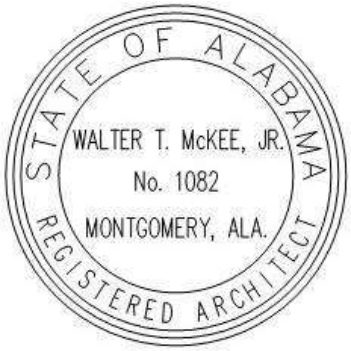
McKEE & ASSOCIATES
ARCHITECTURE & INTERIOR DESIGN

Addendum **No.** 1
Date: November 14, 2025



Project:
Renovation of the Arts Center
To Goshen High School for the
Pike County Schools
Troy, Alabama
MCKEE PROJECT NO. 20-119

ALABAMA DIVISION OF CONSTRUCTION MANAGEMENT NO.2025714

The following changes and/or substitutions to the plans and specifications are hereby made a part of same and are incorporated in full force as part of the contract.

Bidders shall acknowledge receipt of this Addendum in writing on his Proposal Form.

A1.1 GENERAL MODIFICATIONS:

A. Refer to the Table of Contents (**Revised 11.14.25**), herein.
B. Refer to General Contractors' Roofing Guarantee, herein.

A1.2 SPECIFICATION MODIFICATIONS:

A. Refer to Specification Section 01011 Contingency Allowance (**Revised 11.14.25**), herein.
B. Refer to Specification Section 04720 Architectural Cast Stone (**Added 11.14.25**), herein.
C. Refer to Specification Section 07410 Standing Seam Metal Roofing (**Revised 11.14.25**), herein.
D. Refer to Specification Section 08310 Coiling Counter Door (**Added 11.14.25**), herein.
E. Refer to Specifications Section 09650 Rubber Base
   The following manufacturer is approved subject to the specifications
   Tarkett 30000 Aurora Rd., Solon, OH 444139 (850) 510-2721
F. Refer to Specifications Section 09651 Luxury Vinyl Tile
   The following manufacturer is approved subject to the specifications
   Tarkett 30000 Aurora Rd., Solon, OH 444139 (850) 510-2721
G. Refer to Specifications Section 09843 Fixed sound reflective panels
   The following manufacturer is approved subject to the specifications
   G & S Acoustics, St. Louis, MO)800)-737-0903
H. Refer to Specification Section 09980 Brick Color Treatment (**Added 11.14.25**), herein.
I. Refer to Specification Section 10100 Markable Boards and Tack Boards (**Added 11.14.25**), herein.

J. Refer to Specification Section 13670 Extruded Aluminum Walkway Cover (**Added 11.14.25**), herein.

A1.3 DRAWING MODIFICATIONS:

A. See the attached Revised Drawings as follows: Herein.

1. Sheet S3.2 **(Revised 11.07.25),** herein.
2. Sheet E1.1 **(Revised 11.04.25),** herein.
3. Sheet E5.1 **(Revised 11.04.25),** herein.

A1.4 CLARIFICATIONS AND RESPONSES TO RFI

A. The following are responses to RFI's received from Contractors.

Question: Door type "E" is a full louver door. This is only for Door #108A. Is the material for the louver metal or wood?

Answer: Metal.

Question: on Sheet A1.2 the elevation for the toilet partitions is showing 6'-0" high Doors, rather than the standard 58" Is that what is intended?

Answer: Standard height is acceptable.

Question: Please clarify the necessary room signage. Specifications indicate to "SEE DOOR SCHEDULE" for locations and quantities, but none is called out on the schedule on sheet A1.1.

Answer: Provide one sign at each entry door into each space.

Question: Plans & specifications do not match. Specs call out White Oak, Select for stage flooring. But the plans call out plywood.

Answer: Use Plywood as per drawings. Paint plywood black.

END OF ADDENDUM

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Renovation of the Arts Center

to

Goshen High School

for the

Pike County Schools

Troy, Alabama

MCKEE PROJECT NO. 20.119

BIDDING REQUIREMENTS

CONTRACT FORMS

- Alabama Department of Finance Real Property Management Division of Construction Management Permit Fee and Re-Inspection Fee Calculation Worksheet

GENERAL CONDITIONS

- Pre-Construction Conference Checklist (DCM Form B-8)
- Detail Of Project Sign (DCM Form C-15)
- Application and Certificate for Payment (DCM Form C-10)
- Schedule Of Values, (DCM Form C-10SOV) Attachment to DCM Form C-10
- Inventory Of Stored Materials, (DCM Form C-10SM) Attachment to DCM Form C-10
- Progress Schedule and Report (DCM Form C-11)
- Change Order Checklist, (DCM Form B-12) For Use with DCM Form C-12
- Contract Change Order (DCM Form C-12 (fully locally funded K-12 Schools)
- Change Order Justification (DCM Form B-11) Attachment to DCM Form C-12
- Change Order Proposal Recap Sheet (Lathan Mckee Form LM 0825)
- **General Contractor's Roofing Guarantee (DCM Form C-9)**
- Certificate of Substantial Completion (DCM Form C-13 & 13A)
- Form of Advertisement for Completion (DCM Form C-14)
- Final Payment Checklist (DCM Form B-13)
- Contractor's Affidavit of Payment of Debts and Claims (DCM Form C-18)
- Contractor's Affidavit of Release of Liens (DCM Form C-19)
- Consent of Surety to Final Payment (DCM Form C-20)
- Form of Advertisement for Completion (DCM Form C-14)
- Certificate of Asbestos Free Building Materials (McKee Form)

END OF TABLE OF CONTENTS

GENERAL CONTRACTOR'S ROOFING GUARANTEE

DCM Project No. _____

Project Name & Address	Project Owner Entity(ies) Name(s) & Address(es)

General Contractor's Company Name, Address, & Telephone Number	**EFFECTIVE DATES OF GUARANTEE**
	Date of Acceptance:
	Date of Expiration:

1. The General Contractor does hereby certify that the roofing work included in this contract was installed in strict accordance with all requirements of the plans and specifications and in accordance with approved roofing manufacturers recommendations.

2. The General Contractor does hereby guarantee the roofing and associated work including but not limited to all flashing and counter flashing both composition and metal, roof decking and/or sheathing; all materials used as a roof substrate or insulation over which roof is applied; promenade decks or any other work on the surface of the roof; metal work; gravel stops and roof expansion joints to be absolutely watertight and free from all leaks, due to faulty or defective materials and workmanship for a period of five (5) years, starting on the date of substantial completion of the project. This guarantee does not include liability for damage to interior contents of building due to roof leaks, nor does it extend to any deficiency which was caused by the failure of work which the general contractor did not damage or did not accomplish or was not charged to accomplish.

3. Subject to the terms and conditions listed below, the General Contractor also guarantees that during the Guarantee Period he will, at his own cost and expense, make or cause to be made such repairs to, or replacements of said work, in accordance with the roofing manufacturers standards as are necessary to correct faulty and defective work and/or materials which may develop in the work including, but not limited to: blisters, delamination, exposed felts, ridges, wrinkles, splits, warped insulation and/or loose flashings, etc. in a manner pursuant to the total anticipated life of the roofing system and the best standards applicable to the particular roof type in value and in accordance with construction documents as are necessary to maintain said work in satisfactory condition, and further, to respond on or within three (3) calendar days upon proper notification or leaks or defects by the Owner or Architect.

A. Specifically excluded from this Guarantee are damages to the work, other parts of the building and building contents caused by: (1) lightning, windstorm, hailstorm and other unusual phenomena of the elements; and (2) fire. When the work has been damaged by any of the foregoing causes, the Guarantee shall be null and void until such damage has been repaired by the General Contractor, and until the cost and expense thereof has been paid by the Owner or by the responsible party so designated.

B. During the Guarantee Period, if the Owner allows alteration of the work by anyone other than the General Contractor, including cutting, patching and maintenance in connection with penetrations, and positioning of anything on the roof, this Guarantee shall become null and void upon the date of said alterations. If the owner engages the General Contractor to perform said alterations, the Guarantee shall not become null and void, unless the General Contractor, prior to proceeding with the said work, shall have notified the Owner in writing, showing reasonable cause for claim that said alterations would likely damage or deteriorate the work, thereby reasonably justifying a termination of this Guarantee.

C. Future building additions will not void this guarantee, except for that portion of the future addition that might affect the work under this contract at the point of connection of the roof areas, and any damage caused by such addition. If this contract is for roofing of an addition to an existing building, then this guarantee covers the work involved at the point of connection with the existing roof.

D. During the Guarantee period, if the original use of the roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray cooled surface, flooded basin, or other use of service more severe than originally specified, this Guarantee shall become null and void upon the date of said change.

E. The Owner shall promptly notify the General Contractor of observed, known or suspected leaks, defects or deterioration, and shall afford reasonable opportunity for the General Contractor to inspect the work, and to examine the evidence of such leaks, defects or deterioration.

IN WITNESS THEREOF, this instrument has been duly executed this _____ day of _____, _____.

_____
General Contractor's Authorized Signature

_____
Typed Name and Title

SECTION 01011 - CONTINGENCY ALLOWANCE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS AND GENERAL INFORMATION

A. Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 specification sections apply to the work of this section.

PART 2 - CONTINGENCY ALLOWANCES

2.1 BASE BID PROPOSAL

A. The General Contractor shall include the following sums:

1. **One Hundred Thousand Dollars ($100,000.00)** as a contingency to cover unforeseen conditions or minor changes that are necessary to correct or supplement the work as detailed in the Contract Documents.
2. **Thirty Thousand Dollars ($30,000.00)** as a contingency to cover the costs for an emergency two-way radio system.
3. **Fifteen Thousand Dollars ($15,000.00)** as a contingency to cover additional security equipment.
4. **Thirty Thousand Dollars ($30,000.00)** as a contingency to cover cost of storage room casework.
5. **Twenty Thousand Dollars ($20,000.00)** as a contingency to cover the cost of School logo/ graphics.

2.2 The Contractor shall include in his bid proposal(s) all costs of office, job supervision, overhead, profit, and bond on these Contingency Allowances, because no such costs will be paid to Contractor for work performed under these Contingency Allowances. Only the direct costs of performing work under this provision shall be paid under and charged against the Contingency Allowance; such cost includes costs of materials and delivery, installation labor, payroll taxes and insurance, equipment expense, and the cost of subcontracted work (subcontractor's cost may include a maximum of 15% mark-up for overhead and profit).

PART 3 – AUTHORIZATION OF CONTINGENCY ALLOWANCES

3.1 After unknown conditions are identified and examined and the scope of work and method of repair determined, or request for a proposal to cover additional work has been issued by the Owner, the Contractor shall submit a proposal for such work to the Architect for the Owner's approval. If the Owner approves of such proposal, he will issue written authorization to the Contractor to perform the work and charge the related costs to the Contingency Allowance. At the Owner's option, work performed under this provision may be ordered done on a time and material basis, in which case; the Contractor shall keep accurate records of all time and materials used and submit such records to the Architect for his approval at the end of each day's work.

3.2 An accounting of the costs charged against this Contingency Allowance shall be mutually maintained by the Contractor, Architect, and Owner throughout the course of the project. Any of this Contingency Allowance not spent shall be credited to the Owner by Change Order at close out of the project. Refer to Contingency Allowance Form attached to this Section.

3.3 Provide for payment.

A. The Contractor shall include a line item in the *Schedule of Values* entitled "Contingency Allowance". The estimated value of work completed pursuant to fully executed Contingency Allowance Authorizations may be included in the Contractor's monthly Applications for Payment. Payments under this Contingency Allowance shall not exceed the net, total of fully executed

Contingency Allowance Authorizations.

3.4 CONTINGENCY ALLOWANCE AUTHORIZATION FORM

Form to be filled in its entirety.

To: Mckee & Associates , Architects

From: _____
Company

Project: _____

_____
Address

_____

_____
Contact and Email

Project Number _____

Date: _____

Building Commission Number: _____

Authorization Number: _____

In accordance with Specification Section 01011 – CONTINGENCY ALLOWANCE, the Contractor [ ] is hereby authorized to proceed with the changes in Work as are described below and is to be paid for the performance of these changes as provided in Specification Section 01011. This Authorization shall become effective when it is signed by the Contractor and the Owner's representative and it is understood and agreed that the amount(s) stipulated below constitute full compensation for these changes in Work.

TOTAL AMOUNT OF THIS AUTHORIZATION	$

ORIGINAL AMOUNT OF THE CONTINGENCY ALLOWANCE	$
NET TOTAL OF PREVIOUS AUTHORIZATIONS	$
PREVIOUS REMAINING CONTINGENCY ALLOWANCE	$
TOTAL AMOUNT OF THIS AUTHORIZATION	$
CONTINGENCY ALLOWANCE REMAINING AFTER THIS CONTINGENCY	$

Recommended By:	Authorized By:	Accepted By:
_____	_____	_____
Architect	Owner	Contractor

END OF SECTION

SECTION 04720 - ARCHITECTURAL CAST STONE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Architectural Cast Stone.

B. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

1.2 RELATED SECTIONS

A. Section 04200 – Unit Masonry.

B. Section 04220 – Architectural Stone Veneer.

C. Section 07900 – Joint Sealer.

1.3 REFERENCES

A. ASTM A 615/A 615M - Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.

B. ASTM A767/A767M - Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement.

C. ASTM C 33 - Concrete Aggregates.

D. ASTM C 150 - Portland Cement.

E. ASTM C 173 - Air Content of Freshly Mixed Concrete by the Volume Method

F. ASTM C 231 - Air Content of Freshly Mixed Concrete by the Pressure Method

G. ASTM C 260 - Specification for Air Entrained Admixtures for Concrete

H. ASTM C 270 - Mortar for Unit Masonry.

I. ASTM C 426 - Linear Drying Shrinkage of Concrete Masonry Units.

J. ASTM C 494 - Chemical Admixtures for Concrete.

K. ASTM C 618 - Coal Fly Ash and Raw or Calcined Natural Pozzolan for use as a Mineral Admixture in Concrete

L. ASTM C 666 - Resistance of Concrete to Rapid Freezing and Thawing.

M. ASTM C 979 - Pigments for Integrally Colored Concrete.

N. ASTM C 989 - Ground Granulated Blast- Furnace Slag for use in Concrete

O. ASTM C 1194 - Compressive Strength of Architectural Cast Stone.

P. ASTM C 1195 - Absorption of Architectural Cast Stone.

Q. ASTM C 1364 - Architectural Cast Stone.

R. Cast Stone Institute Technical Manual (Current Edition).

S. ACI 530 “Building Code Requirements for Masonry Structures”

1.4 DEFINITIONS

A. Cast Stone: An architectural stone unit manufactured to copy fine grain texture and color of natural cut stone used in unit masonry applications. Meets ASTM C 1364 requirements.

1. Dry Cast Concrete Products: Manufactured from zero-slump concrete.

   a. Vibrant Dry Hand Tamp Casting Method: Vibratory compaction by hand tamp of earth-moist, zero-slump concrete against rigid mold until it is densely compacted.

2. Wet Cast Concrete Products: Manufactured from measurable slump concrete.

   a. Wet Casting Method: Manufactured from measurable slump concrete and consolidated into a mold.

1.5 SUBMITTALS

A. Comply with Section 01600 - Submittal Procedures.

B. Product Data: Submit manufacturer's product data.

C. Shop Drawings: Submit manufacturer's shop drawings, including profiles, cross sections, modular unit lengths, exposed faces, anchors and anchoring method recommendations (if required), and annotation of cast stone types and location.

D. Samples: Submit pieces of manufacturer's cast stone units that represent general range of texture and color proposed to be furnished for project.

E. Test Results:

1. Submit manufacturer's test results from architectural cast stone units previously made by manufacturer using materials from same sources proposed for use in project.

F. Manufacturer's Project References: Submit list of projects similar in scope, including project name and location, name of architect, and type and quantity of architectural stone veneer units installed.

G. Warranty: Submit manufacturer's standard warranty.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. Sufficient plant facilities to provide quality, shapes, quantities, and sizes of architectural stone veneer units required without delaying progress of the Work.

2. Minimum of 10 years experience in producing masonry units or cast stone.

3. Fabricating plant shall be certified by the Cast Stone Institute, National Precast Concrete Association, or equivalent certification program.

4. Manufacturer shall have an internal Quality Assurance Testing Program with certified laboratory technician(s).

5. Custom Cast Stone Series and Architectural Masonry Veneer Series are to be manufactured from a similar mix design to match color and texture.

B. Mock-Ups: Provide full-size architectural cast stone units for use in construction of mock-ups. Approved mock-ups shall become the standard for appearance and workmanship for project.

1. Mock-ups shall remain as part of the completed Work.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Delivery:

1. Deliver architectural cast stone units secured to shipping pallets and protected from damage and discoloration.

2. Provide itemized shipping list.

B. Storage:

1. Store architectural cast stone units and installation materials in accordance with manufacturer's instructions.

2. Store architectural cast stone units on pallets with non-staining, waterproof covers.

3. Do not double stack pallets.

4. Ventilate units under covers to prevent condensation.

5. Prevent contact with dirt and splashing.

C. Handling:

1. Protect architectural cast stone units, including corners and edges, during storage, handling, and installation to prevent chipping, cracking, staining, or other damage.

2. Handle long units at center and both ends simultaneously to prevent cracking.

3. Do not use pry bars or other equipment in a manner that could damage units.

1.8 SCHEDULING

A. Schedule and coordinate production and delivery of architectural stone veneer units with unit masonry work.

PART 2 – PRODUCTS

2.1 MANUFACTURER

A. Reading Rock, Inc., 4600 Devitt Drive, Cincinnati, Ohio 45246; Phone: (800) 482-6466 Fax: (513) 874-2361; www.readingrock.com; e-mail: info@readingrock.com

B. Equal products of other manufacturers may be used in the work provided such products have been approved by the Architect, not less than Ten (10) days prior to scheduled bid opening.

2.2 ARCHITECTURAL CAST STONE

A. Architectural Cast Stone: RockCast's Custom Cast Stone Series.

B. Compliance: ASTM C 1364.

C. Casting Method: Vibrant dry hand tamp or wet cast as specified and/or required.

D. Texture: Smooth or otherwise as indicated on the drawings.

E. Color: To be selected by Architect after bid date.

F. Units: As indicated on the drawings.

G. Profiles: As indicated on the drawings.

H. Test Results:

1. Compressive Strength, ASTM C 1194: Minimum 6,500 psi at 28 days.

2. Absorption, ASTM C 1195: Maximum 6 percent, by the cold water method, at 28 days.

3. Linear Shrinkage, ASTM C 426: Less than .065 percent.

4. Density, ASTM C 140: Greater than 120 pounds per cubic foot.

5. Freeze-Thaw, ASTM C 666: Less than 5 percent cumulative mass loss after 300 cycles.

6. Air Content: ASTM C 173 or C 231 for wet cast product shall be 4-8% for units exposed to freeze-thaw environments; air entrainment is not required for VDT products.

H. Curing: Cure in enclosed chamber at 100 percent relative humidity and minimum 90 degrees F for up to 16 hours and yard cure for a minimum of 3 days.

2.3 ARCHITECTURAL STONE VENEER MATERIALS

A. Portland Cement: ASTM C 150, Type I or III. White and/or gray as required to match specified color.

B. Coarse Aggregates: ASTM C 33, except for gradation. Granite, quartz, or limestone.

C. Fine Aggregates: ASTM C 33, except for gradation. Manufactured or natural sands.

D. Pigments: ASTM C 979, except do not use carbon black pigments. Inorganic iron oxide pigments.

E. Admixtures:

1. Water Reducing, Retarding, and Accelerating Admixtures: ASTM C 494.

2. ASTM C 260 for air-entraining admixtures

3. Other admixtures: integral water repellents and other chemicals, for which no ASTM Standard exists, shall be previously established as suitable for use in concrete by proven field

performance or through laboratory testing.

4. ASTM C 618 for mineral admixtures
5. ASTM C 989 for ground granulated blast-furnace slag

F. Water: Potable.

G. Reinforcing Bars: ASTM A 615, deformed steel bars. Epoxy coated or galvanized when covered with less than 1-1/2 inches of material.

1. Galvanized Coating: ASTM A 767.

2.4 TEXTURE AND COLOR

A. General: Match texture and color of full-size sample on file with Architect.

B. Texture of Surfaces Exposed to View:

1. Fine-grained texture similar to natural stone.
2. Approximately equal to approved sample when viewed in direct daylight at 10 feet.

C. Surface Air Voids:

1. Size: Maximum 1/32 inch.
2. Density: Less than 3 occurrences per any 1 square inch.
3. Viewing Conditions: Not obvious under direct daylight at 10 feet.

D. Finish:

1. Minor chips shall not be obvious under direct daylight at 20 feet, as determined by Architect.

C. Color Variation:

1. Viewing Conditions: Compare in direct daylight at 20 feet, between units of similar age, subjected to similar weathering conditions.
2. Total Color Difference: ASTM C 1364, 6 units
3. Hue Difference: ASTM C 1364, 2 units

2.5 MORTAR

A. Mortar: ASTM C 270, Type N As specified in Section 04200.

B. Mortar Materials: As specified in Section 04200.

2.6 ACCESSORIES

A. Anchors: Non-corrosive type, sized for conditions. Type 304 stainless steel.

B. Sealant: As specified in Section 07900.

C. Cleaner: Prosoco Sure Klean Custom Masonry Cleaner. * Note: Aggressive cleaners may remove too much of the concrete surface paste making some of the color to appear to be “stripped.” Therefore, on darker units a less aggressive cleaner such as Prosoco’s Light Duty Cleaner should be used to maintain color.

2.7 FABRICATION

A. Shapes: As indicated on drawings.

1. Suitable wash on exterior sills, copings, projecting courses, and units with exposed top surfaces.
2. Drips on projecting units, wherever possible.

2.8 TOLERANCES

A. General: Manufacture architectural cast stone units within tolerances in accordance with Cast Stone Institute Technical Manual, unless otherwise specified.

B. Cross Section Dimensions: Do not deviate by more than plus or minus 1/8 inch from approved dimensions.

C. Length of Units: Do not deviate by more than length/360 or plus or minus 1/8 inch, whichever is greater, not to exceed plus or minus 1/4 inch.

D. Warp, Bow, or Twist: Do not exceed length/360 or plus or minus 1/8 inch, whichever is greater.

2.9 PRODUCTION QUALITY CONTROL

A. Mix Designs: Test new and existing mix designs for applicable compressive strength and absorption compliance before manufacturing cast stone units.

B. Plant Production Testing: Test compressive strength and absorption from specimens selected at random from plant production. Tests to be conducted by certified laboratory testing technicians.

1. Custom Cast Stone Units: Test in accordance with ASTM C 1194 and C 1195.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine construction to receive architectural cast stone units. Notify Architect if construction is not acceptable. Do not begin installation until unacceptable conditions have been corrected.

B. Examine architectural cast stone units before installation. Do not install unacceptable units.

1. All RockCast products are shipped on a pallet and have one unfinished side. Textured units are to be set with the texture face forward and smooth units are stacked “face up” on the pallet.

2. RockCast’s Custom Cast Stone Series units do not have returns or finished ends unless otherwise ordered and noted on the shop drawings.

3.2 INSTALLATION

Notes: RockCast products, like all concrete masonry products, may shrink slightly with the loss of moisture, therefore the use of elastic (control) joints is highly recommended. Refer to NCMA TEK Bulletins 10-1A “Design of Concrete Masonry for Crack Control”, 10-2C “Control Joints for Concrete Masonry Walls - Empirical Method”, 10-4 “Crack Control for Concrete Brick and Other Concrete Masonry Veneers”, and 5-2A “Clay and Concrete Masonry Banding Details” for guidelines.

Refer to NCMA TEK Bulletin 3-6B “Concrete Masonry Veneers” for proper veneer anchoring.

You can view NCMA e-TEK bulletins at www.readingrock.com

A. Install units in conjunction with masonry, as specified in Section 04200.

B. Pull units from multiple cubes during installation to minimize variation in color and help with natural blending.

C. Cut units using motor-driven masonry saws. Finished ends should be turned to the visible side and the saw cut turned to the inside of the mortar joint to hide exposed aggregates and saw marks.

D. Do not use pry bars or other equipment in a manner that could damage units.

E. Fill dowel holes and anchor slots completely with mortar or non-shrink grout.

F. Use Type N mortar (ASTM C 270), unless specified otherwise.

G. Per ACI 530.1, it is not necessary, nor recommended, to wet the units prior to installation.

H. Set units in full bed of mortar, unless otherwise indicated on the drawings. It is not necessary to

rake joints for later tuckpointing. Standard full mortar application with tooling is all that is necessary.

I. Fill vertical joints with mortar.

J. Leave head joints in copings and similar components open for sealant.

K. Make joints 3/8 inch, unless otherwise indicated on the drawings.

L. Mortar joints should have a slight concave profile (unless specified otherwise).

M. Remove excess mortar immediately.

N. Remove mortar fins and smears before tooling joints.

O. Cover wainscot for protection and bond separation with plastic, felt paper or other approved products.

P. Cover freshly installed masonry products as required to assist with the curing process.

Q. Sealant Joints:

1. As specified in Section 07900.
2. Prime ends of units, insert properly sized backing rod, and install sealant.
3. Provide sealant joints at following locations:
    a. Copings and cast stone units with exposed tops.
    b. Joints at relieving angles.
    c. Control and expansion joints.
    d. As indicated on the drawings.

3.3 TOLERANCES

A. Installation Tolerances:

1. Variation from Plumb: Do not exceed 1/8 inch in 5 feet or 1/4 inch in 20 feet or more.
2. Variation from Level: Do not exceed 1/8 inch in 5 feet, 1/4 inch in 20 feet, or 3/8 inch maximum.
3. Variation in Joint Width: Do not vary joint thickness more than 1/8 inch or 1/4 of nominal joint width, whichever is greater.
4. Variation in Plane between Adjacent Surfaces: Do not exceed 1/8-inch difference between planes of adjacent units or adjacent surfaces indicated to be flush with units.

3.4 CLEANING

A. Clean exposed units after mortar is thoroughly set and cured.

B. Perform test of cleaner on small area of 4’ x 4’ on each type and color and receive approval by Architect before full cleaning. Let test area dry 4 to 5 days before inspection. Keep test area for future comparison.

C. Clean units by wetting down the surface first, before using the specified cleaner (as specified in Section 2.7.C). Brush on cleaner, let dwell for 2 to 3 minutes. Reapply cleaner, scrub surface with masonry brush and rinse off thoroughly. Areas with heavy soiling use a wood block or non-metallic scraper.

