

SELF LEVELING WEAR TOPPING



Self Leveling Wear Topping

is a polymer modified cement resurfacing material designed for interior or exterior applications.

FEATURES AND BENEFITS:

- ◆ Pump able
- ◆ Wear surface
- ◆ Interior or exterior
- ◆ Self leveling capabilities
- ◆ Stronger than concrete
- ◆ Open to light traffic in four hours

USES:

Wear Surfaces Over Concrete

- ◆ Parking Decks ◆ Residential Floors
- ◆ Factories ◆ Warehouse Floors
- ◆ Loading Docks ◆ Communication Facilities

PREPARATION:

Clean area and remove all unsound concrete, grease, oil, paint and any other foreign materials that will inhibit performance. Slick or sealed surfaces must be thoroughly roughened.

Refer to:

- ◆ ASTM D 4258 Surface Cleaning Concrete for Coating
- ◆ ASTM D 4259 Abrading Concrete
- ◆ ASTM D 4580 Measuring Delaminations in Concrete Bridge Decks by Sounding
- ◆ ACI 201.1 R Guide for Making a Conditions Survey of Concrete in Service
- ◆ ACI 201.3R Guide for Making a Condition survey of Concrete Pavements

PREPARATION (Cont.):

- ◆ ACI 224.1R93 Causes and Repair of Cracks in Concrete Structure
- ◆ ICRI Surface Preparation Guidelines for Repair of Deteriorated Concrete Resulting From Reinforcing Steel Oxidation

Repair areas over 1" in depth with Fast Set Cement Mix or Vinyl Concrete Patcher. Allow the repair products to cure at least three hours before applying 118 Primer / Admixture.

Absorbent concrete will require two applications of the diluted 118 Primer / Admixture to avoid bubbles, pinholes and reduce the flow of the wear topping. To determine if one or two applications are needed, apply a 1:1 dilution of the 118 Primer / Admixture. If the primer turns clear in approximately 30 minutes under the recommended temperatures, two coats are needed. Allow the first coat to dry before applying the second coat.

Place the test area with the same tools and procedures as will be used in the actual construction. Install a minimum of 50 sq. ft. in a high traffic area. Allow the test area to cure for at least 3 days. Evaluate the test area for adhesions, appearance and suitability for the intended use.

Install a bond breaker where vertical surfaces meet the new topping. Extend existing expansion and control joints in the concrete through the topping cement.

Note:

Self-Leveling Wear Topping will not correct or compensate for a structurally defective substrate. Faults in the substrate can appear in the floor topping. The use of alkali resistant glass fabric or galvanized metal reinforcing (Federal Specification QQL 101C) can be helpful in reducing reflective cracking.



PRODUCT INFORMATION

MIXING:

Mix only the amount that can be applied in 15 minutes. The product will remain fluid for about 15 minutes. Add 6 quarts of clean water to the mixing container for each 55 lb. Bag of Self Leveling Wear Topping. As temperature rises above 70°F, working time will decrease. Over watering and over mixing will effect strength, abrasion resistance and may cause cracking or surface defects.

Installations of less than 1,000 sq. ft. are usually done by the "mix and spill" method. This involves mixing the material with a drill mixer -- generally 2 bags at a time.

Once the water has been placed in the mixing drum, gradually add the Self Leveling Wear Topping to the mixing water and mix until material is wet, free of lumps and of a flow able consistency. Mix for about two minutes or until the white milky swirl of chemical on the surface dissipates. In temperatures above 80° F, use cold water to retard the set. Use a high torque electric drill with 450 RPM maximum and self-leveling mixing blade. For applications over 1,000 sq. ft. using a progressive cavity (rotor stator tube) grout pump is recommended.

For applications greater than 1", extend the Self Leveling Wear Topping by adding up to 25 lbs. Of clean, graded 1/8" damp aggregate per 55 lb. bag. Mix the product per instructions, and then add the aggregate. If the aggregate is damp, no additional mixing water will be needed. If the aggregate is dry, up to 1 pint of mixing water may be needed to obtain material flow characteristics.

Addition of aggregate reduces the working characteristics of the material. It may be necessary to apply a finish layer the next day as a final coat. 118 Primer / Admixture must be applied before the finish layer of Self Leveling Wear Topping.

PLACEMENT:

Placement Temperature

	Minimum	Maximum
Substrate	50° F	80° F
Mix	60° F	80° F
Air	50° F	90° F

PLACEMENT (CONTINUED):

Use a spreader tool to pull the Self Leveling Wear Topping into place. Troweling is not recommended. Divide the areas to permit continuous placement without cold joints. To prevent ridges between batches, use the smoother tool and work a narrow dimension. Self Leveling Wear Topping will rapidly adapt to the temperature of the substrate and the environment,

Application thicknesses down to 1/16" are acceptable at points of termination. Most applications are 1/4" to 1/2" in thickness.

