



LevelFlor™

Self-Leveling Underlayment (SLU)

Quick Setting, Self-Leveling Floor Underlayment for Interior and Exterior Use



Highlights:

- Interior/exterior – formulated with hydraulic cement, LevelFlor™ provides long-life durability in wet and dry environments
- Quick setting – minimizes downtime. Ready for foot traffic in 3-4 hours. May be used for a temporary wear surface prior to installation of finished flooring
- Fast floor installation – Moisture insensitive flooring such as tile may be placed in as little as 6 hours.
- High strength – achieves 3,000 psi (20.6 Mpa) compressive strength in 24 hours and 3,500 psi (24.1 Mpa) in 7 days
- Easy to use – just add water, mix and place using barrels or pump

Rapid Set® LevelFlor™

Contractors and Engineers choose Rapid Set® LevelFlor™ for self-leveling floor underlayment applications when a fast, durable and economical solution is required.

DESCRIPTION

Rapid Set® LevelFlor™ is an advanced hydraulic cement based self-leveling underlayment (SLU) that can be used both indoors and outdoors. LevelFlor™ rapidly levels, maintains workability for 30 minutes and produces a flat, strong surface with high bond strength. LevelFlor™ is designed for fast track leveling applications and can be covered with finished flooring in 6 to 16 hours at 70°F (21°C) depending on the flooring type. This advanced underlayment can be applied from feather-edge to 1" (25 cm) thick and up to 5" (127 cm) thick when extended with aggregate.

APPLICATIONS

Use LevelFlor™ when a high quality, fast-setting, self-leveling underlayment is needed. LevelFlor™ is ideal for all floor projects that need long flow life and working time while achieving high 24 hour strength. LevelFlor™ is an excellent choice for new floor projects and repair projects.

SURFACE PREPARATION

Concrete substrates must be clean, sound, and free of oil, curing compound, dust, mastic, bond-breaker and any other material that prevents good bonding. Concrete should be free of hydrostatic pressure, and vapor emission rates should comply with the finished flooring manufacturer's requirements. Smooth concrete and hard troweled surfaces should be prepared to achieve a surface profile similar to ICRI CSP 3. Mechanical methods of surface preparation such as shot-blasting are preferred. Acid etching the substrate is not recommended. Surface must be dry, have a minimum temperature of 50°F (10°C), and be properly primed. Honor all moving joints and cracks.

PRIME

Apply Rapid Set® Acrylic Primer to all substrate surfaces prior to placement. Following the application instructions stated on the primer product packaging.

MIXING

Add one 50 lb (23 kg) bag of LevelFlor™ to 4.5 - 5 quarts (4.2 - 4.7 L) of potable water. Do not exceed 5 quarts (4.7 L) of water. LevelFlor™ may be mixed using a paddle mixer with a ½" heavy duty drill with a minimum 650 rpm or by using an



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appropriate mixer and pump. Mix 3-5 minutes until the mixture is smooth and lump free. Avoid mixers that entrap large amounts of air. Mixed LevelFlor™ should be used within 30 minutes at 70°F (21°C). Maintain material temperature above 50°F (10°C).

PLACEMENT

Prior to placement, confirm that the primer is completely dry. Pour or pump LevelFlor™ onto the substrate up to a maximum thickness of 1" (25 cm). Use a gauge rake, spreader or other tools to place the material. Use a spiked roller to remove any entrapped air if necessary. A smoother trowel may be used to smooth the material. LevelFlor™ can be troweled

PHYSICAL PROPERTIES <small>All data produced at 70°F (21°C)</small>	
Working Time	30 min.
Flow Life	15 min.
Walk-on Time	3 - 4 hours
Install Moisture Insensitive Flooring	6 hours
Install Moisture Sensitive Flooring	16 hours
Set Time (ASTM C191)	
Initial Set: 140 min.	Final Set: 200 min.
Compressive Strength (ASTM C109)	
24 hours	3000 psi (20.6 Mpa)
7 days	3500 psi (24.1 Mpa)
28 days	5000 psi (34.5 Mpa)
Flexural Strength (ASTM C348)	
7 days	1150 psi (7.93 Mpa)
VOC Content	0 g/L

to a feather-edge to match existing elevations.

