

R100 MMA PRIMER

TECHNICAL DATA SHEET



R100 Primer is a 100% reactive methyl methacrylate (MMA) primer that cures within one hour. It's low viscosity allows it to deeply penetrate and reinforce concrete substrates, making it an ideal foundation for the installation of Resinwerks MMA flooring systems. When applied to properly prepared concrete, R100 Primer strengthens the substrate and enhances adhesion. It can be used independently to seal and reinforce concrete surfaces, it is most commonly applied as the primer base for full MMA systems.

USES:

- » Heavy traffic industrial floors
- » Food & Beverage
- » Manufacturing
- » Auto service drive lanes
- » Stadiums

ADVANTAGES:

- » Rapid return to service
- » Superior impact & abrasion resistance
- » Cold climate installation
- » UV Stable
- » Repairable

PACKAGING

R100 Primer is available in the following kits:

- » R100 MMA Primer is packaged in 38 lb. pails and 400 lb. drums.
- » MMA BPO Catalyst is available in 10 lb. containers and 55 lb. boxes.
- » Please note that these products are sold by weight and not volume.

SUGGESTED APPLICATION:

- » R100 should be used in conjunction with Resinwerks R200 bonding agent. Refer to Resinwerks MMA Dosing chart for formula recipe and mix ratios.
- » Coverage should be approximately 100 square feet per gallon. Depending on the porosity of the concrete slab, coverage may vary from 80-120 Sq. ft. per gallon.
- » May be applied over existing MMA systems. Contact your Resinwerks technical representative for more information.

ANCILLARY PRODUCTS:

- » Resinwerks R200 MMA Bonding Agent
- » Resinwerks BPO Catalyst

MATERIAL COVERAGE

WET FILM THICKNESS	APPROXIMATE COVERAGE
16 mils wft	100 ft ² / gallon

GENERAL PRODUCT INFORMATION

Color:	Clear
Solids Volume:	100%
MAX RH:	85%
V.O.C.:	48 g/l
Pot-life:	18 Minutes @ 72° F
Mix-Ratio:	Refer to dosing chart
Cure Schedule:	72° F @ 50% R.H. 45-60 minutes
Clean-up:	Resinwerks MMA Cleaner
Application Temp:	15°F(9.5°C) - 90°F(32.2°C)
Environment:	For interior or exterior use

GENERAL PRODUCT PERFORMANCE

TEST TYPE	TEST METHOD	RESULT
Hardness	ASTM D-2240 Shore D	85
Taber Abrasion	ASTM-D-4060	16 mg loss
Tensile Strength	ASTM C-638	3,700 psi
Flammability	ASTM D 635	Self extinguishing
Impact Resistance	ASTM D 2794	180 lb
Flexibility 1/4" cylindrical mandrel	ASTMD 522	Pass
Adhesion	ASTMD-4541	500+ PSI concrete fracture
Coefficient of Thermal Expansion	(ASTM D696, in./ in./°F): 0.000035	0.000035

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SURFACE PREPARATION

Ensure substrate to be coated is clean, dry, and in sound condition. All laitance, curing compounds, concrete hardeners, and other surface contaminants must be removed. Prepare concrete in accordance with ASTM D 4259-83. Mechanical Grinding or Shot Blasting is recommended to achieve a surface profile of ICRI CSP 2-4. Surface to be coated must be completely porous and free of excessive dust & contaminants.

MOISTURE IN CONCRETE

Concrete slabs should be tested prior to application for elevated moisture vapor emission levels. Resinwerks recommends ASTM F2170-19 standard for determining relative humidity in concrete slabs using RH probes. For slabs exhibiting elevated moisture levels in excess of 85% RH, please contact your Resinwerks technical representative.

DE-GREASING OF CONTAMINATED SUBSTRATES

R100 should not be applied over contaminated surfaces. For previously contaminated surfaces, areas to be coated should be heavily sanded or ground. All dust and remaining contaminants should be completely removed prior to coating.

TREATMENT OF JOINTS & CRACKS

Prior to installation of any Resinwerks primer, all joints, cracks and other substrate irregularities must be addressed. For more information on specific joint treatment procedures, please contact your Resinwerks technical services representative.

BOND TEST

A bond test shall be conducted to confirm the adequacy of surface preparation and the substrate's readiness prior to full primer application. The bond strength must exceed the tensile strength of the substrate. A valid test result will display fractured aggregate across the entire pull area. The presence of only laitance or minimal surface material indicates insufficient preparation, and additional mechanical profiling is required.

MIXING INSTRUCTIONS:

- » Please reference Resinwerks MMA Dosing chart for all mixing ratios and formulas.
- » R100 Primer should be used in conjunction with R200 Bonding Agent. Please reference Resinwerks MMA Dosing chart for actual formula recipes.

APPLICATION INSTRUCTIONS

- » R100 Primer is applied neat using a roller or brush direct to properly prepared concrete.

- » Take special care to ensure that material is applied at an even rate for a consistent film. Multiple coats may be required on older, more porous substrates to help ensure an even primer finish. .

LIMITATIONS

- » Do not apply over concrete experiencing ASR
- » Do not apply over epoxy or polyaspartic coatings
- » Do not apply to new slabs < 28-days old
- » Do not apply to concrete < 3500 PSI compression strength
- » Do not apply product when ambient or room temperature is below 40°F (4.4°C) or over 90°F(32.2°C) or if the relative ambient humidity is above 85%.
- » DEW POINT: Do not apply when dew point is within 5°F of the ambient temperature.

CAUTION

R100 MMA Primer is a flammable liquid in its uncured form. Eliminate all sources of ignition prior to use. Smoking, open flames, and sparks are strictly prohibited in and around the application area. Applicators must wear appropriate personal protective equipment (PPE), including chemical-resistant gloves, safety goggles, and protective clothing. If airborne concentrations exceed permissible exposure limits, use NIOSH-approved organic vapor respirators. All personnel must review the Safety Data Sheet (SDS) and the hazard information provided in the application binder to ensure proper hazard awareness and compliance.

NOTES

Thoroughly read all Material Safety Data Sheets prior to use and maintain copies on job-site at all times.

Mock-ups and field test areas are strongly recommended in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction, etc. to ensure system performance as specified for the intended use, and to determine approval of the coating system. Resinwerks does not guarantee compatibility or adhesion with products not manufactured by Resinwerks.

Variability in job site conditions (including but not limited to surface preparation, sunlight, humidity, dew point, temperature, etc.) during application of products may lead to fish-eyes, blistering, pinholes, wrinkling, or out-gassing of air in the concrete and are not product defects.

TECHNICAL ASSISTANCE

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