



TBS SYSTEM DATA SHEET

TECHNICAL BARRIER SYSTEMS INC.



TEL: 905.842.9488 FAX: 905.842.1582 TOLL FREE: 1.888.537.2888
EMAIL: MAIL@TBSPRODUCTS.COM WEB: WWW.TBSPRODUCTS.COM

KELMAR[®] PC

Flexible Modified Polymer Traffic Deck System

Description

Kelmar[®] PC is a modified polymer traffic deck waterproofing system specifically engineered for treating Pre-Cast Parking Structure joints. The Kelmar[®] PC waterproofing system consists of an epoxy primer, NEO V II C latex based waterproofing membrane reinforced with a nylon mesh and an abrasion resistant flexible traffic bearing wear course blended with #151 Aggregates. A topcoat is required for traffic decks exposed to UV. The topcoat is optional for enclosed decks. If the entire deck is receiving deck coating, Kelmar PC system is applied a foot wide at the joint and the rest of the deck coated with Kelmar FWC 111 deck coating system.

If only the joints are treated, the following are the 3 options for applying Kelmar PC system, depending upon the requirement of the structure:

Option 1 Kelmar PC 1

1 foot wide Kelmar PC system at the joint

Option 2 Kelmar PC 2

1 foot wide Kelmar PC system at the joint with a foot wide Kelmar FWC 111 wear course on either side, total 3 feet.

Option 3 Kelmar PC 3

1 foot wide Kelmar PC system at the joint with a foot wide Kelmar FWC 111 system including Neo V 11 C waterproofing membrane on either side, total 3 feet.

Typical Uses

- Pre-Cast Parking structure joint treatment.

Advantages

- Provides a seamless, flexible wear course over waterproofing membrane
- Remains flexible over a wide range of temperatures
- Extremely durable
- Provides an excellent skid-resistant surface
- Resistant to most automotive chemicals
- Odorless, No VOC
- Rapid curing

Features

The Kelmar[®] PC system wear course is a flexible modified polymer blended with #151 Aggregates that will remain flexible and gives long service life.

Application

- Surface must be checked for soundness and any hollow areas must be removed. All depressions and spalled areas and cracks must be pre-filled with a product approved by TBS.
- Concrete substrate must have the laitance removed preferably by a shot blast method
- Detailing work such as injections and treatment of control for cracks and expansion joints shall be according to specification recommendation
- Must be installed by a TBS Approved Applicator

Limitations

- All substrate must be sound, clean, dry (ASTM D 4263) and free from all contaminants
- Substrate temperature at the time of application must be between 50⁰ F (10⁰C) and 90⁰ F (32⁰C)

Physical Properties

Tensile Strength	
ASTM D 638	2000 psi 14 Mpa
Tensile Elongation (membrane)	600%
ASTM D 412	
Impact Resistance	
Gardner- Direct	160 in/lb
Adhesion to Concrete	300 – 350 psi
Elcometer	
Hardness, Shore D	
ASTM D 2240	71
Taber Abrasion	
ASTM D 4060	0.5g weight loss @ room temp
CS-17 wheels	0.3g weight loss @ 150°F
5000 cycles	
Gel Time	15-20 minutes

Chemical Resistance

Testing in accordance with ASTM-D-1308 spot test procedure indicates that Kelmar® PC is unaffected by the following reagents.

Automotive Fluids
Grease
Motor Oil
Transmission Oil
Anti-Freeze
Gasoline
Heptane
Hexane

Solvents
Acetone
Methalethol Ketone
Alcohol (Denatured)
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%
Hydroflouric Acid 20%
Phosphoric Acid 50%

Inorganic Salts
Calcium Chloride 20%
Ammonium Chloride 20%
Sodium Chloride 20%
Sodium Carbonate 20%
Sodium Phosphate 20%
Sodium Sulfate 20%
Magnesium Sulfate 20%

ALKALIS
Ammonium Hydroxide (Conc)
Potassium Hydroxide 30%
Sodium Hydroxide 30%
Sodium Silicate 20%
Lime Water – Saturated Calcium - Hydroxide Solution

Thickness (Excluding aggregate)

55 mils

Safety Precautions

Please refer to product MSDS Sheet.

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