<Project Name> SECTION 09 78 00
<Project Number> M|R WALLS Interior Wall Paneling
<Distributor Name, GMA, and Contact>
<Date>

**SPEC NOTE:** THIS SPECIFICATION HAS BEEN PREPARED TO ASSIST THE SPECIFIER IN PREPARING A PROJECT OR MASTER SPECIFICATION. IT FOLLOWS GUIDELINES ESTABLISHED BY CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI) AND THEREFORE MAY BE USED WITH MOST MASTER SPECIFICATION SYSTEMS WITH MINOR EDITING.

**SPEC NOTE:** FOLLOWING IS WRITTEN AS A COMPLETE STAND ALONE MASTER SPECIFICATION SECTION FOR PROVISION OF SOLID SURFACE WALL PANEL ON A PROJECT. IT CAN ALSO BE USED AS SUPPLEMENTARY INFORMATION FOR INCORPORATION INTO ANOTHER SPECIFICATION SECTION. SPEC NOTES WILL IDENTIFY WHICH ARTICLES OR PARAGRAPHS SHOULD BE COPIED INTO ANOTHER SPECIFICATION SECTION AS APPLICABLE.

**SPEC NOTE:** THIS SECTION IS BASED ON CORIAN® SOLID SURFACE PRODUCT MANUFACTURED BY DUPONT. TECHNICAL INFORMATION AND A LISTING OF THE DUPONT REGISTERED CORIAN® FABRICATOR/INSTALLERS CAN BE PROVIDED BY THE LOCAL CORIAN® DISTRIBUTOR.

# PART 1 — GENERAL

## 1.01 SUMMARY

A. Section Includes: Provide solid surface fabrications including but not limited to following:

1. Decorative Walls

## 1.02 REFERENCES

A. Definitions

Solid surface is defined as nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment. Wall Definition – premade design aesthetic for vertical applications.

## 1.03 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meetings: Arrange preinstallation meeting 1 week prior to commencing work with all parties associated with trade as designated in Contract Documents or as requested by Architect. Presided over by Contractor, include Architect who may attend, Subcontractor performing work of this trade, Owner's representative, testing company's representative (if needed) and consultants of applicable discipline. Review Contract Documents for work included under this trade and determine complete understanding of requirements and responsibilities relative to work included, storage and handling of materials, materials to be used, installation of materials, sequence and quality control, Project staffing, restrictions on areas of work and other matters affecting construction, to permit compliance with intent of work of this Section.

SUBMITTALS

B. Product Data: Indicate Product description including solid surface sheets, sinks, bowls and illustrating full range of standard colors, fabrication information and compliance with specified performance requirements. Submit Product data with resistance to list of chemicals.

C. Shop Drawings: Submit Shop Drawings for work of this Section in accordance with Section 01 30 00. Indicate plans, sections, dimensions, component sizes, edge details, thermosetting requirements, fabrication details, attachment provisions, sizes of furring, blocking, including concealed blocking and coordination requirements with adjacent work. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, waste receptacles and other items installed in solid surface.

D. Coordination Drawings: Submit coordination drawings indicating plumbing and miscellaneous steel work indicating locations of wall rated or non-rated, blocking requirements, locations and recessed wall items and similar items.

CLOSEOUT SUBMITTALS

E. Operational and Maintenance Data:

1. Submit material manufacturer's care and maintenance data, including repair and cleaning instructions. Include in Project closeout documents.
2. .Review maintenance procedures and warranty details with Owner upon completion.

1.02 QUALITY ASSURANCE

A. Qualifications:

1. Installers: Provide work of this Section executed by M|R Walls approved installers.

B. Mock-Ups:

1. Prior to final approval of Shop Drawings, erect a mock-up demonstrating quality of materials and execution for Architect review.
2. Should mock-up not be approved, rework or remake until approval is secured. Remove rejected units from Project site.
3. Approved mock-up will be used as standard for acceptance of subsequent work.
4. Approved mock-ups may remain as part of finished work.

