



Post-Bid ADDENDUM No. 1

Date: June 7, 2024
To: All Bidders
Project: Fort Bend County ESD 5 Station No. 3

This Addendum modifies previously issued Specifications.

SPECIFICATIONS

- 1.01 Specifications section 00 01 00 – TABLE OF CONTENTS revised.
- 1.02 Specifications section 05 40 00 – COLD-FORMED METAL FRAMING revised to include 1 ½” rainscreen framing Z-girts.
- 1.03 Specifications section 09 72 00 – WALL COVERINGS added to specifications.
- 1.04 Specifications section 09 84 33.26 – WOOD SLAT SOUND-ABSORBING WALL UNITS added to specifications.
- 1.05 Specifications section 10 40 00 – LARGE MATRIX DISPLAY added to specifications.

Please incorporate these revisions into your proposal documents.

Sincerely,
Slattery Tackett Architects, LLP

A handwritten signature in blue ink, appearing to read "D. Slattery".

David Slattery, AIA

Attachments

Specification Sections: 00 01 00 – TABLE OF CONTENTS, 05 40 00 – COLD-FORMED METAL FRAMING, 09 72 00 - WALL COVERINGS, 09 84 33.26 - WOOD SLAT SOUND-ABSORBING WALL UNITS, 10 40 00 – LARGE MATRIX DISPLAY

SECTION 00 01 10
TABLE OF CONTENTS

PROCUREMENT AND CONTRACTING DOCUMENTS GROUP

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

00 01 10	TABLE OF CONTENTS	PRE-BID ADDENDUM NO. 1 POST-BID ADDENDUM NO. 1
00 10 00	NOTICE FOR SUBCONTRACTOR PROPOSALS	
00 12 00	PROPOSAL FORM	
00 21 10	INSTRUCTIONS TO SUBCONTRACTOR-VENDOR PROPOSERS	
00 21 11	SAMPLE CERTIFICATE OF INSURANCE	
00 31 32	GEOTECHNICAL DATA GEOTECHNICAL REPORT	
00 73 46	PREVAILING WAGE RATES WAGE RATE SCALE – TEXAS GULF COAST AREA	

SPECIFICATIONS GROUP

General Requirements Subgroup

DIVISION 01 - GENERAL REQUIREMENTS

01 10 00	SUMMARY	
01 21 00	ALLOWANCES	
01 25 00	SUBSTITUTION PROCEDURES	
01 26 00	CONTRACT MODIFICATION PROCEDURES	
01 29 00	PAYMENT PROCEDURES	
01 31 00	PROJECT MANAGEMENT AND COORDINATION	
01 32 00	CONSTRUCTION PROGRESS DOCUMENTATION	
01 33 00	SUBMITTAL PROCEDURES	
01 33 10	BIM COORDINATION PROCESS	
01 40 00	QUALITY REQUIREMENTS	
01 42 00	REFERENCES	
01 43 39	MOCKUPS	
01 50 00	TEMPORARY FACILITIES AND CONTROLS	
01 60 00	PRODUCT REQUIREMENTS	
01 73 00	EXECUTION	
01 77 00	CLOSEOUT PROCEDURES	

TABLE OF CONTENTS

00 01 10 - 1

Post-Bid Addendum No. 1 - 6/7/2024

01 78 23 OPERATION AND MAINTENANCE DATA
01 78 39 PROJECT RECORD DOCUMENTS
01 79 00 DEMONSTRATION AND TRAINING

Facility Construction Subgroup

DIVISION 02 - EXISTING CONDITIONS

NOT APPLICABLE

DIVISION 03 - CONCRETE

03 35 43 POLISHED CONCRETE FINISHING

DIVISION 04 - MASONRY

04 26 13 MASONRY VENEER *PRE-BID ADDENDUM NO. 1*
~~04 43 13.13 ANCHORED STONE MASONRY VENEER~~ *PRE-BID ADDENDUM NO. 1*
04 72 00 CAST STONE MASONRY

DIVISION 05 - METALS

05 40 00 COLD-FORMED METAL FRAMING *POST-BID ADDENDUM NO. 1*
05 50 00 METAL FABRICATIONS
05 51 13 METAL PAN STAIRS
05 52 13 PIPE AND TUBE RAILINGS

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 10 53 MISCELLANEOUS ROUGH CARPENTRY
06 16 00 SHEATHING
06 20 23 INTERIOR FINISH CARPENTRY
06 41 16 PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS
06 64 00 PLASTIC PANELING

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 21 00 THERMAL INSULATION
07 26 16 UNDER-SLAB VAPOR RETARDER
07 27 26 FLUID-APPLIED MEMBRANE AIR BARRIERS
07 42 13.13 FORMED METAL WALL PANELS
07 42 13.53 METAL SOFFIT PANELS
07 54 23 THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING
07 62 00 SHEET METAL FLASHING AND TRIM
07 65 00 FLEXIBLE FLASHING
07 84 13 PENETRATION FIRESTOPPING
07 84 43 JOINT FIRESTOPPING
07 92 00 JOINT SEALANTS
07 92 19 ACOUSTICAL JOINT SEALANTS

TABLE OF CONTENTS

00 01 10 - 2

Post-Bid Addendum No. 1 - 6/7/2024

DIVISION 08 - OPENINGS

- 08 11 13 HOLLOW METAL DOORS AND FRAMES
- 08 14 16 FLUSH WOOD DOORS
- 08 31 13 ACCESS DOORS AND FRAMES
- 08 33 23 OVERHEAD COILING DOORS
- 08 34 53.13 SECURITY FRAMES, DOORS, AND GLAZING
- 08 35 13.33 PANEL FOLDING DOORS
- 08 41 13 ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS
- 08 44 13 GLAZED ALUMINUM CURTAIN WALLS
- 08 71 00 DOOR HARDWARE
- DOOR HARDWARE INDEX
- 08 80 00 GLAZING
- 08 83 00 MIRRORS
- 08 88 13 FIRE-RESISTANT GLAZING
- 08 91 19 FIXED LOUVERS

