

SECTION 09705

SECTION 09705 RESINOUS QUARTZ FLOORING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Provide labor and materials for a seamless, decorative, chemical, and slip resistant, epoxy flooring system, including surface preparation, primers, 100% epoxy resins, quartz aggregate, and aliphatic urethane topcoat.

1.02 RELATED SECTIONS

- A. Concrete – Division 3
- B. Vapor Transmission Testing – Division 7
- C. Finishes – Division 9

1.03 ACCEPTABLE MANUFACTURERS AND INSTALLERS

- A. Applied Flooring Technologies, Inc. (561) 337-8099
- B. Or approved equal.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver material to job site in clean and clearly labeled containers.
- B. Store material in a dry, enclosed area. Keep temperature of storage area between 55F and 95F.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Cure new concrete no less than 28 days.
- B. Free work area of other trades during and for 24 hours after installation.
- C. Protect finished floor from damage by subsequent trades.

1.06 WARRANTY

- A. Submit a one-year warranty against defects in material and workmanship upon substantial completion.

PART 2 - PRODUCTS

2.01 PRODUCT DESCRIPTION

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- A. 1/8" AFT Quartz Floor with Pilgrim Urocel, Seamless, Decorative, Chemical and Slip Resistant, Epoxy Floor System as manufactured by **Applied Flooring Technologies, Inc. (561) 337-8099.**

2.02 PHYSICAL PROPERTIES

A. H.S. Binder

1) Compressive Strength	ASTM D-695	17,125 psi
	ASTM C-579	12,200 psi
2) Tensile Strength	ASTM D-638	9,900 psi
3) Tensile Elongation	ASTM D-638	12%
4) Flexural Strength	ASTM C-580	14,900 psi
5) Coefficient of Linear Expansion	ASTM D-696	2×10^{-5}
6) Bond Strength to Concrete	ASTM C-882	3,000 psi
7) Heat Distortion / Limitation		147F – 180F
8) VOC Content	H.S. Binder	NA
	Urocel	3.21 lbs. / gal.

2.03 PRODUCT MIXING

- A. Mix manufacturer's pre-measured containers with simple drill mixers and install immediately.

2.04 ALIPHATIC URETHANE TOPCOAT (CRU)

- A. Urocel 65 is a high solids chemical resistant two-component saturated polyester aliphatic urethane coating having exceptional resistance to most chemicals, UV resistant, and excellent anti-soil properties. Displays excellent gloss retention on extended exterior exposures.
- B. Refer to Urocel 65 cut-sheets at www.Pilgrimpermocoat.com.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Create a surface profile using planetary diamond grinders with HEPA vacuum systems for dust-free operation. Edges will be hand ground with diamond cup grinders.
- B. Repair all cracks, divots, dings, and other surface flaws that would appear in the finished surface with epoxy grout or cementitious material compatible to Pilgrim H.S. Binder.
- C. Tape all edges and borders of Quartz flooring application.
- D. Surface will be free of moisture, oil, grease, detergents, and solvents.

3.02 INSTALLATION

- A. Highly trained crews will begin the coving process (where applicable). Do not try this at home! Allow coves to cure overnight.
- B. Apply H.S. Binder directly to bare concrete @ approximately 8-12 mils.
- C. Pneumatically broadcast 3M Color Quartz Aggregate into the base coat of Pilgrim **H.S. Binder**.
- D. Pull taped edges after quartz is broadcast.
- E. Do not walk in wet application under any circumstance.
- F. Return four to six hours after broadcast and vacuum off excess broadcast.
- G. Apply topcoat (10 mils) of Pilgrim **H.S. Binder**. Do not allow to migrate to base of cove. Wait 4 hours.
- H. Apply Pilgrim (5-8 mils) **UROCEL 65** and allow to cure.

3.03 DETAILS

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- A. Construction joints shall be filled with an elastomeric polymer grout.
- B. Cracks shall be sealed with an epoxy grout.
- C. Floor drains shall be ground out and tapered back to the surrounding floor. Any voids around the floor drains will be filled with epoxy grout.
- D. Floating of floors is not in the scope of this specification.

END OF SECTION