scale.

SSPC-SP WJ-3/NACE WJ-3: Thorough Cleaning (WJ-3) is intended to be similar to the degree of surface cleanliness of SSPC-SP 10/NACE 2, except that tightly adherent material, rather than only stains, is permitted to remain on the surface. This standard is used when the objective is to remove much of the rust and other corrosion products, coating, and mill scale, leaving tightly adherent thin films.

SSPC-SP WJ-4/NACE WJ-4: Light Cleaning (WJ-4) is intended to be similar to the degree of surface cleanliness of SSPC-SP 10/NACE 2, except that tightly adherent material, rather than only stains, is permitted to remain on the surface. This standard is used when the objective is to allow as much of the tightly adherent rust and other corrosion products, coating, and mill scale to remain as possible. Discoloration of the surface may be present.

Water Blasting NACE Standard RP-01-72: Removal of oil grease dirt, loose rust, loose mill scale, and loose paint by water at pressures of 2,000 to 2,500 psi at a flow of 4 to 14 gallons per minute.

Stucco S-W 22 : Must be clean and free of any loose stucco. If recommended procedures for applying stucco are followed, and normal drying conditions prevail, the surface may be painted in 30 days. The pH of the surface should be between 6 and 9.

Wood—Exterior – S-W 23: Must be clean and dry. Prime and paint as soon as possible. Knots and pitch streaks must be scraped, sanded, and spot primed before a full priming coat is applied. Patch all nail holes and imperfections with a wood filler or putty and sand smooth. Caulk should be applied after priming.

Wood—Interior – S-W 24: All finishing lumber and flooring must be stored in dry, warm rooms to prevent absorption of moisture, shrinkage, and roughening of the wood. All surfaces must be sanded smooth, with the grain, never across it. Surface blemishes must be corrected and the area cleaned of dust before coating.

Vinyl Siding, Architectural Plastics, PVC & Fiberglass: – S-W 24: Clean the surface thoroughly by scrubbing with warm, soapy water. Rinse thoroughly, prime with appropriate white primer. Do not paint vinyl with any color darker than the original color. Do not paint vinyl with a color having a Light Reflective Value (LRV) of less than 56 unless VinylSafe® Colors are used. If VinylSafe® Colors are not used and darker colors lower than an LRV of 56 are, the vinyl may warp. Follow all painting guidelines of the vinyl manufacturer when painting. Only paint properly installed vinyl siding. Deviating from the manufacturer's painting guidelines may cause the warranty to be voided.

Previously Coated Surfaces – S-W 12: Maintenance painting will frequently not permit or require complete removal of all old coatings prior to repainting. However, all surface contamination such as oil, grease, loose paint, mill scale dirt, foreign matter, rust, mold, mildew, mortar, efflorescence, and sealers must be removed to assure sound bonding to the tightly adhering old paint. Glossy surfaces of old paint films must be clean and dull before repainting. Thorough washing with an abrasive cleanser will clean and dull in one operation, or, wash thoroughly and dull by sanding. Spot prime any bare areas with an appropriate primer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system. Check for compatibility by applying a test patch of the recommended coating system, covering at least 2 to 3 square feet. Allow to dry one week before testing adhesion per ASTM D3359. If the coating system is incompatible, complete removal is required per ASTM D4259.

Touch-Up, Maintenance and Repair

For a protective coating system to provide maximum long-term protection, regularly scheduled maintenance is required. Maintenance includes inspection of painted areas, cleaning of surfaces to remove oils, chemicals, and other contaminants, and touch-up of areas where the coatings have been damaged. Highly corrosive areas, such as those subjected to frequent chemical spillage, corrosive fumes, and/or high abrasion or temperature areas should be inspected frequently – every six months, for example. Areas exposed to less severe conditions, such as interiors and exteriors of potable water tanks, may be inspected annually to assess the condition of the coating system.

The SSPC-VIS 2, Standard Method for Evaluating Degree of Rusting on Painted Steel Surfaces, can be used as a guide to determine appropriate touch-up and repairs maintenance schedules. Touch-up would be suggested when the surface resembles Rust Grade 5-S (Spot Rusting), 6-G (General Rusting), or 6-P (Pinpoint Rusting). Surface preparation would generally consist of SSPC-SP2, SP3, SP11, or SP12. Overcoating a well protected, but aged steel surface showing no evidence of rusting, may be achieved by Low Pressure Water Cleaning per SSPC-SP12/WJ4, and applying an appropriate coating system.

Full removal of the existing coating system by abrasive blasting would be recommended when the surface resembles Rust Grade 3-S (Spot Rusting), 4-G (General Rusting), or 4-P (Pinpoint Rusting). When the coating system has deteriorated to encompass approximately 33% of the surface area, it is always more economical to consider full removal and reapplication of the appropriate protective coating system.

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.



SHERWIN-WILLIAMS®

Reference Pages

Data Pages

Loxon®**Concrete and Masonry Primer-Sealer**

US LX02W0050, Canada LX02WQ050 White

**SHERWIN
WILLIAMS®****CHARACTERISTICS**

Loxon Concrete & Masonry Primer-Sealer is an acrylic coating specifically engineered for interior and exterior, above grade, masonry surfaces requiring a high-performance primer. It is highly alkali and efflorescence resistant and can be applied to a surface with a pH of 6 to 13.

Loxon Concrete and Masonry Primer-Sealer: Seals and adheres to concrete, brick, stucco and plaster.

Conditions porous masonry surfaces.

Use on above grade masonry surfaces for a long-lasting finish.

Apply to masonry and concrete surfaces that are at least 7 days old.

Prevents harm to subsequent coatings by alkalies in the substrate.

For use on these surfaces:

Concrete, Concrete Block, Brick, Stucco, EIFS
Fiber Cement Siding, Plaster, Mortar, Exterior
Wall Cladding, Tilt-Up/Pre-Cast Concrete

Finish: 0-10 units @ 85°
Color: White

Coverage:

Wet mils: 5.3-8.0
Dry mils: 2.1-3.2
Coverage: 200-320 sq. ft. per gallon
Coverage on porous & rough stucco 80 square feet per gallon.

Coverage (thin-mil primer application to new construction tilt-up/precast concrete):

Wet mils: 2.7-4.0
Dry mils: 1.1-1.6
Coverage: 400-600 sq. ft. per gallon

Drying Schedule 77°F @ 50% RH:

To touch 4 hours
To recoat 24 hours

Air and surface temperatures must not drop below 40°F for 48 hours after application.

Drying and recoat times are temperature, humidity, and film thickness dependent.

Tinting with CCE only:

For best topcoat color development, use the recommended "P"-shade primer. If desired, up to 4 oz. per gallon of ColorCast Ecotones can be used to approximate the topcoat color. Check color before use.

Extra White LX02W0050**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: 40 ±2%
Weight Solids: 55 ±2%
Weight per Gallon: 10.92 lbs
Flash Point: N.A.
Vehicle Type: Acrylic
Shelf Life: 36 months, unopened

COMPLIANCE

As of 07/19/2023, 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	Yes
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certified	Yes
MIR-Product Lens Certified	Yes
MPI®	Yes

APPLICATION**Temperature:**

minimum 40°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: No reduction necessary

Airless Spray:

Pressure 2000-2700 p.s.i.
Tip .19 inch

Brush: nylon-polyester

Roller Cover: ½ to 1½ inch nap synthetic cover

Spray and back roll on porous & rough stucco to achieve required film build and a pin-hole free surface.

For porous block, a coat of Loxon Acrylic Block Surfer is required to achieve a pinhole free surface.

Apply at temperatures above 40°F. When the air temperature is at 40°F, substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 40°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 4-6 hours.

Do not apply at air or surface temperatures below 40°F or when air or surface temperatures may drop below 40°F within 48 hours.

For best performance results, avoid painting in direct sun or painting substrates with elevated surface temperatures.

Do not reduce.

May be applied to damp but not to wet surfaces.

APPLICATION TIPS

Apply paint at the recommended film thickness and spreading rate as indicated on the page. Application of coating below minimum recommended spreading rate may adversely affect the coating systems performance.

When spot priming on some surfaces, a non-uniform appearance of the final coat may result, due to differences in holdout between primed and unprimed areas. To avoid this, prime the entire surface rather than spot priming.

For optimal performance, this primer-sealer must be topcoated with a latex, alkyd-oil, water-based epoxy, or solvent based epoxy coating on architectural applications.

For exterior use, this primer-sealer must be topcoated within 14 days to prevent degradation due to weathering.

RECOMMENDED SYSTEMS**Concrete, Masonry, Cement:**

1 coat Loxon Concrete & Masonry Primer
2 coats Appropriate Topcoat

Stucco, Fiber Cement Siding, EIFS:

1 coat Loxon Concrete & Masonry Primer
2 coats Appropriate Topcoat

Recommended Architectural Topcoats:

A-100 Exterior Latex
Duration Exterior & Duration Home Interior
Emerald Exterior & Interior
Loxon Masonry Coatings
SuperPaint Exterior & Interior
ProClassic Interior
ProMar Interior

Recommended Industrial Topcoats:

Industrial Enamels
Pro Industrial Series
Water Based Catalyzed Epoxy

Industrial finishes have been tested for architectural applications only. Loxon Concrete and Masonry Primer has not been tested in environments subject to chemical attack. Any recommendations for use in such areas must follow a thorough evaluation of the effects of the environment on the Loxon Concrete and Masonry Primer and topcoat system.

Loxon®

Concrete and Masonry Primer-Sealer

SURFACE PREPARATION

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting: US - National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead; Canada - your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed 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.

Masonry, Concrete, Stucco:

All new surfaces must cure for at least 7 days. Remove all form release and curing agents. Pressure clean to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Repair cracks, voids, and other holes with an appropriate patching compound or sealant.

Concrete and mortar must be cured at least 7 days at 75°F. Moisture content must be 15% or lower. 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. Fill bugholes, air pockets and other voids with an acrylic elastomeric patch or sealant.

Caulking:

Fill gaps between walls, ceilings, crown moldings, and other trim with the appropriate caulk after priming the surface

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 clean water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean 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.

LX02W0050

Water Vapor Permeance (US):

Method: ASTM D1653 (grains/(hr ft² in Hg)

Result: 25.79 perms

Flexibility:

Method: ASTM D522

Result: method B, 180° bend, 1/8 inch mandrel

Pass

Alkali Resistance:

Method: ASTM D1308

Result: Pass

Mildew Resistance:

Method: ASTM D3273/D3274

Result: Pass

Efflorescence:

Method: ASTM D7072-04

Result: Pass (None)

Wind-Driven Rain Test:

Method: ASTM D6904-03

Result: Pass

SAFETY PRECAUTIONS

For interior or exterior use.

Protect from freezing.

Do not apply at temperatures below 40°F. Air and surface temperatures must not drop below 40°F for 48 hours after application.

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.**

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FRC, SP

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm clean water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

SuperPaint®

Exterior Latex Satin

A89-Series


**SHERWIN
WILLIAMS.**

CHARACTERISTICS

SuperPaint Exterior Latex, with resistance to early dirt pick up, provides outstanding performance on properly prepared aluminum and vinyl siding, wood, hardboard, masonry, cement, brick, block, stucco, and metal down to a surface and air temperature of 35°F. Formulated with Advance Resin Technology for outstanding adhesion and hide and offers improved early moisture resistance (1-2 hours).

VinylSafe™ paint colors allow you the freedom to choose from 100 color options, including a limited selection of darker colors formulated to resist warping or buckling when applied to a sound, stable vinyl substrate.

