

CRYL-A-QUARTZ “POOL DECK”

GENERAL

CRYL-A-QUARTZ is 100% reactive, fast curing, high strength, methyl methacrylate (MMA) based, acrylic flooring system. A 1/8 - 3/16 inch (3-4.75 mm) overlay system is composed of primer, double broadcast of DUR-A-FLEX decorative aggregate and topcoats. This system cannot be thinned with solvents.

COLORS

CRYL-A-QUARTZ uses DUR-A-FLEX decorative aggregate. It is available in standard colors and in two sizes, Q-11 & Q-28. Color options are standard colors and custom color blends. Refer to the [CRYL-A-FLEX COLOR CHART](#) on our website.

SURFACE PREPARATION

The substrate must be dry and free of oil, grease, dirt, bituminous and other contaminants. Unsound concrete and laitance should be removed by appropriate mechanical means. Refer to the [DUR-A-FLEX "Surface Preparation Guide"](#) for detailed instructions on our website.

MOISTURE CONCERNS

Moisture vapor transmission in the slab should be measured prior to application of polymeric systems to ensure a long lasting installation. For MMA based Cryl-A-Flex systems the moisture vapor transmission should be no greater than 5 pounds per 1,000 square feet/24 hours per calcium chloride test.

BOND TEST

Prior to full application of the primer, bond tests shall be conducted to determine adequacy of substrate preparation and bond. The bond of the primer to the substrate should be greater than the tensile strength of the substrate. A proper Bond Test will result in concrete and fractured aggregate being attached to the specimen. If only laitance or a small amount of the substrate is attached further preparation is required.

The procedure is as follows:

Pour 6 ounces of primer in a plastic cup. *If required*, add ¾ of an ounce of CRYL-A-BOND additive. Add ¼ ounce of CRYL-A-CURE (@ 70F) and stir for 15 to 30 seconds. Add enough Q-11 (1 1/2 times the volume of resin) to achieve a very WET slurry. Note: If this mix is too dry it will not leave enough primer to soak into the substrate.

Excessive liquid on the surface when you stop mixing is a good indication that the mix is appropriately “wet”.

Place patties of this mixture on the substrate.

Stir the mixture in-between placing each patty or the first patties will be very wet and the last patty will be too dry. Allow to cure about 1 hour. The patty is fully cured when it has cooled to substrate temperature.

Remove with a hammer and chisel. Look at the bottom of the patty. You should have removed 1/8” to 1/2” inch of concrete. If there is nothing or only laitance, this is an indication that further preparation is necessary.

VENTILATION

Prior to any application, proper “negative pressure” ventilation must be established. Refer to the "CRYL-A-FLEX Ventilation Guidelines for details on our website-<http://www.mmafloors.com/images/VENTguidelines.pdf>.

APPLICATION METHOD / SPREAD RATE

Read this section, then refer to chart on page 3 for spread rates.

All MMA resins require the addition of CRYL-A-CURE (BPO) to cure. The proper amount of BPO can be found on the [CRYL-A-FLEX MIX Chart](#) on our website. BPO usage is a function of the material and substrate temperature. **Therefore, the temperature of the floor must be measured prior to any mixing or application of material.**

Due to the fast cure of the material, only make enough material that can be properly applied based on floor layout and manpower. A typical batch size of primer or topcoat is usually 1 gallon (4 liters). Hot and /or windy conditions may dictate a smaller batch size. All MMA coats are applied with a brush and roller to achieve an even, puddle free surface. Substrates that are very porous may require an additional primer coat. Roller coats are applied with 3/8 or 1/2-inch (13 mm) nap rollers.

The application spread rate and material thickness will vary based on wind speed and temperature. Refer to the chart on page 3 to determine the proper rate and thickness.

Based on the temperature, add the proper amount of BPO to the CRYL-A-PRIME P-101. Mix for 45 seconds or until the BPO is completely dissolved. Pour an even ribbon of material out onto the floor and roll to the proper thickness.

The primer coat will cure tack free in 30 - 60 minutes and must be fully cured before applying subsequent coats.

If CRYL-A-BOND is used with primer, the next coat must be applied within 16 hours. Failure to do this could result in inadequate inter-coat adhesion.

The first coat of CRYL-A-GLAZE G-201 is applied by brush and roller to achieve an even, puddle free surface. Q-28 or Q-11 is broadcast into the wet material at 0.5 lbs per Sq Ft (0.75 kg per m²). **Do not over broadcast, only apply enough sand to cover the wet resin**, over broadcasting can result in the resin not curing properly. Keep broadcast 3 feet (1 meter) back from wet working edge; this will make it easier for the roller man. Let material cure and sweep/vacuum off excess aggregate.

