Project Manual for SPC#05-14-15

EpiCenter, TECH BUILDING ROOF RESTORATION EpiCenter CAMPUS

13805 58th Street North, Clearwater, Fl. 33760 December 19, 2014

St. Petersburg College



Owner: St. Petersburg College

14025 58th Street North Clearwater, FL 33760

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ST. PETERSBURG COLLEGE

INVITATION TO BID, SPC PROJECT SPC#05-14-15
EpiCenter, TECH BUILDING ROOF RESTORATION
EpiCenter CAMPUS 13805 58th STREET, CLEARWATER, Fl. 33760

THIS IS NOT AN ORDER

DATE ISSUED: Friday, December 19, 2015

TO BE OPENED PUBLICLY AT 2:30 P.M.

Thursday, January 22, 2015

St. Petersburg College Services Building-Epicenter, 14025 58th Street North, Clearwater, Florida 33760-3768, Conference Room #217

GENERAL SPECIFICATIONS

- 1. SEALED BIDS: Must be in the Facilities Services Department by the date and time specified. Bids may be hand delivered to the Facilities Services Department, at 2:00PM, Room 252, St. Petersburg College, Services Building-Epicenter, 14025 58, Street North, Clearwater, Florida 33760-3768 or mailed to the Director of Facilities Services, St. Petersburg College, P. O. Box 13489, St. Petersburg, Florida 33733-3489. If you use an express (overnight) delivery service, do not use the Post Office Box. Direct your delivery to the street address above. St. Petersburg College accepts no responsibility for late or misdirected mail deliveries.
- **2. RESPONSE ENVELOPES:** The envelope containing your bid response should contain the following information prominently stated on the front:

EpiCenter Tech Building Roof Restoration EpiCenter Campus SPC Project SPC#05-14-15

Due: 2:00 P.M., Thursday, January 22, 2015

3. PREPARATION OF BIDS: All information shall be printed in ink, typewritten, or produced by computer. Mistakes may be crossed out and corrections inserted before submission of your bid. Corrections shall be initialed in ink by the person signing the bid St. Petersburg College will not be responsible for errors or omissions made by the Contractor in determining the bid price to the College. Corrections and/or modifications received after the due date and time

specified will not be accepted. It is mandatory that all bids are manually signed by an authorized officer of the Contractor.

4. PRE-BID MEETING: A **Mandatory** pre-bid meeting will be held at 10:00A.M. on Thursday, January 15, 2015, at the EpiCenter Campus, TECH Building, Conference Room 1-122, located at 13805 58th, Street North, Clearwater, Florida 33760

Any person(s) requiring reasonable accommodations, in accordance with the provisions of the Americans with Disabilities Act, for attendance at the scheduled bid opening, must contact Facilities Services Department at 727-341-3378 at least 72-hours in advance of your planned attendance.

- **5. SUBSTITUTIONS:** Attention is called to the fact this project requires prior approval for substitution requests.
- **6. AWARD:** A decision by the College regarding a bid award will be made after determining what is the lowest price and in the best interest of the College. The College reserves the right to reject any or all bids and to waive any technicalities or informalities in bids received. **The College reserves the right at any time, including before or after the notice of an award, to withdraw this Invitation to Bid if so doing is deemed to be in the best interests of the College.** Notice of award shall be posted online at the Purchasing Department webpage at http://www.spcollege.edu/purchasing.
- **7. BID REJECTION:** No bid shall be considered if the bidder fails to comply with the terms and conditions of the bid form, fails to meet minimum qualifications as detailed in the Contractors Qualification Statement, or the procedure for submitting bids as authorized in official advertisement and other documents pertaining to the bidding as authorized by the Board of Trustees or its designee.
- **8. PROTEST: Specifications—**With respect to a protest of the terms, conditions, and specifications contained in the Invitation to Bid, the notice of protest shall be filed writing within 72 hours after the posting of the Invitation to Bid. A formal written protest shall be filed in within 10 days after the date the notice of protest is filed. Failure to file a notice of protest or failure to file a formal written protest within the time prescribed in section 120.57(3), Florida Statutes, shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.
- **9. PROTEST:** Intended Decision- A notice of intended decision for a proposal award will be electronically posted on the Purchasing Department website at http://www.spcollege.edu/purchasing. Any person who is adversely affected by the intended decision shall file a notice of protest within 72 hours after the posting of the notice of intended decision. The formal written protest shall be filed within 10 days after the notice of protest is filed. Failure to file a protest within the time prescribed in section 120.57(3), Florida Statutes, or failure to post the bond

or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under chapter 120, Florida Statutes."

- **10. QUALIFICATION OF BIDDER:** In order to be qualified to bid, all bidders must meet minimum qualifications as detailed in Contractors Qualification Statement on page 36-37. Verification of the qualifications and subsequent bid rejection based on insufficient qualifications shall be made at the sole discretion of the Owner.
- 11. REGISTRATION: Bidders need to officially register with the College's Purchasing Department. Bidders can register by obtain the Vendor's Registration Form online at http://www.spcollege.edu/purchasing. The College shall not be responsible for providing addendums to bidders who do not register with the College. Failure to register as a prospective bidder may cause your bid to be rejected as non-responsive if you have submitted a proposal without an addendum acknowledgement for the most current and/or final addendum.
- 12. CHANGES OR MODIFICATIONS TO THE SPECIFICATIONS OR CONDITIONS: Any changes to the specifications or conditions herein shall be in the form of a written addendum issued by the Facilities Services Department. Bidders can review all such revisions and amendments, if any, as they shall be posted online at http://www.spcollege.edu/purchasing. Any oral statement or representation by any representative of the College, changing or supplementing the Invitation to Bid or any condition thereof, is unauthorized and may not be relied upon. An addendum is incorporated into the specifications and/or conditions as of the date of issue.
- **13. QUESTIONS:** If you have questions about the terms, conditions and/or specifications, email them to Rafael Martinez, Facilities Construction Coordinator, at martinez.rafael@spcollege.edu or Diana Wright, Director of Facilities, at wright.diana@spcollege.edu.
- **14. ADDENDA:** In the case of a project related question or changes to the specifications or conditions, an addenda shall be posted online at http://www.spcollege.edu/purchasing. Copies of Addenda will be made available for inspection and kept on file at the Facilities Services Department. No addenda will be issued later than two (2) business days prior to the date for receipt of Bids. Each Bidder shall ascertain prior to submitting his bid that he has received all Addenda issued, and he shall acknowledge their receipt in his Bid.
- **15. CLARIFICATIONS:** The College reserves the right to request clarification of information submitted and to request additional information of one or more bidders if needed.
- **16. SCHEDULE:** Since St. Petersburg College intends to continue classes and occupy the building, this project shall be scheduled in a manner as to <u>not</u> disrupt classes or Owner occupied spaced and minimize the length of time anyone spaces(s) will be affected by the construction.

Therefore, the bidder shall prepare the Bid to allow for all construction to occur on Saturdays, Sundays, legal holidays and college closures at no additional cost to Owner. The bidder must

acknowledge that any work disrupting the continuous occupancy or causing disruption/disturbance of any classes/spaces will not be permitted.