Color: Most Colors

Coverage: 350-400 sq. ft. per gallon
@ 4 mils wet, 1.4 mils dry

Drying Time, @ 50% RH:

	@35-45°F	@45°F+
Touch:	2 Hours	2 Hours
Recoat:	24-48 hours	4 Hours

Drying and recoat times are temperature, humidity, and film thickness dependent.

Finish: 10-20 units @ 60°

Tinting with CCE only:

Base:	oz. per gallon	Strength
Extra White	0-6	SherColor
Deep Base	4-12	SherColor
Ultradeep Base	10-12	SherColor
Light Yellow	2-12	SherColor

Extra White A89W03151

(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: 36 ±2%

Weight Solids: 46 ±2%

Weight per Gallon: 9.93 lbs

Flash Point: N.A.

Vehicle Type: 100% Acrylic

Shelf Life: 36 months, unopened

WVP Perms (US) 19.60 grains/(hr ft² in Hg)

Mildew Resistant

This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

COMPLIANCE

As of 04/10/2025, 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	Yes
MIR-Manufacturer Inventory	No
MPI®	#15, 315

APPLICATION

When the air temperature is at 35°F (1.7°C), substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 35°F (1.7°C) and at least 5° 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 (1.7°C) or when air or surface temperatures may drop below 35°F (1.7°C) within 48 hours.

No reduction needed.

Brush:

Use a nylon-polyester brush such as Purdy® XL®.

Roller:

Use a high quality 3/8-3/4 inch nap synthetic roller cover such as Purdy® White Dove™ or Marathon®.

For specific brushes and rollers, please refer to our Brush and Roller Guide on sherwin-williams.com

Spray - Airless:

Pressure 2000 p.s.i.
Tip .015-.019 inch

APPLICATION TIPS

Make sure product is completely agitated (mechanically or manually) before use.

Thoroughly follow the recommended surface preparations. Most coating failures are due to inadequate surface preparation or application. Thorough surface preparation will help provide long term protection.

SPECIFICATIONS

SuperPaint Exterior Latex can be self-priming when used directly over existing coatings, or bare drywall, plaster, and masonry (with a cured pH of less than 9). The first coat acts like a coat of primer and the second coat provides the final appearance and performance. Please note that some specific surfaces require specialized treatment.

Aluminum & Aluminum Siding¹, Galvanized Steel¹:

2 coats SuperPaint Exterior Latex

Concrete Block, CMU, Split face Block:

1 coat Loxon Acrylic Block Surfacers

2 coats SuperPaint Exterior Latex

Brick, Stucco, Cement, Concrete:

1 coat Loxon Concrete & Masonry Primer³

or

Loxon Conditioner²

2 coats SuperPaint Exterior Latex

Cement Composition Siding/Panels:

1 coat Loxon Concrete & Masonry Primer³

or

Loxon Conditioner²

2 coats SuperPaint Exterior Latex

Plywood:

1 coat Exterior Latex Primer

2 coats SuperPaint Exterior Latex

***Vinyl Siding:**

2 coats SuperPaint Exterior Latex

Wood (Cedar, Redwood)⁴:

1 coat Exterior Oil-Based Wood Primer

2 coats SuperPaint Exterior Latex

¹ On large expanses of metal siding, the air, surface, and material temperatures must be 50°F (10°C) or higher.

² Not for use at temperatures under 50°F (10°C). See specific primer label for that product's application conditions.

³ Not for use at temperatures under 40°F (4.4°C). See specific primer label for that product's application conditions.

⁴ Knots and some woods, such as redwood and cedar, contain a high amount of tannin, a colored wood extract. For best results on these woods, use a coat of Exterior Oil-Based Wood Primer.

Other primers may be appropriate. Standard latex primers cannot be used below 50°F (10°C) or above 100°F (37.7°C). See specific primer label for that product's application limitations.

When repainting involves a drastic color change, a coat of primer will improve the hiding performance of the topcoat color.

SuperPaint®

Exterior Latex Satin

SURFACE PREPARATION

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed 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.

Aluminum and Galvanized Steel:

Wash to remove any oil, grease, or other surface contamination. All corrosion must be removed with sandpaper, wire brush, or other abrading method.

Cement Composition Siding-Panels:

Remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, and peeling or defective coatings. Allow the surface to dry thoroughly. If the surface is new, test it for pH, if the pH is higher than 9, prime with Loxon Concrete & Masonry Primer.

Caulking:

Gaps between windows, doors, trim, and other through-wall openings can be filled with the appropriate caulk after priming the surface.

Masonry, Concrete, Cement, Block:

All new surfaces must be cured according to the supplier's recommendations – usually about 30 days. Remove all form release and curing agents. Rough surfaces can be filled to provide a smooth surface. If painting cannot wait 30 days, allow the surface to cure 7 days and prime the surface with Loxon Concrete & Masonry Primer. Cracks, voids, and other holes should be repaired with an elastomeric patch or sealant. **Concrete masonry units (CMU)** - Surface should be thoroughly clean and dry. Air, material, and surface temperatures must be at least 50°F (10°C) before filling. Use Loxon Acrylic Block Surfer. The filler must be thoroughly dry before topcoating.

Stucco:

Remove any loose stucco, efflorescence, or laitance. Allow new stucco to cure at least 30 days before painting. If painting cannot wait 30 days, allow the surface to dry 7 days and prime with Loxon Concrete & Masonry Primer. Repair cracks, voids, and other holes with an elastomeric patch or sealant.

SURFACE PREPARATION

Mildew:

Clean mildew from the Surface: Mildew is a fungus that looks like dirt but won't wash off. Mildew must be removed before painting, or it will grow through any new coat of paint. To remove mildew or suspected mildew, scrub surface before painting with a commercial mildew remover following manufacturer's safety instructions.

Previously Painted Surfaces:

If in sound condition, clean the surface of all foreign material. Smooth, hard, or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Steel:

Rust and mill scale must be removed using sandpaper, wire brush, or other abrading method. Bare steel must be primed with a corrosion resistant primer such as All Surface Enamel Primer the same day as cleaned.

***Vinyl or other PVC Building Products:**

Clean the surface thoroughly by scrubbing with warm, soapy water. Rinse thoroughly, if needed prime with appropriate white primer. Do not paint vinyl with any color darker than the original color or having a Light Reflective Value (LRV) of less than 56 unless VinylSafe® Colors are used. If VinylSafe colors are not used the vinyl may warp. Follow all painting guidelines of the vinyl manufacturer when painting. Only paint properly installed vinyl siding. Deviating from the manufacturer's painting guidelines may cause the warranty to be voided.

Wood, Plywood, Composition Board:

Clean the surface thoroughly then sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth. All new and patched areas must be primed. Knots and some woods, such as redwood and cedar, contain a high amount of tannin, a colored wood extract. If applied to these bare woods, it may show some staining. If staining persists, spot prime severe areas with 1 coat of Exterior Oil-Based Wood Primer prior to using.

CAUTIONS

For exterior use only.
Protect from freezing.
Non-Photochemically reactive.
Not for use on floors

Before using, carefully read **CAUTIONS** on label.

CRYSTALLINE SILICA, 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. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. 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. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. **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.**

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CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm clean water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

Loxon® Acrylic Conditioner

LX03W0100 Guide Coat White, LX03V0100 Clear



**SHERWIN
WILLIAMS®**

CHARACTERISTICS

Loxon Acrylic Conditioner is a 100% acrylic emulsion conditioner that will penetrate and seal interior and exterior surfaces and bond light chalk to the surface. With excellent alkali and efflorescence resistance, this sealer allows new concrete, stucco, and other cementitious surfaces to be coated prior to a 30-day cure, and will adhere to new or existing concrete with a pH of 6 to 13.

For use on these surfaces:

Concrete, Concrete Block, Brick, Stucco, Fiber Cement Siding, Plaster, Mortar, EIFS Exterior Wall Cladding

Color: Guide Coat White & Clear

Coverage:
Coverage sq.ft. per gallon 200-300
Do not build a surface glaze.

Drying Schedule 77° F @ 50% RH:

Drying and recoat times are temperature, humidity and film thickness dependent.

Touch: 30 minutes
Tack free: 1 hour
Recoat: 3 hours

Tinting with CCE only:

Requires ColorCast Ecotoner colorant for tinting. If desired, up to 1 oz per gallon of ColorCast Ecotoner colorant can be used to approximate the topcoat color. Check color before use.

Clear LX03V0100

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: 15 ± 2%

Weight Solids: 17 ± 2%

Weight per Gallon: 8.43 lb

Flash Point: N/A

Vehicle Type: Proprietary

Acrylic

Shelf Life: 36 months,unopened

Guide Coat White LX03W0100

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: 17 ± 2%

Weight Solids: 24 ± 2%

Weight per Gallon: 8.92 lb

Flash Point: N/A

Vehicle Type: Proprietary Acrylic

Shelf Life: 36 months,unopened

WVP Perms (US): 27.55 grains/(hr ft² in Hg)

COMPLIANCE

As of 09/23/2021, 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	Yes
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certified	Yes
MIR-Manufacturer Inventory	No
MPI®	N.A.

APPLICATION

Temperature:

minimum 50°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: No reduction necessary

Airless Spray:

Pressure 700-1000 p.s.i.

Tip .015-.019 inch

Brush Use a nylon/polyester or foam brush.

Roller Cover Use a 3/8 to 3/4 inch nap synthetic cover.

If the surface requires a full bodied prime/block filler coat rather than a thin penetrating sealer, use Loxon Concrete & Masonry Primer or Loxon Acrylic Block Surfer.

Apply at temperatures above 50°F. When the air temperature is at 50°F, substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 50°F and at least 5°F above the dew point.

Do not apply if the surface temperature is below 50°F, when rain is expected within 3 hours, or when the relative humidity is 90% or more.

Do not paint in direct sun or on a hot surface.

Do not reduce.

APPLICATION TIPS

Do not build a surface glaze.

Do not apply to a damp surface.

Do not apply over heavy chalk.

For maximum resistance to efflorescence, you must topcoat with one of the Loxon Masonry Finishes.

On exterior applications, Loxon Acrylic Conditioner must be topcoated within 7 days or the surface may need to be re-cleaned.

RECOMMENDED SYSTEMS

Masonry, Concrete, Stucco, Block,

1 coat Loxon Acrylic Conditioner
2 coats Appropriate topcoat

Fiber Cement Siding, EIFS:

1 coat Loxon Acrylic Conditioner
2 coats Appropriate topcoat

Previously Painted:

1 coat Loxon Acrylic Conditioner
2 coats Appropriate topcoat

Recommended Architectural Topcoats:

Loxon Masonry Coatings
ConFlex Masonry Coatings
A-100 Exterior Latex
Duration Exterior & Duration Home Interior
Emerald Exterior & Interior
SuperPaint Exterior & Interior
ProMar Interior

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.

New and Previously Painted:

Remove all surface contamination (peeling paint, heavy chalk, efflorescence, laitance, concrete dust, etc.) by washing or pressure washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Masonry, Concrete, Stucco:

All new surfaces must cure for at least 7 days. Remove all form release and curing agents. Pressure clean to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Repair cracks, voids, and other holes with an appropriate patching compound or sealant.

Concrete and mortar must be cured at least 7 days at 75°F. Moisture content must be 15% or lower. 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. Fill bugholes, air pockets and other voids with an elastomeric patch or sealant.

Plaster

Must be cured, usually 30 days, and hard. If painting cannot wait, allow the surface to dry 7 days (within a pH range of 6 to 13) and prime with Loxon Acrylic Conditioner. **Do not build a surface glaze.** If the surface requires a full bodied prime coat rather than a thin penetrating sealer, use Loxon Concrete & Masonry Primer. Soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of water. Repeat until the surface is hard, rinse with water and allow to dry before painting.

