



## Product and Application Guide



Excellence in  
Waterproofing, Roofing  
and Surfacing Technology





# High-Performance, 'Built-to-Last' Roofing and Waterproofing Systems

With more than 50 years of proven experience, Kemper System is the world leader and innovator of the highest quality, cold liquid-applied, fully reinforced waterproofing and roofing membrane systems. From the scorching heat of Puerto Rico to the ice and freezing temperatures of Alaska, our products stand the test of time, even under the most adverse conditions.

We offer three core liquid resin membrane technologies – each with special advantages – that can address a range of challenges across the building envelope. These versatile fleece-reinforced membrane systems provide monolithic, edge-to-edge protection for long-term performance.

## Common Advantages / Uncommon Performance

Unlike many other roofing and waterproofing systems, the cold, liquid-applied system eliminates seams and other areas where most leakage occurs. Our versatile systems are excellent for projects with multiple penetrations, such as stanchions and roof anchors, and for sealing around skylights and other architectural details. We also offer two advanced Traffic Coating technologies.



# At the Heart of Our Liquid Membrane Systems

A high-strength, needle-punched polyester fleece absorbs the liquid resin while providing omni-directional reinforcement. Once saturated, the Kemperol® 165 fleece achieves proper mil thickness without a second topcoat. The easy-to-apply liquid-resin membrane system provides durable, long-term protection.

## Unique Features and Benefits

Kemperol® liquid-resin membrane systems bond tenaciously to all common construction materials including:

- concrete • CMU block
- brick • wood • stainless steel • copper
- galvanized steel • aluminum • cast iron
- glass • fiberglass • cement board
- treated gypsum board • rigid PVC



*Washington, D.C.*

- **Fully reinforced:** The fleece reinforces the membrane throughout and from edge to edge.
- **Seamless technology:** Eliminates any areas of fatigue or weakness.
- **Adheres to virtually any substrate:** Regardless of configuration – vertical or horizontal.
- **Cold-fluid application:** eliminates torches, kettles and fire hazards.
- **“Odor-free” products:** Available for occupied buildings and interior or exterior applications.
- **24/7 application:** Eliminates need for phasing the installation.
- **Self-flashing:** Eliminates need for pitch pockets and metal detailing.
- **Self-terminating:** Eliminates need for termination bars, fasteners, caulks and adhesives.
- **Resists weather extremes:** Unaffected by ponding water and ice.
- **UV and chemical resistant:** Resistant to UV exposure, chemicals, oils and solvents.
- **Rot and root resistant:** Impervious to bio-deterioration... Ideal for green roofing and below-grade installations. FLL tested and approved.
- **Highly durable, long life cycle:** Withstands dimensional movement on virtually any substrate.





# The Ultimate in “Odor-Free” Technology

## Kemperol® 2K-PUR Two-component Liquid Membrane System

*Polyurethane-based cold liquid-applied reinforced membrane system*

Our best-selling solvent-free and “odor-free” system for exterior and interior applications.

This environmentally friendly system is ideal for all applications, from new construction to re-roofs and historic restorations. “Odor-free” also makes Kemperol® 2K-PUR a popular choice for indoor applications such as water features, as well as occupied buildings and sensitive areas such as schools, hospitals, senior housing, roof terraces and balconies.

## The Perfect Match for ‘Green,’ ‘White’ or ‘Blue’ Roof Designs

Vegetated “green” roofs  
(FLL approved; no root barrier needed)

“Blue” roofs (water retention systems)

Cool “white” roofs (high reflectivity coatings available)

Contributes to LEED credits:

LEED Stormwater Design

SS Credit 6.1 (1 Point) / SS Credit 6.2 (1 Point)

LEED Heat Island Effect

SS Credit 7.2 (1 Point)

*Palo Alto, California*



## Typical Applications

**Roofing:** Direct-to-substrate roofing, recover roofing, insulated roofing, IRMA roofing, green/landscaped roofing, and metal recover roofing.

