

## ADDENDUM NO. 2

August 23, 2019

- TO: ALL BIDDERS UNDER INVITATION TO BID (ITB) NO. 19-101113
- FROM: Department of Purchasing and Contracting, DeKalb County, Georgia  
For additional information, go to: <http://yourdekalb.com/purchasing/index.html>
- SUBJECT: ITB NO.19-101113, “**Construction of Tobie Grant Recreation Center**” is hereby modified as follows:
- A. We have received questions pertaining to this ITB. The questions and their resulting answers appear below:
- Question.** Regarding the Telescoping Bleachers: Sheet A-102 shows 5 Rows of Bleachers; The Specifications, Section 126613, Page 8, Paragraph 2.01/B1 call for 4 Rows of Bleachers, which is correct?  
**Answer.** Sheet A102 is correct. Please provide five (5) rows of bleachers. The bottom row of bleachers does not require a walking platform; those seated on the bottom row will put their feet directly on the floor.
  - Question.** The finish schedule on Sheet I-601 indicate Gerflor Taraflex Sports M COMFORT for the flooring in Gymnasium Room 128 and Dance/Aerobics Room 136, however, previously the Gerflor Taraflex Sports M PLUS was considered the best product for the recreation center; which model is required for this project?  
**Answer.** The Gerflor Taraflex Sports M PLUS is the correct product for this project. The Comfort product is not required.
  - Question.** The Mirrors and Ballet [Bars] in Dance/Aerobic Room 136 as shown in elevation on sheet A423 are not specified, should they be specified? Also, in reference to mirrors and [bars] are they located as shown in Plans view on sheet A102 or in Plans view on sheet A104, “L” shaped?  
**Answer.** The specification for Mirrors and Ballet Barres is located within section 11 66 23 Paragraph 3.7 and 3.8 respectively. The specification lists a basis of design and performance type requirements. See modified plan for Dance/Aerobic Room 136 on sheet A-104 that removes the “L” shaped mirror and includes a dimension for the mirror where it is to be located (ATTACHMENT A - Revised Sheet A-104 of Technical Drawings and Specifications).
  - Where is the spec of prefinished metal panel system, phenolic wall panel and prefinished metal canopy on page A-201?  
**Answer.** See ATTACHMENT B Specifications for the Metal Composite Material Wall Panels, the Phenolic Wall Panels, and the Pre-finished Metal Canopy (Aluminum Awnings).

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5. **Question.** Regarding the scoreboard for the Gym; in the spec section 11 66 43 the basis of design is an All-American Scoreboard, but in drawing E-402 a Daktronics board is mentioned, which board is wanted?  
**Answer.** The standard indoor scoreboard typically used throughout the County is the Daktronics Model BB-2155 Wireless Communicating Scoreboard as called out on sheet E-402.
- B. We have received substitution requests pertaining to this ITB. The request and the resulting answers appear below:
1. **Request.** Substitution Request for Locker/Partition substitution by Scranton Products.  
**Response.** Acceptable. No exception to this proposed substitution.
  2. **Request.** Substitution Request for Lighting substitution by 1st Source Lighting.  
**Response.** Acceptable. No Exception to the light fixture proposed for substitution as long as it meets County/Owner's approval.
  3. **Request.** Substitution Request for Sliding Door substitution by record-USA.  
**Response.** Acceptable. No exception to this proposed substitution. According to the only online record-USA specification that we could find (as a full spec was not provided) this door requires a 15A, 120V, 1-phase circuit. The original design called for a 30A, 208V, 1-phase Circuit for the door.
- C. All other conditions remain in full force and effect.
- D. It is the responsibility of each Responder to ensure that he/she is aware of all Addenda issued under this ITB. You may call the agent @ 404-371-4943 before the proposals are due to confirm the number of addenda issued.
- E. All responders under this Invitation to Bid must acknowledge receipt of this Addendum included in their response only.

*Brenda H. Redus*

Brenda H. Redus, Senior Procurement Agent  
Department of Purchasing and Contracting



**ADDENDUM NO. 2**

**ATTACHMENT A**

**REVISED SHEET 104-A (Technical Drawings)**

(ATTACHMENT FOLLOWS ON NEXT PAGE)

**FLOOR PLAN NOTES:**

1. SEE SHEET A-001 FOR GENERAL NOTES.
2. SEE STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION & ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. DIMENSIONS OF EXTERIOR WALLS ARE FACE OF BRICK, CMU WALLS & INTERIOR WALLS ARE TO FACE OF CMU OR METAL STUD, U.N.O.
4. DOOR OPENINGS SHALL BE LOCATED @ 8" FROM FACE OF ADJACENT WALL IN CMU WALLS OR 5" FROM FACE OF ADJACENT STUD WALL, U.N.O.
5. SEE SHEET A-571 FOR TYPICAL MOUNTING HEIGHTS, LOCATIONS & DETAILS.