Brick

Must be free of dirt, loose and excess mortar, and foreign material. All brick should be allowed to weather for at least one year followed by wire brushing to remove efflorescence. Treat the bare brick with one coat of Loxon Acrylic Conditioner.

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.

CAUTIONS

For interior or exterior use.

Protect from freezing.

Not for use on floors

Before using, carefully read **CAUTIONS** on label.

CRYSTALLINE SILICA: 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. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. 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. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. **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	09/23/2021	LX03W0100	17 00
HOTW	09/23/2021	LX03V0100	13 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.

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):

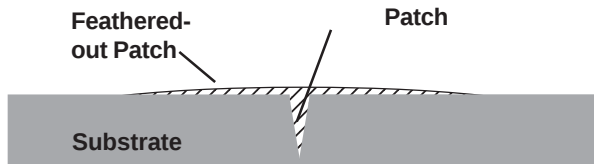
Product	Number	g/L	lb/gal
Gun-Grade Textured	WL70010GT	25	0.20
Gun-Grade Smooth	WL70010GS	25	0.20
Brush-Grade, Smooth	WL700GLSB	21	0.18
Brush-Grade, Textured	WL700GLTB	21	0.17
Knife-Grade, Smooth	WL700GLSK	25	0.20
Knife-Grade, Textured	WL700GLTK	24	0.20

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.



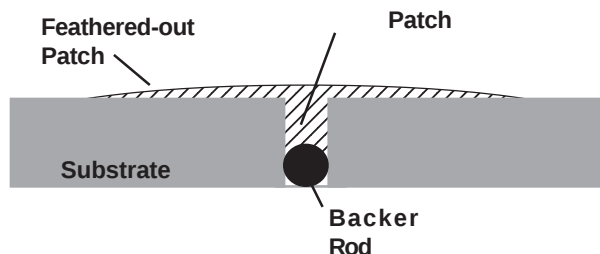
Large Openings and Cracks - from 1/16" to 3/8" wide

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.

BID DOCUMENTS

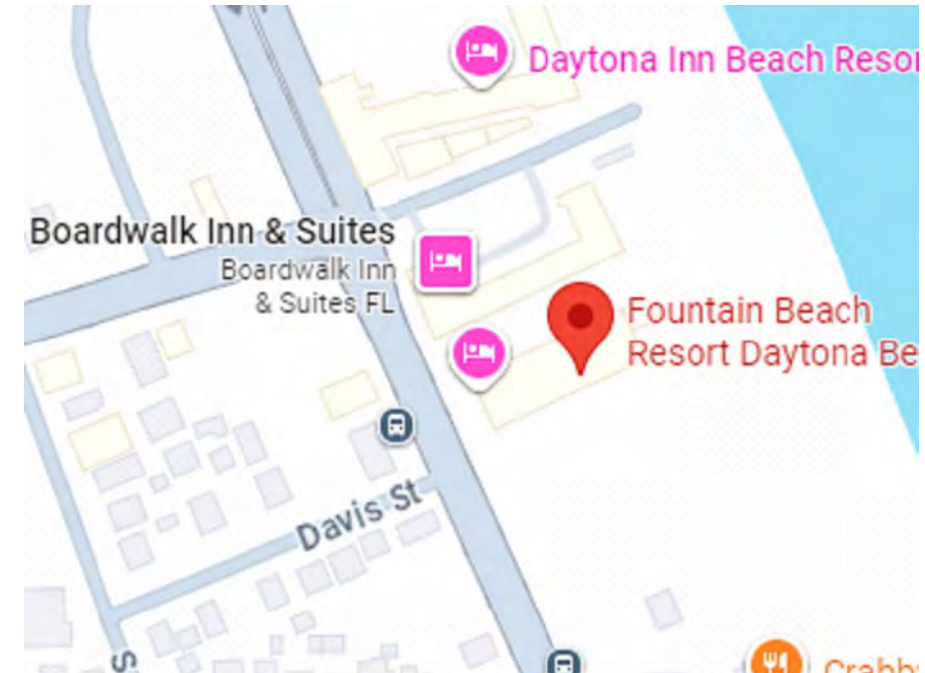
**APPENDIX A
DRAWINGS AND DETAILS**

16 STACK RESTORATION PROJECT
PROJECT NUMBER: 25-1441

Prepared For:
Fountain Beach Resort
313 South Atlantic Avenue
Daytona Beach, Florida 32118

Engineer:
United Engineering Consultants, Inc.
4240 South Ridgewood Avenue, Suite 4
Port Orange, Florida 32127
Timothy J. Snook, P.E., S.I. Limited
Florida License #83208
office@unitedengineeringconsultants.com

LOCATION PLAN



SHEET NUMBER	DRAWING NUMBER	TITLE
1	T1	TITLE PAGE
2	S1	REFERENCE STANDARDS AND DEIGN CRITERIA
3	S2	GENERAL NOTES
4	S3	MASONRY NOTES
5	S4	STEEL FRAMING NOTES
6	S5	STANDARD DETAILS
7	S6	ICRI REPAIR DETAILS
8	S7	BALCONY SLAB DESIGN
9	S8	KNEE WALL DESIGN
10	S9	STEEL HEADER DESIGN

REF.	REV. NO.	DATE		
TIMOTHY J. SNOOK, P.E.				
FLORIDA LICENSE # 83208				
 UNITED ENGINEERING CONSULTANTS, INC. DESIGN - ENGINEERING - PROJECT MANAGEMENT				
4240 SOUTH RIDGEWOOD AVENUE, SUITE 4, PORT ORANGE, FLORIDA 32127				
PHONE: (386) 256-7884				
E-MAIL ADDRESS: OFFICE@UNITEDENGINEERINGCONSULTANTS.COM				
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 6607				
DATE: 1/30/2026				
DRAWING TITLE FOUNTAIN BEACH RESORT 313 SOUTH ATLANTIC AVENUE DAYTONA BEACH, FLORIDA 32118	DRAWN BY:	JJS	JOB NO:	25-1441
	TITLE PAGE	APPROVED BY:	JJS	FILE NAME:
SHEET NO. T1	BID SET			
1 of 10				

REFERENCES AND STANDARDS

2023 FLORIDA BUILDING CODE, 8th EDITION, EXISTING STRUCTURES
AMERICAN CONCRETE INSTITUTE (ACI):
ACI 301: SPECIFICATIONS FOR STRUCTURAL CONCRETE
ACI 318: BUILDING CODE AND COMMENTARY
ACI 562: BUILDING CODE FOR REPAIR OF EXISTING STRUCTURES
ASCE 7-22: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
CRSI MANUAL OF STANDARD PRACTICE
INTERNATIONAL CONCRETE REPAIR INSTITUTE (ICRI) TECHNICAL GUIDELINES (TG):
TG NO. 03730 "SURFACE PREPARATION FOR THE REPAIR OF DETERIORATED CONCRETE"
TG NO: 03733 " SELECTING AND SPECIFYING MATERIALS FOR CONCRETE REPAIR"
2018 NATIONAL DESIGN SPECIFICATION (NDS)
TMS 402 - BUILDING CODE FOR MASONRY STRUCTURES

DESIGN CRITERIA

DESIGN LIVE LOAD, BALCONIES: 60 PSF
FIRE PROTECTION: NOT-PROTECTED

WIND LOADS

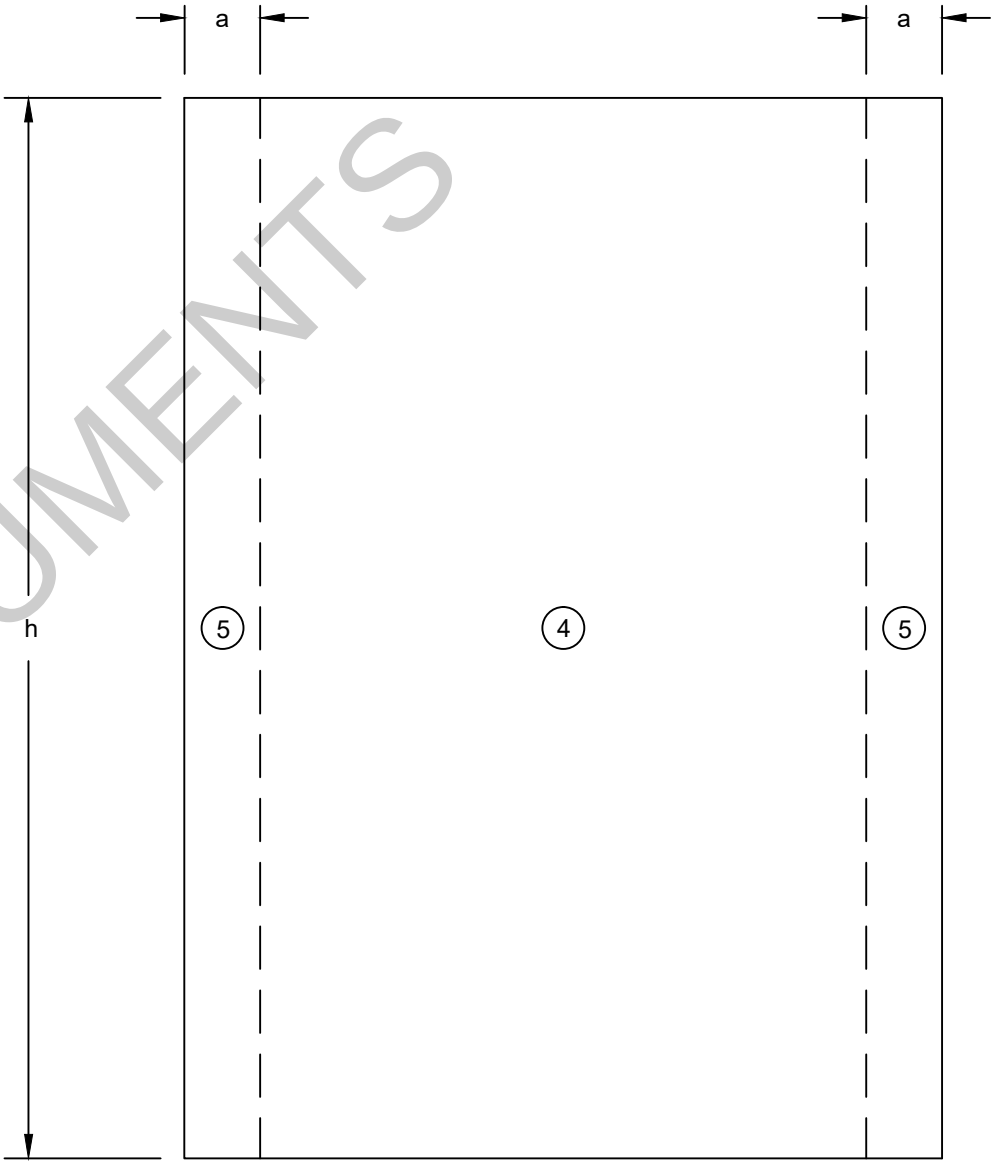
WIND LOAD DATA PROVIDED BY MECAWIND V2406.

THIS STRUCTURE HAS BEEN DESIGNED FOR WIND LOADS IN ACCORDANCE WITH CHAPTER 16 OF THE FLORIDA BUILDING CODE, 8th EDITION (2023) AND ASCE 7-22 AS FOLLOWS:

ULTIMATE DESIGN WIND SPEED: 140 MPH
NOMINAL DESIGN WIND SPEED: 109 MPH
RISK CATEGORY: CATEGORY II
EXPOSURE CATEGORY: D
BUILDING CLASSIFICATION: PARTIALLY ENCLOSED (INTERNAL PRESSURE COEFFICIENT +/- 0.55)

THIS STRUCTURE IS IN THE WIND-BORNE DEBRIS REGION.

