



March 12, 2026

Addendum 1

Bid No. 26-004-2022-PWI-004

City of Fairhope First Responder's Hurricane Safe Room

Public Works Project No. 2022-PWI 004

Addendum 1 contains clarifications, questions and answers submitted via email.

This bid will be opened at the City of Fairhope's City Services and Public Utilities Building, 555 South Section Street, Fairhope, AL 36532 at 2:00 PM on Tuesday, March 24, 2026. Vendors shall acknowledge this Addendum 1 on their submitted Bid Response Form.

Clarifications:

- Carlisle Sure-Flex KEE PVC roof system is an acceptable alternate provided the product meets or exceeds the basis of design including but not limited to design and warranty requirements.

Questions Submitted Via Email:

1. The Plans show a Fire Suppression Systems? Plans E100 (Auxiliary Legend) mentions the below 2 items:

TS / TS FIRE ALARM FIRE SPRINKLER SYSTEM VALVE TAMPER SWITCH

FS / FS FIRE ALARM FIRE SPRINKLER SYSTEM FLOW SWITCH

Please clarify that besides the hood system, the building will exist solely by fire alarm and not with fire suppression.

Answer: Neither fire alarm nor sprinkler systems are required.

2. What is the liquidated damages amount for this bid per day?

Answer: Liquidated damages are \$1,000.00 per day for each day beyond the construction contract.

3. Is this project Davis-Bacon?

Answer: Yes.

4. Is this federal grant funded (FEMA)?

Answer: Yes.

5. Could you help clarify the section below from Volume 1 of the manual for this project? Our initial interpretation is that this provision is intended to prevent a contractor from being awarded and then assigning work to another general contractor. However, we also want to confirm whether the language requires that more than 50% of the total contract value must be performed by personnel directly employed by the contractor. Any additional guidance on how the City applies this requirement would be greatly appreciated.

1.20 SUBLETTING OR ASSIGNING OF CONTRACT

Limitations: The CONTRACTOR shall not sublet, assign, transfer, convey, sell, or otherwise dispose of any portion of the CONTRACT, his right, title or interest therein, or his power to execute such CONTRACT, to any person, firm or corporation without written consent of the CITY, and such written consent shall not be construed to relieve the BIDDER of any responsibility for the fulfillment of the CONTRACT. Unless otherwise stipulated in the proposal or special provisions, the BIDDER shall perform with his own organization, and with the assistance of workmen under his immediate superintendence and reported on his payroll, all CONTRACT work of a value not less than 50 percent of the total CONTRACT amount, except that any items designated in the CONTRACT as "Specialty Items" so performed by SUB-CONTRACT may be deducted from the total CONTRACT amount before computing the amount of work required to be performed by the BIDDER with his own organization.

SUB-CONTRACTOR'S Status:

A SUB-CONTRACTOR shall be recognized only in the capacity of an employee or agent of the CONTRACTOR and the CONTRACTOR will be responsible to the CITY for all of the SUB-CONTRACTOR's work, including failures or omissions; and his removal may be required by the Project Manager, as in the case of an employee.

Answer: More than 50% of the contracted work, less any "specialty items," is required to be performed by the General Contractor and their direct employees.

6. It calls for Wall tile in bathroom 104 and Bathroom 105, there is not a tile section in the specification. Please advise what tile is to be used.

Answer: Our basis of design is Stonepeak, simply modern collection, thru-color porcelain tile (12x24).

7. The interior elevations of the bathroom don't indicate how high on the walls will need to go but it appears that it does not go all the way to the ceiling. Please advise the stopping height of the wall tile on the walls in the bathroom.

Answer: The tile is shown graphicly at 8'-0" above finished floor.

8. It calls for Tile cove base in bathroom 104 & 105 as well. Please advise if it will be any different than the wall tile that is to be used or if it will just be the same as the wall tile.

Answer: Our basis of design is Stonepeak, simply modern collection, thru-color porcelain tile cove base (6 x12).

9. Do you have a security system vendor yet or are you looking for bids for access control and CCTV systems?

Answer: No bids are needed.