D. Apply cleaner to units in accordance with cleaner manufacturer's instructions.

E. Do **not** use the following to clean units:

1. Muriatic acid.
2. Power washing.
3. Sandblasting.

4. Harsh cleaning materials or methods that would damage or discolor surfaces.

3.5 REPAIR

A. Repair methods and results to be approved by Architect.

3.6 INSPECTION AND ACCEPTANCE

A. Inspect completed installation in accordance with Cast Stone Institute Technical Manual.

3.7 WATER REPELLANT

A. Sealer: Prosoco Sure Klean Weather Seal Siloxane WB or PD or Hydrozo Enviroseal 7 according to manufacturer's recommendations. Apply water repellant for weatherproofing in accordance with water repellant manufacturer's instructions.

B. Apply water repellant after installation, cleaning, repair, inspection, and acceptance of units are completed.

3.8 PROTECTION

A. Protect installed units from splashing, stains, mortar, and other damage.

END OF SECTION

SECTION 07410

STANDING SEAM METAL ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

1.2 DESCRIPTION OF WORK

A. The work under this section consists of all preformed metal roofing, underlayment, ridge vent system, sheet metal, roof drainage accessories and all related items necessary to complete the roofing system work indicated on the drawings and herein specified including but not limited to the following:

1. Formed Roof Panels for Standing Seam Installation
2. Underlayment.
3. Workmanship
4. Inspection of Surfaces
5. Protection
6. Delivery, Samples and Shop Drawings

1.3 QUALITY ASSURANCE

A. The Contractor shall engage the services of a Professional Roof Consultant. The Consultant must hold a minimum title of Registered Roof Observer (RRO) through the International Institute of Building Enclosure Consultants (IIBEC) and provide evidence of adequate insurance as required below. The Consultant should perform three (3) inspections during the installation of each new roof system type (1 – Start up inspection; 2 – Interim inspection; 3 – Final inspection). The Consultant must document all site visits with photographs and written reports. All reports shall be forwarded to the Architect with documentation of the roofing progress and any deficiencies noted during the inspections. ***(Note: Although the contractor will be paying the roof consultant from their proceeds, the roof consultant will be considered an agent of the owner and architect throughout the project and will perform the required inspections on behalf of the owner and architect. The above specification shall be applied to individual facilities when multiple site locations are included in the project.)*** ***Additional Note: Alabama Department of Finance Real Property Management, Division of Construction Management must have attendance of an inspector for the pre-roofing conference as required by Manual of Procedures, (See DCM Form C-9).***

1. Roof Consultant Insurance Requirements:
   a. Gen. Liability - $1,000,000 each occurrence - $2,000,000 General Aggregate / Auto. Liability - $1,000,000 / Umbrella Liability. - $1,000,000 / Workers Compensation - $1,000,000 per statute / Professional Liability - $1,000,000
2. Approved Roof Consulting Firm:
   a. Roof Asset Management, Inc.
   David Lee, RRO, CIT, FAA-107
   Millbrook, AL / (334) 590-7999 / dlee@roof-asset.com
   b. Professional Roof Observers, LLC.
   1200 Sumac Road

Pulaski, TN 38478
Kevin Turner / (931) 703-6018 / kturner@professionalroofobservers.net.

c. Substitutions: Roof consulting firms must be pre-approved by the Architect. Requests for a substituting firm must be submitted "In writing" 10 (Ten) days prior to the bid opening.

B. Performance Test Standards: Provide preformed panel systems which have been pretested and certified by manufacturer to provide specified resistance to air and water infiltration and structural deflection and failure when installed as indicated and when tested in accordance with AAMA 501, "Methods of Test for Metal Curtain Walls".

C. Field Measurements: Where possible, prior to fabrication of prefabricated panels, take field measurements of structure or substrates to receive panel system. Allow for trimming panel units where final dimensions cannot be established prior to fabrication.

D. Impact Resistance: Roof coverings installed on low-slope roofs (roof slope <2:12) shall resist impact damage based on the results of tests conducted in accordance with ASTM D 3746, ASTM D 4272, CGSB 37-GP-52M or the "Resistance to Foot Traffic Test "FM 4470.

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product specifications, standard details, certified product test results, installation instructions and general recommendations, as applicable to materials and finishes for each component and for total system of preformed panels.

B. Samples: Submit 2 samples 12" square of each exposed finish material.

C. Shop Drawings: Submit small-scale layouts of panels on roofs, and large-scale details of edge conditions, joints, corners, custom profiles, supports, anchorages, trim, flashings, closures, and special details. Distinguish between factory and field assembly work.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver and store prefabricated components, sheets, panels, and other manufactured items so they will not be damaged or deformed.

B. Stack materials on platforms or pallets, covered with tarpaulins or other suitable weathertight ventilated covering. Store metal sheets or panels so that water accumulations will drain freely. Do not store sheets or panels in contact with other materials which might cause staining.

1.6 ROOFER'S QUALIFICATIONS

A. Installation of the metal roofing and roof related accessories shall be performed by Certified / Preferred Roofers authorized by the manufacturer as trained and qualified to erect the manufacturer's product.

B. The Contractor shall submit a letter from the manufacturer of the metal roofing system, certifying the date of certification from the Manufacturer and the dates and year the Roofing Contractor attended school, prior to full certification that this Roofing Contractor is a certified roofer.

1.7 ROOFING WARRANTIES & GUARANTEE

A. Weather Tightness Warranty

1. The entire installation (sub-framing, clips, panels, fasteners, rakes, eave, ridge, valley flashing conditions, roof to wall conditions as well as all materials specified as supplied by the manufacturer) shall be guaranteed weather tight for a minimum of Twenty (20) years (NO Dollar Limit NDL). Provide written warranty, signed by metal roofing manufacturer and his

authorized installer, agreeing to replace/repair defective materials and workmanship during the warranty period, certified by the third-party inspection firm as stated under QUALITY ASSURANCE. This warranty shall be identified as neither Non-Depreciating, Non-Pro-Rated, nor have exclusions that identify, valleys, curbs, and flashings. The warranty shall be signed by the Manufacture of the roofing materials and the authorized installer.

2. Compatibility: Provide products which are recommended by manufacturers to be fully compatible with indicated substrates or provide separation materials as required to eliminate contact between incompatible materials.

B. Manufacturer's Warranty

1. Manufacturer's roofing warranties which contain language regarding the governing of the warranty by any state other than the State of Alabama, must be amended to exclude such language, and substituting the requirement that the Laws of the State of Alabama shall govern all such warranties.

2. Roof Panels: Durability of the metallic coated and unpainted roof panels due to rupture, structural failure or perforation shall be warranted for a period of Twenty (20) years by the manufacturer.

3. Color Finish:

a. The exterior color finish for painted panels shall be warranted by the Manufacturer for Twenty-five (25) years against blistering, peeling, cracking, flaking, chalking, and shipping.

b. Excessive color change and chalking shall be warranted for Twenty-five (25) years.

i. Color change shall not exceed 5 NBS units per ASTM D2244.68T, chalking shall not be less than a rating of 6 (white) or 8 (other colors) per ASTM D-659.

4. The roofing manufacturer shall be required to provide documentation certifying the roofing system and products specified comply with the performance requirements as set forth in IBC Chapter 15, Section 1504. The documentation shall be attached to the roof warranty at the close out of the project.

C. Contractor's Roofing Guarantee

1. Contractor shall furnish Contractors 5 Year Roofing Guarantee. This roofing guarantee is included in the front-end documentation of this project manual.

D. All roof warranties/guarantees shall be provided to the Owner, by the Contractor at the Final Inspection to obtain the Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. The following manufacturers' products have been used to establish minimum standards for materials, workmanship, and function:

1. American Buildings Company/A Nucor Company; (Basis of Design and Quality);www.americanbuildings.com; 1150 State Docks Road, Eufaula, Alabama 36027; Phone: 334.687.2032.

2. Butler Manufacturing; www.butlermfg.com; 1540 Genessee St., Kansas City, MO. 64102; Phone: 816.968.3000

3. MBCI Manufacturing; www.mbci.com; 2280 Monier Avenue, Lithia Springs, Georgia, 30122; Phone: 844.2506 or 770.729.4772.

4. Varco Pruden; www.vp.com; 3200 Players Club Circle, Memphis, TN 38125; Phone: 1.901.748.8000

5. Morin / A Kingspan Group Company; www.kingspan.com/us/en-us/product-groups/metal-roof-wall-systems; 1975 Eidson Drive, Florida, 32724; Phone: 860.584.0900 or 800.640.9501

6. ACI Building Systems, LLC.; www.acibuildingsystems.com; 10125 Highway 6 West, Batesville, MS 38606; Phone: 662.563.4574.
7. AllSouth Pre-Engineered Components, LLC.; 985 Technology Drive, Dothan, Alabama, 36303; Phone: 334.699.8394; www.buildwithapec.com.
8. Berridge Manufacturing Company; www.berridge.com; 319 Lee Industrial Boulevard, Austell, Georgia; Ph: 770.941.5141.

2.2 MATERIALS

A. All materials shall be from a single source.

B. Loc-Seam 360 with Color Finish as selected by owner from Standard colors by American Buildings Company/A Nucor Company.

1. Standing seam roof panel shall have a configuration consisting of 2-inch vertical rib spaced on 16-inch centers. The panel shall have flush horizontal and vertical surfaces to facilitate sealing at terminations. Panel configurations which create voids requiring supple metal closure devices shall not be considered acceptable. Panels shall be joined at the sidelap with an interlocking seam mechanically locked by a seaming machine after installation. The female panel seam shall have a factory applied sealant, in compliance with UL90.
2. The panel shall be 24-gauge (minimum) AZ50 or AZ55 aluminum-zinc alloy-coated steel, conforming to the requirements of ASTM A 792, Grade 80. Minimum yield strength shall be 80,000 PSI.
3. Deviations in appearance from the quality standard manufacturer's panel must be approved by the owner before acceptance.
4. Changes in framing or variations in loading to the existing structure caused by alternate roof systems shall be subject to review and all costs for any modifications shall be the responsibility of the General Contractor.
5. System Description: The roof system is a concealed fastener interlocking standing seam system. Panel must not be roll formed on site, nor use a portable roll former whereby the contractor manufactures the panel versus a single sourced manufacture providing the finished materials with a single sourced warranty.
6. Roof panels shall be standing seam interlocking design and secured to the supports with a concealed structural fastening system. UL certification must appear on the panel if so requested.
7. The concealed attachment system shall eliminate all through penetration of the exposed roofing surface into structural supports and allow the roof covering to move independently of any differential thermal movement by the framing system.
8. The panel to structural clip shall be designed to provide +/- one inch of thermal movement. It shall incorporate a self-centered feature to assure one inch of movement in both directions.
9. The standing seam shall have integral male and female interlocking ribs with a factory applied, non-hardening sealant, and the seams shall be continuously locked or crimped together by mechanical means during installation.
10. Roof panels shall be fastened to the support framing members with a concealed clip or backing device of steel having a protective metallic coating. Through penetration of the roofing surface by exposed fasteners shall occur only for non-structural connection at panel termination and roof perimeter flashing location.
11. Panel termination and perimeter flashing (attached to roof panels) shall be sealed with sealants recommended by the manufacturer.
12. Required closures shall be metal. Non-metal closures shall not be acceptable.
13. Provide thermal blocks at all roof to purlin connection points/deck supports.

2.3 METAL FINISHES

A. General: Apply coating either before or after forming and fabricating panels, as required by coating process and as required for maximum coating performance capability. Protect coating promptly after application and cure, by application of strippable film or removable adhesive cover and retain until installation has been completed.

B. Color Finish on Roof Panels and Trim:

1. Panels shall have a Color Finish.

2.4 ROOF PANELS

A. General: Provide roofing sheets formed to the general profile or configuration indicated. All roof panels shall be full length, no end laps allowed.

B. Zinc-Coated Steel Sheets: Provide structural quality hot-dip galvanized steel sheets, complying with requirements of ASTM A446, Grade C, with G90 coating complying with ASTM A525.

C. Aluminum Coated Steel Sheets: Provide drawing quality aluminum coated steel sheets, complying with requirements of ASTM A463, with T1-40 coating.

1. Metal thickness not less than 24 ga. (0.0179”).

D. Accessories: Provide the following sheet metal accessories factory formed of the same material and finish as the roofing and siding.

1. Flashings.
2. Fillers.
3. Metal expansion joints.
4. Facias
5. Ridge covers.
6. Cover exposed structural and secondary members at exterior.

E. Fasteners:

1. Provide self-tapping screws, bolts, nuts, self-locking rivets, self-locking bolts, end welded studs, and other suitable fasteners as standard with the manufacturer designed to withstand design loads.
2. Provide metal-backed neoprene washers under heads of fasteners bearing on weather side of panels.
3. Use stainless steel fasteners for exterior application and galvanized or cadmium plated fasteners for interior applications.
4. Locate and space fastenings in true vertical and horizontal alignment. Use proper type fastening tools to obtain controlled uniform compression for positive seal without rupture of neoprene washer.
5. Provide fasteners with heads matching color of roofing sheets by means of plastic caps or factory-applied coating.

F. Flexible Closure Strips: Provide closed-cell, expanded cellular rubber, self-extinguishing flexible closure strips. Cut or premold closure strips to match corrugation configuration of roofing and siding sheets. Provide closure strips where indicated or necessary to ensure weathertight construction.

G. Sealing Tape: Provide pressure sensitive 100 percent solids isobutylene tripolymer compound sealing tape with release paper backing. Provide permanently elastic, non-sag, non-toxic, non-staining tape not less than 1/2" wide and 1/8" thick.

H. Joint Sealants: Provide one-part elastomeric polyurethane polysulfide or silicone rubber sealant as recommended by the building manufacturer.

