Asbury Park Housing Authority
HOUSING AUTHORITY & URBAN REDEVELOPMENT AGENCY

REQUEST FOR PROPOSAL (RFP)

Replacement of Roofing System

DATE ISSUED:	**June 28, 2023**
TYPE OF PROJECT:	The Asbury Park Housing Authority (APHA) is seeking proposals from qualified firm(s)/individual(s) for Replacement of Roofing System.
CONTACT PERSON:	Ed McDonald, Director of Maintenance 732.774.2660. Ex.303 **emcdonald@aphanj.org**
LAST DAY FOR QUESTIONS:	**July 12, 2023 @ 2:00 p.m. DEADLINE:**
	July 18, 2023 @ 10:00 a.m. SUBMISSION
SUBMISSION ADDRESS:	Asbury Park Housing Authority 1000 ½ Third Avenue Asbury Park, NJ 07712 Attn. Lou Riccio

Separate sealed or uploaded proposals will be accepted until the date and time noted above. Proposals will be held in confidence and not released in any manner until after contract award.

The responsibility for submitting a response to this RFP at the APHA on or before the stated time and date will be solely and strictly the responsibility of the respondent. The offeror shall wholly absorb all costs incurred in the preparation and presentation of the proposal.

Single copies of the RFP package may be obtained, at no cost by:

1. Visiting our website at www.aphanj.org. Select Business tab, then select Requests for Proposals. Select appropriate RFP.
2. Copies may also be picked up in person at:

Asbury Park Housing Authority
1000 ½ Third Avenue
Asbury Park, NJ 07712

INVITATION FOR BIDS

LEGAL NOTICE

Advertisement for Bid

Project: Waterproof Roof Coating

Sealed bids for the **Installation of Polysil 2500 high solids Silicone Coating on Roof** and associated work at Comstock Court, 1018 First Avenue, Asbury Park, New Jersey at the Asbury Park Housing Authority shall be accepted no later than 10:00am (prevailing time) on Tuesday, July 18, 2023 at the Administration Offices of the Housing Authority, 1000 ½ Third Ave., Asbury Park NJ 07712. Bids may be submitted by either mail, digitally (e.g. PDF or other common read-only format), or in person by the Bidder or their agent. No late bids will be accepted.

All hard-copy bids shall be enclosed in a sealed envelope bearing the name of the bidder and clearly marked "Waterproof Roof Coating".

The information for the Bidders, Form of Bid, and Specifications may be reviewed, obtained and submitted via:

1. Visiting our website at www.aphanj.org. Select Business tab, then select Requests for Proposals. Select appropriate RFP.
2. Copies may also be picked up in person at:

Asbury Park Housing Authority
1000 ½ Third Avenue
Asbury Park, NJ 07712

Telephone the Housing Authority at 732-774-2660 x200 with any questions.

Contractors are required to visit the site to determine best manner in which to approach this work before submitting bid. Contractors are required to visit the site. To schedule a site visit contact Edwin McDonald at 732-774-2660 x303.

The Authority does not obligate itself to accept the lowest bid and reserves the right to waive any informalities in the bidding process or to accept or reject any or all bids if deemed in the best interest of the Authority. No bid shall be withdrawn for a period of sixty (60) days subsequent to opening bids without the consent of the Owner.

William F. Snyder
Interim Executive Director

Roof Repairs and Coating

Scope of Work

1. All field measurements to be taken by the contractor.
2. Clean, power wash, prep and prime existing single ply roof.
3. Remove all soft spots and areas of water penetration.
4. Install white Polysil 2500 high solids roof coating over seams and flashing prior to finish coat.
5. Install white Polysil 2500 high solids roof coating at approximately 2.5 to 3 gallons per square foot.
6. Broadcast whiter 9/10 roofing granular into coating.
7. Provide a 15-year manufacturer’s warranty.
8. Project to be quoted at prevailing wages during normal business hours, 8 AM to 4 PM.

Form of Proposal

Roof Coating
Asbury Park Housing Authority
1000 ½ Third Avenue
Asbury Park, New Jersey 07712

Date: _____

A. BASE BID

1. We, _____, the Undersigned, will furnish all labor, materials, equipment and services necessary for the complete construction, including site, mechanical and electrical work as required in strict accordance with the RFP for the installation of the roof covering as follows:

a. To provide all work for the installation of **Polysil 2500 high solids Silicone Coating on Roof,** the lump sum of:

_____ dollars ($ _____)

We, the Undersigned, propose to subcontract work, in connection with this single overall bid submission, pursuant to N.J.S.A. 40A: 11-16, to the following:

1. _____

2. _____

B. AGREEMENT: We, the Undersigned, agree, if awarded the Contract, to execute an agreement for the above stated work and compensation on the contact form, as attached.

C. SURETY: We, the Undersigned, agree, if awarded the Contract, to execute and deliver to the Owner, prior to the signing of the Contact, the Bonds as required– Instructions to Bidders.