CURING:

Protect from freezing and sudden rain for 24 hours.

Air and surface temperature of the substrate will affect the working time and method of curing needed.

Materials modified with Acrylic Additive or 118 Primer / Admixture should be air cured, unless hot and/or drying winds or low humidity are present. Under such conditions, cure per Portland Cement Association -- Design and Control of Concrete Mixes (EBOOI.12T) and/or American Concrete Institute 308 -- Standard Practice for Curing Concrete.

TECHNICAL DATA:

Set Time -- Temp. 70°F

ASTM C 191

Initial Set	2 to 3 hours
Final Set	4 to 4 1/2 hours

Compressive Strength

ASTM C 109

Air cured 6 hours	1700 psi (11.64 Mpa)
Air cured 24 hours	3500 psi (23.97 Mpa)
Cured 7 days	4000 psi (27.40 Mpa)
Cured 28 days	5000 psi (34.25 Mpa)

Flexural Strength

ASTM C 580

Cured 7 days 1100 psi (7.53 Mpa)

Tensile Strength

ASTM C 190

Cured 7 days 280 psi (1.92 Mpa)



PARAGON BUILDING PRODUCTS

PRODUCT INFORMATION

TECHNICAL DATA CONTINUED:

Bond Strength Slant Cylinder with Primer

ASTM C 882

Cured 7 days 1500 psi (10.27 Mpa)

Cured 28 days 2100 psi (14.38 Mpa)

Scaling Resistance

ASTM C 672

25 cycles None

Freeze-Thaw Resistance

ASTM C 666A

303 cycles

Self-Leveling 3500 PSI

Wear Topping Class A Concrete

100 % 70%±

Coefficient of Friction

ASTM C 1028:7 Days

Self-Leveling Steel Troweled

Wear Topping Concrete

Wet .77 .654

Dry .804 .674

Abrasion Resistance

ASTM C 418

Self-Leveling Steel Troweled

Wear Topping Concrete

Sandblasted .10 .16

Wt. lbs./ft³

ASTM C 138

Wet (Plastic) 125 lbs. ± 2%

Dry (Hardened) 110 lbs. ± 2%

Cure Time vs. Moisture Content

24 Hours 14.6 %

3 Days 14.5%

7 Days 13.2%

28 Days 8.2%

Length Change Percent

Air Cured -0.009

Moist Cure +0.008

COLOR:

Grey

COVERAGE:

55 lb. Bag covers 22 to 25 sq.ft. @ 1/4"

PACKAGING:

55 lb./24.9 kg multiply bag

SHELF LIFE:

One year from date of manufacture

LIMITATIONS:

- ♦ **DO NOT** trowel.
- ♦ **DO NOT** apply over substrates that are frozen or contain frost.
- ♦ **DO NOT** retemper.
- ♦ **DO NOT** use without primer.
- ♦ **DO NOT** coat with materials that will trap water in the substrate.
- ♦ **DO NOT** over mix.
- ♦ **DO NOT** use over 1" thick without adding 1/8" aggregate.
- ♦ **DO NOT** add more than 6 qts. Of water per bag.
- ♦ **DO NOT** use curing compounds if topping is to receive floor covering.
- ♦ **DO NOT** apply over wood without metal lath.

TECHNICAL SERVICE:

For application procedures or surface conditions not specified in literature contact:

Paragon Building Products

2895 Hamner Ave

Norco, CA 92860

Phone: **951-549-1155**

Fax: **951-549-1177**

Avoid hazards by following all precautions found in the MSDS (Material Safety Data Sheet), product labels and product information sheets. Please read this information prior to using the product. MSDS are available upon request at 951-549-1155.

CAUTION:

Contains Portland Cement. Cement causes skin irritations, may cause allergic reactions. Avoid eye contact or prolonged contact with skin. Use of a dust respirator, safety goggles and rubber gloves are recommended. Wash self thoroughly after any contact. In case of eye contact, flush immediately with plenty of water for at least 15 minutes. Consult a physician immediately. Do not take internally. **Contains free silica don't breath dust. Prolonged exposure to dust may cause delayed lung disease (silicosis). Always wear NIOSH approved mask for silica dust.**



LIMITED WARRANTY:

Paragon Building Products, Inc. (*Paragon*) warrants that this product and the materials used therein meet or exceed the applicable ASTM standards listed and in force at the time of manufacture. Paragon will replace any product or part which proves defective due to quality of ingredients used or due to the manufacturing process itself. This warranty shall apply only if the product is used in strict accordance to applicable specifications and instructions provided by Paragon for its use, and Paragon shall not be liable otherwise. Replacement of any defective product or, at Paragon's option, refund of the purchase price of any defective product shall be the buyer's sole remedy under this warranty. Paragon shall in no event be liable for any damages in excess of the purchase price of the defective product. **PARAGON SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES.**

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