NOMINAL DESIGN WIND PRESSURES (COMPONENTS AND CLADDING): N/A



WALL ELEVATION

REF.	REV. NO.	DATE
TIMOTHY J. SNOOK, P.E.		
FLORIDA LICENSE # 83208		
UNITED ENGINEERING CONSULTANTS, INC. DESIGN - ENGINEERING - PROJECT MANAGEMENT 4240 SOUTH RIDGEWOOD AVENUE, SUITE 4, PORT ORANGE, FLORIDA 32127 PHONE: (386) 256-7884 E-MAIL ADDRESS: OFFICE@UNITEDENGINEERINGCONSULTANTS.COM FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 6607		
DATE: 1/30/2026		
FOUNTAIN BEACH RESORT 313 SOUTH ATLANTIC AVENUE DAYTONA BEACH, FLORIDA 32118		
DRAWING TITLE		
DESCRIPTION REFERENCE STANDARDS AND DESIGN CRITERIA		
DRAWN BY: TJS APPROVED BY: TJS		
JOB NO: 25-1441 FILE NAME: BID SET		
SHEET NO. S1		
2 of 10		

1. THE CONTRACTOR SHALL PAY FOR LOCAL PERMITS.
2. USE ENTRANCES, PARKING, STAGING AND STORAGE AREAS DESIGNATED BY OWNER. KEEP CONSTRUCTION TRAFFIC AND PERSONNEL FROM INTERFERING WITH OWNERS ACCESS AND USE OF FACILITY.
3. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF HIS WORKERS AND THE PUBLIC AND THE ENFORCEMENT OF OSHA REGULATIONS.
4. STRUCTURAL WORK SHALL BE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, 8TH EDITION (2023), AS ADOPTED AND SUPPLEMENTED BY LOCAL REGULATIONS.
5. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS, ELEVATIONS, LOCATIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE ENGINEER OF DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.
6. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION, BRACING, AND SHORING OF ALL STRUCTURAL MEMBERS AS REQUIRED FOR STRUCTURAL STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONDITION WHICH, IN THEIR OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS TO THE STRUCTURE.
7. THE CONTRACTOR SHALL PROTECT EXISTING WORK. ANY WORK DAMAGED DUE TO NEGLIGENCE IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. PRODUCTS SHALL BE DELIVERED IN ORIGINAL, UN-OPENED, FACTORY WATERPROOF PACKAGING BEARING MFR IDENTIFICATION NUMBER AND EXPIRATION DATE. MSDS AND MANUFACTURER'S INSTRUCTIONS FOR USE SHALL ACCOMPANY EACH PRODUCT. STORE ACCORDING TO MANUFACTURER'S DIRECTIONS. DO NOT OPEN UNTIL THE DAY OF USE. CONDITION AND MIX PRODUCT ACCORDING TO MANUFACTURER'S DIRECTIONS. USE WITHIN MANUFACTURER'S TIME AND TEMPERATURE LIMITS. DO NOT USE MATERIAL THAT EXCEEDS THE MANUFACTURER'S TIME LIMITS.
9. CONSTRUCTION MATERIALS SHALL NOT BE STACKED ON FLOORS OR ROOFS IN EXCESS OF THE DESIGN LIVE LOADS. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO INSURE THAT THE SUBCONTRACTORS ARE INFORMED AND DO NOT VIOLATE THIS IMPORTANT REQUIREMENT. IMPACT SHALL BE AVOIDED WHEN PLACING MATERIALS ON FLOORS OR ROOFS.
10. PLANS, SECTIONS AND DETAILS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS OR FIT OF MATERIALS.
11. SUBMIT WRITTEN REQUEST TO THE ENGINEER FOR APPROVAL OF ANY PROPOSED CHANGE TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. SPlicing, CUTTING, NOTCHING OR OTHER ALTERATIONS TO STRUCTURAL MEMBERS ARE NOT PERMITTED WITHOUT WRITTEN AUTHORIZATION OF THE STRUCTURAL ENGINEER. ANY UNAUTHORIZED DEVIATION FROM THE CONTRACT DOCUMENTS, AND CORRECTION THEREOF, IS THE RESPONSIBILITY OF THE CONTRACTOR.
12. INSPECTIONS AND TESTS BY THE OWNER OR ENGINEER DO NOT RELIEVE THE CONTRACTOR OR MANUFACTURER OF THEIR RESPONSIBILITY TO PERFORM QUALITY CONTROL TESTS OR INSPECTIONS TO VERIFY CONFORMANCE TO THE SPECIFICATIONS. THE CONTRACTOR SHALL PERFORM INSPECTIONS OR TESTS AS NECESSARY TO DOCUMENT CONTRACTOR'S PROPER USE AND APPLICATION OF MATERIALS TO THE SATISFACTION OF THE MANUFACTURER AND ASSOCIATIONS ENGINEER.
13. DO NOT USE PRODUCTS DURING PERIODS OF PRECIPITATION OR FREEZING WEATHER. PROTECT NEWLY CAST CONCRETE FROM EXPOSURE TO CHLORIDE IONS AND TEMPERATURES BELOW 40 OR ABOVE 90 DEGREES F.
14. THE CONTRACTOR AND ENGINEER SHALL VERIFY THE LOCATIONS OF REPAIR BEFORE ANY CONCRETE DEMOLITION. EXCAVATIONS SHALL EXTEND TO SOUND CONCRETE AS VERIFIED BY ENGINEER.
15. ENGINEER SHALL INSPECT AND APPROVE WORK BEFORE CONCRETE PLACEMENT OR CONCEALMENT OF ANY WORK. CONTRACTOR SHALL ASSIST IN PROVIDING ENGINEER ACCESS TO THE WORK AND CORRECT ANY DEFECTS BEFORE WORK PROCEEDS.
16. THE MOST STRINGENT REQUIREMENTS APPLY IN CASE OF CONFLICT BETWEEN SPECIFICATIONS, STANDARDS, CODES AND DRAWINGS.

1. SUBMITTALS SHALL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. NON-CONFORMING SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.
2. SUBMIT ALL REQUIRED SHOP DRAWINGS, MIX DESIGNS, PRODUCT DATA SHEETS, FLORIDA PRODUCT APPROVALS AND NOTICE OF ACCEPTANCE (NOA).
3. APPROVAL OF THE SHOP DRAWINGS DOES NOT INDICATE ACCEPTANCE OF THE DEVIATIONS FROM THE CONTRACT DOCUMENTS, UNLESS ACCEPTED BY THE ENGINEER IN WRITING PRIOR TO SUBMISSION OF SHOP DRAWINGS. CONFLICTS AS A RESULT OF SUCH DEVIATIONS SHALL BE DEEMED THE CONTRACTOR'S RESPONSIBILITY. ANY CHANGES TO THE DETAILS SHOWN IN THESE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING BY R.F.I. AND APPROVED BY THE ENGINEER PRIOR TO SUBMITTING SHOP DRAWINGS. ALL SUCH CHANGES SHALL BE "BUBBLED" ON THE SHOP DRAWINGS AND REFERENCED TO THE PROPER R.F.I. SHOP DRAWINGS SHALL NOT CONTAIN REPRODUCTIONS OF THE CONTRACT DOCUMENTS.

1. ALL CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT (28) DAYS:
ELEVATED SLABS, COLUMNS, BEAMS: 5,000 PSI

- A. CEMENT: USE DOMESTIC PORTLAND CEMENT
- B. FINE AGGREGATE: CLEAN SAND
- C. COURSE AGGREGATE: #89, LIMESTONE
- D. NO CALCIUM CHLORIDE SHALL BE USED
- E. WATER/CEMENT RATIO: 0.40 MAXIMUM

3. ALL REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL, CONFORMING TO ASTM A-615:
GRADE 60
FIBERGLASS REINFORCING, AS APPROVED BY ENGINEER

5. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318 CURRENT EDITION, AND SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 301.

7. WHERE LENGTHS ARE GIVEN ON THE DRAWINGS, THE LENGTH OF ANY HOOK, IF REQUIRED, IS NOT INCLUDED. HOOKS SHALL BE PROVIDED AT DISCONTINUOUS ENDS OF ALL TOP BARS OF BEAMS AND AT SLAB EDGES, U.N.O.

9. THE FOLLOWING MINIMUM CONCRETE COVER IS TO BE PROVIDED FOR REINFORCEMENT:

3"	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH
2"	CONCRETE EXPOSED TO WEATHER, #6 THROUGH #8 BARS
1½"	CONCRETE EXPOSED TO WEATHER, #5 BAR OR SMALLER
1½"	CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH FOR THE PRIMARY REINFORCEMENT, TIES, STIRRUPS, AND SPIRALS IN BEAMS OR COLUMNS
¾"	CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH FOR SLABS, WALLS AND JOISTS

10. THE CONTRACTOR SHALL EMPLOY A TESTING LABORATORY TO PREPARE TEST CYLINDERS REPRESENTING CONCRETE POURED EVERY DAY. CYLINDERS WILL BE REQUIRED WITH EACH CONCRETE TRUCK. THE LABORATORY TECHNICIAN SHALL BE PRESENT FOR EACH POUR. TESTING REPORTS ARE REQUIRED, SHOWING THE STRENGTH OF CONCRETE AT (7) AND (28) DAYS, AND/OR AS DIRECTED BY THE CONTRACTOR.

1. ANCHORING ADHESIVES SHALL BE A TWO-PART COMPONENT SOLID EPOXY-BASED SYSTEM, SUPPLIED IN MANUFACTURER'S STANDARD SIDE-BY-SIDE CARTRIDGE AND DISPENSED THROUGH A STATIC MIXING NOZZLE SUPPLIED BY THE MANUFACTURER.

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TIMOTHY J. SNOOK, P.E.							
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 UNITED ENGINEERING CONSULTANTS, INC. DESIGN - ENGINEERING - PROJECT MANAGEMENT							
4240 SOUTH RIDGEWOOD AVENUE, SUITE 4, PORT ORANGE, FLORIDA 32127							
PHONE: (386) 256-7884							
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DATE: 1/30/2026							
DRAWING TITLE FOUNTAIN BEACH RESORT 313 SOUTH ATLANTIC AVENUE DAYTONA BEACH, FLORIDA 32118							
<table border="1"> <tr> <td rowspan="2">DESCRIPTION</td> <td>DRAWN BY: TJS</td> <td>JOB NO: 25-1441</td> </tr> <tr> <td>APPROVED BY: TJS</td> <td>FILE NAME: BID SET</td> </tr> </table>			DESCRIPTION	DRAWN BY: TJS	JOB NO: 25-1441	APPROVED BY: TJS	FILE NAME: BID SET
DESCRIPTION	DRAWN BY: TJS	JOB NO: 25-1441					
	APPROVED BY: TJS	FILE NAME: BID SET					
GENERAL NOTES							
SHEET NO. 52 3 of 10							

