

ADDENDUM TWO

DATE: 11 December 2015

PROJECT: Roof and HVAC Replacement
Quitman County Schools
Quitman County, Mississippi

FROM: **DALE | BAILEY** an ASSOCIATION
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**1.1 NOTICE TO ALL BIDDERS**

- A. This Addendum is issued to all registered plan holders pursuant to the Instructions to Bidders and Conditions of the Contract. This Addendum serves to clarify, revise, and supersede information in the Project Manual, Drawings, and previously issued Addenda. Portions of the Addendum affecting the Contract Documents will be incorporated into the Contract by enumeration of the Addendum in the Owner/Contractor Agreement.
- B. The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form.
- C. The date for receipt of bids is unchanged by this Addendum, at same time and location.

1.2 REVISIONS TO DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

- A. SECTION 001113 – ADVERTISEMENT FOR BIDS. Revise the following items as follows:
 - 1. Bid proposals must be received on or before the scheduled time for opening of bids and no bid may be withdrawn after the declared closing time for the receipt of bids for a period of ~~ninety~~ sixty (60) days.

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2. The Owner reserves the right to waive any irregularities, the right to reject any or all bids and the option to postpone action and final decision for a period of up to ~~ninety (90)~~ sixty (60) days.

B. SECTION 004113.01 – BID FORM. Stipulated sum (Single-Prime Contract) – Contract A - Roof replacement.

1. Add alternate 1 to the bid form. The revised bid form dated 11 December 2015 is attached.

1.3 REVISIONS TO DIVISION 01 – GENERAL REQUIREMENTS

A. Add Section 012300 – Alternates.

1. This section is attached to this addendum.

1.4 REVISIONS TO DIVISIONS 02 – 49 SPECIFICATION SECTIONS

A. Division 07, Section 075216 – Styren-Butadiene-Styrene (SBS) Modified Bituminous Membrane Roofing.

1. Hot asphalt may be used for attachment of this modified bitumen roofing system and the insulation required. Hot asphalt may only be used when the children are not present at the school.

B. Add Specification Section 075423 – Thermoplastic Polyolefin (TPO) Roofing.

1. This section is attached to this addendum.

1.5 REVISIONS TO DRAWING SHEETS

A. Reference Contract A – Roof Replacement Drawings.

1. Add General Note 1: Provide new wood blocking for all conditions (i.e. fascias, curbs, miscellaneous accessories) in areas where new roofing is required.
2. Add General Note 2: At the Bus Shop building, the base bid shall include replacement of 50 square feet of 1 1/2" thick wood roof decking and 50 linear feet of 2 x 12 wood roof framing.

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1.6 ATTACHMENTS

- A. Bid Form – Stipulated Sum (Single-Prime Contract) – Contract A – Roof Replacement
- B. Section 012300 – Alternates
- C. Section 075423 – Thermoplastic Polyolefin (TPO) Roofing
- D. Prebid Sign-In Sheet dated 03 December 2015

END OF ADDENDUM TWO

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DOCUMENT 004113 - BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT) –
CONTRACT A – ROOF REPLACEMENT

1.1 BID INFORMATION

- A. Bidder: _____.
- B. Project Name: Contract A: Roof Replacement, Quitman County Schools.
- C. Project Locations:
1. Quitman County Elementary School, Highway 3 South, Lambert, MS 38643.
 2. Quitman County High School, 1315 Martin Luther King Drive, Marks, MS 38646.
 3. Quitman County School Bus Shop, Highway 6, Marks, MS 38646
- D. Owner: Quitman County School District.
- E. Architect: Dale | Bailey, an Association.
- F. Architect Project Number: 15095.

1.2 CERTIFICATIONS AND BASE BID

- A. Base Bid, Single-Prime (All Trades) Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Dale | Bailey, an Association and Architect's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

_____ Dollars
(\$_____).

1.3 THE ABOVE LUMP SUM PRICE INCLUDES THE FOLLOWING ALLOWANCE:

1. Lump Sum Contingency Allowance: Fifteen Thousand Dollars (\$15,000.00).
2. Quitman High School Roofing Contingency Allowance: Ten Thousand Dollars (\$10,000.00).