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**DeKalb County**  
GEORGIA

**DISTRICT 4 & 6**  
**DEKALB COUNTY**  
593 PARKDALE DRIVE  
SCOTSDALE, GA 30079

**TOBIE GRANT RECREATION CENTER**

SEAL

**DRAWING ISSUE**

MARK	DESCRIPTION	DATE	APPR.
1	PERMIT REVIEW COMMENTS	3.22.19	
2	ADDENDUM #01	8.15.19	

DESIGNED BY: MRC  
DWN BY: ASR  
CKD BY: MWD  
SUBMITTED BY: MRC  
DATE: 03/22/2019

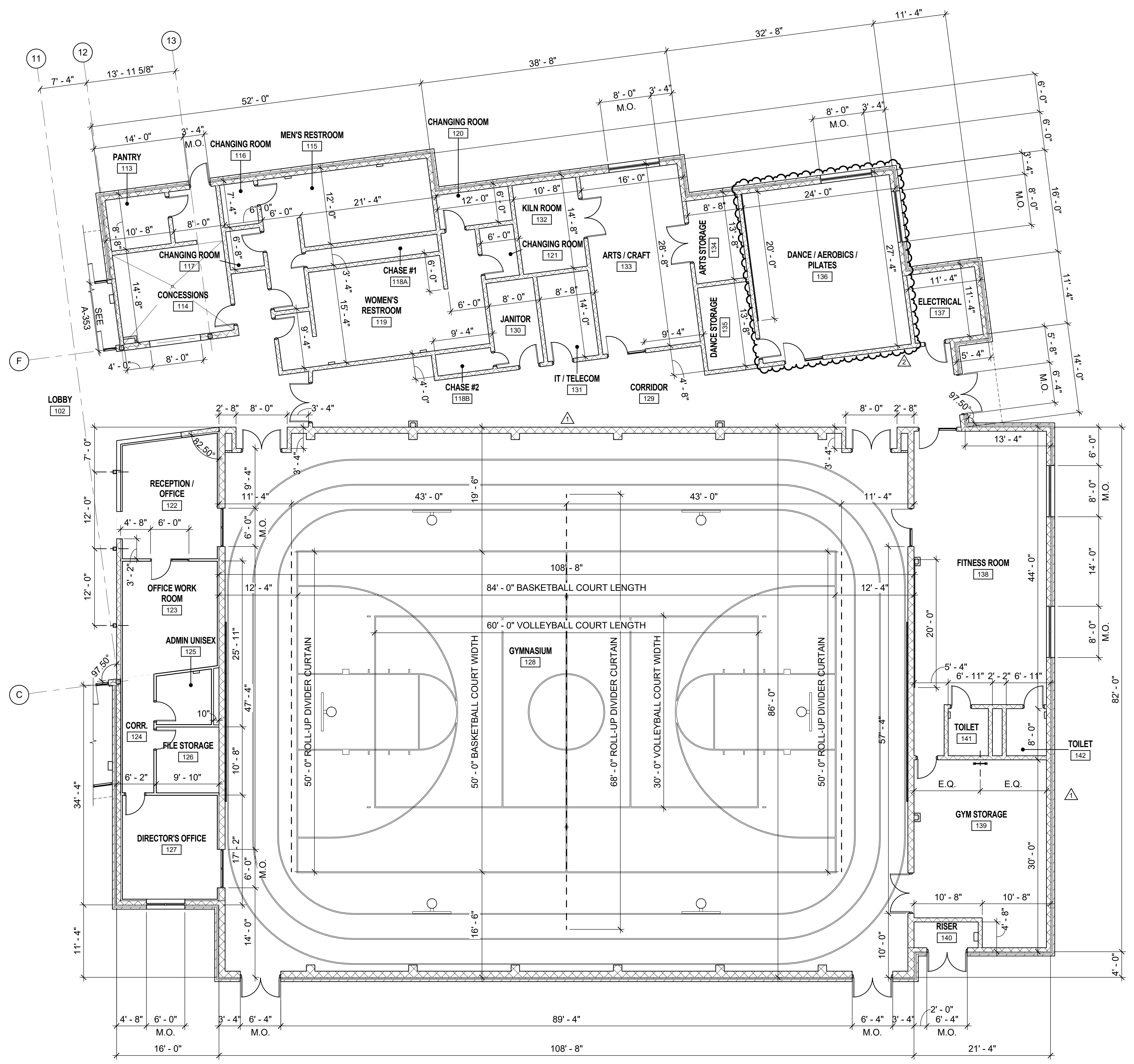
PROJECT #: TOBIE GRANT RECREATION CENTER - 1180510

