

1.0 GENERAL

1.1 REQUIREMENTS

- A. Furnish and install a new weather and watertight --- Foam adhered and Mechanically attached Verea Barrel Tile Grade 1 Roofing System with Polyglass Polystick TU Plus self-adhering underlayment that complies with Notice of Acceptance No. 22-1202.03, Notice of Acceptance No. 22-1221.01, Notice of Acceptance No. 22-1202.01, and Florida High Wind Concrete and Clay Tile Installation Manual, FRSA-TRI 7th Edition.

1.2 PROJECT SCOPE

- A. Roofing Contractor shall furnish all labor, materials, tools, equipment, and supervision necessary to complete the removal of existing barrel tile roofing system and installation of a new Roofing System including roof related insulation and/or cover-boards, flashings, accessories, and related metalwork at the Boca Grande Community Center.
- B. Roofing Contractor shall furnish all labor, materials, tools, equipment, and supervision necessary to complete the repair of existing s-tile roofing system including damaged flashing over front entry at the Boca Grande Island School (Notice of Acceptance No. 22-1202.01).
- C. The roofing contractor shall be an "Authorized Roofing Contractor" in good standing and be fully knowledgeable of all the requirements within the contract documents as well as all job site conditions that could affect their work.
- D. The roofing contractor shall confirm all given information and notify the building COUNTY / COUNTY's representative, prior to bid, of any conflicts that will affect the quality or cost of the proposal.
- E. The roofing contractor shall make all necessary repairs to roof decking prior to installation of new roof system.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain all components including roof insulation and/or cover-board, fasteners adhesives and other accessories as required, from the approved manufacturer.
- B. The roofing contractor shall maintain an adequate number of skilled workers who are thoroughly trained and experienced in the necessary crafts, and who are completely familiar with the specified requirements and methods necessary for the proper performance of the work. No allowance will be made for lack of skill on the part of the workers.
- C. Any deviations from contract, drawings and/or specifications must be submitted in writing to the COUNTY / COUNTY's representative for acceptance / approval prior to implementation.
- D. Upon completion of the roof installation the roofing contractor shall arrange for a quality assurance / warranty inspection by the Technical Service Department of the approved manufacturer. Notice of the inspection date and time will be given to the COUNTY / COUNTY's representative at least 72 hours prior to the inspection taking place.

1.4 REFERENCES

- A. Notice of Acceptance No. 22-1202.03.
- B. Notice of Acceptance No. 22-1221.01.
- C. Notice of Acceptance No. 22-1202.01 (Boca Grande Island School Repair).
- D. Florida High Wind Concrete and Clay Tile Installation Manual, FRSA-TRI 7th Edition and all references contained therein.
- E. Current Florida Building Code at time of roof replacement and all references contained therein.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. 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.
- B. 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.
- C. All roofing materials 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.)
- D. 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.)
- E. Adhesives and sealants shall be safely stored between 50° F and 80°F prior to use.
- F. 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.
- G. Materials, having been determined by the COUNTY/COUNTY's representative to be damaged, shall be immediately removed from the construction site and replaced at no cost to the COUNTY.

1.6 COORDINATION

- A. Prior to installation of materials, a pre-roofing conference shall be held with the roofing contractor and COUNTY/COUNTY's representative(s) and representatives of all trades that may be working on the roof to discuss the specified roofing system, coordinate its proper application and the expectations of all parties involved. The authorized roofing contractor and the COUNTY/COUNTY's representative shall notify all parties a minimum of fourteen days prior to the meeting.
- B. Plan and coordinate the installation of the roofing system with other trades in such a manner to avoid building and roofing system damage, keeping the complete installation weather tight and in accordance with all approved details and warranty requirements.
- C. Topics of discussion at the pre-construction meeting may include the following:
 - 1. Utility Usage
 - 2. Sanitary Facilities
 - 3. Material Storage Areas

4. Roof loading areas
5. Site Access
6. Roof Access
7. Project security
8. Rooftop Penetrations
9. Completed Roof Protection
10. Employee parking

