

SECTION 06650
SOLID SURFACING FABRICATIONS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Solid surfacing materials including window stools and bathroom vanities.

1.2 REFERENCES

- A. ISSFA - International Solid Surface Fabricators Association
- B. ICPA - International Cast Polymer Association

1.3 MAINTENANCE DATA

- A. Include instructions for stain removal and surface and gloss restoration
- B. Ten year manufacturing warranty
- C. Warranty Include coverage of materials and labor to repair or replace product found to be defective in materials or workmanship

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications Company specializing in manufacturing products specified in this section, with no less than five years of experience
- B. Fabricator and Installer Qualifications Company specializing in performing the work of this section with minimum five years of experience, factory-trained and certified by manufacturer
- C. Provide single source responsibility for products of this section
- D. Solid surface materials shall meet or exceed performance standards set forth in ANSI/ICPA SS-1-2001 OR ISSFA-2-01

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable code for flame/smoke rating of 15/25 for a thickness of 1/2 inch, follow ASTM E84 requirements

PART 2 PRODUCT

2.1 MANUFACTURER

- A. "Tessaro" or "Tessaro LG" (lab grade) by Smokey Mountain Tops, Inc. 800-535-8362 or approved equal

2.2 MATERIALS

- A. Material:
 - COMMERCIAL GRADE
Reacted monomers and acrylic polymer blended resins, mineral fillers manufactured in sheets of specific thickness, solid, non-porous, homogeneous, hygienic, renewable, and when applicable, may feature inconspicuous hygienic seams, free from conspicuous internal strengthening fibers
 - LAB GRADE:
Chemical and abrasion resistant, durable top cast of polyester and acrylic blended resin with inert filler. Cast flat, with a uniform non-glare matte finish.
- B. Material thickness:
 - COMMERCIAL GRADE 1/4", 1/2", 3/4", or 1"
 - LAB GRADE: A monolithic 3/4" thick. Check thickness before fabrication. Each corner top shall not deviate more than plus or minus 1/32" from nominal.
- C. Finish Manufacturer's standard semi gloss finish in selected color as selected by Architect/Engineer from manufacturer's standard range or custom design

2.3 ACCESSORIES

- A. Joint Adhesive Manufacturer's standard, low VOC emitting joint adhesive to create Inconspicuous, non-porous joints
- B. Sealant Mildew resistant, color compatible silicone sealant as recommended by

2.4 FABRICATION

- A. Bonding: All joints shall be bonded with a highly chemical and corrosion resistant glue derived from the same composition as the top material itself.
- B. Seams: Align adjacent solid surfacing material countertops and form seams to comply with manufacturers written recommendations using adhesive in color to match countertop. Carefully dress joints smooth and blend with top for seamless appearance, remove scratches, and clean entire surface.
- C. Curbs: Supply loose for field application in same thickness as countertops. Curbs shall be 4 inches high unless otherwise indicated on Drawings. Where tops abut wall or fume hood, supply end curb.
- D. Color: Manufacturer must submit at least 12 colors for owners' consideration. Custom colors must be available upon request.
- E. Drip Groove: Provide a 1/8th inch wide drip groove on the underside of all exposed edges set back 1/2 inch from edge of top.
Drainboard Grooves: Specify number, size, and location.

2.5 SOURCE QUALITY CONTROL TESTING OF SOLID POLYMER WORK SURFACE

- A. Test Procedure: Apply 5 drops of each reagent to surface and cover with 25mm watchglass, convex side down; test volatiles using 1 once bottle stuffed with saturated cotton. After 24 hour exposure flush surface, clean, rinse and wipe dry.
- B. Evaluation Ratings: Change in surface finish and function shall be described by the following ratings:
 - A No effect, no detachable, change in surface material.
 - B Excellent, slight detectable change in color or gloss, but no change to the function or life of the work surface material.
 - C Good, slight surface etching, staining, or swelling.

AFTER 24HRS DWELL TIME, THE CHEMICALS SHOULD BE WIPED WITH A DAMP RAG AND RESIDUE REMOVED WITH 400 GRIT WET SANDPAPER. THERE SHALL NOT BE A SURFACE MATERIAL LOSS OF LESS THAN .002". AND SURFACE SHOULD BE EASILY RENEWED TO ORIGINAL SURFACE APPEARANCE WITHIN A FEW MINUTES.

- C. Test results: Submit a report of the test results. The results shall be equal to or better than the following:

Chemical Name	Method	Result
1. Acetic Acid 98%	watch glass	A
2. Acetone	cotton ball	A
3. Acid dichromate	watch glass	B
4. Ammonium Hydroxide 28%	watch glass	A
5. Amylacetate	cotton ball	A
6. Benzene	cotton ball	A
7. Carbon tetrachloride	cotton ball	A
8. Chromic acid 60%	watch glass	A
9. Chromic acid 40%	watch glass	B
10. Ethyl acetate	cotton ball	B
11. Ethyl alcohol	cotton ball	A
12. Formaldehyde	watch glass	A
13. Gasoline	cotton ball	A
14. Hydrochloric acid 37%	watch glass	A
15. Hydrochloric acid 38%	watch glass	B
16. Hydrogen peroxide 30%	watch glass	A

17. Methyl ethyl keytone	cotton ball	B
18. Methyl alcohol	cotton ball	A
19. Napthalene	cotton ball	A
20. Nitric acid 20%	watch glass	A
21. Nitric acid 30%	watch glass	B
22. Nitric acid 70%	watch glass	B
23. Phenol 85%	watch glass	C
24. Phosphoric acid 85%	watch glass	C
25. Silver nitrate	watch glass	B
26. Sodium hydroxide 10%	watch glass	B
27. Sodium hydroxide 20%	watch glass	B
28. Sodium hydroxide 40%	watch glass	C
29. Sodium hydroxide flake	watch glass	C
30. Sodium sulfite	watch glass	A
31. Sulfuric Acid 33%	watch glass	B
32. Sulfuric Acid 77%	watch glass	B
32. Sulfuric Acid 96%	watch glass	C
33. Tincture of iodine	watch glass	B
34. Toluene	cotton ball	B
35. Xylene	cotton ball	A
36. Zinc chloride	watch ball	B
37. 70% nitric/ 77% sulfuric acid	watch ball	C

RATINGS A,B, AND C CAN BE RENEWED WITH 400 GRIT SANDPAPER