**SECTION XXXXX** (insert correct section #)

**SOLID SURFACE FABRICATION**

**PART 1 - GENERAL**

**1.1 Summary**.

1. Section includes horizontal and vertical product types trim materials and sink and bowl materials.
	1. EOSCU Preventive|Biocidal Surfaces™ 3/8” Sheet material
		1. Countertops and other horizontal applications of EOSCU Preventive|Biocidal Surfaces™ are specified as 12 36 61.16 Solid Surfacing Countertops, EPA Registered Cupron Enhanced EOS Surfaces (EOSCU) with embedded proprietary Cuprous Oxide with Preventive|Biocidal capabilities.
	2. EOSCU Preventive|Biocidal Surfaces™ molded (shaped) goods
		1. EOSCU Preventive|Biocidal Surfaces™ Sinks are specified as 22 43 16 Healthcare Sinks, EPA Registered Cupron Enhanced EOS Surfaces (EOSCU) with embedded proprietary Cuprous Oxide with Preventive|Biocidal capabilities.
		2. EOSCU Preventive|Biocidal Surfaces™ Bed Rails and Overbed Tables are specified as 12 56 70 Healthcare Furniture or 12 40 00 Furniture and Accessories, EPA Registered Cupron Enhanced EOS Surfaces (EOSCU) with embedded proprietary Cuprous Oxide with Preventive|Biocidal capabilities.

**1.2 Definitions**

1. Solid surface sheets and molded goods are hard, homogeneous, hygienic, renewable materials which consist of Polyester resins, mineral fillers and pigments.

**1.3 Submittals**

1. EOSCU Preventive|Biocidal Surfaces™ Product Data
	1. EOSCU Preventive|Biocidal Surfaces™ color chart
	2. EOSCU Preventive|Biocidal Surfaces™ Product Specification Documents
	3. Product Description to include model and part number, identifying name, and color
	4. EOSCU Preventive|Biocidal Surfaces™ SDS sheets
2. Shop Drawings
	1. Indicate plans, dimensions, elevations, layout, cutouts, accessories, support or reinforcements, gloss levels, and edge treatments.
3. Samples of final color selection, minimum 2” x 2” to be retained as standard.
4. Manufacturer’s Fabrication Manual and Care and Maintenance Document

**1.4 Quality Assurance**

1. Fabricator and Installer qualifications
	1. Firms must employ skilled craftsmen with experience for the applications required for this project.
	2. Firms must be certified by the manufacturer through the local master distributor.
2. Applicable Standards
	1. Unless otherwise indicated materials must meet industry standards as referenced herein:
		1. American National Standards Institute (ANSI)
		2. American Society for Testing and Materials (ASTM)
3. Source Limitations
	1. Obtain all materials from single master distributor source.
4. Mockups
	1. Where required the specified may require mockups to verify selections, edges, bowls, coves, etc. to be used as standard for judging quality.
	2. After approval, mockups may be incorporated into the project to save costs.
	3. Preinstallation Conference.
	4. Conduct conference at project site to comply with requirements.

**1.5 Delivery, Storage, Handling**

1. Handle materials according to manufacturer’s instructions,
2. Stores all components indoors, and provides protective wrapping or crating.
3. Do not deliver any parts or components to the job site until it is prepared for installation.

**1.6 Job Site Conditions**

1. Installation sites must be maintained at the ambient temperature and humidity as planned for the project for a minimum of 48 hours prior to installation, and continuously afterwards.

**1.7 Warranty**

1. Provide the manufacturer’s 10 year warranty against defects in materials.
	1. Damage caused by abuse, improper manufacturing or installation techniques, or neglect will not to be warranted.

**1.8 Maintenance**

1. Provide manufacturer’s recommendations for maintenance.
2. Provide materials for future repair, if necessary, from the same batch or dye lot as the installed products.

**PART 2 - PRODUCTS**

**2.1 Manufacturer**

1. Product: EOSCU Preventive|Biocidal Surfaces™ and

Antimicrobial Cupron Enhanced EOS Surfaces™

1. Company: EOS Surfaces, LLC
2. Address: 301 East 20th Street, Norfolk, VA 23517
3. Telephone: (757) 624-3671
4. Fax: (757) 624-3672
5. Company Website: [www.eos-surfaces.com](http://www.eos-surfaces.com)
6. Product Website: [www.eoscu.com](http://www.eos-cu.com)

