Uraflex Traffic-Bearing Waterproffing System

# **Durex** Uraflex Traffic-Bearing Waterproofing System

# Polyurethane Elastomeric Traffic-Bearing Waterproofing System for Vehicular Parking Decks

## Description

Durex® Uraflex Traffic-Bearing Waterproofing System is a high-performance parking and vehicular deck-protective coating system consisting of an elastomeric membrane, Durex® Uraflex 360NP and highly abrasion-resistant topcoats, Durex® Uraflex 361 and Durex® Uraflex 362. Durex® Uraflex Traffic-Bearing Waterproofing System is engineered to waterproof and protect concrete slabs from harsh environmental conditions and salt contamination. The system is formulated with a combination of highly elastomeric polyurethane technology, allowing the system to bridge post-application cracks and a durable, aggregate-laden topcoat to withstand heavy vehicular traffic.

#### Uses

Durex® Uraflex Traffic-Bearing Waterproofing System is intended for use as a protective waterproofing parking deck coating system for the protection of concrete slabs in parking structures, pedestrian walkways and plaza decks.

#### **Ideal For**

- · Parking decks, ramps and drive aisles
- Parking garages
- Plaza and exposed decks
- Terrace:
- · Balconies (See Uraflex 360/375UV Balcony System)

#### **Features**

- · Highly abrasion resistant and elastomeric
- Chemically resistant coating
- . Maintains elasticity at very low temperatures
- · Outstanding penetrating adhesion to concrete
- . Bridges cracks up to 1/16" (1.5mm)
- · Non-skid and decorative
- · Waterproof
- · Potential LEED Credits (Renewable Materials)
- Odour and solvent Free; minimal disturbance to tenants
- UV-resistant topcoat available
- . Easy to clean
- · ASTM C957 tested (pass)

# **TECHNICAL DATA**

PHYSICAL PROPERTIES		
	URAFLEX 360NP MEMBRANE	URAFLEX 361 TOPCOAT
Colour	Light Grey	Please see <i>Durex</i> <sup>®</sup> <i>Colour Selection Guide</i> for available colour options.
Resin Type	Polyurethane/Hybrid polyol	Polyurethane
Mix Ratio	Part B (Urethane): Part A (Resin) 4:1 by volume	Part A (Resin): Part B (Urethane) 3:1 by volume
Coverage	80 ft <sup>2</sup> /gal @ 20 mils DFT	See Chart
Cure Time @ 35-40°C	To touch: 6 hours To recoat: 8 hours Handling time: 25-35 minutes	To touch: 1 hour To recoat: 6-8 hours Vehicular traffic: 24 hours
Pot Life @ 23°C	20 minutes	25 minutes
Recommended Film Thickness	20 mils DFT	15-25 mils DFT
Recycled Content	51%	60%

TEST	METHOD	URAFLEX 360 NP BASECOAT	URAFLEX 361 TOPCOAT
Percent Solids	ASTM D7232-06	99%	100%
V.O.C.	ASTM D3960	5 g/L	0 g/L
Specific Gravity	ASTM D333	1.19 ± 0.05 g/L	1.25 ± 0.05 g/L
Viscosity (Brookfield, 23°C)	ASTM D2196	3,300 cps	1,500 cps
Abrasion Resistance	ASTM 5178-91		24 mg loss,
	CS-17 wheel		1000 g load, 1000 cycles
Tensile Strength	ASTM D412	2,500 psi	3,000 psi
Adhesion (pull-off)	ASTM D4541	400 psi (failure at concrete)	
Elongation	ASTM D412	900%	60%
Flexural Modulus	ASTM D522	2 mm film passes	
		12 mm mandrel	
Adhesion in Peel	ASTM C957	Pass	
Crack Bridging	ASTM C957	Pass	
Low Temperature Flexibility	1/8" mandrel @ -26°C ASTM C957	Pass	

ASTM D570 0.25% < 0.5% Water Absorption Water Vapour Transmission ASTM E96-Procedure B 0.05 g/hr·pi2 0.29 metric perms 0.029 g/hr·m<sup>2</sup> Water Vapour Permeability ASTM E 96 0.20 perm in. 0.0025 ng/Pa·s·m<sup>2</sup> Water Vapour Permeance ASTM E 96 4.70 x 10-5 perm 0.028 ng/Pa·s·m<sup>2</sup> Shore Hardness **ASTM D 2240** 67 (Shore A) 95/70 (Shore A/D)

**Pass** 

**Packaging** 

Chemical Resistance

**ASTM D 412** 

Durex\* Uraflex Traffic-Bearing Waterproofing System is packaged in bulk kits, 18.9 L (5 gal) and 3.78 L (1 gal) 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.

**Pass** 

**Storage Conditions** 

Store Durex® Uraflex Traffic-Bearing Waterproofing System in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. **KEEP FROM FREEZING**.