D. PREVAILING WAGE: We, the undersigned agree to pay all employees on the job the state mandated prevailing wage.

CONTRACT

THIS AGREEMENT, made this day of , 2023, by and between Asbury Park Housing Authority herein called "Owner" , and _____a corporation, partnership, individual doing business as _____ of the County of _____, and State of New Jersey hereinafter called "Contractor."

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the following:

Installation **Polysil 2500 high solids Silicone Coating on Roof** at Comstock Court Apartments.

Hereinafter called the project, for the sum of _____ dollars ($xx,xxx.00). This shall include at his (its or their) own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendent, labor, insurance and other accessories and services necessary to complete the said project in accordance with the price stated in the Proposal.

The Contractor hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice To Proceed" of the Owner and to fully complete the project within 30 consecutive calendar days thereafter. The Contactor further agrees to pay, as liquidated damages, the sum of $250 for each consecutive calendar day after 30 days from the start of the contract. The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the contract, subject to additions and deductions.

IN WITNESS WHEREOF, the parties to these presents have executed this contract in three (3) counterparts, each of which shall be deemed an original in the year and day first above mentioned.

Asbury Park Housing Authority
Owner

ATTEST:

_____ By _____
Secretary

_____ Executive Director
Witness Title

_____
Contractor

ATTEST:

_____ By _____
Secretary

_____ _____
Witness Title

_____
Address & zip code

NOTE: Secretary of the Owner should attest. If Contractor is a corporation, Secretary should attest.

Instructions To Bidders

Bidders must include with their bid the following:

1. Bid guarantee required by N.J.S.A. 40A: 11-21 - BID BOND
2. Consent of Surety as to Labor and Material Payment Bond
3. Statement of corporate ownership, pursuant to N.J.S.A. 52:25-24.2
4. Statement of subcontractors to be used on the project pursuant to N.J.S.A. 40A:11-16
5. Noncollusion Affidavit – Must be Notarized
6. Affirmative Action Program Affidavit & Supplement
7. Statement of Bidder's Qualifications
8. Previous Participation Certification
9. Form of Proposal
10. Copy of New Jersey Public Works Contractor Registration Form.

BID DOCUMENTS SUBMISSION CHECKLIST

A. FAILURE TO SUBMIT THE FOLLOWING DOCUMENTS IS A MANDATORY CAUSE FOR THE BID TO BE REJECTED IN ACCORDANCE WITH N.J.S.A. 40A: 11-23.2

ITEM	**BIDDERS INITIALS**
Bid guarantee required by N.J.S.A. 40A: 11-21 (BID BOND)	_____
Consent of Surety as to Labor and Material Payment Bond	_____
Statement of corporate ownership, pursuant to N.J.S.A. 52:25-24.2	_____
Statement of subcontractors to be used on the project pursuant To N.J.S.A. 40A: 11-16	_____
Noncollusion Affidavit – Must be Notarized	_____
Affirmative Action Program Affidavit & Supplement	_____
New Jersey Public Works Contractor Registration Form	_____

B. FAILURE TO SUBMIT THE FOLLOWING DOCUMENTS MAY BE CAUSE FOR THE BID TO BE REJECTED IN ACCORDANCE WITH N.J.S.A. 40A: 11-23.1B

Statement of Bidder's Qualifications	_____
Previous Participation Certification	_____
Form of Proposal	_____
Section 3 Acknowledgement	_____

C. SIGNATURE: The undersigned hereby acknowledges and has submitted the above listed requirements.

Name of Bidder: _____

By Authorized representative: _____

Signature: _____

Print Name & Title: _____

Date: _____

40A:11-21. Guarantee to be furnished with bid

A person bidding on a contract for the erection, alteration or repair of a public building, structure, facility or other improvement to real property, the total price of which exceeds $100,000, shall furnish a guarantee as provided for herein. A contracting unit may provide that a person bidding on any other contract, advertised in accordance with law, shall furnish a guarantee as provided for herein. The guarantee shall be payable to the contracting unit so that if the contract is awarded to the bidder, the bidder will enter into a contract therefor and will furnish any performance bond or other security required as a guarantee or indemnification. The guarantee shall be in the amount of 10% of the bid, but not in excess of $20,000.00, except as otherwise provided herein, and may be given, at the option of the bidder, by certified check, cashier's check or bid bond. In the event that any law or regulation of the United States imposes any condition upon the awarding of a monetary grant to any contracting unit, which condition requires the depositing of a guarantee in an amount other than 10% of the bid or in excess of $20,000.00 the provisions of this section shall not apply and the requirements of the law or regulation of the United States shall govern.

CONSENT OF SURETY

A performance bond will be required from the successful contractor on this project, and consequently, all bidders shall submit, with their bid, a consent of surety in substantially the following form:

To:_____
(Owner)

Re: _____
(Contractor)

_____
(Project Description)

This is to certify that the _____
(Surety Company)

will provide to _____ a performance bond in
(Owner)
the full amount of awarded contract in the event that said contractor is awarded a contract for the above project.

_____
(CONTRACTOR)

_____
(Authorized Agent of Surety Company)

Date:_____

CONSENT OF SURETY MUST BE SIGNED BY AN AUTHORIZED AGENT OR REPRESENTATIVE OF A SURETY COMPANY AND NOT BY THE INDIVIDUAL OR COMPANY REPRESENTATIVE SUBMITTING THE BID.

