

ITB# 078-26
Paycor Stadium South Scoreboard Expansion
Bid Package 5: Facade
Addendum 1

October 21, 2026

To All Registered Vendors:

1. A non-mandatory in-person pre-bid meeting will occur on Tuesday, October 27, 2026 at 11:00 a.m. at PBSL Main Security; corner of Mehring Way and Central Ave.
2. The Engineer's Estimate has been revised from \$6,000,00 to \$3,988,330

Attachments

1. Pre-Bid Meeting Agenda
2. Pre-Bid Meeting Attendees
3. MBE/WBE/SBE Policies and Procedures Pre-Bid Meeting Overview

Specifications

- I. Refer to 01 11 00 Part 2.1B General Provisions of Bid Package #5 Trade Contracts, Item #85
 - a. Below is a link to the latest Structural Steel Model dated October 13, 2026

<https://acc.autodesk.com/build/share/projects/c6e798de-b6cb-4df8-ac9f-671ad84ef7d6/files?shareId=c6eb0211-6432-41c3-a3e2-278e8c19d198>

2. 07 42 13.15 FL – Formed Perforated Metal Plate Wall Panels – *replace in its entirety*

Drawings

None

Questions & Answers

None

Sincerely,

Jill Williams

Jill Williams
Purchasing Director

AGENDA FOR PRE-BID ON 10-20-26 AT 11:00 AM EDT
ITB# 078-26 – Paycor Stadium South Scoreboard Facade BP#5 Project

LOCATION: Virtual Teams Meeting

Join: <https://teams.microsoft.com/meet/288808821149402?p=CX5cfqiO2Zi07T3rvz>

Meeting ID: 288 808 821 149 402

Passcode: UK2JM6kR

1. Introduction - Kyle

- a. Project
- b. Owner

2. The Bid Process - Kyle

- a. Key Dates
 - Questions **10/28/2026 12:00 PM EDT**
 - Answers **10/30/2026 11:00 AM EDT**
 - Bid Opening Date **11/4/2026 11:00 AM EST**
- b. Addendums

3. Bid Documents – Kyle

- a. Location
- b. Scope Review
- c. Estimated Budget ~~\$6,000,000~~ **\$3,988,330**
- d. Trade Contracts
- e. OCIP Program
- f. **Sealed proposals will be received at the Hamilton County Purchasing Department, Room 507, 138 East Court Street, Cincinnati, Ohio 45202, until 11:00 AM on the date listed above and will be read at that time. Bid opening will be held in Conference Room.**

4. Economic Inclusion and Workforce Development – Robert Bell, Hamilton County

- a. SBE Goal - 20%
- b. MBE Goal – 16.5%
- c. WBE Goal – 4.2%
- d. Economic Inclusion
- e. Workforce Development
- f. Building Opportunities by Leveraging Diversity (BOLD)
- g. **Tailored mailings to MBE/WBE/SBE firms notify them of contracting opportunities at least two (2) weeks before bids or proposals are due providing documentation of contact.** All MBE/WBE/SBE documents must be submitted with proposals, see Hamilton County Minority, Women, and Small Business Enterprise Programs.

5. Questions and Answers – Kyle

Pre-Bid Conference Sign-in Sheet

ITB #- 078-26

ITB Name- Paycor Stadium South Scoreboard Façade BP#5

Date: 10-20-2026

VENDOR NAME	CONTACT NAME	PHONE	EMAIL
Universal Contracting Corp.	Hayden Steele	513-805-3866	hsteele@universal1957.com
Hamilton County Ohio	Andra Williams	513-767-0373	andra.williams@hamiltoncountyohio.gov
Jones	Jack Wellman	952-454-3842	jwellman@jones1910.com
Messer Construction Co.	Jake Marsac	205-225-2224	jmarsac@messer.com
Messer Construction Co.	Kyle Buchhalter	937-903-3142	kbuchhalter@messer.com
Messer Construction Co.	Matt Poland	513-678-0312	mpoland@messer.com

MBE/WBE/SBE Policies and Procedures Pre-Bid Meeting Overview

Solicitation: ITB#078-26 -Paycor Stadium South Score Board Facade 2026

Date: 10-20-2026 **Time:** 11 AM

Location: Virtual Pre-Bid Meeting

- Hamilton County has small, minority, and women-owned business participation goals for all solicitations.

