

MEGANITE™

Acrylic Solid Surface

SECTION 06651 SOLID SURFACE FABRICATION

PART 1 - GENERAL

1.1 Summary.

- A. Section includes horizontal and vertical product types trim materials and sink and bowl materials.
 - 1. Meganite Acrylic ½” Solid Surface Sheet material
 - 2. Meganite Acrylic ¼” Solid Surface Sheet material
 - 3. Meganite solid surface shaped goods (Meganite Sinks and Bowls)

1.2 Definitions

- A. Solid surface sheets and shaped goods are non-porous, homogeneous, hygienic, renewable materials which consist of acrylic resins, ATH mineral fillers and pigments.

1.3 Submittals

- A. Meganite Product Data
 - 1. Meganite color chart
 - 2. MSDS sheets
 - 3. Product Description to include identifying name and color
- B. Shop Drawings
 - 1. Indicate plans, dimensions, elevations, layout, cutouts, accessories, support or reinforcements, gloss levels, and edge treatments.
- C. Samples of final color selection, minimum 2” x 2” to be retained as standard.
- D. Manufacturers Fabrication and Installation Manual

1.4 Quality Assurance

- A. 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 local master distributor.
- B. Applicable Standards
 - 1. Unless otherwise indicated materials must meet industry standards as referenced herein:
 - a. American National Standards Institute (ANSI),
 - b. National Sanitary Foundation (NSF),
 - c. National Electrical Manufacturers Association (NEMA),
 - d. American Society for Testing and Materials (ASTM)

C. Source Limitations

1. Obtain all materials from single master distributor source.

D. 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

- A. Handle materials according to manufacturer's instructions,
- B. Stores all components indoors, and provides protective wrapping or crating.
- C. Do not deliver any parts or components to the job site until it is prepared for installation.

1.6 Job Site Conditions

- A. 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

- A. Provide the manufacture'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

- A. Provide manufacturer's recommendations for maintenance.
 - B. Provide materials for future repair, if necessary, from the same batch or dye lot as the installed products.

PART 2 - PRODUCTS

2.1 Manufacturer

A. Meganite, Inc
1254 E. Lexington Ave
Pomona, CA 91766

Telephone: (708) 343-1515
Fax: (708) 343-1333
Website: www.meganite.info

2.2 Master Distribution Network

A. Aetna Plywood
1401 St Charles Road
Maywood, IL 60153
(708) 343-1515
www.aetnaplywood.com

Specification Representative: Kathy Walker
Phone: (708) 655-9739
Sales Representative: Gary Schimmel
Phone: (708) 343-1515 X 2222

2.3 Materials

- A. Solid homogeneous sheet blended with acrylic resins, ATH mineral fillers and pigments to comply with industry standardized performance characteristics identified below.
- B. Thickness:
 - 1. ½” thick for both vertical and horizontal applications.
 - 2. ¼” thick for vertical applications
- C. Select color and design for all surfaces.
 - 1. Detailed in Schedule of Materials in Section 3
- D. Select edge detail treatment for all horizontal surfaces as shown on drawings
 - 1. Detailed in Schedule of Materials in Section 3
- E. Select seam detail for vertical wall applications as shown on drawings.
- F. Select backsplash and sidesplash options when applicable;
 - 1. “set-on, applied” or “coved”
 - a. Detailed in Schedule of Materials in Section 3
- G. Integral Meganite Sinks or bowls for each horizontal surface as shown on drawings
 - 1. Detailed in Schedule of Materials in Section 3

H. 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. Meet NSF 51, approved
8. Impact Resistance to meet NEMA LD3-3.3, ½ pound ball drop
9. Color Stability to meet NEMA 3-3.3, no change
10. Barcol Hardness to meet ASTM D2583, 60
11. Tensile Strength to meet ASTM D 638, 6000 p.s.i.
12. Flexural Strength to meet ASTM D790, 9000 p.s.i.
13. Thermal Expansion to meet ASTM D696, 1.3×10^{-6} in/in /°F
14. Boiling Water Surface Resistance to meet NEMA LB3-3.5, no effect
15. High Temperature Resistance to meet NEMA 3-3.5, no effect
16. Water Absorption to meet ASTM D570, 0.04%
17. Specific Gravity, 1.7

I. Accessories

1. Manufacturer's 2-part approved adhesive to provide non-porous, inconspicuous joints.

J. Fabrication

1. Fabrication to be completed by a Meganite certified fabricator and installer
 - a. Fabricated according to current Meganite Fabrication, and Industry-Accepted Standards
2. 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.
3. Form joints between compounds using manufacturers' standard joint adhesive to be inconspicuous and without voids.
 - a. Reinforcement strips according to the current manual are required on all seams.
4. Rout and finish all component edges with clean and uniform work.
 - a. All cutouts must be routed and then sanded for a smooth edge
5. Repair all defective or inaccurate work.
6. When applicable, comply with manufacturers thermoforming requirements
 - a. Heat entire piece, (do not spot heat) to a uniform 280° - 325 °
 - b. Form pieces to shape prior to seaming and joining
 - c. Sand edges and remove nicks and scratches
 - d. Prevent blistering, whitening, and cracking during the forming process.