52:25-24.2. Bidders to supply public agencies; statement of ownership of 10% interest in corporation or partnership

No corporation or partnership shall be awarded any contract nor shall any agreement be entered into for the performance of any work or the furnishing of any materials or supplies, the cost of which is to be paid with or out of any public funds, by the State, or any county, municipality or school district, or any subsidiary or agency of the State, or of any county, municipality or school district, or by any authority, board, or commission which exercises governmental functions, unless prior to the receipt of the bid or accompanying the bid, of said corporation or said partnership, there is submitted a statement setting forth the names and addresses of all stockholders in the corporation or partnership who own 10% or more of its stock, of any class or of all individual partners in the partnership who own a 10% or greater interest therein, as the case may be. If one or more such stockholder or partner is itself a corporation or partnership, the stockholders holding 10% or more of that corporation's stock, or the individual partners owning 10% or greater interest in that partnership, as the case may be, shall also be listed. The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, exceeding the 10% ownership criteria established in this act, has been listed.

NON-COLLUSION AFFIDAVIT

State of New Jersey
County of _____ ss:

I, _____ residing in _____
(name of affiant) (name of municipality)
in the County of _____ and State of _____of full age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____
(title or position) (name of firm)

_____ the bidder making this Proposal for the bid

entitled _____, and that I executed the said proposal with
(title of bid proposal)
full authority to do so that said bidder has not, directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named project; and that all statements contained in said proposal and in this affidavit are true and correct, and made with full knowledge that the _____ _____relies upon the truth of the statements contained in said Proposal
(name of contracting unit)
and in the statements contained in this affidavit in awarding the contract for the said project.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by _____.

Subscribed and sworn to

before me this day _____
Signature

_____, 2____ _____
(Type or print name of affiant under signature)

_____
Notary public of

My Commission expires _____

(Seal)

AFFIRMATIVE ACTION COMPLIANCE NOTICE
N.J.S.A. 10:5-31 and N.J.A.C. 17:27

GOODS AND SERVICES CONTRACTS
(INCLUDING PROFESSIONAL SERVICES)

This form is a summary of the successful bidder's requirement to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27-1 et seq.

The successful bidder shall submit to the public agency, after notification of award but prior to execution of this contract, one of the following three documents as forms of evidence:

(a) A photocopy of a valid letter that the contractor is operating under an existing Federally approved or sanctioned affirmative action program (good for one year from the date of the letter);

OR

(b) A photocopy of a Certificate of Employee Information Report approval, issued in accordance with N.J.A.C. 17:27-4;

OR

(c) A photocopy of an Employee Information Report (Form AA302) provided by the Division and distributed to the public agency to be completed by the contractor in accordance with N.J.A.C. 17:27-4.

The successful vendor may obtain the Affirmative Action Employee Information Report (AA302) from the contracting unit during normal business hours.

The successful vendor(s) must submit the copies of the AA302 Report to the Division of Contract Compliance and Equal Employment Opportunity in Public Contracts (Division). The Public Agency copy is submitted to the public agency, and the vendor copy is retained by the vendor.

The undersigned vendor certifies that he/she is aware of the commitment to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27.1 et seq. and agrees to furnish the required forms of evidence.

The undersigned vendor further understands that his/her bid shall be rejected as non-responsive if said contractor fails to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27-1 et seq.

COMPANY: _____ SIGNATURE: _____

PRINT NAME: _____ TITLE: _____

DATE: _____

LINKS BELOW FOR THE FOLLOWING ATTACHMENTS:

Attachment B – Bonding Requirements

Attachment C – Executive Order 11246 & MBE/WBE Procurement

Attachment D – Accessibility to Construction Site and Contractor's Files

Attachment E – Interest of Other Parties

Attachment F – New Jersey Wage Law, Federal Labor Standards Provisions & Payroll Forms

Attachment G – Contractor Clearance Requirements

Attachment H – 2 CFR Part 200 Appendix II – Administrative Requirements

Attachment I – Certification Regarding Lobbying

Attachment J – Construction Standards

Attachment K – Section 3 Contracts

NJ Public Works Registration Certificate

https://na4.documents.adobe.com/public/esignWidget?wid=CBFCIBAA3AAABLblqZhBlNGfZJOWQGSnTY1CgS68a41MA7eNjHQ_rUSaRq-wSfZydcg0-02Fcj6N7wuEofTo*

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https://na4.documents.adobe.com/public/esignWidget?wid=CBFCIBAA3AAABLblqZhCKfpNPCZzVEHJPNBBmmV4-KDvShVHugIdDpcPOArwjlaywYoB62E-r9v73DQPFwzw*

Asbury Park Housing Authority
HOUSING AUTHORITY & URBAN REDEVELOPMENT AGENCY

COMSTOCK COURT
ROOF REPLACEMENT SPECIFICATIONS

PART 1 - GENERAL

1.01. GENERAL REQUIREMENTS

A. The General Conditions, Supplementary Conditions, Instructions to Bidders, and Division 01- General Requirements shall be read in conjunction with and govern this section.