The goals for this project are 16.5 % MBE, 4.2 % WBE, and 20 %SBE participation. These goals can be found on page _____ of the solicitation package.

- There are required forms for respondents to complete in the MBE/WBE/SBE policy section of each proposal, including the *Goal Compliance Plan*, the *Application for Program Waiver* (if respondents are unable to meet the project goals), and the *Letter of Intent* (LOI) between the prime contractor and any subcontractor included in the *Goal Compliance Plan*. These forms must be provided when you submit your proposals for your proposal to be deemed responsive.
 - For projects under \$1 million, signed, and notarized LOIs between Bidder and all subcontractors/supplies must be included in their Goal Compliance Plan at the time of submission. For larger projects above \$1 million, bidders must submit a completed LOI for all MBE/WBE/SBE subcontractors/suppliers listed in the Goal Compliance Plan at the time of submission. The LOI for all other subcontractors can be submitted after the time of submission, but before the contract is awarded.
- These participation goals can be achieved by any company doing work for the project that is MBE, WBE, or SBE certified by a third-party certifying agency.
- If you are not able to meet the participation goals, you must submit the *Application for Program Waiver* in addition to the *Goal Compliance Plan* to demonstrate adequate good faith efforts in engaging small, minority, or women-owned companies.
- If you plan to perform 100% of the work yourself, you must submit the *Goal Compliance Plan* and indicate this in the self-performance section in addition to submitting an *Application for Program Waiver*.
- Preference is not given to proposals based on their ability to meet the project goals or their choice to use the Application for Program Waiver. The Goal Compliance Plan and the Application for Program Waiver are evaluated for responsiveness only. For RFPs, points will not be deducted for filling out the Application for Program Waiver.
- An example of how to complete the inclusion forms can be found here: Sample of [Solicitations Inclusion Form](#) , or by visiting our website at [Economic & Community Support - Hamilton County, OH](#) and clicking on the “Sample Solicitation Insert” tab on the left side of the Home Page.

DIVISION 07 – THERMAL AND MOISTURE PROTECTION
SECTION 07 42 13.15
FORMED PERFORATED METAL PLATE WALL PANELS

1.1 SUMMARY

A. Section Includes:

1. Perforated and fabricated architectural metals.
2. Perforated metal panels that incorporate project design images executed with cross-seam perforations.
3. Continuous, horizontal cantilevered perforated metal panel blades projecting from the façade.
4. Custom support plates connecting blades to façade panel support framing.
5. Subframing, brackets, anchors, trims, closures, and all related accessories.
6. Materials for panels, blades and support framing.

- a. Aluminum is the Base Bid material. Stainless steel is the Alternate.

B. Related Requirements:

1. Division 1: Submittal Procedures
2. Division 1: Quality Control
3. Division 1: Closeout Submittals
4. Division 5: Metal Fabrications

1.2 DELEGATED DESIGN REQUIREMENTS

- A. Performance Responsibility: Engage a single, qualified professional engineer, legally authorized to practice in the jurisdiction where the project is located, to provide comprehensive delegated design engineering services.
- B. Scope of Design: The delegated design engineer must design the entire façade, including the formed perforated metal plate panel façade system, cantilevered perforated metal panel blades, panel thickness sizing, reinforcement stiffeners, attachment clips, fasteners, sub-girt framing components, and attachment to the existing structural steel framing.
- C. Design Criteria: System must withstand all local building code structural wind loads, seismic forces, and thermal movements without permanent deformation, structural failure, or component displacement.

1.3 SUBMITTALS FOR DELEGATED DESIGN

- A. Delegated Design Services Statement: Submit a formal statement signed and sealed by the delegated design engineer, certifying that the system design complies with specified structural, thermal, and performance criteria.

