

# PLEXIGARD MRD

## *Decorative Membrane Flooring*

### PRODUCT DESCRIPTION

PlexiGard MRD is a nominal 1/8 in. /3 mm thick decorative quartz, slip resistant broadcast system. It is designed to address moisture issues in mechanical equipment rooms and other indoor spaces. The elastomer primer allows the system to resist dynamic stresses in the substrate to ensure the system remains waterproof. It consists of the following:

#### Rubberthane

A two-component, free-flowing, 100% solids, urethane, elastomeric waterproof membrane

#### PlexiQuartz Basecoat

A three-component, free-flowing, epoxy formulation consisting of resin, curing agent and fine aggregate

#### PlexiQuartz Aggregate

Brightly colored, quartz broadcast aggregate

#### PlexiQuartz Sealer

A two-component, high performance, UV resistant, clear epoxy sealer

### OPTIONS

#### Cove Base

Provides an integral seal at the joint between the floor and the wall. Cove bases in heights from 2 to 6 in. /5 to 15 cm are available.

#### Standard or Medium Texture

PlexiQuartz Sealer is applied at a thickness that will produce the desired texture.

### COVERAGE

Each unit of PlexiGard MRD will cover approximately 300 sq. ft. /27.9 sq. m of surface at a nominal 1/8 in. /3 mm thickness.

### STORAGE CONDITIONS

Store all components of PlexiGard MRD between 60 to 85°F/16 to 30°C in a dry area. Avoid excessive heat and do not freeze.

### COLOR

PlexiGard MRD is available in 6 solid colors and 18 blended quartz colors. Refer to the Plexi-Chemie's Color Charts. Custom colors are available upon request.

### SUBSTRATE

PlexiGard MRD, in conjunction with the proper primers, is suitable for application over properly prepared concrete, metal or wood. For questions regarding other possible substrates or an appropriate primer, contact your local Plexi-Chemie representative or Technical Department at the number listed above.

### CLEANING AND MAINTENANCE

Do not expose PlexiGard MRD system to any chemicals until the full curing time of 7 days has passed. Regular cleaning and maintenance will prolong the life of all polymer-flooring systems, enhance appearance and reduce any tendency to retain dirt.

### SURFACE PREPARATION (CONCRETE)

Good surface preparation is essential to a satisfactory coating system. A method that will achieve a profile of at least CSP 3 as described by the International Concrete Repair Institute is recommended. Although various methods are acceptable, captive shot blasting is the preferred means of achieving this profile by abrading the concrete and removing latent materials that impede adhesion.

### PRIMING

The use of PlexiGlaze #4 Primer 100% solids two component epoxy based priming system is necessary for all applications of PlexiGard MRD over all substrates. Please see the PlexiGlaze #4 Primer data sheet for details.

### PRECAUTIONS

- An effective moisture barrier is required for substrates on or below grade.
- The substrate must be structurally sound, cleaned of any foreign matter that will inhibit adhesion, and dry.
- These products should be installed at a substrate temperature between 50°F and 85°F/10°C and 30°C
- System will follow the contour of the substrate. Ensure the substrate is smooth and all cracks and holes are repaired prior to installation.

### SAFETY

**Safe storage, handling, and use dictate that adequate health and safety precautions are observed with this product. User is specifically directed to consult the current Material Safety Data Sheet for this product as well as precautions contained on product labeling.**

## APPLICATION

1. Prepare substrate properly in accordance with instructions above.
2. Install optional cove base as required.
3. Apply primer coat of Rubberthane @ 10-40 mils.
4. Apply three component PlexiQuartz basecoat free flowing epoxy and broadcast into this basecoat the decorative PlexiQuartz brightly colored aggregate.
5. Allow curing, usually overnight, and thoroughly vacuum off the excess aggregate.
6. Repeat steps 3, 4, and 5 to ensure 1/8" thickness. Repeat for a third time to yield 3/16" thickness.
7. Apply clear grout coat by squeegee with light backroll with a tight nap roller. Allow to cure 8 – 10 hours.
8. Apply two component, high performance, UV resistant, clear epoxy sealer. Additional finish coats may be applied depending upon smoothness of surface desired.

## NOTES

- Procedures for cleaning of the flooring system during operations can be found in the Plexi-Chemie Floor Maintenance Guide.
- Specific information regarding chemical resistance is available in the Plexi-Chemie Chemical Resistance Guide.
- Material Safety Data Sheets for PlexiGard MRD are available on line at [www.plexi-chemie.com](http://www.plexi-chemie.com) under "Our Products" or upon request.
- A staff of technical service engineers is available to assist with installation, or to answer questions related to Plexi-Chemie products.
- Requests for technical literature or service can be made through local sales representatives

## Typical Physical Properties

Tensile Strength (ASTM D-638)	1,850 psi
Flexural Strength (ASTM C-580)	2,250 psi
Flexural Modulus of Elasticity (ASTM C-580)	2.5 x 10 <sup>5</sup> psi
Hardness (ASTM D-2240, Shore D)	85 to 90
Abrasion Resistance (ASTM D-4060, CS-17)	0.065 gm max weight loss
Coefficient of Friction (Dry) (ASTM F1679)	Standard >0.9 Medium 0.85
Slip Resistance Index (Wet) (ASTM F1679)	Standard Texture >0.9 Medium Texture 0.95
Flammability (ASTM E-648)	Class I
Water Absorption (ASTM C-413)	<0.15%
Heat Resistance Limitation	145°F (continuous exposure) 190-210°F (intermittent exposure)
VOC Content (ASTM D-2369)	0 g/l
Cure Rate (@77°F/25°C)	8 hours for foot traffic 24 hours for normal operations