2.5 UNDERLAYMENTS

A. Self-Adhered Underlayment:

1. Manufacturers: The following manufacturers' products have been used to establish minimum standards for materials, workmanship, and function:
    a. SDP Advanced Polymer Products
    b. Carlisle Dri-Start A
    c. Grace HT
2. Materials:
    a. Install 40 mil self- adhering ice and water shield membrane.
    b. Palisade SA-HT; SDP Advanced Polymer Products
        i. Color - KOOL BLUE™
        ii. Top Surface - STRONGHOLD™ Anti-Skid Technology: Polymer
        iii. Bottom Release Liner - Silicone Split Release Poly
        iv. Permeability - ASTM E96 - 00 0.01 perms
        v. Nominal Thickness - ASTM D1777 - 40 mil (1 mm)
        vi. Nail Sealability - ASTM D1970 - Pass
        vii. Lap Sealability - ASTM D1970 - Pass
        viii. Tensile Strength - ASTM D226 - 121 lbf/in. (21kN/m)
        ix. Tear Strength - ASTM D4523 - 160 lbf/in. (28 kN/m)
        x. Elongation - ASTM D2523-00 - 16%
        xi. Low Temperature Flexibility - ASTM D1970 - -22 F (-30 C) - Pass
        xii. Adhesion to Plywood - ASTM D1876 - 55 lbf/in.:75 F (9.6 kN/m: 24 C)
        xiii. Adhesion to Plywood - ASTM D1876 - 23 lbf/in.: 40 F (4 kN/m: 4.4 C)
        xiv. UV Exposure - ASTM G90 - 6 months
        xv. Temperature Range - ASTM D1970 - LT: 15 F (-9 C) to HT: 250 F (121 C)
        xvi. Dimensions - 36 in. x 66.7 ft. (91.4 cm x 20.3 m)

2.6 MISCELLANEOUS MATERIALS

A. Internal Panel Framing: Manufacturer's standard.

B. Fasteners: Manufacturer's standard noncorrosive types, with exterior heads gasketed.

C. Accessories: Except as indicated as work of another specification section, provide components required for a complete roofing/siding system, including:

1. Trim
2. Copings
3. Fascias
4. Gravel stops
5. Mullions
6. Sills
7. Corner Units

8. Ridge Closures
9. Clips
10. Seam Covers
11. Battens
12. Flashings

13. Gutters
14. Downspouts
15. Louvers
16. Sealants
17. Gaskets
18. Fillers
19. Closure Strips
20. All similar items.
21. Match materials/finishes of preformed panels.

D. Bituminous Coating: Cold-applied asphalt mastic, SSPC paint 12, compounded for 15 mil dry film thickness per coat.

2.7 SHEET METAL ACCESSORIES

A. General: Provide coated steel sheet metal accessories with coated steel roofing and siding panels.

B. Gauges of Materials:
   1. Roof Panels - 24 ga.
   2. Rake Flashing - 26 ga.
   3. Fascia – 26 ga.

C. Roof Curbs: The fully welded roof curb units shall be fabricated to the specifications of the roofing manufacturer, thus assuring its compatibility with the roof constructions framing and covering. Roof curbs shall be of size and design to accommodate the various projecting elements to be retained. The contractor is responsible for verification of the various sizes, configurations, and requirements. It is expected that the contractor use the existing conditions, surfaces, and elements as a source material for these requirements. The roof curb shall be of size and design required for fan, vent, or air conditioning equipment. It shall support the specific ventilating device in a nominally horizontal position above the weather surface of the roof and adequately deflect storm drainage around its periphery. All sealants, closures, and fasteners, etc. shall be included for proper installation and performance. Roof subframing and/or headers shall be provided for additional rigidity and support of the curb and its ventilating device. Roof vent curb and supporting framing shall provide for expected expansion and contraction of roof panels.

D. Roof Jacks: Openings 8” in diameter or smaller may be flashed and sealed to the roof panel by jacks. Material shall be an EPDM material with an aluminum sealing ring base. Jacks are acceptable providing attachment in flat of panel and no standing seam rib has been altered. If rib must be cut, a curb must be used. Installation of roof jacks must comply with manufacturer’s instructions.

PART 3 - EXECUTION

3.1 PRE-ROOFING CONFERENCE

A. A pre-roofing conference is required before any roofing materials are installed. This conference shall be conducted by a representative of the Architect and attended by representatives of the Owner, General Contractor, Roofing Contractor, Sheet Metal Contractor, Roof Deck Manufacturer (if applicable), and the Roofing Materials Manufacturer (if warranty is required of this manufacturer). If equipment of substantial size is to be placed on the roof, the Mechanical Contractor must also attend this meeting. Provide at least 72 hours advance notice to participants prior to convening pre-roofing conference.

B. The pre-roofing conference is intended to clarify demolition and application requirements for work to be completed before roofing operations can begin. This would include a detailed review of the specifications, roof plans, roof deck information, flashing details, and approved shop drawings, submittal data, and samples. If conflict exists between the specifications and the Manufacturer's requirements, this shall be resolved. If this pre-roofing conference cannot be satisfactorily concluded without further inspection and investigation by any of the parties present, it shall be reconvened at the earliest possible time to avoid delay of the work. In no case should the work proceed without inspection of all roof deck areas and substantial agreement on all points.

C. The following are to be accomplished during the conference:

1. To review all Factory Mutual and Underwriters Laboratories requirements listed in the specifications and resolve any questions or conflicts that may arise.
2. To establish trade-related job schedules, including the installation of roof-mounted mechanical equipment.
3. To establish roofing schedule and work methods that will prevent roof damage.
4. Require that all roof penetrations and walls be in place prior to installing the roof.
5. To establish those areas on the job site that will be designated as work and storage areas for roofing operations.
6. To establish weather and working temperature conditions to which all parties must agree.
7. To establish acceptable methods of protecting the finished roof if any trades must travel across or work on or above any areas of the finished roof.

D. The Architect shall prepare a written report indicating actions taken and decisions made at this pre-roofing conference. This report shall be made a part of the project record and copies furnished the General Contractor and the Owner.

3.2 INSTALLATION

A. General: Comply with panel fabricator's and material manufacturer's 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/structural movement.

1. Install panels with concealed fasteners.

B. Installation Tolerances: Shim and align panel units within installed tolerance of 1/4" in 20'-0" on level/plumb/slope and location/line as indicated, and within 1/8" offset of adjoining faces and of alignment of matching profiles.

C. Joint Sealers: Install gaskets, joint fillers and sealants where indicated and where required for

weatherproof performance of panel systems. Provide types of gaskets and sealants/fillers indicated or, if not otherwise indicated, types recommended by panel manufacturer.

D. Refer to other sections of these specifications for product and installation requirements applicable to indicated joint sealers.

E. Water shall be prevented from entering the building during the work. This shall involve keeping penetrations sealed, planning the work to reroof sections, and sealing new to old or other precautionary and effective safeguards.

3.3 ROOFING

A. General: Arrange and nest sidelap joints so that prevailing winds blow over, not into, lapped joints. Apply panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line. Protect factory finishes from damage.

1. Provide weatherseal under ridge cap. Flash and seal roof panels at eave and rake with rubber, neoprene, or other closures to exclude weather.

B. Standing Seam Roof Panel System: Fasten roof panels to hat channels with concealed clip in accordance with the manufacturer's instructions.

1. Install clips at each support using self-drilling fasteners.
2. At end laps of panels install two strips of tape caulk between panels.
3. Install factory-caulked cleats at standing seam joints. Machine seam cleats to the panels to provide a weather-tight joint.

C. Sheet Metal Accessories: Install gutters, downspouts, ventilators, louvers, and other sheet metal accessories in accordance with manufacturer's recommendations for positive anchorage to building and weathertight mounting. Adjust operating mechanism for precise operation.

3.4 CLEANING AND PROTECTION

A. Damaged Units: Replace panels and other components of the work which have been damaged or have deteriorated beyond successful repair by means of finish touch-up or similar minor repair procedures.

B. Cleaning: Remove temporary protective coverings and strippable films (if any) as each panel is installed. Upon completion of panel installation, clean finished surfaces as recommended by panel manufacturer and maintain in a clean condition during construction.

END OF SECTION

SECTION 08310 COILING COUNTER DOOR

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. COILING STEEL COUNTER DOOR – ANODIZED ALUMINUM FINISH

1.2 RELATED SECTIONS

A. Drawings and general provisions of the Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

B. Section 05500 - Metal Fabrications: Support framing and framed opening.

1.3 REFERENCES

A. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

B. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.

C. ASTM A 924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.

D. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

E. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric).

F. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).

G. NEMA ICS 2 - Industrial Control and Systems: Controllers, Contactors, and Overload Relays, Rated Not More Than 2000 Volts AC or 750 Volts DC.

H. NEMA MG 1 - Motors and Generators.

1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:

C. Preparation instructions and recommendations.

D. Storage and handling requirements and recommendations.

E. Details of construction and fabrication.

F. Installation methods.

G. Shop Drawings: Include detailed plans, elevations, details of framing members, required clearances, anchors, and accessories. Include relationship with adjacent construction.

H. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and patterns.

I. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

A. Furnish each overhead coiling counter door as a complete unit produced by one manufacturer, including hardware, accessories, mounting and installation components.

B. Furnish overhead coiling counter door units by one manufacturer for entire project.

C. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.

D. Installer Qualifications: Company specializing in performing Work of this section with minimum

three years and approved by manufacturer.

E. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.

F. Install in areas designated by Architect.

G. Do not proceed with remaining work until workmanship and installation is approved by Architect.

H. Refinish mock-up area as required to produce acceptable work.

I. Anchorages: Furnish all anchoring devices and provide setting drawings, templates, instructions and directions for installation of anchoring devices. Coordinate delivery with other work to avoid delay.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.

C. Store materials in a dry, warm, ventilated weathertight location.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 COORDINATION

A. Coordinate Work with other operations and installation of adjacent finish materials to avoid damage to installed materials.

1.9 WARRANTY

A. Warranty: Manufacturer’s limited door warranty for 2 years for all parts and components.

B. Manufacturer’s 2 year limited warranty for PowderGuard Premium Powder Coat Finish.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. Overhead Door Corporation, 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: www.overheaddoor.com; E-mail: info@overheaddoor.com.

B. Raynor; 1101 East River Road, Dixon, IL 61021-0448; www.raynor.com: PH: 815.285.7144.

C. Cookson; 1901 South Litchfield Road, Goodyear, AZ 85338; www.cooksondoor.com:

PH: 800.294.4358

2.2 OVERHEAD COILING STEEL COUNTER DOORS.

A. Anodized Aluminum Counter Doors: Overhead Door Corporation 652 Series.

1. Wall Mounting Condition:
   a. As indicated on drawings.
2. Curtain: Interlocking slats, Type F-158 fabricated of anodized aluminum. Endlocks attached to alternate slats to maintain curtain alignment and prevent lateral slat movement.
3. Finish:
   a. Anodized Finish:
      i. Slats and hood clear anodized aluminum.

ii. Non-galvanized exposed ferrous surfaces shall receive one coat of rust-inhibitive primer.

b. Powder coat: PowderGuard

i. PowderGuard Premium: Weather resistant polyester powder coat color as selected by the Architect.

4. Bottom Bar: Extruded aluminum tubular shape with astragal.
5. Guides: Extruded aluminum.
   a. Finish: PowderGuard Zinc Finish for guides, bottom bar and head plate.
6. Brackets: Steel plate to support counterbalance, curtain and hood.
7. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel.
8. Hood: Provided with intermediate support brackets as required and fabricated of:
   a. Aluminum.
   b. Galvanized primed steel.
9. Operation:
   a. Manual push up.
10. Locking:
    a. Two point dead locks with mortise cylinder/s.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify opening sizes, tolerances and conditions are acceptable.

B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.

C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.

C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.

D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

E. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.

F. Install perimeter trim and closures.

3.4 ADJUSTING

A. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.

B. Adjust hardware and operating assemblies for smooth and noiseless operation.

3.5 CLEANING

A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.

B. Remove labels and visible markings.

C. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 PROTECTION

A. Protect installed products until completion of project.

END OF SECTION

SECTION 09980
BRICK COLOR TREATMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Water Based Stain

B. Mineral Stain

1.2 RELATED SECTIONS

A. Section 04200 - Masonry Units: Masonry Units to receive color treatment.

1.3 REFERENCES

A. ASTM C 744 - Standard Specification for Prefaced Concrete and Calcium Silicate Masonry Units.

B. SCAQMDR 1168 - South Coast Air Quality Management District's (SCAQMD) Volatile Organic Content (VOC) Rule 1168 for Adhesive and Sealant Applications.

1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Product characteristics.
2. Preparation instructions and recommendations.
3. Storage and handling requirements and recommendations.
4. Application methods.

C. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors.

D. Verification Samples: For each finish product specified, two samples, minimum size 3 inches (76 mm) square, representing actual product and color.

E. Environmental Regulations: Submit certification stating the masonry stain material to be applied is in compliance with federal, provincial and local environmental Volatile Organic Compounds (VOC) regulations.

F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: A manufacturer with a minimum of 20 years experience in the production the stains and coatings of type specified.