**2.2 Master Distribution Network**

1. Multiple Distributors. Please see Website or Contact EOS Surfaces LLC for local master distributor.

**2.3 Materials**

1. Solid, homogeneous, antimicrobial sheet blended with Polyester resins, mineral fillers and pigments to comply with industry standardized performance characteristics identified below.
2. Thickness:
	1. 3/8” thick for both vertical and horizontal applications.
	2. 3/8” thick for vertical applications
3. Select color and design for all surfaces.
	1. Detailed in Schedule of Materials in Section 3
4. Select edge detail treatment for all horizontal surfaces as shown on drawings
	1. Detailed in Schedule of Materials in Section 3
5. Select seam detail for vertical wall applications as shown on drawings.
6. Select backsplash and sidesplash options when applicable;
	1. “set-on, applied” or “coved”
	2. Detailed in Schedule of Materials in Section 3
7. Integral EOSCU Preventive|Biocidal Surfaces™ Sinks or Bowls for each horizontal surface as shown on drawings
	1. Detailed in Schedule of Materials in Section 3
8. To meet or exceed all Performance Characteristics,
	1. Flame Spread Index <25, in accordance with ASTM E 84, Class 1A
	2. Smoke Developed Index < 25, in accordance with ASTM E 84, Class 1A
	3. Stain Resistance to meet ANSI Z-124.3, no effect
	4. Wear and Cleanability to meet ANSI Z-124.3 passes
	5. Fungus Resistance to meet ASTM G21, does not support microbial growth
	6. Bacteria Resistance to meet ASTM G22, does not support microbial growth
	7. Impact Resistance to meet NEMA LD3-3.3, ½ pound ball drop
	8. Color Stability to meet NEMA 3-3.3, no change
	9. Barcol Hardness to meet ASTM D2583, 60
	10. Thermal Expansion to meet ASTM D696, 1.3” 10-6 in/in /°F
	11. Boiling Water Surface Resistance to meet NEMA LB3-3.5, no effect
	12. High Temperature Resistance to meet NEMA 3-3.5, no effect
	13. Water Absorption to meet ASTM D570, 0.04%
	14. Specific Gravity, 1
9. Accessories
	1. Manufacturer’s 2-part approved adhesive to provide non-porous, inconspicuous joints.
10. Fabrication
	1. Fabrication must be completed by a fabricator that has completed the EOSCU Preventive|Biocidal Surfaces™ certification course and can present certificate of completion.
		1. All distributors and the manufacturer will have a list of certified fabricators available
	2. Fabricated according to current EOSCU Preventive|Biocidal Surfaces™ Fabrication and Industry-Accepted Standards
	3. Fabricate parts and components in manufacturing shop to greatest extent practical to size and shapes indicated, in accordance with approved shop drawings, and manufactures or industry’s printed instructions.
	4. Form joints between compounds using manufacturer’s approved standard joint adhesive to be inconspicuous and without voids.
		1. Reinforcement strips according to the current manual are required on all seams.
	5. Rout and finish all component edges with clean and uniform work.
		1. All cutouts must be routed and then sanded for a smooth edge
	6. Repair all defective or inaccurate work.
		1. When applicable, comply with manufacturers thermoforming requirements
		2. Heat entire piece, (do not spot heat) to a uniform 280° - 325 °
		3. Form pieces to shape prior to seaming and joining
		4. Sand edges and remove nicks and scratches
		5. Prevent blistering, whitening, and cracking during the forming process.
11. Finishing
	1. Follow manufacturer’s SPECIFIC guidelines for effective biocidal finish.
	2. This is a critical step in the process and must be followed exactly as outlined in the manufacturer’s certification course and Fabrication Manual (available through distributor and manufacturer).

**PART 3 - EXECUTION**

**3.1 Examination**

1. Examine substrates where solid surface will be installed with fabricator for compliance with tolerances and other conditions at job site.
	1. Coordinate with contractor to correct unsatisfactory conditions.
	2. Proceed to complete installation only after all conditions are repaired and acceptable.

**3.2 Installation**

1. Install solid surface according to manufacturer’s Fabrication and Installation Manual
	1. Install all components plumb, level, and rigid; scribed to adjacent surfaces; according to approved shop drawings and product data.
	2. Provide components in largest pieces available for proper installation.
	3. Form field joints using the manufacturure’s approved adhesive, with joint inconspicuous in finished work.
	4. Adhere undermount sinks/bowls to the countertop using the manufacturer’s recommended adhesive.
	5. Provide solid surface material bowls and lavatories sinks with overflows in locations shown in shop drawings.
	6. Anchor securely to base cabinets or supports according to manufacturer’s recommendations.
	7. Cut and finish component edges with clean, sharp returns.
	8. Carefully remove scratches and clean entire surface.
	9. Install countertops with no more than 1/8” sag, bow or other variation from a straight line.

**3.3 Repair**

1. Repair or replace any damaged work.

**3.4 Clean and Protect**

1. Keep components clean during transportation and installation. Follow guidelines outlined in manufacturers Care and Maintenance documents.
2. Clean all surfaces according to the manufacturer’s instructions. DO NOT apply polish.
3. Remove all adhesives, caulks, sealants, etc.
4. Cover and protect all surfaces to protect from damage until accepted by owner.

**3.5 Schedule of Materials**

1. Countertops - -
	1. Surfaces of material adhesively joined with inconspicuous seams

Color

1. Vertical Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Horizontal Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Inlay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Edge Details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Finish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Backsplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_
7. Sidesplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Sink \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Vanity Tops
	1. Surfaces of material adhesively joined with inconspicuous seams

Color

1. Vertical Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Horizontal Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Inlay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Edge Details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Finish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Backsplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_
7. Sidesplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Sink \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Work Stations
	1. Surfaces of material adhesively joined with inconspicuous seams

Color

1. Vertical Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Horizontal Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Inlay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Edge Details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Finish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Backsplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_
7. Sidesplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Sink \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Laboratory Tops
	1. Surfaces of material adhesively joined with inconspicuous seams

Color

1. Vertical Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Horizontal Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Inlay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Edge Details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Finish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Backsplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_
7. Sidesplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Sink \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Window Sills
	1. Surfaces of material adhesively joined with inconspicuous seams

Color

1. Vertical Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Horizontal Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Inlay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Edge Details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Finish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Backsplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_
7. Sidesplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Sink \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Nurses’ Stations
	1. Surfaces of material adhesively joined with inconspicuous seams

Color

1. Vertical Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Horizontal Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Inlay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Edge Details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Finish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Backsplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_
7. Sidesplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Sink \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Reception Areas - -
	1. Surfaces of material adhesively joined with inconspicuous seams

Color

1. Vertical Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Horizontal Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Inlay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Edge Details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Finish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Backsplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_
7. Sidesplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Sink \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Other Applications
	1. Surfaces of material adhesively joined with inconspicuous seams

Color

1. Vertical Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Horizontal Thickness \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Inlay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Edge Details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Finish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Backsplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_
7. Sidesplash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Sink \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_