**SHEET TITLE**  
**PARTIAL DIMENSIONED FLOOR PLAN - AREA B**

SHEET NUMBER

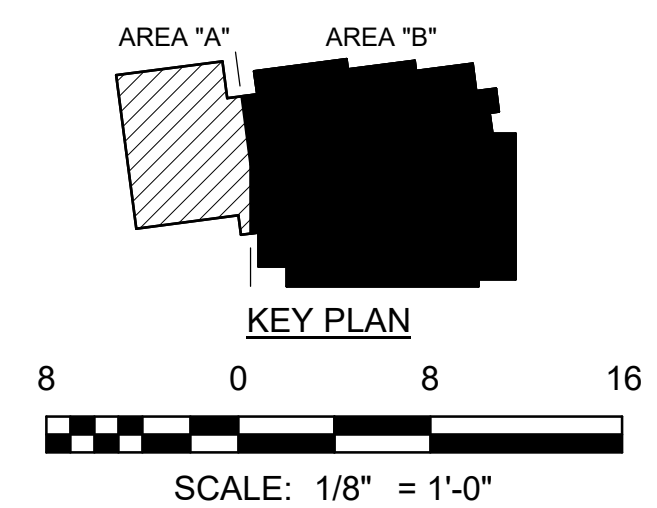
**A-104**

RELEASED FOR CONSTRUCTION  
CONSTRUCTION DOCUMENTS - 100% SUBMITTAL



**A1 PARTIAL DIMENSIONED FLOOR PLAN - AREA B**

SCALE: 1/8" = 1'-0"



BIM 360/1180510 Tobie Grant Recreation Center/1180510\_Tobie\_Rec\_Center\_v17\_Arch.rvt  
8/15/2019 2:09:16 PM



**ADDENDUM NO. 2**

**ATTACHMENT B**

**Specifications for the Metal Composite Material Wall  
Panels, the Phenolic Wall Panels, and the Pre-finished Metal Canopy**

(ATTACHMENT FOLLOWS ON NEXT PAGE)

## SECTION 107313 – ALUMINUM AWNINGS

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Fixed aluminum awnings.

#### 1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings:

1. Include plans, elevations, sections, mounting heights, and attachment details.
2. Detail fabrication and assembly of aluminum awnings.

C. Samples: For each exposed product and for each color and texture specified.

#### 1.3 INFORMATIONAL SUBMITTALS

A. Sample warranty.

#### 1.4 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

#### 1.5 WARRANTY

A. Special Warranty: Manufacturer and fabricator agree to repair or replace components of awnings that fail in materials or workmanship within specified warranty period.

1. Awning Warranty Period: Five years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

A. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.

1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- B. Fire-Test-Response Characteristics: Provide awning with the fire-test-response characteristics indicated, as determined by testing identical products according to test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  1. Flame-Resistance Ratings: Passes NFPA 701.
  2. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency for Flame-Spread Index of 25 or less.
  3. Permanently attach label to each awning fabric indicating whether it is inherently and permanently flame resistant or is treated with flame-retardant chemicals, and whether it requires retreatment after designated time period or cleaning.

## 2.2 AWNING FRAME AND ACCESSORY MATERIALS

- A. Aluminum: Alloy and temper recommended by awning manufacturer for type of use and finish indicated and with not less than the strength and durability properties of alloy and temper required by structural loads.
  1. Aluminum Plate and Sheet: ASTM B209 (ASTM B209M).
  2. Aluminum Extrusions: ASTM B221 (ASTM B221M).
  3. Extruded Structural Pipe and Round Tubing: ASTM B429/B429M, standard weight (Schedule 40).
  4. Drawn Seamless Tubing: ASTM B210 (ASTM B210M).
- B. Anchors, Fasteners, Fittings, Hardware, and Installation Accessories: Complying with performance requirements indicated and suitable for exposure conditions, supporting structure, anchoring substrates, and installation methods indicated. Corrosion-resistant or non-corrodible units; weather-resistant, tamperproof, vandal- and theft-resistant, compatible, non-staining materials. Provide as required for awning assembly, mounting, and secure attachment. Number as needed to comply with performance requirements and to maintain uniform appearance; evenly spaced. Where exposed to view, provide finish and color as selected by Architect from manufacturer's full range.
  1. Expansion Anchors: Anchor bolt and sleeve assembly with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry assemblies and equal to four times the load imposed when installed in concrete as determined by testing according to ASTM E488 conducted by a qualified independent testing and inspecting agency.
    - a. Material: Stainless steel with bolts and nuts complying with ASTM F593 and ASTM F594, Alloy Group 1 or 2 (ASTM F738M and ASTM F836M, Grade A1 or A4).
  2. Adhesive-Bonded Anchors: Anchor bolt and sleeve assembly with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry assemblies and equal to four times the load imposed when installed in concrete as determined by testing according to ASTM E1512 conducted by a qualified independent testing and inspecting agency.

