



### Flexible Wear Course Traffic Deck System

#### Description

The KELMAR® FWC Traffic Deck System is a rapid curing, odor free, high-solids epoxy/sand matrix which provides long service life with maintained skid resistance. The KELMAR® FWC Traffic Deck System consists of a primer coat, a waterproofing membrane, an abrasion resistant traffic-bearing wear course, seeded with aggregate for durability and skid resistance and a top coat.

#### Components

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

**OR**

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

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

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

**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

#### Limitations

- MUST be installed by an Approved Applicator
- DO NOT USE in areas subjected to thermal shock
- NOT recommended for light weight concrete
- 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
- Store material in a dry area 10°C to 27°C (50°F – 80°F)
- DO NOT FREEZE

#### Typical Uses

- As a waterproofing system for parking structures
- Pedestrian walkways and balconies
- Stadiums
- Mechanical equipment rooms

#### Features

- UV resistant
- No odor
- Provides a seamless wear course over waterproofing membrane
- Remains flexible over a wide range of temperatures
- Provides an excellent slip-resistant surface
- Wear course thickness can be adjusted for varying degrees of traffic exposure
- Resistant to automotive fluids and salts
- Available in a range of colors

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Revision Date: June 3, 2021



## SYSTEM DATA SHEET

# KELMAR® FWC

**Kelmar®**  
waterproofing systems

Page 2 of 3

## Flexible Wear Course Traffic Deck System

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

- **COVERAGE WILL VARY DEPENDING ON AGGREGATE SIZE**

### Physical Properties

#### Crack Bridging

ASTM C957 Passes

#### Tensile Strength

ASTM D638 2000 psi  
14 Mpa

#### Tensile Elongation

ASTM D412 600% (membrane)

#### Impact Resistance

Gardner- Direct 160 in/lb

#### Adhesion to Concrete

Elcometer 300 - 350 psi

#### Hardness, Shore D

ASTM D2240 71

#### Taber Abrasion

ASTM D4060 0.5-gram weight loss @ room temp

(CS-17 wheels) 0.3-gram weight loss @ 150°F

#### Gel Time

15-20 minutes

#### Test for Surface Burning Characteristics

ASTM E84

Flame Spread	14
Fuel Contribution	0
Class	1 or A

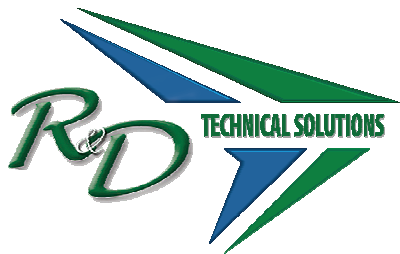
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### Chemical Resistance

Testing in accordance with ASTM-D-1308 spot test procedure indicates that the Kelmar<sup>®</sup> FWC System is unaffected by the following reagents.

<b>Automotive Fluids</b>
Grease
Motor Oil
Transmission Oil
Anti-Freeze
Gasoline
Heptane
Hexane

<b>Solvents</b>
Acetone
Methyl Ethyl Ketone
Alcohol (Denatured)
Butyl Alcohol
Butyl Acetate
Carbon Tetrachloride
Trichloroethylene
Cellosolve Solvent
Toluene
Xylene
Mineral Spirits

<b>Organic Acids</b>
Acetic 10%
Citric 20%
Lactic 40%
Gluconic 40%
Tartaric 40%

<b>Inorganic Acids</b>
Chromic 20%
Hydrochloric 30%
Nitric 40%
Hydrofluoric Acid 20%
Phosphoric Acid 50%

<b>Inorganic Salts</b>
Calcium Chloride 20%
Ammonium Chloride 20%
Sodium Chloride 20%
Sodium Carbonate 20%
Sodium Phosphate 20%
Sodium Sulfate 20%
Magnesium Sulfate 20%
Ammonium Hydroxide (Conc)
Potassium Hydroxide 30%
Sodium Hydroxide 30%
Sodium Silicate 20%
Lime Water – Saturated Calcium - Hydroxide Solution

### Safety Precautions

Please refer to product Safety Data Sheet