When broadcasting aggregate, make sure to throw it high and let it “rain down” into the surface. Do not throw at an angle as this can result in ripples.

The second coat of CRYL-A-GLAZE G-201 is applied by brush and roller to achieve an even, puddle free surface. Aggregate is broadcast at 0.4-0.5 lbs per Sq Ft (0.6-0.75 m² per kg). Let material cure and again remove all excess aggregate.

The cured system is top coated with two coats of CRYL-A-TOP T-303 sealer and is applied by brush and roller to achieve an even, puddle free surface. **Do not over-dose the Cryl-A-Cure. Excessive BPO will result in discoloration of the topcoat.**

The chart below details the proper mil thickness, spread rates and working time based on wind speed.

Each wet film thickness (WFT) and spread rate indicated on the chart will yield a dry film thickness (DFT) of approximately 16 mils.

The **working time** is the maximum application time available for placement and final back-roll or cross-roll.

This chart is based on a temperature of **70°F**. Working times will be slightly longer at lower temperatures and slightly shorter at higher temperatures.

Never apply any material when the temperature is **90°F** or above or the wind speed is higher than 7 mph.

It is important to anticipate if the working area will be exposed to sunlight during the application because a rapid increase in temperature will occur on the substrate.

CURE

CRYL-A-QUARTZ components will cure in 40-60 minutes. The floor is fully functional one hour after completed application. **IMPORTANT, DO NOT APPLY THE TOPCOAT TOO THIN.** It will not cure properly and will pick up dirt and wear prematurely.

JOINT GUIDELINES

Refer to the [Joint Guidelines](#) for complete details on our website.

PACKAGING

CRYL-A-QUARTZ resins are available in 5-gallon (19 liter) pails and 50-gallon (190 liter) drums. CRYL-A-CURE is available in 1-gallon (3.8 liter) cans, 5-gallon (19 liter) pails and 55 lb (25 kg) boxes. DUR-A-FLEX decorative aggregate is available in 50 lb (22.7 kg) bags.

CLEANING

This product is considered to be a low maintenance flooring solution; however, certain textures and service environments require specific procedures. Please refer to the master “**Cleaning Guide**”.

STORAGE CONDITIONS

Store in a cool and dry place below 85 F (30 C), out of direct sunlight. Do not store near open flame or food. The shelf life is 6 months from ship date in the original unopened containers.

CAUTION

CRYL-A-QUARTZ resins are flammable liquids in their uncured state. Smoking, open flames or sparks should not be permitted during the handling of the product. Workers should wear protective clothing consisting of splash-proof goggles, impermeable gloves and, where exposure limits are exceeded, an organic vapor respirator should be used. Air powered or explosion proof mixing equipment is required. Adequate cross ventilation should be provided, and if necessary, explosion proof fans may be required. All foodstuffs must be removed during application of the system. **Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed. KEEP OUT OF REACH OF CHILDREN. If substrate and/or material temperature is above 90 F (32 C), Do Not apply material.**

Product & Application	Wind Speed, 70°F	WFT & Spread Rate	Spread Rate over Q-28	Spread Rate over Q-11	Working Time to back-roll
P-101	3 mph	18 mils, 90 square feet per gallon	N/A	N/A	4 minutes
	5 mph	20 mils, 80 square feet per gallon	N/A	N/A	3 minutes
	7 mph	22 mils, 72 square feet per gallon	N/A	N/A	2 minutes
G-201 1 st broadcast	3 mph	22 mils, 72 square feet per gallon	N/A	N/A	9 minutes
	5 mph	25 mils, 65 square feet per gallon	N/A	N/A	8 minutes
	7 mph	25 mils, 65 square feet per gallon	N/A	N/A	7 minutes
G-201 2 nd broadcast	3 mph	N/A	65 square feet per gallon	46 square feet per gallon	9 minutes
	5 mph	N/A	60 square feet per gal.	41 square feet per gallon	8 minutes
	7 mph	N/A	60 square feet per gal.	41 square feet per gallon	7 minutes
T-303, 1 st topcoat	3 mph	N/A	65 square feet per gallon	46 square feet per gallon	10 minutes
	5 mph	N/A	60 square feet per gallon	41 square feet per gallon	9 minutes
	7 mph	N/A	60 square feet per gallon	41 square feet per gallon	7 minutes
T-303, 2 nd topcoat	3 mph	N/A	72 square feet per gallon	72 square feet per gallon	10 minutes
	5 mph	N/A	65 square feet per gallon	65 square feet per gallon	9 minutes
	7 mph	N/A	65 square feet per gallon	65 square feet per gallon	7 minutes

Before using any DUR-A-FLEX, Inc. product, be sure the Material Safety Data Sheet is read and understood.