B. Installer Qualifications: Installer licensed by Nawkaw to apply the stain products specified and with a minimum of 3 years documented experience in applying stains and coatings similar in type and scale to this Project.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
   1. Finish areas designated by Architect.
   2. Prepare samples in an area where they will be exposed to the same conditions as will be present on the building during curing.
   3. Allow samples to cure a minimum of three days before obtaining approval.
   4. Samples should be viewed from a minimum distance of 20 feet.
   5. Do not proceed with remaining work until color and finish is approved by Architect.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store and handle products in accordance with requirements of manufacturer.

C. Store materials inside if possible, away from sparks or open flame. Store in a secure area to avoid tampering and contamination. Water based materials must be kept from freezing.

D. Store and dispose of hazardous materials, and materials contaminated by hazardous materials, in accordance with requirements of local authorities having jurisdiction.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

A. Provide with manufacturer's standard 25 year limited warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Nawkaw Corporation, which is located at: 370 Commerce Blvd.; Athens, GA 30606; Toll Free Tel: 866-462-9529; Tel: 706-355-3217; Fax: 706-355-9199; Email:request info (info@nawkaw.com); Web:www.nawkaw.com

B. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 WATER BASED STAIN

A. NawTone+PLUS (Formally NWRT-91):
   1. General: Dual-purpose product designed to add color to masonry while repelling water from significantly penetrating the vertical masonry. Water based, multiple polymer formulation of resin solids and color pigments. UV resistant, light- fast and mold, mildew and fungus resistant.

2. Physical Properties:
    a. Specific Gravity: 1.27 - 1.31.
    b. Viscosity at 72 F (22 C): 70 - 95 KU.
    c. Solids (Weight): 36 to 39 percent.
    d. Solids (Volume): 31 to 34 percent.
    e. pH: 8.5 - 9.5.
    f. Gloss / Sheen: Flat.
    g. Volatile Organic Compound (VOC): Less than 5 percent.
3. Finish:
    a. Color: Formulate to color as selected by the Owner or Architect.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. Verify that surfaces to receive Work are structurally sound and fully intact.

C. Verify that new masonry and concrete have cured at least 21 days prior to starting Work using NawTone and NawTone + Plus.

D. Verify that new masonry and concrete have cured at least 47 days prior to starting Work using NawTone K.

E. Verify that surfaces to receive Work have a neutral pH.

F. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

B. Clean surfaces thoroughly prior to installation. Allow surfaces to dry completely before applying coating.

C. Verify that walls, masonry, concrete, stucco, block split faced/fluted and mortar that may have been treated with any form of chemical/acid wash are neutralized.

D. Verify that masonry, concrete, stucco, block split faced/fluted and mortar units in existing building are structurally sound and fully intact.

E. Treat alkali or efflorescence with proper neutralizing compounds as recommended by masonry supplier before stain application.

F. Before application verify that the masonry walls have a neutral pH level.

G. Before application verify that surface to be treated is clean, dry and contains no frozen water.

H. Mix products as recommended immediately prior to application.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Ensure that stained surfaces are not exposed to rain for at least 24 hours after application.

C. Apply stain using airless spray pump to help control airborne particles or overspray. If site conditions prohibit spray application, apply by hand; utilizing brushes and rollers.

D. Do not proceed with Work when ambient temperatures are less than 25 degrees F (4 degrees C) or greater than 110 degrees F (43 degrees C).

E. Verify color uniformity 12 to 36 hours after application. Recoat areas where blotches, blemishes or imperfections are present.

3.4 FIELD QUALITY CONTROL

A. After masonry stain has cured a minimum of 12 hours, verify color uniformity. Recoat any area that are unacceptable.

3.5 PROTECTION

A. Protect installed products until completion of project.

B. Protect prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels as required.

C. Protect shrubs, metal, wood trim, glass, asphalt and other building hardware during application from overspray.

D. Do not permit mist (if spraying) or liquid to drift onto surrounding properties or parking lots.

E. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

SECTION 10100 - MARKABLE BOARDS AND TACKBOARDS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

1.2 DESCRIPTION OF WORK

A. Extent of markable boards (M.B.) and tackboards (T.B.) is shown on drawings.

B. Types of markable boards and tackboards specified in this section include the following:

1. Markable Boards
2. Vinyl Fabric-Faced Cork Tackboards

1.3 QUALITY ASSURANCE

A. Manufacturer: Unless otherwise acceptable to Architect, furnish all markable boards and tackboards by one manufacturer for entire project.

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's technical data and installation instructions for each material and component part, including data substantiating that materials comply with requirements.

B. Samples: Submit full range of color samples for each type of markable board, tackboard, trim and accessories required. Provide 12" square samples of sheet materials and 12" lengths of trim members for color verification after selections have been made.

C. Shop Drawings: Submit for each type of markable board and tackboard. Include sections of typical trim members and dimensioned elevations. Show anchors, grounds, reinforcement, accessories, and installation details.

1.5 SPECIAL PROJECT WARRANTY

A. Warranty on Porcelain Enamel Markable Boards: Provide written warranty, signed by manufacturer, agreeing to replace, within warranty period, porcelain enamel remarkable boards which do not retain original writing and erasing qualities, defined to include surfaces which become slick and shiny, or exhibit crazing, cracking or flaking; provided manufacturer's instructions for handling, installing, protecting and maintaining markable boards have been adhered to during the warranty period. Replacement is limited to material replacement only and does not include labor for removal and reinstallation.

1. Warranty Period: 50 years from date of substantial completion or lifetime of the building.

PART 2 – PRODUCTS

2.1 MANUFACTURER

A. The following manufacturers' products have been used to establish minimum standards for materials, workmanship and function:

B. Manufacturers of Markable Boards and Tackboards:

1. Claridge Products and Equipment, Inc.; www.claridgeproducts.com; 601 Highway 62-65 South, P.O. Box 910, Harrison, AR. 72602-0910; Phone: 800.434.4610 or 870.743.2200.
2. Corona Group, Inc.; www.coronagroupinc.com; 3650 Messer Airport Hwy, Birmingham, AL 35222; Ph.: 205.941.1942.
3. ASI Visual Display Products; www.asi-visualdisplayproducts.com; 2210 Dunwin Drive, Mississauga, ON L5L 1C7, Canada; Ph.: 833.632.0878.
4. PolyVision, Inc.; www.polyvision.com; 10700 Abbotts Bridge Road, Suite 100, Johns Creek, GA. 30097; Phone: 888.325.6351 or 678.542.3100.
5. Marsh Industries, Inc.; www.marsh-ind.com; 2301 East High Avenue, New Philadelphia, OH, 44663; Phone: 800.426.4244.

C. Equal products of other manufacturers may be used in the work, provided such products have been approved by the Architect not less than Ten (10) days prior to scheduled bid opening.

2.2 MATERIALS

A. Markable Boards (M.B.) - Markable boards shall be porcelain enamel writing surface as manufactured by PolyVision, Inc. Writing surface shall have magnetic properties and perform as follows:

1. As a Writing Surface: The writing surface shall accept various writing medium including but not limited to chalk, pencil, water base marker, ball point pen, and fiber tip pen. All markings shall be clearly visible and easily cleaned.

2. As a Projection Surface: Projected images shall be clearly visible from any angle.

3. Board Construction shall include the following:

   a. Facing sheet shall be porcelain enamel (P3 ceramicsteel) fused to 28 gauge steel face at approximately 1500 degrees F. Core shall be 1/2:" particleboard with 0.005" aluminum backing sheet.

   b. Provide single piece units up to 4' x 16'. Where overall sizes exceed manufacturer's maximum size, provide two or more panels of equal size as acceptable to the Architect.

B. Tackboards (T.B.): "Fabricork" Vinyl faced fabric (Koroseal) complying with FS CCC-W-408, Type II, mildew resistant, laminated to 1/4" thick cork backing sheet. Furnish materials as required for tack strips.

1. Unless otherwise indicated, make up rigid panels by factory-laminating under pressure to 1/4" thick exterior type plywood or hardboard backing.

2. Color: Color and Pattern to be selected from manufactures standards.

C. Colors and Textures: Color to be selected from manufactures standards.

D. Trim and Accessories:

1. General: Fabricate frames and trim of not less than 0.062" thick aluminum alloy, size and shape as indicated, to suit type of installation. Provide straight, single-length units wherever possible and keep joints to minimum. Miter corners to neat, hairline closure.

2. Aluminum Finish: Furnish exposed aluminum trim, accessories and fasteners with the following finish:

   a. Finish: Manufacturer's standard satin aluminum finish.

3. Chalk-trough: Furnish continuous aluminum chalk-troughs for each markable board, unless otherwise indicated, as follows:

   a. Solid extrusion, manufacturer's standard ribbed section, enclosed chalk tray with solid end caps, smoothly curved with concealed mounting.

4. Map-rails and Map hooks: Furnish continuous aluminum maprails with cork tackstrip inserts for each markable board. Provide one pair of paper holders and one pair of maphooks for each 4 foot of remarkable board length. Provide flag holder and 1 pair of roller brackets.

2.3 FABRICATION

A. Assembly: Provide factory-assembled markable board and tackboard units unless field-assembled units indicated.

B. Make joints only where total length exceeds maximum manufactured length. Fabricate with minimum number of joints, balanced around center of board, as acceptable to Architect.

C. Provide manufacturer's standard vertical joint system between abutting sections of markable board.

1. Provide mullion trim at joints between markable board and tackboard.

PART 3 – EXECUTION

3.1 INSTALLATION:

A. **Verify mounting heights with Owner prior to installation.**

B. Deliver factory-built markable board and tackboard units completely assembled in one piece without joints, whenever possible. Where dimensions exceed panel size, provide 2 or more pieces of equal length as acceptable to Architect. When overall dimensions require delivery in separate units, prefit at factory, disassembled for delivery, and make final joints at site. Use splines at joints to maintain surface alignment.

C. Install units in locations as shown on drawings and mounted at heights as directed by the Owner, keeping perimeter lines straight, plumb, and level. Provide all grounds, clips, backing materials, adhesives, brackets, anchors, trim, and accessories for complete installation.

3.2 ADJUST AND CLEAN:

A. Verify accessories required for each unit properly installed and operating units properly functioning.

B. Clean units in accordance with manufacturer's instructions, breaking in only as recommended.

END OF SECTION

SECTION 13670 - EXTRUDED ALUMINUM WALKWAY COVER (FLAT CANOPY & PITCHED CANOPY)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

1.2 DESCRIPTION OF WORK

A. **Flat Canopy**: The work covered by this section shall include design, fabrication and installation of a complete Flat Extruded Aluminum Canopy System (roll formed not acceptable) with decking and fascia in accordance with the drawings and this specification. The canopy shall consist of structural aluminum panels bound by a framework of fascia which also acts as a water collecting gutter. All components shall be as required to support design loads in accordance with engineering prints and calculations provided by the manufacturer. Sizes shown on the drawings are for diagrammatical purposes only. Water shall drain from deck into the beams and out at grade level of columns through drain holes.

B. **Pitched Canopy**: The work covered by this section shall include design, fabrication and installation of a complete Pitched Extruded Aluminum Canopy System (roll formed not acceptable) with welded drain beams, trusses, decking, facia and roof panels in accordance with the drawings and this specification. All components shall be as required to support design loads in accordance with engineering prints and calculations provided by the manufacturer. Sizes shown on the drawings are for diagrammatical purposes only. Water shall drain from deck into the beams and onto adjacent roofs of flat canopies.

C. The extent of aluminum walkway covers is shown on the drawings and as specified herein.

1.3 REFERENCES

A. Aluminum Design Manual 2000, Specifications & Guidelines for Aluminum Structures.

B. ASCE 7, Minimum Design Loads for Buildings and Other Structures.

C. American Architectural Manufacturers Association (AAMA)

D. American Society for Testing and Materials (ASTM)

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product information, specifications and installation instructions for components and accessories.

B. Shop Drawings: Submit complete erection drawings showing attachment system, column and gutter beam framing, transverse cross sections, covering and trim details, and optional installation details to clearly indicate proper assembly of components, sealed by a State Registered Structural Engineer in the state in which the work is being performed.

C. Certification: Submit written Certification prepared and signed by a State Registered Structural Engineer verifying that framing design will safely resist wind uplift as computed by ANSI A58.1, IV=150, Exposure C, as well as meet indicated loading requirements of the Standard Building Code, latest edition as referenced in State Requirements for Educational Facilities 1999 and wind loading requirements of ANSI/ASCE 7-98, live and dead loads and other load requirements.

1.5 QUALITY ASSURANCE

A. Codes and Standards: Comply with provisions of the following except as otherwise indicated.

1. International Building Code, latest addition with amendments, if any.

   AWS (American Welding Society) standards for structural aluminum welding.

B. Manufacturer: Obtain aluminum covered walkway system from only one (1) manufacturer, although several may be indicated as offering products complying with requirements.

C. Installer Qualification: Firm with not less than three (3) years experience in installation of aluminum walkway covers of type, quantity and installation methods similar to work of this section.

D. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication where possible, to insure proper fitting of work. However, allow for adjustments within specified tolerations wherever taking of field measurements before fabrication might delay work.

E. Shop Assembly: Pre-assemble units in shop to greatest extent possible and disassemble as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

F. Coordination: Coordinate work of this section with work of other sections which interface with covered walkway system (sidewalks, curbs, building fascias, etc.).

1.6 PERFORMANCE REQUIREMENTS

A. System Performance: Provide aluminum covered walkway system that has been designed, produced, fabricated and installed to withstand normal temperature changes as well as live loading, dead loading and wind loading in compliance with Standard Building Code requirements for geographic area in which work is located and as follows:

B. The system shall be designed by a registered Engineer in the State of Alabama, certifying the system meets all wind, foundation and all other applicable loads and requirements set forth by local or state building requirements.