CONCRETE MASONRY

1. CONCRETE MASONRY SHALL CONFORM TO ACI "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (ACI 530) AND ACE "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1), LATEST EDITION.
2. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C 90, NORMAL WEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI ON UNIT NET SECTION.
3. THE DESIGN NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F'm) WALLS IS 1,500 PSI. COMPLIANCE WITH THE SPECIFIED STRENGTH (F'm = 2,000 PSI) SHALL BE VERIFIED BY THE "UNIT STRENGTH METHOD" , IN ACCORDANCE WITH ACI 530.1, SECTION 1.4.
4. MORTAR SHALL COMPLY WITH ASTM C 270, TYPE "M" WITH MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI.
5. GROUT AND FILLED CELLS SHALL CONFORM TO ASTM C 476, WITH A SLUMP BETWEEN 8" AND 11". GROUT COMPRESSIVE STRENGTH AT (28) DAYS SHALL BE 5,000 PSI. JOB SITE MIXING OF GROUT SHALL NOT BE PERMITTED.
6. GROUT FOR FILLED CELLS SHALL HAVE A MAXIMUM POUR HEIGHT OF 12'-0". THE MAXIMUM HEIGHT OF GROUT LIFT SHALL BE 5'-0".
7. CONCRETE BLOCK SHALL NOT BE MOISTENED BEFORE GROUTING.
8. CONCRETE BLOCK SHALL BE LAID IN RUNNING BOND, UNLESS NOTED OTHERWISE ON THE PLANS.
9. PROVIDE FULL MORTAR BEDDING AROUND ALL CELLS TO BE GROUTED.
10. REINFORCE WALLS WITH LADDER-TYPE STANDARD (9 GAUGE) REINFORCEMENT IN BED JOINTS AT 16" ON CENTER, MEASURED VERTICALLY, U.N.O. PLACE PER MANUFACTURER'S RECOMMENDATIONS. EXTEND INTO COLUMNS, OR PROVIDE DOVETAIL ANCHORS TO SECURE MASONRY TO COLUMNS. LADDER SHALL BE HOT-DIPPED GALVANIZED PER ASTM A153 (1.50 OZ PER S.F.) AFTER FABRICATION. LAP ALL HORIZONTAL JOINT REINFORCEMENT 8" MINIMUM.
11. FOR WALL VERTICAL REINFORCING, SEE CMU WALL DETAILS. THE TYPICAL WALL VERTICAL REINFORCING AND SPACING SHALL ALSO BE PLACED ABOVE AND BELOW ALL WALL OPENINGS. U.N.O., REINFORCE CMU WALLS WITH (1) #5 VERTICAL BAR AT 32" O.C. PROVIDE ADDITIONAL #5 VERTICAL AT THE FIRST CELL OF ALL JAMBS, CORNERS, ENDS OF WALLS AND WALL INTERSECTIONS.
12. VERTICAL REINFORCING IS TYPICALLY CENTERED IN THE WALL, U.N.O., AND MUST HAVE A MINIMUM CLEARANCE OF 1/2" TO INSIDE FACE OF WEB. VERTICAL BAR LAP = 48x (BAR DIAMETER). VERTICAL REINFORCEMENT IN WALLS SHALL BE SECURED AND Laterally SUPPORTED AGAINST DISPLACEMENT AT INTERVALS NOT EXCEEDING 192x (BAR DIAMETER) OR 10' (WHICHEVER IS LESS) WHENEVER A CLEAN OUT IS REQUIRED.
13. EXTEND ALL WALL VERTICAL REINFORCEMENT TO WITHIN 2' OF TOP OF WALL OR BEAM, U.N.O.
14. U.N.O. THE TOP COURSE OF ALL CMU WALLS, PARTITIONS AND PARAPETS SHALL BE CONSTRUCTED OF KNOCK-OUT BLOCKS REINFORCED WITH (2) #5 CONTINUOUS HORIZONTAL BARS IN GROUTED BOND BEAM. BEND BARS WITH STANDARD HOOK AT ALL CORNERS AND INTERSECTIONS.
15. PROVIDE FILLED, PRE-CAST CONCRETE U-LINTELS OVER MASONRY WALL OPENINGS, AS NOTED. THESE PRE-CAST CONCRETE LINTELS, MANUFACTURED BY CAST-CRETE, OR APPROVED EQUAL, SHALL HAVE A MINIMUM OF (1) #5 CONTINUOUS BOTTOM BAR AND SHALL BEAR 8" EACH END, ON A GROUT-FILLED CELL. NEATLY SAW CUT AND REMOVE BOTTOM OF PRE-CAST TO ALLOW CONTINUATION OF VERTICAL JAMB REINFORCING.
16. PROVIDE MASONRY CONTROL JOINTS (MCJ) FOR CMU WALLS, FULL HEIGHT OF WALLS, AT A SPACING NOT EXCEED THE LESSER OF 3x (WALL HEIGHT) OR 50'-0" O.C.
17. REINFORCE MASONRY OPENINGS GREATER THAN 1'-0" WIDE WITH HORIZONTAL JOINT REINFORCEMENT, PLACED IN (2) BED JOINTS AT 8' O.C. IMMEDIATELY ABOVE THE LINTEL AND IMMEDIATELY BELOW THE SILL. EXTEND JOINT REINFORCING A MINIMUM OF 2'-0" BEYOND JAMBS OF THE OPENING, EXCEPT AT CONTROL JOINTS. PROVIDE (2) #5 HORIZONTAL BARS IN GROUT-FILLED, KNOCK-OUT BLOCK BOND BEAM BELOW SILLS, EXTENDING 6" INTO JAMB, EACH END.
18. TEMPORARY BRACING AND SHORING OF WALLS AND LINTELS TO PROVIDE STABILITY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS REFERRED TO NCMA TEK 3-4B FOR GUIDELINES ON PROVIDING WALL BRACING DURING CONSTRUCTION.

19.SUBMITTAL REQUIREMENTS:

DETERMINATION OF THE MASONRY COMPRESSIVE STRENGTH, IN ACCORDANCE WITH THE FOLLOWING "UNIT STRENGTH METHOD" OF ACI 530.1, REQUIRES WRITTEN ACCEPTANCE OF THE FOLLOWING SUBMITTALS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE FOLLOWING DOCUMENTATION FOR REVIEW AND APPROVAL, PRIOR TO COMMENCEMENT OF THE WORK:

- A. MORTAR MIX DESIGN, INDICATING TYPE AND PROPORTIONS OF INGREDIENTS, IN COMPLIANCE WITH PROPORTION SPECIFICATION OF ASTM C 2270.
- B. GROUT MIX DESIGN, INDICATING TYPE AND PROPORTIONS OF INGREDIENTS, IN COMPLIANCE WITH PROPORTION SPECIFICATION OF ASTM C 476.
- C. MATERIAL CERTIFICATES FOR THE FOLLOWING, CERTIFYING THE EACH MATERIAL IS IN COMPLIANCE:

REINFORCEMENT (VERTICAL AND HORIZONTAL BARS)
JOINT REINFORCEMENT (HORIZONTAL)
ANCHORS, TIES, FASTENERS AND METAL ACCESSORIES
MASONRY UNITS
MORTAR AND GROUT MATERIALS

20. INSPECTION REQUIREMENTS:

MINIMUM INSPECTION REQUIREMENTS INCLUDE VERIFICATION OF COMPLIANCE WITH THE APPROVED SUBMITTALS AND DRAWINGS, INCLUDING INSTALLATION OF ALL REINFORCING STEEL PRIOR TO GROUT PLACEMENT. INSPECTOR SHALL PROVIDE WRITTEN DOCUMENTATION/SUMMARY OF FINDINGS TO THE ENGINEER OF RECORD, IN ACCORDANCE WITH ACI 530.1, SECTION 1.6. MATERIAL OR WORK WHICH FAILS TO COMPLY WITH THE CONTRACT DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.

[illegible]

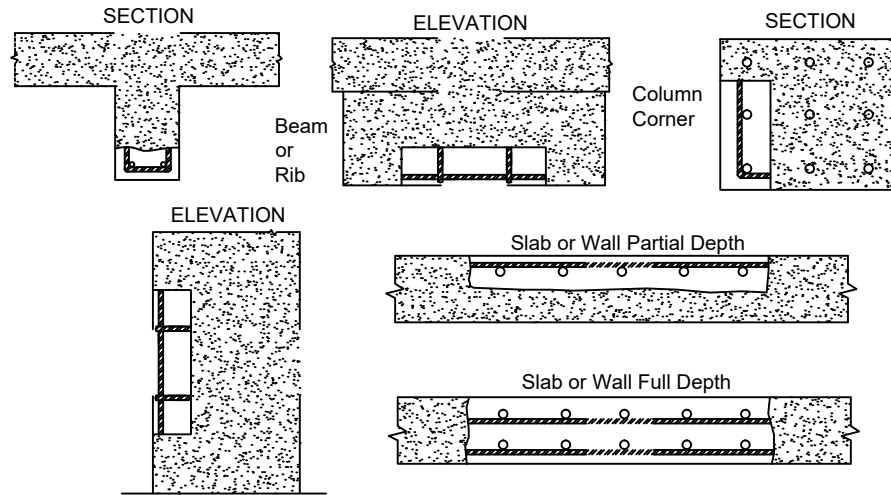
COLD-FORMED STEEL NOTES

1. INSTALL FRAMING MEMBERS IN ONE PIECE LENGTHS. SPLICING OF STUDS, TRACKS AND OTHER STRUCTURAL MEMBERS SHALL NOT BE PERFORMED WITHOUT AN APPROVED SPLICE DESIGN AND DETAIL.
2. THE END OF THE WALL STUDS FOR LOAD BEARING WALLS SHALL BE SEATED SQUARELY IN THE TRACK WITH NO MORE THAN $\frac{1}{8}$ " GAP BETWEEN THE END OF THE WALL STUD AND THE TRACK.
3. ALL FIELD CUTTING OF, INCLUDING BUT NOT LIMITED TO, STUDS, TRACKS AND CLIPS MUST BE DONE BY SAWING OR SHEARING. TORCH CUTTING OF COLD FORMED MEMBERS IS UNACCEPTABLE. COPING, CUTTING OR NOTCHING OF FLANGES AND EDGE STIFFENERS IS NOT PERMITTED FOR STRUCTURAL MEMBERS WITHOUT AN APPROVED DESIGN AND DETAIL.
4. THE COLD FORMED STEEL WALL AND CEILING STUDS MAY BE PUNCHED.
5. THE DISTANCE BETWEEN THE END OF THE STUD AND THE NEAR EDGE OF A PUNCHED OPENING OR PERFORATION SHALL NOT BE LESS THAN 10" UNLESS THE PROPER DETAIL TO REINFORCE THE OPENING IS PROVIDED.
6. ALL LIGHT GAUGE MEMBERS SHALL HAVE A MINIMUM $F_y = 50$ KSI.
7. ALL STRUCTURAL AND NONSTRUCTURAL MEMBERS SHALL BE COLD FORMED TO SHAPE FROM SHEET STEEL IN COMPLIANCE WITH THE REQUIREMENTS OF ASTM A1003/A1003M WITH STRUCTURAL GRADE TYPE H FOR STRUCTURAL MEMBERS AND NONSTRUCTURAL GRADE TYPE NS FOR NONSTRUCTURAL MEMBERS. MEMBERS SHALL COMPLY WITH THE MINIMUM METALLIC GALVANIZED COATING OF PROJECT SPECIFICATIONS (G90).
8. RIGID OR DEFLECTION CLIP ANGLES SHALL BE COLD FORMED TO SHAPE FROM SHEET STEEL IN COMPLIANCE WITH THE REQUIREMENTS OF ASTM A653/A653M WITH STRUCTURAL STEEL GRADE 50 CLASS 1. RIGID CLIP ANGLES AND DEFLECTION CLIP ANGLES SHALL COMPLY WITH THE MINIMUM METALLIC GALVANIZED COATING OF PROJECT SPECIFICATIONS (G90).
9. PROVIDE MECHANICAL BRIDGING AT A MAXIMUM OF 4'-0" ON CENTER VERTICALLY OR HORIZONTALLY AT ALL STUDS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
10. ALL FRAMING SCREWS SHALL BE A MINIMUM OF #12 EXCEPT WHERE NOTED AND SHALL BE SELF-DRILLING TAPPING SCREWS CONFORMING TO SAE J78. A MINIMUM OF 3 EXPOSED THREADS SHALL EXTEND THROUGH THE STEEL BEYOND ALL FRAMING COMPONENTS CONNECTED. SCREWS SHALL PENETRATE THE INDIVIDUAL FRAMING COMPONENTS OR CONNECTION MATERIAL WITHOUT CAUSING PERMANENT SEPARATION BETWEEN COMPONENTS. SCREWS SHALL BE INSTALLED SUCH THAT NEITHER THREADS NOR HOLES ARE STRIPPED. ALL SCREWS TO BE STAINLESS-STEEL.