B. Read this Specification as a whole by all parties concerned. Each Section may contain more or less than the complete Work of any trade. The Contractor is solely responsible to make clear to the installing Subcontractor the extent of their Work.

1.02. SUMMARY

A. This Section includes requirements for supplying labor, materials, tools, and equipment to complete the Work as shown on the Drawings Architectural Division as specified herein including, but not limited to, the following:
1. Cleaner
2. Stain Blocking Primer
3. Sealant
4. Stain Blocking Primer
5. Roof Coating
6. Walkways (optional)

****
SPEC NOTE: Coordination of terminations, transitions, and penetrations are pertinent to ensure chemical compatibility and adhesion of adjacent products. Edit the following related sections as required to specify a continuous air and watertight building envelope. Contact manufacturer(s) where products transition from one assembly to another to confirm minimum installation requirements for warranty issuance.
****

1.03. RELATED REQUIREMENTS

A. DIVISION 07 – Thermal and Moisture Protection Section 07 01 20 – Maintenance of Thermal Protection

B. DIVISION 07 – Thermal and Moisture Protection Section 07 01 50.16 – Roof Maintenance Program

C. DIVISION 07 – Thermal and Moisture Protection Section 07 01 50.19 – Preparation for Re-Roofing

D. DIVISION 07 – Thermal and Moisture Protection Section 07 01 50.23 – Roof Removal

E. DIVISION 07 – Thermal and Moisture Protection Section 07 01 50.81 – Roof Replacement

F. DIVISION 07 – Thermal and Moisture Protection Section 07 01 50.91 – Roofing Restoration

G. DIVISION 07 – Thermal and Moisture Protection Section 07 01 60 – Maintenance of Flashing and Sheet Metal

1.04. ALTERNATES

A. Submit requests for alternates in accordance with these specifications.

B. Materials not considered acceptable substitutions:
1. Roof coatings such as acrylic, cementitious, ceramic filled or asphalt modified, urethanes, and Kraton based rubber materials.

C. Roof coatings must meet the following criteria:

1. Roof coating as a standalone assembly, and independent of existing roof membranes, must pass ASTM D7281 – Standard Test Method for Determining Water Migration Resistance Through Roof Membranes. Test reports indicating testing of roof coating applied over a roof membrane are not considered acceptable substitutions.
2. Miami-Dade product approval and Notice of Acceptance (NOA) are not considered acceptable substitutions.
3. NSF certified in accordance with Protocol P151: Health Effects from Rainwater Catchment System Components.

D. Alternate submission format to include:
1. Online certification listings:
   a. FM Approval
   b. Miami-Dade County Product Control
   c. NSF
   d. UL Approval
2. Warranty:
   a. Complete set of warranty verification documents as required by the Roof Coating Manufacturer.
3. References clearly indicating that the Roof Coating Manufacturer has successfully completed projects of similar scope and nature on an annual basis for a minimum of ten (10) years.

1.05. REFERENCES

A. American Society for Testing and Materials (ASTM):
1. ASTM C794 – 10: Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants
2. ASTM C1549: Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer
3. ASTM D471: Water Absorption
4. ASTM D7281 – Standard Test Method for Determining Water Migration Resistance Through Roof Membranes
5. ASTM E96: Water Vapor Transmission of Materials
6. ASTM E1980: Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces Miami-Dade County Product Control NOA (Notice of Acceptance)

B. Factory Mutual (FM):
1. Approval Standard for Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for use in Class 1 and Noncombustible Roof Deck Construction (Class Number 4470)

C. Underwriters Laboratories (UL):
1. UL Inc.: Class A Classification for use in roof coverings

1.06. ADMINISTRATIVE REQUIREMENTS

A. Pre-installation meetings:
1. When required, and with prior notice, a Roof Coating Manufacturer representative will meet with the necessary parties at the jobsite to review and discuss project conditions as it relates to the integrity of the assembly.

1.07. SUBMITTALS

A. Provide the following requested information in accordance with the bidding specifications.

B. Action Submittals:
1. Product Data:
   a. Roof Coating Manufacturer’s guide specification.
   b. Roof Coating Manufacturer’s complete set of technical data sheets for assembly.
2. Certificates:
   a. Product certification that the assembly components are supplied and warranted by single source Roof Coating Manufacturer.
   b. Statement that installing Subcontractor is authorized by Roof Coating Manufacturer to complete Work as specified.

c. LEED:
1. Health Declaration Product (HPD) Certificate

3. Warranty:
a. Complete set of warranty verification documents as required by the Roof Coating Manufacturer.

1.08. QUALITY ASSURANCE

A. Single Source Responsibility:
1. Obtain roof coating and auxiliary materials including roof coating, fabric reinforcement, sealants, and adhesives from a single Roof Coating Manufacturer regularly engaged in the manufacturing and supply of the specified products.
2. Contactor to verify product compliance with federal, state, and local regulations controlling use of Volatile Organic Compounds (VOC).