1. Live Load: 30 p.s.f. minimum
2. Structural design for wind forces: Comply with ANSI A58.1-1982
3. Design Wind Velocity: **120.p.h.**
4. Importance Factor: 1.1.
5. Stability Criteria: International Building Code 2015

C. Sizes shown on drawings are to be considered minimum.

D. Roof structure shall be capable of sustaining severe icing, hail, hurricane force winds and supporting a concentrated load such as being walked upon.

PART 2 – PRODUCT

2.1 MANUFACTURERS

A. The following manufacturers products have been used to establish minimum requirements for materials, workmanship, and function:

1. Extruded Aluminum Walkway Cover System.
    a. Tennessee Valley Metals, Inc. **(Basis of Design and Standard of Quality) |** 190 Industrial Park Road, Oneonta, Alabama 35121 **|** (205) 274-9500 **|** www.tvmetals.com.
    b. Dittmer Architectural Aluminum **|** 1006 Shepherd Road **|** Winter Springs, Florida 32708**|** (800) 822-1755; (407) 699-1755 **|** www.dittdeck.com **|** info@dittdeck.com.
    c. Superior Mason Products LLC. **|** 116 Citation Court, Birmingham, Alabama 35209**|** (877) 445-1200 **|** www.superiormetalproducts.com **|** canopysales@superior-mason.com.
    d. Mitchell Metals **|** 1761 McCoba Dr. SE Suite B, Smyrna, Georgia 30080 **|** (770) 285-5875; **|** www.mitchellmetals.net **|** sales@mitchellmetals.net.
    e. Gulf South Metals **|** 17869 Samantha Drive, Foley, Alabama 36535 **|** (251) 943-6443; **|** www.gulfsouthmetals.com **|** info@gulfsouthmetals.com.

B. Equal products of other manufacturers may be used in the work, provided such products have been approved, by the Architect, not less than ten (10) days prior to scheduled bid opening.

2.2 MATERIALS

A. General: All aluminum extrusions shall be alloy 6063 heat treated to a T-6 temper.

B. Columns: Columns shall be radius-cornered tubular extrusion of size shown on drawings with cutout and internal diverter for drainage where indicated. Circular downspout opening in column is not acceptable. Provide a small weep hole at the bottom of all non-draining columns to allow for

C. Beams (when used): Beams shall be tubular extrusions of size and shape shown on drawings (open-top tubular extrusions of size and shape shown on drawings with top edges thickened for strength as necessary).

D. Deck Construction: Deck shall be manufactured of extruded modules that interlock in a self-flashing manner. Interlocking joints shall be positively fastened at 18" O.C. creating a monolithic structural unit capable of developing the full strength of the sections. The fastenings must have minimum shear strength of 350 pounds each. Deck shall be assembled with sufficient camber to offset dead load deflection.

E. Fascia: Fascia shall be manufacturer's standard shape.

F. Drainage: Water shall drain internally from deck to fascia to beams (when used) to columns, for discharge out of rain diverters at or below ground level as indicated on architectural drawings.

G. Flashing: Flashing shall be .032” aluminum (min.). All thru-wall flashing is completed by others.

H. Arches: Arches for barrel vault protective covers shall be sharp-cornered tubular extrusions of size shown in drawings.

I. Fasteners:

1. Deck Screws (rivets not permitted): Type 18-8 non-magnetic stainless steel sealed with a neoprene "O" ring beneath 5/8" outside dimension, conical washer.
2. Fascia Rivets: Size 3/16" by 1/2" grip range aluminum rivets with aluminum mandrel.
3. Bolts: All bolts, nuts and washers to be 18-8 non-magnetic stainless steel.
4. Tek Screws: not permitted

2.3 FINISHES

A. Standard:

1. Factory baked enamel finish, AAMA 603.8.
   a. Color to be selected by Architect after bid date from manufactures standards.
   b. Standard Color Selection must include “White”.

2.4 WARRANTY

A. Manufacturer shall warrant the entire system against defects in labor and materials for a period of one (1) year commencing on the date of substantial completion as established in Division One of these specifications.

B. Intention of this warranty is the manufacturer will come onto the jobsite and do all necessary to effect corrections of any deficiencies.

C. Prima Facie Evidence of defects in labor and material may include but is not limited to, one or more of the following:

1. Moisture leaks
2. Metal failure including excessive deflection
3. Fastener failure
4. Finish failure

2.5 FABRICATION

A. Comply with indicated profiles, dimensioned requirements and structural requirements.

B. Use sections true to details with clean, straight, sharply defined profiles and smooth surfaces of uniform color and texture, free from defects impairing strength and durability.

C. All welding to be done by heli-arc process.

D. Bents shall consist of shop welded one piece units. When size of bents do not permit shipment as a welded unit, concealed mechanical joints may be used.

E. Mechanical joints shall consist of stainless steel bolts with a minimum of two (2) bolts per fastening. Bolts and nuts shall be installed in a concealed manner utilizing 1/2" thick by 1 1/2" aluminum bolt bars welded to structural members. All such mechanical joints must be detailed on shop drawings showing all locations.

F. Roof Deck: Flush deck extruded aluminum shapes, interlocking self-flashing sections. Shop fabricate to lengths and panels widths required for field assembly. Depth of sections to comply with structural requirements. Provide shop induced camber in deck units with spans greater than 16'- 0" to offset dead load deflections. Welded dams are to be used at non-draining ends of deck.

G. Expansion joints, design structure for thermal expansion and contraction. Provide expansion joints as required.

H. Exposed rivets used to fasten bottom of fascia to deck to have finish to match fascia.

I. Apply a shop applied dip-coat of clear acrylic enamel to each column end terminating in concrete to insulate from electrolytic reaction. Column ends shall be pierced to "key" grout to bent for maximum uplift protection.

PART 3 - EXECUTION

3.1 DELIVERY, STORAGE AND HANDLING

A. Deliver, store and handle covered walkway system components as recommended by manufacturer. Handle and store in a manner to avoid deforming members and to avoid excessive stresses.

3.2 EXAMINATION

A. Examine adjacent work for conditions that would prevent quality installation of system.

B. Do not proceed until defects are corrected.

3.3 FIELD DIMENSIONS

A. General contractor shall field confirm all existing locations, dimensions and elevations shown on shop drawings prior to fabrication.

3.4 INSTALLATION

A. Install roof deck sections, accessories and related flashing in accordance with manufacturer's instructions. Provide roof slope for rain drainage without ponding water. Align and anchor roof deck units to structural support frames.

B. Assemble all components in a neat, workmanlike manner.

3.5 FLASHING

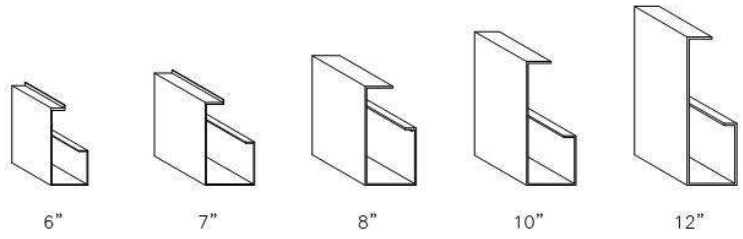
A. Flashings: Flashings required between covered walkway system and adjoining structures are not work of this section. Refer to "Flashing and Sheet Metals", Section 07600.

3.6 CLEANING AND PROTECTION

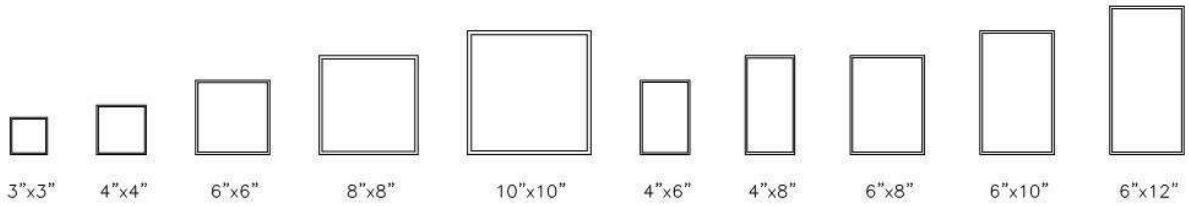
A. Damaged Units: Replace roof deck panels and other components of the work which have been damaged or have deteriorated beyond successful minor repair.

B. Cleaning: Remove protective coverings at time in project construction sequence which will afford greatest protection of work. Clean finished surfaces as recommended by manufacturer. Maintain in a clean condition during construction.

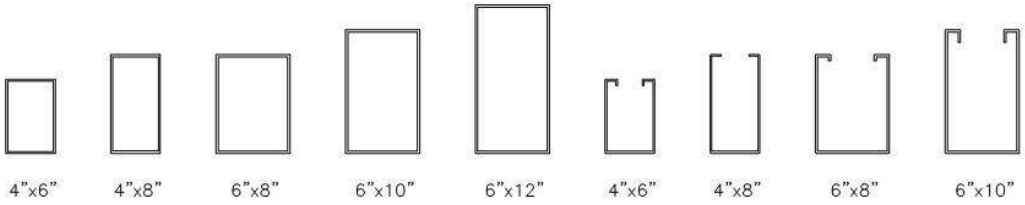
END OF SECTION



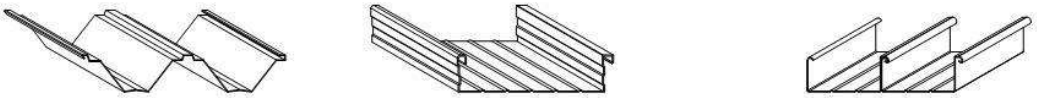
FASCIA OPTIONS

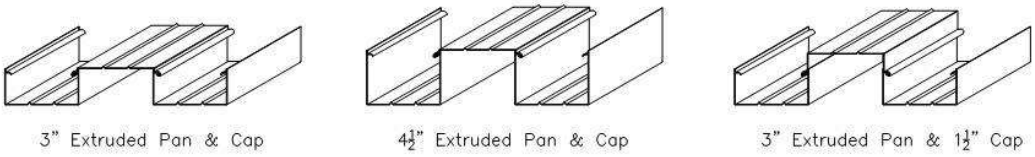


COLUMN OPTIONS

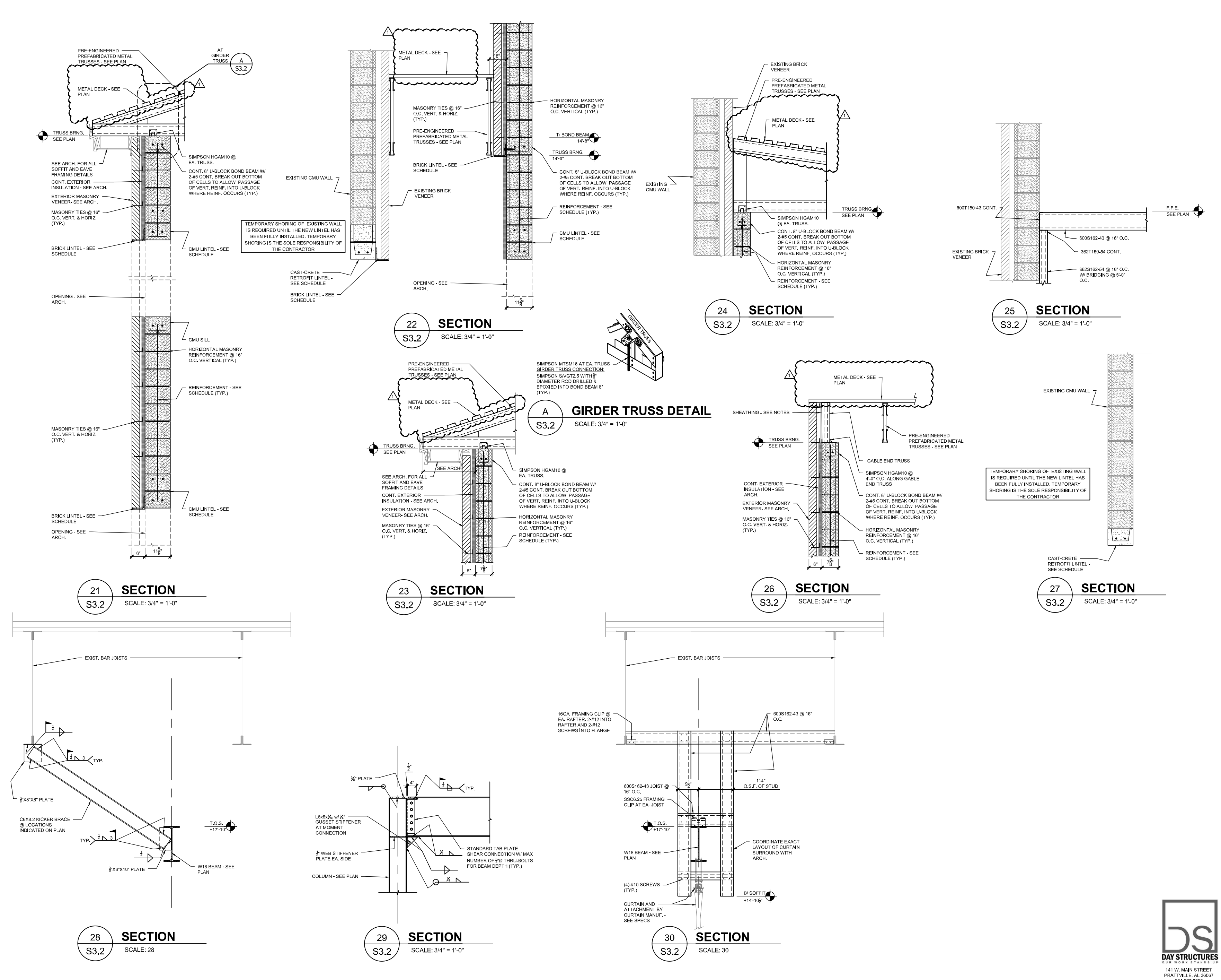


BEAM OPTIONS





DECK OPTIONS



Goshen High School Arts Center Renovation

TO

Goshen High School

FOR THE

Pike County Board of Education

Troy, ALABAMA

McKEE and ASSOCIATES
ARCHITECTURE and INTERIOR DESIGN
631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9933

