

Durex® Heavy-Duty Mechanical Waterproofing System

Heavy-Duty Mechanical Room Waterproofing System

Description	Durex® Heavy-Duty Mechanical Room Waterproofing System is a high-performance waterproofing system for mechanical rooms subject to heavy traffic. The system consists of an elastomeric membrane base coat, Durex® Uraflex 360 Elastomeric Polyurethane Waterproofing Membrane; an abrasion-resistant traffic-bearing polyurethane topcoat, Durex® Uraflex 361 Elastomeric Polyurethane Traffic-Bearing Topcoat; and an easy-to-use protective topcoat, Durex® Epoxy Guard Pro Professional Use Quick-Drying Water-Based Epoxy Coating.
Uses	Durex® Heavy-Duty Mechanical Room Waterproofing System is intended for use as a protective waterproofing flooring system for mechanical rooms subject to heavy traffic.
Ideal For	<ul style="list-style-type: none"> • Mechanical rooms subject to heavy traffic and abuse
Features	<ul style="list-style-type: none"> • Highly abrasion resistant and elastomeric • Waterproofing and sound deadening • Potential LEED Credits • Very low odour, minimal disturbance to tenants • Extremely durable, long lasting and easy to clean • Anti-slip finish • Protects from hairline cracks

TECHNICAL DATA

PHYSICAL PROPERTIES	URAFLEX 360 MEMBRANE	URAFLEX 361 TOPCOAT	EPOXY GUARD PRO TOPCOAT
Colour	Beige	Please see <i>Durex® Colour Selection Guide</i> for available colour options.	Please see <i>Durex® Colour Selection Guide</i> for available colour options.
Resin Type	Polyurethane/Hybrid polyol	Polyurethane	Water-based epoxy
Mix Ratio	Part A (Resin):Part B (Urethane) 4:1 by volume	Part A (Resin):Part B (Urethane) 3:1 by volume	Part A : Part B 2:1 by volume
Coverage	50 ft ² /gal @ 30 mils DFT	80 ft ² /gal @ 20 mils DFT	7 m ² /L (400 ft ² /gal) @ 2 mils per coat; 2x coat DFT
Cure Time @ 23°C	To touch: 6 hours To recoat: 8 hours Handling time: 25-35 minutes	To touch: 15-20 minutes To recoat: 2-4 hours Immersion time after curing: 6 hours Handling time: 25-35 minutes	To touch: 2 hours To recoat: 3 hours Light traffic: 6 hours Fully cured: 7 days
Recommended Film Thickness	20 mils DFT	15-25 mils DFT	4-6 mils DFT
Pot Life @ 23°C	20 minutes	25 minutes	3 hours
Recycled Content	51%	53%	

TEST	METHOD	URAFLEX 360 MEMBRANE	URAFLEX 361 TOPCOAT	EPOXY GUARD PRO TOPCOAT
Percent Solids	ASTM D7232-06	100%	100%	50 ± 2% (vol.) clear
V.O.C.	ASTM D3960	0 g/L	0 g/L	< 30 g/L
Specific Gravity	ASTM D333	1.20 ± 0.05 g/L	1.25 ± 0.05 g/L	1.07 ± 0.01 g/L 8.90 ± 0.1 lb/gal
Viscosity (Brookfield 23°C)	ASTM D2196		2,500 cps	400-3,000 cps
Abrasion Resistance	ASTM 5178-91 CS-17 Wheel	75 mg loss, 1000 g load, 1000 cycles	11 mg loss, 1000 g load, 1000 cycles	100 mg loss, 1000 g load, 1000 cycles
Tensile Strength	ASTM D412	1,350 psi	1,850 psi	
Tear Strength	ASTM D624		171 lb./in. (30 KN/lin. metre)	
Elongation	ASTM D412	900%	180%	
Flexural Modulus	ASTM D522	2 mm film passes 12 mm mandrel	2 mm film passes 12 mm mandrel	
Water Absorption	ASTM D570	< 0.5%	< 0.5%	
Water Vapour Transmission	ASTM E96 - Procedure B	0.05 g/hr · pi ² 0.029 g/hr · m ²	0.29 metric perm	
Water Vapour Permeability	ASTM E96	0.20 perm in. 0.0025 ng/Pa · s · m ²		
Water Vapour Permeance	ASTM E96	4.70 x 10 ⁻⁵ perm 0.028 ng/Pa · s · m ²		
Shore D Hardness	ASTM D2240	71		Pencil Hardness: F-HB
Fire Rating	ASTM E84	Class A		Class A

Packaging Durex® Heavy-Duty Mechanical Room Waterproofing System is packaged in 18.9 L (5 gal) and 3.78 L (1 gal) kits, as well as bulk kits. This product is available in multiple standard colours. Custom colour matching can also be attained at an additional cost. Please refer to the *Durex® Colour Selection Guide* for all available colour options.