DIVISION 09 - FINISHES

- 09 22 16 NON-STRUCTURAL METAL FRAMING
- 09 24 00 CEMENT PLASTERING
- 09 29 00 GYPSUM BOARD
- 09 30 13 CERAMIC TILING
- 09 51 13 ACOUSTICAL PANEL CEILINGS
- 09 65 13 RESILIENT BASE AND ACCESSORIES
- 09 65 19 RESILIENT TILE FLOORING
- 09 65 66 RESILIENT ATHLETIC FLOORING
- 09 68 13 TILE CARPETING
- 09 72 00 WALL COVERINGS** *POST-BID ADDENDUM NO. 1*
- 09 81 29 SPRAYED ACOUSTICAL INSULATION
- 09 84 33.26 WOOD SLAT SOUND-ABSORBING WALL UNITS** *POST-BID ADDENDUM NO. 1*
- 09 91 13 EXTERIOR PAINTING
- 09 91 23 INTERIOR PAINTING
- 09 96 00 HIGH-PERFORMANCE COATINGS
- 09 97 24 PENETRATING LIQUID FLOOR TREATMENT

DIVISION 10 - SPECIALTIES

- 10 14 16 PLAQUES
- 10 14 19 DIMENSIONAL LETTER SIGNAGE
- 10 14 23 PANEL SIGNAGE
- 10 14 33 ILLUMINATED PANEL SIGNAGE
- 10 26 00 WALL AND DOOR PROTECTION
- 10 28 13 TOILET ACCESSORIES
- 10 40 00 LARGE MATRIX DISPLAY** *POST-BID ADDENDUM NO. 1*
- 10 44 13 FIRE PROTECTION CABINETS
- 10 44 16 FIRE EXTINGUISHERS
- 10 58 00 FIRE FIGHTING EQUIPMENT STORAGE
- 10 73 00 PROTECTIVE COVERS
- 10 75 16 GROUND-SET FLAGPOLES

TABLE OF CONTENTS

00 01 10 - 3

Post-Bid Addendum No. 1 - 6/7/2024

DIVISION 11 - EQUIPMENT

- 11 23 26 COMMERCIAL WASHERS AND EXTRACTORS
- 11 31 00 RESIDENTIAL APPLIANCES
- 11 52 13 PROJECTION SCREENS
- 11 67 33 CLIMBING WALL SYSTEMS

DIVISION 12 - FURNISHINGS

- 12 21 13 HORIZONTAL LOUVER BLINDS
- 12 24 13 ROLLER WINDOW SHADES
- 12 36 16 METAL COUNTERTOPS
- 12 36 23.13 PLASTIC-LAMINATE-CLAD COUNTERTOPS
- 12 36 61.19 QUARTZ AGGLOMERATE COUNTERTOPS

DIVISION 13 - SPECIAL CONSTRUCTION

- 13 24 26 STEAM BATHS

DIVISION 14 - CONVEYING EQUIPMENT

- 14 24 00 HYDRAULIC ELEVATORS
- 14 93 13 FIREHOUSE SLIDE POLES
- 14 94 00 FIREHOUSE PERSONNEL SLIDE

Facility Services Subgroup

DIVISION 21 - FIRE SUPPRESSION

TABLE OF CONTENTS AT BEGINNING OF DIVISION 21

DIVISION 22 - PLUMBING

TABLE OF CONTENTS AT BEGINNING OF DIVISION 22

DIVISION 23 - HEATING VENTILATING AND AIR CONDITIONING

TABLE OF CONTENTS AT BEGINNING OF DIVISION 23

DIVISION 26 - ELECTRICAL

TABLE OF CONTENTS AT BEGINNING OF DIVISION 26

DIVISION 27 - COMMUNICATIONS

TABLE OF CONTENTS AT BEGINNING OF DIVISION 27

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

TABLE OF CONTENTS AT BEGINNING OF DIVISION 28

TABLE OF CONTENTS

00 01 10 - 4

Post-Bid Addendum No. 1 - 6/7/2024

Site and Infrastructure Subgroup

DIVISION 31 - EARTHWORK

- 31 10 00 SITE CLEARING
- 31 20 00 EARTH MOVING
- 31 31 16 TERMITE CONTROL

DIVISION 32 - EXTERIOR IMPROVEMENTS

- 32 13 13 CONCRETE PAVING
- 32 13 73 CONCRETE PAVING JOINT SEALANTS
- 32 17 13 PARKING BUMPERS
- 32 17 23 PAVEMENT MARKINGS
- 32 39 13 MANUFACTURED METAL BOLLARDS
- 32 31 13 CHAIN LINK GATES
- 32 31 19 DECORATIVE METAL FENCES AND GATES
- 32 39 13 MANUFACTURED METAL BOLLARDS

DIVISION 33 - UTILITIES

NOT APPLICABLE

END OF SECTION

TABLE OF CONTENTS

00 01 10 - 5

Post-Bid Addendum No. 1 - 6/7/2024

SECTION 05 40 00
COLD-FORMED METAL FRAMING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Load-bearing wall framing.
 - 2. Exterior non-load-bearing wall framing.
 - 3. Floor joist framing.
 - 4. Soffit framing.

1.02 ACTION SUBMITTALS

- A. Product Data: For each type of cold-formed steel framing product and accessory.
- B. Shop Drawings:
 - 1. Include layout, spacings, sizes, thicknesses, and types of cold-formed steel framing; fabrication; and fastening and anchorage details, including mechanical fasteners.
 - 2. Indicate reinforcing channels, opening framing, supplemental framing, strapping, bracing, bridging, splices, accessories, connection details, and attachment to adjoining work.
- C. Delegated-Design Submittal: For cold-formed steel framing.

1.03 INFORMATIONAL SUBMITTALS

- A. Welding certificates.