For thicknesses greater than 1" (25 cm), extend each 50 lb (23 kg) bag of Rapid Set® LevelFlor™ with 25 lb (11.4 kg) of clean, dry 3/8" (9.5 cm) pea gravel. Place the extended material to 1/2" (13 cm) below desired floor level and then place neat LevelFlor™ or Rapid Set® TRU™ Self Leveling for the final 1/2" (13 cm) within 24 hours. When extended with aggregate, LevelFlor™ may be placed up to 5" (127 cm) thick.

CURE

No curing is required under normal conditions of 70°F (21°C). If used in exterior applications apply a fine water mist to the newly hardened surface of LevelFlor™ as soon as it can be done without marring the surface and continue until one hour after final set. Avoid excessively dry, windy, hot or sunny conditions.

FLOOR COVERINGS

Moisture insensitive flooring such as tile may be placed in as little as 6 hours. Moisture sensitive flooring may be placed after 16 hours. Always follow the flooring manufacturer's recommendations for Moisture Vapor Emission Rate and retained moisture. LevelFlor™ is not designed to function as a vapor barrier. To determine if LevelFlor™ is suitable for your specific application, install and evaluate jobsite test sections using the prepared substrate and the specified finished floor.

LevelFlor™ may be used as a wear surface for foot traffic in 3 to 4 hours and rubber wheel traffic in 24 hours at 70° room temperature. LevelFlor™ is not designed to be a permanent finished floor surface. LevelFlor™ may be used as a temporary wear surface over a moisture control system. Contact CTS Cement before using LevelFlor™ as a wear surface over a moisture control system application.

COVERAGE & PACKAGING

LevelFlor™ is available in 50 lb (23 kg) polyethylene-lined bags. Coverage is 24 - 30 sq. ft. (2.2 - 2.8 M²) at 1/4" (6.4 cm) thickness and 12 - 15 sq. ft. (1.3 - 1.4 M²) at 1/2" (12.7 cm) thickness for flat surfaces.

BEFORE USING THIS PRODUCT, READ THE MSDS AND TECHNICAL GUIDELINES AT WWW.CTSCEMENT.COM

WARNING

DO NOT BREATHE DUST. AVOID CONTACT WITH SKIN AND EYES. Use product in well ventilated areas. Exposure to dust from this product may irritate eyes, nose, throat and lungs. Use a NIOSH/MSHA-approved (under 30 CFR 11) or NIOSH-approved (under 42 CFR 84) respirator. Contact with dry material or wet mixtures may cause severe chemical burns to skin and eyes. Protect eyes with goggles or safety glasses with side shields. Cover skin with protective clothing. Use chemical resistant gloves. Do not allow dry material or wet mixture to get inside boots or gloves. Exposure by inhalation over an extended period or repeated periods of time may result in the development of pulmonary diseases including silicosis, and lung cancer. Seek medical treatment if you experience difficulty breathing while using this product. In case of skin contact, immediately wash with soap and water. In case of eye contact, flush immediately and repeatedly with large quantities of water. If irritation or burn occurs, seek medical treatment. Proposition 65: One or more of the components contained in this product may contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

LIMITED WARRANTY

CTS Cement Manufacturing Corp. (CTS) warrants its materials to be of good quality and, at its option, within one year from date of sale it will replace material proven defective or refund purchase price thereof, and such replacement or refund shall be the limit of CTS's responsibility. Except for the foregoing, all warranties, expressed or implied, including merchantability and fitness for a particular purpose, are excluded. CTS shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the materials.

MANUFACTURER

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