B. Manufacturer Qualifications:
1. Roof Coating Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:
a. Roof Coating Manufacturer must not issue warranties for terms longer than they have been manufacturing and supplying specified products for similar scope of Work.

C. Installer Qualifications:
1. Only authorized Subcontractor(s) shall install the roof coating.
2. Perform Work in accordance with the Roof Coating Manufacturer's published literature and as specified in this section.
3. Maintain one (1) copy of the Roof Coating Manufacturer's instructions on site.
4. Allow the Roof Coating Manufacturer representative site access during installation.
5. Contact the Roof Coating Manufacturer two weeks prior to scheduling a meeting.

1.09. DELIVERY, STORAGE, AND HANDLING

A. Delivery of Materials:
1. Deliver materials to the jobsite in undamaged and clearly marked containers indicating the name of the Roof Coating Manufacturer and product.

B. Storage of Materials:
1. Store materials as recommended by the Roof Coating Manufacturer and conforming to applicable safety regulatory agencies. Refer to all applicable data including, but not limited to, MSDS sheets, Product Data sheets, product labels, and specific instructions for personal protection.
2. Keep solvents away from open flame or excessive heat.
3. Roof coating should be stored in closed containers.
4. Refer to Roof Coating Manufacturer's published literature.

C. Handling:
1. Provide adequate ventilation for protection from hazardous fumes.
2. Protect areas not included in scope of work from overspray.
3. Refer to Roof Coating Manufacturer's published literature.

1.10. SITE CONDITIONS

A. Environmental Requirements:
1. Do not install roof coating over saturated insulation.
2. Do not install roof coating over saturated substrates.

B. Protection:
1. It is the responsibility of the installing Subcontractor to protect all surfaces not included in scope of Work from damage.
2. Secure protective coverings against wind and vent area if used in conjunction with applications preventing collection and moisture.
3. Post signs noting potential overspray hazard within 400ft (122 M) of applications.
4. Turn off air-intake ventilation equipment to prevent fumes from entering building.
5. Post no smoking signs as mandated by local fire ordinances.

6. Beware of Cellular Phone Skids and raceways.

C. Complete preparation Work prior to installing roof coating, which includes identification of all wet/ soft spots and removal of same.

D. Ground all electrical equipment during operations.

1.11. WARRANTY

A. Warranty Submittals to Roof Coating Manufacturer:
1. Contact Henry® sales representative for a complete list of required documents and procedures prior to material purchase. Warranties submitted without required documents and procedures completed may result in delay or rejection of warranty request.

A. Warranty Terms:
1. Installing Contractor:
a. Installing Subcontractor must warranty the installation; provide material and labor costs for repair in the event of a leak as a result of faulty workmanship for a period of two (2) years from the date of installation completion.
2. Manufacturer's Single Source Warranty:
a. Manufacturer's Single Source Material Plus Warranty:
1. Installing Subcontractor must be a Material Plus Authorized Subcontractor.
2. Manufacturer must warranty the products; provide material and labor costs for repair for a period of **15 years (Alt 20 years)** from the date of installation completion as a result of any of the following:
a. Manufacturing product defect

PART 2 - PRODUCTS

2.01. MANUFACTURERS

A. Obtain waterproofing and auxiliary materials as a single-source from the Roof Coating Manufacturer to ensure total system compatibility and integrity.

A. Acceptable Manufacturers:
1. Henry Company
999 N. Sepulveda Blvd. Suite 800
El Segundo, CA 90245
(800) 486-1278
www.henry.com

2.02. MATERIALS

A. Primary roof coating assembly minimum requirements (Basis of Design):
1. Energy Performance:
a. Initial Solar Reflectance (ASTM C1549): 88%
b. Solar Reflective Index (SRI): 111
c. ENERGY STAR: Certified
2. FM Approved (Class Number 4470):
a. Max Roof Slope: 1:12
3. Florida Product Approval:
a. Miami-Dade County, Florida NOA
4. NSF certified:
a. Protocol P151: Health Effects from Rainwater Catchment System Components
5. Tested Fire Response Characteristics:
a. Standard Test Methods for Fire Tests of Roof Coverings (ASTM E 108 or UL 790): Class A

B. Roof Coating (Basis of Design):
1. Primary Roof Coating:
a. Solvent free one-component moisture curing silicone rubber roof coating; having the following properties:

1. Basis of design: Pro-Grade® 988 Silicone Roof Coating
2. Color: Bright White
3. Standard Test Method for Determining Water Migration Resistance Through Roof Membranes (ASTM D7281): Pass (>/= 22 dry mils)
4. Solids Content:
    a. By volume (ASTM D2697): 92 +/-3%
5. Flash Point (ASTM D93): 140.9 degrees F (60.5 degrees C)
6. Tack-Free Time at 75 degrees F (24 degrees C): Approximately 1-2 hours
7. Volatile Organic Content (VOC) (ASTM D3960/EPA Method 24): 10g/l max.
8. Durometer Hardness, Shore A (ASTM D2240): 42 Shore A
9. Tensile Strength, die C (ASTM D412): 320psi
10. Elongation (ASTM D412): 170%
11. Permeability (ASTM E96): 4.6 perms
12. Initial Solar Reflectance (ASTM C1549): White roof coating: .88
13. Solar Reflective Index (SRI): 111
14. QUV, 5,000 hours (ASTM G154): No degradation
15. Water Absorption (ASTM D471): 0.0005%