- a. Material: Stainless steel with bolts and nuts complying with ASTM F593 and ASTM F594, Alloy Group 1 or 2 (ASTM F738M and ASTM F836M, Grade A1 or A4).

C. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187.

### 2.3 FIXED AWNING FABRICATION

1. Frame Fabrication: Fabricate awning frames from aluminum. Preassemble in shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations.
2. Form exposed work true to line and level with accurate angles and surfaces and straight edges.
3. Weld corners and connections continuously. Obtain fusion without undercut or overlap. Remove welding flux immediately. At exposed corners and connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
4. Provide for anchorage of type indicated; coordinate with supporting structure. Space anchoring devices to secure awnings in place and to properly transfer loads.

B. Aluminum Finish: Manufacturer's standard primed and top-coated decorative Baked-enamel or powder-coat finish complying with finish manufacturer's written instructions for surface preparation including pretreatment, application, baking, and minimum dry film thickness.

1. Color: As selected by Architect from manufacturer's full range.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. General: Install awnings at locations and in position indicated on drawings, securely connected to supports, free of rack, and in proper relation to adjacent construction. Use mounting methods of types described and in compliance with Shop Drawings and fabricator's written instructions.
- B. Weld frame connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations.
- C. Anchoring to In-Place Construction: Use anchors, fasteners, fittings, hardware, and installation accessories where necessary for securing awnings to structural support and for properly transferring load to in-place construction.
- D. Corrosion Protection: Coat concealed surfaces of aluminum that come in contact with grout, concrete, masonry, wood, or dissimilar metals with a heavy coat of bituminous paint.
- E. Adjust hardware and moving parts to function smoothly, and lubricate as recommended by retractable-awning manufacturer.

END OF SECTION 107313



## SECTION 074213.23 - METAL COMPOSITE MATERIAL WALL PANELS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes metal composite material wall panels.

#### 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Meet with Owner, Architect, Owner's insurer if applicable, metal composite material panel Installer, metal composite material panel manufacturer's representative, structural-support Installer, and installers whose work interfaces with or affects metal composite material 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 composite material 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 composite material panels.
  - 6. Review governing regulations and requirements for insurance, certificates, and tests and inspections if applicable.
  - 7. Review temporary protection requirements for metal composite material panel assembly during and after installation.
  - 8. Review procedures for repair of panels damaged after installation.
  - 9. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of panel and accessory.
- B. Shop Drawings:

1. Include fabrication and installation layouts of metal composite material panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment assembly, trim, flashings, closures, and accessories; and special details.
  2. Accessories: Include details of the flashing, trim and anchorage, at a scale of not less than 1-1/2 inches per 12 inches (1:10).
- C. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.
1. Metal Composite Material Panels: 12 inches (305 mm) long by actual panel width. Include fasteners, closures, and other metal composite material panel accessories.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Test Reports: For each product, tests performed by a qualified testing agency.
- C. Field quality-control reports.
- D. Sample Warranties: For special warranties.

#### 1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For metal composite material panels to include in maintenance manuals.

#### 1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components, metal composite material panels, and other manufactured items so as not to be damaged or deformed. Package metal composite material panels for protection during transportation and handling.
- B. Unload, store, and erect metal composite material panels in a manner to prevent bending, warping, twisting, and surface damage.
- C. Stack metal composite material panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal composite material panels to ensure dryness, with positive slope for drainage of water. Do not store metal composite material panels in contact with other materials that might cause staining, denting, or other surface damage.
- D. Retain strippable protective covering on metal composite material panels during installation.

## 1.9 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal composite material panels to be performed according to manufacturers' written instructions and warranty requirements.

## 1.10 COORDINATION

- A. Coordinate metal composite material panel installation with rain drainage work, flashing, trim, construction of soffits, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

## 1.11 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal composite material 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.
- B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal composite material panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
  - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
    - a. Color fading more than 5 Hunter units when tested according to ASTM D2244.
    - b. Chalking in excess of a No. 8 rating when tested according to ASTM D4214.
    - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
  - 2. Finish Warranty Period: 20 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide metal composite material panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E330:
  - 1. Wind Loads: As indicated on Drawings.
  - 2. Other Design Loads: As indicated on Drawings.
  - 3. Deflection Limits: For wind loads, no greater than 1/180 of the span.