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1.4 ALTERNATE:

Additive Alternate 1: Add TPO roof system over arched metal roof area of the school bus shop.

_____Dollars

(\$_____).

1.5 BID GUARANTEE

- A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10 days after a written Notice of Award, if offered within 60 days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:

1. _____Dollars

(\$_____).

- B. In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.6 TIME OF COMPLETION

- A. The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed anticipated to be issued by the Architect no later than January 2, 2015, and shall fully complete the Work by July 15, 2016.

1.7 ACKNOWLEDGEMENT OF ADDENDA

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. 1, dated _____.
2. Addendum No. 2, dated _____.
3. Addendum No. 3, dated _____.
4. Addendum No. 4, dated _____.

1.8 BID SUPPLEMENTS

- A. The following supplements are a part of this Bid Form and are attached hereto.

Bid Form - Stipulated Sum (Single-Prime Contract) – Contract A: Roof Replacement

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1. Bid Form Supplement - Bid Bond Form (AIA Document A310).

1.9 CONTRACTOR'S LICENSE

- A. The undersigned further states that it is a duly licensed contractor, for the type of work proposed, in Mississippi, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.10 SUBMISSION OF BID

- A. Respectfully submitted this _____ day of _____, 20____.
- B. Submitted By _____
(Name of bidding firm or corporation)
- C. Authorized Signature: _____
(Handwritten signature)
- D. Signed By: _____
(Type or print name)
- E. Title _____
(Owner/Partner/President/Vice President).
- F. Street Address _____
- G. City _____ State, _____ Zip _____
- H. Phone: _____
- I. License No.: _____

END OF DOCUMENT 004113

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.

- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Alternate No. 1: This Alternate applies to the 60'-6" x 95' roof area located on the North portion of the School Bus Shop. This Alternate includes the following:

- 1. Delete requirement for Waterproofing in the perimeter gutter area that is depicted in detail 8 on drawing A5.

Fill in the flutes of the existing standing seam with 3" thick rigid insulation. Made for this application.

Screw down a cover board over the insulation.

Mechanically attach 45 mil TPO roof system over the cover board.

Provide tapered crickets that shall flow water to scupper locations.

Replace existing metal scuppers.

Run TPO membrane continuous from existing metal roofing, over existing gutter and up and over all parapet walls, providing a new metal coping on top of parapets.

END OF SECTION 012300

SECTION 075423 – THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section. See Section 01100 Alternate Bids, also.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Mechanically fastened membrane roofing system.
 - 2. Roof insulation.
 - 3. Vapor retarder.
 - 4. Substrate board.

1.3 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079 "Terminology Relating to Roofing and Waterproofing"; glossary of NRCA's "The NRCA Roofing and Waterproofing Manual"; and the Roof Consultants Institute "Glossary of Roofing Terms" for definition of terms related to roofing work in this Section.
- B. Sheet Metal Terminology and Techniques: SMACNA Architectural Sheet Metal Manual.

1.4 PERFORMANCE REQUIREMENTS

- A. General: Provide installed roofing membrane and Flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.
- C. Jobsite Safety: Execute all operations and provide a safe work environment in accordance to OSHA standards and regulations. This requirement applies to all contractor personnel, associated subcontractors, workers in other trades, and jobsite visitors.
 - 1. Follow all industry fire prevention guidelines for storage of materials, staging areas, roof access, and application means and methods.
 - 2. Any applicable local fire codes supersede industry guidelines.
- D. Roofing System Design: Provide a membrane roofing system that is identical to systems that have been successfully tested by a qualified testing and inspecting agency to resist uplift pressure calculated according to ASCE 7.
 - 1. Fire/Windstorm Classification: Class 1A-90.
 - 2. Hail Resistance: SH.