1.04 QUALITY ASSURANCE

- A. Product Tests: Mill certificates or data from a qualified independent testing agency.
- B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.3/D1.3M, "Structural Welding Code - Sheet Steel."
- C. Mockups: Provide cold-formed metal framing and accessories required to construct integrated exterior mockup specified in Division 01 Section "Mockups."

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Protect cold-formed steel framing from corrosion, moisture staining, deformation, and other damage during delivery, storage, and handling.

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Division 01 Section "Quality Requirements," to design cold-formed steel framing.
- B. Structural Performance: Provide cold-formed steel framing capable of withstanding design loads within limits and under conditions indicated.
 - 1. Design Loads: Determine positive and negative wind pressures according to ASCE/SEI 7 using wind speed criteria indicated on Structural Drawings.
 - 2. Deflection Limits: Design framing systems to withstand design loads without deflections greater than the following:
 - a. Interior Load-Bearing Wall Framing: Horizontal deflection of 1/360 of the wall height under a horizontal load of 5 lbf/sq. ft.
 - b. Exterior Non-Load-Bearing Framing: Horizontal deflection of 1/600 of the wall height.
 - c. Floor Joist Framing: Vertical deflection of 1/360 for live loads and 1/240 for total loads of the span.
 - d. Soffit Joist Framing: Vertical deflection of 1/120 of the span for live loads and 1/240 for total loads of the span.
 - 3. Design exterior non-load-bearing wall framing to accommodate horizontal deflection without regard for contribution of sheathing materials.
- C. Cold-Formed Steel Framing Design Standards:
 - 1. Floor and Roof Systems: AISI S210.
 - 2. Wall Studs: AISI S211.
 - 3. Headers: AISI S212.
 - 4. Lateral Design: AISI S213.
- D. AISI Specifications and Standards: Unless more stringent requirements are indicated, comply with AISI S100 and AISI S200.
- E. Fire-Resistance Ratings: Comply with ASTM E 119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

2.02 COLD-FORMED STEEL FRAMING, GENERAL

- A. Steel Sheet: ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of grade and coating weight as follows:
 - 1. Grade: As required by structural performance.
 - 2. Coating: G60 or equivalent.

- B. Steel Sheet for Vertical Deflection Clips: ASTM A 653/A 653M, structural steel, zinc coated, of grade and coating as follows:
 - 1. Grade: As required by structural performance.
 - 2. Coating: G60.

2.03 LOAD-BEARING WALL FRAMING

- A. Steel Studs: Manufacturer's standard C-shaped steel studs, of web depths indicated, punched, with stiffened flanges, and as follows:
 - 1. Minimum Base-Metal Thickness: 0.0329 inch.
 - 2. Flange Width: 1-5/8 inches.
- B. Steel Track: Manufacturer's standard U-shaped steel track, of web depths indicated, unpunched, with straight flanges, and as follows:
 - 1. Minimum Base-Metal Thickness: 0.0329 inch.
 - 2. Flange Width: 1-1/4 inches.
- C. Steel Box or Back-to-Back Headers: Manufacturer's standard C-shapes used to form header beams, of web depths indicated, unpunched, with stiffened flanges, and as follows:
 - 1. Minimum Base-Metal Thickness: 0.0329 inch.
 - 2. Flange Width: 1-3/8 inches.
- D. Steel Single- or Double-L Headers: Manufacturer's standard L-shapes used to form header beams, of web depths indicated, and as follows:
 - 1. Minimum Base-Metal Thickness: 0.0329 inch.
 - 2. Top Flange Width: 1-1/2 inches.

2.04 EXTERIOR NON-LOAD-BEARING WALL FRAMING

- A. Steel Studs: Manufacturer's standard C-shaped steel studs, of web depths indicated, punched, with stiffened flanges, and as follows:
 - 1. Minimum Base-Metal Thickness: 0.0329 inch.
 - 2. Minimum Flange Width: 1-5/8 inches.
- B. Steel Track: Manufacturer's standard U-shaped steel track, of web depths indicated, unpunched, with unstiffened flanges, and matching minimum base-metal thickness of steel studs.
- C. Vertical Deflection Clips: Manufacturer's standard head clips, capable of accommodating upward and downward vertical displacement of primary structure through positive mechanical attachment to stud web.
- D. Single Deflection Track: Manufacturer's single, deep-leg, U-shaped steel track; unpunched, with unstiffened flanges, of web depth to contain studs while allowing free vertical movement, with flanges designed to support horizontal loads and transfer them to the primary structure.

COLD-FORMED METAL FRAMING

05 40 00 - 3

Post-Bid Addendum No. 1 - 6/7/2024

- E. Double Deflection Tracks: Manufacturer's double, deep-leg, U-shaped steel tracks, consisting of nested inner and outer tracks; unpunched, with unstiffened flanges.

2.05 FLOOR JOIST FRAMING

- A. Steel Joists: Manufacturer's standard C-shaped steel joists, of web depths indicated, punched, with stiffened flanges, and as follows:
 - 1. Minimum Base-Metal Thickness: 0.0329 inch.
 - 2. Flange Width: 1-5/8 inches, minimum.
- B. Steel Joist Track: Manufacturer's standard U-shaped steel joist track, of web depths indicated, unpunched, with unstiffened flanges, and as follows:
 - 1. Minimum Base-Metal Thickness: 0.0329 inch.
 - 2. Flange Width: 1-1/2 inches, minimum.

2.06 SOFFIT FRAMING

- A. Exterior Soffit Frame: Manufacturer's standard C-shaped steel sections, of web depths indicated, with stiffened flanges, and as follows:
 - 1. Minimum Base-Metal Thickness: 0.0329 inch.
 - 2. Flange Width: 1-5/8 inches, minimum.

