



Schenectady County  
Purchasing Department

620 State St.-2<sup>nd</sup> Floor  
Schenectady, NY 12305  
[Purchasing@schenectadycounty.com](mailto:Purchasing@schenectadycounty.com)  
518.388.4240

## ADDENDUM

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**RFB-2023-54**  
**SCHENECTADY COUNTY RAY WEMPLE RINK ADDITIONS AND RENOVATIONS**  
**C2 DESIGN GROUP**

**ADDENDUM #6**

Issued Date: 12/28/2023

The purpose of this addendum is to provide detailed information to all Bidders. This addendum is hereby included in and made part of the Contract Documents, whether or not attached thereto. Receipt of this Addendum must be acknowledged on the bid form.

### CONTENTS/RESPONSE TO QUESTIONS/REFERENCE TO ATTACHMENTS

#### **General:**

1. This addendum changes the documents for Bid #RFB-2023-54.
2. The bid due date is January 4, 2024 at 2:00pm

#### **Revised/New Contract Drawings and Specifications**

1. Drawing SK-02. **Add** to bid set.
3. Specification 081116 Monumental Wide Stile Door.
  - a. Description: Add Specification 081116 to bid set (attached).

#### **Clarification**

1. Clarification: Openings **100 & 101** shall be **SL-15** FRP Aluminum Hybrid Monumental Wide Stile Doors in Kawneer TriFab 450 aluminum framing (see attached spec section 081116).
2. Clarification: Door **127** is changed from a HM door/frame to an FRP-1 door & frame with hardware group 8.



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## ADDENDUM

### General Bid RFI's

1. Q: The new P201 Drawing you sent has conflicting information on it. The underground states 3" Type K Copper Pipe, then the riser states 4" until the first valve where it states 3", then back to 3". Which size is it supposed to be, who is responsible for this scope, and what type of material should we figure? Type K Copper or Ductile Iron?
  - a. Response: The water service shall be 3" copper for the entire length upstream and downstream (as shown continued on drawing P401).
2. Q: Based on RFI response #22 from addendum #5, is the foundation waterproofing to include the existing foundation for the structure or only the new addition foundations?
  - a. Response: Waterproofing shall be applied only on *new* foundation work.
3. Is the intent to only leave the sprinkler system operable in the Ice Rink area during construction? It may be difficult to provide sprinkler protection in the scope of work due to phasing.
  - a. Response: Fire protection needs to be operable when the building is occupied by the public. It is the responsibility of each Prime contractors to coordinate their work with the Owner to avoid any loss of service that may affect life safety.
4. At the end of each phase, will the sprinkler system need to be operable within each phase or is the expectation that the system will only be fully placed in service when all phases are complete?
  - a. Response: Yes, the sprinkler system will need to be operable at the end of each phase. Again, coordinate this with the Owner, Architect, and CM.
5. Q: Who is responsible for cutting and patching of any existing ceilings for MEP tie-ins and who is responsible for the cutting and patching of ceiling tiles?
  - a. Response: Based on Specification section 210010, paragraph 1.09, the Fire Protection contractor shall be responsible for all cutting and patching, including required work in the *existing* facility.
6. Please let us know if the temporary electric service for the "project office trailer" can be energized from the existing building power source.
  - a. Response: Yes, connect to existing building electrical system located at the service entrance.
7. Please clarify who is responsible for National Grid charges and energy consumption fees.
  - a. Response: The Owner will be responsible for National Grid charges and energy consumption fees.
8. Confirm Metal Panels, MP-1, MP-2, MP-3 and MP-4 will require horizontal support at 24" o.c., such as 1.5" Z-girts, 20 ga, set in plane of 1.5" rigid insulation envelope.
  - a. Response: Z-girts are required. See attached SKA-02.



