

POLY-CARB

PROVEN PERFORMANCE SYSTEMS



# POLY-CARB

## PAVEMENT MARKINGS



Long-life pavement marking solutions from POLY-CARB provide some of the most dependable day and nighttime visibility in the industry on both asphalt and concrete. Many long-life pavement marking installations have shown high nighttime reflectivity, even after heavy traffic and snow plows.



# CO-POLYMER

## BRIDGE DECK OVERLAY SYSTEM



For over 3 decades, POLY-CARB has set the standard for bridge deck protection.

Our co-polymer overlay system is **twice as strong as concrete** and **impermeable to water and sodium chloride**. Additionally, it maintains **skid numbers above 50\***, even after **multiple years of service**. This system can be customized to meet specific performance and budgetary requirements over varying climatic conditions.

In order to mix, meter and dispense material at controlled temperatures with precise application, POLY-CARB engineered the FLEXOGRID Machine.

- Optimized quality control
- Accelerated installation speed
- POLY-CARB is the only material manufacturer that owns and operates its own specialized application equipment for thin co-polymer overlays

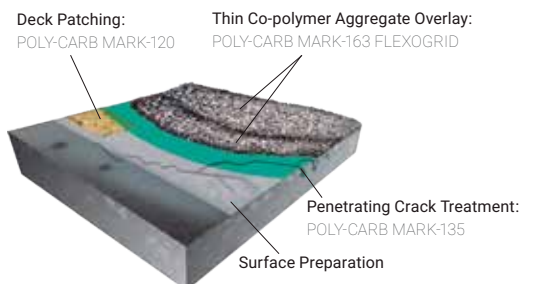
Properties	Unit	Typical Value	Test Methods
Tensile Strength	psi	2,200	ASTM D638
Elongation	%	30	ASTM D638
Compressive Strength	psi	8000	ASTM C109
Adhesion to Concrete	psi	> 400	ACI 503
Chloride Ion Permeability	coulombs	0	ASTM C1202
Weight (finished system)	lbs	2-3ft <sup>2</sup>	-
Hardness	Shore D	70	ASTM D2240

### Features:

- Thin and lightweight, yet tough and flexible
- Impervious to moisture and chloride contamination
- Low temperature cold weather formulations available
- Ideal for new construction and bridge restoration/preservation
- Precise mechanized installation
- Strong adhesion to concrete and metal surfaces
- Variety of aggregates available

### Benefits:

- Proven long-term performance
- Skid-resistant surface provides safety enhancements
- Protection helps preserve underlying infrastructure
- Rapid asset return to service
- Extended construction season



\*ASTM E303

# UREGRID™

## MONOLITHIC WATERPROOFING SYSTEM



POLY-CARB MARK-155 UREGRID is an advanced polymer **monolithic waterproofing system** for conventional and reinforced concrete, box-beam and metal bridge decks that have an asphalt wearing surface. It offers **long-term protection** from corrosion caused by the ingress of water, de-icing chemicals and other contaminants.

Due to the intrinsic characteristics of the two-component formulation, the elastomer system cures rapidly and shows a high level of resistance to temperature and humidity during application. POLY-CARB **utilizes specialized spray-applied robotic technology** for the application of UREGRID. The mechanized equipment controls the critical elements of the installation for **uniform and seamless** distribution of properly mixed material.

Consistent quality in the formulation, materials and installation of the UREGRID System deliver a high-performance waterproofing membrane that effectively helps **extend the life of bridge assets**.

### Features:

- Effective solution to replace underperforming rolled membrane systems
- Fast set spray-applied monolithic membrane
- Strong adhesion to concrete and metal surfaces
- Controlled installation with robotic technology

### Benefits:

- Cost effective solution that minimizes future expenditures and maximizes current budgets
- Minimal traffic inconvenience with accelerated back to service time
- Long-lasting waterproofing protection
- Asphalt replacement without removal of the membrane

Properties	Unit	Typical Value	Test Methods
Tensile Strength	psi	> 2,000	ASTM D638
Elongation	%	> 150	ASTM D638
Puncture Resistance	G	> 2,000	ASTM D1709
Crack Bridging Ability		Pass @ 10 Cycles	ASTM C836
Water Vapor Transmission	grains/ft <sup>2</sup> /hr	0.1	ASTM E96
Adhesion to Concrete	psi	> 400	ACI 503
Hardness	Shore D	50	ASTM D2240
Tear	pli	383	ASTM D624C
Tack Free	sec	15-20	Sprayed

# SAFE-T-GRID™

## HIGH FRICTION SURFACING SYSTEM



SAFE-T-GRID is a single layer, flexible polymer-aggregate high friction surfacing system. The single-coat system adds increased **skid resistance and roadway identification to help improve visibility and safety. It is more cost effective than concrete overlays and other competitive offerings.** A second layer can be applied for added durability and for open-grade asphalt applications.

Based on **proven technology**, SAFE-T-GRID is able to deliver skid resistance and excellent color demarcation even after years of wear and tear from weather, traffic and snow-plows. **A variety of aggregates can be utilized to meet specific performance, color and budgetary requirements**, as well as weather conditions.

SAFE-T-GRID is a fast-curing system that allows for traffic service to be restored within hours of the application.

Properties	Unit	Typical Value	Test Methods
Tensile Strength	psi	2,800	ASTM D638
Elongation	%	45	ASTM D638
Compressive Strength (3 hr)	psi	2,500	ASTM C109
Compressive Strength (24 hr)	psi	7,500	ASTM C109
Adhesion to Concrete	psi	> 400	ACI 503

### Features:

- Thin, yet tough and flexible
- Strong adhesion to concrete, asphalt and metal surfaces
- Fast-curing formulation
- Precise mechanized installation available
- Variety of aggregate colors, sizes and textures available

### Benefits:

- Skid-resistant surface provides safety enhancements
- Proven accident rate reduction
- Installation with minimal traffic congestion
- Rapid asset return to service
- Supports preservation of underlying infrastructure
- Color and audible differentiation alerts drivers
- Low life-cycle costs

### Applications:

- Roads with hazardous curves
- Bus lanes and stops
- Bicycle or pedestrian paths
- Toll authority lanes
- School & hospital speed zones
- Intersections & crash prone areas
- Highway & parking access ramps
- Airport access lanes

# POLY-CARB

**For more information, please visit [www.poly-carb.com](http://www.poly-carb.com)**

**USA & Canada: 1-800-225-5649**

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