



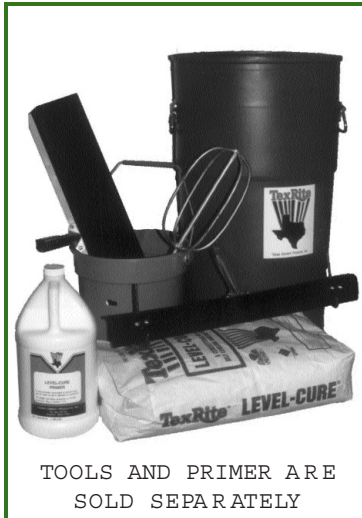
LEVEL-CURE®

Self-Leveling, Pourable Cement Based Underlayment

(Two versions: LEVEL-CURE and LEVEL-CURE LCB)

Product Information

Copyright © TEXAS CEMENT PRODUCTS, INC.



TOOLS AND PRIMER ARE SOLD SEPARATELY

Level-Cure® Self-Leveling Underlayment is the state of the art in Portland cement technology. With the sole addition of water, it becomes a free-flowing liquid mortar that seeks its own level and produces a smooth flat surface. **Level-Cure** has been designed as an underlayment for the fast leveling and smoothing of floor surfaces with a minimum of labor required. The resulting finish is a smooth and durable surface that is acceptable for the instal-

lation of all floor coverings.

BASIC USE

Level-Cure is used anywhere an uneven, rough or unfinished concrete surface must be leveled or smoothed before the application of ceramic tile, dimension stone, wood, resilient floor coverings or carpets. In addition to leveling concrete floors, **Level-Cure** can be used in rehabilitation projects where old terrazzo, ceramic tile, wooden floors and steel decking must be made ready for new floor coverings.

AREA OF USE

Level-Cure may be used in interior applications where a permanent water-resistant surface is required for receiving decorative floor coverings. **Level-Cure** hardens quickly by hydration. Surfaces can be walked on in 2-4 hours and can have floor coverings installed within 12-24 hours. When cured, the finished underlayment will have similar properties to concrete. **Level-Cure** may be applied as thick as 3/8" to featheredge in single application without fear of shrinking, cracking or spalling. For depths of 1/8" to 1" thick, use **Level-Cure LCB**. Other advantages of **Level-Cure** over traditional latex underlayment systems are that no troweling is required. It installs much faster and no sanding of finish is required.

LIMITATIONS

Level-Cure must not be used over gypsum-based surfaces, old adhesive residue, paints, particleboard, plastics, or vinyl, epoxy or urethane floor coverings. Do not apply **Level-Cure** over elastomeric waterproofing or crack isolation membranes. Use in temperature range of 40° F to 100° F (Do not allow mortar to freeze for the first 72 hours). **Level-Cure** shall never be applied to any surface unless it has been previously primed with **Level-Cure Primer** to increase adhesion to the substrate and allow the underlayment to retain water for improved flow and higher strengths. **Level-Cure** shall not be used as a wearing surface. **Level-Cure** is for interior use only. Do not use **Level-Cure** over substrates subject to hydrostatic pressure.

PACKAGING

COLOR: Grey.
 TEXTURE: Powder consisting of Portland cement graded sand, organic and inorganic chemicals.
 PACKAGING: 50 lbs. multi-wall bags.
 PRIMER LIQUID: Free flowing white liquid
 PACKAGING: Primer 1 gallon container, four 1 gallon/case

INSTALLATION

Preparatory Work

All surfaces to receive **Level-Cure** must be structurally sound. Floor systems, including the framing system and subfloor panels over which tile will be installed shall be in conformance with the IRC for residential applications, the IBC for commercial applications, or applicable building codes. Surfaces shall be free of dust, grease, wax, sealers, old adhesive and cut back residue, curing compounds, oils, gypsum based underlayments, surface hardeners, paints, old flooring, and other foreign materials before the application of primer. **Level-Cure Primer** is required on all surfaces before application of **Level-Cure** underlayment.

Concrete Floors

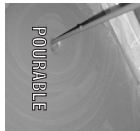
Concrete shall be completely exposed, fully cured, free of efflorescence, hydrostatic pressure and excessive moisture (moisture test should be done prior to application). Chip, shot-blast or hammer out any spalled unsound concrete. Clean off any resulting dust. Hard troweled concrete must be shot-blasted, scarified or acid-etched using a 10% muriatic wash. It is important that the acid sludge be thoroughly neutralized and flushed from the floor. Prime clean surface with **Level-Cure Primer** diluted 1 to 1 with water. Apply an even coat using brush or broom. On extremely porous concrete, two applications may be required. Allow Primer to dry to a tacky surface before applying **Level-Cure**. Reapply Primer if first application is allowed to dry past 24 hours.

Plywood

Plywood surfaces shall be of exterior grade, and when placed over conventional floor joists, shall be of a design and thickness to provide a secured rigid substrate base. Allow a gap of 3/16" to 1/4" between sheets of plywood. Cover these gaps with tape so the gaps remain empty or fill with caulk to allow expansion and contraction of the plywood after the application of **Level-Cure**. Prime the plywood subfloor with **Level-Cure Primer** diluted 1 to 1 with water. Broom the primer over the sub-floor. After the primer has dried, nail or staple an approved thin, plastic lath or galvanized metal lath to the floor. Install no less than 3/8" thickness of the **Level-Cure** mix over the surface following the standard procedure.