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## **ADDENDUM**

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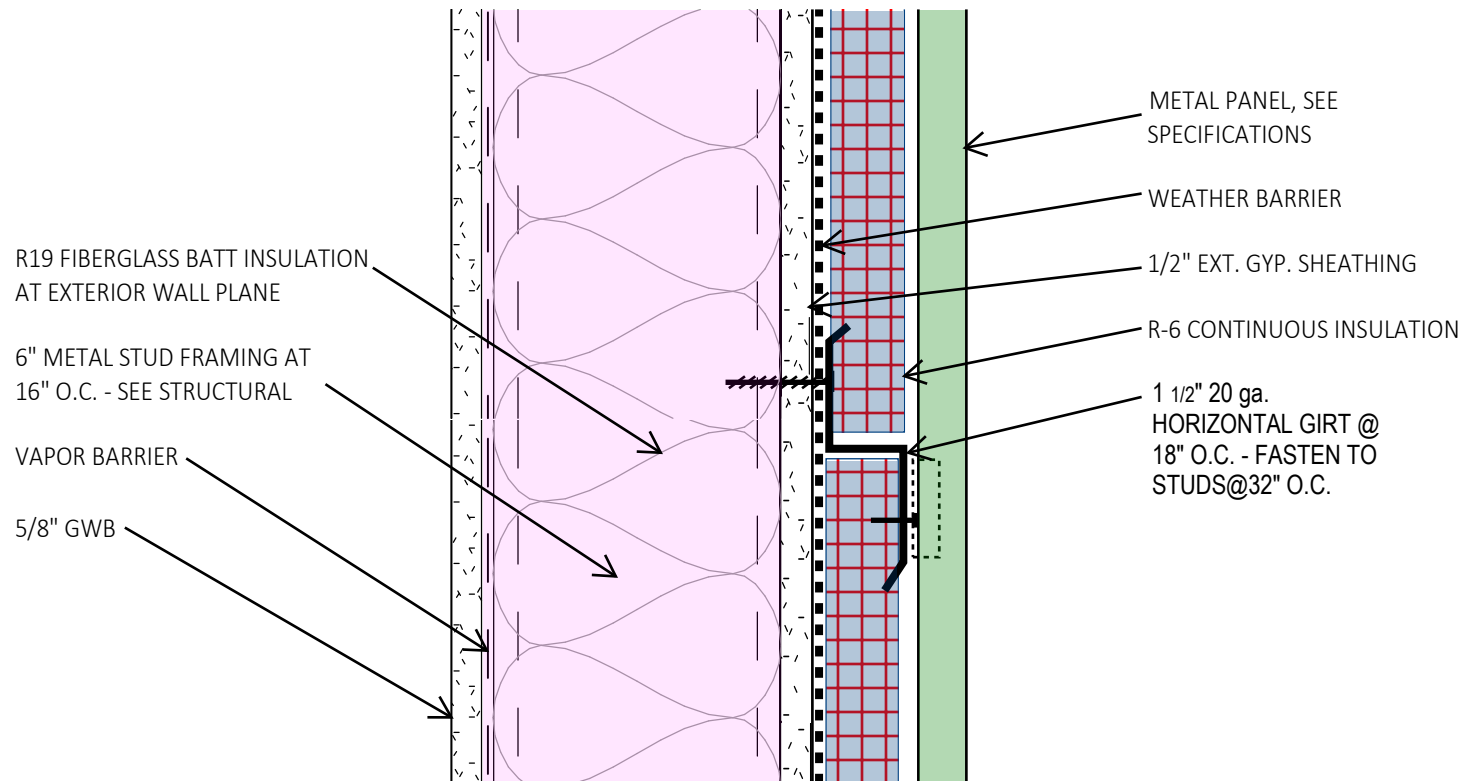
9. Q: Please clarify if the drawings or specifications are correct for toilet accessories. See the following for specific items:
- a. Q: Regarding Bobrick B-2888;
    - i. Response: Drawing G203 is generic in nature and just meant to show ADA clearances and other requirements in bathrooms. Although there is no model number on the A700 sheet, the Bobrick B-2888 is the desired model.
  - b. Q: Toilet paper dispensers B-2888 is called out to have a shelf.
    - i. Response: The county does not need a shelf (called out in specs) below the mirror, so the Bobrick B-2888 shall be provided as specified.
  - c. Q: Are shower seats needed as they are not called out for on print A700, Addenda 5?
    - i. Response: The shower seats are listed in the 10 28 13 2.12 spec and shown on the A700 sheet in Addendum 5. They are required for ADA and shall be in contract.
  - d. Q: Are shower curtains needed as they are not called out for on print A700 Addenda 5?
    - i. Response: The shower curtains are listed in the 10 28 13 2.09 spec and the curtain rod is shown on the drawings and in the specs. Clarification: the curtain shall be provided with the rod.
  - e. Q: Are shower grab bars needed as they are not called out for on print A700 Addenda 5 Version?
    - i. Response: The shower grab bars are listed in the 10 28 13 2.11 spec and shown on the drawings but not called out. These grab bars are required for ADA compliance.
  - f. Q: Are the grab bars called out on print A103, #118 to be 1.25" OD per print or 1.5" OD Per the Specs?
    - i. Response: Provide 1 1/2" diameter bars.
  - g. Q: Are the soap dispensers to be automatic, black plastic as per print A103 #121 or manual and clear glass or plastic type per Spec 2.07?
    - i. Response: Provide the clear option.
  - h. Q: Are any mirrors needed in bathroom men 135 and women 136 as none are called out for on the drawings?
    - i. Response: The specs call for Type A stainless steel mirrors and these are shown on the interior elevations and in plan also. Two mirrors are needed in each of these rooms.

