



SELF LEVELING UNDERLAYMENT

◆ The Pro's Choice Since 1936



Sakrete® Self Leveling Underlayment is a polymer modified based portland cement and gypsum based self-leveling underlayment for interior applications.

Features:

- Portland cement based
- Provides a smooth surface
- Applications up to 1" (25 mm) in a single pour
- Rapid curing – Accepts non-moisture sensitive tile and stone in 24 hours
- Accepts floor covering sheet goods in 3 days

Use For:

- Interior only
- Level and smooth above or below grade concrete solid wood floors (lath required) *

UNDER:

- Carpeting
- Vinyl composition tile
- Ceramic tile
- Wood flooring
- Stone
- Resilient flooring

*NOTE: Refer to section "Over Wood Subfloors"

Do not use as a wear surface floor covering must be applied.

Yield/Water/Coverage:

Bag Size	Coverage	Water
50 lb (22.7 kg)	1/8" (3 mm) thick covers 50 - 60 ft ² (4.5 - 5.8 m ²) 1/4" (6 mm) thick covers 25 - 30 ft ² (2.3 - 2.8 m ²) 1/2" (12 mm) thick covers 12 - 15 ft ² (1.1 - 1.4 m ²)	5 qt (4.75 L)

NOTE: YIELD AND WATER ARE APPROXIMATE.

Color:

Gray

Technical Data:

Set Time ASTM C191

Initial Set 40 - 70 minutes

Final Set 1 - 1.5 hours

Working time at 70°F (21°C) - 30 minutes

Flexural Strength ASTM C496

28 days 900 psi (6.2 MPa)

Splitting Tensile Strength ASTM C496

7 days 230 psi (1.6 MPa)

28 days 370 psi (2.6 MPa)

Density (Wet)

126 lb/ft³ (202 kg/L)

PH = 11

Compressive Strength ASTM C109

7 days 1,500 psi (10.3 MPa)

14 days 3,800 psi (26.2 MPa)

28 days 5,000 psi (34.5 MPa)

Chloride Penetration ASTM C1202

28 days 680 Coulombs Passed, Very low

NOTE: Test results obtained under controlled laboratory conditions at 73°F (23°C) and 50% relative humidity. More or less water may be required to achieve the desired mixing consistency depending on the atmospheric conditions and job site conditions. Do not exceed 5 qts (4.75 L) of water per 50 lb (22.7 kg) bag.

DIVISION 3

Cast Underlayment - 03 54 00

Preparation/Application:

For best results all materials should be stored between 50°F (10°C) and 90°F (32°C) 24 hours prior to installation.

Over Concrete:

1. Use only when the product, air, and surface temperature are above 50°F (10°C) for a minimum of 24 hours.
2. Concrete floors must be solid, structurally sound, stable and free from movement.
3. Floor must be free of all dirt, oil, grease, paints, sealers and or any foreign materials that would interfere with bonding.
4. Some concrete surfaces may require mechanical profiling (steel troweled or slick surfaces or tensile strength < 72 psi (0.5 MPa)) by shot blasting or scarifying.
5. After cleaning and profiling, test for MVER (moisture vapor emission rate – reference ASTM F1869) and concrete substrate's relative humidity (RH) – reference ASTM F2170. The requirements of the floor covering and floor adhesive manufacturers must be followed with respect to, but not limited to, levels of moisture.
6. Deep holes should be filled prior to application using Sakrete Fast Set Cement Patcher. Allow to cure for several hours before applying the Sakrete Self Leveling Underlayment.
7. Isolate perimeters and abutments such as column bases, pedestals, supports, walls, etc. using foam tape (self adhering minimum 1/4" (6 mm) thick) or caulking.
8. Do not bridge over existing expansion joints.
9. All surfaces require priming with the Sakrete Bonder and Fortifier (see priming section).