- 17. TIME OF COMPLETION: All of the work shall be substantially completed within the 45 days after receipt of Purchase Order. Overtime cost to perform any work after regular hours or on Saturdays, Sundays, legal holidays and college closures made necessary to meet the required time schedule or as required to work around class schedules and to ensure that classes are not disrupted or disturbed, shall be at the expense of the Contractor(s) and/or sub-contractor(s). It is hereby understood and mutually agreed, that the contract time as stipulated by the Bid Documents constitutes a reasonable time period in which to complete the work and achieve a state of substantial completion, final completion, and Owner occupancy for the project, and that, at the end of such time, the entire project shall be completed and ready for unrestricted use by Owner.
- **18. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES:** Shop drawings, product data and samples shall be dated and contain: name of project, description or names of equipment, materials and items, and complete identification of locations at which materials or equipment are to be installed. Contractor shall highlight and reference product data and shop drawings for ease of review. Contractor shall verify and coordinate the information contained within such submittals with the requirements of the work and of the contract documents. The shop drawings shall be reviewed by the College and the College's representative. Failure to do any of the above shall result in rejection of the product data, shop drawing, and sample.
- 19. The Contractor shall be fully responsible for any and all damage to property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, irrigation system, television cable system, telephone cable system, fiber optic system, computer network system, fire alarm system, emergency lighting system and emergency power generating system and utilities not designated for removal or replacement in the course of construction, whether or not it was shown on drawings or whether or not it was identified and located by College personnel.
- **20. PERMITS:** All work must comply with the Florida Building Code. All work shall be permitted and inspected through the St. Petersburg College Building Code Official. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the contract.
- **21. FIRM BIDS:** Any bid may be withdrawn until the date and time set for the submission of the bids. Any bid not so withdrawn shall constitute an irrevocable offer, for a period of ninety (90) days, to sell the College the products/services set forth in these specifications, or until one or more of the other bids have been awarded.
- **22. ASSIGNMENTS:** The successful Contractor shall not assign any interest in the bid and/or contract and shall not transfer any interest in the same without prior written consent of the College.

- **23. SCHEDULED PAYMENTS:** Partial payment request shall be granted upon percentage of completion as scheduled set and agreed upon by the College and the Contractor. Upon substantial completion of the Work under this Contract and before final payment will be issued; the Contractor shall deliver to the College the following:
- 1. Preparation of punch list by the Contractor. The Contractor, along with his subcontractors, shall make an inspection of the new roof and prepare his own punch list of all items to be corrected and completed prior to requesting Final Payment.
- 2. Correction of all punch list item by Contractor and his subcontractors shall take place prior to requesting a final walkthrough inspection by the Owner.
- 3. The Owner, Owner's representatives and the Contractor shall then provide a final walkthrough inspection of the new roof areas and prepare the Owner's final punch list for the Contractor and his subcontractors to complete prior to receiving release of retainage and Final Payment.
- **24. PUBLIC ENTITY CRIMES:** A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid/bid on a contract to provide any goods or services to a public entity (the College is a political subdivision of the State of Florida), may not submit a bid on a contract with a public entity for the construction or repair of a public building or a public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of \$25,000.00 for a period of 36 months from the date of being placed on the convicted vendor list.
- **25. LEGAL REQUIREMENTS:** Applicable provisions of all federal, state, county and local laws and of all ordinances, rules and regulations shall govern development, submittal and evaluation of all bids received in response hereto and shall govern any and all claims and disputes which may arise between person(s) submitting a bid response hereto and the College by and through its officers, employees and authorized representatives, or any other person, natural or otherwise; and a lack of knowledge by any bidder shall not constitute a cognizable defense against the legal effect thereof. The laws of the State of Florida shall govern any contract resulting from this bid.
- **26. DISCRIMINATORY VENDOR'S LIST:** An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not award or perform work as a Contractor, supplier, subcontractor, or consultant under any contract with any public entity, and may not transact business with any public entity.
- **27. IDENTICAL OR TIE BIDS**: In the event two (2) or more bids are tied the following criteria, in order of importance, shall be used to break said tie: (1) Drug Free Work Place Certification, (2) Florida Respondents, (3) or Bidder's place of business is within Pinellas County.

- 28. CONFLICT OF INTEREST: Any award hereunder is subject to Chapter 112, Florida Statutes, regarding conflict of interest. All vendors submitting a bid/proposal must disclose the name of any officer, director, trustee, or agent who is also an employee of the State of Florida or any of its agencies or political subdivisions (the College is a political subdivision of the State). All vendors submitting a bid/proposal must disclose the name of any College employee or employee's spouse or child who is an officer, partner, director, or proprietor or in which such officer or employee or the officer's or employee's spouse or child, or any combination of them, who has an interest in 5% or more in the vendor's firm or any of its branches or dealerships. In accordance with Section 112.313(3), Florida Statutes, no College officer or employee acting in a private capacity may rent, lease, or sell any realty, goods or services to the College, unless the transaction is otherwise exempted under Section 112.313(12), Florida Statutes. Therefore, any vendor who is a College employee or who has an interest in the vendor's firm, and the transaction is not otherwise exempted, cannot contract with the College to provide the services set forth in this Invitations to Bid.
- **29. COLLUSION/DISCLOSURE:** Anti-collusion statement must be signed and notarized in order to be considered for a bid. Vendor's bid must include a properly executed statement certifying that:
- 1) Vendor's proposal is made without previous understanding, agreement, or connection with any person, firm or corporation making a proposal for the same item(s) and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action; and
- 2) No member of vendor's ownership, management or staff has a vested interest in any aspect or department of the College.
- **30. EQUAL OPPORTUNITY/EQUAL ACCESS:** All work on this project will be carried out in compliance with the College's commitment to the concept of equal opportunity; that is, there will be no discrimination on the basis of race, color, religion, sex, age national origin, marital status, or against any qualified person with a disability. Recognizing that sexual harassment constitutes discrimination on the basis of sex, the College shall not tolerate such conduct.
- **31. INDEMNIFICATION**: To the fullest extent permitted by law, the bidder shall indemnify, hold harmless and defend the College, its Trustees, officers, agents, servants, and employees, or any of them, from and against all claims, damages, losses, and expenses including, but not limited to, attorneys' fees and other legal costs including but not limited to costs for paralegal, investigative, and legal support services, and the actual costs incurred for expert witness testimony, arising out of or resulting from the performance of services required under this Contract, provided that same is caused by the negligence, recklessness, or intentional wrongful conduct of the bidder or other person utilized by the bidder in the performance of the work. Nothing herein shall be deemed to affect the rights, privileges, and immunities of the College as set forth in Section 768.28, *Florida Statutes*.

32. INSURANCE REQUIREMENTS: The successful contractor shall supply the college with certificate(s) of insurance evidencing coverage during the period the vendor is providing services per the following:

Type of Policy Limits:

Workers Compensation/Statutory/If claiming exemption from workers' employers liability compensation requirements, proof of exemption or signed declaration must be provided.

Commercial General Liability
To include products/completed
operations, bodily injury,
broad form property damage,
and independent contractors
(if applicable).

\$1,000,000 per occurrence

Automobile Liability
To include all vehicles owned,
leased hired, non-owned and
employee non-owned vehicles.
Individual contractors and
Subcontractors will be required
to show personal automobile
liability in the absence of
corporate coverage.

Certificate showing proof of coverage.

ADDITIONAL COVERAGE REQUIREMENTS: The Board of Trustees, St. Petersburg College shall be named as additional insured with regard to General Liability coverage. A copy of the endorsement must be provided.

All coverage/certificate(s) to be in effect during the time the vendor is installing the equipment or providing a service on the College premises and must be provided to the College's Risk Management Coordinator within five (5) days of notification of bid award. In the event any binder is delivered, a certified copy of the policy or a Certificate of Insurance shall replace it within thirty (30) days in lieu thereof. Each such copy of a certificate shall contain a valid provision or endorsement that the policy may not be canceled, terminated, changed or modified without giving thirty (30) days written advance notice thereof to the College's representative. This Agreement may be subject to immediate termination, at the Colleges discretion, in the event that vendor fails to maintain or comply with any of the Insurance requirements set forth herein.

Certificate(s) of insurance shall be executed on a standard ACCORD form **and signed** with the Certificate Holder listed as follows:

Board of Trustees St. Petersburg College 14025 58th Street North Clearwater FL 33760

33. VOLATILE AND HAZARDOUS MATERIALS: Volatile waste shall be stored in covered metal containers, and removed from the premises daily. Clean-up and disposal operations shall be conducted to comply with local ordinances and Anti-Pollution Laws. Burning or burying of rubbish and waste on the Site is not permitted. Disposal of volatile fluid waste in storm or sanitary sewer systems, or into streams or waterways is not permitted. Hazardous materials shall be stored and disposed of only as permitted by law and shall be properly and legally removed from the premises prior to the completion of the Contract.