**Please acknowledge this addendum on your bid form.**

**END OF ADDENDUM #6**

INTERIOR

EXTERIOR



NOTE: TYPICAL FOR METAL PANEL TYPES  
MP-1, 2, 3, & 4 (INSULATION, SHEATHING,  
AND WEATHER BARRIER LOCATION VARIES -  
SEE BUILDING SECTIONS)

1  
 SKA-02

# TYPICAL EXTERIOR METAL PANEL WALL

SCALE: 3" = 1'-0"

Stamp:

Project:  
 ADDITIONS AND RENOVATIONS TO:  
 RAY WEMPLE MEMORIAL  
 RINK  
 Tower Road Schenectady, NY 12302

RFB 2023-54 - (BID SET)

REVISION #	DATE

Drawn By: C2 Architecture  
 Scale: As Noted  
 Date: 12/27/2023  
 Job No: 2237  
 Sheet Title:  
 SINK DETAIL WITH ADA  
 PLUMBING PROTECTION PANEL  
 Sheet Number:  
 SKA-02

**SECTION 08 11 16**

## Wide Stile Monumental Door

**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. SL-15 Wide Stile Monumental Door installed in Aluminum Framing.

**1.02 RELATED SECTIONS**

- A. Section 08 06 71 – Door Hardware Schedule.
- B. Section 08 06 80 – Glazing Schedule.
- C. Section 08 71 00 – Door Hardware.

**1.03 REFERENCES**

- A. AAMA 1503-98 – Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections.
- B. ASTM-B209 – Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- C. ASTM-B221 – Standard Specification for Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- D. ASTM-C518 – Standard test Method for Steady-State Thermal Transmission Properties by Means of Heat Flow Meter Apparatus.
- E. ASTM-D256 – Standard Test Methods for Determining the Pendulum Impact Resistance of Plastics.
- F. ASTM-D570 – Standard Test Method for Water Absorption of Plastics.
- G. ASTM-D638 – Standard Test Method for Tensile Properties of Plastics.
- H. ASTM-D790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- I. ASTM-D1621 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics.
- J. ASTM-D1622 – Standard Test Method for Apparent Density of Rigid Cellular Plastics.
- K. ASTM-D1623 – Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics.
- L. ASTM-D2126 – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging.
- M. ASTM-D2583 – Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.
- N. ASTM-D3029 – Test Methods for Impact Resistance of Flat Rigid Plastic Specimens by Means of a Tup (Falling Weight) (Withdrawn 1995) (Replaced by ASTM-D5420).
- O. ASTM-D5116 – Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/ Products.
- P. ASTM-D6670 – Standard Practice for Full-Scale Chamber Determination of Volatile Organic Emissions from Indoor Materials/ Products.
- Q. ASTM-E84 – Standard Test Method for Surface Burning Characteristics of Building Materials.
- R. ASTM-E283 – Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
- S. ASTM-E330 – Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- T. ASTM-E1886 – Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials.
- U. ASTM-F1642-04 – Standard Test Method for Glazing Systems Subject to Air Blast Loading.
- V. NFRC 100 – Procedure for Determining Fenestration Products U-Factors.
- W. NFRC 400 – Procedure for Determining Fenestration Products Air Leakage.

