

**SECTION 10 21 16
SHOWER AND DRESSING COMPARTMENTS**

SHOWER WALL PANELS

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PART 1 – GENERAL

1.1 RELATED SECTIONS

- A. Related work specified in other sections:
 - 01 33 00 “Submittal Procedures”
 - 06 10 00 “Rough Carpentry”
 - 06 20 00 “Finish Carpentry”
 - 22 40 00 “Plumbing Fixtures”

1.2 REFERENCES

- A. Codes and Standards referenced in this section refer to the latest edition thereof.
- B. Applicable Standards referenced herein:
 - ASTM: American Society for Testing and Materials
 - ANSI: American National Standards Institute

1.3 SUMMARY

- A. Section includes:
 - Porcelain composite wall panels, as indicated and specified
- B. Work Specified in this Section:
 - Shower surround panels, Tub surround panels, and Wet room wall panels

1.4 DEFINITION

- A. Porcelain composite wall panels consist of 6mm vitrified porcelain slabs adhered in-plant to a moisture-resistant backer and PVC tracks. The material is non-porous with the specified color and pattern on the porcelain surface.

1.5 SUBMITTALS

- A. Shop Drawings
 - Installer shall provide shop drawings indicating panel sizes and seam locations.

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- B. Submit samples of full range of available colors for color selection
- C. Care & Maintenance Data
Provide manufacturer's care and maintenance instructions

1.6 DELIVERY, STORAGE AND HANDLING

- A. Transport and deliver all items in appropriate packaging to prevent damage.
- B. Handle materials to prevent damage to adjacent surfaces and previous work.
- C. Carry all shower wall panels vertically to avoid breakage.

1.7 QUALITY ASSURANCE

- A. Source Limitations
Where porcelain composite wall panels are indicated on drawings, the material shall be **Synthesis™**, manufactured by Panel Composite Systems, Inc., 6130 Cochran Road, Solon OH 44139. Phone 440.287.0101
- B. Installation Qualifications
Porcelain composite wall panels shall be installed in accordance with published manufacturer instructions.

1.8 WARRANTY

- A. Furnish the manufacturer's 10-Year Limited Warranty covering defects in material and workmanship. Term of warranty to commence upon date product is delivered to the jobsite.

PART 2 - PRODUCTS

2.1 MANUFACTURER / BASIS OF DESIGN

Synthesis™ porcelain shower surround system
Panel Composite Systems, Inc.
6130 Cochran Road, Solon, OH 44139
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2.2 MATERIALS

- A. Porcelain composite wall panels

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- a. Porcelain composite wall panels shall be **Synthesis™**, manufactured by Panel Composite Systems, Inc., 6130 Cochran Road, Solon OH 44139. Phone 440.287.0101
- b. Porcelain composite wall panels consist of 6mm vitrified porcelain slabs adhered in-plant to a moisture-resistant backer and PVC tracks. The material is non-porous with the specified color and pattern on the porcelain surface.
- c. Porcelain composite wall panels shall be installed using mechanical attachments with no thinset adhesive or grout.
- d. Porcelain composite wall panels shall be removable for future plumbing repairs and shall allow for reinstallation upon completion of the repairs.
- e. Porcelain composite wall panels shall meet or exceed performance requirements listed in Section F below.
- f. All products shall carry a Limited Ten-Year Commercial Warranty covering defects in material and workmanship.

B. Products

- a. Horizontal porcelain composite shower wall panels
 - i. Horizontal porcelain composite shower wall panels shall be **Synthesis™ H-Series**, manufactured by Panel Composite Systems, Inc., 6130 Cochran Road, Solon OH 44139. Phone 440.287.0101
 - ii. Horizontal porcelain composite shower wall panels shall be manufactured from 6mm vitrified porcelain slabs adhered in-plant to a moisture-resistant backer and PVC tracks.
 - iii. Horizontal porcelain composite shower wall panel type shall be as follows:
 1. Model: H-Series porcelain composite panel
 - a. Maximum panel size: 94-1/2"W x 47-1/4"H
 - b. 1-1/4" overall panel thickness
 - c. 3/4" thick at vertical edges
 - iv. Horizontal porcelain composite shower wall panels shall be manufactured and supplied at largest practical widths so as to minimize seaming at the jobsite.
 - v. Horizontal porcelain composite shower wall panels shall be trimmed and scribed at time of installation to ensure proper fit

C. Color & Pattern

- a. Porcelain composite wall panel color/pattern
 - i. To be selected from manufacturer's standard selection of available colors and patterns

D. Finish

- a. To be selected from manufacturer's standard selection of finishes

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- E. Basic Limitations
 - a. Material designed for interior use only.
- F. Performance Characteristics
 - a. Fire Test Data
 - i. Test data for Porcelain composite wall panels shall be generated according to ASTM E 84-23: Standard Test Method for Surface Burning Characteristics of Building Materials. This procedure is catalogued by Underwriters Laboratories, Inc. as UL 723.
 - 1. The Flame Spread Index (FSI) shall be less than or equal to 25

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine all substrates to receive porcelain composite wall panels for compliance with installation tolerances and other conditions affecting performance of work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install products plumb and level in locations indicated, in accordance with manufacturer's recommended installation procedures.
 - a. Trim and scribe all shower wall panels to ensure proper fit.
 - b. Cut and finish component edges with clean, sharp returns where needed.
 - c. Use manufacturer's recommended tooling, blades, bits, and published procedures for all trimming and scribing.
- B. Install manufacturer's provided in-wall, mechanical fastening system according to published manufacturer procedures, installing in-wall blocking where necessary.
- C. Porcelain composite wall panels shall be installed in a stacked configuration so as to create a single horizontal seam in each shower wall. Seams in shower walls shall be level and align with adjacent shower walls.
- D. Install self-adhesive, closed-cell foam gasket between panels at vertical corner joints.
- E. Install self-adhesive, waterproof flashing in one continuous piece at the following locations:
 - a. on framing behind vertical corner joints, from top of panels to top of shower base, with bottom edge inside water dam on shower base

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- b. at horizontal joint between shower base and wall framing
- F. Install manufacturer's recommended color-match sealant at all visible panel joints. Maximum joint width shall be no more than 1/8" in finished work.
- G. Installer shall not use thinset adhesive, mortar, or grout to install porcelain composite wall panels.
- H. Coordinate plumbing installation with Division 22.

3.3 CLEANING

- A. Keep components clean during installation.
- B. Remove all adhesives and sealants from product surfaces.
- C. After installation is complete, remove all excess materials, supplies, adhesives, dirt, and debris from the installation area.

3.4 PROTECTION

- A. Protect surfaces from damage until project is completed. Repair or replace damaged components which cannot be repaired to the Architect's satisfaction.