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other Work.
 - 1. Flashings and membrane terminations.
 - 2. Tapered insulation, including slopes.
 - 3. Insulation fastening patterns.
 - 4. Sheet layout with perimeter and corner defined.
- C. Samples for Verification: For the following products:
 - 1. Manufacturer's standard sample size of sheet roofing, of color specified, including T-shaped side and end lap seam.
 - 2. Manufacturer's standard sample size of walkway pads or rolls.
 - 3. Manufacturer's standard sample size of roof insulation.
 - 4. Manufacturer's standard sample size of metal termination bars.
 - 5. Manufacturer's standard sample size of substrate board.
 - 6. Two fasteners or each type, length and finish used for complete roofing installation.
- D. Installer Certificates: Signed by roofing system manufacturer certifying that Installer is approved, authorized, or licensed by manufacturer to install roofing system.
- E. Manufacturer Certificates: Signed by roofing manufacturer certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
 - 1. Submit evidence of meeting performance requirements.
- F. Qualification Data: For Installer and manufacturer.
- G. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of roofing system.
- H. Research/Evaluation Reports: For components of membrane roofing system.
- I. Maintenance Data: For roofing system to include in maintenance manuals.
- J. Warranties: Special warranties specified in this Section.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's warranty.
- B. Manufacturer Qualifications: A qualified manufacturer that has FMG approval for membrane roofing system identical to that used for this Project.
- C. Testing Agency Qualifications: An independent testing agency with the experience and capability to conduct the testing indicated, as documented according to ASTM E 548.

D. Test Reports:

1. Roof drain and leader test or submit plumber's verification.
2. Core cut (if requested).
3. Roof deck fastener pullout test.

E. Source Limitations: Obtain all components from single source roofing manufacturer.

F. Fire-Test-Response Characteristics: Provide membrane roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.

1. Exterior Fire-Test Exposure: Class A; ASTM E 108, for application and roof slopes indicated.
2. Fire-Resistance Ratings: ASTM E 119, for fire-resistance-rated roof assemblies of which roofing system is a part.

G. Preinstallation Conference: Conduct conference at Project site. Comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:

1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.
2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
3. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
4. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
5. Review structural loading limitations of roof deck during and after roofing.
6. Review Flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
7. Review governing regulations and requirements for insurance and certificates if applicable.
8. Review temporary protection requirements for roofing system during and after installation.
9. Review roof observation and repair procedures after roofing installation.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.

1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

1.8 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.9 GUARANTEE

- A. Provide manufacturer's system guarantee equal to Johns Manville's Peak Advantage No Dollar Limit Roofing System Guarantee.
 1. Single-Source special warranty includes roofing membrane, Flashings, roofing membrane accessories, roof insulation, fasteners, substrate board, vapor retarder, walkway products, and other single-source components of roofing system marketed by the manufacturer.
 2. Warranty Period: 15 years from date of Substantial Completion.
- B. Installer's Guarantee: Submit roofing Installer's warranty, signed by Installer, covering Work of this Section, including all components of roofing system such as roofing membrane, Flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, roof pavers, and walkway products, for the following warranty period:
 1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis of Design: Johns Manville Roofing Systems

2.2 THERMOPLASTIC POLYOLEFIN ROOFING MEMBRANE

- A. Fabric-Reinforced Thermoplastic Polyolefin Sheet: ASTM D 6878, uniform, flexible sheet formed from a thermoplastic polyolefin, internally fabric or scrim reinforced. Product: JM TPO
 1. Thickness: 45 mils nominal.