C. Assembly Auxiliary Materials:

1. Stain Blocking Primer:
    a. Water based acrylic latex elastomeric roof coating; having the following properties:
        1. Basis of design: Pro-Grade® 294 Base Coat and Sealer
        2. Color: grey
        3. Elongation (Initial) (ASTM D2370): >400%
        4. Flash Point (ASTM D3278): Non-flammable
        5. Volatile Organic Content (VOC) (ASTM D3960/EPA Method 24): 50 g/l max
        6. Solids Content by Volume: 51-55%
        7. Tensile Strength Film (ASTM D2370): >150 psi

2. Reinforcement Fabric:
    a. Stich bonded, high performance fabric reinforcement sheet; having the following properties:
        1. Basis of design: HE195 Polyester Fabric
        2. Color: White to Yellow White
        3. Elongation (Initial) (ASTM D1682): 61-63%
        4. Volatile Organic Content (VOC) (ASTM D3960/EPA Method 24): 0 g/l max Maximum VOS: 0 lbs/gal
        5. Mullen Burst (ASTM D3786): 176.8 lbs.
        6. Tensile Strength Film (Initial) (ASTM D1682): 57.1 lbs.
        7. Trapezoidal Tear Strength (ASTM D1117): 16.1 lbs.
        8. Weight of Fabric: 3 oz/sq. yd.
3. Sealants:
    a. Butter grade, one-part moisture cure sealant consisting of silicone rubber; having the following properties:
        1. Basis of design: Pro-Grade® 923 Butter Grade Silicone Roof Sealer
        2. Colors: White
        3. Solids Content by Volume (ASTM D2697-3): 95%
        4. Tensile Strength, die C (ASTM D412): 130 psi
        5. Elongation (ASTM D412): 275%
        6. Volatile Organic Content (VOC) (ASTM D3960/EPA Method 24): 25g/l max
    b. Standard grade, one- part moisture cure sealant consisting of silicone rubber; having the following properties:
        1. Basis of design: Pro-Grade® 920 Silicone Roof Sealant
        2. Colors: Bright White or Grey
        3. Solids Content by Volume (ASTM D2697-3): 95%
        4. Tack free time: Approximately 1-2 hours
        5. Cure time (ASTM C920): 7 days
        6. Tensile Strength, die C (ASTM D412): 200 psi
        7. Elongation (ASTM D412): 300%
    c. Fibered grade, one-part moisture cure sealant consisting of silicone rubber; having the following properties:
        1. Basis of design: Pro-Grade® 957 Silicone Fibered Roof Sealer

2. Colors: White
3. Solids Content by Volume (ASTM D2697-3): 95%
4. Tack Free Time: Approximately 1-3 hours
5. Cure time (ASTM C920):24-48 hours
6. Tensile Strength, die C (ASTM D412): 110 psi
7. Elongation (ASTM D412): 75%
8. Volatile Organic Content (VOC) (ASTM D3960/EPA Method 24): 25g/l max

4. Roof Granules:
   a. Ceramic coated roof granules, and having the following properties:
      1. Basis of design: Permax Roof Granules
      2. Color: White
      3. Sieve Size: varies; refer to Roof Coating Manufacturer published literature.

D. Additional Materials:
1. Cleaner:
   a. Refer to Section 3.02. C Surface Cleaning

PART 3 - EXECUTION

3.01. EXAMINATION

A. It is the installing Subcontractor's responsibility to verify the substrate is dry and in accordance with Section 1.03 Related Requirements prior to installation of roof coating. Commencement of the Work or any parts thereof, indicates installer acceptance of the substrate.
1. Do not install roof coating over saturated insulation.
2. Do not install roof coating over saturated substrates.

B. The installing Subcontractor must verify the following:
1. Moisture detection survey:
   a. Visual inspection
   b. Moisture analysis; choose from one or more of the following:
      1. Infrared Thermography
      2. Nuclear Scan
      3. Electric Capacitance / Impedance Testing
      4. Roof core cut samples

C. Adhesion Test:
1. Do not perform Work in this section until a field adhesion test has been conducted by the contractor in accordance with Section 3.02.D. Adhesion Test.

D. Verify existing substrate and assembly flashings are dry, leak-free, and in accordance with Roof Coating Manufacturer's published literature.

E. Verify skylights, scuppers, gutters, penetrations, and structures located within area of Work are firmly secured and in good working condition prior to installation. Clean, repair, or replace to correct substrate deficiencies as required in accordance with Roofing Membrane Manufacturer's published literature to obtain a continuous and secure substrate in accordance with Roof Coating Manufacturer's published literature prior to installation of roof coating.

F. Existing assembly must be continuous and secured prior to application of roof coating.

G. Do not apply roof coatings until substrate and environmental conditions are in accordance with Roof Coating Manufacturer's published literature.