34. CLEANING DURING CONSTRUCTION:

The Contractor shall oversee cleaning by all personnel and ensure that the building and grounds around the structure are maintained free from accumulations of waste materials. The premises shall be kept free from the accumulation of waste materials or rubbish at all times, which may require daily cleaning. The Contractor shall not, in any case, use the Owner's trash facilities.

- **35. SITE SAFETY:** The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the contract.
- **36. GOVERNING LAW/JURISDICTION:** This Agreement and all transactions governed by this Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Florida without regard to principles of conflicts of laws. In the event of any legal or equitable action arising from, growing out of or relate to this Agreement, the parties agree that the jurisdiction and venue of such action shall lie exclusively within the courts of record of the State of Florida located in Pinellas County, Florida, and the parties specifically waive any other jurisdiction and venue.
- **37. RIGHT OF OFFSET:** The College shall be entitled to offset against any sums due the successful contractor for any expenses or costs incurred by the College, or damages assessed by the College concerning the successful contractor's non-conforming performance or failure to perform under the terms of the bid.

End of General Specifications

ST. PETERSBURG COLLEGE

INVITATION TO BID, SPC PROJECT SPC#05-14-15
EpiCenter, TECH BUILDING ROOF RESTORATION
EpiCenter CAMPUS 13805 58th STREET, CLEARWATER, Fl. 33760

Technical Specifications

- A. Project Summary: Work shall include provision of new single ply roofing system above the existing EPDM single ply roof mechanically attached as required to provide a new single ply roofing system by FiberTite Roofing Systems by Seaman Corporation for the, Tech Building located at the St. Petersburg College, EpiCenter Campus.
- **B.** Roof Monitoring for Moisture Content: All new roofing operations should only occur after a minimum of two sequential dry days to allow the roof to dry thoroughly. All existing cupped or warped polyisocyanurate insulation board shall be replaced with new insulation board and mechanically attached as required to meet Code.

FIBERTITE ROOFING SYSTEMS

By Seaman Corporation

FTG-RB GS 11/13 Technical Specification For Installation Of FiberTite® KEE Roofing System With Rhinobond®

PART 1 | GENERAL

1.1 SUMMARY

Scope

- 1. Furnish and install a new weather and watertight --- High Performance KEE Thermoplastic Roofing System on the following:
 - St. Petersburg College, EpiCenter TECH Building 13805 58th Street North
 - Clearwater, FL 33760
- 2. This roofing project consists of re-roofing approximately 62946 sq. ft. using a FiberTite XT membrane.
- 3. This specification is constructed to meet Florida Product Approval Evaluation Report S4028.07.05-R8 FL4920-R8 System Number S-92.

Re-Roofing Scope

- 1. Slit existing EPDM membrane every 3 to 5 feet perpendicular to the seams.
- 2. Eliminate fasteners and other roofing components that might exist above the plane of the roof.
- 3. Mechanically Attached manufacturer approved ½" High Strength/Density Coverboard fastened as required by selected Florida Product Approval System Number.
- 4. Attached FiberTite XT membrane using the Rhinobond Fastening System.
- 5. Include in your bid the removal of all old flashing membranes on walls, curbs and pipe penetrations.
- 6. Include in your bid the removal and reinstallation of the existing lightning protection system.
- 7. Include in your bid the removal of the existing edge metal and replace with new FiberClad metal (24 ga. / 20 mil coating) with continuous locking cleats.
- **8.** Include in your bid KEE Tuff Trac reinforced walkpads providing protection outside the roof hatch.
- 9. All t-seams must be re-enforced using FiberTite 060 unsupported membrane.
- 10. Include in your bid a unit cost to replace any damaged or wet insulation.
- 11. Provide a 20 year No Dollar Limit Full System warranty to owner.

Special Design Considerations

- 1. FiberTite Roofing Systems with RhinoBond can be installed in conventional low slope or metal building recover applications.
- 2. All FiberTite Roofing Systems with RhinoBond require an approved cover-board.
- 3. All FiberTite Roofing Membranes without fleece backing may be used for a RhinoBond Roofing System.

Environmental Considerations

- Environmental conditions such as fog, dew, rain, snow and/or freezing temperatures can have a detrimental effect on the application and performance of adhesives.
- 2. Compliance with Environmental Protection Agency and OSHA requirements as published by local, state and federal authorities.
- All adhesives can be described as temperamental at best. The contractor must be aware of all potential environmental variables when installing adhered roofing systems.
- **4.** Pay particular attention to and follow all adhesive storage and application precautions/guidelines.

1.2 FIBERTITE ROOFING SYSTEMS WITH RHINOBOND REFERENCES

FiberTite General Guide Specification FTR GS04/08
FiberTite Construction Details
FiberTite Foreman's Manual
OMG® RhinoBond Induction Welder instruction manual
Seaman Corporation Supplemental Instructions for RhinoBond Installations

1.3 QUALITY ASSURANCE

- FiberTite Roofing Systems with RhinoBond shall be installed only by a roofing contractor, authorized by Seaman Corporation to install FiberTite Roofing Systems with RhinoBond prior to bid and/or contract award. Herein, the term Authorized FiberTite Roofing Contractor is synonymous with authorized, roofing contractor and/or contractor.
- 2. Roofing contractor's key personnel shall have received specialized training in the installation of FiberTite Roofing Systems and the RhinoBond installation methodology by Seaman Corporation.
- 3. FiberTite Roofing Systems with RhinoBond shall be installed in accordance with the most current guide specifications (FTR RB GS09/11) and details as amended and/or authorized by FTCS for specific project requirements.

4. Upon completion, certification by the contractor that a quality installation has been completed in accordance with the approved contract specifications, and all field welds have been probed and inspected, a quality assurance inspection of the roof system shall be performed by FTCS for acceptance and approval.

1.4 SUBMITTALS

The following information shall be submitted to FTCS for review before warranty consideration, material shipment or acceptance can be confirmed.

- 1. Complete copy of roofing contractor's proposal outlining design parameters.
- 2. Complete list of accessories or materials not manufactured or expressly authorized for use in FiberTite literature.
- 3. Dimensioned outline of the roof indicating all FiberTite Detail references.

At the time of contract award, the roofing contractor shall submit to the Owner/Owner's Representative the following:

- 1. Roofing contractor's approved copy of the submitted Pre-Installation Notice to FTCS.
- 2. Written approval from FTCS confirming any accessories submitted, not manufactured or expressly approved in FiberTite literature are acceptable and compatible with the proposed FiberTite Roofing System.
- 3. Material Safety Data Sheets (MSDS) relating to all products, chemicals and solvents.
- **4.** Certification that the system specified complies with all identifiable building code and insurance requirements.

1.5 DELIVERY & STORAGE

- 1. Deliver all materials to the job site in manufacturer's original, unopened containers, with legible labels and in sufficient quantity to allow for continuity of work.
- 2. Select and operate material handling equipment in a safe manner, guarding against damage to existing construction or newly applied roofing and conforming to manufacturer's recommendations of handling and storage.
- 3. All rolls of membrane shall be stored, lying down, elevated above the roof deck and completely protected from moisture with tarpaulins. Manufacturer's packaging is not considered adequate for outdoor storage.
- 4. Insulation and cover board materials shall be elevated on pallets and fully protected from moisture with tarpaulins. Manufacturer's packaging is not considered adequate protection from moisture.
- 5. Adhesives and sealants shall be safely stored between 50°F and 80°F prior to use.