**Waterproofing:** Plaza decks, balconies, water features, below-grade, between-slab, through-wall flashing, masonry restoration, secondary containment.

## Product Description

A two-component, solvent-free and odor-free, fleece-reinforced, liquid-applied waterproofing system. 80% of the resin is derived from renewable sources. (VOC is 6 g/l.)

### The waterproofing and roofing system includes:

1. Primer approved for substrate
  - Kempertec® EP epoxy-based primer for concrete or masonry
  - Kempertec® D urethane-based primer for metal or wood
2. Kemperol® 2K-PUR resin with Kemperol® 165 polyester fleece reinforcement

### Surface and finishing options:

- Kempertec® EP alkalinity protection/adhesion key
- Kemperdur® Deko colored coating
- Kemperdur® 2KS-FR heavy-duty roof coating
- Kemperdur® BSF-R "odor-free" roof coating
- Kemperdur® TC Traffic Coating (See pg. 10)
- Kemperdur® EP-FR "odor-free," stone-gray interior topcoat

## Available Kemper System Warranties

20, 25\* and 30\* years

\* Subject to manufacturer's approval

*Palo Alto, California*







Above & Right: Atlanta, Georgia



## The Original in Proven System

### The Kemperol® BR / V210 System

*Polyester-based cold liquid-applied reinforced membrane system*

Kemperol® V 210 is the “original” cold-liquid applied resin membrane technology developed by Kemper System more than 50 years ago to address roofing challenges in Europe. It has been proven in climates around the world. Beyond roofing, the technology also includes Kemperol® BR which can be applied under asphalt, cement slabs or paving stones.

### Typical Applications

**Roofing** (Kemperol® V210): Direct-to-substrate roofing, recover roofing, insulated roofing, IRMA roofing, green/landscaped roofing, and metal recover roofing.

**Waterproofing** (Kemperol® BR): Plaza decks, below-grade, between-slab, through-wall flashing, masonry restoration, secondary containment, and many other related uses.



# Performance

## Product Description

The resin components of the system are a one- or two-liquid-component polyester with a powdered catalyst.

### The waterproofing and roofing system includes:

- 1. Primer approved for substrates
  - Kempertec® EP epoxy-based primer for concrete or masonry
  - Kempertec® D urethane-based primer for metal or wood
- 2. Kemperol® BR / V210 resin with Kemperol® 165 polyester fleece reinforcement

### Surface and finishing option (for Kemperol® BR):

- Kempertec® AC Primer protection/adhesion key

## Available Kemper System Warranties

20, 25\* and 30\* years

\* Subject to manufacturer's approval



New York, New York



Lakeland, Florida





Tacoma, Washington

## Rapid-curing Resin Technology for Same-day Application

### Kemperol® AC

#### *PMMA-based cold liquid-applied reinforced membrane system*

With the Kemperol® AC membrane system, many jobs can be completed in the same day. It can be installed either as a complete edge-to-edge membrane system or in discrete locations to address localized conditions. The rapid-curing resin technology can be especially important for balconies and exterior walkways in occupied buildings.

### Applications

**Roofing:** Direct-to-substrate roofing, recover roofing, insulated roofing, IRMA roofing, green/landscaped roofing, and metal recover roofing.

**Waterproofing:** Plaza decks, fountains and other water features, below-grade, between-slab, through-wall flashing, masonry restoration, secondary containment, and many other related uses.

New York, New York

### Product Description

The Kemperol® AC system is based primarily on two-component polymethyl methacrylate (PMMA) technology, incorporating a liquid component and a powdered catalyst.