1.7 JOB CONDITIONS

A. Safety

1. Take all necessary precautions regarding worker health and safety when using solvents, adhesives, and hot asphalt.
2. Store flammable liquid and materials away from open sparks, flames, and extreme heat.
3. Take necessary precautions when using solvents and adhesives near fresh air intakes.
4. Comply with all OSHA requirements for construction. It is the roofing contractor's responsibility to comply with all state, federal and local codes, guidelines, and safety requirements.
5. Daily site cleanup shall be performed to minimize debris and hazardous congestion.
6. Roof work involves handling combustible and heavy materials at height, on some occasions directly over other trades working below the roof deck or in cases of occupied buildings, over building occupants. Extreme caution will be utilized when installing the roof to prevent injury to roofing personnel, other trades, building occupants and to property. Listed below is a partial list of safety requirements, additional requirements exist in order to comply with OSHA and jobsite regulations.
7. Material Safety Data Sheets (MSDS) shall be maintained on the jobsite for any and all roofing materials being stored or installed on the project.
8. Fire suppression equipment will be readily available on the roof top whenever combustible roofing material is being handled. Protect against fire and flame spread at all times.
9. Roofing contractor will establish a safety plan and rooftop evacuation procedures and brief his personnel on appropriate emergency actions.

B. Protection

1. Schedule installation sequence to limit access and utilization of the newly installed roofing 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 installed roof.
4. Protect building walls, rooftop units, windows, and other components during

installation. Damages incurred during the duration of the project will be repaired at no expense to the owner.

C. 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 Manufacturers Technical Rep 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, underlayment, roofing, 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 off-site.
6. If a condition is discovered that is not covered by the project drawings and specifications notify the COUNTY/COUNTY's representative immediately and resolve the conflict. Take appropriate steps to prevent water intrusion into the roof system until such conflict is resolved and roofing operations are continued.

1.8 WARRANTY

- A. Provide manufacturer's Verea Lifetime Limited Warranty. All materials to be supplied by Verea manufacturer to be covered under warranty.
- B. Provide contractor's warranty covering leaks caused by installation workmanship for a period of TWO years.

2.0 PRODUCTS

2.1 GENERAL

- A. All roofing system components shall be manufactured or supplied by approved manufacturer.
- B. Unless approved otherwise prior to project bid, all roofing components are to be manufactured or supplied through approved manufacturer and be included in the warranty coverage.

3.0 EXECUTION

3.1 GENERAL

- A. The latest manufacturer specifications and installation techniques are to be followed along with the following additional requirements. These specific minimum requirements must be accounted for in the contractors bid / proposal and shall not be altered.
- B. The roofing contractor is responsible for providing a suitable substrate surface for the proper installation of the approved roofing system, roof insulation, and specified

components.

- C. The roofing contractor shall examine all areas and conditions whereby work in this section is to be installed.
- D. Notify the Building COUNTY / COUNTY Representative of any and all conditions detrimental to the proper and timely execution of the work. Do not proceed until such conditions have been corrected to the satisfaction of the COUNTY / COUNTY's representative.
- E. Commencement of roofing operations indicates the roofing contractor's acceptance of the roofing substrate for roof application.

3.2 SUBSTRATE PREPARATION

- A. Surfaces scheduled to receive new roofing system shall be free of any standing water, dew, ice, loose debris or any other contaminate that could impair the quality of the installation.
- B. Substrate shall be smooth, clean, and free of sharp edges and or projections and obvious depressions that would interfere with the installation.
- C. Prepared substrate shall be smooth, dry, and free of debris and/or any other irregularities which would interfere with the proper installation of the roofing system.
- D. Do not proceed with any part of the application until all defects and preparation work have been corrected and complete.
- E. Adhesives will not bond to wet, damp or inadequately cured lightweight insulating concrete or poured structural concrete.
- F. All components of the Roofing System must be constructed to prevent water from penetrating behind or beneath the new Roofing System. This includes water from above, besides, below, and beneath the new system.