- 6. Flammable materials shall be stored in a cool, dry area away from sparks and open flames. Follow all precautions as outlined in manufacturer's Material Safety Data Sheets.
- 7. Materials, having been determined by the owner/owner's representative to be damaged, shall be immediately removed from the construction site and replaced at no cost to the owner

1.6 JOB CONDITIONS

Safety

- 1. Take all necessary precautions regarding worker health and safety when using solvents and adhesives.
- 2. Worker safety is paramount when working on steep slopes.
- 3. Roofing membrane is slippery when wet or exhibits dew, frost, ice are any other form of moisture.
- **4.** Comply with all OSHA requirements for steep slope construction and fall protection where required.
- **5.** Store flammable liquid and materials away from open sparks, flames and extreme heat.
- **6.** Take necessary precautions when using solvents and adhesives near fresh air intakes.
- 7. Daily site cleanup shall be performed to minimize debris and hazardous congestion.

Protection

- Schedule installation sequence to limit access and utilization of the newly installed membrane for material storage, construction staging, mechanical and/or excessive foot traffic.
- 2. Provide proper protection on all newly completed roofing to avoid damage to the new roofing system.
- 3. Traffic should be minimized on a freshly laid roof.
- **4.** Protect building walls, rooftop units, windows and other components during installation.

Additional Precautions

- 1. Adverse weather conditions (e.g. extreme temperature, high winds, high humidity and moisture) could have a detrimental effect on adhesives, general production efforts, and/or the quality of the finished installation. Contact FTCS for recommendations and acceptable tolerances.
- 2. Daily production schedules of new roofing shall be limited to only that which can be made 100% watertight at the end of the day, including all flashing and night seals.

- 3. All surfaces to receive new roof system, including insulation and flashing, shall be free from all dirt, debris and be thoroughly dry.
- **4.** Comply with local EPA requirements as published by local, state and federal authorities.
- **5.** All construction debris shall be removed from the construction site and legally disposed of offsite.

1.7 COORDINATION

- Prior to installation of materials, a pre-roofing conference shall be held with the
 roofing contractor, and owner/owner's representative to discuss the specified
 roofing system, coordinate its proper application and the expectations of all parties
 involved. The authorized roofing contractor and the owner/owner's representative
 shall notify all parties a minimum of 14 days prior to the meeting.
- 2. Plan and coordinate the installation of the roofing system with other trades in such a manner to avoid membrane damage, keeping the complete installation weathertight and in accordance with all approved details and warranty requirements.
- FTCS shall be available to make recommendations necessary to ensure compliance with project specifications and specification alternatives due to unforeseen job conditions.
- 4. Field services are provided at the discretion of Seaman Corporation. A minimum two weeks' notice is required to evaluate and coordinate any request for onsite technical assistance.

1.8 WARRANTY

1. Inspections

A FiberTite Technical Customer Service Representative shall inspect the completed FiberTite RhinoBond Roofing installation, and upon acceptance, Seaman Corporation shall issue the pre-authorized warranty, subject to the terms and conditions of the sample warranty and contract documents.

2. Warranty Period

Provide a 20 year No Dollar Limit Full System warranty. This warranty provides the building owner protection against the cost of repairing leaks as a direct result of either defects in the membrane or the workmanship involved up to 20 years.

3. Maintenance

Along with the issuance of the warranty, a set of instructions shall be included detailing preventative maintenance requirements on the part of the building owner and noting a list of harmful substances that may damage the FiberTite RhinoBond Roofing System.

PART 2 | PRODUCTS

2.1 GENERAL

- 1. All products and components for the FiberTite Roofing Systems with RhinoBond shall be supplied by Seaman Corporation.
- 2. Components other than those manufactured and/or supplied by Seaman Corporation shall be submitted for review, prior to ordering. Any product(s) not specifically authorized in writing for the project by Seaman Corporation, shall be considered unacceptable and their performance excluded from the warranty.
- 3. FiberTite Roofing Systems with RhinoBond may be installed directly over preapproved insulation, cover board or composites thereof. Contact FTCS for additional information regarding compatible substrates.

2.2 MEMBRANE

FiberTite XT Membrane

FiberTite XT is a nominal 50 mil Ketone Ethylene Ester (KEE) membrane, reinforced with a 6.5 oz yd² knitted polyester fabric as manufactured by Seaman Corporation, under the trade name FiberTite XT, conforming to the physical properties as outlined in the associated data sheet. FiberTite XT greatly exceeds all requirements outlined ASTM D 6754 - 02 Standard Specification for Ketone Ethylene Ester (KEE) Sheet Roofing.

Flashing Membrane

Nominal 50 mil FiberTite XT membrane shall be used for all respective roofing system flashing requirements to match the field membrane and warranty expectations selected for the roofing system.

Acceptable Substrate(s)

- 1. Authorized rigid insulation or cover board
- 2. Structural concrete; insulated
- 3. Insulated steel decking
- 4. Exterior grade plywood; insulated

2.3 RELATED MATERIALS "BY SEAMAN CORPORATION"

The following product(s)/material(s) shall be supplied by Seaman Corporation.

FTR Fasteners

- 1. FiberTite XHD #15 Fastener To secure FiberTite membranes to steel, wood and structural concrete decks. A #15-13, buttress threaded, #3 Phillips head fastener constructed of case hardened carbon steel with a reduced diameter drill point and corrosion resistant coating.
- 2. FiberTite HD To secure insulation to steel, wood and structural concrete decks. A #14-13, heavy duty threaded steel #3 Phillips truss, self-tapping corrosion resistant fastener.

FTR Stress Plates

- 1. RhinoBond Plates- A 3" (75 mm) round, high-tensile, 22-gauge corrosion resistant steel plate with a KEE compatible polymeric coating used with approved fasteners to attach insulation boards to the structural deck and as a subsequent platform to induction weld the FiberTite Roofing Membrane.
- 2. FTR-MAGNUM Plus Series Barbed Stress Plates- When required/used to anchor membrane at roof transitions are 1.5" x 2.75" rectangular in dimension with 3/4" radial corners, manufactured from 20-gauge AZ-50 galvalume steel with a 0.25" diameter hole in its center. The plate has a raised reinforcement area and eight barbs.

FTR Adhesives

Adhesives, supplied by Seaman Corporation have been specially formulated for FiberTite Roofing Systems.

 FTR-190e Bonding Adhesive- A VOC compliant, solvent-borne, contact (two-sided) bonding adhesive, designed for bonding non-fleece back FiberTite membranes to properly prepared and pre-authorized horizontal and vertical substrates.

Additional Components

- 1. FTR-101 Sealant A one component gun-grade polyether sealant to seal flashing termination.
- 2. FiberClad Metal To fabricate metal flashing, 4' x 10' sheets of 24-gauge hot-dipped G-90 steel, laminated with a 0.020 mil polymeric coating.
- 3. FTR Pre-Molded Flashing(s) Injection molded vent stack, split WrapidFlash™ and inside/outside corner flashing using FiberTite vinyl compound.

- **4.** FTR Non-Reinforced Membrane Field fabrication membrane, 0.060 mil non-reinforced vinyl membrane.
- 5. FTR Tuff-Trac Reinforced Walkway & Protection Pads High-grade walkway/protection material with slip-resistant design.
- 6. FTR Termination Bar Membrane flashing(s) restraint/termination seals, nominal 1/8" x 1" x 10' 6060-T5 extruded aluminum bar with pre-punched slots, 8" on center.
- 7. FTR Metal Fascia System Two-piece, snap-on, pre-formed, architectural Kynar fluoropolymer metal edge systems.
- 8. FTR-Value Insulation Polyisocyanurate and extruded polystyrene flat or tapered insulation.
- 9. FTR-601 Dual component, single-bead (ribbon applied) urethane insulation adhesive. Adhesive is a non-solvent, elastomeric, urethane adhesive, specifically designed for bonding single or multiple layers of roof insulation and insulation composites and/or cover boards to structural roof decks and base sheets.
- 10. FTR-Cover Board Gypsum or gypsum/cellulose core board.
- 11. ½" High Strength/Density Polyiso coverboard supplied by Seaman Corporation.

