

Ply-Guard UC (SL)

Technical Bulletin

Ply-Guard UC (SL) is a flowable polyurethane mortar installed at 1/8–1/4 inch to protect concrete from physical and chemical abuse. It is very resistant to impact and abrasion, and is unaffected by animal fats and most solvents.

Ply-Guard UC (SL) has a coefficient of thermal expansion similar to concrete, allowing it to maintain adhesion when subjected to the thermal shock of hot water. It can be used at constant service temperatures up to 200°F.

Ply-Guard UC (SL) can be purchased with an anti-microbial additive to inhibit the growth of bacteria and micro-organisms. Ply-Guard UC (SL) is a quick-turnaround flooring solution for businesses that must minimize downtime. It is usually installed without a primer or topcoat, and can be returned to service 12-24 hours after installation. It contains 0 VOCs, has very little odor, and is made with natural sustainable raw materials.

Key Features

- Chemical, Abrasion, and Impact Resistant
- Qualifies for LEED Projects
- Low Odor
- Moisture Tolerant
- 0 VOCs
- Rapid Cure
- Available in 8 Standard Colors

Uses

- School Locker Rooms / Showers
- Food & Beverage Processing Industries
- Commercial Kitchens
- Chemical Processing
- Pulp & Paper Plants
- Wastewater Treatment Facilities

Surface Preparation

Concrete must be clean dry and profiled. Refer to the Ply-Guard UC (SL) application instructions for more detailed surface preparation instructions.

Product Data

Compressive Strength (ASTM C579), psi:	7,400
Tensile Strength (ASTM C307), psi:	1,050
Flexural Strength (ASTM C580), psi:	2,600
Hardness, Shore D (ASTM D2240):	84
Impact Resistance (ASTM D4226), in/lb:	180
Thermal Shock Resistance:	Passes
Tabor Abrasion (ASTM D4060), mg:	30
<small>(1000 mg, load 1000 cycles, CS 17 wheel)</small>	
Water Absorption (ASTM C413), %:	0.48
Bond Strength (ACI 503.4-2.3.2), psi:	400 (Concrete Failure)
Cure Rate Foot Traffic, hours:	12
Cure Rate Foot Traffic Fast Cure, hours:	6

Chemical Resistance

Refer to Polyset Chemical Resistance Guide for full system chemical resistance.

Concrete Moisture

Calcium chloride in accordance with ASTM F1869 or relative humidity probe testing in accordance with ASTM F2170. In the event that test results in 10 pounds per 1000 sq ft per 24 hours, or 85% relative humidity, please refer to Polyset product information.

Installation

Please refer to Ply-Guard UC (SL) installation guidelines for information and instructions.

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