# CONCRETE LEVELER®

Quick-Setting, Hydraulic Cement-Based, Self-Leveling Floor Underlayment

## PRODUCT DATASHEET

**DESCRIPTION:** Rapid Set® CONCRETE LEVELER® is an advanced hydraulic cement-based, polymer-modified self-leveling underlayment that can be used both indoors and outdoors. CONCRETE LEVELER has a flow life of 15 minutes, maintains workability for 20 minutes and produces a flat, strong surface with high bond strength. CONCRETE LEVELER is designed for fast-track leveling applications and can be covered with finished flooring in 4 to 16 hours at 70°F (21°C), depending on the flooring type. This advanced underlayment can be applied up to 2" (5.1 cm) thick and up to 5" (12.7 cm) thick when extended with aggregate. Professionals choose CONCRETE LEVELER for self-leveling floor underlayment applications when a fast, durable and economical solution is required.

**USES:** Use CONCRETE LEVELER when a high quality, fast-setting, self-leveling underlayment is needed. CONCRETE LEVELER is ideal for all floor projects that need long flow life and working time while achieving high 24-hour strength. Use to level or change the elevation of your substrate prior to installing carpet, tile, hardwood, or resinous flooring. CONCRETE LEVELER is an excellent choice for new floor projects and repair projects.

**ENVIRONMENTAL ADVANTAGES:** Use CONCRETE LEVELER to reduce your carbon footprint and lower your environmental impact. Production of Rapid Set cement emits far less $CO_2$ than portland cement. Contact your CTS representative for EPD, LEED values and other sustainability information.

**SURFACE PREPARATION:** Substrate must be clean, sound concrete that is free of gypsum compounds and all materials that may inhibit bond such as: oil, curing compound, dust, mastic, bond breakers, and other surface contaminants. Concrete vapor emission rates should comply with the finished flooring manufacturer's requirements. Smooth concrete and hard-troweled surfaces must 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 is not recommended. Surface must be dry and be between 50°F and 90°F (10°C and 32°C), and be properly primed. Honor all moving joints and cracks.

**PRIMING:** Apply Rapid Set® Concrete Leveler™ Primer to all substrate surfaces prior to placement. Follow the application instructions stated on the primer product packaging.

**APPLICATION:** Apply CONCRETE LEVELER up to 2" (5.1 cm) thick. For thicknesses greater than 2" (5.1 cm), extend each 50-lb (22.7-kg) bag with 25 lb (11.3 kg) of clean, dry 3/8" (0.95 cm) pea gravel. When extended with aggregate, CONCRETE LEVELER may be placed up to 5" (12.7 cm) thick.

**MIXING: Add one 50-lb (22.7-kg) bag of CONCRETE LEVELER to 4.5 to 5 quarts (4.3 L to 4.7 L) of potable water. Do not exceed 5 quarts (4.7 L) of water.** CONCRETE LEVELER may be mixed using a drill-mounted paddle mixer, or by using an appropriate mixer and pump. Mix 3 to 5 minutes until the mixture is smooth and lump free. Avoid mixers that entrap large amounts of air. Mixed CONCRETE LEVELER should be placed within 20 minutes at 70°F (21°C). Maintain material temperature between 60°F and 80°F (16°C and 27°C).

**PLACEMENT:** When primer is completely dry, pour or pump CONCRETE LEVELER with a minimum thickness of 1/8" (3 mm) over the highest point. Use a gauge rake, spreader or other tools to place the material. Use a Rapid Set® Spiked Roller to remove any entrapped

## OVERVIEW

**Highlights:**

- Interior/Exterior: Provides long-life durability in wet and dry environments
- Quick Setting: Ready for foot traffic in 2 to 4 hours.
- Minimizes downtime: May be used as a temporary work surface prior to installation of finished flooring
- High Strength: Achieves 3000 psi (20.7 MPa) compressive strength in 24 hours and 5,000 psi (34.5 MPa) in 28 days
- Easy To Use: Just add water

**Tested in accordance with:**

ASTM C1708

**MasterFormat® 2016**

| | |
|---|---|
| 03 01 50 | Maintenance of Cast Decks and Underlayment |
| 03 54 16 | Hydraulic Cement Underlayment |

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air. A smoother trowel may be used to smooth the material. CONCRETE LEVELER can be troweled to a featheredge to match existing elevations.

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

**FLOOR COVERINGS:** Ceramic tile may be placed in as little as 4 hours and other moisture insensitive flooring may be placed in 6 hours. Allow CONCRETE LEVELER to cure for 16 hours prior to installing moisture sensitive flooring such as some adhesives and coatings. Always follow the flooring manufacturer's recommendations for Moisture Vapor Emission Rate and retained moisture. CONCRETE LEVELER is not designed to function as a vapor barrier. To determine if CONCRETE LEVELER is suitable for your specific application, install and evaluate jobsite test sections using the prepared substrate and the specified finished floor.

CONCRETE LEVELER may be used as a temporary work surface for foot traffic in 2 to 4 hours and rubber wheel traffic in 24 hours at 70°F (21°C). CONCRETE LEVELER is not designed to be a permanent finished floor surface. CONCRETE LEVELER may be used as an underlayment in moisture control systems.

**YIELD & PACKAGING:** CONCRETE LEVELER is available in 50-lb (22.7-kg) polyethylene-lined bags. Coverage is 24 $ft^2$ to 30 $ft^2$ (2.2 $m^2$ to 2.8 $m^2$) at 1/4" (0.64 cm) thickness and 12 $ft^2$ to 15 $ft^2$ (1.1 $m^2$ to 1.4 $m^2$) at 1/2" (1.3 cm) thickness for flat surfaces.

**SHELF LIFE:** CONCRETE LEVELER has a shelf life of 12 months when stored properly in a dry location, protected from moisture, out of direct sunlight, and in an undamaged package.

**USER RESPONSIBILITY:** Before using CTS products, read current technical data sheets, bulletins, product labels and safety data sheets at www.CTScement.com. It is the user's responsibility to review instructions and warnings for any CTS products 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 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 bodily injury ranging from moderate irritation and 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. In case of skin contact with wet cement, wash exposed skin areas 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 cement splashes into eyes, rinse eyes with clean water for at least 15 minutes and go to the hospital for further treatment.

Please refer to the SDS 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, will replace or refund the purchase price of any material proven to be defective within one (1) year from date of purchase. The above remedies shall be the limit of CTS' 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.

⚠ **WARNING**
CANCER and REPRODUCTIVE HARM - www.P65Warnings.ca.gov

## TYPICAL PHYSICAL DATA

| Tested In Accordance with ASTM C1708* | |
|---|---|
| Working time | 20 minutes |
| Flow life | 15 minutes |
| Walk-on time | 2 to 4 hours |
| Install moisture insensitive flooring | 6 hours |
| Install moisture sensitive flooring | 16 hours |
| VOC content | 0 g/L |

| Set Time, ASTM C191* | |
|---|---|
| Initial set | 2 hours |

| Compressive Strength, ASTM C109* | |
|---|---|
| 24 hours | 3000 psi (20.7 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) |

* Data obtained at 70°F (21°C)