2.4 RELATED MATERIALS

Wood Nailers

- 1. Wood nailers are being tested to determine the effect preservatives on metal components. Borate treated lumber seem to be the less corrosive and is strongly recommended. Installation of other types of treated lumber should be verified with a design professional.
- 2. Wood shall be No. 2 or better construction grade lumber.
- 3. Creosote or asphaltic type preservatives are not acceptable.
- 4. Minimum top nailer thickness shall be 1½" nominal.

Insulation

- Insulation shall be installed, where specified and/or required to provide a suitable surface for the FiberTite Roofing Systems with RhinoBond and/or meet desired thermal values.
- 2. Approved Products

Atlas AC Foam HS Coverboard.

PART 3 | EXECUTION

3.1 GENERAL

- 1. The authorized roofing contractor shall ensure strict compliance with FTR RB GS09/11; General Guide Specifications for Installation of FiberTite Roofing Systems with RhinoBond.
- 2. The roofing contractor shall provide a suitable substrate surface for the proper installation of the FiberTite Roofing Systems with RhinoBond, roof insulation and specified components.
- 3. Application of Seaman Corporation/FiberTite materials constitutes an agreement that the roofing contractor has inspected and found the substrate suitable for the installation of the FiberTite Roofing System.
- 4. The roofing contractor shall coordinate the installation to ensure that the system remains watertight at the end of each working day.

3.2 SUBSTRATE PREPARATION

The roofing contractor shall verifying that the deck condition and/or existing roof construction is suitable for the specified installation of the FiberTite Roofing Systems with RhinoBond.

Seaman Corporation requires fastener withdrawal values (pull out tests) on all reroofing projects to verify the suitability of decking to accept a mechanically fastened insulation system.

Examine surfaces for inadequate anchorage, low areas that will not drain properly, foreign material, ice, wet insulation, unevenness or any other defect that would prevent the proper execution and quality application of the FiberTite Roofing Systems with RhinoBond as specified.

Prepared substrate shall be smooth, dry, free of debris, and/or any other irregularities that would interfere with the proper installation of the FiberTite Roofing Systems with RhinoBond.

Do not proceed with any part of the application until all defects and preparation work have been corrected and complete.

Adhesives will not bond to wet, damp or inadequately cured lightweight insulating concrete or poured structural concrete.

3.3 SUBSTRATE PREPARATION (RE-ROOFING)

General

- 1. Roofing Contractor shall inform the building owner/owner representative of any issues in regard to the condition and structural integrity of the existing decking.
- 2. The building owner/owner representative shall make and be responsible for the determination as to the proper method of treatment and/or replacement.

- Re-roofing applications require fastener withdrawal tests to substantiate proposed attachment patterns for the new mechanically fastened insulation systems and/or membranes.
- 4. Re-roofing applications that require modification to the deck and/or insulation system should be installed to provide positive slope and subsequent positive drainage of the new FiberTite Roofing Systems with RhinoBond.
- 5. All terminations of the FiberTite Roofing Systems with RhinoBond must be constructed to prevent water from penetrating behind or beneath the new FiberTite Roofing Systems with RhinoBond. This includes water from above, beside, below and beneath the new system.

Removal of Existing Roof Materials

- Remove all existing flashing, metal and deteriorated wood blocking and legally dispose off-site.
- 2. Remove only enough to accommodate the day's work and ensure the exposed area can be made 100% watertight at the end of the day or first sign of inclement weather.

Steel and Wood Decks

- 1. All rotted and/or deteriorated decking shall be removed and replaced with like kind.
- 2. Areas of structurally acceptable steel decking exhibiting slight surface rust shall be properly cleaned, primed and painted prior to installing the approved insulation.
- All decking shall be inspected for proper attachment and excessive deflection that would compromise the uplift performance of the new FiberTite Roofing Systems with RhinoBond.
- **4.** Attachment and deflection deficiencies shall be repaired and brought into compliance with current, local building code requirements.

3.4 WOOD NAILERS

- 1. Install treated lumber at the same heights as insulation layer or adjacent construction $\pm 1/4$ " continuous treated wood nailers are to be installed at all perimeters, around roof projections and penetrations as shown in approved details.
- 2. Where wood nailers are installed directly on the substrate, the substrate shall be carefully examined to confirm that the entire area provides a suitable fastening surface. All defects shall be repaired by the appropriate trade prior to installation.
- 3. Nailers shall be at least 3½" wide and 1½" high and installed and anchored in such a manner to resist a force of 250 lbs per linear foot of wood blocking in any direction.

4. Nailers along parapets, curbs and expansion joints are recommended for insulated decking. Consult FiberTite Construction Details or FTCS for optional/alternate membrane termination/securement methods.

3.5 ROOF INSULATION

General

- 1. Roof insulation shall be installed where by the long dimension of the board(s) run in parallel alignment and the short dimensions are staggered.
- 2. Insulation shall be installed with minimum joint dimensions and shall be tightly butted where possible. Maximum joint widths shall be 3/8". Damaged corners shall be cut out and replaced with an insulation piece a minimum of 12" x 12" pieces that are cut from larger panels and are smaller than one square foot are not acceptable.
- 3. Install no more than can be covered during the same working day.
- 4. Taper roof insulation to drain sumps using tapered edge strips. If an insulation layer is 1½" or less, taper 12" from the drain bowl. If insulation thickness exceeds 1½", taper 18" from the drain bowl. All taper boards or pieces must be adhered or mechanically fastened with a minimum of two fasteners per board.
- 5. When a cover board and/or multiple layers are installed each layer shall be offset from the previous layer a minimum of 12" on center.
- **6.** At the end of each working day, provide a watertight cover on all unused insulation as to avoid moisture penetration.

RhinoBond Insulation Attachment - Plate Installation

- 1. Insulation shall be applied to and installed over properly prepared and preapproved substrates, free of any debris, dirt, grease, oil or moisture.
- 2. All fasteners and RhinoBond stress plates for the mechanical attachment of insulation and/or cover board materials and subsequent induction bond of FiberTite Roofing Membrane shall be FTR Fasteners as provided by Seaman Corporation.
- All fasteners and stress plates shall be Factory Mutual Research approved for mechanical attachment of insulation and comply with FM Standard 4470 for corrosion resistance.
- **4.** Install RhinoBond plates in a straight grid pattern using chalk lines. Proper plate layout will improve welding effectiveness.
- 5. Perimeter areas require a fastener tributary area decrease that is no greater than 60% of the field tributary per fastener.
- 6. Corner areas require a fastener tributary area decrease that is no greater than 40% of the field tributary per fastener.
- 7. Fasteners shall be installed flush with the substrate and not overdriven to the point of promoting plate deformation.

8. Fasteners shall be installed using depth sensing tool attachments to ensure proper installation.

3.6 INSTALLATION OF FIBERTITE MEMBRANE

Quality Control

- It is the responsibility of the roofing contractor to initiate and maintain a Quality Control (QC) program to govern all aspects of the installation of the FiberTite Roofing Systems with RhinoBond.
- 2. The project foreman and or supervisor will be responsible for the daily execution of the QC program, which will include, but is not limited to, the supervision, inspection and probing of all heat welded seams and induction welded plates incorporated within the FiberTite Roofing Systems with RhinoBond.
- 3. If inconsistencies in the quality of the application of the composite, membrane and/or welds are found, all work shall cease until corrective actions are taken to ensure the continuity the installation.