- B. Air Infiltration: Air leakage of not more than 0.06 cfm/sq. ft. (0.3 L/s per sq. m) when tested according to ASTM E283 at the following test-pressure difference:
  - 1. Test-Pressure Difference: 1.57 lbf/sq. ft. (75 Pa).
- C. Water Penetration under Static Pressure: No water penetration when tested according to ASTM E331 at the following test-pressure difference:
  - 1. Test-Pressure Difference: 6.24 lbf/sq. ft. (300 Pa).
- D. 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 (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

## 2.2 METAL COMPOSITE MATERIAL WALL PANELS

- A. Metal Composite Material Wall Panel Systems: Provide factory-formed and -assembled, metal composite material wall panels fabricated from two metal facings that are bonded to a solid, extruded thermoplastic core; formed into profile for installation method indicated. Include attachment assembly components and accessories required for weathertight system.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Alcoa Architectural Products (USA).
    - b. ALPOLIC Materials; Mitsubishi Plastics Composites America.
    - c. ALUCOBOND; 3A Composites USA, Inc.
    - d. CENTRIA Architectural Systems.
    - e. Firestone Metal Products, LLC.
- B. Aluminum-Faced Composite Wall Panels: Formed with 0.020-inch- (0.50-mm-) thick, coil-coated aluminum sheet facings.
  - 1. Basis of Design Product: Alucobond Plus Rainscreen System II with “naturAL” finish.
  - 2. Panel Thickness: 0.157 inch (4 mm).
  - 3. Core: Standard.
  - 4. Exterior Finish: Clear coat over pretreated natural and brushed aluminum substrate.
    - a. Color: Zinc. Metal grain always horizontal.
- C. Attachment Assembly Components: Formed from material compatible with panel facing.
- D. Attachment Assembly: Manufacturer's standard rainscreen principle system.

## 2.3 MISCELLANEOUS MATERIALS

- A. Miscellaneous Metal Subframing and Furring: ASTM C645, cold-formed, metallic-coated steel sheet ASTM A653/A653M, G90 (Z275 hot-dip galvanized) coating designation or ASTM A792/A792M, Class AZ50 (Class AZM150) aluminum-zinc-alloy coating designation unless otherwise indicated. Provide manufacturer's standard sections as required for support and alignment of metal composite material panel system.
- B. Panel Accessories: Provide components required for a complete, weathertight panel system including trim, copings, fasciae, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal composite material panels unless otherwise indicated.
- C. Flashing and Trim: Provide flashing and trim formed from same material as metal composite material panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, bases, drips, sills, jambs, corners, endwalls, framed openings, rakes, fasciae, parapet caps, soffits, reveals, and fillers. Finish flashing and trim with same finish system as adjacent metal composite material panels.
- D. Panel Fasteners: Self-tapping screws designed to withstand design loads. Provide exposed fasteners with heads matching color of metal composite material panels by means of plastic caps or factory-applied coating. Provide EPDM or PVC sealing washers for exposed fasteners.
- E. Panel Sealants: ASTM C920; elastomeric polyurethane or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal composite material panels and remain weathertight; and as recommended in writing by metal composite material panel manufacturer.

## 2.4 FABRICATION

- A. General: Fabricate and finish metal composite material 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. Fabricate metal composite material panel joints with factory-installed captive gaskets or separator strips that provide a weathertight seal and prevent metal-to-metal contact, and that minimize noise from movements.
- C. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.
  - 1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
  - 2. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.
  - 3. Seams for Other Than Aluminum: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.

4. Sealed Joints: Form non-expansion, but movable, joints in metal to accommodate sealant and to comply with SMACNA standards.
5. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.
6. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.
  - a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal wall panel manufacturer for application but not less than thickness of metal being secured.

## 2.5 FINISHES

- A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in 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.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal composite material 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 composite material wall panel manufacturer.
  2. Examine wall sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal composite material wall panel manufacturer.
    - a. Verify that air- or water-resistive barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.
- B. Examine roughing-in for components and assemblies penetrating metal composite material panels to verify actual locations of penetrations relative to seam locations of metal composite material panels before installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Miscellaneous Supports: Install subframing, furring, and other miscellaneous panel support members and anchorages according to ASTM C754 and metal composite material panel manufacturer's written recommendations.

