

SECTION 083110 (08 31 10) - ACRYLIC ACCESS DOORS AND PANELS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Acrylic access doors/panels and frames for walls and ceilings.

- B. Related Sections:

- 1. Section 066200 – Glass-Fiber Reinforced Polymer Composite Wall and Ceiling Panels.
- 2. Section 066250 - Engineered Polymer Wall and Ceiling Panels.

1.3 SUBMITTALS

- A. Comply with Section 013300 - Submittal Procedures.

- B. Product Data: Submit manufacturer's product data including installation instructions.

- 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finish.

- C. Samples: Submit manufacturer's samples.

- 1. Access door/panels and frame.

- D. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.

- E. Product Schedule: For access doors/panels and frames. [**Use same designations indicated on Drawings.**]

- F. Warranty: Submit manufacturer's standard warranty. The manufacturer guarantees the product supplied shall be free of defects in material or workmanship under normal use and service.

- 1. Warranty Period: Five years from date of delivery.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain access doors/panels and frames from single manufacturer.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
- C. Handling: Protect materials and finish from damage during handling and installation in accordance with manufacturer's instructions.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Do not install materials until building is enclosed and areas to receive materials are protected from dirt and dust.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis of Design: Subject to compliance with requirements, provide **Acrylic Access Doors and Panels by ARCOPLAST**, 1873 Williamstown Drive, St. Peters, Missouri 63376. Toll Free (888) 736-2726. Phone (636) 978-7781. Fax (636) 978-7782. Web Site www.arcoplast.com.
- B. The following components meet critical environment and high containment facility requirements. SUBSTITUTION ARE NOT ALLOWED.

2.2 ACRYLIC ACCESS DOORS AND PANELS

- A. Provide manufacturer's standard cast acrylic access door/panel designed to provide air tight, leak proof and gas tight seal, 0.50" (12.5mm) thick in various sizes to be installed in wall or ceiling panels.
- B. Access Doors/Panels: High-gloss cast acrylic; factory fabricated, fully assembled units with integrated surface frame with rubber bubble type door gasket; single cast acrylic door construction; stainless steel pull latch, concealed fasteners and continuous hinge.
 - 1. Hinges: Piano Type; 0.40" 316 polished stainless steel.
 - 2. Latch/Pull: Compression gasketed latch; low profile, 316 polished stainless steel
 - 3. Air Leakage: Per ASTM E283 at 75 Pa (4.18 psf and 10.44 psf respectively); results:
 - a. 0.28 cfm/ft² and 0.70 cfm/ft²
 - b. 0.04 cfm/per linear ft. and 0.09 cfm/per linear ft.
 - 4. Anti-microbial, passing ASTM D3273, ASTM D3274; ISO 846;
 - 5. Decontamination tested for resistance to formaldehyde gas, chlorine dioxide and hydrogen peroxide vapor.
 - 6. Chemical and corrosion resistant, ASTM D1308 and ISO 2812-4.
 - 7. Fire-resistance, ASTM E84, Class B minimum.
 - 8. Size: Selected from manufacturer's standard sizes.

- C. Access Door/Panel Accessories:
1. Attachment Screws: Polished stainless steel screws of length and type as determined by manufacturer to attach access doors/panels.
 2. Structural Adhesive and VHB double sided adhesive foam tape:
 - a. Two-component, 1:1 mix, non-sag, non-porous, high-gloss structural methacrylate adhesive.
 - 1) Solids: 100 percent.
 - 2) Color: Translucent.
 - b. Adhesive Tape: VHB foam tape all acrylic 100 percent closed cell
 - 1) Thickness: 1/16" (1.6mm).
 - 2) Width: 1/2" (12.5mm).
 3. Sealant and finishing compound for perimeter joints at access door/panel wall intersection shall be FDA approved sealant and certified as non-supportive of fungal and bacterial growth.
 - a. Pick proof two-component, 1:1 mix, non-sag, non-porous, non-yellowing, high-gloss, odor-free, solvent-free sealant and finishing compound.
 - a. FDA Approved: Determination of Extractives Residue according to US FDA 21 CFR 177.2600 Arcoplast finishing compound/sealant.
 - b. NSF Approved: Registration #148103.
 - c. Color: Match panel color.
 - d. Solids: 100 percent.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written instructions for installing access doors/panels and frames.
- B. All walls and ceilings shall be able to support load of wall mounted access doors/panels specified.
- C. Install access doors/panels, level, square, and in proper alignment.

- D. Sealants: Apply sealants in accordance with sealant manufacturer's instructions and shop drawings.
 - 1. Seal joints, openings, and penetrations in accordance with manufacturer's instructions and shop drawings.
- E. Apply Arcoplast finishing compound to perimeter of access door/panel frame in accordance with manufacturer's instructions.
- F. Repair minor damages to access door/panel finish in accordance with manufacturer's instructions and as approved by Architect.
- G. Remove and replace damaged components that cannot be successfully repaired as determined by Architect.
- H. Access doors/panels shall be installed and sealed per manufacturers written instructions to comply with project requirements and testing; including but not limited to the following:
 - 1. Rooms tested for positive/negative pressure.
 - 2. Room sterilized for micro-bacterial decontamination without risk of transfer of fumes to adjoining spaces.
 - 3. Rooms sealed to prevent cross-contamination between rooms and service corridors.

3.3 ADJUSTING

- A. Adjust doors and hardware, after installation, for proper operation.

3.4 PROTECTION

- A. Protect installed access doors/panels from damage.
- B. Allow 24 hours curing time before pressure wash down sanitation procedures.

END OF SECTION 083110 (08 31 10)