General

- 1. Work shall be coordinated to ensure that sequencing of the installation promotes a 100% watertight installation at the end of each day.
- 2. All FiberTite Roofing Systems with RhinoBond shall be designed utilizing and determined to be in compliance with the procedures outlined within the current publication of ASCE Standard 7. Alternative designs may be determined using the criteria within Factory Mutual Research Loss Prevention Data.
- 3. A FiberTite Roofing Systems with RhinoBond may utilize either conventional roll goods or custom pre-welded panel rolls.
- **4.** Restrictions regarding outside ambient air temperature are relative only to the exposure limits of the workers and/or adhesives when necessary.
- 5. When using adhesives outside ambient air temperature shall be above 40°F. Curing or drying time of the adhesive will be affected by ambient temperatures and must be taken into consideration when determining flashing lengths.
- 6. Humidity can affect the drying time of solvent borne adhesives and/or cause condensation to form on the newly applied adhesive.
- 7. No moisture may be present on the adhesive(s) prior to mating or application of FiberTite membranes.
- **8.** FiberTite Roofing Systems with RhinoBond shall only be installed over properly prepared and sound substrates, free from excessive surface roughness, dirt, debris and moisture.

FiberTite Membrane Installation

- 1. Unroll and position the FiberTite membrane and/or custom panel onto the properly prepared substrate, over the previously installed RhinoBond plates.
- 2. Install the membrane in a flat, relaxed position avoiding excess wrinkles and stretching.
- 3. Adjoining rolls shall overlap a minimum of 2", properly shingled with the flow of water wherever possible.
- 4. Stager the factory seams in custom rolls to prevent adjacent factory welds from falling on top of one another.
- 5. The field membrane shall be properly affixed to wood blocking or restrained in an approved manner at all roof perimeters, walls, expansion joints, curbs and penetrations having any one dimension greater than 24" in length. Do not use RhinoBond plates for transitional attachment. (See Current FiberTite Construction Details)

General Welding

- 1. All field seams exceeding 10' in length shall be welded with an approved automatic welder.
- 2. All field seams must be clean and dry prior to initiating any field welding.
- 3. Remove foreign materials from the seams (dirt, oils, etc.) with MEK or authorized alternative.
- 4. Use clean white cotton cloths and allow approximately five minutes for solvents to dissipate before initiating the automatic welder. Do not use denim or synthetic rags for cleaning.
- Contaminated areas within a membrane seam will inhibit proper welding and will require a membrane patch.
- 6. All welding shall be performed only by qualified personnel to ensure the quality and continuity of the weld.
- 7. Keep the bottom of the induction RhinoBond tool and cooling magnets clean.
- 8. Continuous operation of the induction welding process can promote overheating of the cooling magnets. Periodically cool the magnets using clean water to prevent melting and/or scarring of the FiberTite membrane.
- 9. Follow the Induction Welder Tool manufacturer's recommendations for periodic cleaning and maintenance for the equipment.
- 10. All field seams exceeding 10' in length shall be welded with an approved automatic welder.
- 11. All field seams must be clean and dry prior to initiating any field welding.
- 12. Remove foreign materials from the seams (dirt, oils, etc.) with MEK or authorized alternative.

Hot Air Hand Welding

- 1. The lap or seam area of the membrane may be intermittently tack welded to hold the membrane in place.
- 2. The back interior edge of the membrane shall be welded first, with a thin, continuous weld to concentrate heat along the exterior edge of the lap during the final welding pass.
- 3. The nozzle of the hand held hot air welder shall be inserted into the lap at a 45° angle to the lap. Once the polymer on the material begins to flow, a hand roller shall be use to apply pressure at a right angle to the tip of the hand welder. Properly welded seams shall utilize a 1½" wide nozzle, to create a homogeneous weld, a minimum of 1½" in width.
- 4. Smaller nozzles may be used for corners, and other field detailing, maintaining a minimum 1" weld.

Automatic Hot Air Machine Welding

- 1. Proper welding of the FiberTite Membrane can be achieved with a variety of automatic welding equipment. Contact FTCS for specific recommendations.
- 2. Follow all manufacturer instructions for the safe operation of the automatic welder.
- 3. Follow local code requirements for electric supply, grounding and surge protection.
- **4.** The use of a dedicated, portable generator is highly recommended to ensure a consistent electrical supply, without fluctuations that can interfere with weld consistency.
- 5. Properly welded seams shall utilize a 1½" wide nozzle, to create a homogeneous weld, a minimum of 1½" width.

Induction Welding

- 1. Calibrate the induction welding tool by making test welds with the FiberTite membrane and the RhinoBond stress plates.
- 2. Make test welds using variable settings on the welder and then performing peel tests to examine continuity of the weld to the plate.
- 3. The lowest energy setting that creates the most comprehensive and continuous bond is the preferred setting.
- 4. All membrane shall be cleaned and dry prior to induction welding.
- 5. Immediately upon completion of the induction weld cycle at each stress plate, place the cooling magnet directly centered over the welded membrane/plate assembly.
- **6.** Repeat the welding and magnet cooling process for each and every RhinoBond plate in the installation assembly.

Inspection

- 1. The job foreman and/or supervisor shall initiate daily inspections of all completed work which shall include, but is not limited to the probing of all field welding with a dull pointed instrument to assure the quality of the application and ensure that any equipment or operator deficiencies are immediately resolved.
- 2. Ensure that all aspects of the installation (sheet layout, attachment, welding, flashing details, etc.) are in strict accordance with the most current FiberTite Roofing Systems Specifications and Details.
- 3. Excessive patching of field seams because of inexperienced or poor workmanship will not be accepted at time of Final Inspection for Warranty Acceptance.
- 4. Any deviation from pre-approved specifications and/or details requires written authorization from the FTCS prior to application to avoid any warranty disqualification.
- 5. It is the contractor, job foreman, and supervisor and/or quality control personnel to perform a final self inspection on all seams prior to requesting the inspection for warranty issuance by the FTCS.

3.7 FLASHING

- 1. Clean all vents, pipes, conduits, tubes, walls and stacks to bare metal. All protrusions must be properly secured to the roof deck with approved fasteners. Remove and discard all lead, pipes and drain flashing. Flash all penetrations according to approved details.
- 2. Remove all loose and/or deteriorated cant strips and flashing.
- **3.** Flash all curbs, parapets and interior walls in strict accordance with approved FiberTite details.
- 4. All flashing shall be adhered to properly prepared, approved substrate(s) with either FTR 190e or FTR-201 mastic applied in sufficient quantity to ensure total adhesion.
- 5. The base flashing of all membrane flashing shall extend out on to the plane of the deck, beyond the wood nailers to a maximum width of 8".
- 6. Vertical flashing shall be terminated no less than 8" above the plane of the deck with approved termination bar and counter-flashing or metal cap flashing.
- 7. When using FTR-201 as the adhesive, vertical wall flashing termination shall not exceed 40" without supplemental mechanical attachment of the flashing between the deck and the termination point of the flashing.
- **8.** Probe all seams with a dull, pointed probe to ensure the weld has created a homogeneous bond.

9. Install penetration accessories in strict accordance with approved details. Ensure penetration accessories have not impeded in any way the working specification. (Refer to the related trade for the technical specification).

3.8 METAL FLASHING

- 1. All perimeter edge details are to be fabricated from FiberClad Metal or utilize a prefabricated FiberTite Fascia System.
- 2. Ensure all fascia extend a minimum of 2" lower than the bottom of the wood nailers.
- **3.** Fasten all metal flashing to wood nailers or approved substrate with approved fasteners 8" on center.
- 4. Break and install FiberClad metal in accordance with approved details, ensuring proper attachment, maintaining ½" expansion joints and the installation of a minimum 2" bond breaker tape prior to sealing the joint.
- 5. Solidly weld FiberClad expansion joints with a 6" strip of FiberTite membrane welded to the FiberClad, covering the bond breaker tape (cover plates are optional).

Roof Drains

- 1. Flash all roof drains in accordance with FiberTite roof drain details.
- 2. Replace all worn or broken parts that may cut the FiberTite membrane or prevent a watertight seal. This includes the clamping ring and strainer basket.
- 3. Replace all drain bolts or clamps used to hold the drain compression ring to the drain bowl.
- 4. FiberTite non-reinforced 60 mil membrane shall be used for flashing the drain assembly. Drain assemblies and basins or sumps must be free of any asphalt or coal tar pitch residue prior to installation.
- 5. The drain target sheet should be sized and installed to provide for a minimum of 12" of exposed 60 mil on all sides of the drain.

