

Durex® Dur-A-Fast Gemstone PMMA Trowel

Polyurethane Methyl Methacrylate based Multi-Coloured Decorative Coating

Description	Durex® Dur-A-Fast Gemstone PMMA Trowel is a polyurethane modified methyl methacrylate decorative, trowel applied coating with high build, multi-coloured aggregates with oversized Mica flakes to yield a finish that replicates the look of granite. It is the decorative coating for Durex® Dur-A-Fast Gemstone Decorative System.
Uses	Durex® Dur-A-Fast Gemstone PMMA is used as the decorative coat, part of the Durex® Dur-A-Fast Gemstone Trowel system. Durex® Dur-A-Fast Gemstone PMMA Trowel is a hand applied, durable decorative coating that can be used for a variety of areas.
Ideal For	<ul style="list-style-type: none"> • Balcony terraces and pedestrian walkways • Parking Decks • Plaza, pool and recreational decks, and vehicular ramps • Stadiums
Features	<ul style="list-style-type: none"> • Aesthetically pleasing • Granite-like finish • Polyurethane modified Methyl Methacrylate based technology • Extremely rapid curing, ready for sealcoat within 45 minutes (depending on temperature). • Cold curing capability, cures down to 0°C • Excellent water immersion properties • High chemical resistance to acids, alkalis, salts, seawater, sewage and other compounds • Fast curing properties • Abrasion resistant, tough product • UV Resistant • Can be installed vertically and horizontally

TECHNICAL DATA

PHYSICAL PROPERTIES	
Colour	Multi-Coloured Aggregate Blends
Resin Type	Polyurethane modified Methyl Methacrylate
Mix Ratio	Part A (resin): Part B (Initiator): Part C (Colored Aggregates)
Cure Time @ 23°C	To touch: 30 minutes To recoat: 45 minutes Traffic: 2 hours Fully Cured: 5 days
Coverage	2.8 m ² /10kg kit @ 3mm (30 ft ² /23 lbs kit @ 1/8") *varies on system*
Pot Life @ 23°C	10 minutes

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Percent Solids	ASTM D7232-06	100%
V.O.C. & Absorption	ASTM D3960	0 g/L
Recycled Content		51%
Specific Gravity	ASTM D 333	1.19 ± 0.05 g/L
Mixed Viscosity	ASTM D2196	1000 cps
Abrasion Resistant	ASTM 5178-91, CS-17 wheel	75 mg, 1000 g load, 1000 cycles
Tensile Strength	ASTM D 638-86	1,680 psi
Tear Strength	ASTM D624 Die C	83 lb/in.in (14.5 KN/in. m)
Elongation	ASTM D 638-86	55%
Flexural Modulus	ASTM D 522	2 mm film passes 12 mm mandrel
Low Temperature Flexibility	1/8" Mandrel @ 26°C	Pass
Water Absorption	ASTM D570	0.25%
Shore D Hardness	ASTM D 2240	70
Pull-Off Strength of Coatings	ASTM D 4541	3.35 MPa (480 psi) over concrete surface
Water Vapour Transmission	ASTM E 96 – Procedure B	0.05 grain/hr·pi ² 0.029 g/hr·m ²
Water Vapour Permeability	ASTM E 96	0.20 Perm In. 0.0025 ng/Pa·s·m ²
Water Vapour Permeance	ASTM E 96	4.70 x 10 - 5 perm 0.028 ng/ Pa·s·m ²