Storage Conditions Store Durex® Heavy-Duty Mechanical Room Waterproofing System in a dry, vented, waterproof location, stacked

Surface Preparation

All surfaces such as concrete, wood and metal to be coated must be free of dirt, oils, and any other contaminants that may prevent proper adhesion of Durex® Heavy-Duty Mechanical Room Waterproofing System. Pre-treat cracks up to 1/16 in. with Durex® Uraflex 360 Waterproofing Membrane or with an approved polyurethane sealant. For larger cracks, please refer to application instructions, specifications or consult with a Durabond Technical Representative. Prior to application of Durex® Uraflex 360 Waterproofing Membrane, concrete must be fully cured (28 days) or as deemed acceptable by a Durabond Technical Representative. Surface must be dry prior to application. Patch work and miscellaneous repairs are to be corrected with Durex® Duracrete Trowel, Dur-A-Patch RS-45 or approved alternative. Plywood must be exterior grade at a minimum thickness of 1/2 in. and must be properly secured and fastened prior to application. All plywood joints are to be pre-treated with Durex® Uraflex 360 Waterproofing Membrane and reinforced with Durex® Barrier Seam Tape. Caulking of seams with a polyurethane sealant is strongly recommended.

Application

WATERPROOFING MEMBRANE: Durex® Uraflex 360 Waterproofing Membrane is to be applied at a thickness of 30 wet mils to form an effective waterproofing membrane. Apply with a notched squeegee. The use of a wet-film thickness gauge is required to verify applied material thickness. Typically, an overnight cure (12 hours) is sufficient time prior to application of the topcoat. Allow more time for dry and cool environmental conditions. 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 a Durabond Technical Representative for special application areas and site adaptations.

INTERMEDIATE COAT: Durex® Uraflex 361 Elastomeric Polyurethane Traffic-Bearing Topcoat is to be applied at a thickness of 20 wet mils using a notched squeegee. Immediately after application, the non-slip aggregate is to be broadcasted over the wet surface. Distribute the aggregate evenly over the surface at a rate of approximately 10-15 lbs of aggregate per gallon (1.3-1.8 kg per litre) of Durex® Uraflex 361 Elastomeric Polyurethane Traffic-Bearing Topcoat. Back-roll the coating for a smooth, consistent finish while ensuring to encapsulate the aggregate. **Note:** Silica sand #32 is recommended as a non-slip aggregate.

TOPCOAT: Durex® Epoxy Guard Pro Professional Use Quick-Drying Water-Based Epoxy Coating is to be applied twice at a thickness of 3-5 wet mils per coat using a 13 mm phenolic core roller for a total film thickness of 6-8 mils. Non-slip aggregate may be applied. It is to be broadcasted over the wet surface evenly at a rate of approximately 5 lbs of aggregate per gallon (0.5 kg per litre) of Durex® Epoxy Guard Pro Professional Use Quick-Drying Water-Based Epoxy Coating. Back-roll the coating for a smooth, consistent finish while ensuring to encapsulate the aggregate. **Note:** Silica sand #32 is recommended as a non-slip aggregate.

Allow a minimum of 48 hours prior to pedestrian traffic and 72 hours prior to vehicular traffic (5-35°C). Extended drying times must be accounted for in dry and/or cool environmental conditions. Please contact Durabond Technical Services for further assistance and recommendations of curing accelerators.

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

Take suitable fire precautions. Use under well-ventilated conditions with appropriate respirator approved for organic vapours and rubber gloves when handling the product. Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water and seek medical attention if irritation occurs. Harmful if swallowed. Do not induce vomiting. Drink 1-2 glasses of water or milk. Keep product out of reach of children. Read published Material 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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