Pitch Pans

- Every reasonable effort shall be made to eliminate the need for pitch pans including the removal of all existing pans. Contact FTCS for specific design alternatives and recommendations.
- 2. In the event of no alternative, fabricate pitch pans from Fiber Clad metal, installed in accordance with FiberTite details, ensuring proper attachment, maintaining a minimum of 2" clearance around the penetration.
- 3. Pitch pans shall be filled with non-shrinking grout to within 1" of the top of the pan. Allow the grout to dry and fill remainder of the pan with FTR-SLS pourable sealant.

- **4.** Pitch pans and the sealant will require periodic maintenance by the building owner's maintenance personnel.
- 5. Pitch pans are maintenance items and shall not be considered as part of the FiberTite warranty.

3.9 EXPANSION JOINTS

- Flash all expansion joints in accordance with authorized details. Fasten all expansion
 joint material according to FiberTite specifications. Ensure the expansion material
 has sufficient material to expand to the widest point in expansion without causing
 undue stress on the expansion joint material.
- 2. If the expansion joint is a pre-formed system, the manufacturer, description and a drawing illustrating the method of installation must be included when the FiberTite Pre-Installation Notice is submitted.
- 3. Pitch pans shall be filled with non-shrinking grout to within 1" of the top of the pan. Allow the grout to dry and fill remainder of the pan with FTR-SLS pourable sealant.

3.10 SEALANTS

- 1. Apply authorized sealant(s) to all surface mounted reglets and per project requirements. Sealant(s) are to shed water. Follow all manufacturer's instructions and installation guides.
- 2. Use primer when recommended by the manufacturer.
- 3. Sealants will require periodic maintenance by the building owner's maintenance personnel.

3.11 TEMPORARY SEALS

- At the end of each working day or at the sign of rain, install temporary, 100% watertight seal(s) where the completed new roofing adjoins the uncovered deck or existing roof surface.
- The authorized roofing contractor shall create and maintain the temporary seal in such a manner to prevent water from traveling beneath the new and/or existing roof system.
- 3. The use of plastic roofing cement is permissible when sealing to an existing built up roof.
- 4. If water is allowed to enter beneath the newly completed roofing, the affected area(s) shall be removed and replaced at no additional expense to the building owner.
- 5. Prior to the commencement of work, cut out and remove all contaminated membrane, insulation, roof cement or sealant and properly dispose off site.

3.12 WALKWAYS

FiberTite walkways and protection pads shall be installed at staging areas for rooftop equipment maintenance or areas subject to regular foot traffic. Provide a FiberTite walkway around all roof top equipment requiring service or maintenance foot traffic. Provide a walkway with FiberTite walkway protection to connect all equipment maintenance areas to protect against puncture of FiberTight membrane.

Walkway Installation

- 1. Roofing membrane to receive walkway material shall be clean and dry.
- Cut and position the FiberTite walkway material as directed by the specifications or agreement.
- 3. Hot air weld the entire perimeter of the walkway to the previously cleaned FiberTite roofing membrane. Avoid excessive heating of the walkway material to prevent scorching the underlying roofing membrane.

Protection Pad Installation

- 1. Roofing membrane to receive walkway material shall be clean and dry.
- 2. Prior to installing the FiberTite protection pads (1/4" x 2' x 4'), weld a 6" x 6" strip of FiberTite membrane to each of the four corners of the back side of the pad. Position the strips in such a way that they overhang the edge of the pad a minimum of 2" around the 90° corner.
- **3.** Position the FiberTite protection pads as directed by the specifications or agreement and weld the visible portion of the previously applied stripping to the FiberTite roofing membrane.

3.13 LIGHTNING PROTECTION

- 1. The installation of lightning protection must be coordinated with the authorized FiberTite roofing contractor, certified lightning contractor and the building owner
- The lightning protection must be installed in such a manner that base plates, air terminals and cables do not penetrate the roofing membrane without the use of pre-approved flashing details.
- 3. Cables and air terminals may be attached to the membrane using base plates and an approved construction adhesive or by welding intermittent strips of FiberTite membrane over the base plates and cables to the FiberTite roofing. Contact FTCS for specific adhesive recommendations.
- **4.** Recommendations regarding the selection of adhesives or alternative affixing of lightning protection systems to the FiberTite membrane does not in any way imply a warranty covering their performance or ability of the adhesives to remain affixed to the FiberTite membrane.

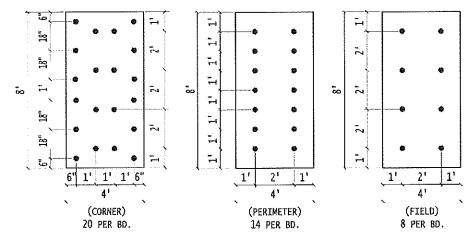
3.14 COMPLETION

- 1. Remove any and all debris, excess materials and scrap of any kind from the roof and surrounding premises prior to demobilization.
- 2. Inspect all field welds, detailing and terminations to ensure a 100% watertight installation.

3.15 WARRANTY INSPECTION

- 1. Upon completion of the project, the authorized roofing contractor shall complete and submit the FiberTite Project Completion Notice to FTCS.
- Upon receipt of the notice of completion, a FTCS representative will schedule an
 inspection with a representative of the authorized roofing contractor to thoroughly
 review the installation and verify compliance with Seaman Corporation
 specifications.
- 3. Any corrections or modifications necessary for compliance with the specifications and acceptance for warranty (punch list) will be noted on the Final Inspection for Warranty Form.
- 4. Upon completion of all punch list items and final acceptance of the installation, a warranty as authorized by the approved Seaman Corporation/FiberTite Pre-Installation Notice will be issued.

END OF SECTION FTG-RB GS11/13



2' X 2' RhinoBond FASTENING PATTERN : FIELD, PERIMETER & CORNER ATTACHMENT CLASS 1-135 RATING

NOTE:

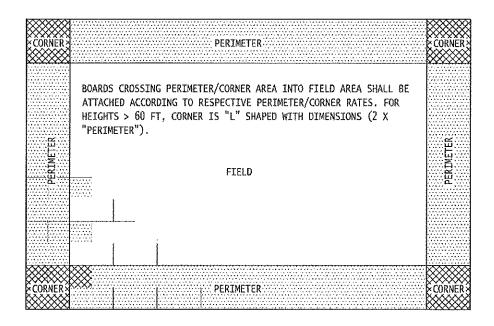
REFER TO DETAIL FTR-RBS1 FOR PROPER PLATE SECUREMENT TO ENSURE MAXIMUM MEMBRANE TO PLATE BONDING. WHEN INSTALLING MULTIPLE LAYERS OF INSULATION, ALL END JOINTS SHALL BE STAGGERED.



GENERAL REFERENCE:
"FTR-RB GS09/11"
APPLICABLE SYSTEMS:

	ATTACHME	
(CLASS R	ATING 1-13	35)

	REVISES DETAIL	ISSUE DATE	DRAWING NUMBER
-	ALL PREVIOUS	08-13-13	FTR-RBIA1



PERIMETER AND CORNER WIDTH DIMENSIONS ARE DETERMINED BASED ON THE LESSER PRODUCT DERIVED BY MULTIPLYING THE BUILDING HEIGHT BY .4 (40%) OR THE LESSER BUILDING DIMENSION BY .1 (10%).

FTR APPROVED INSULATION INSTALLED IN THE FIELD OF THE ROOF IS SECURED IN ACCORDANCE WITH THE APPLICABLE CODE RATING REQUIREMENTS AND ENHANCED IN THE PERIMETER AND CORNER AREAS OF THE ROOF BY THE FOLLOWING FACTORS: PERIMETER - 50% INCREASE OVER THE FIELD SECUREMENT RATE CORNER - 100% INCREASE OVER THE FIELD SECUREMENT RATE

NOTE:

REFER TO DETAIL FTR-RBIA1 FOR TYPICAL RhinoBond ATTACHMENT METHODS. WHEN INSTALLING MULTIPLE LAYERS OF INSULATION, ALL END JOINTS SHALL BE STAGGERED.