10. Are there specs detailing what access control system will be used for this project along with part numbers?
Answer: **Access Control:** <https://store.ui.com/us/en/category/door-access-hub/products/ua-hubdoor>
 Door Panel: <https://store.ui.com/us/en/category/door-access-readers/collections/accessreader>
11. Are there specs detailing what camera and recording system will be used for this project along with the part numbers?
Answer: **The City already has a system.**
12. On sheet E102 I found three PTZ Camera locations. Are there specs for these or is this a design build bid?
Answer: **Fixed Camera:** <https://store.ui.com/us/en/category/cameras-dome-turret/products/uvcg6-pro-turret>
13. On sheet E102 I also see two doors showing Access Control (card readers, and door strike locks). Are there specs for these or is this a design build bid also.
Answer: **See above specifications for the controller and the panel.**
14. Will the ELEC/TELECOM ROOM 106 be used for the ACS panel and VMS Equipment?
Answer: **Yes.**
15. Do you have a telecom vendor yet? Our company has a cabling division that could supply and install the data network for this project also.
Answer: **Bidders shall include the telecom installation as part of their bid price.**
16. Can a brick product be specified or a brick allowance be provided?
Answer: Brick allowance shall be \$750.00 per thousand and should include brick material only. All other masonry accessories, mortar, labor and ALL other masonry items shall be included in the base bid amount.
17. There are no porcelain/ceramic tile specifications provided. Please advise on materials to be provided for items TCB and WT-1 as indicated in the finish schedule.
Answer: **Our basis of design is Stonepeak, simply modern collection, thru-color porcelain tile (12x24) and cove base (6x12).**
18. Sheet A301.3 references EFIS details on sheet A304.1. however, there is no sheet A304.1. Can these details be provided?
Answer: **Dryvit EIFS system is the basis of design, per specification section 072419 - EIFS Dryvit Outsulation Plus MD.**

19. Regarding the EIFS System:
- a. Can the following EIFS system be an approved equal? (Equal for the Specifications)
 - i. Parex Standard WaterMaster Continuous Insulation (CI) system consisting of Adhesive, Expanded Polystyrene Insulation (EPS) Board, Base Coat with embedded Reinforcing Fabric Mesh, Primer, and Finish Coat. This system is installed over a cementitious base coat. (See Note Below from manufacture)
 - ii. The Finish Coat would be Parex AquaSol: 100% acrylic polymer-based finish, enhanced DPR acrylic finish with hydrophobic and photocatalytic properties, repels water, reflects UV rays, Self-Cleaning, and reduces smog particles near the finish surface.
 - iii. Note from Manufacturer: When applying a water-resistive barrier over ICF block for a Parex USA WaterMaster System, 121 or 121 Dry base coat with Parex USA Standard Mesh 355 embedded is the recommend WRB. The ICF must be totally rasped prior to the application of the 121 base coat and mesh. Once the base coat has been applied and allowed to dry, the Parex USA WaterMaster System can then be installed following the Parex USA WaterMaster specifications. Important: Use the same 121 (wet or dry) to bond to the EPS as is used for the WRB.
 - b. And/or Can the following EIFS system be an approved equal? (Equal to system shown on A304.1 that was not included in the drawings for Fairhope, but were included in Elberta Safe Room drawings)
 - i. An exterior coating system consisting of Base Coat with embedded Reinforcing Fabric Mesh, Primer, and Finish Coat.
 - ii. 12 oz Reinforcing Mesh with a High Impact Base Coat to achieve an Ultra High (160 in-lb) Impact Resistant System.
 - iii. The Finish Coat would be Parex AquaSol: 100% acrylic polymer-based finish, enhanced DPR acrylic finish with hydrophobic and photocatalytic properties, repels water, reflects UV rays, Self-Cleaning, and reduces smog particles near the finish surface.

Answer: Dryvit EIFS system is the basis of design, per specification section 072419 - EIFS Dryvit Outsulation Plus MD.

20. Option: A) Can the following EIFS system be an approved equal? (Equal for the Specifications)
- (1) Parex Standard WaterMaster Continuous Insulation (CI) system consisting of Adhesive, Expanded Polystyrene Insulation (EPS) Board, Base Coat with embedded Reinforcing Fabric Mesh, Primer, and Finish Coat. This system is installed over a cementitious base coat. (See Note Below from manufacture)
 - (2) The Finish Coat would be Parex AquaSol: 100% acrylic polymer-based finish, enhanced DPR acrylic finish with hydrophobic and photocatalytic properties, repels water, reflects UV rays, Self-Cleaning, and reduces smog particles near the finish surface.

