Perdure UMC TG

trowel applied urethane concrete topping



DESCRIPTION

Perdure UMC TG is a heavy duty, trowel applied urethane modified concrete topping. It is ideal for heavy duty traffic areas where thermal shock resistance is a requirement. Perdure UMC TG 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. Perdure UMC TG is a great choice for wet areas like those typically found in dairies, food processing areas, commercial kitchens, breweries, bakeries, heavy industries, 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/1000ft²/24hr & 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 TG

- a. 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.
- b.One kit of Perdure UMC TG 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 Kwortz) while mixing Part I and Part II.
- c. 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.
- d. 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 TG

- a. Perdure UMC TG is trowel applied at 1/4 to 3/8-inch thickness. Using a notched trowel or screed box spread 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 shows to walk into the wet material.
- b.lt is also a common practice to broadcast 30 mesh silica sand and topcoat it with Perdure UMC SC or pigmented Perdure P72

COMPOSITION

Perdure UMC TG 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 TG covers 18 to 22ft2 at 1/4" 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)
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
Compressive Strength	ASTM C579, 7 days	4850psi (28 days)
Tensile Strength	ASTM C307	425 psi (28 days)
Service Temperature Resistance		50°F to 200°F
VOC	EPA Method 24	0.0g/L, compliant to low VOC Rule 1113 in all 50 states

The above properties are typical and should not be considered as absolute specifications.

AVAILABILITY

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

MAINTENANCE

After completing the application of Perdure UMC TG, 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 TG 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

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

WARRANTY

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