Packaging	Durex® Dur-A-Fast Gemstone PMMA is packaged in 10 kg (23 lbs) kits. Available in 16 standard colours. Custom colour matching can also be attained at an additional cost.
Storage Conditions	Durex® Gemstone PMMA in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store between 5°C and 25°C. KEEP FROM FREEZING.
Surface Preparation	All surfaces must be dry, free of dirt, oils, and any other contaminants that may prevent proper adhesion. Durex® Dur-A-Fast Gemstone PMMA is designed to be installed as part of the Durex® Dur-A-Fast Decorative System line. Inter-coat adhesion times are to be followed at all times. Contact Durabond Technical Services for applications beyond inter-coat window, surface preparation methods for contaminated surfaces and all applications not available within Durex® Dur-A-Fast Systems' specifications.
Mixing Instructions	Mixing shall be carried out in a clean, rust-free container, and mixed by a power-drill at 400-500 rpm maximum. Do not mix Part A and Part B together until ready for application, only mix materials to be used within working time window. Mix full kit as provided of Part 'A' resin with Part 'B' Dur-A-Fast Initiator. The Part 'B' Initiator must be mixed depending on substrate and ambient temperature. Please refer to the "Dur-A-Fast Initiator Consumption Chart" below. Mix Part A and Part B Initiator together slowly, using a low speed drill for a minimum of 1 minute, ensuring that both components are thoroughly mixed and there is a consistent colour without any residue remaining on the sides of the pail. Once mixed, slowly add Part 'C' Gemstone Aggregate and mix for an additional minute, so that the aggregate is completely and thoroughly mixed in the container. Extra care must be taken to avoid introducing air into mixture.

Durex® Dur-A-Fast Initiator Mixing Chart

Temperature C	Initiator %	g/ 3.78L (1 Gallon)	g/18.9L (5 gallons)	Cold Cure Accelerator	g/ 3.78L (1 Gal)	g/18.9L (5 Gal)
30	1%	32	160	N/A	N/A	N/A
20	2%	64	320	N/A	N/A	N/A
15	3%	96	480	N/A	N/A	N/A
10	4%	128	640	N/A	N/A	N/A

Application	Apply Durex® Dur-A-Fast Gemstone PMMA with a trowel at a uniform thickness of 1/16" (1.5mm) to 1/8" (3mm) thick. Application must be performed quickly, with a co-ordinated crew in order to maintain a wet edge and allow for consistent supply of mixed materials. It is recommended to install upturns first. Allow Durex® Dur-A-Fast Gemstone PMMA to cure for at least 30 minutes prior to application of clear sealcoat. Substrate temperature must be at least 3 degrees Celsius above dew point prior to application. Warm, humid environments will cure more rapidly. Ensure that the product is slightly tacky to the touch prior to installation of the topcoat. Consult with Durabond Technical Services for further information. Do not install below 0 degrees Celsius or adjust catalyst for below freezing applications.
Limitations	Do not apply Durex® Dur-A-Fast Gemstone PMMA if ambient and substrate temperature is less than 10 degrees C or above 32 degrees C during application and curing time. Apply Durex® Dur-A-Fast Sealcoat Clear over Durex® Dur-A-Fast Gemstone PMMA within 2 hours (depending on system). Always adhere to published recoating schedules to ensure coating adhesion. Product must be applied in temperatures 3 degrees C above the dew point. Do not add solvent to the mixture.
Clean-up	Wash all tools and equipment immediately with mineral Xylene or solvent-based cleaner. Allow any unused product to harden in container and discard according to local regulations.
Health and Safety	Read published Safety Data Sheet prior to use and handling. Use under well ventilated conditions with appropriate protective clothing and eyewear when handling the product. Avoid contact with eyes and contact with skin. If contact occurs, flush immediately with water and seek medical attention if irritation occurs. Harmful if swallowed. Keep product out of reach of children. Read published Safety Data Sheet for additional information.
Warranty	Durabond warrants this product is free of manufacturing defects, and will replace at no charge, provided it has been applied within 12 months of purchase, it has been installed for uses suitable for this product and in accordance with the manufacturer's instructions.
Technical Services	Technical support is available upon request at info@durabond.com . For the latest version of this data sheet, please visit our website at www.durabond.com , call toll free at 1-877-DURABOND (387-2266) or speak with your Durabond Technical Coatings Ltd. sales representative.

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