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Refer to:

1. ASTM D4259 Abrading Concrete
2. ACI 201.1R Guide for Making a Conditions Survey of Concrete in Service
3. ACI 224.1R93 Causes and Repair of cracks in Concrete Structure
4. ICRI 03732 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings and Polymer Overlays

Over Wood Subfloors:

1. For residential and light commercial applications
2. Follow Tile Council of North American (TCNA) F185 installation method for cementitious self-leveling underlayments over plywood.
3. All wood subfloors must be structurally sound and have a maximum deflection of L/360. The wood must be either 3/4" (19mm) tongue and groove, APA rated exterior grade type 1 plywood or OSB equivalent.
4. The surface must be clean, free from any contaminants that may act as a bond breaker such as dirt, paint, wall compound, varnish, grease, oils or wax. All loose boards must be re-fastened.
5. Fill all open joints with Sakrete B-1 Leveler.
6. Honor all expansion joints, control joints and moving cracks through-out the entire Sakrete Self Leveling application. Failure to do so could result in delamination or cracking.
7. Vacuum the subfloor to remove all loose debris and dust. Primer the wood subfloor with the Sakrete Bonder & Fortifier following mixing and application instructions on the technical data sheet.
8. Apply a thin layer of primer using a short-nap paint roller or squeegee leaving no bare spots. Puddling of the primer must be avoided and can be corrected by lightly brushing off the excess primer.
9. Metal lath is required for all wood installations. Once the primer is applied, and during the drying process, install 3.4 lb per yd² (1.0 kg/m²) galvanized, expanded diamond metal lath mesh or a plastic equivalent. Staple approximately every 6" (152 mm).
10. Avoid walking on the wet primer by placing the metal lath into the primer and then walking on the lath while stapling. Overlap lath 2" (51 mm) at all abutments and staple through both pieces assuring they are properly fastened into the wood substrate.
11. Allow Sakrete Bonder & Fortifier to dry before applying the Sakrete Self Leveling Underlayment.
12. Apply the Sakrete Self Leveling Underlayment at a minimum of 3/8" (10 mm) thickness from the top of the highest point of the lath. Hairline cracks may occur due to excessive movement at the plywood joints.

Placement:

1. Apply when air and substrate temperatures are between 40°F (4°C) and 90°F (32°C) within 24 hours of the application.
2. Close all windows, doors and HVAC vents to minimize air flow.
3. Divide the areas into sections to permit continuous pours without cold joints.
4. Pour material in a continuous stripe about 1 foot in width across the narrow section of the floor. Pour the next mixed material adjacent to the first pour. Continue successive pours in this manner until floor is covered.
5. The material will flow well but must be raked or pulled over the floor at the required depth. A gauge rake should be used to insure proper and even thickness of the Self Leveling Underlayment.
6. Material can be poured up to 1" (25 mm) in thickness.
7. To prevent ridges between batches, use a smoother tool and work a narrow dimension.

Mixing:

1. In a clean 20 - 25 gallon container add 5.0 qts (4.75 L) of clean potable water for each 50 lb (22.7 kg) bag.
2. Add dry material while mixing at full speed using an egg-beater mixing blade attached to a heavy-duty 1/2" (12 mm) drill (min. 650 rpm).
3. Mix mechanically with a high torque electric drill not to exceed 600 r.p.m. with a paddle type mixing blade.
4. Mix a maximum of 3 minutes to achieve a lump free batter like consistency.
5. Mix only the amount of materials that can be applied within 10 minutes. DO NOT ADD ADDITIONAL WATER. (the formation of a white film on the surface is an indication of over watering).

Curing:

1. Protect from rapid excessive drying due to temperature and air movements.
2. Do not use a curing compound.

NOTE: When vinyl, wood or other types of floor coverings are to be installed over Sakrete Self Leveling Underlayment, the requirements of the floor covering manufacturer are to be followed with respect to, but not limited to, levels of moisture.

Precautions:

Air, mix and substrate temperatures should be between 40°F (4°C) and 90°F (32°C). For applications outside this range of temperatures and conditions, contact Sakrete Technical Service.

- Colder temperatures or higher humidity conditions will retard set times
- Do not retemper Self Leveling Underlayment by adding water after mixing.
- Do not add accelerators, retarders, plasticizer or other additives.

NOTE: Proper application and installation of all Sakrete products are the responsibility of the end user.

Safety:

READ and UNDERSTAND the Safety Data Sheet (SDS) before using this product. WARNING: Wear protective clothing and equipment. For emergency information, call CHEMTREC at 800-424-9300 or 703-527-3887 (outside USA).

KEEP OUT OF REACH OF CHILDREN.

Limited Product Warranty:

The manufacturer warrants that this product shall be of merchantable quality when used or applied in accordance with the manufacturer's instructions. This product is not warranted as suitable for any purpose other than the general purpose for which it is intended. This warranty runs for one (1) year from the dates the product is purchased. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE DURATION OF THIS WARRANTY. Liability under this warranty is limited to replacement or defective products or, at the manufacturer's option, refund of the purchase price. CONSEQUENTIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY.