

TBS SPECIFICATION MANUAL

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Division 09700

SPECIFICATION

EMBE® PERMAGLASS, SOLVENT FREE REINFORCED/RESINOUS WALL & CEILING SURFACING

NOTE TO SPECIFIER

The purpose of this suggested specification is to assist the specifier in developing a specification for the use of EMBE® PERMAGLASS SOLVENT-FREE WALL SYSTEM. Questions regarding the selection, installation, or intended end use of materials should be directed to a technical representative. This specification is prepared to be a part of a complete project specification.

PART 1 – GENERAL

1.01 Related Documents

A. Drawings and general provisions of the contract, including General and supplementary conditions, apply to this section.

1.02 Summary

- A. This section specifies a fiberglass reinforced, decorative interior wall and ceiling coating system.
- B. EMBE® PERMAGLASS Solvent Free system is a monolithic wall and ceiling coating system able to withstand severe impact and temperature fluctuations and can be modified depending upon the agreed to requirements of this project.

1.03 References

ASTM D S22-88	Test Method for Mandrel Bond Test of Attached Organic Coatings
ASTM D 1044-90	Test Method for Resistance of Transparent Plastics to Surface Abrasion
ASTM D 1864-88	Test Method for Moisture in Mineral Aggregates
ASTM D 4263-88	Test Method for Capillary Moisture in Concrete by Plastic Sheet
ASTM E 84-91	Test Method for Surface Burning Characteristics of Building Materials

1.04 System Performance Requirements

- A. Provide an epoxy wall and ceiling coating system that, when cured, produces the following typical properties:

<u>PROPERTY</u>	<u>TEST METHOD</u>	<u>RESULT</u>
Flexibility	ASTM D 522-88	Passes 1" mandrel without cracking
Wear Resistance	ASTM D 1044-00	0.019 gm loss
Fire Resistance	ASTM E 84-91	Class A & B Systems Available Consult the manufacturer
Impact Resistance	Gardner Impact	>160 in . lb

1.05 Submittals

- A. Submit manufacturer's technical data and product literature indicating that the products comply with specified requirements.
- B. Submit two mock-up sample coupons that are representative of the finished wall and ceiling surface, texture and color.

1.06 Quality Assurance

- A. Installer Qualification: Use only a qualified installer for the wall system manufacturer of having completed a program of instruction in proper methods for preparation of substrate, possible delaminated areas, crack and joint repair and complete wall and ceiling system installation.
- B. Mock-up: On site, fabricate a panel approximately 100 sq. ft. (10 sq. m.) to demonstrate quality of finished wall and ceiling system, complying with manufacturer's instructions.

Install panel where directed by architect/engineer. Maintain panel as a standard of quality for all installations.

1.07 Delivery, Storage and Handling

- A. Deliver product in factory packages, clearly marked with manufacturer's identification, printed instructions, lot numbers and shelf life expiration date for each component.
- B. Store materials at 50 F to 90 F (10 C to 32 C) in dry environment away from sunlight, heat, or other hazards.

1.08 Project Conditions

- A. Maintain minimum substrate surface temperature of 55 F (12 C) for a minimum of 48 hours, during and after installation, or other hazards.
- B. Substrate must be free of hydrostatic, capillary or moisture vapor pressure. Substrates in contact with ground must have a properly installed, effective vapor barrier to help prevent potential problems resulting from hydrostatic, capillary or moisture vapor pressure. Concrete must contain less than 3% moisture when tested per ASTM D 1864.
- C. Do not apply sealers or membrane curing agents to concrete. Moisture curing of concrete is recommended.
- D. Concretes containing lightweight aggregates are not recommended substrates.
- F. Advise other trades of fixtures and fittings not to be installed until system is cured, such as radiators, painting, decorating, floor-supported equipment or cabinetwork, caulking, plumbing, fixtures, etc.
- G. Work areas shall be kept free of traffic and no trades shall be permitted in rooms during the application and curing of the coating.
- H. Protect adjacent surfaces from damage resulting from work of this trade. If necessary, mask and/or cover adjacent surfaces, fixtures, equipment, etc. by suitable means.
- I. Gypsum drywall is only suitable for dry areas. Water-resistant Gypsum board is suitable in occasionally wet areas. Install drywall in accordance with drywall manufacturer's directions and with the factory paper bound edge 1/4 inch (6.4 mm) above floor line. Tape and fill joints; fill all fastener heads and other indentations for smooth finished surface.

PART 2 – PRODUCTS

2.01 Materials

- A. Reinforced/Resinous Wall and Ceiling System: PERMAGLASS Solvent Free system.
 - 1. (OPTIONAL) Use PERMAGLASS Solvent Free system with fibreglass fabric and 100% solids thermosetting resins providing a dry film thickness of 21 to 35 mils; Class B fire rating.
 - 2. (OPTIONAL) Use PERMAGLAZE Solvent Free system with 100% solids thermosetting resins with no fibreglass providing a dry film thickness to 6 to 10 mils; Class A fire rating.
- B. (OPTIONAL) Wall and Ceiling Topcoat: PERMAGLAZE

PART 3 – EXECUTION

3.01 Inspection

- A. Before starting work, ensure that environmental and site conditions are suitable for application and curing.
- B. Inspect surfaces for acceptability of levelness, moisture content and other critical factors at time of installation.
- C. Report in writing to architect/engineer, with copy to manufacturer, of deficiencies that could impair work. Surfaces must be approved by the certified contractor prior to application of the system.

3.02 Surface Preparation

- A. Prepare surfaces in accordance with manufacturer's instructions.
- B. Remove concrete laitance by steel shot blasting, grit blasting, or other method approved by manufacturer.
- C. Surface must be clean, sound and dry prior to application.
- D. Pre-fill surface irregularities, holes and cracks in accordance with manufacturer's recommendations.

3.03 Mixing

- A. Comply with manufacturer's instructions for mixing procedures.
- B. Pre-mix each component before every batch to ensure uniformity.

C. Carefully measure and mix the components together.

3.04 Installation

A. Follow manufacturer's written instructions.

B. Prime entire surface with recommended primer.

C. Apply coating in accordance with manufacturer's instruction to a total thickness depending upon the agreed to requirements of the installation.

D. Apply grout coat(s) and topcoat(s) at manufacturer's recommended coverage to provide uniform dense surface.

E. Allow proper cure time for each installation step.

F. Allow the finished system to cure for a minimum of 7 days from completion before putting into service.