3.3 REMOVAL OF EXISTING ROOFING SYSTEM.

- A. Remove all existing roofing system components to roof deck.
- B. Remove only enough roofing to accommodate the day's work and ensure the exposed area can be made 100% watertight at the end of the day or prior to inclement weather.

3.4 RECOVER EXISTING ROOF DECK.

- A. Remove all loose debris and/or vacuum and legally dispose of off-site.
- B. Remove and replace all damaged, defective, or deteriorated roof decking with like kind.
- C. Clean all exposed metal surfaces such as pipes, pipe sleeves, drains, duct work, etc., by removing loose paint, rust and any asphalt or coal tar pitch of any kind. Remove and properly discard lead sleeves at soil stacks.
- D. Existing Roof Decking
 1. Deteriorated decking shall be repaired and/or replaced with appropriate materials according to standard industry regulations and practices.
 2. Repair any depressions and/or areas where reinforcing has become exposed.
 3. Prior to installing new roofing system, the decking will be re-attached to meet current building code requirements.

3.5 INSTALLATION - GENERAL

- A. Perform all related work specified in other sections of the contract documents necessary for the proper installation of the roofing system.
- B. Ensure mechanical fasteners do not penetrate items located within or secured to the bottom of the deck: i.e. electrical conduit, post tension cables or other miscellaneous items.
- C. Outside ambient air temperatures must be 40°F and rising during the use of all adhesives or self-adhering materials.

3.6 ROOFING SYSTEM INSTALLATION – GENERAL

A. Quality Control

- 1. It will be the responsibility of the roofing contractor to initiate and maintain a QC program to govern all aspects of the installation of the Roofing System.
- 2. The project foreman and or supervisor will be responsible for the daily execution of the QC program.
- 3. If inconsistencies in the quality of the application of the roofing system are found, all work shall cease until corrective actions are taken to ensure the continuity the installation.

B. 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. Restrictions regarding outside ambient air temperature are relative only to the exposure limits of the workers and/or adhesives when necessary.
- 3. 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.
- 4. Humidity can affect the drying time of solvent borne adhesives and/or cause condensation to form on the newly applied adhesive.
- 5. No moisture may be present on the adhesive(s) prior to mating or application.

3.7 ROOFING SYSTEM SECUREMENT – FOAM ADHERED AND MECHANICALLY ATTACHED

- A. The authorized roofing contractor shall assume full responsibility for any and all irregularities, defects or quality issues that arise due to failure to following published installation guidelines for the proper installation of specified roofing systems.

3.8 INSPECTION

- A. The job foreman and/or supervisor shall initiate daily inspections of all completed work to assure the quality of the application and ensure that any equipment or operator deficiencies are immediately resolved.
- B. Ensure that all aspects of the installation (sheet layout, attachment, welding, flashing details, etc.) are in strict accordance with the most current manufacturer Specifications and Details.
- C. Any deviation from pre-approved specifications and/or details requires written authorization from the Manufacturer Technical Services prior to application to avoid

any warranty disqualification.

3.9 METAL FLASHING

- A. Install metal flashing in accordance with Manufacturer Specifications and Construction Details.
- B. All metal flashing, drip edge, gutters, boots, and accessories required to be removed prior to roof replacement will be replaced with similar components and installed in accordance with all state and local building codes.

3.10 COMPLETION

- A. Remove any and all debris, excess materials and scrap of any kind from the roof and surrounding premises prior to demobilization.
- B. Inspect all work completed to ensure a 100% the watertight installation.

3.11 WARRANTY INSPECTION

- A. Upon completion of the project, the authorized roofing contractor shall complete and submit the Manufacturer Warranty Registration Form.
- B. Upon receipt of the notice of completion, a Technical Representative of the Manufacturer shall schedule an inspection with a representative of the authorized roofing contractor to thoroughly review the installation and verify compliance with Manufacturer specifications.
- C. 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.
- D. Upon completion of all punch list items and final acceptance of the installation, a warranty as authorized by the Manufacturer will be issued.