Note: When applying a water-resistive barrier over ICF block for a Parex USA WaterMaster System, 121 or 121 Dry base coat with Parex USA Standard Mesh 355 embedded is the recommend WRB. The ICF must be totally rasped prior to the application of the 121 base coat and mesh. Once the base coat has been applied and allowed to dry, the Parex USA WaterMaster System can then be installed following the Parex USA WaterMaster specifications. Important: Use the same 121 (wet or dry) to bond to the EPS as is used for the WRB.

OR,

Option: B) Can the following EIFS system be an approved equal? (Equal to system shown on A304.1 that was not included in the drawings for Fairhope, but were included in Elberta Safe Room)

(1) An exterior coating system consisting of Base Coat with embedded Reinforcing Fabric Mesh, Primer, and Finish Coat.

(2) 12 oz Reinforcing Mesh with a High Impact Base Coat to achieve an Ultra High (160 in-lb) Impact Resistant System.

(3) The Finish Coat would be Parex AquaSol: 100% acrylic polymer-based finish, enhanced DPR acrylic finish with hydrophobic and photocatalytic properties, repels water, reflects UV rays, Self-Cleaning, and reduces smog particles near the finish surface.

The plans call for the option B and the Specifications call for option A. In the past, we have completed a few "Safe Rooms" with ICF with Option "B". Please advise.

Answer: Dryvit EIFS system is the basis of design, per specification section 072419 - EIFS Dryvit Outsulation Plus MD.

21. Can specifications be provided for the aluminum canopies?

Answer: Canopies are pre-engineered overhead aluminum canopies, basis of design is Tennessee Valley Metals or approved equal, refer to attached specification as related to the delegated design of aluminum canopies.

22. Architectural drawings indicate sheetrock on ICF interior walls. The partition types indicate CMU with?" hat channels but the wall sections do not appear to have any hat channels. Will hat channels be required on the ICF walls for attachment of sheetrock?

Answer: The gypsum attachment is directly to the ICF per manufacturer of the ICF and their recommended attachment.

23. Will this project require compliance with the "Build America Buy America Act"?

Answer: BABAA does not apply to this project.

24. The civic drawings do not indicate a propane tank size and reference to coordinate with MEP drawings. There is no mention of the tank requirements in the MEP drawings. Can a tank size requirement be provided? Is the intent for the Contractor to provide the tank or for the propane service provider to provide the tank through their utility service agreement with the City?

Answer: Per architectural site plan AS100.00, the service provider is to size tank and provide submittal for review and approval by the Engineer of Record.

26. The plans do not provide a fire alarm layout. Is the alarm system design-build to be completed by the fire alarm subcontractor or will a layout be provided at a later date?

Answer: Per the EOR, fire alarm detection and notification are not required.

27. While reviewing plan page A600.1 (Finish Schedules and Detail), I did not find the **DOOR/HARDWARE** Schedule. Is this detail on another page? Please confirm that the Door Schedule is in the plans and what page.

Answer: The door hardware is provided in Specification Vol 2 of 2 – Section 087100 – Door Hardware.

SECTION 107316 – ALUMINUM CANOPY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes manufactured exterior metal canopy of the nominal length, width, height, and roof slope indicated.
- B. Related Sections: The following sections contain requirements that relate to this section:
 - 1. Division 3 Section "Concrete Reinforcing".
 - 2. Division 3 Section "Insulating Concrete Forms".
 - 3. Division 3 Section "Cast-In-Place Concrete".
 - 4. Division 5 Section "Adhesive Anchors".
 - 5. Division 7 Section "Sealants".

1.3 SYSTEM PERFORMANCE REQUIREMENTS

- A. General: Provide a complete, integrated metal canopy system manufacturer's standard mutually dependent components and assemblies capable of withstanding structural and other loads, thermally induced movement, and exposure to weather without failure or infiltration of water other than through integral drainage system. Include primary and secondary framing, roof panels, and accessories complying with requirements indicated, including those in this Article. Leakage shall be prevented by providing proper metal laps and detailing per SMACNA and NRCA standards. No joint shall be designed to use sealant to maintain water tightness.
- B. Metal Canopy System Design: Of size, spacing, slope, and spans indicated below and on drawings:
- C. Structural Performance: Provide metal canopy systems capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - 1. Engineer canopy systems to comply with load requirements of current local Building Code and ASCE7 wind, snow and seismic loads.
 - a. Risk Category III, $V_{ult} = 120$ mph
 - b. Minimum roof live load = 25 psf.
 - 2. Collateral Loads: Include additional dead loads other than the weight of metal canopy system for permanent items such as electrical systems. Minimum superimposed dead load for the roofing shall be 10 psf.
 - 3. Deflection Limits: Engineer assemblies to withstand design loads with deflections no greater than the following:
 - a. Beams: Vertical deflection of 1/180 of the span.
 - b. Roof Panels: Vertical deflection of 1/180 of the span.
 - c. Deflection shall be limited so as not to allow ponding water on roof.

4. Design secondary framing system to accommodate deflection of primary building structure and construction tolerances.
- D. Thermal Movements: Provide canopy systems that allows for thermal movements resulting from a 140-degree F change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
- E. Wind-Uplift Resistance: Provide roof panel assemblies that meet requirements of UL 580 for the following wind- uplift resistance:
 1. Class 90.

1.4 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of the following metal building system components:
 1. Structural-framing system.
 2. Roof panels.
 3. Trim and closures.
 4. Accessories.
 5. Structural calculations
- B. Shop Drawings: For the following metal canopy system components. Include plans, elevations, sections, details, and attachments to other Work.
 1. For installed components indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation. The design engineer shall be registered in the state of the work.
 2. Structural-Framing Drawings: Show complete fabrication of primary and secondary framing. Indicate welds and bolted connections, distinguishing between shop and field applications. Include transverse cross- sections.
 3. Roof Layout Drawings: Show layouts of panels on support framing, details of edge conditions, joints, panel profiles, corners, custom profiles, supports, anchorages, trim, flashings, closures, and special details. Distinguish between factory- and field-assembled work.
- C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for each type of the following products with factory-applied color finishes:
 1. Roof panels.
 2. Structural-framing system.
- D. Samples for Verification: For the following products, in manufacturer's standard sizes, showing the full range of color, texture, and pattern variations expected, in the profile and style indicated. Prepare Samples from the same material to be used for the Work.
 1. Roof Panels: 12 inches (300 mm) long by actual panel width. Include clips, caps, battens, fasteners, closures, and other exposed panel accessories.
 2. Trim and Closures: 12 inches (300 mm) long. Include fasteners and other exposed accessories.
 3. Gutters: Include prefabricated downspout outlet.
- E. Product Certificates: Signed by manufacturers of metal canopy systems certifying that

products furnished comply with requirements.

1. Letter of Design Certification: Signed and sealed by a qualified professional engineer. Include the following:
 - a. Name and location of Project.
 - b. Order number.
 - c. Name of manufacturer.
 - d. Name of Contractor.
 - e. Structure dimensions, including width, length, height, and roof slope.
 - f. Governing building code and year of edition.
 - g. Design Loads: Include dead load, roof live load, collateral loads, roof snow load, deflection, wind loads/speeds and exposure.
 - h. Load Combinations: Indicate that loads were applied acting simultaneously with concentrated loads, according to governing building code.
- F. Erector Certificates: Signed by manufacturer certifying that erectors comply with requirements.
- G. Manufacturer Certificates: Signed by manufacturers certifying that they comply with requirements. Include evidence of manufacturing experience.
- H. Warranties: Special warranties specified in this Section.

