

SECTION 09705

RESINOUS FLOORING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Provide labor and materials for a seamless, decorative, slip resistant, epoxy flooring system, including surface preparation, primers, and finish coats.

1.02 RELATED SECTIONS

- A. Concrete - Division 3
- B. Thermal & Moisture Protection - Division 7

1.03 ACCEPTABLE MANUFACTURERS AND INSTALLERS

- A. DUR-A-FLEX INC 1-800-253-3539
- B. Manufacturer approved Installer, who has technical qualifications, currently approved in writing, and facilities to install specified systems.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver material to job site in clean, clearly labeled containers and inspect prior to start of job.
- B. Store material in a dry, enclosed area protected from the elements. Keep temperature of storage area between 60° and 90° F.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Cure new concrete no less than 28 days under good conditions.
- B. Verify that substrate is properly equipped with vapor barriers and perimeter drains.
- C. Verify supply of adequate utilities, including electric, water, heat (between 60° and 90° F.) and lighting of no less than 80 ft candles measured at floor surface.
- D. Free work area of other trades during, and for a period of 24 hours, after floor installation.
- E. 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 of installation.

PART 2 PRODUCTS

2.01 PRODUCT DESCRIPTION

- A. 1/8" **DUR-A-QUARTZ** Multiple Component, Seamless, Decorative, Slip Resistant, Epoxy Floor System as manufactured by DUR-A-FLEX INC. **1-800-253-3539**.

2.02 PHYSICAL PROPERTIES

Physical Property	Test Method	Result
Hardness (Shore D)	ASTM D-2240	75-80
Compressive Strength	ASTM D-695 ASTM C-579	17,500 psi 12,500 psi
Tensile Strength	ASTM D-638 ASTM C-307	4,000 psi 2,600 psi
Tensile Elongation	ASTM D-638	7.50%
Flexural Strength	ASTM D-790 ASTM C-580	6,250 psi 4,500 psi
Flexural Modulus of Elasticity	ASTM D-790	6.2×10^5
Linear Shrinkage	ASTM D-2566	0.02%
Coefficient of Linear Expansion	ASTM D-696	2×10^{-5}
Bond Strength to Concrete	ASTM D-4541	400 psi substrate fails
Indentation	ML D-3134	.025 MAX
Impact Resistance	ML D-3134	Pass
Water Absorption	ASTM D-570	0.04%
Heat Resistance Limitation		140°F - 200°F
Flammability	ASTM D-570	Self Extinguishing
Flame Spread/NFPA 101	ASTM E-84	Class A
Abrasion Resistance CS17 Wheel 1000 GM Load 1000 Cycles	ASTM C-501	24 mg loss
Coefficient of Friction Standard Slip-Resistant Orange Peel VOC Content	ASTM D-2047	0.9 0.8 0 g/l

2.03 PRODUCT MIXING

- A. Mix on site with manufacturer supplied mix and measure apparatus to ensure a timely, accurate mix ratio and minimize waste.

PART 3 EXECUTION

3.01 PREPARATION

- A. Create a surface profile with a steel shot blast machine and dust-free diamond grinders for edges.
B. Verify that surface is dry and perfectly clean, free of all oil, grease, detergent film, sealers and/or curing compounds

3.02 INSTALLATION

- A. Adhere strictly to manufacturer's current written instructions.
B. Apply prime coat at 4 mil of **DUR-A-SHIELD #2** or **DUR-A-POXY HIGH GLOSS** and allow to cure.
C. Apply 1/8" **DUR-A-QUARTZ** System.
D. Broadcast **Q28 DUR-A-QUARTZ** non skid aggregate to excess and allow to cure.
E. Sweep up excess aggregate.
F. Apply 15 mil topcoat of **DUR-A-GLAZE WATER CLEAR** and allow to cure.

3.03 DETAILS

- A. Thoroughly route and vacuum moving cracks and joints, then fill with ELAST-O-COAT.
B. Pre-patch non-moving surface deviations with patching compound comprised of 100% solids epoxy and aggregate.
C. "Key in" all drains, edges and transition points according to manufacturers instructions.
D. Install a 4" integral cove base at perimeter walls.

END OF SECTION