**1.04 SUBMITTALS**

- A. Must comply with Section 01 33 00 – Submittal Procedures.
- B. Action Submittals/ Informational Submittals.
  - 1. Product Data.
    - a. Submit manufacturer's product data sheets, catalog pages illustrating the products, description of materials, components, fabrication, finishes, installation instructions, and applicable test reports.

2. Shop Drawings.
    - a. Submit manufacturer's shop drawings, including elevations, sections, and details indicating dimensions, tolerances, materials, fabrication, doors, panels, framing, hardware schedule, and finish.
  3. Samples.
    - a. Submit manufacturer's door sample composed of door face sheet, core, framing and finish.
    - b. Submit manufacturer's sample of standard colors for door face and frame.
  4. Testing and Evaluation Reports.
    - a. Submit testing reports and evaluations provided by manufacturer conducted by and accredited independent testing agency certifying doors and frames comply with specified performance requirements listed in Section 2.04.
  5. Manufacturer Reports.
    - a. Manufacturer's Project References.
      1. Submit list of successfully completed projects including project name, location, name of architect, type, and quantity of doors manufactured.
- C. Closeout Submittals.
1. Operation and Maintenance Manual.
    - a. Submit manufacturer's maintenance and cleaning instructions for doors and frames, including maintenance and operating instructions for hardware.
  2. Warranty Documentation.
    - a. Submit manufacturer's standard warranty.

## **1.05 QUALITY ASSURANCE**

- A. Manufacturer's Qualifications.
1. Continuously engaged in manufacturing of doors of similar type to that specified, with a minimum of 25 years concurrent successful experience.
  2. Door and frame components must be fabricated by same manufacturer.
  3. Evidence of a documented complaint resolution quality management system.

## **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery.
1. Deliver materials to site in manufacturer's original, unopened, containers and packaging.
  2. Labels clearly identifying opening, door mark, and manufacturer.
- B. Storage.
1. Store materials in a clean, dry area, indoors in accordance with manufacturer's instructions.
- C. Handling.
1. Protect materials and finish from damage during handling and installation.

## **1.07 WARRANTY**

- A. Warrant doors, frames, and factory installed hardware against failure in materials and workmanship, including excessive deflection, faulty operation, defects in hardware installation, and deterioration of finish or construction in excess of normal weathering.
- B. Standard Period.
1. Ten years starting on date of shipment.
- C. Limited lifetime
1. Covers failure of corner joinery, core deterioration, and delamination or bubbling of door skin and corrosion of all-fiberglass products while the door is in its specified application in its original installation.
- D. Finish
1. Fluropan painted aluminum: 10 years.
  2. Painted SL-17 face sheets: 5 years.
  3. Anodized, aluminum: 10 years.

## **PART 2 PRODUCTS**

### **2.01 FRP/ALUMINUM HYBRID DOORS**

- A. Manufacturer.

