

W501 LevelTech

Self-Leveling Underlayment

Premium high-strength, polymer-modified, fast-setting, self-leveling mortar for application ranges of 1/8" to 1" on concrete floors and floors. Formulated to meet the performance requirements of professional contractors, W501 Level Tech™ self-levels producing a smooth, hard, flat surface that eliminates bond failure over existing properly primed concrete, and rapidly develops high strength.

USES

- Suitable for tile or roof coating installation in 24 hours
- Polymer-modified, does not require latex addition
- For interior or exterior use
- For residential, commercial and institutional project

LIMITATIONS

- Avoid installing during sunlight high temperatures (maximum recommended installation temperature is 75°F). During hot days, use chilled mixing water and follow ACI 305 guidelines on hot weather concrete.
- Do not install at temperatures under 20°F, during the first three hour from application. Follow ACI 306 procedures for cool weather concrete.
- Protect from strong winds and precipitation.
- Avoid walking on installed surface for at least 24 hours after installation.
- Do not install over vinyl, wood, metal, asphalt, asphalt membranes, roof coatings, gypsum or over non-dimensionally stable materials.
- Do not use in areas subjected to prolonged exposure to moisture or affected by condensation.
- Over-watering can cause mixture to segregate.

INDUSTRY STANDARDS



Exceeds requirements per ASTM C-1708 Standard Test Methods for Self-leveling Mortars Containing Hydraulic Cements
LEED* Program: MR Credit 5, Regional Materials (up to 2 points)

*The use of this product can help provide valuable points for LEED (Leadership in Energy and Environmental Design) certification of projects in the categories listed above. Points are awarded based on input from all materials used in the project.

TECHNICAL DATA

Test Method*	Results
Compressive Strength (ASTM C-109)	>4500 psi @ 28 days
Flexural Strength (ASTM C-348)	800-950 psi @ 28 days
Bond Strength (ASTM C-1583)	280 @ 400 psi

*Product performance properties at 73°F (23°C) and 50% relative humidity.

Product Properties*	
Density	126 lbs. per cu. ft.
pH	11 (wet mix) / 9 (cured dry mix)
VOCs	0 g per L
Flow life	15 minutes
Shelf life	1 year, unopened
Appearance	Gray powder
Initial Set Hours (ASTM C-807)	80 minutes
Final Set Hours (ASTM C-807)	2-4 hours
Working Time**	25 minutes (approximately)

* Product performance properties at 73°F (23°C) and 50% relative humidity.

**Working time will vary based on jobsite conditions. Ambient air temperature and substrate temperature should be above 45°F (7°C) and below 90°F (32°C).

Construction Specifications Institute (CSI) Classification

Division 03	Concrete
03 54 00	Cast Underlayment

PACKAGING & COVERAGE

Product Code	Pack	Water	Yield
WE0811207	Bag / 50 Lbs	1 ¼ Gal	48 sq. ft. @ 1/8" 24 sq. ft. @ 1/4" 12 sq. ft. @ 1/2" 9 sq. ft. @ 3/4" 6 sq. ft. @ 1"
WE0850105	Pail / 40 Lbs	1 Gal	39 sq. ft. @ 1/8" 19 sq. ft. @ 1/4" 10 sq. ft. @ 1" 7 sq. ft. @ 3/4" 4 sq. ft. @ 1"

*Coverage depends on slump and substrate conditions

SURFACE PREPARATION

The surface must be clean, well adhered and free of dust, grease, wax, mold oil, paint, sealant, efflorescence and any other contaminants that compromise adhesion. Clean the area with pressurized water. Perform an absorption test by moistening with water in various areas of the substrate. If the water penetrates, a good bond can be achieved; if there are water droplets, loss of adhesion with surface contaminants may occur. They must be mechanically removed before installation. The concrete substrate that is completely smooth must be prepared mechanically (sanding, grinding, scarifying, etc.) until a finish is obtained according to the CSP "Concrete Surface Profile" (Ref: ICRI 310.2R-2013) of 1@ 4. Apply the WECO® W500 Level Tech Primer™ with brush or roll on the concrete surface to be leveled. Let the product cure for about 5 – 10 minutes or until it feels sticky. Ambient temperature, surfaces, and materials should be below 90°F. It is highly recommended to install the materials during the coolest times of the day, either in the morning or in the afternoon. Using cold water in the mixture reduces the heat of the mixture.

