



SECTION 10 17 10 SOLID SURFACE PARTITION SYSTEMS

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. This Section includes the following vertical solid surface product types:

1. Toilet partitions.
2. Pilasters
3. Trim.

B. Related Sections include the following:

1. Division 1 Section "LEED Requirements" for additional LEED requirements.
2. Division 6 Section "Rough Carpentry" for Blocking.
3. Division 6 Section "Solid Surface Fabrications."
4. Division 9 Section "Solid Surface Wall Cladding."
5. Division 10 Section "Toilet and Bath Accessories."
6. Division 15 Section "Plumbing."

C. Alternates:

1. Refer to Division 1 Section "Alternates" for description of work in this Section affected by alternates.

1.3 DEFINITION

A. Solid surface is a homogeneous thermoset polymer compound, comprised of acrylic and polyester components filled with aluminum trihydrate. Materials are non-porous and homogenous, with uniform color and pattern throughout the entire thickness. Materials should be 100% repairable.

1.4 SUBMITTALS

A. Product data:

1. For each type of product indicated.



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B. Shop drawings:

1. Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices and other components.
 - a. Show full-size details, edge details, attachments, etc.
 - b. Show locations and sizes of cutouts and holes for plumbing fixtures, soap holders and other items installed in solid surface.

C. Samples:

1. For each type of product indicated.
 - a. Submit a minimum 4-inch by 4-inch sample.
 - b. Indicate full range of color and pattern variation.
2. Approved samples will be retained as a standard for work.

D. Product Data:

1. Indicate product description, fabrication information and compliance with specified performance requirements.

E. LEED Submittals:

1. Credit EQ 4.1:
 - a. Manufacturer's product data for installation adhesives, including printed statement of VOC content and material safety data sheets.

F. Maintenance data:

1. Submit manufacturer's care and maintenance data, including repair and cleaning instructions.
2. Include in project closeout documents.

1.5 QUALITY ASSURANCE

A. Qualifications:

1. Shop that employs skilled workers who custom fabricate products like those required for this project and whose products have a record of successful in- service performance.

B. Fabricator/ Installer qualifications:

1. Work of this section shall be by an experienced fabricator/ installer.



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C. Applicable standards:

1. Standards of the following, as referenced herein:

- a. American National Standards Institute (ANSI)
- b. American Society for Testing and Materials (ASTM)
- c. National Electrical Manufacturers Association (NEMA)

2. Fire test response characteristics:

- a. Provide with the following Class A (Class 1) surface burning characteristics as determined by testing identical products per UL 723 (ASTM E84) or another testing and inspecting agency acceptable to authorities having jurisdiction:

- 1) Flame Spread Index: 25 or less.
- 2) Smoke Developed Index: 450 or less.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver no components to project site until areas are ready for installation.
- B. Store components indoors prior to installation.
- C. Handle materials to prevent damage to finished surfaces.

- 1. Provide protective coverings to prevent physical damage or staining following installation for the duration of the project.

1.7 WARRANTY

- A. Furnish the manufacturer's limited warranty covering defects in materials and workmanship.

1.8 MAINTENANCE

- A. Provide maintenance requirements as specified by the manufacturer.

PART 2- PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers:

- 1. Subject to compliance with requirements, provide products by one of the following:
 - a. Wiltcher Industries, Inc. Solid Surfaces (Basis of Design)



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B. Toilet partitions:

1. Pilasters of ¾" to 1" solid surface material:

a. Floor mounted.

C. Urinal screens:

1. Panels to be wall mounted.

D. Thickness:

1. 1/2 inch

2. 3/4 inch

3. 1 inch

E. Performance characteristics:

Type	Test Method	Results
Hardness	ASTM D-2583-95	58- 60
Tensile Strength	ASTM D- 638- 98	4,125
Mod		1,410,000
% Elong		0.73%
Work to Break		8.56
Flex. Strength	ASTM D- 790	9,870
Mod.		1,330,000
Gloss	NEMA LD 3-3 1513.2	5- 20
Wear and Clean	ANNSI Z124.3	Passes
Abrasion Resistance	CS 221-66	No Loss of Pattern
Cigarette Resistance	NEMA LD3-3.07	No Effect
Boiled Water Resistance	NEMA LD3- 3.05/3.5	No Effect
High Temperature Resistance	NEMA LD3- 3.06/3.5	No Effect
Conductive Heat	NEMA LD3- 3.08/ 3.8N	Slight Effect
Unnotched Impact	ASTM D- 256- 96a	1.3
Notch Impact	ASTM D- 256- 96a	0.33 Ft- Lb/ In
Stain	ANSI Z124.3	Passes- 43
Sp. Gr.	ASTM D- 729- 91	1.71
Water Absorption	ASTM D- 570- 95	0.022
Flammability	ASTM E- 84	Class 1
Oxygen Index	ASTM D- 2863	0.33
% Cure by DSC	Analytical	97%
GC Head Space	Analytical	1030 PPM



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2.3 ACCESSORIES

A. Joint adhesive:

1. Manufacturer's standard one- or two-part adhesive kit to create inconspicuous, nonporous joints.

B. Sealant:

1. Manufacturer's standard mildew resistant silicone sealant in colors matching components.

2.4 FACTORY FABRICATION

A. Shop assembly:

1. Fabricate components to the greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings.

2.5 FINISHES

A. Select from the manufacturer's standard range of finishes.

B. Finish:

1. Provide surfaces with a uniform finish. The final finish may range from matte to high gloss, depending on the customer's specification. Surfaces with gloss and semi- gloss finishes require more maintenance than matte or satin finishes. Darker colors require more attention.

2.6 HARDWARE

A. Hinges:

1. Manufacturer's standard self- closing type that can be adjusted to hold doors open at any angle up to 90 degrees.

B. Latch and keeper:

1. Manufacturer's standard surface mounted latch unit designed for emergency access and with combination rubber- faced door strike and keeper.
 - a. Provide units that comply with accessibility requirements of authorities having jurisdiction at compartments indicated to be accessible to people with disabilities.



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C. Coat hook:

1. Manufacturer's standard combination hook and rubber tipped bumper, sized to prevent door from hitting compartment mounted accessories.

D. Door bumper:

1. Manufacturer's standard rubber tipped bumper at out- swinging doors and in- swing doors.

E. Door pull:

1. Manufacturer's standard unit at out- swing doors that complies with accessibility requirements of authorities having jurisdiction.
2. Provide units on both sides of doors at compartments indicated to be accessible to people with disabilities.

F. All hardware is installed onto solid surface at time of installation.

PART 3- EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions with installer 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. Install components plumb, level, and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and data.

3.3 REPAIR

- A. Repair or replace damaged work, which cannot be repaired to architect's satisfaction.

3.4 CLEANING AND PROTECTION

- A. Keep components clean during installation.
- B. Remove adhesives, sealants, and other stains.