#### The waterproofing and roofing system includes:

1. Kempertec® AC Primer
2. Kemperol® AC Resin with Kemperol® 165 polyester fleece reinforcement

#### Surfacing and finishing options:

- Kemperdur® AC Traffic Coatings (see pg. 11)
- Kemperdur® AC Finish

### Available Kemper System Warranties

20, 25\* and 30\* years

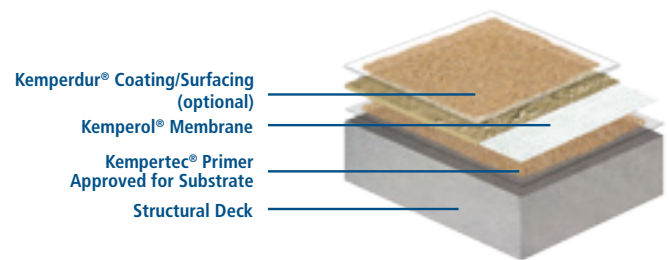
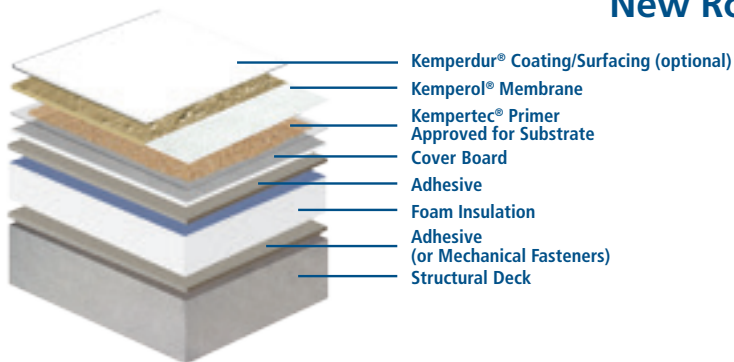
\* Subject to manufacturer's approval



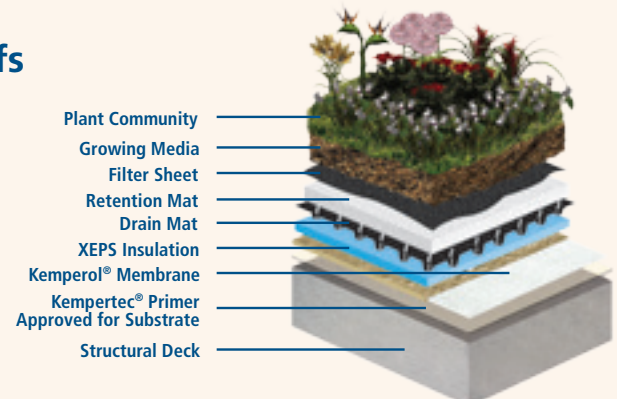
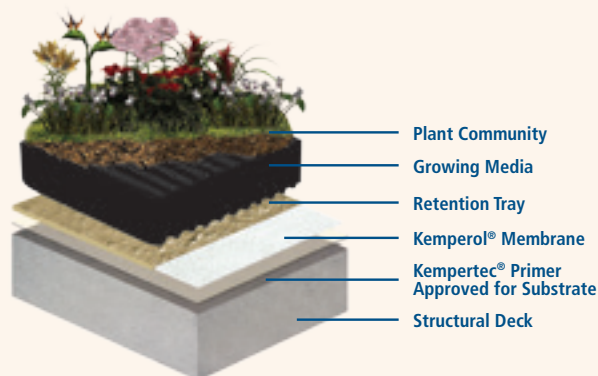