1.03 DELIVERY, STORAGE AND HANDLING

A. Delivery and Acceptance Requirements: M|R Walls should acclimate to the existing temperature of the project for 48 hours.

B. Storage and Handling Requirements:

1. Store components indoors prior to installation.
2. Handle materials to prevent damage to finished surfaces.

PART 2 - PRODUCTS

MANUFACTURERS

E. Manufacturer List: Products of following manufacturers are acceptable subject to conformance to requirements of Drawings, Schedules and Specifications:

1. M|R Walls designed with Corian® Solid Surface; mrwalls.marioromano.com
Contact: Corian® Design distributor.

F. Substitution Limitations: This Specification is based on M|R Walls designed with Corian® Solid Surface. Comparable Products from manufacturers will be accepted provided they meet requirements of this Specification.

2.02 MATERIALS

G. Corian® Solid Surface: Nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment; not coated, laminated or of composite construction.

a. Wall Dimensions: _____

b. Corian® Solid Surface Color _____

c. M|R Walls Design Name (or “Custom”): _____

H. Sustainability Characteristics: Provide Products meeting following LEED® performance criteria:

- Related Sections: Following description of work is included for reference only and shall not be presumed complete: Provision of general LEED® requirements: Section 01 33 29, General LEED® Requirements. Provision of general LEED® Product requirements: Section 01 60 13, LEED® Product Requirements.

- LEED®: Leadership in Energy and Environmental Design; www.usgbc.org.

**SPEC NOTE:** USE FOLLOWING IN CONNECTION WITH LEED® CREDIT MR 4. IT MAY BE NECESSARY TO SPLIT FOLLOWING PARAGRAPH DUE TO DIFFERENT PRODUCTS WITHIN A PARTICULAR SECTION HAVING DIFFERENT RECYCLING AMOUNTS (IE. IN SECTION 09 21 16, GYPSUM BOARD IS 40% AND STEEL IS 25%). EDIT ACCORDINGLY.

a. MRc4: Provide Product with a combined minimum pre-consumer and post-consumer recycled content of [xx%].

**SPEC NOTE:** USE FOLLOWING PARAGRAPH IF AMOUNT OF RECYCLED CONTENT IS UNKNOWN, BUT DESIRED FOR LEED® CREDIT.

b. MRc4: Provide Product with maximum pre-consumer and post-consumer recycled content available.

**SPEC NOTE:** USE FOLLOWING IN CONNECTION WITH LEED® CREDIT MR 5.

c. MRc5: Provide Product with regional content.

**SPEC NOTE:** USE FOLLOWING IN CONNECTION WITH LEED® CREDIT EQ 4.1.

d. EQc4.1: Provide adhesives and sealants with VOC quantities lower than stated in SCAQMD Rule 1168. Ensure VOC quantities for sealants do not exceed 250 g/l under any circumstances.

I. Performance/Design criteria:

**PHYSICAL PROPERTIES**

| Property | Typical Result | Test |
|---|---|---|
| Density | 1.7g/cm³ | ASTM D792 |
| Approximate weight per square foot ½" (12mm) | 4.4 lbs | |
| Thermal Expansion | 3.9 x $10^{-5}$ in./in./°C (2.2 x $10^{-5}$ in./in./°F) | ASTM D696 |
| Hardness – Rockwell 'M' Scale | >85 | ASTM D785 |
| Hardness – Barcol Impressor | 56 | ISO 19712-2 (ASTM D2583) |