MIXING (40 lbs W501 Level Tech Kit)

- Moisten all tools and containers to be used.
- In a clean mixing container, add the entire contents of Part A W501 Level Tech Admix.
- Fill Part A bottle with water and pour into the mixing container three additional times. The total mixing ratio is approximately 1.0 to 1.1 gallons (3.6 – 4.2 liters) of admix / clean water for each 40 Lbs. (18.1 kg) bag. Note: Use only the recommended amount of admix / water. Over-watering can cause mixture to segregate.
- Gradually add Parte B WECO® W501 Level Tech Mortar™ to the admix / water and mix with a paddle or an electric drill at low speed (approximately 300 rpm) to avoid air entrapment, and stir while achieving a smooth consistency with no lumps (approximate time: 4 minutes).
- Let the mix rest for one (1) minute before pouring.
- For use of alternative mixing or pumping equipment consult WECO's Technical Services Department.

MIXING (50 lbs W501 Level Tech Bag)

- Moisten all tools and containers to be used.
- In a clean mixing container add 1 1/4 gallons (3.8 – 4.7 liters) of admix / clean water for each 50 Lbs. (22.7 kg) bag. Note: Use only the recommended amount of admix / water. Over-watering can cause mixture to segregate.
- Gradually add WECO® W501 Level Tech Mortar™ to the water and mix with a paddle or an electric drill at low speed (approximately 300 rpm) to avoid air entrapment, and stir while achieving a smooth consistency with no lumps (approximate time: 4 minutes).
- Let the mix rest for one (1) minute before pouring.
- For use of alternative mixing or pumping equipment consult WECO's Technical Services Department.

APPLICATION

Once the surface is properly prepared and primed apply the product by pouring or pumping directly. Adjust width and pouring distance to maintain a wet and fluid edge during installation avoiding cold joints between batches. If a second coat is needed, apply as soon as product turns hard enough to be walked on. Re-prime if the first layer has dried for more than 12 hours. Do not leave air entrapped during the placement process.

CAUTION

Job failures can occur when applying product during hot weather temperatures (maximum recommended installation temperature is 75°F). Follow ACI 305 guidelines on hot weather concrete, moisture cure concrete and protect from wind during the first 24 hour of application.

CURING & PROTECTION

Proper curing increases the strength and durability of the mortar. Per ACI recommendations, moist curing is required immediately after application. Spray surface with water or a compatible curing compound per ASTM C309, or protect with a plastic blanket for the first 24 hours, to prevent cracking from excessive surface drying due to wind, rain, frost, etc. the sun and high temperatures. Protect area from traffic for a minimum of 24 hours, depending on temperature and humidity.

SAFETY

Please refer to the Safety Data Sheet (SDS) for safety data. KEEP OUT OF THE REACH OF CHILDREN.

LEGAL DISCLAIMER

Before applying this product, customer must read the product information in this Technical Data Sheet to determine its suitability for the intended application. Mixing, application and curing methods, as well as surface and weather conditions, and test methods may affect results and generate statistical variations. This product warranty is limited to its replacement or its refund value should it not comply with the specifications of the manufacturer and does not include any application costs. Customer must present original proof of purchase and submit claim in writing within 15 days from the alleged situation. The information in this Technical Data Sheet supersedes any other product information available from packaging and any other company or marketing documentation. Visit our website at www.wecopr.com for the most up-to-date official TDS.