

# Perdure UMC SL

## self-leveling urethane concrete topping

### DESCRIPTION

Perdure UMC SL is a seamless self-leveling urethane modified concrete topping. It is ideal for medium to heavy duty traffic areas where thermal shock resistance is a requirement. Perdure UMC SL exhibits excellent impact and chemical resistance. It is tolerant to moisture vapor emission on well prepared concrete substrates. Its built-in textured surface reduces slipping under wet conditions. It can be installed with an integral cove base for areas requiring seamless wall to floor systems. It will not support the growth of fungus or bacteria. Installing Perdure UMC SL with a textured surface reduces slipping under most wet conditions. It is a great choice for wet areas like those typically found in dairies, food processing areas, commercial kitchens, breweries, bakeries, etc.

### ADVANTAGES

- Suitable for high impact, thermal shock and high traffic areas
- Excellent Chemical resistance
- Low odor for use in occupied areas
- Does not support growth of fungus or bacteria
- Moisture vapor resistant – 15lbs/1000ft<sup>2</sup>/24hr & 95% RH
- Meets USGBC – LEED criteria for low VOC
- Rapid on step application for fast return to service on properly prepared substrates

### SUBSTRATE REQUIREMENTS

- Should be applied when temperature is between 50°F and 80°F
- Substrate must be free from condensation or water contamination during application and cure
- Concrete Substrate must be free of dirt, waxes, curing agents and other foreign materials
- Expansion joints in the substrate must be honored
- Movement of substrate cracks may transmit through the system
- CSP of 4 or 5 is required for proper bonding

### INSTALLATION

#### Priming

Priming of concrete substrates is not usually required on well prepared surfaces. However, due to variations in concrete quality, surface conditions, surface preparation and ambient conditions, reference test areas are recommended to determine whether priming is required to prevent the possibility of blisters, debonding, pinholes and other aesthetic variations. The primer recommended for this system is Perdure UMC SC.

### Mixing Perdure UMC SL

- Set up the mixing station as close to the work area as possible. Exothermic heat will be generated, and flash setting may occur if material remains in the mixing pail for longer than 10 minutes.
- One kit of Perdure UMC SL consists 4 components including the color pack. Pour Part I and Part II into an empty pail and mix for 30 seconds. Add the Pigment pack (except when neutral color is used with Kwartz) while mixing Part I and Part II.
- Add Part III slowly to the mix while continuously mixing the liquid components. Mix all the components for 3 to 4 minutes. Ensure thorough mixing of all the components without changing their proportions.
- The mixing bucket and mixing paddle should be scraped thoroughly and cleaned with solvents like MEK or Xylene after mixing 2 to 3 kits. If plastic pail is used for mixing dispose the bucket after every 3 to 4 mixes. Use a brand-new mixing pail ever 3 to 4 mixes when plastic pails are used.

### Application of Perdure UMC SL

- Perdure UMC SL is self-leveling grade available in two different grades. One that can be applied between 1/16" to 1/8" and another that can be applied between applied at 3/16" to 1/4" thickness. Using a notched trowel or gauge rake the mixed product evenly at the desired thickness. Use a 3/8" nap roller or loop roller and lightly back roll the surface while it is still wet. Always maintain a wet edge. It is a common practice to wear spiked shoes to walk into the wet material.
- It is also a common practice to broadcast 30 mesh silica sand and topcoat it with pigmented Perdure P72 or chemical resistant novolac epoxy for extreme chemical resistance.

### COMPOSITION

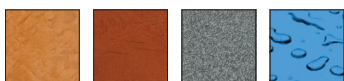
Perdure UMC SL is blend of polyol and isocyanate and finely grade mineral fillers.

### COLOR SELECTION

Refer to Perdure UMC Color chart.

### COVERAGE

1 kit of Perdure UMC SL covers 80ft<sup>2</sup> at 1/16" thickness and 30ft<sup>2</sup> at 3/16" thickness.



## CURE/DRY TIME

Working Life	10 to 15 minutes @ 75°F, 50% RH
Recoat	6 to 8 hours @ 75°F, 50% RH
Light foot traffic	8 to 10 hours @ 75°F, 50% RH
Light Vehicular traffic	16 to 24 hours @ 75°F, 50% RH
Full cure & Max resistance	3 to 5 days @ 75°F, 50% RH

## PHYSICAL PROPERTIES

Fungus & Bacteria Growth	MIL F 52505 4.4.2.11	Will not support growth of fungus or bacteria when subjected to mildew and bacteria tests
Hardness, Shore D	ASTM D2240	80-85
Adhesion to Concrete	ASTM D7240	300-400 psi (concrete failure)
Flexural Strength	ASTM C580	2000psi
Coefficient of Friction	ASTM D2047	0.80
Water Absorption	ASTM D570	0.10%
Thermal Shock Resistance	ASTM C884	Passes
Abrasion Resistance	ASTM D4060 / CS17 Wheel, 1000 cycles	50mg
Impact Resistance	MIL F 3134J	Withstands 16ft/lb without cracking, delamination or chipping
Compressive Strength	ASTM C579, 7 days	7500psi
Tensile Strength	ASTM C307	800psi
Thermal Coefficient of Friction	ASTM C531	1.1 X 10 <sup>-5</sup> in/in/per °F
Service Temperature Resistance		-50 to 240°F wet, 280°F wet intermittent, 350°F dry
VOC	EPA Method 24	0.0g/L, compliant to low VOC Rule 1113 in all 50 states

## AVAILABILITY

Perdure UMC SL is available throughout the United States and Canada. Contact Duraamen representative in your area for details.

## MAINTENANCE

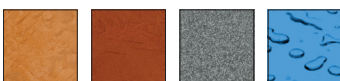
After completing the application of Perdure UMC SL, the installer should provide the owner with maintenance instructions. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly. Perdure UMC SL is easily cleaned with neutral soaps or detergents. Routine mechanical scrubbing is recommended for all surfaces having a non-skid texture. Waxing is optional. Long periods of heavy traffic may cause wear patterns necessitating application of a finish coat.

## TECHNICAL SERVICE

Duraamen Engineered Products, Inc. provides services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces.

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duraamen engineered products, inc.

20 Haypress Road, Suite 323 Cranbury, NJ 08512 | [duraamen.com](http://duraamen.com) | [info@duraamen.com](mailto:info@duraamen.com) | 1.866.835.6595