- B. Structural Calculations: Provide comprehensive, engineered calculations demonstrating compliance with gravity and wind load pressures (positive and negative) according to ASCE 7. Calculations shall be signed and sealed by a Professional Engineer licensed in good standing with the State of Ohio.
- C. Submittal Coordination: Deliver all engineering packages with the delegated design engineer's seal in a timely manner to facilitate local jurisdiction submittal approval prior to fabrication.
 - 1. Do not provide multiple delegated design engineers for discreet portions of the system.
- D. Shop Drawings: Include detailed plans, elevations, sections, and structural attachment details, explicitly showing fastener types, sizes, spacing, and panel corner reinforcing. Shop Drawings shall be signed and sealed by a single Professional Engineer licensed in good standing with the State of Ohio.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at **Project site**.
 - 1. Meet with Owner, Architect, Owner's insurer if applicable, metal panel Installer, metal panel manufacturer's representative, structural-support Installer, and installers whose work interfaces with or affects metal panels, including installers of doors, windows, and louvers.
 - 2. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 3. Review methods and procedures related to metal panel installation, including manufacturer's written instructions.
 - 4. Examine support conditions for compliance with requirements, including alignment between and attachment to structural members.
 - 5. Review flashings, special siding details, wall penetrations, openings, and condition of other construction that affect metal panels.
 - 6. Review governing regulations and requirements for insurance, certificates, and tests and inspections if applicable.
 - 7. Review temporary protection requirements for metal panel assembly during and after installation.
 - 8. Review of procedures for repair of metal panels damaged after installation.
 - 9. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.5 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures.
- B. Product Data: Submit product data, shop drawings, and installation instructions for custom perforated metal architectural panels. Include construction details; material descriptions; dimensions and profiles of panels, components, and accessories; and specified finishes. Provide

manufacturer's product sheets identifying materials, available finishes, panel thicknesses, dimensions, minimum line spacing, and the available range of perforation and opening sizes.

- C. Samples for Verification: For each type of exposed finish, prepared on Samples of size indicated below:
 - 1. Finish Selection Sample: If requested, provide up to 5 of each material finishes for Architect's selection.
 - a. Minimum Sample sizes: 8" x 10"
 - 2. Perforated and Formed Sample: If requested, provide a representative perforated and formed sample, minimum 24 inches by 24 inches. The perforation scale may vary as needed to illustrate the intended design.
- D. Shop Drawings: Include fabrication and installation layouts for metal panels, showing edge conditions, joints, panel profiles, corners, anchorages, attachment systems, trim, flashings, closures, accessories, and all required special details. Submit shop drawings indicating installation layouts, panel centerline dimensions, connection methods, and anchorage locations. Stamped by a Professional Engineer licensed in good standing with the State of Ohio.
 - 1. The Architect will provide electronic CAD files to be used as the basis for preparing shop drawings.
- E. Patterning Files: Submit perforation patterning files developed from the image files provided by the Architect. Patterning files shall illustrate the intended perforation imagery across the panel surfaces and panel joints, using the specified perforation hole sizes.
- F. Technical Datasheet: Submit structural calculation, system weight, and design pressure.
- G. Quality Assurance:
 - 1. Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
 - 2. Manufacturer's Instructions: Manufacturer's installation instructions
- H. Sample Warranties: For special warranties.

1.6 Closeout Submittals: Submit the following:

- 1. Warranty: Warranty documents specified herein.
- 2. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operation Data) Section. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
- 3. Provide final Revit model in native format.

1.7 QUALITY ASSURANCE

A. Qualifications:

1. Specialties Subcontractor: Company specializing in contracting and management of the work of this section with at least 10 years of documented experience with a comparable-size project and at least five successful prior projects with the Fabricator and Installer. Specialties subcontractor shall be familiar with the Products and the Fabricator's and Installer's production and installation methods.
2. Fabricator Qualifications: Company shall be a manufacturer specializing in the products specified in this Section, with a minimum of 15 years of documented experience and adequate production capacity to meet the Project Schedule. Fabrication shall be performed in a quality-controlled facility by experienced personnel, with references demonstrating multiple successful projects involving perforated metal fabrication comparable to the requirements of this Project.
3. Installer Qualifications: Company specializing in installing the work of this section with at least five years of documented experience with a comparable-size project. Familiar with the Products and the manufacturer's installation methods.

B. Reliance on Existing Documentation: Field verification of existing conditions shall be provided by the Construction Manager. The specialty contractor shall perform all design, engineering, coordination, fabrication, and shop drawing preparation based solely on the existing construction documents provided for reference only. The specialty contractor is responsible for thoroughly reviewing all existing documents and incorporating those dimensions into the delegated design and shall notify the Architect of any discrepancies or unclear conditions prior to proceeding. Any conditions not clearly defined in the available documents shall be treated as assumed conditions and explicitly identified as such within shop drawings and engineering submittals. The specialty contractor shall incorporate reasonable tolerances, adjustment strategies, and attachment flexibility to accommodate typical construction variances of existing structures.