DAY STRUCTURES
OUR WORK STANDS UP
141 W. MAIN STREET
PRATTVILLE, AL 36067
334.277.9550

SHEET TITLE :	SECTIONS
MCKEE JOB # :	20.119
DRAWN BY :	TNS
DATE:	10.10.25
REVISED DATE:	1 11.7.25
REVISED DATE:	
REVISED DATE:	

SHEET NO. : S3.2

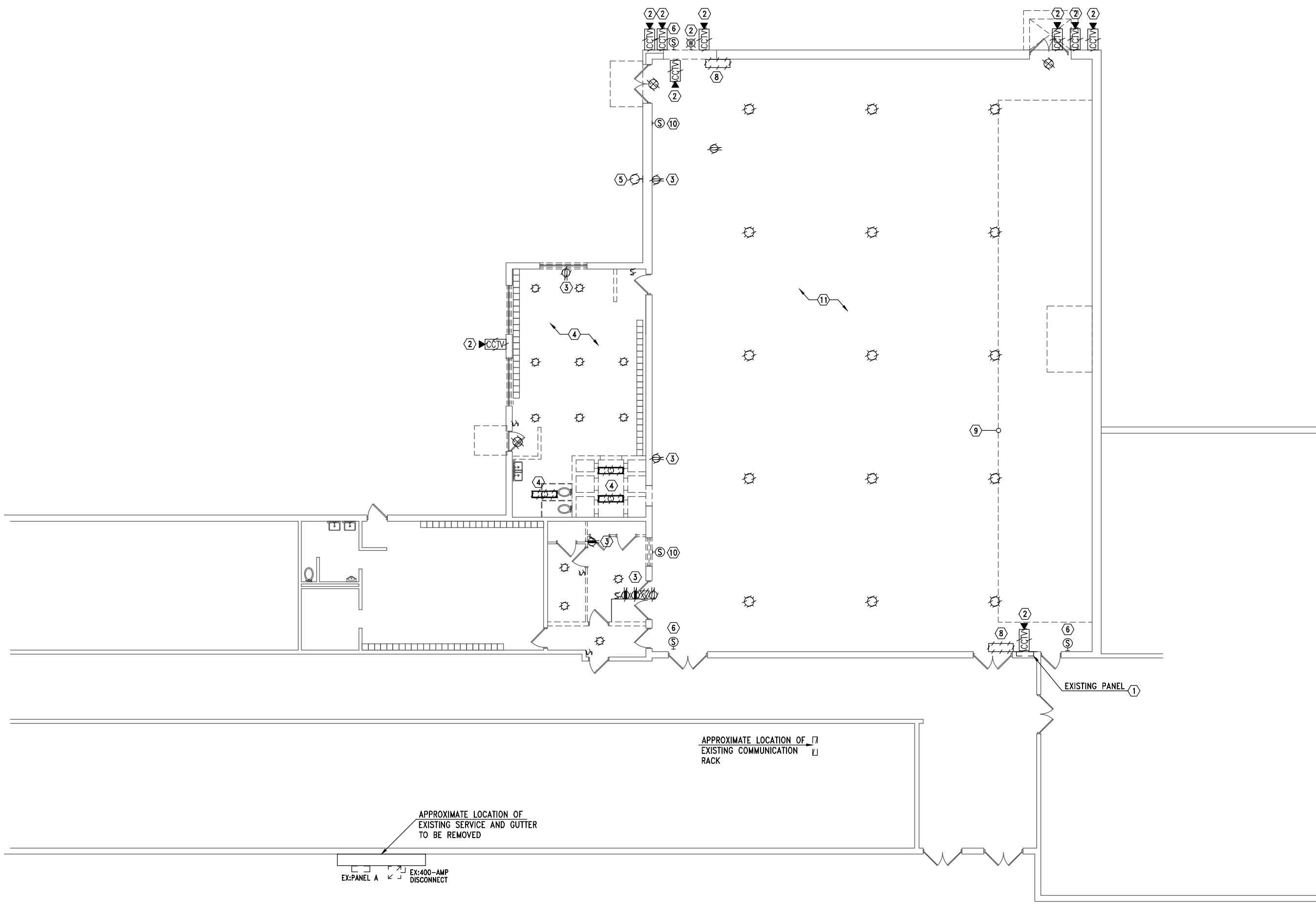
GENERAL NOTES:

1. CONTRACTOR RESPONSIBLE FOR REMOVING AND REINSTALLING ALL CEILING MOUNTED DEVICES IN ALL AREAS THAT NEW CEILINGS WILL BE INSTALLED. LOWER DEVICES TO NEW CEILINGS AS REQUIRED. INTERCEPT AND EXTEND CIRCUITRY AS NEEDED. VISIT SITE PRIOR TO BIDS TO QUANTIFY THE AMOUNT OF WORK AND BID ACCORDINGLY.
2. REMOVE ALL SWITCHING AS REQUIRED TO ACCOMPLISH NEW SWITCHING REQUIREMENTS. SEE LIGHTING PLANS FOR NEW SWITCH REQUIREMENTS FOR EACH SPACE.
3. CONTRACTOR RESPONSIBLE FOR REMOVING AND PROPERLY DISPOSING OF ALL EXISTING LIGHTS AND LIGHT BULBS.
4. CONTRACTOR SHALL EDIT EXISTING PANELBOARDS AS REQUIRED TO REFLECT DEMOLITION WORK.
5. OWNER TO REMOVE WIRELESS ACCESS POINTS, SECURITY CAMERAS, AND OTHER DEVICES. COORDINATE THIS REMOVAL WITH PIKE COUNTY BOE IT DEPARTMENT PRIOR TO DEMOLITION WORK BEGINNING. DEVICES LEFT THAT ARE NOT WANTED BY PIKE COUNTY BOE IT DEPARTMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM JOBSITE.

EXISTING RACEWAYS:
ELECTRICAL CONTRACTOR SHALL SUPPORT ALL EXISTING RACEWAYS TO REMAIN PER THE NATIONAL ELECTRICAL CODE. PROVIDE ALL EXISTING OPEN JUNCTION BOXES WITH COVERS AND PROVIDE PUSH PENNIES TO ANY EXISTING OPEN KNOCKOUTS. THE EXISTING OVERHEAD CONDUIT SYSTEM IS CURRENTLY NOT SUPPORTED CORRECTLY AND THERE IS OPEN JUNCTION BOXES AND KNOCKOUTS. ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE TO CORRECT ALL THESE ITEMS IN THEIR BASE BID.

SHEET NOTES:

(1) EXISTING DEVICE TO REMAIN.
(2) CONTRACTOR SHALL REMOVE DEVICE AND CIRCUITRY. NOTE WHITE CAMERAS SHALL BE TURNED OVER TO THE OWNER AND BLACK CAMERAS SHALL BE DISPOSED OF.
(3) EXISTING DEVICE TO BE REMOVED. CONTRACTOR SHALL INTERCEPT & EXTEND EXISTING CIRCUIT FOR EXISTING DEVICES TO REMAIN.
(4) EXISTING LIGHTING DEVICES IN THIS AREA TO BE REMOVED. CONTRACTOR SHALL INTERCEPT & EXTEND EXISTING CIRCUIT FOR EXISTING DEVICES TO REMAIN.
(5) REMOVE EXISTING LIGHT. MAINTAIN CIRCUITRY TO EXISTING LIGHTING TO REMAIN.
(6) CONTRACTOR SHALL REMOVE INTERCOM SPEAKER/HORN AND CIRCUITRY AND TURN OVER TO OWNER. ANY REFUSED EQUIPMENT SHALL BE DISPOSED OF.
[redacted] OMIT
(8) CONTRACTOR SHALL REMOVE SCOREBOARD AND CIRCUITRY.
(9) CONTRACTOR SHALL REMOVE ELECTRICAL TO MOTORIZED BLEACHERS TO BE REMOVED.
(10) CONTRACTOR SHALL REMOVE SPEAKER/AV SYSTEM AND CIRCUITRY AND TURN OVER TO OWNER. ANY REFUSED EQUIPMENT SHALL BE DISPOSED OF.
(11) REMOVE ALL EXPOSED CIRCUITRY AND LOW VOLTAGE CABLING IN EXISTING GYMNASIUM.



1 E1.1 PARTIAL FLOOR PLAN DEMOLITION - ELECTRICAL
SCALE: 1/8"=1'-0"

1/8" = 1'-0
8' 0 8 16 FT
GRAPHIC SCALE

Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14, Millbrook, AL 36054, Tel: 334.285.1273
1200 Providence Park, Suite 200, Birmingham, AL 35242
GA#25-140

Goshen High Shool Arts Center Renovation
TO
Goshen High School
FOR THE
Pike County Board of Education
Troy, ALABAMA

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631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9933

ALABAMA REGISTERED PROFESSIONAL ENGINEER NO. 26988 KENNETH RAY GUNN JR. 11-04-2025

SHEET TITLE :	PARTIAL FLOOR PLAN - DEMOLITION - ELECTRICAL
MCKEE JOB # :	20.119
DRAWN BY :	J. TILLERY
DATE:	10-10-2025
REVISED DATE:	11-04-2025 △
REVISED DATE:	
REVISED DATE:	

SHEET NO. : E1.1

LIGHTING FIXTURE SCHEDULE

TYPE:	MANUFACTURER NUMBER AND EQUALS:	VOLTAGE:	MOUNTING:	LAMP TYPE:	LAMP QUANTITY:	DESCRIPTION:
D1	PRESCOLITE NO. LTR-6RA-H-20L40K8MD-DM1-LTR-6RA-T-SS OR PRIOR APPROVED EQUAL BY WILLIAMS OR COOPER	MVOLT	RECESSED	LED	2000 LUMEN	6 INCH 2000 LUMEN LED DOWNLIGHT 3500K TEMPETURE LAMPS AND FEATURE REMOTE PHOSPHOR TECHNOLOGY ENABLING A HIGH SYSTEM EFFICACY AND MINIMUM 80 CRI. 0-10V DIMMING
LG22	HUBBELL NO. SRP22-40VLHE-EDU OR EQUALS BY WILLIAMS OR COOPER	MVOLT	RECESSED	LED	4600 LUMEN	2'X2' 4600-LUMEN FLAT PANEL FIXTURE. 0-10V DIMMING CAPABLE.
LG48	HUBBELL NO. SRP24-40ML-EDU OR EQUALS BY WILLIAMS OR COOPER	MVOLT	RECESSED	LED	5000 LUMEN	2'X4' 5000-LUMEN FLAT PANEL FIXTURE. 0-10V DIMMING CAPABLE.
LG60	HUBBELL NO. SRP24-40HL-EDU OR EQUALS BY WILLIAMS OR COOPER	MVOLT	RECESSED	LED	6000 LUMEN	2'X4' 6000-LUMEN FLAT PANEL FIXTURE. 0-10V DIMMING CAPABLE.
LG72	HUBBELL NO. SRP24-40VL-EDU OR EQUALS BY WILLIAMS OR COOPER	MVOLT	RECESSED	LED	7200 LUMEN	2'X4' 7200-LUMEN FLAT PANEL FIXTURE. 0-10V DIMMING CAPABLE.
LW1	COOPER NO. 4AWS-L3C3-UNV OR EQUALS BY HUBBELL OR PHILIPS	MVOLT	SURFACE	LED	SELECTABLE 4,500/5,300/6,100	4' LED WRAPAROUND WITH SELECTABLE LIGHT OUTPUTS. SELECT HIGH LUMEN SETTING AND 4,000K CCT. CONTRACTOR SHALL ADJUST THE SETTING TO THE ENGINEER SATISFACTION AT NO ADDIITONAL COST.
PL1	ALTMAN NO. PHX1.5-RGBL-30Z-510-SC-36-BK-PCL-TLG-12-5 MATCH AND PROVIDE PROPER LENS IN THE FIELD OR PRIOR APPROVED EQUALS	120	PIPE BATTEN	RGBW LED DMX	1	THEATRICAL LIGHITNG WITH SAFETY CABLE ATTACHMENT AND CABLE. SEE DETAIL SHEET E2.7 FOR FURTHER DETAILS. 50,000 HOURS AT L70 MINIMUM.
WL1	ALTMAN NO. SSPY-RGBW-B-DMX-VNSP,NSP,MFL,WFL-SC-36-BK-XLR-5-10 OR PRIOR APPROVED EQUALS	120	TRACK	LED	1	LED TRACK MOUNTED PAR LUMINAIRE 50,000 HOURS AT L70 MINIMUM. SEE DETAIL SHEET E2.7 FOR FURTHER DETAILS.
WP1	COOPER NO. GWC-SA1-C-740-U-T4W-BZ-10K OR PRIOR APPROVED EQUALS BY HUBBELL OR WILLIAMS	MVOLT	WALL	LED	7,500 LUMEN	7500 LUMEN DARK BRONZE EXTERIOR LED LIGHT WITH SURGE PROTECTION. UL LISTED FOR WET LOCATIONS.
EM WALL PACK	COMPASS NO. CU2HLHOSD - WIREGUARDS IN GYM OR PRIOR APPROVED EQUAL BY EMERGI-LITE, MCPHILBEN, OR PRESCOLITE	MVOLT	WALL	LED	1000 LUMEN	1000 LUMEN LED EMERGENCY WALL PACK
EXIT SIGN COMBO "XB"	DUAL-LITE NO. EVCHLU*W12-06L OR PRIOR APPROVED EQUAL BY EMERGI-LITE, MCPHILBEN, OR PRESCOLITE	MVOLT	UNIVERSAL	LED	1000 LUMEN	THERMOPLASTIC 1000-LUMEN COMBO LED EXIT SIGN EGRESS LIGHT. PROVIDE WITH NUMBER OF FACES AND DIRECTIONAL ARROWS AS SHOWN ON DRAWINGS. COORDINATE COLOR OF SIGNAGE WITH LOCAL REQUIREMENTS. PROVIDE WITH EMERGENCY BATTERY. PROVIDE WIREGUARDS IN GYM.