H. Previously coated areas:
1. Contact Roof Coating Manufacturer's technical support or local sales representative for previously coated examination procedures.

3.02. PREPARATION

A. Surfaces must be sound, dry, clean, and free of oil, grease, dirt, excess mortar, frost, laitance, loose and flaking particles, or other contaminants.

A. Existing roof membrane, insulation, and all substrates must be dry and in accordance with Roof Coating Manufacturer's published literature prior to installation of roof coating.

B. Surface Cleaning:
1. Confirm local ordinances and jurisdiction restrictions prior to selecting from the following cleaning methods.
2. Clean and prepare existing membrane roofing taking caution not to inject water into roofing substrate.
3. Acceptable Methods of Cleaning
    a. Pressure washer with greater than 2000psi.
    b. Algae, mildew, or fungus:
        1. Treat with a tri-sodium phosphate (TSP) or equivalent non-filming detergent and water solution.
        2. Clear water rinse until complete cleaning residue removal.
    c. All substrate areas must be completely dry prior to roof coating application.
    d. Refer to Roof Coating Manufacturer's published literature.

D. Adhesion Test:
1. Granulated surfaces:
    a. Not required.
2. Smooth Surfaces:
    a. Complete an adhesion test over all substrates including existing previously coated and non-coated roof membranes prior to installation of roof coating.
        1. Submit passing adhesion test results to Roof Coating Manufacturer during warranty application process.
    b. Refer to Roof Coating Manufacturer's application guide for adhesion test procedures.
    c. Allow roof coating to cure for a minimum of 72 hours prior to conducting adhesion test.

E. Removal and replacement of existing roof membrane, wet insulation and /or defective roof substrate:
1. Completely remove exiting roof membrane, wet insulation, and /or defective materials and replace roofing membrane to match existing in accordance with roofing membrane manufacturer published literature.
2. Replace insulation and roofing membrane continuously and flush to match existing roofing membrane and secure in accordance with roofing membrane manufacturer's published literature. Allow to cure a minimum of 24 hours.

F. Detail seams where new roof membrane transitions to existing roof membrane to maintain an air and water tight assembly; choose from the following:
1. Sealant:
    a. Use butter grade or fibered grade sealant. Do not use standard grade sealant when repairing existing roof membrane cut seams.
    b. Using a stiff bristled brush or sealant knife apply sealant at one-eighth (1/8) inch thick (125 wet mils) extending three (3) inches on each side of existing roof membrane seam until fully coated ensuring a smooth and continuous watertight finish.
2. Reinforced Roof Coating:
    a. Install one (1) layer of roof coating at two (2) gallons per square (32 wet mils) extending four (4) inches on each side of existing roof membrane seam.
    b. Center six (6) inch wide strip of stitch bond polyester fabric over existing roof membrane seam and fully embed fabric into roof coating ensuring three (3) inches of fabric on each side of existing roof membrane seam. Brush fabric for proper adhesion and removal of all voids.
    c. Allow roof coating to dry prior to subsequent roof coating application.
    d. Apply second layer of roof coating at one (1) gallon per square (16 wet mils) extending a minimum four (4) inches on each side of existing roof membrane seam ensuring fabric is fully coated and has a smooth and continuous watertight finish.

G. Loose or torn existing roof membrane seams; choose from the following:
1. Sealant:
    a. Secure existing roof membrane seams by generously applying sealant under torn or loose area using a stiff bristled brush or sealant knife, and firmly press loose roof membrane into sealant.

b. Once existing roof membrane seam is fully bonded into sealant generously apply sealant on top of the existing roof membrane seam using stiff bristled brush or sealant knife until fully coated ensuring a smooth and continuous watertight finish.

2. Reinforced roof coating:
   a. Install one (1) layer of roof coating at two (2) gallons per square (32 wet mils) extending four (4) inches on each side of existing roof membrane seam.
   b. Center six (6) inch wide strip of stitch bond polyester fabric over existing roof membrane seam and fully embed fabric into roof coating ensuring three (3) inches of fabric on each side of existing roof membrane seam. Brush fabric for proper adhesion and removal of all voids.
   c. Allow roof coating to dry prior to subsequent roof coating application.
   d. Apply second layer of roof coating at one (1) gallon per square (16 wet mils) extending a minimum four (4) inches on each side of existing roof membrane seam ensuring fabric is fully coated and has a smooth and continuous watertight finish.

H. Repair defects including splits, cracks, blisters, deteriorated flashings, cracked metal edging, and any other defects affecting the water tightness of the roofing system using one of the following methods:
1. Sealant:
   a. Use butter grade or fiber grade sealant. Do not use standard grade sealant when repairing defects as described above.
   b. Using a stiff bristled brush or sealant knife apply sealant at one-eighth (1/8) inch thick (125 wet mils) extending three (3) inches on each side of defect as described above until fully coated ensuring a smooth and continuous watertight finish.
2. Reinforced Roof Coating:
   a. Install one (1) layer of roof coating at two (2) gallons per square (32 wet mils) extending four (4) inches on each side of defect as described above.
   b. Center six (6) inch wide strip of stitch bond polyester fabric over defect as described above and fully embed fabric into roof coating ensuring three (3) inches of fabric on each side of defect as described above. Brush fabric for proper adhesion and removal of all voids.
   c. Allow roof coating to dry prior to subsequent roof coating application.
   d. Apply second layer of roof coating at one (1) gallon per square (16 wet mils) extending a minimum four (4) inches on each side of defect as described above ensuring fabric is fully coated and has a smooth and continuous watertight finish.