GENERAL REFERENCE: "FTR-RB GS09/11" APPLICABLE SYSTEMS:

RhinoBond FIELD, PERIMETER & CORNER ATTACHMENT DESIGNATIONS

		gg pipt man too s fili impos fili mynn e o o na nass ramnad in ann ara s panga, a
REVISES DETAIL	ISSUE DATE	DRAWING NUMBER
ALL PREVIOUS	07-24-12	FTR-RBIA2

Common Problems that may Result in Bid Being Rejected

The following is a listing of some of the more common mistakes/problems that may result in bid being rejected. This is only a partial listing therefore, the General Specifications and Technical Specifications should be thoroughly reviewed before submitting a bid.

Failure to sign and notarize the bid.
Failure to fill out the bid in ink, typewriter or via computer.
Failure to initial price changes.
Taking exceptions.
Failureto meet the minimum requirements of the specifications.
Failure to provide all required information/documentation.
Failure to deliver the bid on time to the proper location.
Failure to sign and return all addenda which may have been issued.
Failure to answer all questions or meet minimum requirements as

Attachments

ST. PETERSBURG COLLEGE

INVITATION TO BID, SPC PROJECT SPC#05-14-15
EpiCenter, TECH BUILDING ROOF RESTORATION
EpiCenter CAMPUS 13805 58th STREET, CLEARWATER, Fl. 33760

Contractors Registration Form

Anyone interested in doing business with St. Petersburg College is requested to complete the Contractors Registration Form. The completed Contractors Registration Form is not a guarantee of an opportunity to bid, but will help us in evaluating your business for bidding opportunities.

Business Name:	
Mailing Address (Street/P.O. box):	
City:	State: County:
	Zip Code:
Contact Person:	Title:
Telephone #:	Fax #:
Email Address:	
Is your company certified by the State of Florida's Office of Susiness?	Supplier Diversity as a Minority/Woman owned
If Yes, identify certification:	- if galalag is available online
Please forward a current catalog or provide a website address Website Address:	ss it catalog is available offinie.
Type of business/service offered:	
Please return the completed Contractors Registration	on Form to:
St. Petersburg College Facilities Services Department, Room No. 252 P.O. Box 13489 St. Petersburg, FL 33733-3489	
OR -	
<u>Fax to</u> : (727) 444-6710	

ST. PETERSBURG COLLEGE

INVITATION TO BID, SPC PROJECT SPC#05-14-15 EpiCenter, TECH BUILDING ROOF RESTORATION EpiCenter CAMPUS 13805 58th STREET, CLEARWATER, Fl. 33760

BID FORM

The undersigned, having of	carefully read the Invitation to Bid and contract documents,
conditions, and general,	technical specifications of Bid No. SPC#05-14-15 for EpiCenter, TECH
Roof Restoration, EpiCente	er Campus hereby submits bid pricing for the described services as follows:
1. Raco hid Š	EniCenter TECH Roof Restoration
EpiCenter Campus as per c	EpiCenter, TECH Roof Restoration, ontract documents and specifications herein.
	ent of existing damaged cupped or warped Polyisocyanurate insulation in \$
/ per sf	<u></u>
DATE:	
FIRM NAME:	
BY:	Authorized Signature
	Printed/Typed Name of Signature
TITLE:	
ADDRESS:	
PHONE/FAX:	
EMAIL ADDRESS:	

Bid Tender /Contractor's Qualification Statement

The undersigned certifies under oath the truth and correctness of all statements and all answers to questions made hereinafter. In order to qualify for bid, Contractor must comply with minimum qualifications as described in the statements below. Failure to include references will disqualify your firm.

Su	bmitted to:	ST. PETERSBURG COLLEGE/Facilities Services Director Bid No. SPC#05-14-15
Submitted by:		Name:
1.	Your company	has been in business 10 years or more? YES NO
2.	Your company	has performed at least 3 projects in the State of Florida in the last 5 years? \Box YES \Box NO
3.	Your company	has performed 3 successful ROOF RESTORATION projects in the last 8 years?
4.	ls your compa	ny a certified FiberTite installer?
	IF YES, PROVII	DE NARRATIVE OF SCOPE OF WORK AND OWNER CONTACT INFORMATION FOR EACH PROJECT:
	PROJECT #2	
	PROJECT #3	
	•	
4.	Has your com	pany, partners, or authorized officer ever failed to complete a contract? YES NO
5.	Your company	's main business is in RESTORATION OF ROOFING systems?

ANTI-COLLUSION STATEMENT: The below signed bidder has not divulged to, discussed or compared his/her proposal with other bidders and has not colluded with any other bidders or parties to this invitation to bid whatsoever. (NOTE: No premiums, rebates or gratuities permitted either with, prior to, or after any delivery or personal contact. Any such violation will result in the cancellation of this proposal and the removal from bid lists.)

Dated at		th	nis	day of	, 201
Name of Compan	y:				
Ву:					
Printed Name of s	igner:	(Autho	rized signatu	re)	
Title:					
Telephone:			Fax:		
			NOTARIZATION		
The foregoing Bid before me this	Tender-Cor	ntractor's Qu day of		atement was Sworn to	and subscribed , 2015. The
individual signing identification:		is Personal		or produc	- ed appropriate
				Signature of Notary	
			Notary Pu	blic–State of	
			My Comm	ission expires:	
		_		ped or stamped commis	ssioned)

Drug Free Workplace Certification

In accordance with Florida Statute 287.087, preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the contractors submitting identical bids have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- I. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- **3.** Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (I).
- 4. In the statement specified in subsection (I), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendre to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
- **5.** Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- **6.** Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

CONTRACTOR'S SIGNATURE	

Minority and Woman Owned Business Declaration

٧	rirtue of the following: Type of Business: Check applicable block(s)
	"African American" includes persons having origins in any of the Black racial groups of Africa.
	"Hispanic American" includes persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish cultures or origins, regardless of race.
	"Native American" includes American Indians, Eskimos, Alaskan Indians, Aleuts and Native Hawaiians.
	"Asian-American" includes persons whose origins are from Japan, China, Taiwan, Korea, Southeast Asia, the Philippines, Samoa, Guam, the U.S. Trust Territories of the Pacific, and Northern Marianas.
	"American Woman-Owned Business Enterprise"
	"Service-Disabled Veteran"
v t is	Note: MBE and WBE are defined by Federal Register 49 CFR, Part 23, as a business firm which as at least fifty-one percent (51%) owned by minority or women group members, or in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by the minority or woman. The minority or woman ownership must exercise actual day to day management and control of the business.
Ē	Bidder:
	Certified by (name of Public Entity, if applicable)
C	City: County:
S	State: Zip Code
7	Certificate Number: Attach cop
S	Gignature: Date:

Minority and Woman Owned Businesses (M/WBE) shall complete this page, and return with their submittal

Statement of no Proposal EpiCenter, TECH BUILDING ROOF RESTORATION SPC#05-14-15

If your company does not intend to bid on this procurement, please complete and return this form prior to the date shown for receipt of bids to: St. Petersburg College, Facilities Department, P.O. Box 13489, St. Petersburg, Florida 33733-3489.

The undersigned declines to bid on the above referenced Invitation to Bid for the following reason(s): Specifications are too "restrictive." (please explain below) Unable to meet specifications Specifications were unclear. (please explain below) Insufficient time to respond We do not offer this type of service or equivalent Our schedule would not permit us to perform Other (please explain below) **REMARKS:** Telephone Company Name Fax Signature **Email Address** Title Typed or Printed Name Address City State Zip