K. Finishing

1. Surfaces should have a consistent and uniform finish
2. Select color from standard offering
 - a. Select finish after reviewing samples.
 - b. Retention of finish depends upon color selected and the intended use of the product.
 - c. Greater polishing will increase cost,
 - d. Matte finish is the standard.
3. Provide surfaces with a uniform finish
 - a. Greater polishing increases cost
 - 1) Matte is standard and requires least maintenance
 - 1a) Matte Finish; gloss range 5 - 20
 - 2) Use Semi-Gloss to bring out depth in darker patterned materials; semi-gloss will be more expensive and will require more maintenance
 - 2a) Semi-Gloss Finish; gloss range 20 – 50.
 - 3) Use Polished Finish for Light Duty only. This is most expensive, and much heavier maintenance requirements.
 - 3a) Polished Finish: gloss range 50 - 80

PART 3 - EXECUTION

3.1 Examination

- A. 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.
- B. Proceed to complete installation only after all conditions are repaired and acceptable.

3.2 Installation

- A. 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 manufacturer'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 materials 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

- A. Repair or replace any damaged work.

3.4 Clean and Protect

- A. Keep components clean during transportation and installation.
- B. Clean all surfaces according to manufacturer's Care and Maintenance Guide
- C. Remove all adhesives, caulks, sealants, etc.
- D. Cover and protect all surfaces to protect from damage until accepted by owner.

3.5 Schedule of Materials

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

- | | |
|-------------------------|-------|
| | Color |
| a. Vertical Thickness | _____ |
| b. Horizontal Thickness | _____ |
| c. Inlay | _____ |
| d. Edge Details | _____ |
| e. Finish | _____ |
| f. Backsplash | _____ |
| g. Sidesplash | _____ |
| h. Sink | _____ |

B. Vanity Tops

1. Surfaces of material adhesively joined with inconspicuous seams

- | | |
|-------------------------|-------|
| | Color |
| a. Vertical Thickness | _____ |
| b. Horizontal Thickness | _____ |
| c. Inlay | _____ |
| d. Edge Details | _____ |
| e. Finish | _____ |
| f. Backsplash | _____ |
| g. Sidesplash | _____ |
| h. Sink | _____ |

C. Work Stations

1. Surfaces of material adhesively joined with inconspicuous seams

- | | |
|-------------------------|-------|
| | Color |
| a. Vertical Thickness | _____ |
| b. Horizontal Thickness | _____ |
| c. Inlay | _____ |
| d. Edge Details | _____ |
| e. Finish | _____ |
| f. Backsplash | _____ |
| g. Sidesplash | _____ |
| h. Sink | _____ |

D. Laboratory Tops

1. Surfaces of material adhesively joined with inconspicuous seams

Color

- a. Vertical Thickness _____
- b. Horizontal Thickness _____
- c. Inlay _____
- d. Edge Details _____
- e. Finish _____
- f. Backsplash _____
- g. Sidesplash _____
- h. Sink _____

E. Window Sills

1. Surfaces of material adhesively joined with inconspicuous seams

Color

- a. Vertical Thickness _____
- b. Horizontal Thickness _____
- c. Inlay _____
- d. Edge Details _____
- e. Finish _____

F. Nurses Stations

1. Surfaces of material adhesively joined with inconspicuous seams

Color

- a. Vertical Thickness _____
- b. Horizontal Thickness _____
- c. Inlay _____
- d. Edge Details _____
- e. Finish _____
- f. Backsplash _____
- g. Sidesplash _____
- h. Sink _____

G. Reception Areas - -

1. Surfaces of material adhesively joined with inconspicuous seams

Color

- a. Vertical Thickness _____
- b. Horizontal Thickness _____
- c. Inlay _____
- d. Edge Details _____
- e. Finish _____

- f. Backsplash _____
- g. Sidesplash _____
- h. Sink _____

H. Cafeteria and Food Service Areas - -

1. Surfaces of material adhesively joined with inconspicuous seams
2. Confirm installation recommendations in current Fabrication and Installation Manual
 - a. Adhesively joined with no exposed open or silicone filled seams
 - b. Provide expansion joints as detailed in shop drawings, according to manufacturers recommendations.
 - c. Reinforce cutouts as recommended by the manufacturer.
 - d. Provide insulation between material and adjacent hot water pans and food warmers.
 - e. Thermally isolate hot applications from cold.
 - f. Provide venting of cabinets.

- | | Color |
|--------------------------|-------|
| 1). Vertical Thickness | _____ |
| 2). Horizontal Thickness | _____ |
| 3). Inlay | _____ |
| 4). Edge Details | _____ |
| 5). Finish | _____ |
| 6). Backsplash | _____ |
| 7). Sidesplash | _____ |
| 8). Sink | _____ |

I. Other Applications

1. Surfaces of material adhesively joined with inconspicuous seams

- | | Color |
|-------------------------|-------|
| a. Vertical Thickness | _____ |
| b. Horizontal Thickness | _____ |
| c. Inlay | _____ |
| d. Edge Details | _____ |
| e. Finish | _____ |
| f. Backsplash | _____ |
| g. Sidesplash | _____ |
| h. Sink | _____ |