### 3.3 METAL COMPOSITE MATERIAL PANEL INSTALLATION

- A. General: Install metal composite material panels according to manufacturer's written instructions in orientation, sizes, and locations indicated on Drawings. Install panels perpendicular to supports unless otherwise indicated. Anchor metal composite material 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 composite material panels.
  - 2. Flash and seal metal composite material panels at perimeter of all openings. Fasten with self-tapping screws. Do not begin installation until air- or water-resistive barriers and flashings that will be concealed by metal composite material panels are installed.
  - 3. Install screw fasteners in predrilled holes.
  - 4. Locate and space fastenings in uniform vertical and horizontal alignment.
  - 5. Install flashing and trim as metal composite material panel work proceeds.
  - 6. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
  - 7. Align bottoms of metal composite material panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.
  - 8. Provide weathertight escutcheons for pipe- and conduit-penetrating panels.
- B. Fasteners:
  - 1. Aluminum Panels: Use aluminum or stainless-steel fasteners for surfaces exposed to the exterior; use aluminum or galvanized-steel fasteners for surfaces exposed to the interior.
- C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal composite material panel manufacturer.
- D. Attachment Assembly, General: Install attachment assembly required to support metal composite material wall panels and to provide a complete weathertight wall system, including subgirts, perimeter extrusions, tracks, drainage channels, panel clips, and anchor channels.
  - 1. Include attachment to supports, panel-to-panel joinery, panel-to-dissimilar-material joinery, and panel-system joint seals.
- E. Installation: Attach metal composite material wall panels to supports at locations, spacings, and with fasteners recommended by manufacturer to achieve performance requirements specified.
  - 1. Wet Seal Systems: Seal horizontal and vertical joints between adjacent metal composite material wall panels with sealant backing and sealant. Install sealant backing and sealant according to requirements specified in Section 079200 "Joint Sealants."

2. Dry Seal Systems: Seal horizontal and vertical joints between adjacent metal composite material wall panels with manufacturer's standard gasket system.
  3. Rainscreen Systems: Do not apply sealants to joints unless otherwise indicated.
- F. Clip Installation: Attach panel clips to supports at locations, spacings, and with fasteners recommended by manufacturer. Attach routed-and-returned flanges of wall panels to panel clips with manufacturer's standard fasteners.
1. Seal horizontal and vertical joints between adjacent panels with sealant backing and sealant. Install sealant backing and sealant according to requirements specified in Section 079200 "Joint Sealants."
  2. Seal horizontal and vertical joints between adjacent metal composite material wall panels with manufacturer's standard gaskets.
- G. Rainscreen-Principle Installation: Install using manufacturer's standard assembly with vertical channel that provides support and secondary drainage assembly, draining at base of wall. Notch vertical channel to receive support pins. Install vertical channels supported by channel brackets or adjuster angles and at locations, spacings, and with fasteners recommended by manufacturer. Attach metal composite material wall panels by inserting horizontal support pins into notches in vertical channels and into flanges of panels. Leave horizontal and vertical joints with open reveal.
1. Install wall panels to allow individual panels to be installed and removed without disturbing adjacent panels.
  2. Do not apply sealants to joints unless otherwise indicated.
- H. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.
1. Install components required for a complete metal composite material panel assembly including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items. Provide types indicated by metal composite material panel manufacturer; or, if not indicated, provide types recommended in writing by metal composite material panel manufacturer.
- I. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that are permanently watertight.
1. Install exposed flashing and trim that is without buckling and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof performance.
  2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (605 mm) of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).



### 3.4 ERECTION TOLERANCES

- A. Installation Tolerances: Shim and align metal composite material wall panel units within installed tolerance of 1/4 inch in 20 feet (6 mm in 6 m), non-accumulative, on level, plumb, and location lines as indicated, and within 1/8-inch (3-mm) offset of adjoining faces and of alignment of matching profiles.

### 3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified independent testing agency to perform field tests and inspections.
- B. Water-Spray Test: After installation, test area of for water penetration according to AAMA 508-05.
- C. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect completed metal composite material wall panel installation, including accessories.
- D. Metal composite material wall panels will be considered defective if they do not pass test and inspections.
- E. Additional tests and inspections, at Contractor's expense, are performed to determine compliance of replaced or additional work with specified requirements.
- F. Prepare test and inspection reports.

### 3.6 CLEANING AND PROTECTION

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

END OF SECTION 074213.23

## SECTION 074633 PHENOLIC WALL PANELS (SIMULATED WOOD)

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplemental General Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SECTION INCLUDES

- A. Exterior solid phenolic cladding factory fabricated panel system and accessories as required for a complete drained and back-ventilated rain screen system.
  - 1. Wall panels.
  - 2. Fascia.
  - 3. Horizontal soffits.
  - 4. Storefront panels.
- B. Interior solid phenolic cladding factory fabricated panel system and accessories.

#### 1.3 RELATED SECTIONS

- A. Section 05 44 00 “Cold Formed Metal Framing” for support, clips, z-clips and accessories required for attachment of wall panel system.
- B. Section 05 50 00 – Metal Fabrications; additional sub framing, Z girts to accommodate exterior insulation is not in the scope of Section 07.
- C. Section 07 00 00 – Thermal and Moisture Barrier.

