



POLYMERICA

INCORPORATED

POLYMERICA PRODUCT DATA

MasterQuartz DQS

Decorative Quartz
Surfacing

PRODUCT PRESENTATION

MasterQuartz DQS is a colorful trowel-applied epoxy surfacer designed to be a decorative and protective coating for concrete surfaces.

MasterQuartz DQS is installed at a nominal 3/16" to 1/4" thickness consisting of:

- ▶ a 100% solids epoxy primer
- ▶ a trowel-applied multi-colored epoxy surfacer
- ▶ Optional seal coats for specified finish and textures for either a high gloss orange peel or a low sheen slip resistant finish

Proper seal coat selection will improve cleanability and resistance to U.V. light, chemical spills and wear.

FEATURES

- ▶ Pleasant, colorful tweed like patterns.
- ▶ Easy to clean and maintain.
- ▶ Will not support growth of fungus or bacteria. Available in Anti-microbial.
- ▶ Materials comply with USDA requirements for use in federally inspected meat and poultry plants.
- ▶ Approved by Agriculture Canada Food Production and Inspection Branch for use in registered establishments.
- ▶ Self-extinguishing.
- ▶ Lower cost alternative to terrazzo.
- ▶ Power trowelable for minimal downtime.

USES

MasterQuartz DQS is a decorative epoxy surfacer for commercial, industrial and institutional flooring. Suitable uses are for clean rooms, aisle ways, show rooms and production areas. **DQS** is tough enough for manufacturing facilities and aesthetically pleasing for high-profile show case flooring.

Typical facilities include laboratories, pharmaceutical plants, food and beverage processing floors, schools and universities.

LIMITATIONS

- ▶ Substrate must be sound, clean, properly prepared and free from high levels of moisture vapor transmission or hydrostatic pressure.

As is the case with any impermeable floor coating, any concrete slab on grade to receive this product should be tested for moisture content while in the planning and estimating stages. product should only be installed if moisture content falls within acceptable range or where **MVP** can be used as a primer. Consult **POLYMERICA Bulletin SP-C** for details.

- ▶ Minimum application temperature is 55°F.
- ▶ Low temperature curing agents are available for applications between 55°F and 40°F.
- ▶ Chemical exposure, service temperatures, mechanical abuse and house-keeping influence service life.

ESTIMATING & APPLICATION GUIDELINES

System	Step one	Step two	Step three	Step four
	Primer	Surfacer	Seal Coat	Finish Coat
Sealed	IEP-HV	DQS	DEC-OP	DEC-OP or CRF-LD**
Mix Ratio	3A : 1B	1 gal IEB-A 1/4 gal IEB-B to 75lbs. MQB-C	2A : 1B	2A : 1B
Coverage*	125-200 ft ² /gal	30-35 ft ² @ 1/4"	165-200 ft ² /gal	200-300 ft ² /100 gal
Requirements per 1000 ft ²	5-8 gal	40 gal IEB 48 x 50# MQB	6 gal	4 gal
Pot Life @ 70°F	20 min.	20 min.	30 min.	30 min.
Cure to next step @ 70°F	1/2 to 6 hrs	5 to 8 hrs	8 to 10 hrs	10 to 16 hrs. Full chemical cure 3-5 days

NOTES *Coverage requirements will vary due to condition of substrate and desired finish and texture.



**DEC-OP provides a high gloss orange peel finish. CRF-LD promotes a low sheen finish.

APPLICATION

- Preparation: Concrete must be structurally sound and clean. Preferred method includes abrasive blast, diamond grinding, or water blast cleaning. Consult **POLYMERICA** Bulletin SP-C for complete details.
- Step One: Mix IEP-HV A & B with low speed drill for two minutes. Apply with squeegee, cut in with brush and back roll with short nap roller. Do not puddle.
- Step Two: Mix IEB A & B with low speed drill for one minute. Charge mortar mixer or KOL miser with liquids and add MQB. Mix for additional one to two minutes until all material is thoroughly wetted. Screed to level. Finish by power or hand trowel. Allow to cure.
- Step Three: Mix coating A & B with low speed drill for two minutes. Apply coating with squeegee, then backroll with a good quality short nap roller.
- Step Four: Repeat step three. Backroll finish coat with carpet roller.

PERFORMANCE CHARACTERISTICS OF SYSTEM

Compressive Strength @ 7 days (ASTM C579).....	12,000 psi
Tensile Strength (ASTM C307).....	2,100 psi
Flexural Strength (ASTM C580).....	4,250 psi
Bond Strength (ACI Comm #403).....	350 psi
	concrete fails
Thermal Coefficient of Expansion (ASTM D696).....	0.000025 inch per inch per 0°F
Abrasion Resistance (ASTM D4060).....	19 mg weight loss
CS17 wheel, 1 kg load, 1000 rev.	
Thermal Shock Resistance (ASTM C884).....	passes
Water Absorption (ASTM C413).....	0.1%
Flammability (ASTM D635).....	Self-Extinguishing
Impact Resistance (MIL D3134F).....	16 foot-pounds
	concrete fractures
Indentation (MIL D3134F).....	No Indentation

CHEMICAL RESISTANCE

<u>Reagent</u>	<u>Rating</u>	<u>Reagent</u>	<u>Rating</u>
Acetic Acid-5%	L	Lactic Acid-15%	L
Acetone	L	Methyl Ethyl Ketone.....	L
Bleach	L	Nitric Acid-10%	L
Citric Acid-20%	L	Skydrol.....	R
Crude Oil	R	Sodium Hydroxide-50%.....	R
Diesel Fuel	R	Sulfuric Acid-30%	R
Ethylene Glycol	R	Toluene	L
Fatty Acids	L	Urea	R
Gasoline	R	Vinegar	L
Hydrochloric Acid-15%	R	Xylene.....	L

R - Recommended for continuous service.

L - Limited recommendation, occasional spills.

This chart is intended as an aid in evaluating the performance of these systems in various chemical exposures at 75°F. The data is intended as a guide only. In severe or combination exposures, a sample should be tested under actual or simulated use conditions.

Product data is revised as needed to reflect the most recent technology and field experience. Consult **POLYMERICA** for current printing date of literature.

CARE & MAINTENANCE

MasterQuartz Floors must be protected from traffic, chemicals and abuse during the cure process.

Newly installed floors should be cured a minimum of 18 hours at 65°F before washdowns. Only warm water should be used to clean within the first week. If use of a detergent is necessary in the first week, use only a pH neutral cleaner dissolved in water. Sanitizing detergents containing chlorine or hypochlorite should not be used for at least 7 days.

Good housekeeping practices and regulated spill removal will prolong the service life of the floor. **MasterQuartz Floors** are not self-cleaning nor always non-staining. The following cleaning procedures are recommended weekly or as needed:

- ▶ Spills must be removed and rinsed at the first opportunity.
- ▶ Sweep or vacuum loose dirt and debris.
- ▶ Use a pH neutral cleaner, dissolved in water as directed by the manufacturer.
- ▶ Power scrub surface, then rinse with a pressure washer.
- ▶ Remove rinse water with a wet vacuum squeegee.
- ▶ Conventional methods are also acceptable for small areas.

COLORS

Decorative: Twelve standard colors to produce unlimited blends.

SAFETY

Material Safety Data Sheets are available from **POLYMERICA** and should be consulted prior to use of the product. These products are intended for use by professionals only. Keep away from children and those not trained in the use and potential hazards involved.

MasterShield CRF-LD, DEC-OP, IEB, and IEP are two part epoxy systems. Part A contains epoxy resins. Part B contains amine-epoxy adducts. Workers should wear gloves, goggles, and body covering clothing when mixing and applying product. Clean up with soap and warm water. **MasterQuartz Fillers** contain silica which may cause delayed lung damage. Dust masks should be worn when handling. Be sure to follow label and MSDS cautions.

WARRANTY

POLYMERICA warrants its products to conform to its manufacturing standards. **POLYMERICA** will replace or refund the purchase price of non-conforming product at the seller's option; such remedy being exclusive of all others and sole remedy available to the buyer. Buyer hereby expressly waives claim to additional damages. Any claim under this warranty must be made in writing within 7 days of discovery of non-compliance and no later than one year from the date of delivery of product. No representative, distributor or applicator of these products is authorized to modify product data or warranty.

IMPORTANT NOTICE

These products are sold subject only to the express warranties contained herein. There are no other warranties by **POLYMERICA** of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Buyer agrees that seller assumes no liability for remote or consequential damages of any kind which result from the use or misuse of this product. Information contained herein is based on data believed to be reliable, however, it is the Buyer's responsibility to satisfy itself of the suitability of the product for a particular purpose.

MQ/DQS 022811