**FITNESS FOR USE**

| Property | Typical Result | Test |
|---|---|---|
| Light Resistance (Xenon Arc) | Pass | ISO 191712-2 |
| Colorfastness | $\Delta E^*_{94} < 2$ in 200 hrs. | CSA B45/ANSI Z124 |
| Resistance to dry heat | Pass | ISO 19712-2 |
| Resistance to wet heat | Pass | ISO 19712-2 |
| Hot/cold cycle water-resistance test | Pass | ISO 19712-2 |
| Dimensional stability | Pass | ISO 4586-2 |
| Resistance to surface wear | .18 % wt/25 revolutions | ISO 4586-2 |
| Fungal Resistance | ASTM Rating of 0, No observed Growth on product at 100x power | ASTM G21 |
| Bacterial Resistance | No observed growth on product at 100x power | ASTM G22 |
| Microbial Resistance | Listed with UL | UL 2824 Greenguard® Mold Resistance |
| Boiling Water Resistance | No visible change | NEMA LD 3-2005 |
| High Temperature Resistance | No change | NEMA LD 3-2005 |

J. Joint Adhesive: Manufacturer's standard one or two part adhesive kit to create inconspicuous, nonporous joints

K. Panel adhesive/sealants: 100% silicone sealant with a minim 50% movement capability

L. Fabrication:

1. Fabricate components in shop to sizes and shapes indicated, in accordance with approved Shop Drawings and solid surface manufacturer requirements. Provide factory cutouts for plumbing fittings and bath accessories as indicated on Drawings.
2. Ensure joints between components fit together, and are inconspicuous in appearance, per the Installation requirements.
3. Provide holes and cutouts for plumbing and bath accessories as indicated on Drawings.
4. Rout and finish component edges to a smooth, uniform finish. Rout cutouts, then sand edges smooth. Repair or reject defective or inaccurate work.
5. Fabrication Tolerances: (see individual project details)
   a. Variation in Component Size: +/-3 mm (+/-1/8").
   b. Location of Openings: +/-3 mm (+/-1/8") from indicated location.
6. Silicone: A minimum silicone adhesive thickness of 1/16" (1.5 mm) is suggested to apply sheet panels to the wall. Greater silicone thickness can accommodate even longer hard seamed wall lengths for a given variable temperature environment.

## PART 3 - EXECUTION

### EXAMINATION

A. Verification of Conditions:

1. Examine substrates and conditions, with fabricator or installer present for compliance with requirements for installation tolerances and other conditions affecting performance of work. Proceed with installation only after unsatisfactory conditions have been corrected.
2. Verify actual site dimensions and location of adjacent materials prior to commencing work.
3. Notify Architect in writing of any conditions which would be detrimental to installation.

B. Evaluation and Assessment: Commencement of work implies acceptance of previously completed work.

### INSTALLATION

A. GENERAL

1. M|R Walls will provide an installation map/guide of how the pieces fit together. The assembly logic is embedded in the design.
2. M|R Walls will also provide technical drawings, such as 2D cad drawings in PDF or STL models which can be imported in to 3d architectural programs like Revit.
3. M|R Walls puzzle pieces can be seamed together using color coordinated Corian® Joint Adhesive to create inconspicuous seams.
4. Wall leveling – Develop an overall installation plan based on the application. Care must be taken to mount M|R Walls with plumb and level vertical and horizontal edges, respectively. Both vertical edges of corner panels should be plumb

B. TEMPERATURE CONTROL

M|R Walls should acclimate to the existing temperature of the project for 48 hours. Once installed it is ideal to control the temperature of the project.

C. SUBSTRATES

1. Dry Environments use drywall or plywood.
2. Wet Environments use Hardiebacker® cement board, Densglas®, or similar

D. REPAIR

Repair minor imperfections and cracked seams and replace areas of severely damaged surfaces in accordance with manufacturer's "Technical Bulletins".

E. SITE QUALITY CONTROL

Non-Conforming Work: Replace damaged work which cannot be satisfactorily repaired, restored or cleaned, to satisfaction of Architect at no cost to Owner.

F. CLEANING

1. Remove excess adhesive and sealant from visible surfaces.
2. Clean surfaces in accordance with manufacturer's "Care and Maintenance Instructions".

G. PROTECTION

1. Provide protective coverings to prevent physical damage or staining following installation for duration of Project.
2. Protect surfaces from damage until date of Substantial Completion of the Work.

END OF SECTION