2.07 Z-GIRT FOR RAINSCREEN FRAMING

- A. Basis of Design: Design is based on Clark Dietrich, "Z-Girt Rainscreen Framing." Subject to compliance with requirements, provide named product or comparable products approved by the Architect.
 - 1. Material: Garde 33 ksi, G90- 43 mils.
 - 2. Thickness: 18 gage.
 - 3. Depth: As indicated on Drawings.
 - 4. Fasteners: As recommended by Manufacturer for each application condition.

2.08 FRAMING ACCESSORIES

- A. Fabricate steel-framing accessories from steel sheet, ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of same grade and coating weight used for framing members.
- B. Provide accessories of manufacturer's standard thickness and configuration.

2.09 ANCHORS, CLIPS, AND FASTENERS

- A. Steel Shapes and Clips: ASTM A 36/A 36M, zinc coated by hot-dip process according to ASTM A 123/A 123M.
- B. Anchor Bolts: ASTM F 1554, Grade 36, threaded carbon-steel hex-headed bolts, headless, hooked bolts, or headless bolts, with encased end threaded, and carbon-steel nuts; and

flat, hardened-steel washers; zinc coated by hot-dip process according to ASTM A 153/A 153M, Class C.

- C. Expansion Anchors: Fabricated from corrosion-resistant materials, with allowable load or strength design capacities calculated according to ICC-ES AC193 and ACI 318 greater than or equal to the design load, as determined by testing per ASTM E 488 conducted by a qualified testing agency.
- D. Power-Actuated Anchors: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with allowable load capacities calculated according to ICC-ES AC70, greater than or equal to the design load, as determined by testing per ASTM E 1190 conducted by a qualified testing agency.
- E. Mechanical Fasteners: ASTM C 1513, corrosion-resistant-coated, self-drilling, self-tapping, steel drill screws.
 - 1. Head Type: Low-profile head beneath sheathing, manufacturer's standard elsewhere.

2.10 MISCELLANEOUS MATERIALS

- A. Galvanizing Repair Paint: ASTM A 780.
- B. Cement Grout: Portland cement, ASTM C 150, Type I; and clean, natural sand, ASTM C 404. Mix at ratio of 1 part cement to 2-1/2 parts sand, by volume, with minimum water required for placement and hydration.
- C. Nonmetallic, Nonshrink Grout: Premixed, nonmetallic, noncorrosive, nonstaining grout containing selected silica sands, portland cement, shrinkage-compensating agents, and plasticizing and water-reducing agents, complying with ASTM C 1107/C 1107M, with fluid consistency and 30-minute working time.
- D. Shims: Load bearing, high-density multimer plastic, and nonleaching; or of cold-formed steel of same grade and coating as framing members supported by shims.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Install load bearing shims or grout between the underside of load-bearing wall bottom track and the top of foundation wall or slab at locations with a gap larger than 1/4 inch to ensure a uniform bearing surface on supporting concrete or masonry construction.

3.02 INSTALLATION, GENERAL

- A. Cold-formed steel framing may be shop or field fabricated for installation, or it may be field assembled.
- B. Install cold-formed steel framing according to AISI S200 and to manufacturer's written instructions unless more stringent requirements are indicated.

- C. Install cold-formed steel framing and accessories plumb, square, and true to line, and with connections securely fastened.
- D. Install framing members in one-piece lengths.
- E. Install temporary bracing and supports to secure framing and support loads comparable in intensity to those for which structure was designed. Maintain braces and supports in place, undisturbed, until entire integrated supporting structure has been completed and permanent connections to framing are secured.
- F. Do not bridge building expansion joints with cold-formed steel framing. Independently frame both sides of joints.
- G. Install insulation, specified in Division 07 Section "Thermal Insulation," in built-up exterior framing members, such as headers, sills, boxed joists, and multiple studs at openings, that are inaccessible on completion of framing work.
- H. Fasten hole reinforcing plate over web penetrations that exceed size of manufacturer's approved or standard punched openings.
- I. Erection Tolerances: Install cold-formed steel framing level, plumb, and true to line to a maximum allowable tolerance variation of 1/8 inch in 10 feet and as follows:
 - 1. Space individual framing members no more than plus or minus 1/8 inch from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.

3.03 LOAD-BEARING WALL INSTALLATION

- A. Install continuous top and bottom tracks sized to match studs. Align tracks accurately and securely anchor at corners and ends, and at spacings as follows:
 - 1. Anchor Spacing: As shown on Shop Drawings.
- B. Squarely seat studs against top and bottom tracks with gap not exceeding of 1/8 inch between the end of wall framing member and the web of track. Fasten both flanges of studs to top and bottom tracks. Space studs as follows:
 - 1. Stud Spacing: 16 inches unless otherwise indicated.
- C. Set studs plumb, except as needed for diagonal bracing or required for nonplumb walls or warped surfaces and similar configurations.
- D. Align studs vertically where floor framing interrupts wall-framing continuity. Where studs cannot be aligned, continuously reinforce track to transfer loads.
- E. Align floor and roof framing over studs according to AISI S200, Section C1. Where framing cannot be aligned, continuously reinforce track to transfer loads.
- F. Anchor studs abutting structural columns or walls, including masonry walls, to supporting structure as indicated.

