Durex® Dur-A-Comfort Membrane

Ergonomic Polyurethane Based Elastomeric Membrane

Description

Durex® Dur-A-Comfort Membrane is a two-component, 100% solids, solvent-free, high solids elastomeric ergonomic polyurethane membrane formulated for use in Dur-A-Comfort ergonomic flooring systems. It adheres to concrete and wood surfaces to form a high build, ergonomic, sound-deadening membrane that gives comfort floors its unique properties. Durex® Dur-A-Comfort Membrane must be top coated with Durex® to achieve an effective Comfort flooring system.

Uses

Durex® Dur-A-Comfort Membrane is an elastomeric, polyurethane-based ergonomic membrane that is used in conjunction with other Durex® Dur-A-Comfort topcoats to form a comprehensive, sound-deadening, ergonomic waterproof and seamless flooring system. It is designed to perform as a sound-deadening and ergonomic traffic-bearing membrane on a variety of surfaces such as concrete and wood. Capable of bridging cracks up to 1.6mm.

Ideal For

- Hospitals & Medical Facilities
- "Dry" Flooring Areas
- Schools and Institutions
- Sounds absorbing requirements

Features

- Outstanding water impermeability sealing properties
- Sound Deadening
- Zero VOCs, 100% solids urethane
- Possible LEED credits
- Softness underfoot
- High chemical resistance to acids, alkalis, salts, seawater, sewage and other compounds
- Fast-curing properties
- Excellent low temperature flexibility and crack-bridging properties

TECHNICAL DATA

PHYSICAL PROPERTIES	
Colour	Amber/Clear
Resin Type	Polyurethane
Mix Ratio	Part A (resin):Part B (urethane) 2.5:1 by volume
Cure Time @ 23°C	To touch: 6 hours To recoat: 8 hours Traffic: 48 hours Fully Cured: 7 days
Coverage	10 ft^2/gal @ 160 mils (4mm) DFT
Pot Life @ 23°C	20 minutes

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Percent Solids	ASTM D7232-06	100%
V.O.C. & Absorption	ASTM D3960	0 g/L
Recycled Content		53%
Specific Gravity	ASTM D333	1.15 ± 0.05 g/L
Mixed Viscosity	ASTM D2196	1000 cps
Abrasion Resistance	ASTM D5178-91, CS-17 wheel	75 mg, 1000 g load, 1000 cycles
Tensile Strength	ASTM D412	1,000 psi
Tear Strength	ASTM D624 Die C	83 lb/ln.in (14.5 KN/ln. m)
Elongation	ASTM D412	900%
Flexural Modulus	ASTM D522	2 mm film passes 12 mm mandrel
Low Temperature Flexibility	1/8" Mandrel @ -26°C	Pass
Water Absorption	ASTM D570	0.25%
Shore A Hardness	ASTM D2240	54
Pull-Off Strength of Coatings	ASTM D4541	2.4 MPa (350 psi) over concrete surface
Water Vapour Transmission	ASTM E96 – Procedure B	0.05 grain/hr·pi^2 0.029 g/hr·m^2
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

Packaging

Durex® Dur-A-Comfort Membrane is packaged in 18.9 L (5 gal) and 3.78 L (1 gal) kits, as well as bulk containers.

Storage Conditions

Store Durex® Dur-A-Comfort 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. **KEEP FROM FREEZING**.

Surface Preparation

Concrete, wood and metal surfaces must be dry, free of dirt, oils, and any other contaminants that may prevent proper adhesion. Contact Durabond Technical Services for surface preparation methods of surfaces contaminated by oil or other materials.

Concrete: 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. Correct concrete repairs with Durex® Dur-A-Patch EP or Duracrete Trowel. Not applicable for below-grade slab applications. Prime with Durex® Uraflex Primer for best results.

Plywood: 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-Comfort Membrane Elastomeric Polyurethane Waterproofing Membrane. Prime with Durex® Uraflex Primer.

Metal: Metal must be cleaned of all dirt, debris and rust prior to application.

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 urethane. Mix Part A and Part B 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.

Application

Apply Durex® Dur-A-Comfort Membrane with a notched squeegee at a uniform thickness of 160 mils (4mm) DFT (or as specified) to form an effective comfort flloring 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. 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® Topcoat must be applied within 24 hours of application. Consult with Durabond Technical Services for further information.

Limitations

Do not apply Durex® Dur-A-Comfort Membrane Elastomeric Polyurethane Traffic-Bearing Topcoat if ambient and substrate temperature is less than 10 degrees C or above 32 degrees C during application and curing time. Topcoat with Durex® Dur-A-Comfort Self Leveling within 24 hours. 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

Use under well-ventilated conditions with 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. 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.