REF.	REV. NO.	DATE					
TIMOTHY J. SNOOK, P.E.							
FLORIDA LICENSE # 83208							
 UNITED ENGINEERING CONSULTANTS, INC. DESIGN - ENGINEERING - PROJECT MANAGEMENT							
4240 SOUTH RIDGEWOOD AVENUE, SUITE 4, PORT ORANGE, FLORIDA 32127							
PHONE: (386) 256-7884							
E-MAIL ADDRESS: OFFICE@UNITEDENGINEERINGCONSULTANTS.COM							
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 6607							
DATE: 1/30/2026							
DRAWING TITLE FOUNTAIN BEACH RESORT 313 SOUTH ATLANTIC AVENUE DAYTONA BEACH, FLORIDA 32118							
<table border="1"> <tr> <td rowspan="2">DESCRIPTION COLD-FORMED STEEL NOTES</td> <td>DRAWN BY: TJS</td> <td>JOB NO: 25-1441</td> </tr> <tr> <td>APPROVED BY: TJS</td> <td>FILE NAME: BID SET</td> </tr> </table>			DESCRIPTION COLD-FORMED STEEL NOTES	DRAWN BY: TJS	JOB NO: 25-1441	APPROVED BY: TJS	FILE NAME: BID SET
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SHEET NO. S4							
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REMOVAL GEOMETRY

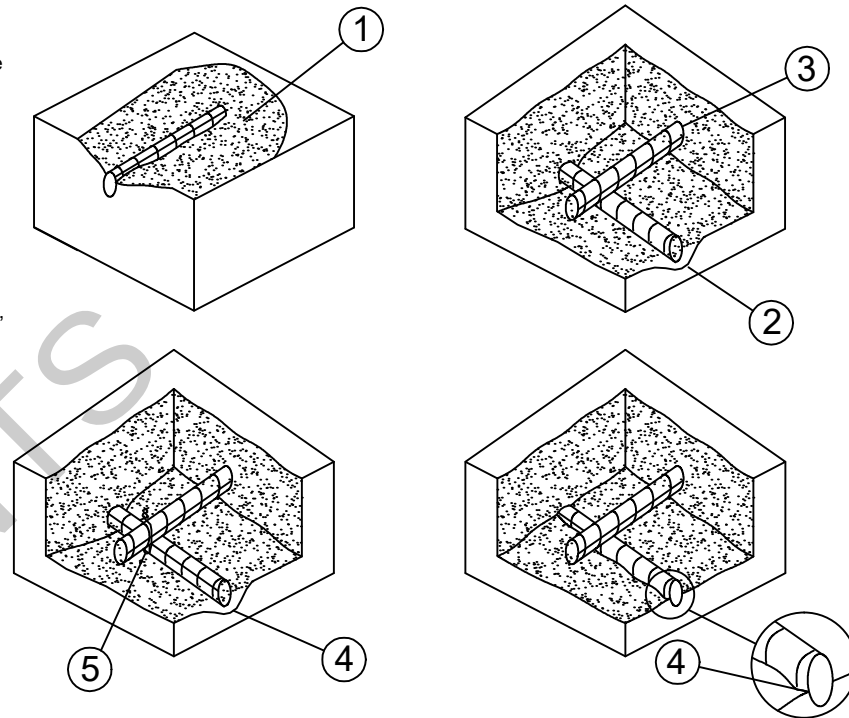
Caution ! Before starting removals, review effect of removals on structural integrity. Provide shoring of member as necessary. Particular care shall be exercised at slab/beam connections to columns.



EXPOSING AND UNDERCUTTING OF REINFORCING STEEL

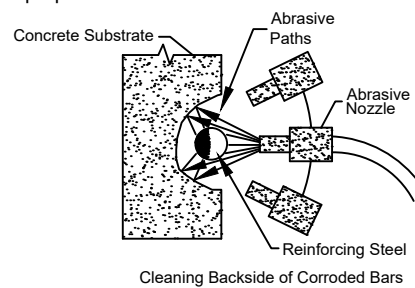
These details are applicable to horizontal, vertical, and overhead locations. They are also applicable to removal by hydro-demolition, hydro-milling, and electric, pneumatic or hydraulic impact breakers.	3. Concrete removals shall extend along the bars to locations along the bar free of bond inhibiting corrosion, and where the bar is well bonded to surrounding concrete.
---	--

1. Remove loose or delaminated concrete above corroded reinforcing steel.
2. Once initial removals are made, proceed with the undercutting of all exposed corroded bars. Undercutting will provide clearance for under bar cleaning and full bar circumference bonding to surrounding concrete, and will secure the repair structurally. Provide minimum 3/4 inch clearance between exposed rebar and surrounding concrete or 1/4 inch larger than largest aggregate in repair material, whichever is greater.
3. After the repair material is placed, exposed bars shall be cut to 1/2 inch above the repair surface.
4. After the repair material is placed and cured, exposed bars shall be cut to 1/2 inch above the repair surface.
5. Any reinforcement which is loose shall be secured in place by tying to other secured bars or by other approved methods.



CLEANING & PREPARING REINFORCING STEEL

6. All heavy corrosion and scale should be removed from the bar as necessary to promote maximum bond of replacement material. Oil free abrasive blast is the preferred method. A tightly bonded light rust build-up on the surface is usually not detrimental to bond, unless a protective coating is being applied to the bar surface, in which case the coating manufacturer's recommendations for surface preparation should be followed.

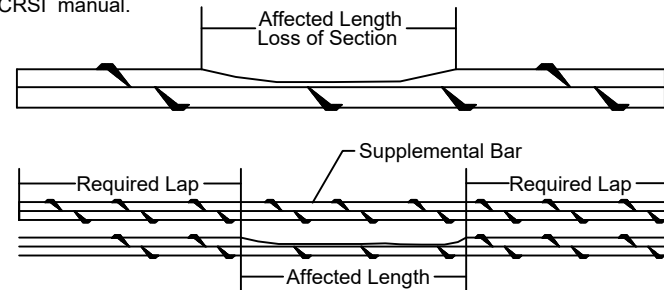


Repair of Reinforcing Steel Due to Loss of Section

If reinforcing steel has lost significant cross section, consult a structural engineer. If repairs are required to the reinforcing steel, one of the following repair methods should be used:

- * Complete bar replacement, or
- * Addition of supplemental bar over affected section.

New bars may be mechanically spliced to old bars or placed parallel to and approximately 3/4 inch from existing bars. Lap lengths shall be determined in accordance with ACI 318: also refer to CRSI manual.



EDGE AND SURFACE CONDITIONING OF CONCRETE

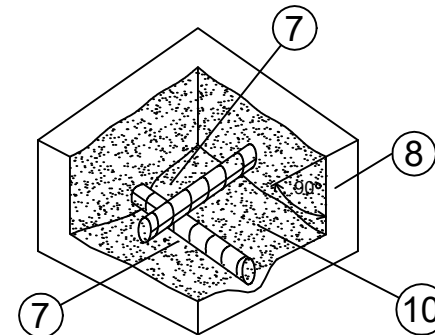
These details are applicable to horizontal, vertical, and overhead locations. They are also applicable to removal by hydro-demolition, hydro-milling, and electric, pneumatic or hydraulic impact breakers.

DO NOT USE THESE DETAILS FOR SHOTCRETE APPLICATIONS - FOR SHOTCRETE REPAIRS REFER TO ACI 506 EDGE PREPARATION GUIDELINES.

5. Remove delaminated concrete, undercut reinforcing steel (refer to "Exposing and Undercutting of Reinforcing Steel), remove additional concrete as required to provide minimum required thickness of repair material.
6. At edge locations, provide right angle cuts to the concrete surface with either of the following methods:
 - * Saw cut 1/2" or less as required to avoid cutting reinforcing steel.
 - * Use power equipment such as hydro-demolition or impact breakers. AVOID FEATHER EDGES.
7. Repair configurations should be kept as simple as possible, preferably with squared corners.

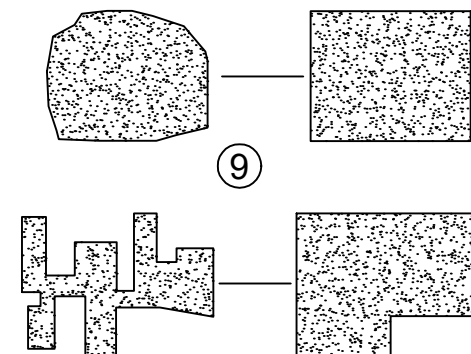
10. After removal and edge conditioning are complete, remove bond inhibiting materials (dirt, concrete slurry, loosely bonded aggregates) by abrasive blasting or high pressure water-blasting with or without abrasive. Check the concrete surfaces after cleaning to insure that surface is free from additional loose aggregate, or that additional delaminations are not present.

11. If hydro-demolition is used, cement and particulate slurry must be removed from the prepared surfaces before slurry hardens.

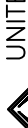


BOUNDARY OF LOOSE &
DELAMINATED CONCRETE

RECOMMENDED LAYOUT

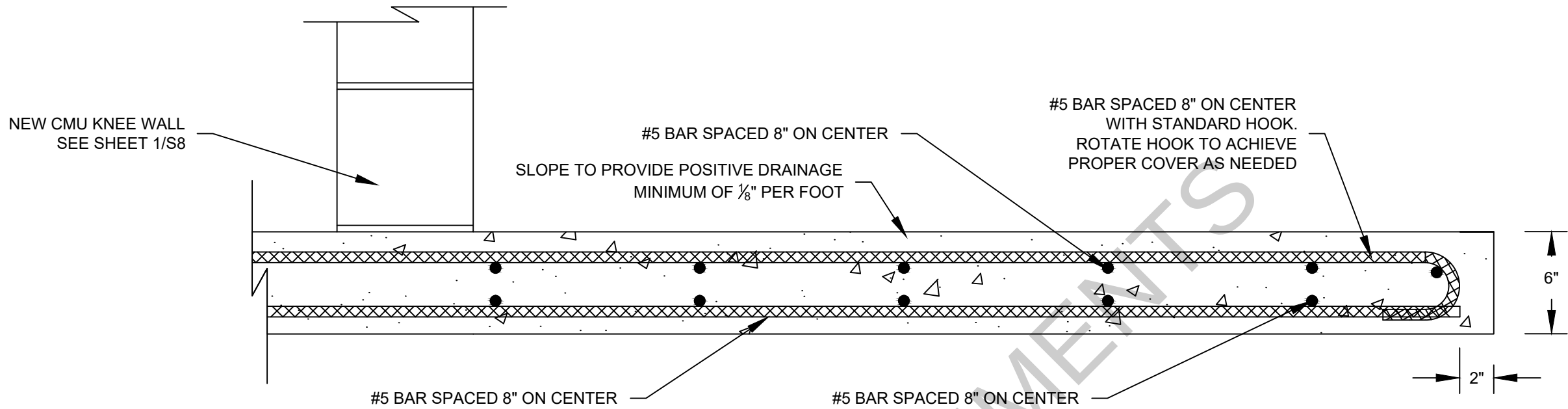


1 ICRI DETAILS
S6 NOT TO SCALE

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E-MAIL ADDRESS: OFFICE@UNITEDENGINEERINGCONSULTANTS.COM		
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DESCRIPTION	DRAWN BY: TJS	JOB NO: 25-1441
	APPROVED BY: TJS	FILE VALUE: BID SET
ICRI DETAILS		
SHEET NO. 56		
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NOTES:

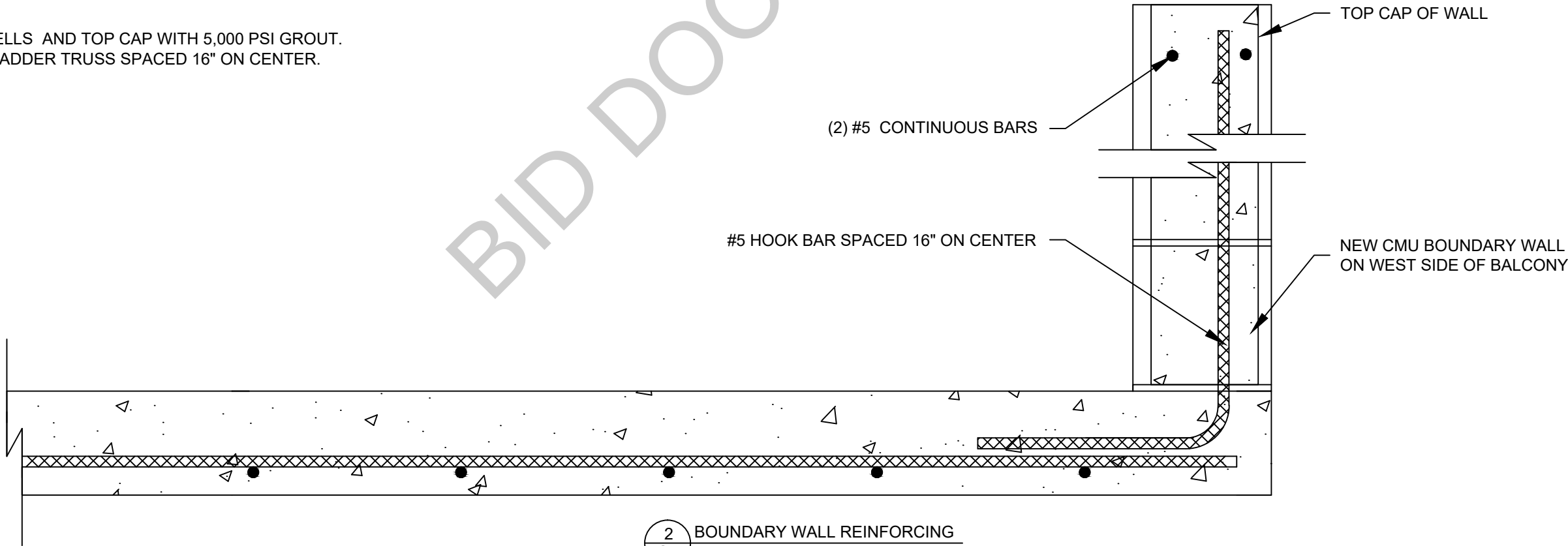
1. EPOXY DOWEL NEW STEEL 12" WITH HILTI RE-500 OR EQUAL AS APPROVED BY THE ENGINEER.
2. OPENING FOR SWING DOOR AND FOR WINDOW TO REMAIN THE SAME.



1
S7
SLAB DESIGN
NOT TO SCALE

NOTES:

1. GROUT REINFORCED CELLS AND TOP CAP WITH 5,000 PSI GROUT.
2. INSTALL 9 GAGE WIRE LADDER TRUSS SPACED 16" ON CENTER.



2
S7
BOUNDARY WALL REINFORCING
NOT TO SCALE

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FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 6607

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DRAWING TITLE
FOUNTAIN BEACH RESORT
313 SOUTH ATLANTIC AVENUE
DAYTONA BEACH, FLORIDA 32118

DESCRIPTION
BALCONY SLAB DESIGN

DRAWN BY: TJS
APPROVED BY: TJS

JOB NO: 25-1441
FILE NAME: BID SET

1. EPOXY DOWEL 4" WITH HILTI RE-500 OR EQUAL AS APPROVED BY THE ENGINEER.
2. ROUGH OPENING FOR SWING DOOR, WINDOW AND PTAC TO REMAIN THE SAME. CONTRACTOR TO FIELD VERIFY THE DIMENSIONS.
3. REINFORCE CMU CELLS AS SHOWN.
4. INSTALL 9 GAGE WIRE LADDER TRUSS SPACED 16" ON CENTER.
5. CONTRACTOR TO VERIFY ALL DIMENSIONS.

Architectural drawing of a wall design. The drawing shows a cross-section of a wall with various components and dimensions.

Dimensions:

- 15"
- 80"
- 71"
- 45"
- 24"
- 15"
- 8"

Labels and Callouts:

- EXISTING BUILDING WALL
- NEW GUARD WALL SEE SHEET 2/S7
- PRECAST WINDOW SILL TO MATCH EXISTING DESIGN
- PTAC ROUGH OPENING
- NEW CMU WALL
- REINFORCE CMU WITH (1) #5 BAR EPOXY DOWELED 4" INTO SLAB TOP AND BOTTOM. GROUT WITH 5,000 PSI GROUT

Title Block:

1 WALL DESIGN
S8 NOT TO SCALE

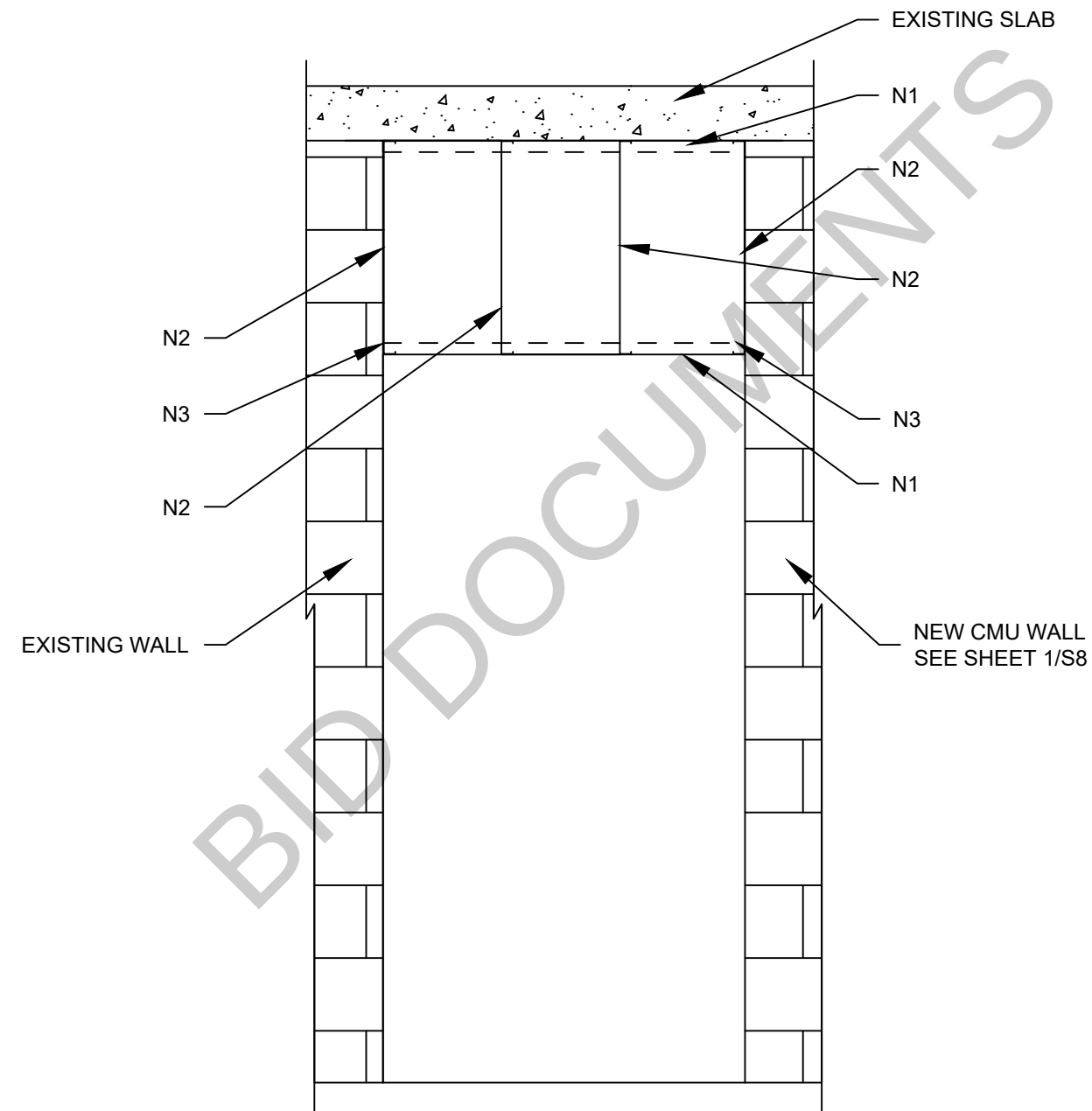
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SHEET NO. 38 9 of 10							

1. REPLACE BALCONY DOOR HEADER SECTION AS DIRECTED BY ENGINEER.
2. CONTRACTOR TO MATCH EXISTING DIMENSIONS.
3. REPLACE WALL SHEATHING WITH 5/8" DENSGLASS GOLD SHEATHING. ATTACH SHEATHING TO STUDS WITH #10 BUGLE HEAD STAINLESS-STEEL SELF-TAPPERS SPACED 4" ON CENTER AT THE PERIMETER AND 8" ON CENTER IN THE FIELD.
4. ALL FASTENERS TO BE STAINLESS-STEEL.
5. APPLY WATERPROOFING IAW THE MANUFACTURER'S SPECIFICATION AND CURRENT CODE REQUIREMENTS.
6. INSTALL STUCCO IAW ASTM C926.
7. INSTALL A MINIMUM OF R-19 BATTEN INSULATION.
8. INSTALL DRYWALL ON THE INTERIOR OF THE UNIT AND BRING TO A READY TO PAINT FINISH, MATCHING THE EXISTING WALL TEXTURE.

N-1: 362T150-54 G90 TRACK. ATTACH WITH 1/4" DIAMETER MASONRY FASTENERS SPACED 6" ON CENTER STAGGERED WITH 2.5" EMBEDMENT.

N-2: 362S125-54 G90 STUD SPACED AT 12" ON CENTER. ATTACH TOP AND BOTTOM WITH #12 STAINLESS-STEEL SCREWS EACH SIDE.

N-3: G90 16 GAUGE 3"x3" ANGLE CLIP. ATTACH TO CMU WITH (4) 1/4" DIAMETER STAINLESS-STEEL FASTENERS AND TO TRACK WITH (4) #12 STIANLESS-STEEL SELF-TAPPERS.



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SHEET NO. 59							
10 of 10							

**APPENDIX B
CONTRACT**

AIA® Document A101® – 2017

Standard Form of Agreement Between Owner and Contractor *where the basis of payment is a Stipulated Sum*

AGREEMENT made as of the Sixteenth day of January in the year Two Thousand Twenty-Six
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

and the Contractor:
(Name, legal status, address and other information)

for the following Project:
(Name, location and detailed description)

The Architect:
(Name, legal status, address and other information)

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:

The author of this document may have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A101®–2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®–2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

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TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS

EXHIBIT A INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

- ☐ The date of this Agreement.
- ☐ A date set forth in a notice to proceed issued by the Owner.
- ☐ Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:

(Check one of the following boxes and complete the necessary information.)