- G. Install headers over wall openings wider than stud spacing. Locate headers above openings as indicated. Fabricate headers of compound shapes indicated or required to transfer load to supporting studs, complete with clip-angle connectors, web stiffeners, or gusset plates.
 - 1. Frame wall openings with not less than a double stud at each jamb of frame as indicated on Shop Drawings. Fasten jamb members together to uniformly distribute loads.
 - 2. Install runner tracks and jack studs above and below wall openings. Anchor tracks to jamb studs with clip angles or by welding, and space jack studs same as full-height wall studs.
- H. Install supplementary framing, blocking, and bracing in stud framing indicated to support fixtures, equipment, services, casework, heavy trim, furnishings, and similar work requiring attachment to framing.
 - 1. If type of supplementary support is not indicated, comply with stud manufacturer's written recommendations and industry standards in each case, considering weight or load resulting from item supported.
- I. Install horizontal bridging in stud system, spaced vertically as indicated on Shop Drawings. Fasten at each stud intersection.
 - 1. Bridging: One of the following at the Contractor's option.
 - a. Cold-rolled steel channel, welded or mechanically fastened to webs of punched studs.
 - b. Combination of flat, taut, steel sheet straps of width and thickness indicated and stud-track solid blocking of width and thickness to match studs. Fasten flat straps to stud flanges and secure solid blocking to stud webs or flanges.
 - c. Proprietary bridging bars installed according to manufacturer's written instructions.
- J. Install steel sheet diagonal bracing straps to both stud flanges, terminate at and fasten to reinforced top and bottom tracks. Fasten clip-angle connectors to multiple studs at ends of bracing and anchor to structure.
- K. Install miscellaneous framing and connections, including supplementary framing, z-girt for rainscreen framing, web stiffeners, clip angles, continuous angles, anchors, and fasteners, to provide a complete and stable wall-framing system.

3.04 EXTERIOR NON-LOAD-BEARING WALL INSTALLATION

- A. Install continuous tracks sized to match studs. Align tracks accurately and securely anchor to supporting structure as indicated.
- B. Fasten both flanges of studs to bottom track unless otherwise indicated. Space studs as follows:
 - 1. Stud Spacing: As indicated.

- C. Set studs plumb, except as needed for diagonal bracing or required for nonplumb walls or warped surfaces and similar requirements.
- D. Isolate non-load-bearing steel framing from building structure to prevent transfer of vertical loads while providing lateral support.
 - 1. Install single deep-leg deflection tracks and anchor to building structure.
 - 2. Install double deep-leg deflection tracks and anchor outer track to building structure.
- E. Install horizontal bridging in wall studs, spaced vertically in rows indicated on Shop Drawings but not more than 48 inches apart. Fasten at each stud intersection.
 - 1. Top Bridging for Single Deflection Track: Install row of horizontal bridging within 12 inches of single deflection track. Install a combination of bridging and stud or stud-track solid blocking of width and thickness matching studs, secured to stud webs or flanges.
 - a. Install solid blocking at centers indicated on Shop Drawings.
 - 2. Bridging: One of the following at the Contractor's option.
 - a. Cold-rolled steel channel, welded or mechanically fastened to webs of punched studs.
 - b. Combination of flat, taut, steel sheet straps of width and thickness indicated and stud-track solid blocking of width and thickness to match studs. Fasten flat straps to stud flanges and secure solid blocking to stud webs or flanges.
 - c. Proprietary bridging bars installed according to manufacturer's written instructions.
- F. Install miscellaneous framing and connections, including stud kickers, web stiffeners, clip angles, continuous angles, anchors, and fasteners, to provide a complete and stable wall-framing system.

3.05 JOIST INSTALLATION

- A. Install perimeter joist track sized to match joists. Align and securely anchor or fasten track to supporting structure at corners, ends, and spacings indicated on Shop Drawings.
- B. Install joists bearing on supporting frame, level, straight, and plumb; adjust to final position, brace, and reinforce. Fasten joists to both flanges of joist track.
 - 1. Install joists over supporting frame with a minimum end bearing of 1-1/2 inches.
 - 2. Reinforce ends and bearing points of joists with web stiffeners, end clips, joist hangers, steel clip angles, or steel-stud sections as indicated on Shop Drawings.
- C. Space joists not more than 2 inches from abutting walls, and as follows:
 - 1. Joist Spacing: 12 inches unless otherwise indicated.
- D. Frame openings with built-up joist headers consisting of joist and joist track, or another combination of connected joists if indicated.

- E. Install joist reinforcement at interior supports with single, short length of joist section located directly over interior support, with lapped joists of equal length to joist reinforcement, or as indicated on Shop Drawings.
 - 1. Install web stiffeners to transfer axial loads of walls above.
- F. Install bridging at intervals indicated on Shop Drawings. Fasten bridging at each joist intersection as follows:
 - 1. Bridging: Combination of flat, taut, steel sheet straps of width and thickness indicated and joist-track solid blocking of width and thickness indicated. Fasten flat straps to bottom flange of joists and secure solid blocking to joist webs.
- G. Secure joists to load-bearing interior walls to prevent lateral movement of bottom flange.
- H. Install miscellaneous joist framing and connections, including web stiffeners, closure pieces, clip angles, continuous angles, hold-down angles, anchors, and fasteners, to provide a complete and stable joist-framing assembly.

3.06 FIELD QUALITY CONTROL

- A. Testing: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Field and shop welds will be subject to testing and inspecting.
- C. Testing agency will report test results promptly and in writing to Contractor and Architect.
- D. Remove and replace work where test results indicate that it does not comply with specified requirements.
- E. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.07 REPAIRS AND PROTECTION

- A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on fabricated and installed cold-formed steel framing with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that cold-formed steel framing is without damage or deterioration at time of Substantial Completion.

END OF SECTION

SECTION 09 72 00 WALL COVERINGS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes textile wall covering for direct application to drywall.
 - 1. Textile wall covering.

1.02 ACTION SUBMITTALS

- A. Shop Drawings: Indicate the following:
 - 1. Quantities of each type of wall covering required for Owner' use in furnishing wall covering material.
 - 2. Show location and extent of each wall-covering type.
 - 3. Indicate pattern placement, seams and termination points.

1.03 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For wall coverings to include in maintenance manuals.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Source Limitations: Obtain each type of material specified in this Section from single source from single manufacturer.

2.02 WALL COVERINGS

- A. Basis of Design: Design is based on MPS Acoustics, "Collaire." Subject to compliance with requirements, provide named product or comparable product approved by Architect.
- B. Properties:
 - 1. Felt Thickness: 3/ 8 inch.
 - 2. Material: 100% PET (polyethylene terephthalate) acoustic felt.
 - 3. Fire Rating: Comply with ASTM E84 Class A.
 - 4. Pattern: As selected by Architect.
 - 5. Color: As selected by Architect.