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NOTES:
1. ARCHITECT RESERVES THE RIGHT TO SELECT ALL COLORS OR MAKE CUSTOM COLOR DURING SHOP DRAWING REVIEW. BID ACCORDINGLY.
2. COORDINATE MOUNTING OF ALL LUMINAIRES WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION
3. PROVIDE EMERGENCY BATTERY BALLAST FOR ALL EMERGENCY TYPE FIXTURES CAPABLE OF 90-MINUTES. ALL EMERGENCY LIGHTS IN SAFE AREA SHALL BE CONNECTED TO THE BATTERY INVERTER FOR 180-MINUTES OF RUN TIME.
4. FOR WARRANTY AND LONG TERM SUPPORT FOR OWNER, ALL LIGHTING FIXTURES SHALL BE PURCHASED THROUGH MANUFACTURER REPRESENTATIVES LOCATED IN THE STATE OF ALABAMA. SUBMITTALS RECEIVED THAT DO NOT COMPLY WITH THIS REQUIREMENT WILL BE REJECTED WITHOUT REVIEW. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIABLE FOR ANY DELAYS CAUSED BY NON COMPLIANCE WITH THIS REQUIREMENT.
5. ALL INTERIOR LIGHTS SHALL HAVE 4000K TEMPERTURE LAMPS, UNLESS NOTED OTHERWISE.
6. ALL EXTERIOR LIGHTS SHALL HAVE 4000K TEMPERTURE LAMPS.
7. LIGHTS SPECIFIED WILL BE USED AT BOTH 120V AND 277V CIRCUITS. PROVIDE UNIVERSAL TYPE VOLTAGE DRIVERS FOR ALL LIGHT FIXTURES. IF A SPECIFIC VOLTAGE IS REQUIRED, LIGHTING MANUFACTURER AND CONTRACTOR SHALL WORK TOGETHER TO PROVIDE THE REQUIRED VOLTAGES FOR EACH OF THE DIFFERENT FACILITIES. ENGINEER WILL NOT BE RESPONSIBLE FOR THIS COORDINATION DURING SUBMITTALS. WE WILL ASSUME THE VOLTAGE SUBMITTED IS CORRECT.

LUMINAIRE NOTES:

1. ALL LUMINAIRES AND INSTALLATION SHALL BE IN ACCORDANCE WITH NEC, NFPA AND LOCAL CODES. ALL LUMINAIRES SHALL BE UL LISTED AND INSTALLED IN ACCORDANCE WITH THE UL LISTING.
2. LUMINAIRES SHALL BE FURNISHED COMPLETE WITH THE PROPER LAMP BASE OR PIN RECEPTORS, WIRING COMPONENTS, LAMPS, SUPPORTING FRAMES AND DEVICES, ETC., FOR A COMPLETE INSTALLATION.
3. ALL LUMINAIRE DEVICES, COMPONENTS, FITTINGS, SUPPORTS, ETC., SHALL BE COORDINATED TO PROVIDE A COMPLETE UL LISTED INSTALLATION
4. ALL LUMINAIRES BALLAST, DRIVERS, LAMPS, ETC SHALL BE COMPATIABLE WITH THE LIGHTING CONTROL SYSTEM OR DIMMING CONTROL SYSTEM PROVIDED.
5. SECURE EACH LAY-IN LUMINAIRE AT TWO LOCATIONS TO THE CEILING GRID. PROVIDE BOLTS, SCREWS, RIVETS OR APPROVED CLIPS FOR USE WITH THE TYPE CEILING AND LUMINAIRE INSTALLED.
6. ALL LUMINAIRES IN MECHANICAL AND ELECTRICAL ROOMS SHALL BE INSTALLED TO CLEAR ELECTRICAL EQUIPMENT, DUCT, PIPING, ETC., SUSPEND BELOW OBSTRUCTION WHEN CONFLICTS OCCUR.
7. ALL FLUORESCENT LUMINARIES SHALL BE PROVIDED WITH 3500K COLOR TEMPERATURE LAMPS, UNLESS NOTED OTHERWISE.
8. ARCHITECT RESERVES THE RIGHT TO SELECT ALL COLORS FOR LUMINAIRES, POLES, MOUNTING ACCESSORIES, ETC. DURING SHOP DRAWING REVIEW.
9. COORDINATE LUMINAIRE MOUNTING WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION.
10. ALL EXIT SIGNS AND LUMINAIRES DESIGNATED AS EMERGENCY SHALL BE PROVIDED WITH A MINIMUM 1100 LUMEN EMERGENCY BATTERY BALLAST CAPABLE OF 90 MINUTES OF ILLUMINATION. X DESIGNATION MEANS DIFFERENT TYPE BATTERY SEE SCHEDULE.
11. CONTRACTOR SHALL PROVIDE ALL SLOPE ADAPTERS, FLANGE KITS, TRIMS, AND ALL OTHER MOUNTING ACCESSORIES AS NEEDED TO MOUNT EACH LUMINAIRE IN CEILINGS AS SHOWN. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS.
12. PROVIDE ALL EXIT SIGNS WITH DIRECTIONAL ARROWS AS SHOWN ON DRAWINGS.

COMcheck Software Version 4.1.5.5
Interior Lighting Compliance Certificate

Project Information

Energy Code: 90.1 (2013) Standard
Project Title: Goshen High School Arts Center Renovation to Goshen High School
Project Type: New Construction

Construction Site:
Owner/Agent: MCKEE & ASSOCIATES
Designer/Contractor: JASON TILLERY, GUNN & ASSOCIATES, MILLBROOK, AL

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-AUDITORIUM (Common Space Types:Auditorium Seating Area)	8982	0.63	5659
		Total Allowed Watts =	5659

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-AUDITORIUM (Common Space Types:Auditorium Seating Area)				
LG48: Other:	1	21	38	798
LG60: Other:	1	14	45	630
LG72: Other:	1	16	76	1216
LG22: Other:	1	2	28	56
			Total Proposed Watts =	2700

Interior Lighting PASSES: Design 52% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 90.1 (2013) Standard requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JASON TILLERY (ELECTRICAL DESIGNER) — Name - Title; Signature: Jason Tillery; Date: 09-04-2025

Project Title: Goshen High School Arts Center Renovation to Goshen High School — Report date: 09/04/25
Data filename: \\s4\Drive-N\2025\25-140 GOSHEN HIGH SCHOOL ADDITION\Correspondence\GOSHEN AUDITORIUM ENERGY STUDY.cck — Page 1 of 6

COMcheck Software Version 4.1.5.5
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 90.1 (2013) Standard
Project Title: Goshen High School Arts Center Renovation to Goshen High School
Project Type: New Construction
Exterior Lighting Zone: 1 (Developed rural area (LZ1))

Construction Site:
Owner/Agent: MCKEE & ASSOCIATES
Designer/Contractor: JASON TILLERY, GUNN & ASSOCIATES, MILLBROOK, AL

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Walkway < 10 feet wide	700 ft of	0.7	Yes	490
			Total Tradable Watts (a) =	490
			Total Allowed Watts =	490
			Total Allowed Supplemental Watts (b) =	500

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Walkway < 10 feet wide (700 ft of walkway length): Tradable Wattage				
LED 1: Other:	1	2	30	60
LED 2: Other:	1	5	45	225
			Total Tradable Proposed Watts =	285

Exterior Lighting PASSES: Design 71% better than code

Exterior Lighting Compliance Statement

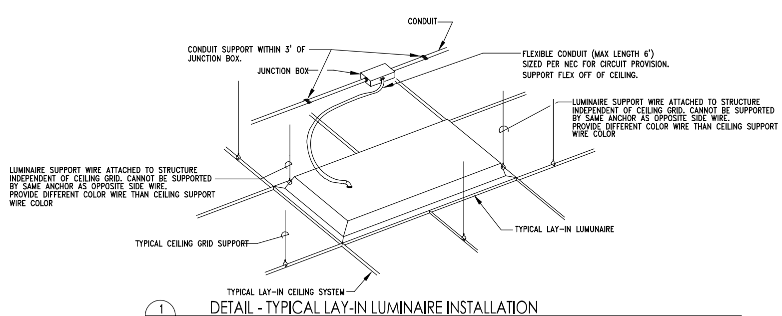
Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 90.1 (2013) Standard requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JASON TILLERY (ELECTRICAL DESIGNER) — Name - Title; Signature: Jason Tillery; Date: 09-04-2025

Project Title: Goshen High School Arts Center Renovation to Goshen High School — Report date: 09/04/25
Data filename: \\s4\Drive-N\2025\25-140 GOSHEN HIGH SCHOOL ADDITION\Correspondence\GOSHEN AUDITORIUM ENERGY STUDY.cck — Page 2 of 6

NOTES:

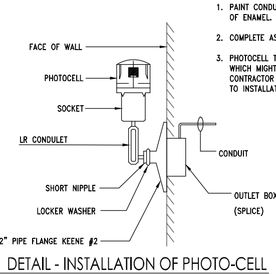
1. ALL RECESSED LUMINAIRES SHALL BE WIRED FROM A JUNCTION BOX AS SHOWN, INCLUDING LUMINAIRES IN A CONTINUOUS ROW. NO WIRING THRU FIXTURES. NO MORE THAN TWO LUMINAIRES SHALL BE CIRCUITED TO ONE JUNCTION BOX.
2. LUMINAIRE SUPPORT WIRES TO BE A MINUMUM OF #14 GAGE PRE-STRAINED GALVINIZED WIRE ATTACHED AT OPPOSITE CORNERS. LUMINAIRE SHALL BE SUPPORTED TO THE STRUCTURE INDEPENDENT OF THE CEILING GRID.
3. CONDUCTORS IN FLEXIBLE CONDUIT FROM JUNCTION BOX TO LUMINAIRE SHALL CONTAIN AN INSULATED GREEN GROUND WIRE, WITH NEUTRAL AND PHASE CONDUCTORS REQUIRED FOR THE CIRCUITING AND SWITCHING REQUIREMENTS INDICATED.
4. JUNCTION BOXES SHALL BE ACCESSIBLE AND LOCATED WITHIN 1'-6" ABOVE LAY-IN CEILING INSTALLATION. PROVIDE PENDANT ALL-THREAD RODS AND/OR STRUT ASSEMBLIES TO MEET THIS REQUIREMENT WHERE DROP CEILING IS MORE THAN 1'-6" FROM STRUCTURE.
5. CONTRACTOR SHALL INSTALL ALL T-BAR SAFETY CLIPS TO GRID. IF FIXTURE DOES NOT COME WITH GRID SAFETY CLIPS, THEN THE CONTRACTOR SHALL PROVIDE SUPPORT WIRES ON ALL FOUR SIDES.



1 E5.1 DETAIL - TYPICAL LAY-IN LUMINAIRE INSTALLATION
NO SCALE

NOTES

1. PAINT CONDUIT NIPPLE, SOCKET AND PIPE FLANGE WITH TWO COATS OF ENAMEL.
2. COMPLETE ASSEMBLY TO BE UL LISTED FOR WET LOCATIONS.
3. PHOTOCELL TO BE MOUNTED FACING NORTH FREE FROM ALL SHADOWS WHICH MIGHT CAUSE PHOTOCELL TO TURN LIGHTS ON EARLY. CONTRACTOR SHALL COORDINATE PROPER MOUNTING LOCATION PRIOR TO INSTALLATION.



2 E5.1 DETAIL - INSTALLATION OF PHOTO-CELL
NO SCALE

Goshen High Shool Arts Center Renovation
TO
Goshen High School
FOR THE
Pike County Board of Education
Troy, ALABAMA

McKEE and ASSOCIATES
ARCHITECTURE and INTERIOR DESIGN
631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9933

ALABAMA REGISTERED NO. 26088 PROFESSIONAL 11-04-2025 ENGINEER KENNETH RAY GUNN JR

Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14, Millbrook, AL 36054, Tel: 334.285.1273
1200 Providence Park, Suite 200, Birmingham, AL 35242, GA#25-140

SHEET TITLE : LIGHTING SCHEDULE, DETAILS & NOTES
MCKEE JOB # : 20.119
DRAWN BY : J. TILLERY
DATE: 10-10-2025
REVISED DATE: 11-04-2025 ⚠1
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- Tuesday, November 4, 2025 8:24:08 AM