I. All areas must promote positive drainage.
1. Contact Roof Coating Manufacturer's technical support or local sales representative for ponding area repair procedures.

J. Previously coated areas:
1. Contact Roof Coating Manufacturer's technical support or local sales representative for previously coated preparation procedures.

3.03. INSTALLATION

A. Verify substrate is ready to receive the roof coating in accordance with Roof Coating Manufacturer's TDS and guide specification.

A. Roof coating may settle during storage. Mix roof coating prior to use with drill and mixer blade until consistent viscosity is achieved.

B. Temperature limitation:
1. Substrate temperature must be above 35 degrees F (2 degrees C) and rising and at least 6 degrees F (3 degrees C) above the dew point temperature and rising.

C. Stain Blocking Primer:
1. Apply stain-blocking primer in accordance with Roof Coating Manufacturer's application guide.
2. Allow stain-blocking primer to dry and verify substrate is thoroughly clean and free of debris or contamination prior to subsequent application.

D. Detailing/Flashing:
1. Complete detailing and flashings prior to installation of roof coating per Roof Coating Manufacturer's details and application guide.

2. Refer to Roof Coating Manufacturer application guide for pretreatment of secure and intact seam requirements.
3. Refer to Roof Coating Manufacturer details including, but not limited to, the following:
    a. Roof curbs
    b. Parapets
    c. Pipe penetrations
    d. Drains
4. Roof valleys and waterways:
    a. Install one (1) layer of roof coating in direction of valley slope at one (1) gallon per square (16 wet mils) extending roof coating at up twelve (12) inches each side of valley.
    b. Center minimum eighteen (18) inch wide strip of reinforcement fabric over existing roof membrane valley and fully embed reinforcement fabric into roof coating ensuring minimum nine (9) inches of reinforcement fabric on each side of valley. Using a soft bristled broom or paint roller brush reinforcement fabric for proper adhesion and removal of all voids.
    c. Where more than one piece of reinforcement fabric is required:
        1. Coat side and end laps of embedded reinforcement fabric with roof coating ensuring complete coverage of reinforcement fabric prior to installation of subsequent reinforcement fabric courses. Overlap of dry fabric is not acceptable.
        2. Lap ends of reinforcement fabric four (4) inches where more than one piece is required to ensure a continuous watertight finish.
    d. Allow roof coating to dry prior to subsequent roof coating application.
    e. Apply second layer of roof coating at one (1) gallon per square (16 wet mils) fully encapsulating areas previously covered with a reinforced roof coating.

E. Roof Marking:
1. Mark desired area in accordance with published literature to apply the appropriate amount of roof coating per square. Re-measure prior to installation of second coat to ensure proper millage requirements.
2. Contact Roof Coating Manufacturer for roof marking instructions.
    a. Coverage rates are theoretical and do not take into account for material loss due to spraying, surface texture, waste, etc.
    b. Install a test patch to determine how much coating per square is required over asphaltic textured surfaces.
    c. Adjust application rates based on test patch results in order to meet specified requirements.

F. Application of Roof Coating:
1. Application rates apply to both Material Plus and Gold Seal Warranties.
2. Refer to Roof Coating Manufacturer warranty chart for coverage rate options.

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SPEC NOTE: For added traction at areas anticipating periodic traffic due to roof maintenance and around mechanical equipment, install an additional layer of roof coating in accordance with "3.03.H Walkways".
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G. Walkways: (optional)
1. Verify overall roof coating is in accordance with warranty requirements.
2. Verify substrate is thoroughly clean and free of debris or contamination prior to subsequent application. Wash roof coating as required and allow roof coating to dry.
3. Apply additional primary roof coating at traffic areas at a minimum one (1) gallon per square (Sixteen (16) wet mils).
4. Apply roof granules uniformly into wet roof coating at a rate of 20-30 pounds per 100 square feet.
5. Allow roof coating to dry.
6. Remove loose particles to avoid clogging drains.

3.04. FIELD QUALITY CONTROL

A. Limit traffic on roof coated surfaces for a minimum of two (2) days. Damage to surface by other trades shall not be the responsibility of the installing Subcontractor.

B. Final Observation and Verification:

1. [Architect] [Consultant] [General Contractor] [Roof Coating Manufacturer] to complete the final inspection of roofing coating as required by warranty.
2. Contact Roof Coating Manufacturer for warranty issuance requirements.

3.05. CLEANING

A. As the Work proceeds, and upon completion, promptly clean up and remove from the premises all rubbish and surplus materials resulting from the foregoing Work.

B. Clean soiled surfaces, spatters, and damage caused by Work of this Section.

C. Check area to ensure cleanliness and remove debris, equipment, and excess material from the site.

END OF SECTION