WALL COVERINGS

09 72 00 - 1

Post-Bid Addendum No. 1 - 6/7/2024

2.03 ACCESSORIES

- A. Adhesive: Mildew-resistant, nonstaining, strippable adhesive, for use with specific wall covering and substrate application; as recommended in writing by wall-covering manufacturer.
- B. Primer/Sealer: Mildew resistant, complying with requirements in Division 09 Section "Interior Painting" and recommended in writing by wall-covering manufacturer for intended substrate.
- C. Seam Tape: As recommended in writing by wall-covering manufacturer.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Clean substrates of substances that could impair bond of wall covering, including dirt, oil, grease, dust, mold, mildew, and incompatible primers.
- B. Prepare substrates to achieve a smooth, dry, clean, structurally sound surface free of flaking, unsound coatings, cracks, and defects.
 - 1. Gypsum Board: Prime with primer as recommended in writing by primer/sealer manufacturer and wall-covering manufacturer.
- C. Remove hardware and hardware accessories, electrical plates and covers, light fixture trims, and similar items.
- D. Acclimatize wall-covering materials by removing them from packaging in the installation areas not less than 24 hours before installation.
- E. Cut wall-covering strips in roll number sequence. Change roll numbers at partition breaks and corners.
- F. Install strips in same order as cut from roll.
- G. Install reversing every other strip.
- H. Install wall covering with no gaps or overlaps, no lifted or curling edges, and no visible shrinkage.
- I. Install seams vertical and plumb at least 6 inches from outside corners and 6 inches from inside corners unless a change of pattern or color exists at corner.
- J. Fully bond wall covering to substrate. Remove air bubbles, wrinkles, blisters, and other defects.
- K. Trim edges and seams for color uniformity, pattern match, and tight closure. Butt seams without any overlay or spacing between strips.

WALL COVERINGS

09 22 00 - 2

Post-Bid Addendum No. 1 - 6/7/2024

- L. Remove excess adhesive at finished seams, perimeter edges, and adjacent surfaces.
- M. Reinstall hardware and hardware accessories, electrical plates and covers, light fixture trims, and similar items.

END OF SECTION

WALL COVERINGS

09 72 00 - 3

Post-Bid Addendum No. 1 - 6/7/2024

SECTION 09 84 33.26
WOOD SLAT SOUND-ABSORBING WALL UNITS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes shop-fabricated, linear slat wood acoustical wall units tested for acoustical performance, including the following:

1.02 DEFINITIONS

- A. NRC: Noise Reduction Coefficient.
- B. SAA: Sound Absorption Average.

1.03 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.04 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For unit assembly and installation.
 - 1. Include plans, elevations, sections, and mounting devices and details.
 - 2. Include details at panel head, base, joints, and corners; and details at ceiling, floor base, and wall intersections. Indicate panel edge profile and core materials.
 - 3. Include details at cutouts and penetrations for other work.
 - 4. Include direction of fabric weave and pattern matching.
- C. Samples for Initial Selection: For each type of acoustic panel.
 - 1. Veneer: Supply 12 inch long MDF slat with veneer applied.
 - 2. Include Samples of hardware and accessories involving color or finish selection.
- D. Samples for Verification: 12 inch long for the following:
 - 1. Veneer face on MDF.
 - 2. Panel edge including corner.
 - 3. Backer board.
 - 4. Mounting Devices: Full-size Samples.

WOOD SLAT SOUND-ABSORBING WALL UNITS

09 84 33.26 - 1

Post-Bid Addendum No. 1 - 6/7/2024

1.05 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Elevations and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
 - 1. Electrical outlets, switches, and thermostats.
 - 2. Items penetrating or covered by units including but not limited to access panels.
- B. Sample Warranty: For manufacturer's special warranty.

1.06 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each type of unit to include in maintenance manuals. Include fabric manufacturers' written cleaning and stain-removal instructions.

1.07 QUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials, fabrication, and installation.
 - 1. Build mockup of typical wall area 48 inches wide by full height. Include intersection of wall and ceiling, corners, and perimeters.
 - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Comply with fabric and unit manufacturers' written instructions for minimum and maximum temperature and humidity requirements for shipment, storage, and handling.
- B. Deliver materials and units in unopened bundles and store in a temperature-controlled dry place with adequate air circulation.

1.09 FIELD CONDITIONS

- A. Environmental Limitations: Do not install units until spaces are enclosed and weathertight, wet-work in spaces is complete and dry, work at and above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

- B. Lighting: Do not install units until a permanent level of lighting is provided on surfaces to receive the units.
- C. Air-Quality Limitations: Protect units from exposure to airborne odors, such as tobacco smoke, and install units under conditions free from odor contamination of ambient air.
- D. Field Measurements: Verify unit locations and actual dimensions of openings and penetrations by field measurements before fabrication, and indicate them on Shop Drawings.

1.10 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace units and components that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to the following:
 - a. Acoustical performance.
 - b. Backer fabric sagging, distorting, or releasing from panel edge.
 - 2. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Source Limitations: Obtain wall units specified in this Section from single source from single manufacturer.

2.02 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: Units shall comply with "Surface-Burning Characteristics" or "Fire Growth Contribution" Subparagraph below, or both, as determined by testing identical products by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
 - 1. Surface-Burning Characteristics: Comply with ASTM E 84 or UL 723; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: 25 or less.
 - b. Smoke-Developed Index: 450 or less.
 - 2. Fire Growth Contribution: Comply with acceptance criteria of local code and authorities having jurisdiction when tested according to NFPA 265 Method B Protocol or NFPA 286.