1.5 QUALITY ASSURANCE

- A. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of metal building systems that are similar to those indicated for this Project in material, design, and extent.
- B. Manufacturer Qualifications: A firm experienced in manufacturing metal canopy systems similar to those indicated for this Project and with a record of successful in-service performance.
 1. Engineering Responsibility: Preparation of Shop Drawings, testing program development, test result interpretation, and comprehensive engineering analysis by a qualified professional engineer.
- C. Source Limitations: Obtain each type of metal canopy system component through one source from a single manufacturer.
- D. Product Options: Information on Drawings and in Specifications establishes requirements for system's aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to verification by one or more methods including preconstruction testing, field testing, or in-service performance.
- E. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Meetings." Review methods and procedures related to metal building systems including, but not limited to, the following:
 1. Inspect and discuss condition of foundations and other preparatory work performed by other trades.
 2. Review structural load limitations.
 3. Review and finalize construction schedule and verify availability of materials, Erector's personnel, equipment, and facilities needed to make progress and avoid

delays.

4. Review weather and forecasted weather conditions and procedures for unfavorable conditions.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components, sheets, panels, and other manufactured items so as not to be damaged or deformed. Package roof panels for protection during transportation and handling.
- B. Handling: Unload, store, and erect roof panels to prevent bending, warping, twisting, and surface damage.
- C. Stack materials on platforms or pallets, covered with tarpaulins or other suitable weathertight and ventilated covering. Store roof panels to ensure dryness. Do not store panels in contact with other materials that might cause staining, denting, or other surface damage.

1.7 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when weather conditions permit roof panel installation to be performed according to manufacturer's written instructions and warranty requirements.
- B. Field Measurements: Verify canopy foundations by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.8 COORDINATION

- A. Coordinate size and location of concrete foundations and casting of anchor-bolt inserts into foundation walls and footings. Concrete, reinforcement, and formwork requirements are specified in Division 3 Section "Cast-in- Place Concrete."

1.9 WARRANTY

- A. General Warranty: Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents, State and Local Law, and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
 1. Arbitration clauses are not allowed in warranties.
 2. Exclusions for failure of essential purpose are not allowed in the warranties because these are illegal in the state of Alabama.
 3. Warranty shall be fiduciary and primary.
- B. Special Weather Tightness Warranty on Panels: Written warranty, executed by manufacturer agreeing to repair or replace roof and wall panels that fail in materials or workmanship within specified warranty period. Failure is defined as permanent deformation beyond the installed condition or leakage.
 1. Warranty Period: Ten years from date of Substantial Completion.
 2. Warranted Wind Speed: Up to 120 mph per ASCE-7 3 second gust
- C. Special Warranty on Panel Finishes: Written warranty, signed by manufacturer agreeing to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period. Deterioration of finish includes, but is not limited to, color fade, chalking, cracking, peeling, and loss of film integrity.

1. Warranty Period for Roof Panels: 25 years from date of Substantial Completion. Warranty shall preclude.
 - a. Color fading of more than 5 Hunter units per ASTM D 2244
 - b. Chalking in excess of a No. 8 rating per ASTM D 4214
 - c. Cracking, checking, peeling, or failure of paint to adherer to metal.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A Available Manufacturer: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:

1. Tennessee Valley Metals, Oneonta, Alabama
2. Alcan Building Products, Charlotte, North Carolina
3. Superior Aluminum Products, Birmingham, Alabama
4. Peachtree Protective covers, Kennesaw, Georgia

2.2 SYSTEM DESCRIPTION:

- A General: Canopy shall drain at the low side only from roof panel to gutter and downspout system and be discharged at or near finished grade level or to drainage system. Roof system shall have no exposed fasteners. Discharge shall occur within the structural aluminum columns (if present), or through aluminum downspouts (if there are not columns).
- B Components: Provide components of general description listed below to suit size, shape, and layout of metal canopy system indicated on drawings.
1. Roof panel:
 - a. Roll formed, 1 inch standing seam panel: 16 inches x 1 inch. COLOR: WHITE or any manufacturer's standard color. Submit sample for approval.
 - 1) Thickness: 0.032 inches
 - 2) Shape to match existing buildings near site.
 2. Extruded Fascia/Gutter: Fascia shall be a full perimeter fascia with a single shape for the perimeter of the building. Gutter shall be integrated with the fascia on the low side and sized as required by engineer, but no smaller than the following minimum size:
 - a. 7 inches x 3 inches x 0.094 inches
 - b. Gutter and fascia shall match the existing buildings near site.
 3. Extruded Column, size as required by engineer, but no smaller than the following minimum size:
 - a. 6 inches x 6 inches x 0.188 inches (minimum).
 4. Extruded C-beam, size as required by engineer:
 - a. 10 inches x 3 inches x 0.125 inches (minimum).
 5. Extruded Drainage Beam (if required), size as required by engineer:
 - a. 10 inches x 3 inches x 0.125 inches (minimum).
 - b. 8 inches x 4 inches x 0.250 inches (minimum).
 6. Cross Beam for mounting light fixtures:

- a. 6 inches x 6 inches x 0.188 inches (minimum).