2.3 AUXILIARY MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with membrane roofing.
 - 1. Liquid-type auxiliary materials shall meet VOC limits of authorities having jurisdiction.
- B. Sheet Flashing: Manufacturer's sheet flashing of same material, type, reinforcement, thickness, and color as sheet membrane. Product: JM TPO
- C. Sheet Flashing: Manufacturer's unreinforced sheet flashing of same material as sheet membrane. Product: JM TPO Detail Membrane
- D. Bonding Adhesive: Manufacturer's standard solvent-based bonding adhesive for membrane, and solvent-based bonding adhesive for Flashings. Product: JM TPO Membrane Adhesive (Low VOC)
- E. Metal Termination Bars: Manufacturer's standard predrilled stainless-steel or aluminum bars, with anchors. Product: JM Termination Systems
- F. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer. Product: High Load Fasteners and Plates
- G. Expansion Joints: Provide factory fabricated weatherproof, exterior covers for expansion joint openings consisting of flexible rubber membrane, supported by a closed cell foam to form flexible bellows, with two metal flanges, adhesively and mechanically combined to the bellows by a patented bifurcation process. Provide product manufactured and marketed by single-source membrane supplier that is included in the No Dollar Limit guarantee. Product: Expand-O-Flash
- H. Coping System: Manufacturer's factory fabricated coping consisting of a base piece and a snap-on cap. Provide product manufactured and marketed by single-source membrane supplier that is included in the No Dollar Limit guarantee. Product: Presto-Lock Coping
- I. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, termination reglets, cover strips, and other accessories. Products: JM TPO Pourable Sealer A & B, JM TPO Pipe Boots, JM TPO Universal Corners, JM TPO Edge Sealant, JM TPO T-Joint Patch, JM TPO Membrane Cleaner, JM TPO Membrane Primer, JM TPO Polyurethane Caulk, JM TPO Sealing Mastic, JM TPO Cover Tape, JM TPO Detail Membrane, JM TPO-Coated Metal
- J. Roof Drain: One piece aluminum retro-fit drain manufactured of 0.064" spun 1100 aluminum alloy. Cast aluminum strainer with positive mechanical fasteners and U-Flow Seal providing mechanical watertight connection.

2.4 WALKWAYS

- A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads sourced from membrane roofing system manufacturer. Product: JM TPO Walkpad

2.5 INSULATION ACCESSORIES

- A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.
- B. Provide factory preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated. Product: Tapered Pre-Cut Cricket
- C. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roof insulation to substrate, and provided by roofing system manufacturer. Product: UltraFast Fasteners and Plates
- D. Urethane Adhesive: Manufacturer's two component urethane adhesive formulated to adhere insulation to substrate. Product: JM Two-Part Urethane Insulation Adhesive
- E. Insulation Cant Strips: ASTM C 728, perlite insulation board. Product: FesCant Plus
- F. Wood Nailer Strips: Comply with requirements in Division 06 Section "Rough Carpentry."

2.6 SUBSTRATE BOARD

- A. Substrate Board: ASTM C 1177/C 1177M, glass-mat, water-resistant gypsum substrate, 1/2 inch (13 mm) thick. Product: Securock.
- B. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening substrate panel to roof deck. Product: UltraFast Fasteners and Plates

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of roofing system:
 - 1. Verify that roof openings and penetrations are in place and set and braced and that roof drains are securely clamped in place.
 - 2. Verify that wood cants, blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.

- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 RE-ROOF PREPARATION

- A. Remove all roofing membrane, surfacing, coverboards, insulation, fasteners, asphalt, pitch, adhesives, etc. to the extent indicated on drawings.
 - 1. Remove an area no larger than can be re-roofed in one day.
- B. Tear out all base flashings, counterflashings, pitch pans, pipe flashings, vents and like components necessary for application of new membrane.
- C. Remove abandoned equipment curbs, skylights, smoke hatches, and penetrations.
 - 1. Install decking to match existing as directed by Owner's Representative.
- D. Immediately remove all debris from roof surface. Demolished roof system may not be stored on the roof surface.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.4 SUBSTRATE BOARD INSTALLATION

- A. Install substrate board with long joints in continuous straight lines, perpendicular to roof slopes with end joints staggered between rows. Tightly butt substrate boards together.
 - 1. Fasten substrate board to top flanges of steel deck according to recommendations in FMG's "Approval Guide" for specified Windstorm Resistance Classification.
 - 2. Fasten substrate board to top flanges of steel deck to resist uplift pressure at corners, perimeter, and field of roof according to roofing system manufacturer's written instructions.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.5 INSULATION INSTALLATION

- A. Coordinate installing roof system components so insulation is not exposed to precipitation or left exposed at the end of the workday.
- B. Comply with roofing system manufacturer's written instructions for installing roof insulation.
- C. Insulation Cant Strips: Install and secure preformed 45-degree insulation cant strips at junctures of roofing membrane system with vertical surfaces or angle changes greater than 45 degrees per manufacturer's instruction.
- D. Install tapered insulation under area of roofing to conform to slopes indicated.