2.03 SOUND-ABSORBING WALL UNITS

- A. General: Manufacturer's standard panel construction consisting of wood-veneered MDF board on polyethylene terephthalate (PET) backer.
- B. Basis of Design: Design is based on Acoustical Solutions, "Alphasorb Designer Acoustic Slatted Wood All Panels." Subject to compliance with requirements provide named product or product approved by Architect.
 - 1. Panel Texture: Flat.
 - 2. Mounting: Back mounted with manufacturer's standard impaling clips, adhesive, or mechanical z-clips, secured to substrate.
 - 3. Edge Construction: Manufacturer's standard chemically hardened core with no frame.
 - 4. Edge Profile: As indicated on Drawings.
 - 5. Corner Detail in Elevation: As indicated on Drawings.
 - 6. Acoustical Performance: Sound absorption NRC of 0.70.
 - 7. Nominal Overall Panel Thickness: 1 inch.
 - 8. Panel Width: As indicated on Drawings.
 - 9. Panel Height: As indicated on Drawings.

2.04 MATERIALS

- A. Materials:
 - 1. Wood Veneer: Rotary cut; Species and color as selected by Architect.
 - a. Grade: Comply with Decorative Hardwoods Association requirements for Veneer products.
 - 2. Backer: polyethylene terephthalate (PET).
 - 3. Medium-Density Fiberboard (MDF): ANSI A208.2, Grade 130.
- B. Mounting Devices: Fasteners and adhesives as recommended by manufacturer to support weight of unit.

2.05 FABRICATION

- A. Standard Construction: Use manufacturer's standard construction unless otherwise indicated; with veneer material applied to MDF board; and with rigid edges to reinforce panel perimeter against warpage and damage.
- B. Dimensional Tolerances of Finished Units: Plus or minus 1/16 inch for the following:
 - 1. Thickness.
 - 2. Edge straightness.
 - 3. Overall length and width.
 - 4. Squareness from corner to corner.

WOOD SLAT SOUND-ABSORBING WALL UNITS

09 84 33.26 - 4

Post-Bid Addendum No. 1 - 6/7/2024

5. Chords, radii, and diameters.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine panel face, fabricated units, substrates, areas, and conditions for compliance with requirements, installation tolerances, and other conditions affecting unit performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install units in locations indicated. Unless otherwise indicated, install units with vertical surfaces and edges plumb, top edges level and in alignment with other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.
- B. Comply with manufacturer's written instructions for installation of units using type of mounting indicated. Mount units securely to supporting substrate.
- C. Layout panels in selected pattern for determination of necessary cuts. Align panel pattern and grain as indicated on Drawings.
- D. Remove panels from PET backing prior to cutting panels. Reattach to PET backing after cutting panels to size.
- E. Apply adhesive as recommended by manufacturer.
- F. After installing each panel, secure it to wall temporarily with screws at top, bottom, and midpoints while adhesive dries.

3.03 INSTALLATION TOLERANCES

- A. Variation from Plumb and Level: Plus or minus 1/16 inch in 48 inches, noncumulative.
- B. Variation of Joint Width: Not more than 1/16-inch variation from hairline in 48 inches, noncumulative.

3.04 CLEANING

- A. Clip loose threads; remove pills and extraneous materials.
- B. Clean panels on completion of installation to remove dust and other foreign materials according to manufacturer's written instructions.

END OF SECTION

WOOD SLAT SOUND-ABSORBING WALL UNITS

09 84 33.26 - 6

Post-Bid Addendum No. 1 - 6/7/2024

SECTION 10 40 00
LARGE MATRIX DISPLAY

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. LED message centers.
2. Control software.

1.02 ACTION SUBMITTALS

A. A. The electronic LED display manufacturer shall provide a complete technical submittal and shall not proceed with LED Matrix manufacture until the submittal is approved.

B. Submit:

1. All LED display manufacturer qualifications, as specified herein.
2. LED display shop drawing.
3. LED display Riser diagram.
4. AC Site Power Requirements, including legs and Amps per leg.
5. LED display control software operator's manual.
6. LED display installation and maintenance manual.

1.03 WARRANTY

A. Provide 5 years of parts coverage.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Source Limitations: Obtain each type of material specified in this Section from single source from single manufacturer.

2.02 LED DISPLAY

A. Cabinet Construction

1. Cabinet dimensions shall not exceed 2'-7" inches high by 8'-1" inches wide. The front-to-back cabinet depth shall not exceed 5 inches.
2. The cabinet shall contain a full LED matrix measuring a minimum of 32 pixel rows high by 120 pixel columns wide.
3. Cabinet display configuration is:
Two-View (2V), two one sided displays typically installed back-to-back and show same content on both sides.
4. The distance from the center of one line or column of pixels to the center of all adjacent lines or columns shall be 19.8 mm (0.78 inches) both horizontally and vertically.
5. Maximum display power per face shall not exceed 745 watts when 100% of the pixels are operating at their maximum possible drive current.
6. Cabinet weight per face shall not exceed 150 lbs/69 kg.
7. Display shall operate in a minimum ambient temperature range of -40° to +120°F (-40 to +50°C) and to a 95% humidity.
8. Internal display component hardware (nuts, bolts, screws, standoffs, rivets, fasteners, etc.) shall be fabricated from stainless steel, aluminum, nylon, or other durable corrosion-resistant materials suitable for the signage application.
9. Electrical display components shall be 100% solid-state.
10. The presence of ambient radio signals and magnetic or electromagnetic interference, including those from power lines, transformers, and motors, shall not impair performance of the display system.

B. Housing Frame

1. Display materials shall use non-corrosive materials or have a protective coating so they shall be anti-corrosive and not degrade or oxidize.
2. The display shall be rear ventilated with adequate ventilation provided by the use of fans.
3. Steel mounting points that can be used for mounting purposes shall be provided with the display and have the ability to be adjusted for alternative mounting methods.
4. Shall include lifting supports that can be removed after installation.