#### 1.4 REFERENCES

- A. ASTM International (ASTM):
  - 1. ASTM D 1929 – Standard Test Method for Ignition Temperature.
  - 2. ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials.
  - 3. ASTM E 119 – Standard Test Method for Fire Rated or Fire Resistive Construction.

#### 1.5 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Material Property Datasheet.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation Manual.
- B. Drawings: Submit plan, section, elevation and perspective drawings necessary to describe and convey the layout, profiles and product components, including edge conditions, panel joints, fixture location, anchorage, accessories, finish colors.

- C. Code Compliance: Documents showing product compliance with local building code shall be submitted prior to the bid. These documents shall include, but not be limited to, appropriate Evaluation Reports and/or test reports supporting the use of the product.
- D. Selection Samples: For each finish product specified, submit color chips representing manufacturer's full range of available colors and patterns.
- E. Operation and Maintenance Data: Submit operation, maintenance, and cleaning information for products covered under this section.
- F. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties.
- G. Closeout Submittals: Submit the following:
  - 1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 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. Include maintenance information for the removal and replacement of panels.
  - 2. Warranty: Warranty documents specified herein.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery:
  - 1. During transportation, use stable, flat pallets that are at least the same dimension as the material.
  - 2. Materials are packaged to minimize or eliminate the possibility of damage during shipping. Items such as wooden side boards, wooden lid, and spacers or protective sheeting between panels shall be used to protect the panels from surface and/or edge damage.
- B. Storage:
  - 1. Store products in an enclosed area protected from direct sunlight, moisture and heat. Maintain a consistent temperature and humidity.
  - 2. Store products in manufacturer's unopened packaging until ready for installation.
  - 3. Stack panels using protective dividers to avoid damage to decorative surface.
  - 4. For horizontal storage, store on pallets of equal or greater size as the panels with a protective layer between the pallet and panel.
  - 5. Do not store fabricated panels vertically.
- C. Handling:
  - 1. Remove protective film within 24 hours of the panels being removed from the pallet.
  - 2. When moving panels, lift evenly to avoid dragging panels across each other and scratching the decorative surface.
  - 3. Remove all labels and stickers immediately after installation.

#### 1.7 PERFORMANCE REQUIREMENTS

- A. General Performance: Solid phenolic exterior wall panel assemblies shall comply with performance requirements without failure due to defective manufacture, fabrication, installation, or other defects in construction.

- B. Wall Assembly shall meet requirements of NFPA 285. Refer to Division 01 "Testing Laboratory Services".
- C. 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.

#### 1.8 PRE-INSTALLATION CONFERENCE

- A. Pre-installation Conference: Conduct conference at Project Site.
  - 1. Review methods and procedures related to the work.
  - 2. Review substrate and adjacent work.
  - 3. Comply with requirements in Division 01 Section "Project Management and Coordination."
  - 4. Review methods and procedures related to the work.
  - 5. Review attachment and support requirements of other materials and systems to be attached.

#### 1.9 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.
- B. Field Measurements: Verify actual measurements/openings by field measurements performed by the installer. Recorded measurements to be indicated on drawings based on field measurements provided by the installer.

#### 1.10 WARRANTY

- A. Warranty: At project closeout, provide manufacturer's limited ten (10) year warranty covering defects in materials and improper installation.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURER AND BASIS OF DESIGN PRODUCTS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
  - 1. Available Manufacturers: Manufacturers offering products that may be incorporated into the Work include those manufacturers specified.
- C. Basis-of-Design Product specification: A specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to illustrate and establish significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics

for purposes of evaluating comparable products of additional manufacturers named in the specification.

## 2.2 PHENOLIC WALL SIDING SYSTEM

### A. Products: Provide the following:

1. Basis of Design: Trespa Pura by Trespa International as represented by Trespa North America, LTD., or Design Professional approved equal.
2. Material: Solid panel manufactured using a combination of high pressure and temperature to create a flat panel created from thermosetting resins, homogeneously reinforced with wood-based fibers and an integrated decorative surface.
3. Siding System: Trespa Pura is a factory fabricated High Pressure Laminate material used in conjunction with siding accessories and components to provide a cladding for a drained and back ventilated rainscreen wall system.
4. Color: As selected by the Design Professional from manufacturer's standard color palette.
5. Finish: Matte sheen.
6. Flush Siding System
7. Panel Core: Fire retardant (FR) brown core.
8. Panel Thickness: 5/16 inch (8 mm).
9. Physical Properties:
  - a. Modulus of Elasticity: 1,300,000 psi (9000 N/mm<sup>2</sup>) minimum, ISO 178.
  - b. Tensile Strength: 10,100 psi (70 N/mm<sup>2</sup>) minimum, ISO 527-2.
  - c. Flexural Strength: 14,500psi (120 N/mm<sup>2</sup>) minimum, ISO 178.
10. Fire Performance:
  - a. Flame Spread: Class A, ASTM E 84.
  - b. Smoke Development: Less than 450, ASTM E 84.
11. Finish Performance: Electron Beam Cure resin in conformance with the following general requirements:
  - a. Color: As selected by the Design Professional from manufacturer's standard colors.
  - b. Resistance to Climactic Shock: EN 438-2:19.
  - c. Resistance to Artificial Weathering: EN 438-2:29.
  - d. Color Stability: decorative surface shall comply with, classification, 4 - 5 measured with the grey scale according to ISO 105 A02-93 according to test method EN 438-2:29.
  - e. Resistance to SO<sub>2</sub>: DIN 50018.
  - f. Microbial Characteristics: Will not support micro-organic growth (ISO 846).