C. Electronic Files:

1. Licensing: Licensing of image file shall be provided by the Architect to the manufacturer prior to acceptance of the bid, unless otherwise agreed upon in writing.
2. Imaging Files: Image files in .jpg, .png, .ai files format, with minimum resolution of 72 pixel/inch, will be provided by the Architect to the manufacturer.

D. Source Limitation:

1. When possible, ensure all raw material came from the same producing mill, the same master slab, and the same chemical composition.
2. All panels in this section shall be produced by the same manufacturer and finished by the same finish applicator to protect against variations.

1.8 MOCKUPS

- A. Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
 - 1. Provide a free-standing mockup; in-place mockups are not permitted. Provide all necessary framing, backing, and support of the mockup.
 - 2. Build mockup of typical metal panel assembly as shown on Drawings (Sheet A-901), including sub-framing, supports, attachments, and accessories.
 - a. Locate mockup at the Project Site in a final location to be determined by the Owner.
 - 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
- B. Mock-up pre-installation meetings:
 - 1. Preinstallation Conference: Conduct a conference at the Project site.
 - a. Meet with Owner, Tenant, Construction Manager, Architect and installers of major systems whose Work is included in the freestanding mock-up.
 - b. Determine location of mock-up on or adjacent to Project site.
 - c. Review and finalize schedule for mock-up, and verify availability of materials, personnel and equipment needed to complete mockups and maintain schedule for the Work.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components, metal panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.
- B. All crates and packaging should be inspected upon delivery for damage. Contact the manufacturer immediately at the time of receipt if any damage is identified. Photographs of any damaged product, including concealed damages, must be supplied to the manufacturer with any claims. Photos of damaged crates and packaging must also be provided to manufacturer. Freight damage must be filed with freight company within the freight carrier's terms.
- C. Unload, store, and erect metal panels in a manner to prevent bending, warping, twisting, and surface damage.
- D. Do not stack crates unless otherwise approved and noted by manufacturer.
- E. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness, with a positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage. Crated products that are stored under tarps should be frequently opened and ventilated to reduce humidity and condensation accumulation.

- F. Retain strippable protective covering on metal panels during installation.
- G. Remove the protective film immediately after installation
- H. Keep product free of oil, grease, mortar, paint, acid, bitumen, drilling dust, dirty water, and other impurities.
- I. Do not use adhesive tape on products in areas visible after installation.
- J. Do not scribe or mark on products.
- K. The Contractor is responsible for using all means necessary to protect the materials of this Section before, during, and after installation and to protect the installed work and materials of all other trades.
- L. In the event of damage, immediately make all repairs and replacements necessary at the sole cost of the responsible party.

1.10 COORDINATION

- A. Coordinate metal panel installation with other trades and other Work, including, but not limited to, video board installation, video board framing, soffits, rain drainage work, flashing, trim, and other adjoining work.
- B. Coordinate all work with storm drainage, flashings, and connections to provide a noncorrosive installation.
- C. Provide Revit files to the Architect for coordination with the existing scoreboard and framing during design.

1.11 WARRANTY

- A. Manufacturer's Warranty: Manufacturer will warrant its products to be in good quality, free from defects, in conformance with the specification, and when installed in accordance with manufacturer's published installation procedures. Any defaults or defects in material or workmanship resulting solely from the manufacturer shall constitute a warranty claim. Manufacturer's warranty coverage and failure types includes, but not limited to, the following:
 - 1. 2-years limited warranty for all structural failures including, but not limited to, permanent deflection beyond design limit.
 - 2. 1-Year Warranty on deterioration of metals, defined as perforation due to corrosion resulting from manufacturer's defects, and loss of adhesion as a result from manufacturer's finish application. This warranty does not cover natural weathering and fading of the surface that will occur as the surface is exposed to ambient conditions. Nor does it cover minor oxidation or oxidation products that transfer to other surfaces.
 - 3. Warranty commences upon Substantial Completion date.