- E. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.
- F. Install tapered edge strips at perimeter edges of roof that do not terminate at vertical surfaces.
- G. Preliminarily Fastened Insulation: Install insulation with fasteners at rate required by roofing system manufacturer or applicable authority, which ever is more stringent.
- H. Mechanically Fastened with Subsequent Layers Adhered Insulation: Secure first layer of insulation to deck using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to deck type.
 - 1. Fasten first layer according to requirements in FMG's "Approval Guide" for specified Windstorm Resistance Classification.
 - 2. Fasten first layer to resist uplift pressure at corners, perimeter, and field of roof.
- I. Proceed with installation only after unsatisfactory conditions have been corrected.

3.6 MECHANICALLY FASTENED ROOFING MEMBRANE INSTALLATION

- A. Install roofing membrane specification ST6RM over area to receive roofing according to roofing system manufacturer's written instructions. Unroll roofing membrane and allow to relax before installing.
- B. Start installation of roofing membrane in presence of roofing system manufacturer's technical personnel.
- C. Accurately align roofing membranes and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
- D. Mechanically fasten roofing membrane securely at terminations, penetrations, and perimeter of roofing.
- E. Always install membrane laps perpendicular to the steel deck flutes. "Picture Frame" installation method is not permitted.
- F. Apply roofing membrane with side laps shingled with slope of roof deck where possible.
- G. Seams: Clean seam areas, overlap roofing membrane, and hot-air weld side and end laps of roofing membrane according to manufacturer's written instructions to ensure a watertight seam installation.
 - 1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of roofing membrane.
 - 2. Verify field strength of seams a minimum of twice daily and repair seam sample areas.
 - a. Remove and repair any unsatisfactory sections before proceeding with Work.
 - 3. Repair tears, voids, and lapped seams in roofing membrane that do not meet requirements.
- H. Spread sealant or mastic bed over deck drain flange at deck drains and securely seal roofing membrane in place with clamping ring.

- I. In-Splice Attachment: Secure one edge of roofing membrane using fastening plates or metal battens centered within membrane splice and mechanically fasten roofing membrane to roof deck. Field-splice seam.
- J. Install roofing membrane and auxiliary materials to tie in to existing roofing.
- K. Proceed with installation only after unsatisfactory conditions have been corrected.

3.7 FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.
- B. Apply solvent-based bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with sheet flashing.
- D. Clean seam areas and overlap and firmly roll sheet flashings into the adhesive. Weld side and end laps to ensure a watertight seam installation.
- E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.
- F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.8 WALKWAY INSTALLATION

- A. Flexible Walkways: Install walkway products in locations indicated. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

3.9 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform roof tests and inspections and to prepare test reports.
- B. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion and submit report to Architect.
 - 1. Notify Architect or Owner 48 hours in advance of date and time of inspection.
- C. Repair or remove and replace components of membrane roofing system where test results or inspections indicate that they do not comply with specified requirements.
- D. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.10 PROTECTING AND CLEANING

- A. Protect membrane roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- B. Correct deficiencies in or remove membrane roofing system that does not comply with requirements, repair substrates, and repair or reinstall membrane roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

QUITMAN Co PREBID Roof U VAC

NAME	CO	EMAIL	CELL
GARY BAILEY	D/B	G.BAILEY@BAILEYARCH.COM	(601) 951-1820
Lt. Brand	B/SB Contract	D-Brand123@yahoo.com	402 9873
William F. Stover	Roofing Solutions	W.Stover@RoofingSolutionsLA.com	225 226 5995
Mitch Reflex	Independent Roofing	mitch@roofing.ms	662-515-4644