1. Special-Lite, Inc. (Basis of Design)
  - a. PO Box 6, Decatur, Michigan 49045.
  - b. Toll Free (800) 821-6531, Phone (269) 423-7068, Fax (800) 423-7610.
  - c. Web Site [www.special-lite.com](http://www.special-lite.com).
  - d. E-Mail [info@special-lite.com](mailto:info@special-lite.com).
2. Alternates for consideration include:
  - a. Kawneer 500 Series.
  - b. Tubelite Monumental.

## 2.02 DESCRIPTION

- A. Model.
  1. SL-15 Wide Stile Monumental Door.
- B. Door Opening Size.
  1. As indicated on door schedule.
- C. Construction.
  1. Door Thickness.
    - a. 1-3/4".
  2. Stiles.
    - a. 4-3/4" wide with integral glass stop on exterior side, no snap or applied stops allowed.
    - b. Aluminum extrusions made from 6063 aluminum alloys with a minimum temper of T5.
    - c. Screw or snap in place applied caps are not acceptable.
    - d. Meeting stiles to include integral pocket to accept pile brush weather seal.
  3. Rails.
    - a. Top Rail Height.
      1. 6-1/2".
    - b. Bottom Rail Height.
      1. 10".
    - c. Integral glass stops on exterior side, no snap or applied stops allowed.
    - d. Aluminum extrusions made from 6063 aluminum alloys with a minimum temper of T5.
    - e. Screw or snap in place applied caps are not acceptable.
  4. Corners.
    - a. True mortise and tenon joints.
    - b. Secured with 3/8" diameter full-width steel tie rod.
    - c. Weld, glue, or other methods of corner joinery are not acceptable.
  5. Mid Panel.
    - a. Model SL-484.
    - b. 12" high.
    - c. Core.
      1. Poured-in-place polyurethane foam.
      2. Laid in foam cores are not acceptable.
      3. Foam Plastic Insulated Doors: IBC 2603.4.
        - a. Foam plastic shall be separated from the interior of a building by an approved thermal barrier.
        - b. Approved thermal barrier must meet the acceptance criteria of the Temperature Transmission Fire Test and Integrity Fire Test as stated in NFPA 275.
        - c. IBC 2603.4.1.7 foam plastic insulation, having a flame spread index less than 75 and a smoke developed index of not more than 450 shall be permitted as a door core when the face is metal minimum 0.032" aluminum or 0.016" steel.
        - d. Standard door assembly can be tested to show it meets these requirements without the use of thermal barrier. If no independent testing conducted all doors with foam plastic core must have a thermal barrier.
    4. Frame.
      - a. Aluminum extrusions with extruded spline and interlocking edges to secure face sheet.
    5. Secured to stiles with mortise & tenon joints and two 3/8" steel tie rods with locking hex nuts.
  - d. Face Sheet.
    1. Exterior.

- a. Pebble texture FRP.
      - 1. 0.120" thick, pebble texture, through color with integral surfaseal film FRP sheet.
      - 2. Optional painted finish consult manufacturer.
      - 3. Class C standard.
  - 2. Interior.
    - a. Pebble texture FRP.
      - 1. 0.120" thick, pebble texture, through color with integral surfaseal film FRP sheet.
      - 2. Optional painted finish consult manufacturer.
      - 3. Class C standard optional Class A available consult manufacturer.
- 6. Hardware.
  - a. Pre-machine doors in accordance with templates from specified hardware manufacturers.
  - b. Surface mounted closures will be reinforced for but not prepped or installed at factory.
  - c. Factory install door hardware.
- 7. Reinforcements.
  - a. Aluminum extrusions made from 6061 or 6063 aluminum alloys.
  - b. Sheet and plate to conform to ASTM-B209.
  - c. Alloy and temper to be selected by manufacturer for strength, corrosion resistance, and application of required finish, and control of color.
  - d. Bars and tubes to meet ASTM-B221.
- D. Sustainability Characteristics.
  - 1. LEED Declaration.
    - a. Entrance Products contribute to point calculations for the following credits:
      - 1. MR Credit 4.1 Recycled Content 10% (post-consumer = ½ pre-consumer) 1 point.
      - 2. MR Credit 4.2 Recycled Content 20% (post-consumer = ½ pre-consumer) 1 point.
    - b. All aluminum extrusions are produced using prime-equivalent billet produced from 100% reprocessed 6063-T6 alloy recovered from industrial processes. The USGBC classifies these extrusions as pre-consumer recycled material.
    - c. Manufacturing facility located within 500 miles of major components and materials, including aluminum extrusions.
    - d. The point of recovery and smelting of pre-consumer recycled material within 500 miles of the manufacturing facility.