C. Exterior Finish

1. The LED display border pieces shall be coated with an automotive-grade acrylic urethane paint.

D. Front Face Construction

1. To meet the display readability requirements, the front face must be constructed in such a manner that it provides high contrast, low sunlight reflection and durability in all weather and site conditions.
2. Minimum features of front face shall:
 - a. Provide UV resistance to prevent discoloring.
 - b. Include horizontal louvers for contrast enhancement.
 - c. Include vertical ribbing for contrast enhancement
 - d. Use surface materials in the active LED area, such as metal, plastic, or other face materials, designed for low sunlight reflectivity.

E. Serviceability

1. The display housing shall provide safe and convenient front service access for all modular assemblies, components, wiring, and other materials located within the housing.
2. All internal components shall be removable and replaceable by a single technician with basic hand tools.
3. Service access shall be easily obtained by removal of one or more modules in front of the associated internal component.
4. Each module should allow simple removal with a single latch system.

Displays shall be designed with service features that minimize potential bodily harm.

2.03 DISPLAY COMPONENTS

- A. LED display modules shall be constructed for good readability, long life, and ease of service. Each display module shall be constructed as follows:
1. Each module within the product family shall be designed with the same physical footprint of 12.48" x 15.59".
 2. All modules and their components shall be fully encapsulated and sealed to meet IP-67 standards.
 3. An LED module shall consist of LEDs with all drive electronics mounted on a single Printed Circuit Board (PCB).
 4. LEDs shall be auto-inserted in order to maintain quality and uniformity of the LEDs within each LED module.
 5. All PCBs shall be wave-soldered to ensure uniformity, quality, and durability of all solder joints.

6. All PCBs shall be cleaned in a manner so as not to contain more than 2 parts per million contaminants.
 7. Module signal and electrical connections shall be of the positive locking and removable type. Removal of a module from the display shall not require a de-soldering operation.
 8. Data to the modules shall be redundant in that the signal can reach the module from multiple directions in the event of a loss in signal path from either direction.
 9. All LED display modules in a single display shall be identical in construction and interchangeable throughout the display with the ability to be field calibrated.
 10. All module rows shall include continuous louvers over the LEDs for sunlight shading and enhanced contrast.
 11. Modules shall be individually attached to the cabinet frame.
 12. Removal of one or more modules shall not affect the display's structural integrity.
 13. The distance from the center of one line or column of pixels to the center of all adjacent lines or columns shall be 0.78" both horizontally and vertically.
 14. The failure of a single pixel, module or power supply shall not cause the failure of any other pixel, module or power supply in the display.
 15. All modules shall have no less than a 140° horizontal half-intensity viewing angle and a readability angle of 160° horizontal.
 16. The transition of the viewing intensity shall be consistent throughout the viewing cone.
- B. Pixels shall be constructed with discrete LEDs, and these discrete LEDs shall conform to the following specifications:
1. LEDs shall be non-diffused, ultra-bright, solid-state light emitting diodes.
 2. Each color of LEDs used in all LED displays provided for this contract shall be from the same bin.
 3. LED half-life shall be an estimated minimum of 100,000 hours.
 4. Display shall have a minimum intensity of 11,000 cd/m² for RGB maximum light output, 4,500 cd/m² for Red maximum light output, and 6,000 cd/m² for Amber maximum light output.
- C. Power Supply
1. All power supplies shall be regulated, auto-ranging AC to DC power, with protection for the LED pixel, LED display and driver circuitry in the event of power spikes or surges.
 2. Each power supply and their connectors shall be fully sealed to protect from corrosive environmental factors meeting IP-67 standards.

D. Internal Wiring

1. Wiring for LED display modules and other internal components shall be installed in the housing in a neat and professional manner.
2. Wiring shall not impede the removal of display modules, power supplies or other display components.
3. Wires shall not make contact with or be bent around sharp metal edges.
4. All wiring shall conform to the National Electric Code.

E. The display shall be protected from electrical spikes and transients.

F. The manufacturer shall provide an earth-ground lug on the display.

2.04 DISPLAY PERFORMANCE

A. Display Capability

1. The LED display shall present messages that are continuous, uniform, and unbroken in appearance.
2. The LED display shall be capable of producing 281 trillion colors for RGB and 4096 shades of color for monochrome red or amber at all dimming levels.
3. Each display pixel shall be composed of one each – red, green, and blue LEDs or one red or one amber
4. The LED display shall be capable of displaying all true type fonts.
5. The display shall be able to display messages composed of any combination of alphanumeric text, punctuation symbols, graphic images, and pre-canned video files.
6. Video and message files shall have up to a 30 frame per second playback capability.

B. Controller

1. The display's controller shall be able to run independently from a controlling computing device allowing the display to operate even when the controlling device is unhooked or turned off.
2. Communication protocol shall support other matrix products from the vendor such as other outdoor or indoor displays of varying sizes and/or colors.
3. Each controller shall be connected to a light sensor allowing each LED display to automatically adjust brightness according to display direction and lighting conditions.
4. The controller shall allow connection to a temperature sensor that provides accurate site temperatures.
5. Active presentations, stored presentations, schedules, display configuration, time and date shall be stored in non-volatile memory. No external power or battery backup will be required to maintain this data.

C. Control and Communications

1. The display controller should be DHCP-enabled and allow for static IP addressing.
2. Each single-face display shall be controlled and monitored by its own LED controller.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Mounting structure to be installed by contractor to support desired displays in all locations. Verify that separate conduit is in place for power and data to display, unless fiber is being used. Verify that all control equipment has access to 120 VAC.

3.02 INSTALLATION

- A. Support structure design depends on the mounting methods, display size, and weight. The structure design is critical and should be done only by a qualified individual.
- B. The mounting hardware shall be capable of supporting all components to be mounted.
- C. All mounted displays must be inspected by a qualified structural engineer.
- D. Possible power and signal entrances are designated by etched markings. Separate conduit must be used to route the power, signal in wires, and signal out wires.
- E. Displays must be grounded according to the provisions outlined in Article 250 of the National Electrical Code. The display must be connected to earth-ground. Proper grounding is necessary for reliable equipment operation and protects the equipment from damaging electrical disturbances and lightning.

END OF SECTION