2.3 MISCELLANEOUS MATERIALS

- A. Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads.
 1. Use aluminum or stainless-steel fasteners.
 2. Provide exposed fasteners with heads matching color of panel by means of plastic caps or factory-applied coating.
 3. Provide metal-backed EPDM washers under heads of exposed fasteners bearing on weather side of panels.
 4. Locate and space exposed fasteners in true vertical and horizontal alignment. Use proper tools to obtain controlled uniform compression for positive seal without rupture of neoprene washer.
- B. Accessories: Unless otherwise specified, provide components required for a complete roof and wall panel assembly including trim, copings, fascia, mullions, sills, corner units, ridge closures, clips, seam covers, battens, flashings, gutters, sealants, gaskets, fillers, closure strips, and similar items. Match materials and finishes of panels.
 1. Closure Strips: Closed-cell, self-extinguishing, expanded, cellular, rubber or cross-linked, polyolefin-foam flexible closure strips. Cut or pre-mold to match configuration of panels. Provide closure strips where indicated and as necessary to ensure weathertight construction.
 2. Sealing Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealing tape with release paper backing. Provide permanently elastic, non-sag, nontoxic, non-staining tape.
 3. Elastomeric Joint Sealant: ASTM C 920, Silicone, type, grade, class, and use classifications required to seal joints in panel roofing and remain weathertight. Provide sealant recommended by panel manufacturer.

2.4 FABRICATION, GENERAL

- A. General: Design components and field connections required for erection to permit easy assembly and disassembly.
 1. Fabricate components in a manner that once assembled in the shop, they may be disassembled, repackaged, and reassembled in the field.
 2. Mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams, and instruction manuals.
 3. Fabricate framing to produce clean, smooth cuts and bends. Punch holes of proper size, shape, and location. Cold-formed members shall be free of cracks, tears, and ruptures.

2.5 FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Finish designations prefixed by AA conform to the system established by the Aluminum

Association for designating aluminum finishes.

- D. Exposed Finish for Extruded Aluminum components:
 - 1. 70% Fluoropolymer Coating: Consisting of epoxy primer and two top coats of 70% fluoropolymer finish to meet AAMA 2605 requirements.
 - a. Color: WHITE to match the existing cottage buildings. Submit standard colors for approval.
- E. Finish for Roll Formed Aluminum components:
 - 1. 70% Fluoropolymer Coating: Consisting of epoxy primer and two top coats of 70% fluoropolymer finish to meet AAMA 2605 requirements.
 - a. Color: TO BE SELECTED FROM STANDARD COLORS BY OWNER.
- F. Finish for steel shapes associated with the canopy and otherwise required for the project:
 - 1. Surface Prep: SSPC SP6
 - 2. Primer: PPG Amerilock 2 primer. 83% minimum solids content.
 - 3. Intermediate Coat: Amershield VOC. Eggshell finish. 3 mil DFT min.
 - 4. Top Coat: Amershield VOC. High gloss. 3 mil DFT min.
 - 5. Color: To match canopy prefinished aluminum color. To be selected by owner from standard color samples.

