

DIVISION 103000

Engineered Composites Fabrications

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Mastercast™ Engineered Composites:

1. Tub & Shower Wall Panels

1.2 RELATED SECTIONS

- A. Section 102800 - Toilet, Bath & Laundry Accessories
- B. Section 224000 - Plumbing fixtures

1.3 REFERENCES

- A. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

1.4 SUBMITTALS

- A. Comply with Section 01330 - Submittal Procedures.
- B. Product Data: Submit manufacturer's product data including installation instructions.
- C. Shop Drawings: Submit manufacturer's shop drawings, including plans, elevations, sections, and details indicating dimensions, sizes, installation details, attachment provisions, and coordination requirements with adjacent work.
- D. Samples: Submit 3 manufacturer's 4-inch by 4-inch samples of engineered marble for each color specified, showing material thickness and finish. Indicate full range of colors and patterns.
- E. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- F. Maintenance Data: Submit manufacturer's care and maintenance recommendations, including recommended repair and cleaning instructions.

G. Warranty: Submit manufacturer's standard commercial warranty.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. Sufficient plant facilities to provide quality, quantities, shapes, and sizes of engineered marble units required without delaying progress of the Work.
2. Minimum of 20 years experience in producing engineered composite products.

B. Installer Qualifications: Experienced installer who has demonstrated successful installation of engineered marble or cast polymer products similar to that specified.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name, manufacturer, and individual unit number.

B. Storage: Store materials flat in clean, dry area indoors in accordance with manufacturer's instructions.

C. Handling: Protect materials and finish from damage during handling and installation in accordance with manufacturer's instructions.

1.7 SCHEDULING

A. Schedule and deliver engineered composite units when ready for installation.

PART 2 PRODUCTS

2.1 ENGINEERED COMPOSITE

A. Material: Engineered marble

B. Compliance:

1. ASTM E 84.

C. Fabrication:

1. Mix clean aggregate filler with polyester resin to create a matrix.
2. Add colorants to matrix in a manner to provide veining to mimic appearance of natural marble products.
3. Pour material into molds behind gel coat
4. Allow to fully cure to a solid material.
5. Coat finished engineered marble units with protective wax.
6. Provide consistent color throughout depth of material, not just the

surface.

2.2 TUB AND SHOWER WALL PANELS

- A. Size: As indicated on the drawings.
- B. Thickness: 3/8 inch.
- C. Color: To be selected by Architect from manufacturer's standard color selection.
- D. Accessories:
 - 1. Panel Adhesive: Clear or color-matched 100 percent silicone panel adhesive.
 - 2. Sealant: Clear or color-matched 100 percent silicone sealant.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to receive engineered marble units. Notify Architect if surfaces are not acceptable. Do not begin installation until unacceptable conditions have been corrected.
- B. Examine engineered composite units before installation. Do not install unacceptable units.

3.2 INSTALLATION

- A. Install engineered composite units in accordance with manufacturer's instructions.
- B. Install engineered composite units level, plumb, square, and in proper alignment.
- C. Make field cuts as necessary from unfinished bottom side in accordance with manufacturer's instructions.
- D. Form field joints using manufacturer's recommended adhesive.
- E. Do not excessively tighten faucet fixtures or sink drains on bathroom vanities. Hand tighten sink drains in accordance with manufacturer's instructions.
- F. Do not allow hot water temperature over 140 degrees F to come into contact with engineered composite units.
- G. Repair nicks, scratches, and other minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- H. Remove and replace damaged units that cannot be successfully repaired as

determined by Architect.

3.3 CLEANING

- A. Clean and polish engineered composite units promptly after installation in accordance with manufacturer's instructions.
- B. Do not use abrasive or harsh cleaning materials or methods that would damage finish.
- C. Protect Finish from damage until job completion using plastic wrap, cardboard or a soft cloth.

3.4 PROTECTION

- A. Protect installed engineered composite units from damage for duration of project.

END OF SECTION 103000