# Typical Kemperol® Liquid-resin Membrane Assemblies (All Three Systems)

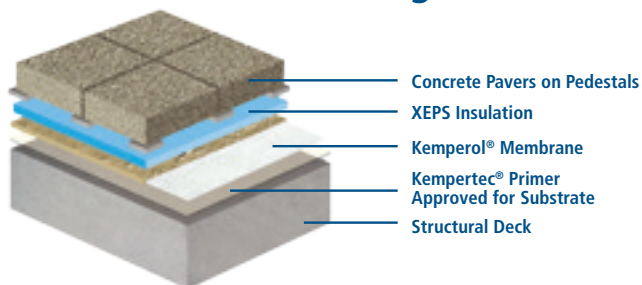
## New Roofs



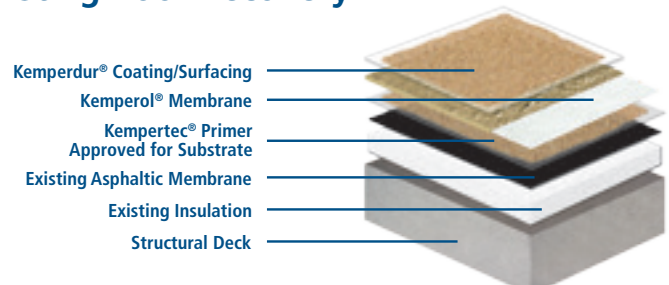
## Green Roofs



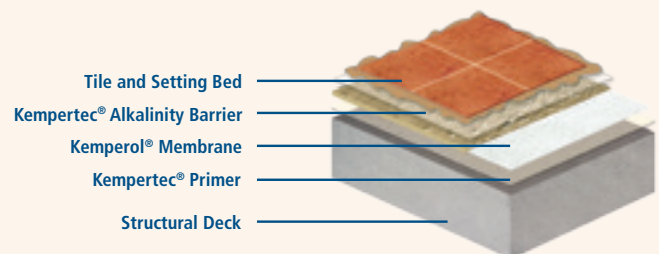
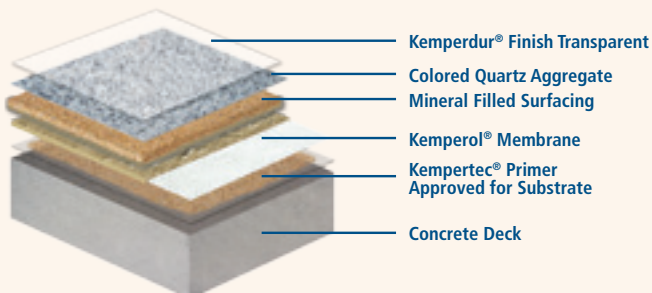
## Plaza and IRMA Roofing



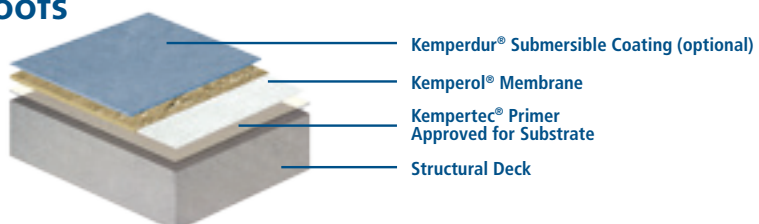
## Existing Roof Recovery



## Balconies and Terraces



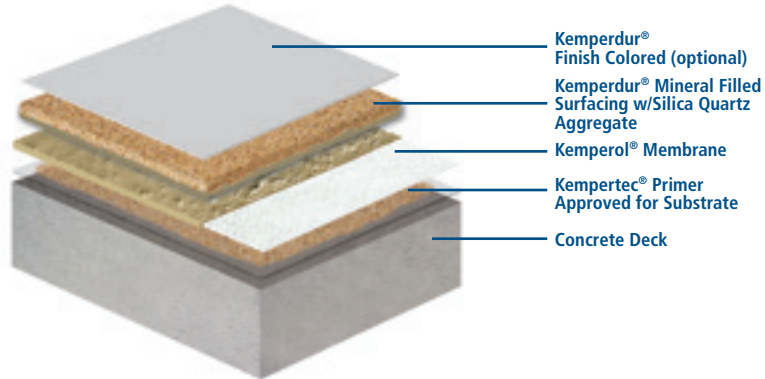
## Fountains and "Blue" Roofs



# Two Advanced Technologies for Traffic Coating and Surfacing

Beyond variations in the weather, traffic coatings and surfaces may be subject to mechanical and chemical stress.