### B. Mounting System:

1. Flush Siding System.

### C. Sub Structure:

1. Sub-structure designed to withstand structural loading due to wind load and the dead load of the panel, painted as required to conceal behind the open joinery of the attachment system.

2. Extrusions, battens, including corner closures, joint closures and vent screens, formed members, clips, z-clips, sheet, and plate shall conform with the recommendations of the manufacturer.
- D. Fasteners (Concealed): Fasteners are non-corrosive. Exposed fasteners shall be colored to match panels where required by the Design Professional.
- E. Accessories:
  1. Extruded aluminum trim includes outside corners, inside corners, start profiles, j channel, and finish profiles.
  2. Color to match siding color.

### 2.3 FABRICATION

- A. Panels: Solid phenolic impregnated kraft paper wall panels with no voids, air spaces or foamed insulation in the core material.
- B. Accessory Items: In accordance with manufacturer's recommendations and approved submittals.
- C. Panel edges: Factory fabricated to be used with the provided hardware system.
- D. Panel Weight: 8mm-5/16" (2.4lb/ft<sup>2</sup>)
- E. Panel Dimensions: Field fabrication shall be allowed where necessary, but shall be kept to an absolute minimum.
- F. Appearance: Panel lines, breaks, and angles shall be sharp, true, and surfaces free from warp and buckle.

## PART 3 – EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Surfaces to receive panels shall be even, smooth, dry, and free from defects detrimental to the installation of the panel system.  
Notify Construction Professional in writing of conditions detrimental to proper and timely completion of the work.
- C. Confirm exterior sheathing is plumb and level, with no deflection greater than 1/4 inch (6 mm) in 20 feet (6096 mm).
- D. If substrate preparation is the responsibility of another installer, notify Design Professional of unsatisfactory preparation before proceeding.  
Do not proceed with installation until unsatisfactory conditions have been corrected.

### 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 solid phenolic wall panels, clips, z-clips and sub-frame system in accordance with manufacturer's instructions.
- B. Clips shall be spaced 12 inches on center maximum.
- C. Install solid phenolic wall panels plumb and level and accurately spaced in accordance with manufacturer's recommendations and approved submittals and drawings.
- D. Anchor panels and sub-framing securely per engineering recommendations and in accordance with approved shop drawings to allow for necessary movement and structural support.
- E. Fasten solid phenolic wall panels with fasteners approved for use with supporting substrate.
- F. Do not install panels or component parts which are observed to be defective or damaged including, but not limited to: warped, bowed, abraded, scratched, and broken members.
- G. Do not cut or trim component parts during installation in a manner that would damage the finish, decrease the strength, or result in visual imperfection or a failure in performance. Return component parts with require alteration to the shop for re-fabrication or replacement.
- H. Install corner profiles and trim with fasteners appropriate for use with adjoining construction as indicated on the Contract Drawings and as recommended by manufacturer.

#### 3.4 ADJUSTING AND CLEANING

- A. Remove masking or panel protection as soon as possible after installation. Any masking intentionally left in place after panel installation on an elevation, shall become the responsibility of the Construction Professional to remove.
- B. Adjust final panel installation so that all joints are true and even throughout the installation. Panels out of plane shall be adjusted with the surrounding panels to minimize any imperfection.
- C. Repair panels with minor damage. Remove and replace panels damaged beyond repair as a direct result of the panel installation. After installation, panel repair and replacement shall become the responsibility of the Construction Professional.
- D. Clean finished surfaces as recommended by panel manufacturer. After installation cleaning, cleaning during construction shall become the responsibility of the Construction Professional.

END OF SECTION 07 46 33

**ADDENDUM NO. 2**

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Addendum No. 1  
ITB No. 19-101113

ACKNOWLEDGEMENT

The above Addendum No. 1 is hereby acknowledged:

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Company Name

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Signature & Title

DR:bhr