## 2.03 FRAMING

- A. Framing
  - 1. Aluminum Tube Framing with Applied Stops.
    - a. Model.
      - 1. SL-240.
    - b. Materials.
      - 1. See 2.05. A.
    - c. Perimeter Frame Members.
      - 1. Box type with 4 enclosed sides.
      - 2. Factory fabricated.
      - 3. Open-back framing is not acceptable.
    - d. Applied Door Stops.
      - 1. 5/8" x 1-1/4" or 5/8" x 1-3/4", 0.125" wall thickness, with screws and weather-stripping.
      - 2. Provide solid ½" aluminum bar behind door stop for closer shoe attachment.
      - 3. Pressure gasketing for weathering seal.
      - 4. Counterpunch fastener holes in door stop to preserve full-metal thickness under fastener head.
    - e. Caulking.
      - 1. Caulk joints before assembling frame members.
    - f. Frame Member to Member Connections.
      - 1. Secure joints with fasteners.
      - 2. Provide hairline butt joint appearance.
    - g. Hardware
      - 1. Pre-machine and reinforce frame members for hardware in accordance with manufacturer's standards and door hardware schedule.
      - 2. Surface mounted closures will be reinforced for but not prepped or installed at factory.



3. Factory install door hardware.
- h. Anchors:
  1. Anchors appropriate for wall conditions to anchor framing to wall materials.
  2. Door Jamb and Header Mounting Holes: Maximum of 24-inch centers.
  3. Secure head and sill members of transom, side lites, and similar conditions.

## 2.04 PERFORMANCE

### A. FRP Mid Panel.

1. Pebble grain FRP.
  - a. Standard Interior and Exterior Class C 0.120" thick, pebble texture, through color with integral surfaseal film FRP sheet.
    1. Flexural Strength, ASTM-D790:  $21 \times 10^3$  psi.
    2. Flexural Modulus, ASTM-D790:  $0.7 \times 10^6$  psi.
    3. Tensile Strength, ASTM-D638:  $13 \times 10^3$  psi.
    4. Tensile Modulus, ASTM-D638:  $1.2 \times 10^6$  psi.
    5. Barcol Hardness, ASTM-D2583: 55.
    6. Izod Impact, ASTM-D256: 14.0 ft-lb/in.
    7. Gardner Impact Strength, ASTM-D5420: 120 in-lb.
    8. Water Absorption, ASTM-D570: 0.20%/24hrs at 77°F.
    9. Surface Burning, ASTM-E84: Flame Spread  $\leq 200$ , Smoke Developed  $\leq 450$ .
    10. Taber Abrasion Resistance, Taber Test: 0.007% Max Wt. Loss, cs-17 wheels, 1000g. Wt., 25 cycles.
    11. Chemical Resistance.
      - a. Excellent Rating.
        1. Acetic Acid, Concentrated.
        2. Acetic Acid, 5%.
        3. Bleach Solution.
        4. Detergent Solution.
        5. Distilled Water.
        6. Ethyl Acetate.
        7. Formaldehyde.
        8. Heptane.
        9. Hydrochloric Acid, 10%.
        10. Hydrogen Peroxide, 3%.
        11. Isooctane.
        12. Lactic Acid, 10%.
    12. USDA/FSIS Requirements.
      - a. FRP face sheet with surfaseal is a finished outer surface material that is rigid; durable; non-toxic; non-corrosive; moisture resistant; a light, solid color such as white; easily inspected; smooth or an easily cleaned texture.
      - b. FRP face sheet with surfaseal does not contain any known carcinogen, mutagen, or teratogen classified as hazardous substances; heavy metals or toxic substances; antimicrobials; pesticides or substances with pesticidal characteristics.
  - b. Optional Interior Face Only Class A 0.120" thick, pebble texture, through color with integral surfaseal film FRP sheet.
    1. Flexural Strength, ASTM-D790:  $13 \times 10^3$  psi.
    2. Flexural Modulus, ASTM-D790:  $0.57 \times 10^6$  psi.
    3. Tensile Strength, ASTM-D638:  $6.8 \times 10^3$  psi.
    4. Tensile Modulus, ASTM-D638:  $0.90 \times 10^6$  psi.
    5. Barcol Hardness, ASTM-D2583: 40.
    6. Izod Impact, ASTM-D256: 12.0 ft-lb/in notched.
    7. Gardner Impact Strength, ASTM-D3029: 45 in-lb.
    8. Water Absorption, ASTM-D570: 0.32%/24hrs at 77°F.
    9. Surface Burning, ASTM-E84: Flame Spread  $\leq 25$ , Smoke Developed  $\leq 450$ .
    10. Taber Abrasion Resistance, Taber Test: 0.02% Max Wt. Loss, cs-17 wheels, 1000g. Wt., 25 cycles.

### B. Door Panel.

1. Thermal Transmittance, NFRC-100-2010: U-Factor = 0.63 Btu/hr·ft<sup>2</sup>·°F
2. Condensation Resistance Factor, AAMA 1503-98, CRFp = 23.
3. Indoor Air Quality, ASTM-D5116, ASTM-D6607: GreenGuard, GreenGuard Gold.
- C. Door and Aluminum Tube Frame Assembly.
  1. Air Leakage, NFRC 400, ASTM-E283.
    - a. Commercially Glazed Swinging Entrance Door (> than 50% glass)
      1. 0.02 cfm/sqft @ 1.57 psf.
      2. 0.01 cfm/sqft @ 6.24 psf.
  2. Structural Performance, ASTM E-330.
    - a. Single Door, 3'4-1/4" x 7'1-1/2" overall size, single point latching.
      1. ± 45 psf design pressure, pass.
  3. Impact Test, ASTM-E1886.
    - a. Single Door, 3'4-1/4" x 7'1-1/2" overall size, single point latching.
      1. 9 lbs. missile @ 50 fps, minimum 1 impacts, no rips, tears, or penetrations.
  4. Blast Test, ASTM-F1642.
    - a. 6.9 psi @ 46 psi-msec, minimal hazard, GSA Performance Condition 2.
- D. Door and 3-sided Aluminum Tube Frame with Applied Stops.
  1. Glazed Smoke and Draft Door with Frame Assembly in accordance with UL 1784.
    - a. Maximum Size.
      1. Single Swing: 4'0" x 10'0".
      2. Pairs: 8'0" x 10'0".
    - b. Glazing.
      1. 1" IGU or any listed fire glazing.
        - a. Maximum Size.
          1. Height: 103-1/2".
          2. Width: 38".
    - c. Category H Smoke and Draft Gasket supplied by manufacturer.

## 2.05 MATERIALS

- A. Aluminum Members.
  1. Aluminum extrusions made 6061 or 6063 aluminum alloys.
  2. Sheet and plate to conform to ASTM-B209.
  3. Alloy and temper to be selected by manufacturer for strength, corrosion resistance, and application of required finish, and control of color.
- B. Fiberglass.
  1. See 2.02.C.5.d.
- C. Fasteners.
  1. All exposed fasteners will have a finish to match material being fastened.
  2. 410 stainless steel or other non-corrosive metal.
  3. Must be compatible with items being fastened.