[] Not later than (____) calendar days from the date of commencement of the Work.

[] By the following date:

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date
-----------------	-----------------------------

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be _____, subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price	
Item	Price	Conditions for Acceptance

§ 4.3 Allowances, if any, included in the Contract Sum:
(Identify each allowance.)

Item	Price
------	-------

§ 4.4 Unit prices, if any:
(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
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§ 4.5 Liquidated damages, if any:
(Insert terms and conditions for liquidated damages, if any.)

§ 4.6 Other:
(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the Tenth day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the Fifteenth day of the same month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than Five (5) days after the Architect receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201™–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

MOBILIZATION AND GENERAL CONDITIONS

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work,

including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows: *(Insert any other conditions for release of retainage upon Substantial Completion.)*

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

§ 5.1.9 Except with the Owner’s prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner’s final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect’s final Certificate for Payment, or as follows:

DUE WITHIN FIFTEEN (15) DAYS after the issuance of the Architect’s final Certificate for Payment

§ 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located. *(Insert rate of interest agreed upon, if any.)*

18.00 %

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker. *(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)*

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows: *(Check the appropriate box.)*

- ☐ Arbitration pursuant to Section 15.4 of AIA Document A201–2017
- ☒ Litigation in a court of competent jurisdiction
- ☐ Other *(Specify)*

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 7.1.1 If the Contract is terminated for the Owner’s convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows:

(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner’s convenience.)

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner’s representative:

(Name, address, email address, and other information)

§ 8.3 The Contractor’s representative:

(Name, address, email address, and other information)

§ 8.4 Neither the Owner’s nor the Contractor’s representative shall be changed without ten days’ prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™–2017 Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with a building information modeling exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with a building information modeling exhibit, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required

to generate a read receipt for the transmission.)

N/A

§ 8.7 Other provisions: From A to K

A. **Schedule:** Time is of the essence with regard to the work under this Contract and Contractor shall be responsible to Owner for any damages caused to Owner by Contractor's delay. Contractor's sole remedy for excusable delay in the performance to work caused by circumstances beyond the Contractor's control shall be an equitable adjustment to the contract time pursuant to an approved, Owner-signed change order, and Contractor shall not be entitled to any additional compensation due to such delays.

B. **Termination:** The Owner may, upon seven (7) days' notice, terminate the Contract for the Owner's convenience and without cause. Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall (1) cease operations as directed by the Owner in the notice; (2) take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and (3) except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders. In case of termination for cause, the Contractor shall only be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work executed.

C. **Indemnity:** In exchange for the sum of ten dollars (\$10.00) and other good and valuable consideration, receipt and sufficiency of which are hereby acknowledged, Contractor covenants to defend, indemnify, save harmless and exonerate Owner, and her affiliates, employees, agents and representatives, from and against all claims, demands, actions and/or damages, including property damages, economic losses and damages for personal injuries and wrongful death and expenses, including attorneys' fees, arising out of any violation of the law or services or work undertaken or to be performed by Contractor, its employees, agents and representatives, or arising out of any other action, omission, service or work performed by or on behalf of Contractor. This indemnity obligation includes damages for personal injury or death to persons employed or leased by Contractor or any person employed or leased by Contractor's subcontractors. The parties agree that the monetary limitation on this contractual indemnity obligation shall be three times the contract price as set forth in this Contract or one million dollars (\$1,000,000.00), whichever is greater and this indemnity obligation is hereby incorporated into the project bid, contract documents, plans and specifications. Nothing herein shall negate, abridge or otherwise reduce Owner's common law right to indemnification. Contractor further agrees to indemnify and reimburse Owner for its legal expenses, including attorneys' fees, and costs incurred or assessed against Owner in any lawsuit, arbitration or claim arising from any act, omission or violation of the law by Contractor its employees, agents, representatives or subcontractors involving, arising out of, or in any way related to this Contract and/or the work or materials provided thereunder.

D. **Insurance:**

Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor and Owner from claims set forth below which may arise out of or result from the Contractor's operations and completed operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a subcontractor or by anyone directly or indirectly contracted or employed by any of them, or by anyone for whose acts any of them may be liable:

1. Claims under workers' compensation, disability benefit and other similar employee benefit acts that are applicable to the Work to be performed;
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
4. Claims for damages insured by usual personal injury liability coverage;
5. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
6. Claims for damages because of bodily injury, death of a person or property damage arising out of Ownership, maintenance or use of a motor vehicle;
7. Claims for bodily injury or property damage arising out of completed operations; and
8. ~~Claims involving contractual liability insurance applicable to the Contractor's obligations.~~

The Contractor shall cause the commercial liability coverage required by the Contract to include (1) Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations.

Limits of insurance shall be:

General Liability: \$1 million (each occurrence, including personal injury and advertising injury); \$2 million (aggregate per project).

Forms Needed:

ISO Form GC 2294, with broad coverage and no exclusions, such as exclusions for Contractor's work.

Additional Insured (including ongoing and completed operations

Waiver of Subrogation

Per Project Aggregate

Primary and Non-Contributory

30-Day Notice of Cancellation

Automobile: \$1 million combined single limit, or \$1 million/\$1 million split limits

Forms Needed:

Additional insured (including ongoing and completed operations

Waiver of Subrogation

30-Day Notice of Cancellation

Umbrella: \$1 million policy limit

Follow Form

Respond on primary and non-contributory basis

Workers Compensation : Bodily Injury/Accident \$100,000 per accident; Bodily Injury/Disease \$500,000 per policy, \$100,000 per employee (applicable to any state work is performed)

Forms Needed:

Waiver of Subrogation

30-Day Notice of Cancellation

Owner and such other and additional parties as Owner may require shall be named as an additional insured on the general liability, automobile liability and excess (umbrella) insurance policies carried by Contractor with respect to this Agreement. (Additional insured form will include ongoing and completed operations via ISO form CG 2037. Policy will contain no residential exclusions or limitations. No subcontractor exclusions or limitations will be contained on the general liability policy. Copies of the Additional Insured Endorsement in favor of and naming such parties shall be provided to Owner prior to payment and shall be in form acceptable to Owner. Contractor shall maintain excess liability coverage (umbrella form) in the amount of not less than \$1,000,000.00. Contractor represents to Owner that its liability policy includes coverage for sudden and accidental pollution and proof of such coverage shall be provided in an endorsement or certificate of insurance. Contractor shall provide to Owner a certificate of insurance reflecting all the above coverages and limits prior to commencing any work under the Contract and thereafter upon request. All Certificates of Insurance must state each additional insured's status as additional insured for both ongoing and completed operations. Contractor also shall provide updated certificates of insurance at any time upon Owner's request. Contractor shall also maintain at the project site a file containing all certificates of insurance and Owner may inspect such file upon request. Additional insured coverage must respond on a primary and non-contributory basis, via ISA form CG 2001 or equivalent. For each insurance policy required hereunder, Owner shall be notified of cancellation at least 30 days prior to the cancellation effective date. To the extent of any insurance coverage for claims under any of the insurance policies required hereunder, Contractor and its insurers hereby waive all claims for subrogation against Owner.

E. Payment Conditions: No payment shall become due until the Contractor submits to the Owner: (1) a Contractor's Affidavit pursuant to Florida Statutes Section 713.06, (2) a certificate evidencing that insurance required by the Contract to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to Owner, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract, and (4) original, signed waivers and releases of lien from Contractor and all subcontractors, suppliers and laborers entitled to claim a lien under Florida Statutes Chapter 713. Acceptance of payment by the Contractor, a subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of payment.

F. Authorized Representative: Owner's only authorized agent for purposes of the project is Craig Eberhard ("Authorized Agent"). Only the Owner's Authorized Agent named herein has the right and power to bind Owner in any project matters requiring approvals, authorization, written notice, and/or change orders. No other person or entity, whether or not employed by Owner, has any express, implied or apparent authority to bind Owner in any matters relating to the project. The Architect is not a representative or agent of Owner, and has no express, implied or apparent authority to act on behalf of Owner except to the extent provided in the Contract or unless otherwise specifically directed by Owner in writing.

G. Merger Clause: No verbal agreement, representation or conversation with any officer, agent or employee of Owner, either before or after the execution of this Agreement, shall affect or modify any of the terms or obligations herein contained.

H. Flow Down Clause: Contractor shall include in all of its subcontracts, if any, a provision incorporating therein all provisions of this Contract and stating that, with regard to any particular subcontractor's scope of work, said subcontractor shall be bound to Contractor in the same manner and to the same extent as Contractor is bound to Owner hereunder.

I. Consequential Damages: Contractor hereby waives any and all claims for consequential damages arising from a breach of this Agreement or the intervention of specific circumstances not ordinarily predictable at the time of contracting, including, but not limited to, rental expenses, loss of use, income, profits, financing, business, reputation, loss of management or employee productivity or the services of such persons. This paragraph shall survive the termination of this Agreement.

J. Liens: Should a subcontractor or supplier (of any tier) for which the Owner previously made payment to Contractor, or any person or entity claiming to be a creditor of Contractor file a lien, Contractor shall cause the same to be removed as of record and/or bonded, at Contractor's sole cost and expense. Any payment due Contractor hereunder shall be reduced by an amount up to two hundred percent (200%) of the amount of any such lien arising out of or related to Contractor's performance under this Agreement until such lien is removed as of record and/or bonded. Contractor shall and hereby does subordinate any and all mechanics' and materialmen's liens owned, claimed or held, or to be owned, claimed or held by Contractor in and to any part of the Work or the property on which the Work is performed, to the liens securing payments of sums now or hereafter borrowed by Owner in connection with construction of the Project. Contractor shall execute such further and additional documentation subordinating its liens, rights and interest as Owner's interim or permanent lenders may reasonably require. The subordination of lien is made in consideration of and as an inducement to the execution and delivery of this Agreement, and shall be applicable despite any dispute between the parties hereto, or any default by Owner under the Contract Documents or otherwise. Contractor shall require this same subordination of each of the Project's subcontractors and suppliers.

K. Other:

The parties hereto are the only parties intended to be benefitted hereby. There are no third-party beneficiaries of this Contract.

Contractor binds itself, its affiliates, partners, successors, assigns and legal representatives to all of the covenants, agreements and obligations contained in the Contract Documents. Contractor shall not assign this Contract without prior written consent of the Owner. If Contractor attempts to make such an assignment without the Owner's consent, Contractor shall nevertheless remain legally responsible for all obligations under this Contract.

Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

If any portion of the Contract is found to be invalid or unenforceable in a court of law, arbitration proceeding or other dispute resolution proceeding, such portion shall be deemed stricken from this agreement and the remainder of this agreement shall be enforceable as if the unenforceable provision did not exist.

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A201™–2017, General Conditions of the Contract for Construction
- .3

Number	Title	Date	
.6	Specifications		
Section	Title	Date	Pages

.7 Addenda, if any:

Number	Date	Pages
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Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

☐ AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017 incorporated into this Agreement.)

☐ The Sustainability Plan:

Title	Date	Pages
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☐ Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
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- .9 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™–2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor’s bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

This Agreement entered into as of the day and year first written above.

{{@signerTag}}
OWNER (Signature)

(Printed name and title)

{{@signerTag}}
CONTRACTOR (Signature)

(Printed name and title)