



Self-Leveling Underlayment

Cementitious Self-Leveling Floor Underlayment



Description

Self-Leveling Underlayment is a blend of portland cement, high performance polymers, selected aggregates and proprietary admixtures designed to provide a smooth, level floor without the labor intensity of hand applied materials. This material will provide a hard surface in 4 hours with floor coverings able to be installed within 24 hours. **Self-Leveling Underlayment** can be applied up to 1" in a single lift without shrinking, cracking or spalling.

Uses

Self-Leveling Underlayment is ideal for creating a level surface in interior applications.

- Offices, schools and other areas that will require carpet, tile, coatings or wearing surfaces
- Warehouses and light industrial renovation projects
- Rough or uneven surfaces that need leveling

Benefits

- Ease of use: eliminates troweling
- Cost effective: saves hand-applied labor
- Versatile: rehabilitates, repairs, resurfaces
- Adhesion: polymer modified for increased adhesion to concrete surfaces
- Consistent: strict Quality Control Testing and standards

Surface Preparation

All surfaces in contact with **SL Underlayment** shall be free of dirt, oil, grease, laitance and other contaminants. All unsound concrete should be removed to ensure a good bond. Mechanically clean the surface by shotblasting or scarifying. Acid etching or the use of solvents is not an acceptable means of cleaning the substrate. Concrete must be abraded and "open" in order to receive primer and underlayment. Take special care in preparing very smooth, highly power troweled concrete. These surfaces must be prepared properly or the underlayment may delaminate. Prime the surface with **US SPEC Multicoat** at a rate of 500-600 square feet per gallon when diluted 1:1 with clean, potable water. Apply evenly with a soft push broom. Do not use paint rollers, mops or spray equipment. Coverage rate of **Multicoat** will vary depending on the porosity of the surface. Extremely absorbent concrete may require two applications of **Multicoat** to avoid the formation of "pinholes" in the underlayment.

Physical Properties

Compressive Strength (ASTM C-109*)

SET	1 DAY	3 DAYS	7 DAYS	28 DAYS
A Normal	2,200 psi 15.16 MPa	2,400 psi 16.54 MPa	2,700 psi 18.60 MPa	4,400 psi 30.32 MPa

*Notes: 73°F (22.8°C) 55% Humidity A = 4.5 qts

Rate of Set (ASTM C-266*)

SET	INITIAL	FINAL
A Normal	:35	1:15

Consistency (ASTM C-230*)

SELF-LEVELING TIME	WORKING TIME
:15	:20

Bond Strength (ASTM C-882*)

AGE	APPLIED LOAD	SHEAR BOND STRENGTH
14 DAYS	24,700	2,500 psi (17.23 MPa)

*Note: 100% of rupture occurred in dummy section

Surface Preparation (Cont.)

For this type of concrete, apply a first coat of **Multicoat** diluted 3:1 with water. Allow to dry and install a second application of **Multicoat** at the normal 1:1 dilution. Allow primer to dry completely dry to the touch before proceeding (2 to 4 hours). If applying lifts, prime each lift with **Multicoat**. Always apply a test area.

Coverage

One 50 lb. (22.7 kg) bag will cover approximately 25 ft² at 1/4" thickness. Coverage may vary depending on porosity of surface.

Mixing

For best results, use a mechanical mixer with rotating blades. Pre-wet mixer and empty excess water. Place 5 quarts of cool, clean potable water per 50 lb. bag in mixer, then add dry material. Mix on low RPM for a total of 3 to 5 minutes to achieve desired consistency. Mix only enough material that can be placed within working time. Do not blend excess water as this will cause bleeding and segregation. Do not use any other admixtures or additives.

Packaging: 50 lb. bag (22.7 kg)
64 bags per pallet

Yield: 50 lb. (22.7 kg) will fill approximately .43 ft³
(0.012 m³) when 5 qts mixing water is used.

03540

CEMENTITIOUS UNDERLAYMENT

Placing

SL Underlayment has a flow time of 10 minutes at 70°F. Pour or pump **SL Underlayment** onto the substrate. Work into position with a long handled spreader and spiked roller. The material will flow freely during the self-leveling time and needs no troweling. Immediately smooth the material with a "smoother." Wear spiked shoes to avoid leaving marks in the underlayment. For placements greater than 1", it is recommended that **SL Underlayment** be extended 30%, by weight, with clean, washed and dried 3/8" pea gravel per 50 lb. bag. Add the aggregate during the last minute of mixing. A second lift of non-extended material may be applied as soon as foot traffic can be supported. Profile or roughen the first lift to ensure a good bond and re-prime with **Multicoat**.

Storage

Normal cement storage and handling practices should be observed. Store material in an interior, cool, dry place. Shelf life is one year in original, unopened bags.

Limitations

In addition to limitations already mentioned, please note the following. This product is for interior use only. Do not apply when the surface temperature is below 50°F (10°C) or when the temperature is expected to fall below 50°F within 48 hours. Do not apply over surfaces that are frozen or contain frost. Do not apply over any active faults or cracks in the substrate without addressing any movement that may occur. Although crack repair is recommended prior to application, we can not guarantee that cracks will not "telegraph" up through the dressing. All moving joints, such as expansion joints, must be carried up through the new surface. Allow concrete to fully cure for 28 days before the use of this product. **SL Underlayment** is not a wearing surface and must be protected with a final floor covering. Normal conditions working time is 20 minutes. Setting time will speed up in warm conditions and slow in cold conditions.

Regulatory

Read and follow application information, precautions and Material Safety Data Information.

Right-to-know

This product contains Crystalline Silica (CAS# 14808-60-7) and Portland Cement (CAS# 65997-15-1).

HMIS

Health 1, Fire 0, Reactivity 0

Prop 65

Warning! This product contains Crystalline Silica, a chemical known to the State of California to cause cancer or reproductive toxicity.

VOC Content

0 g/l

Caution

EYE AND SKIN IRRITANT

Contains Portland Cement (CAS# 65997-15-1) Contains Aggregates (CAS# 14808-60-7) Do not allow contact with eyes or skin. Avoid breathing dust - Silica may cause serious lung problems. There is limited evidence Silica is a carcinogen. The use of gloves, goggles, and where appropriate, dust masks and other protective clothing is recommended. If cement or sand particles get into eyes, rinse immediately with clean water and seek prompt medical attention.

Technical Service

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Denver, CO 80223
Phone (303) 778-7227 Fax (303) 722-8426
Web Site www.usspec.com

NOTICE OF LIMITED WARRANTY US MIX Products Co. (manufacturer) warrants to buyer that this product at the time and place of shipment is of good quality and conforms to the manufacturer's specifications in force on the date of manufacture when used in accordance with the instructions hereon. Manufacturer cannot warrant or guarantee any particular method of use, application or performance of the product under any particular condition. This limited warranty cannot be extended or amended by manufacturer's sales, people, distributors or representatives or by any sales information, specifications of anyone other than the manufacturer. Liability under this warranty is expressly limited to refund of the purchase price.

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