4. During the warranty period, and upon approval of the claim, the manufacturer will repair, or at its option, replace the products that are proven to be defective. The labor and all associated costs (i.e., Scaffolding, lifts, etc.) to remove and reinstall repaired or replacement product is included.
- B. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal panel systems that fail in materials or workmanship within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Structural failures including rupturing, cracking, or puncturing.
 - b. Deterioration of metals and other materials beyond normal weathering.
 2. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORATED METAL PANEL FACADE

- A. Acceptable Manufacturers: Acceptable manufacturers include, but are not limited to the following:
 1. A. Zahner Company; 1400 E. 9th Street, Kansas City, MO 64106; Phone: (816) 423-8354.
 2. Hendrick Architectural; 1 Seventh Ave., Carbondale, PA 18407; Phone: (877) 840-0881, (570) 282-1010.
 3. Arktura; 966 Sandhill Ave. Carson CA 90746; Phone: (310) 532-1050.

2.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E1592:
 1. Wind Loads: As indicated on Drawings.
 2. Gravity Loads: As indicated on Drawings.
 3. Other Design Loads: As indicated on Drawings.
 4. Deflection Limits: For wind loads, no greater than 1/240 of the span.
- B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.
- C. Tolerances:

1. Panels and Components: Panels shall be fabricated to a tolerance not to exceed 1/8" deviation in any dimension from dimensions shown on the shop drawings.
2. Bent Radius at panel bend should be no more than 4 times the thickness of the metal panel.
3. Panel Flatness: Panels shall be fabricated to a flatness that is not to exceed 0.5" out-of-plane when panels are in their installed condition.
4. Installation Tolerances: Adjust hardware to ensure that panels after installation maintain the tolerance of 1/8" in 10' that is not cumulative for level, plumb and line. Offset between panel edges shall be less than 1/16" in plane with the surface.
5. Panel Joints: Hardware and panels shall be installed so that panel joints are 1/8" +/-16".

- D. **Perforations:** Perforation patterns shall maintain an open area not greater than 40 percent, based on the combination of hole size, spacing, and pattern density. Delegated design engineer shall determine final perforation dimensions and ligament widths necessary to meet structural performance requirements while staying within the specified maximum open area and maintaining the intended architectural appearance.

2.3 Materials:

A. Perforated Metal Panels

1. Aluminum panel (Base Bid):
 - a. Thickness: Minimum 0.125-inch. Delegated design engineer shall determine panel thicknesses required to meet structural performance criteria, including wind loads, deflection limits and allowable stress requirements.
 - b. Alloy: 5052-H32 aluminum alloy
 - c. Panel Width: maximum 40"
 - d. Panel Length: maximum 120"
 - e. Panel Depth: Provide panels with a minimum architectural depth of 2.5 inch to maintain the design appearance. Final required panel depth shall be determined by the delegated design engineer based on structural performance criteria
 - f. Shape: Formed panel edges per design details and requirements
 - g. Perforations: As indicated on Drawings.
2. Stainless Steel panel (Alternate):
 - a. Thickness: Minimum 11 ga (0.125-in). Delegated design engineer shall determine panel thicknesses required to meet structural performance criteria, including wind loads, deflection limits and allowable stress requirements.
 - b. Alloy: Type 304.
 - c. Panel Width: minimum 36"
 - d. Panel Length: minimum 72"
 - e. Panel Depth: Provide panels with a minimum architectural depth of 2.5 inch to maintain the design appearance. Final required panel depth shall be determined by the delegated design engineer based on structural performance criteria.
 - f. Perforations: As indicated on Drawings.

B. Continuous Cantilevered Perforated Metal Panel Blades:

1. Projection: As indicated on Drawings.
2. Section Geometry: As indicated on Drawings.
3. Base Bid Material: Aluminum.
 - a. Thickness: Minimum 0.125-inch. Delegated design engineer shall determine panel thicknesses required to meet structural performance criteria, including wind loads, deflection limits and allowable stress requirements.
 - b. Alloy: 5052-H32 aluminum alloy
 - c. Panel Width: minimum 72"
 - d. Panel Length: minimum 72"
 - e. Panel Depth: Flat
 - f. Shape: Formed panel edges per design details and requirements
 - g. Perforations: As indicated on Drawings.
4. Alternate Material: Stainless Steel.
 - a. Thickness: Minimum 11 ga (0.125-in). Delegated design engineer shall determine panel thicknesses required to meet structural performance criteria, including wind loads, deflection limits and allowable stress requirements.
 - b. Alloy: Type 304.
 - c. Panel Width: minimum 72"
 - d. Panel Length: minimum 72"
 - e. Panel Depth: Flat
 - f. Shape: Formed panel edges per design details and requirements
5. Perforations: As indicated on Drawings.

C. Cantilevered Perforated Metal Panel Blade Support Plates:

1. Base Bid Material: Aluminum.
 - a. Thickness: Minimum 0.125-inch. Delegated design engineer shall determine panel thicknesses required to meet structural performance criteria, including wind loads, deflection limits and allowable stress requirements.
 - b. Alloy: 5052-H32 aluminum alloy.
 - c. Shape: As indicated on Drawings.
2. Alternate Material: Stainless Steel.
 - a. Thickness: Minimum 11 ga (0.125-in). Delegated design engineer shall determine panel thicknesses required to meet structural performance criteria, including wind loads, deflection limits and allowable stress requirements.
 - b. Alloy: Type 304.
 - c. Shape: As indicated on Drawings.

2.4 MISCELLANEOUS MATERIALS

- A. Subframing and Support Members: Fabricate miscellaneous subframing, brackets, and support members from structural shapes, plates, and bars unless otherwise indicated. Miscellaneous

components shall be designed and sized by the delegated engineer and shall include, but not be limited to, angles, plates, channels, stiffeners, and connection hardware required to support and align the architectural metal panel and fin system. Provide manufacturer's standard or custom-fabricated support members as necessary to achieve required attachment geometry, tolerances, and load transfer to the primary structure.

1. Materials:

a. Aluminum (Base Bid):

- 1) Structural Profiles: ASTM B308, Alloy 6061-T6.
- 2) Sheet and Plate: ASTM B209, Alloy 6061-T6.
- 3) Extruded Bars, Rods, Profiles, and Tubes: ASTM B221, Alloy 6063-T6.

b. Stainless Steel (Alternate):

- 1) Laser and Laser-hybrid Welded Bars, Plates, and Shapes: ASTM A1069, Type 304.
- 2) Sheet, Strip, and Plate: ASTM A240 or ASTM A666, Type 304.
- 3) Steel Bars and Shapes: ASTM A276, Type 304.

B. Panel Fasteners: Self-tapping screws designed to withstand design loads. Provide countersunk fasteners with heads matching the finish of metal panels.

1. Compatible with aluminum or stainless-steel substrates.
2. Provide isolation pads between dissimilar materials.

2.5 FABRICATION

A. Fabricate and finish metal panels and accessories at the factory, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.

B. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.

2.6 FINISHES, GENERAL

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable

if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.7 ALUMINUM FINISHES (BASE BID)

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

2.8 STAINLESS STEEL FINISHES (ALTERNATE)

- A. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
- B. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
 - 1. Run grain of directional finishes with long dimension of each piece.
- C. Stainless Steel Tubing Finishes:
 - 1. 180-Grit Polished Finish: Uniform, directionally textured finish.
- D. Stainless Steel Sheet and Plate Finishes:
 - 1. Directional Satin Finish: ASTM A480/A480M, No. 4.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal panel supports, and other conditions affecting performance of the Work.
 - 1. Examine wall framing to verify that girts, angles, channels, studs, and other structural panel support members and anchorage have been installed within alignment tolerances required by metal wall panel manufacturer.
- B. Examine roughing-in for components and systems penetrating metal panels to verify actual locations of penetrations relative to seam locations of metal panels before installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Miscellaneous Supports: Install subframing and other miscellaneous panel support members and anchorages according to metal panel manufacturer's written recommendations.

3.3 INSTALLATION OF METAL PANELS

- A. Install metal panels according to manufacturer's written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.
 - 1. Shim or otherwise plumb substrates receiving metal panels.
 - 2. Install screw fasteners in predrilled holes.
 - 3. Locate and space fastenings in uniform vertical and horizontal alignment.
- B. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.

3.4 CLEANING AND PROTECTION

- A. Remove temporary protective coverings and strippable films, if any, as metal panels are installed, unless otherwise indicated in manufacturer's written installation instructions. On completion of metal panel installation, clean finished surfaces as recommended by metal panel manufacturer. Maintain in a clean condition during construction.
- B. After metal panel installation, clear weep holes and drainage channels of obstructions, dirt, and sealant.
- C. Replace metal panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 07 42 13.15