

# Durex® Dur-A-Fast Membrane

## Polyurethane Methyl Methacrylate based Waterproofing Membrane

<b>Description</b>	Durex® Dur-A-Fast Membrane is a polyurethane modified methyl methacrylate membrane to be used in conjunction with Durex® Dur-A-Fast Traffic Bearing Waterproofing Systems. Durex® Dur-A-Fast Waterproofing Systems are a series of rapid return to service, high performance, UV resistant decorative and functional traffic bearing waterproofing systems. Durex® Dur-A-Fast Membrane is a rapid curing, highly elastomeric membrane which waterproofs the surface and creates a crack bridging, impermeable layer to protect the substrate. It is designed to be ready to top coat within 45 minutes of application.
<b>Uses</b>	Durex® Dur-A-Fast Membrane is used as a waterproofing membrane for all Durex® Dur-A-Fast Traffic Bearing Waterproofing Systems to waterproof the substrate and provide crack bridging capabilities. It will protect the substrate intrusion from water, chloride ion, salt and damage from chemicals. Durex® Dur-A-Fast Membrane can be used in virtually all seasons, as it can be applied down to -20°C.
<b>Ideal For</b>	<ul style="list-style-type: none"> <li>Balcony terraces and pedestrian walkways</li> <li>Parking Decks</li> <li>Mechanical rooms</li> <li>Plaza, pool and recreational decks, and vehicular ramps</li> <li>Stadiums</li> <li>Non-potable water retention tanks, cooling towers and secondary containment</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>Polyurethane modified Methyl Methacrylate based technology (PUMA)</li> <li>Extremely rapid curing, ready for topcoat within 45 minutes (depending on temperature).</li> <li>Cold curing capability, cures down to -20°C</li> <li>Outstanding water impermeability sealing properties</li> <li>Excellent water immersion properties</li> <li>High chemical resistance to acids, alkalis, salts, seawater, sewage and other compounds</li> <li>Fast curing properties</li> <li>Excellent low temperature flexibility and crack bridging properties</li> </ul>

### TECHNICAL DATA

PHYSICAL PROPERTIES		
Colour	Off White	
Resin Type	Polyurethane Modified Methyl Methacrylate	
Mix Ratio	Part A (resin):Part B (catalyst)	
Cure Time @ 23°C	To touch: 30 minutes To recoat: 45 minutes Traffic: 4 hours	
Coverage	0.5 m <sup>2</sup> /L (20 ft <sup>2</sup> /gal) @ 80 mils	*varies on system*
Pot Life @ 23°C	15-20 minutes	

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Percent Solids	ASTM D7232-06	100%
V.O.C. & Absorption	ASTM D3960	0 g/L
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	-
Tensile Strength	ASTM D 638-86	1,680 psi
Tear Strength	ASTM D624 Die C	90 lb/in.in (14.5 KN/in. m)
Elongation	ASTM D 638-86	520%
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	< 0.1%
Shore A Hardness	ASTM D 2240	85
Pull-Off Strength of Coatings	ASTM D 4541	3.35 MPa (480 psi) over primed concrete surface
Water Vapour Permeability	ASTM E 96	0.20 Perm In. 0.0025 ng/Pa·s·m <sup>2</sup>
Water Vapour Performance	ASTM E 96	4.70 x 10 - 5 perm 0.028 ng/ Pa·s·m <sup>2</sup>

<b>Packaging</b>	Durex® Dur-A-Fast Membrane is packaged in 18.9 L (5 gal) and 3.78 L (1 gal) kits, as well as bulk containers.
<b>Storage Conditions</b>	Store Durex® Dur-A-Fast Membrane in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store between 10°C and 25°C. <b>KEEP FROM FREEZING.</b>
<b>Surface Preparation</b>	<p>Surfaces must be dry, free of dirt, oils, and any other contaminants that may prevent proper adhesion. All surfaces to be coated are to be primed with Durex® Dur-A-Fast Primer. Contact Durabond Technical Services for surface preparation methods of surfaces contaminated by oil or other materials.</p> <p><b>Concrete:</b> New concrete shall be allowed to cure for a minimum of 28 days and have a compressive strength of concrete of at least 25 MPa (3,625 psi) before coating. Moisture content of the concrete shall be less than 4% by weight prior to application or the substrate must be primed with Durex® Epotel 100 Moisture Block. Contact a Durabond Technical Representative for further assistance. Prepare surfaces by shot blasting to achieve a surface consistent with ICRI CSP 3-4. Treat all cracks as per ASTM C1127. Not applicable for on-grade slab applications.</p> <p><b>Plywood:</b> Plywood must be minimum thickness of 1/2 inch exterior grade plywood secured and fastened solid to support substrates. Surfaces must be free of dirt and other contaminants that may prevent proper adhesion. Treat plywood joints with polyurethane sealant and Durex® Barrier Seam Tape laid in a bed of Durex® Dur-A-Fast Membrane.</p>
<b>Mixing Instructions</b>	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 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 2 minutes, ensuring that both components are thoroughly mixed and there is a consistent colour without any residue remaining on the sides of the pail. Extra care must be taken to avoid introducing air into the 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 to 35C	0.50%	14	72	N/A	N/A	N/A
25 to 30C	1%	29	144	N/A	N/A	N/A
20 to 25C	1.5%	43	216	N/A	N/A	N/A
15 to 20C	2%	58	288	N/A	N/A	N/A
10 to 15C	3%	86	432	N/A	N/A	N/A
5 to 10C	4%	115	576	N/A	N/A	N/A
0 to 5C	5%	144	720	N/A	N/A	N/A
0 to -5C	5%	144	720	0.50%	14	72
-5 to -10C	5%	144	720	1%	29	144
-10 TO -20C	5%	144	720	2%	58	288

<b>Application</b>	Apply Durex® Dur-A-Fast Membrane with a notched squeegee at a uniform thickness of 80 mils DFT (or as specified) to form an effective waterproofing membrane. Measure wet film mil thickness with a thickness gauge. Allow membrane to cure for at least 8 hours prior to application of topcoat. Substrate temperature must be at least 3 degrees Celsius above dew point prior to application. Moisture content of concrete must be less than 4% by weight. Warm, humid environments will cure more rapidly. Ensure that the product is slightly tacky to the touch prior to installation of the topcoat. Specified Durex® Dur-A-Fast Topcoat must be applied within 24 hours of application. Consult with Durabond Technical Services for further information.
<b>Limitations</b>	Do not apply Durex® Dur-A-Fast Membrane if ambient and substrate temperature is less than minus 20 degrees C or above 32 degrees C during application and curing time. Topcoat with Durex® Dur-A-Fast Wearcoat, Sealcoat or Topcoat within 24 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. Moisture content of the concrete must be less than 4% by weight, if

not the surface must be primed with Durex® Epotel Moisture Block 100. 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](mailto:info@durabond.com). For the latest version of this data sheet, please visit our website at [www.durabond.com](http://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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