**Surface Preparation** 

Surfaces to be coated must be 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 to achieve a compressive strength of concrete of at least 25 MPa (3,625 psi) before coating. Durex\* Epotel Moisture Block 100 can be used as a moisture-mitigating primer for application on new slabs after 14 days. Consult your Durabond Technical Representative for further information. Prepare surfaces by shot-blasting to achieve a profile consistent with ICRI CSP 3-4. Refer to ASTM C1127 for crack treatment. Treat static cracks up to 1/16 inch with Durex\* Uraflex 360 Elastomeric Polyurethane Waterproofing Membrane. Rout and seal all dynamic/moving cracks and static cracks greater than 1/16 inch with a polyurethane sealant and reinforce where applicable. Correct concrete repairs with Durex\* Duracrete Trowel or Durex® Dur-A-Patch RS-45.

**Mixing Instructions** 

Mixing shall be carried out in a clean, rust-free container, and mixed by a power drill at 400-500 rpm maximum. See the respective product data sheets for specific mixing ratios and instructions.

## **Application**

System Description	Coating System Components			
System Description	Membrane	Top Coat #1	Top Coat #2	
Parking Stalls Light Vehicular & Pedestrian	Uraflex 360NP	Uraflex 361 (aggregates 10-15 Lbs/100 SF)	Not Required	
System Thickness: 38 Mils	DFT:20mils	DFT:18mils	-	
<b>Drive Aisles</b> Heavy Vehicular Use	Uraflex 360NP	Uraflex 361 (aggregates 30-45 Lbs/100 SF)	Not Required	
System Thickness: 45 Mils	DFT:20 mils	DFT:25mils		
Turning Lanes & Ramps Extra Heavy Vehicular Use	Uraflex 360NP	Uraflex 361 (aggregates 50-75 Lbs/100 SF)	Uraflex 362 (OPTIONAL: 5 - 10 Lbs/100 SF)	
System Thickness: 56 Mils	DFT:20 mils	DFT: 18 mils	DFT: 18 mils	

Optional Primer: Durex\* Uraflex Primer. Applied at 5 mils DFT. For extremely porous surfaces
Optional High Abrasion Topcoat: Durex\* Uraflex 362. Applied as dictated above replacing Uraflex 361.

**TRAFFIC-BEARING WATERPROOFING MEMBRANE** - **Durex® Uraflex 360NP**: Durex® Uraflex 360 NP Waterproofing Membrane is to be applied at a thickness of 20 wet mils to form an effective waterproofing membrane. Apply with a notched squeegee. The use of a wet-mil 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.



**TRAFFIC-BEARING WATERPROOFING TOPCOAT - Durex® Uraflex 361**: Durex® Uraflex 361 Traffic-Bearing Topcoat is to be applied at varying thicknesses depending on the area of application. Apply materials using a notched squeegee. Immediately after application, the non-slip aggregate is to be broadcasted over the wet surface, distributing the aggregate evenly. Back-roll the coating for a smooth, consistent finish while ensuring to encapsulate the aggregate. Rounded silica sand and aluminum oxide of 20-30 mesh are recommended as non-slip aggregates.

**Light Duty Traffic Areas (Parking Stalls)**: Apply one coat at 18mils broadcasting aggregate at 10-15 lbs per 100 sq.ft.

**Heavy Duty Traffic Areas (Drive Aisles)**: Apply one coat at 25 mils broadcasting aggregate at 30-45 lbs per 100 sq.ft.

**Extra-Heavy Traffic Areas (Turning Lanes & Ramps) Durex \*Uraflex 362**: Apply in two coats at 18 mils for a total thickness of 36 mils. First coat is Durex \*Uraflex 361 to be applied at 18 mils broadcasting aggregate at 50-75 lbs per 100 sq.ft. Second coat, Durex \*Uraflex 362, is to be applied at 18 mils broadcasting aggregate at 5-10lbs per 100 sq.ft. Consult a Durabond Technical Representative for further information.

**Exposed Parking Decks (Areas subject to UV Exposure)**: Apply a final topcoat of Durex® Uraflex 375UV at 10-15 mils broadcasting aggregate at 5-10 lbs per 100 sq.ft. Consult a Durabond Technical Representative for further information.

**OPTIONAL PRIMER:** Durex® Uraflex Primer is an optional primer installed as part of the Durex® Uraflex Traffic-Bearing Waterproofing System. It is formulated to increase adhesion to substrates when necessary for certain conditions and for substrates which may result in out-gassing. Durex® Uraflex Primer is applied at a thickness of 5 mils DFT. Consult a Durabond Representative for further information and recommendations.

Allow a minimum of 24 hours prior to traffic (at 23-35°C). Extended drying times must be accounted for in dry and/or cool environmental conditions. Please contact a Durabond Technical Representative for further assistance and recommendation 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.

# Limitations

Durex® Uraflex Traffic-Bearing Waterproofing System shall not be installed under the following conditions:

- · Concrete Slabs with a moisture content greater than 4% be weight
- · High-compression (super-plasticized) concrete slabs & Unvented Steel Deck Slabs
- Application temperature is less than 3 degrees Celsius above dew point
- · On-grade slabs and split concrete slabs with existing membrane coating
- Minimum ambient and substrate temperatures: Below 7 degrees Celsius for Durex Uraflex 360 NP.
- · Use Durex® Uraflex 375UV for all exposed decks and areas subject to UV rays and direct sunlight

#### **Health and Safety**

Use with proper protective equipment when using/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. Keep product out of reach of children. Read published Material Safety Data Sheet prior to handling and use.

## 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.

