



# SYSTEM DATA SHEET

## KELMAR® T.E.

**Kelmar®**  
waterproofing systems

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## Totally Engineered Traffic Deck System

### Description

The KELMAR® T.E. Traffic Deck System is engineered to meet the various traffic abrasion needs which exist within a parking garage environment. The KELMAR® T.E. System is a rapid curing, high-solids epoxy protective coating system with a proven history of performance. The KELMAR® T.E. System consists of a primer coat, a waterproofing membrane, an abrasion-resistant traffic-bearing wear course, which is seeded with aggregate for wear and skid resistance, and a top coat. The KELMAR® T.E. System maintains skid resistance throughout a long service life.

The KELMAR® T.E. System meets all requirements of ASTM C957 – Elastomeric Waterproofing Traffic Bearing Membrane.

### Components

**PRIMER:** KELMAR® MONOBOND Epoxy Primer Resin and Hardener (Mix 1:1)

OR

KELMAR® DUALOX Water Based Epoxy Primer Resin and Hardener (Mix 1:1:1 water)

**MEMBRANE:** KELMAR® NEO V Membrane (Single Component)

**WEAR COURSE:** KELMAR® CWC Epoxy Wear Course Resin and Hardener (Mix 2:1)

OR

KELMAR® TE Epoxy Wear Course Resin and Hardener (Mix 1:1)

**TOP COAT:** KELMAR® 1910 UV Resistant Acrylic Top Coat (Single Component)

OR

KELMAR® 1920 UV Resistant Epoxy Top Coat Resin and Hardener (Mix 2:1)

**AGGREGATE:** Flint Silica or GS-20 Silica Sand or equivalent

### Typical Uses

- Parking garages
- Areas requiring abrasion resistance combined with waterproofing needs
- Loading docks

### Features

- Passes ASTM C957-15 Testing
- Prevents chloride ion penetration
- Bonded, elastic membrane
- High traction skid-resistant wear course
- Highly resistant to chemicals & corrosion
- Easily recoated
- Flame Spread (ASTM E84) – Class A

### Limitations

- MUST be installed by an Approved Applicator
- Surface and air temperatures MUST be at least 10°C (50°F) during entire application and cure time

### Application

- Surface must be checked for soundness and any hollow areas must be removed; All depressions, spalled areas and cracks must be pre-filled with approved products
- Concrete substrate must have laitance removed by shot blast method or diamond grinding
- Detailing work such as injection and treatment of control and expansion joints shall be according to specification recommendation
- Thickness adjusted for varying degrees of traffic exposure:
- Store material in a dry area 10°C to 27°C (50°F – 80°F)
- DO NOT FREEZE

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#### Theoretical Coverage

##### PRIMER -

KELMAR® MONOBOND - 401 ft<sup>2</sup>/gal @ 4 wet mils  
KELMAR® DUALOX - 267 ft<sup>2</sup>/gal @ 6 wet mils

##### MEMBRANE -

KELMAR® NEO V - 50 ft<sup>2</sup>/gal @ 32 wet mils

##### WEAR COURSE -

KELMAR® CWC or TE - 89 ft<sup>2</sup>/gal @ 18 wet mils  
70 ft<sup>2</sup>/gal @ 23 wet mils

**Exposure 1 - Light Duty:** 18 wet mils

-For pedestrian areas

**Exposure 2 - Medium Duty:** 23 wet mils

-For parking stalls and light to medium traffic

**Exposure 3 - Heavy Duty:** 23 + 23 wet mils

-For all driving lanes, ramps, high torque turning areas, entrance/exit areas and all exposed top deck areas that will be subject to snow plowing

**Exposure 4 - Extra Heavy Duty:** 23 + 23 + 23 wet mils

-For extra heavy traffic, shipping & receiving areas and areas of heavy truck/bus traffic, etc.

**\*Industrial areas may require thicker wearcourse layers -**

**Consult a Kelmar representative to be sure that the correct traffic requirements are being met**

##### TOP COAT -

KELMAR® 1910 or 1920 - 100 ft<sup>2</sup>/gal @ 16 wet mils

- COVERAGE WILL VARY DEPENDING ON AGGREGATE SIZE**

#### Physical Properties

• <b>Tensile Strength</b> (ASTM D412)	1600 psi (11Mpa)
• <b>Tensile Elongation</b> (ASTM D412)	600% (membrane)
• <b>Abrasion Resistance</b> (ASTM C501)	0.044 g/1000 cycles
• <b>Impact Resistance</b> (Gardner Impact Test)	160 in/lb
• <b>Test for Surface</b> <b>Burning Characteristics</b> (ASTM E84)	
Flame Spread	14
Fuel Contribution	0
Smoke Development	241
Class	A
• <b>Hardness, Shore D</b> (ASTM D2240)	71
• <b>Waterproofing Traffic-Bearing Membrane</b> (ASTM C957)	PASS
• <b>Crack Bridging Ability</b> (ASTM C1305)	PASS
• <b>Adhesion-in-Peel</b> (ASTM C794)	26.4 lbf Average On cement mortar after 7 day immersion

#### Safety Precautions

Please refer to product Safety Data Sheet

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Chemical Resistance testing (ASTM D1308) using spot-test procedure indicates KELMAR® T.E. is unaffected by the following:

**Automotive Fluids:**

Grease	Heptane
Motor Oil	Hexane
Transmission Oil	Anti-Freeze
Gasoline	

**Inorganic Salts:**

Calcium Chloride, 20%	
Ammonium Chloride, 20%	
Sodium Chloride, 20%	
<b>Inorganic Salts (cont'd):</b>	
Sodium Carbonate, 20%	
Sodium Phosphate, 20%	
Sodium Sulfate, 20%	
Magnesium Sulfate, 20%	

**Solvents**

Acetone
Methyl Ethyl Ketone
Denatured Alcohol
Butyl Alcohol
Butyl Acetate
Carbon Tetrachloride
Trichloroethylene
Cellosolve Solvent
Toluene
Xylene
Mineral Spirits

**Organic Acids**

Acetic 10%
Citric 20%
Lactic 40%
Gluconic 40%
Tartaric 40%

**Inorganic Acids**

Chromic 20%
Hydrochloric 30%
Nitric 40%
Hydrofluoric 20%
Phosphoric 50%
Sulphuric 60%

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