



PRODUCT DATASHEET

DESCRIPTION: Rapid Set[®] TRU[®] SELF-LEVELING is a high performance architectural topping and resurfacer that can be used indoors and outdoors. TRU rapidly levels, maintains workability for 20 minutes, and produces a smooth, strong surface with high-bond strength. TRU is ready for foot traffic in 2 to 3 hours and ready for coatings in 12 hours. As an interior and exterior product, TRU is durable in wet or dry conditions.

USES: Use TRU for finished floors in commercial, institutional and recreational facilities.

ENVIRONMENTAL ADVANTAGES: Use TRU to reduce your carbon footprint and lower your environmental impact. Production of Rapid Set cement emits far less CO₂ than portland cement. Contact your representative for LEED values and environmental information.

APPLICATION: Apply TRU when a high quality, fast, polishable topping is required. TRU is ideal for projects that need long flow life and working time while achieving high early strength. TRU cures to a natural (off-white) color. A customized appearance can be achieved by adding integral colors and/or decorative aggregate. Protective coatings, sealers or epoxies can be applied per the manufacturer's recommendations after 12 hours.

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. Mechanical methods of surface preparation such as shot blasting are preferred. Surface must be ICRI CSP 3 to 5. Acid etching the substrate is not recommended. Surface must be dry and be properly primed. Surface and ambient temperatures must be between 50°F to 90°F (10°C to 32°C).

PRIMING: When placing TRU as a decorative topping, Rapid Set[®] TXP™ or Rapid Set[®] TXP™ FAST epoxy primer with sand broadcast to refusal is the preferred method of priming. When TRU is not being placed as a decorative topping, Rapid Set[®] Acrylic Primer may be applied to the prepared concrete substrate. Follow all product specifications and instructions.

MIXING: Add one bag of TRU to 4.0 to 4.5 quarts (3.8 to 4.3 L) of clean, potable water. Mix 3 to 5 minutes until the mixture is smooth and lump-free. Avoid mixers that entrap large amounts of air. Mixed TRU should be used within 20 minutes at 70°F (21°C). Maintain material temperature between 60°F and 80°F (16°C and 27°C). **Do not exceed 4.5 quarts (4.3 L) per bag.**

PLACEMENT: Arrange work area to permit continuous placement without cold joints. Pour or pump the TRU onto the prepared and primed substrate with a minimum thickness of 1/8" (3 mm) over the highest point. A minimum of 3/8" thickness (10 mm) is required for polished flooring. Please refer to CTS Technical Bulletins for more information. All existing joints and moving cracks must be honored up through the topping. TRU will flow and level out within its 15 minute flow life. Use a gauge rake to coax the material into place as required. Use a Rapid Set[®] Spiked Roller to remove any entrapped air. For thicknesses greater than 1.5" (3.8 cm), extend each 50-lb (22.7-kg) bag of TRU with 25 lbs (11.3 kg) of clean, dry 3/8" (10 mm) pea gravel.

CURING: No wet curing is required under normal conditions at 70°F (21°C). If used in exterior applications, apply a fine water mist to the newly hardened surface of TRU 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.

Adhesives, thin set or paint can be applied after 6 hours. If used as a topping that will receive traffic, a high-quality sealer or epoxy can be applied per the manufacturer's recommendations after 12 hours.

OVERVIEW

Highlights:

Decorative: Designed specifically for polishing and decorative flooring applications

Outstanding Clarity & Gloss: Highly polishable due to low polymer content and high density

Versatile: Use as a topping, resurfacer or underlayment, incorporate colors and aggregates to create numerous design possibilities

Fast Track: Foot traffic in 2 to 3 hours, coatings in 12 hours, grind and polish in 24 hours

High Strength: 5000 psi (34.5 MPa) in 24 hours, 6500 psi (44.8 MPa) in 28 days

Interior/Exterior: Durable in dry and wet areas

Tested in accordance with:

ASTM C1708

MasterFormat[®] 2016

03 01 50 Maintenance of Cast Decks and Underlayment

03 53 19 Concrete Overlayment

03 54 16 Hydraulic Cement Underlayment

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POLISHING: Rapid Set[®] TRU[®] SELF-LEVELING may be polished after 24 hours at normal conditions. TRU grinds and polishes much like concrete and can achieve a very high gloss and Distinctness-of-Image (DOI) due to its high density and low polymer content. Polishing any topping requires a high degree of experience and craftsmanship. Contact CTS Cement for a list of approved installers.

COLD WEATHER: Environmental and material temperatures below 70°F (21°C) may delay setting time and reduce the rate of strength gain. Lower temperatures will have a more pronounced effect. Thinner sections will be more significantly affected. To compensate for cold temperatures, keep material warm, use heated mix water, and follow ACI 306 Procedures for Cold Weather Concreting.

WARM WEATHER: Environmental and material temperatures above 70°F (21°C) may speed setting time and increase the rate of strength gain. Higher temperatures will have a more pronounced effect. To compensate for warm temperatures, keep material cool, use chilled mix water and follow ACI 305 Procedures for Hot Weather Concreting.

YIELD & PACKAGING: TRU is available in 50-lb (22.7-kg) polyethylene-lined bags. Yield is 0.45 ft³ per 50-lb (22.7-kg) bag. Coverage is 15 ft² to 16 ft² (1.4 m² to 1.5 m²) at 3/8" (10 mm) thickness and 11 ft² to 12 ft² (1.02 m² to 1.11 m²) at 1/2" (13 mm) thickness for flat surfaces.

SHELF LIFE: TRU 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: TRU GRAY is a rigid, non-structural topping. It is not possible to predict the appearance of micro-cracking in a non-structural topping and such overlayers may not be capable of restraining movement from the substrate. Reflective cracks may appear due to vibration, substrate flexure or existing joints and cracks. TRU GRAY is designed as a wear surface for foot traffic, forklift traffic or other rubber-wheeled traffic. The result of highly localized imposed loads, such as steel or hard-plastic wheeled traffic, heavy metal equipment, or pallets with protruding nails, may cause abrasion or gouging to the flooring surfaces. Due to its cementitious nature, TRU GRAY cannot be completely homogenous in appearance and optical variations to the finished floor should be expected. TRU GRAY is not recommended in locations subjected to freezing temperatures or where deicing salts will be used.

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 concrete, 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 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 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'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.

TYPICAL PHYSICAL DATA

Working time	20 minutes
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Flow life	15 minutes
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Compressive Strength, ASTM C109 Mod.*

4 hours	3000 psi (20.7 MPa)
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24 hours	5000 psi (34.5 MPa)
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28 days	6500 psi (44.8 MPa)
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Slant Shear Bond Strength, ASTM C882 Mod.*

7 days	2100 psi (14.5 MPa)
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28 days	2900 psi (20.0 MPa)
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Tensile Strength, ASTM C307*

7 days	210 psi (1.44 MPa)
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28 days	365 psi (2.51 MPa)
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Flexural Strength, ASTM C348*

24 hours	850 psi (5.86 MPa)
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28 days	1900 psi (13.1 MPa)
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*Data obtained at 70°F (21°C)

