Durex. Dur-A-Fast Traffic Bearing Waterproofing System

Rapid Return to Service, High Abrasion Resistant PUMA Based Traffic Bearing Waterproofing System

Description

Durex® Dur-A-Fast Traffic Bearing Waterproofing System is a rapid return to service, high performance, UV resistant decorative and functional traffic bearing waterproofing systems. A PUMA (polyurethane modified methylmethacrylate) based traffic bearing waterproofing system for vehicular parking decks. Features silica sand broadcasted to refusal for an extremely durable, high abrasion resistant waterproofing system. Ideal for high traffic parking decks, heavily used turning lanes, ramps and ticket gateways. Rapid return to service in 2 hours, 1 day application.

Ideal For

- · Parking decks and garages
- Drive isles and lanes
- Helical turn ramps
- Areas that require fast turn around and high abrasion resistance
- Balcony terraces and pedestrian walkways
- Mechanical rooms
- · Plaza, pool and recreational decks
- Stadiums
- · Non-potable water retention tanks, cooling towers and secondary containment

Features

- Polyurethane modified Methyl Methacrylate based technology (PUMA)
- · Extremely rapid curing, ready for light traffic within 45 minutes (depending on temperature).
- Cold curing capability, cures down to -20°C
- · Outstanding water impermeability sealing properties
- · 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

Components

Durex® Dur-A-Fast Primer is a polyurethane modified methyl methacrylate primer to be used in conjunction with all Dur-A-Fast systems. Dur-A-Fast systems are a series of rapid return to service, high performance, UV resistant flooring systems. Dur-A-Fast Primer is a rapid curing, penetrating primer which helps seal the surface and create a positive, lasting bond to the substrate. It is designed to be ready to top coat within 45 minutes of application.

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.

Durex Dur-A-Fast Wearcoat is used as a wear coat for all Durex Dur-A-Fast Traffic Bearing Waterproofing Systems to protect and add strength to the coating system for traffic bearing applications. Durex Dur-A-Fast Wearcoat can be used in virtually all seasons, as it can be applied down to -20°C.

Durex® Dur-A-Fast Sealcoat is used as a top coat for all Durex® Dur-A-Fast Traffic Bearing Waterproofing Systems to seal and protect. Durex® Dur-A-Fast Sealcoat is a rapid curing, abrasion resistant, UV resistant coating that protects the surface and creates a tough, impermeable layer to protect the membrane, substrate or previous layers. It is designed to be ready for light traffic within 45 minutes of application.

TECHNICAL DATA

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PHYSICAL PROPERTIES	DUR-A-FAST PRIMER	DUR-A-FAST MEMBRANE	DUR-A-FAST WEARCOAT	DUR-A-FAST SEALCOAT		
Colour	Clear	Off White	Off White	Pigmented		
Resin Type	Polyurethane Modified Methyl Methacrylate (PUMA)	Polyurethane Modified Methyl Methacrylate (PUMA)	Polyurethane Modified Methyl Methacrylate (PUMA)	Polyurethane Modified Methyl Methacrylate (PUMA)		
Mix ratio	Part A (Resin) : Part B (Catalyst)	Part A (Resin) : Part B (Catalyst)	Part A (Resin) : Part B (Catalyst)	Part A (Resin) : Part B (Catalyst)		
Coverage	3.68 m2/L (150 ft2/gal) @ 10 mils *varies on system*	0.5 m2/L (20 ft2/gal) @ 80 mils *varies on system*	0.6 m2/L (25 ft2/gal) @ 65 mils *varies on system*	2.0 m2/L (80 ft2/gal) @ 20 mils *varies on system*		
Cure Time @ 35-45 °C	Fully cured: 60 minutes	To touch: 30 minutes To recoat: 45 minutes	To touch: 30 minutes To recoat: 45 minutes	To touch: 30 minutes To recoat: 45 minutes Traffic: 1 hour		
Pot Life @ 23 °C	10 minutes	10 minutes	10 minutes	10 minutes		
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PROPERTIES & TEST METHOD	RESULTS	RESULTS	RESULTS	RESULTS
Percent Solids ASTM D7232-06	100%	100%	100%	100%
V.O.C. & Absorption ASTM D3960	0 g/L	0 g/L	0 g/L	0 g/L
Specific Gravity ASTM D 333	1.06 (Clear)	1.19 ± 0.05 g/L	1.20 ± 0.05 g/L	1.10 ± 0.05 g/L
Mixed Viscosity ASTM D2196	430 cps (clear)	1500 cps	1200 cps	1100 cps
Abrasion Resistant ASTM 5178-91, CS-17 wheel	-	-	-	75 mg, 1000 g load 1000 cycles
Tensile Strength ASTM D 638-86	1,280 psi	1,680 psi	1,500 psi	950 psi
Tear Strength ASTM D624 Die C		90 lb/ln.in	130 lb/ln.in	220 lb/ln.in
Elongation ASTM D 638-86	0.8%	520%	200%	115%
Flexural Modulus ASTM D 522	-	2 mm film passes 12 mm mandrel	N/A	N/A
Low Temperature Flexibility 1/8" Mandrel @ 26°C	-	Pass	N/A	N/A
Water Absorption ASTM D570	-	< 0.1%	0.15%	0.15%
Shore A Hardness ASTM D 2240	85	85	95	99
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·m²	0.20 Perm In. 0.0025 ng/Pa·s·m²	0.20 Perm In. 0.0025 ng/Pa·s·m ³	0.20 Perm In. 0.0025 ng/Pa·s·m ⁴

Packaging

Durex* Dur-A-Fast Components are packaged in 18.9 L (5 gal) and 3.78 L (1 gal) kits, as well as bulk containers. Available in standard colours, please refer to Durabond Protective Coatings Colour Chart. Custom colour matching can also be attained at an additional cost.

Storage Conditions

Store Durex® Dur-A-Fast Components 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 Components are designed to be installed as part of the Durex® Dur-A-Fast Traffic Bearing Waterproofing 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 subsrate and ambient temperature. Please refer to the "Dur-A-Fast Initiator Consumption Chart" for each respetive product on the individual Technical Data Sheet. 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 mixture.

Application

Apply Durex® Dur-A-Fast with a notched squeegee at a uniform thickness as specified to form an effective system. Durex® Dur-A-Fast Primer to be installed at 10 mils DFT. Durex® Dur-A-Fast Membrane to be installed at 80 mils DFT. Durex® Dur-A-Fast Wearcoat to be installed at 65 mils DFT with silica sand aggregate broadcasted to refusal. Durex® Dur-A-Fast Topcoat to be installed at 20 mils DFT. Measure wet film mil thickness with a thickness gauge. Refer to respective product Technical Data Sheets for application instructions. 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.

Limitations

Do not apply Durex® Dur-A-Fast if ambient and substrate temperature is less than minus 20 degrees C or above 32 degrees C during application and curing time. Surfaces must be clean and free of any materials/substances that may impede adhesion (including ice). Broadcast anti-slip aggregate as required. 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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