*Available in standard colors and aggregate blends for traction-enhanced surfacing.*



Boston, Massachusetts



## A Solvent-free and “Odor-free” Technology for Concrete Surfaces

### Kemperdur® TC Traffic Coating

*A long-lasting protective wear coating and surfacing system for exterior and interior concrete surfaces.*

The odor-free Kemperdur® TC Traffic Coating system is ideal for surfacing enclosed concrete decks and walkways and both interior and exterior areas of occupied buildings, especially hospitals, schools, adult living centers, etc.

#### Typical Applications

Heavy-duty pedestrian and light-duty traffic coating and surfacing.

Exterior and interior concrete surfaces, including parking garages and rooftop parking decks, balconies, courtyards, terraces and walkways.

#### Product Description

Three component, mineral-filled, highly durable, self-leveling, solvent-free, polyurethane-based system. A mineral aggregate selected for the intended application is broadcast into the surfacing mixture to excess while semi-cured, becoming an integral part of the Kemperdur® TC Traffic Coating. (VOC is 6 g/l.)







Sawgrass, Florida

## A Heavy-duty Traction-enhancing Technology

### Rapid-curing Kemperdur® AC Traffic Coating

*A high-performance system for heavy-duty traction-enhanced surfacing.*

Where traction is needed, the Kemperdur® AC Traffic Coating system bonds to almost all substrates for a skid-resistant surface. The self-leveling topcoat system is combined with quartz or other mineral aggregates to achieve enhanced surfacing. The rapid-curing resin system can help satisfy same-day turnaround on some jobs.

#### Typical Applications

Heavy-duty pedestrian and light-duty traffic coating and surfacing.

Exterior concrete surfaces, including parking garages and rooftop parking decks, balconies, terraces and walkways.

#### Product Description

Three component, cold-applied liquid polymethyl methacrylate (PMMA) coating system, includes AC resin and a powdered catalyst, plus a specified mineral filler. The aggregate is broadcast into the surfacing system, becoming an integral part of the traffic coating.



## Made in the USA

Built-to-last performance begins with consistent quality materials. Many Kemper System roofing and waterproofing products for the Americas are "Made in the USA" at our world-class ISO-certified manufacturing plant in West Seneca, New York, also home to our North American headquarters. Our liquid resin systems are manufactured and packaged to strict quality control standards to yield consistent quality from batch to batch.

## Excellence in Waterproofing, Roofing and Surfacing Technology

Our highly trained and professional staff stands behind our technology with a half-century of experience and expertise. If you have a challenging project that requires a built-to-last, peace of mind, long-term solution, contact Kemper System today.



See our website for an up-to-date list of our certifications.



Visit the Project Profiles page of our website.



### KEMPER SYSTEM AMERICA, Inc.

1 Reuten Drive  
Closter, NJ 07624  
Tel: (201) 833-8898  
Toll Free: (800) 541-5455

[www.kempersystem.net](http://www.kempersystem.net)

### KEMPER SYSTEM CANADA, Inc.

5200 Dixie Road, Suite 13  
Mississauga, ON L4W 1E4  
Canada  
Tel: (905) 624-5463

[www.kempersystem.ca](http://www.kempersystem.ca)

### NORTH AMERICAN HEADQUARTERS

1200 North America Drive  
West Seneca, NY 14224  
Tel: (716) 558-2971



All information and statements contained herein are believed to be accurate, but Kemper System America, Inc., its agents and/or affiliates make no warranty with respect thereto, including but not limited to any results to be obtained or the infringement of any proprietary right. Improper and unauthorized use or application of such information or statements or the material or systems described herein is at user's sole discretion and risk, and consequently user acknowledges that Kemper System America, Inc. shall bear no responsibility or liability for same. Nothing herein shall be construed as a license of or recommendation for use which infringes any proprietary right. All sales are subject to Kemper System America, Inc.'s Standard Terms and Conditions of Sale, including but not limited to its Limited Warranty.

