1. Section 068316   
   Fiberglass Reinforced Paneling
   1. PART 1 GENERAL
      1. REFERENCE STANDARDS
         1. ASTM D256 - Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics; 2023, with Editorial Revision.
         2. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2021.
         3. ASTM D5319 - Standard Specification for Glass-Fiber Reinforced Polyester Wall and Ceiling Panels; 2022.
         4. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023d.
         5. ISO 2812-1 - Paints and Varnishes -- Determination of Resistance to Liquids -- Part 1: Immersion in Liquids Other than Water; 2017.
      2. SUBMITTALS
         1. See Section 013000 - Administrative Requirements, for submittal procedures.
         2. Product Data:  Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
   2. PART 2 PRODUCTS
      1. MANUFACTURERS
         1. Fiberglass Reinforced Plastic Panels:
            1. Crane Composites, Inc​​:  www.cranecomposites.com/#sle.
            2. Marlite, Inc​​:  www.marlite.com/#sle.
      2. PANEL SYSTEMS
         1. Wall Panels:
            1. Panel Size:  4 by 8 feet.
            2. Panel Thickness:  ​0.12 inch​.
            3. Surface Design:  ​Smooth​.
            4. Color:  White.
            5. Attachment Method:  Adhesive only, sealant joints, no trim.
      3. MATERIALS
         1. Panels:  Fiberglass reinforced plastic (FRP), complying with ASTM D5319.
            1. Surface Burning Characteristics:  Maximum flame spread index of 25 and smoke developed index of 450; when system tested in accordance with ASTM E84.
            2. Mold Resistance:  Score of 10, when tested in accordance with ASTM D3273.
            3. Impact Strength:  Greater than 6 ft lb force per inch, when tested in accordance with ASTM D256.
            4. Chemical Cleanability:  Excellent chemical resistance to common cleaners and detergents when tested in accordance with ISO 2812-1.
         2. Trim:  Vinyl; color coordinating with panel.
         3. Adhesive:  Type recommended by panel manufacturer.
         4. Sealant:  ​Type recommended by panel manufacturer​; ​color matching panel​.
   3. PART 3 EXECUTION
      1. EXAMINATION
         1. Verify existing conditions and substrate flatness before starting work.
         2. Verify that substrate conditions are ready to receive the work of this section.
      2. INSTALLATION - WALLS
         1. Install panels in accordance with manufacturer's instructions.
         2. Cut and drill panels with carbide tipped saw blades, drill bits, or snips.
         3. Apply adhesive to the back side of the panel using trowel as recommended by adhesive manufacturer.
         4. Apply panels to wall with seams plumb and pattern aligned with adjoining panels.
         5. Install panels with manufacturer's recommended gap for panel field and corner joints.
         6. Place trim on panel before fastening edges, as required.
         7. Fill channels in trim with sealant before attaching to panel.
         8. Install trim with adhesive and screws or nails, as required.
         9. Seal gaps at floor, ceiling, and between panels with applicable sealant to prevent moisture intrusion.
         10. Remove excess sealant after paneling is installed and prior to curing.
2. END OF SECTION