2.6 DELEGATED DESIGN AND PERFORMANCE

- 1 Delegated Design: Engage a qualified professional engineer licensed in the state of Alabama to design metal building system. Drawings and calculations shall be stamped by this engineer.
- 2 Structural Performance: Metal building systems shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to procedures in MBMA's "Metal Building Systems Manual."
- 3 Design Loads: Use the latest IBC and ASCE-7 to develop loads.
- 4 Deflection and Drift Limits: Design metal building system assemblies to withstand serviceability design loads without exceeding deflections and drift limits recommended in AISC Steel Design Guide No. 3 "Serviceability Design Considerations for Steel Buildings."
- 5 Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
- 6 Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- 7 Structural Performance for Metal Roof Panels: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E 1592:
- 8 Air Infiltration for Metal Buildings (Does not apply to canopies): Air leakage of not more than 0.06 cfm/sq. ft. (0.3 L/s per sq. m) when tested according to ASTM E 1680 or ASTM E 283 at the following test-pressure difference:
 - a. Test Pressure Difference: 1.57 lbs/sq.ft.
- 9 Water Penetration for Metal Roof Panels: No water penetration when tested according to ASTM E 1646 or ASTM E 331 at the following test-pressure difference:
 - b. Test-Pressure Difference: 6.24 lbf/sq. ft. (300 Pa).
- c. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.
 - a. Uplift Rating: UL 60.
- d. FM Global Listing: Provide metal roof panels and component materials that comply with

requirements in FM Global 4471 as part of a panel roofing system and that are listed in FM Global's "Approval Guide" for Class 1 or noncombustible construction, as applicable. Identify materials with FM Global markings.

- a. Fire/Windstorm Classification: Class 1A-60.
 - b. Hail Resistance: MH.
- e. Energy Performance: Provide roof panels according to the following when tested according to CRRC-
- a. Initial solar reflectance of 77 and emissivity of not less than 0.08.
 - b. Solar Reflectance Index of 72 and emissivity of not less than 0.08.

PART 3 - EXECUTION

3.1 LAYOUT

- A. General: Comply with dimensioned layout of metal canopy system as shown on bid documents.

3.2 ERECTION

- A. Foundation: As designed by contractor in the locations shown on the bid documents.
- B. Erect metal canopy system straight, true, and plumb according to manufacturer's written instructions and erection drawings. Unless noted otherwise on drawings, canopy cantilever projections less than 10 feet shall have a minimum slope of 1/8 inch per foot, and projections greater than 10 feet shall have a minimum slope of 1/4 inch per foot.
- C. Provide Cross Beam, parallel to roof panel corrugation between aligned posts, at every set of posts, for the purpose of mounting light fixtures. Do not allow water drainage to pass through the cross beam.
- D. Do not field cut, drill, or alter structural members without written approval from metal building system manufacturer's professional engineer.
- E. Set structural framing in locations and to elevations indicated and according to specifications referenced in this Section. Maintain structural stability of frame during erection.
- F. Align and adjust framing members before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact. Make adjustments to compensate for discrepancies in elevations and alignment.
 1. Level and plumb individual members of structure.

3.3 ROOF PANEL INSTALLATION

- A. General: Comply with panel manufacturer's written instructions and recommendations for installation, as applicable to project conditions and supporting substrates. Anchor panels and other components of the Work securely in place, with provisions for thermal and structural movement.
 1. Fasten roof panels to structure with non-exposed fasteners at each lapped joint and at locations and spacings determined by manufacturer to meet structural, aesthetic, SMACNA and NRCA requirements.
 2. Flash and seal roof panels with weather closures at eaves, rakes, and at perimeter of all openings. Fasten with self-tapping screws.
 3. Install screw fasteners with power tools having controlled torque adjusted to compress

EPDM washer tightly without damage to washer, screw threads, or panels.

4. Arrange and nest side-lap joints so prevailing winds blow over, not into, lapped joints. Lap ribbed or fluted sheets one full rib corrugation. Apply panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line.
5. Locate and space exposed fasteners in true vertical and horizontal alignment.
- B. If required, provide flashing into adjacent brick wall abutted by canopy by sawcut reglets in bed joints with silicone sealant.
- C. Water-tightness: Fit roofing panels to drainage beams and other components to channel water through drainage system. Replace components allowing water leakage.

3.4 CLEANING AND PROTECTING

- A. Damaged Units: Replace panels and other components of the Work that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.
- B. Cleaning: Remove temporary protective coverings and strippable films, if any, as soon as each panel is installed. On completion of panel installation, clean finished surfaces as recommended by panel manufacturer and maintain in a clean condition during construction. Touch up abrasions, marks, skips, or other defects to surfaces.

END OF SECTION 107316