Special Surfaces

Marble, terrazzo and existing ceramic tile surfaces must be well bonded to the sub-floor, cleaned of any waxes and abraded to a rough surface prior to priming. Prime the surface with a slurry composed of one gallon **Level-Cure Primer** to 1/2 gallon water, then mix in 1 1/2 gallons of **Level-Cure** powder. Let dry, then apply **Level-Cure** mixed with 5 1/2 quarts of water and 1 quart of **Level-Cure Primer**. Over steel surfaces, consult with Texas Cement's Technical Department to discuss the particular job conditions.



LEVEL-CURE®

TEXAS CEMENT PRODUCTS, INC.

4000 Pinemont
 Houston, Texas 77018 USA

Phone: 713-682-8411
 Toll Free: 800-669-0115
 Fax: 713-688-2448
 texrite.com & texascement.com

NO-MOLD GROWTH FORMULA

Mixing

An exact and accurate measurement of water is required to avoid over-watering and delamination. Mix one 50# bag of **Level-Cure** with a measured 6 quarts (maximum) of clean water. A primer/water blend should be 6 1/2 quarts (maximum) total. A slight reduction in amount of water may be necessary due to cooler weather conditions. **NOTE : Level-Cure LCB** only requires a measured 4 1/2 quarts (maximum) of clean water. Always add the powder to the total amount of liquid and mix with a 650-RPM power mixer until a lump-free mix is obtained. Experience shows that it is best to mix only 2 bags of **Level-Cure** at a time, pour this on the floor, then mix as many additional 2 bag batches as necessary to complete the job. For optimum mixing results, it is advisable to use a TexRite mixing paddle for minimal air entrapment in the mortar. For information on pumping **Level-Cure**, consult Texas Cement's Technical Department.

Expansion Joints

Expansion joints, saw cuts (contraction joints), cold (construction) joints and structural cracks shall never be bridged over **Level-Cure**. They should continue through the **Level-Cure** and subsequent tile work. Joints through the work directly over structural expansion joints must never be narrower than the structural joint. Provide movement joints 20-25 ft. in each direction. Where floor is exposed to direct sunlight, provide movement joints 8-12 ft. in each direction. Install movement joints where **Level-Cure** abuts restraining surfaces such as perimeter walls, dissimilar floors, curbs, columns and pipes. Follow recommendations in the TCNA Handbook EJ171 for movement joints. An architect or structural engineer must specify expansion joints and show location and details on drawing.

Application

Pour the **Level-Cure** approximately in place and finish using TexRite's adjustable mortar spreader. Spiked shoes should be used if it is necessary to walk in the fresh mortar. A finish blade may be used for feather edging. **Level-Cure** will have a flow time of approximately 10 minutes.

Applications In Large Areas: After primer has been applied and is sufficiently dry, mix and apply **Level-Cure** in narrow single swaths across the entire width of the area. Use a spreader tool to drag any excess **Level-Cure** to the adjacent area where the next swath will be poured; establishing the required thickness as work progresses. Always pour freshly mixed **Level-Cure** into the edge of a previous swath that is still in its flow cycle. This way subsequent poured swaths will blend together with no overlapping marks. Keep repeating this procedure until the entire area has been leveled. After application the finished floor will be ready to walk on in 2 to 4 hours and a floor covering may be installed 12 to 24 hours later. Ceramic tile installed with a TexRite Dry-Set Mortar system may be installed on **Level-Cure** when the mortar is firm enough to walk on. For thicker applications over 3/8" to 1" thick, use **Level-Cure** LCB. If **Level-Cure** is to be applied in multiple layers, each previous layer must be allowed to cure for 24 hours prior to application of subsequent layers. Prime with **Level-Cure Primer** prior to application of additional layers. When multiple pours are to be used to achieve an entire floor thickness of 2" or greater, it is recommended that a mortar bed be detailed by an architect. Do not exceed three layers of application.

NOTE: Do not add any other materials to **Level-Cure** other than those prescribed by Texas Cement Products, Inc. For conditions other than those covered in the instructions, refer to the Technical Service Department at Texas Cement Products Inc.

Coverage

Level-Cure will cover approximately 50 to 55 square feet per 50-pound bag at 1/8" thickness.

Cleaning

Water is all that is needed to remove uncured **Level-Cure**.

Curing

A minimum cure is obtained in 12-24 hours, depending on ambient temperatures. As with concrete, the strength increases significantly with age during the first 28 days. Always check for moisture prior to installation of vinyl flooring.

SPECIFICATIONS

Technical Data: Level-Cure

Test	Typical Values
Working Time	20 minutes @ 70°F
Flowing Time	10 minutes @ 70°F
Initial Set	30 minutes @ 70°F
Final Set	2 hours @ 70°F
Compressive Strength (ASTM C109)	
3 days	2075 psi
7 days	3225 psi
28 days	4650 psi
Flexural Strength (ASTM C348)	
28 days	1035 psi
Tensile Strength (ASTM C109)	
28 days	520 psi
Bond Strength (ASTM D3931)	
28 days	500 psi

Storage Life - Primer Liquid - One year if kept in sealed unopened container
Storage Life - Powder - One year if kept dry in sealed bags.

SAFETY - CAUTION - Powder may cause eye, skin, or lung injury prolonged exposure to dust may cause delayed lung disease (Silicosis). Eliminate exposure to dust. Recommend use of a NIOSH approved mask for silica dust. Contains Portland Cement. If any cement or cement mixtures get into eyes, flush immediately and repeatedly with water and consult a physician promptly. Avoid contact with skin where possible and wash exposed skin areas promptly with water. Primer Liquid- Avoid inhalation of vapors, use in well ventilated areas. Avoid contact with eyes or skin. In case of contact with eyes, flush with water and call physician immediately; for skin contact, wash with warm soapy water. If material is swallowed, call physician immediately.

KEEP OUT OF REACH OF CHILDREN.

Protect from freezing.