



LEVELFLO[®]

Self-Leveling Underlayment (SLU)

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



Highlights:

- **INTERIOR/EXTERIOR**

Formulated with hydraulic cement, LEVELFLO[®] 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

MANUFACTURER:

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PRODUCT NAME:

Rapid Set® LEVELFLO[®]

DESCRIPTION: Rapid Set LEVELFLO is an advanced hydraulic cement based self-leveling underlayment (SLU) that can be used both indoors and outdoors. LEVELFLO rapidly levels, maintains workability for 30 minutes and produces a flat, strong surface with high bond strength. LEVELFLO 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 featheredge to 1" (2.5 cm) thick and up to 5" (12.7 cm) thick when extended with aggregate. Contractors and engineers choose LEVELFLO for self-leveling floor underlayment applications when a fast, durable and economical solution is required.

APPLICATIONS: Use LEVELFLO when a high quality, fast-setting, self-leveling underlayment is needed. LEVELFLO is ideal for all floor projects that need long flow life and working time while achieving high 24 hour strength. LEVELFLO 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.





LEVELFLOR[®]

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MIXING: Add one 50 lb (23 kg) bag of Rapid Set[®] 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 1/2" heavy duty drill with a minimum 650 rpm or by using an 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" (2.5 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 to a featheredge to match existing elevations.

For thicknesses greater than 1" (2.5 cm), extend each 50-lb (23-kg) bag of LEVELFLOR with 25 lb (11.4 kg) of clean, dry 3/8" (0.95 cm) pea gravel. Place the extended material to 1/2" (1.2 cm) below desired floor level and then place neat LEVELFLOR or Rapid Set[®] TRU[®] Self-Leveling for the final 1/2" (1.2 cm) within 24 hours. When extended with aggregate, LEVELFLOR may be placed up to 5" (12.7 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°F (21°C) 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.

YIELD & PACKAGING: LEVELFLOR is available in 50-lb (23 kg) polyethylene-lined bags. Coverage is 24-30 ft² (2.2-2.8 m²) at 1/4" (0.64 cm) thickness and 12-15 ft² (1.1-1.4 m²) at 1/2" (1.2 cm) thickness for flat surfaces.

STORAGE & SHELF LIFE: One year when stored in cool, dry conditions out of direct sunlight.

USER RESPONSIBILITY: Before using Rapid Set[®] products, read current technical data sheet, bulletins, product label and material safety data sheet at www.ctscement.com. It is the user's responsibility to review instructions and warnings for any Rapid Set product in current technical data sheet, bulletins, product label and material safety data sheet prior to use.

WARNING: DO NOT BREATHE DUST. AVOID CONTACT WITH SKIN AND EYES. Use material in well-ventilated areas only. Exposure to cement dust may irritate eyes, nose, throat, and the upper respiratory system/lungs. Silica exposure by inhalation may result in the development of lung injuries and pulmonary diseases, including silicosis and lung cancer. Seek medical treatment if you experience difficulty breathing while using this product. The

PHYSICAL DATA	
Working time	30 minutes
Flow life	15 minutes
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 minutes	Final set: 200 minutes
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

Data obtained at flow consistency at 70°F (21°C)

use of a NIOSH/MSHA-approved respirator (P-, N- or R-95) is recommended to minimize inhalation of cement dust. Eat and drink only in dust-free areas to avoid ingesting cement dust. Skin contact with dry material or wet mixtures may result in moderate irritation to thickening/ cracking of skin to severe skin damage from chemical burns. If irritation or burning occurs, seek medical treatment. Protect eyes with goggles or safety glasses with side shields. Cover skin with protective clothing. Use chemical resistant gloves and waterproof boots. In case of skin contact with cement dust, immediately wash off dust with soap and water to avoid skin damage. Wash skin areas exposed to wet concrete with cold, running water as soon as possible. In case of eye contact with cement dust, flush immediately and repeatedly with clean water and consult a physician. If wet concrete splashes into eyes, rinse eyes with clean water for at least 15 minutes and go to the hospital for further treatment.

PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Please refer to the MSDS and www.ctscement.com for additional safety information regarding this material.

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, 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.