## 2.06 FABRICATION

- A. Factory Assembly.
  1. Door and frame components from the same manufacturer.
  2. Required size for door and frame units, shall be as indicated on the drawings.
  3. Complete cutting, fitting, forming, drilling, and grinding of metal before assembly.
  4. All cut edges to be free of burs.
  5. Welding of doors or frames is not acceptable.
  6. Maintain continuity of line and accurate relation of planes and angles.
  7. Secure attachments and support at mechanical joints with hairline fit at contact surfaces.
- B. Shop Fabrication
  1. All shop fabrication to be completed in accordance with manufactures process work instructions.
  2. Quality control to be performed before leaving each department.

## 2.07 FINISHES

- A. Door.
  1. Aluminum.

- a. Mill.
    - 1. AA-M10C22A21-Flash.
  - b. Anodizing.
    - 1. Class 1 Anodizing, minimum 0.7 mils thick.
      - a. Color.
        - 1. As chosen by architect.
- B. Mid panel.
  - 1. Pebble FRP Face Sheets.
    - a. Through color.
      - 1. Color.
        - a. As chosen by architect.
- C. Frame
  - 1. Aluminum.
    - a. Mill.
      - 1. AA-M10C22A21-Flash.
    - b. Anodizing.
      - 1. Class 1 Anodizing, minimum 0.7 mils thick.
        - a. Color.
          - 1. As chosen by architect.
    - c. Two-component flexible acrylic urethane Satin topcoat.
      - 1. Color.
      - 2. As chosen by architect.
      - 3. Custom colors available consult manufacturer.
      - 4. Excellent exterior durability.
      - 5. Unique, high-solids, high-build, multifunctional coating.
      - 6. Low VOC, Satin coating.
      - 7. Impact Resistance, ASTM D-4226 Minimum 1.2 in/lb/mil
      - 8. Color retention:  $\leq 1\Delta$  (CIE L.a.b.), Montreal 45° South: 12 months
      - 9. Very good chemical resistance.

## 2.08 ACCESSORIES

- A. Vision Lites.
  - 1. Factory Glazing.
    - a. Glazing Thickness.
      - 1. 1".
- B. Hardware.
  - 1. Pre-machine doors in accordance with templates from specified hardware manufactures and hardware schedule.
  - 2. Factory install hardware.
  - 3. Hardware Schedule.
    - a. As indicated here and in section 087100.
      - 1. Hinges.
        - a. SL-11HD.
      - 2. Door Pulls.
        - a. SL-86.
      - 3. Concealed adjustable bottom brush.
        - a. SL-301.
          - 1. Not for use with CVR type hardware.
      - 4. Concealed adjustable meeting stile astragal.
        - a. Adjustable astragal by Special-Lite.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Examine areas to receive doors.

- B. Notify architect of conditions that would adversely affect installation or subsequent use.
- C. Do not proceed with installation until unsatisfactory conditions are corrected.

**3.02 PREPARATION**

- A. Ensure openings to receive frames are plumb, level, square, and in tolerance.

**3.03 ERECTION**

- A. Install doors in accordance with manufacturer's instructions.
- B. Install doors plumb, level, square, true to line, and without warp or rack.
- C. Anchor frames securely in place.
- D. Separate aluminum from other metal surfaces with bituminous coatings or other means approved by architect.
- E. Set thresholds in bed of mastic and back seal.
- F. Install exterior doors to be weathertight in closed position.
- G. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by architect.
- H. Remove and replace damaged components that cannot be successfully repaired as determined by architect.

**3.04 FIELD QUALITY CONTROL**

- A. Manufacturer's Field Services.
  - 1. Manufacturer's representative shall provide technical assistance and guidance for installation of doors.

**3.05 ADJUSTING**

- A. Adjust doors, hinges, and locksets for smooth operation without binding.

**3.06 CLEANING**

- A. Clean doors promptly after installation in accordance with manufacturer's instructions.
- B. Do not use harsh cleaning materials or methods that would damage finish.

**3.07 PROTECTION**

- A. Protect installed doors to ensure that, except for normal weathering, doors will be without damage or deterioration at time of substantial completion.

**END OF SECTION**