# TRU® SP SELF-LEVELING

Salt & Pepper Flnish, High Performance, Self Leveling, Architectural Topping



# PRODUCT DATASHEET

**DESCRIPTION:** Rapid Set® TRU® SP is an advanced, professional grade, hydraulic cement-based, self-leveling topping. It can be ground and polished to expose the sand and provide a salt and pepper appearance. TRU SP levels rapidly, maintains workability for up to 20 minutes, is ready for foot traffic in 2 to 3 hours, produces a dense surface, and has high bond strength. As an interior and exterior product, it is durable in wet or dry conditions. TRU SP is available in natural and gray.

**USES:** Use TRU SP for polished floors in schools, airports, warehouses, retail, restaurants, lobbies, and more.

**ENVIRONMENTAL ADVANTAGES:** Use TRU SP 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:** Use TRU SP when a high quality, fast, polishable topping is required. TRU SP is ideal for projects that need long flow life and working time while achieving high early strength. 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 and 90°F (10°C and 32°C).

**PRIMING:** Use a Rapid Set® TXP™ epoxy primer with sand broadcast to refusal. Follow all product specifications and instructions.

MIXING: For each bag of TRU SP, use 4.0 to 4.5 quarts (3.8 L to 4.3 L) of potable water. For polished floors, use less water to achieve maximum sand exposure with minimal grinding. It is recommended to start with 4.25 quarts (4.0 L) per bag. Add the measured amount of water to the mixing container. While the mixer is running, add TRU SP. Water may be adjusted within the acceptable range, if necessary, to provide the desired flow. **Do not exceed 4.5 quarts (4.3 L) per bag.** 

When mixing 4-bag batches, use 17.0 quarts (16.1 L) of water in the appropriate sized batch mixer. Mix using an ICRI 320.5R #P2 or #P9 helix-style mixing paddle. After the final bag is added to the batch, mix an additional 2 to 3 minutes until the mixture is lump-free. If more flow is required, add 0.5 quart (0.5 L) increments of water and check the flow. Do not exceed 18 quarts (17.0 L) per 4 bags. Avoid mixers that entrap large amounts of air. Mixed TRU SP should be placed within 20 minutes. Maintain material temperature between 60°F and 80°F (16°C and 27°C).

**PLACEMENT:** Arrange work area to permit continuous placement without cold joints. Place the TRU SP onto the prepared and primed substrate with a minimum thickness of 3/8" (10 mm). For floors subjected to high-load traffic, TRU SP must be applied at a minimum thickness of 1/2" (13 mm). All existing joints and moving cracks must be honored up through the topping. TRU SP will flow and level within 15 minutes. Use a gauge rake to coax the material into place as required. Immediately after placement, use a Rapid Set® Spiked Roller to remove any entrapped air. A smoother may be used on the surface.

**CURING:** No wet curing is required under normal conditions at 70°F (21°C) with moderate humidity. If used in exterior or low humidity conditions, apply a fine water mist 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.

**POLISHING:** TRU SP may be polished wet or dry after 24 hours at normal conditions. TRU SP grinds and polishes much like concrete and can achieve a very high gloss and Distinctness-of-Image (D0I) due to its excellent surface hardness. Polishing toppings requires a high degree of experience and craftsmanship. Contact CTS Cement for a list of preferred installers.

# **OVERVIEW**

# **Highlights:**

Decorative: Specialized aggregate to achieve a salt and pepper appearance on polished, decorative floors

Outstanding Clarity & Gloss: Highly polishable with excellent surface hardness

Versatile: May be polished wet or dry. Incorporate aggregates to create numerous design possibilities

Fast Track: Foot traffic in 2 to 3 hours, grind wet or dry, and polish in 24 hours.

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

#### Manufacturer:

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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 SP is available in 60-lb (27.2-kg) polyethylene-lined bags. Yield is 0.5 ft3 (0.01 m3) per 60-lb (27.2-kg) bag. Coverage is approximately 16 ft2 (1.5 m2) at 3/8" (10 mm) thickness or 12 ft<sup>2</sup> (1.1 m<sup>2</sup>) at 1/2" (13 mm) thickness for flat surfaces.

SHELF LIFE: TRU SP 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 SP is a rigid, non-structural topping. It is not possible to predict the appearance of micro-cracking in a non-structural topping. Such overlayments 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 SP 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 SP cannot be completely homogenous in appearance and optical variations to the finished floor should be expected. TRU SP is not recommended in locations subject 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.

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.

#### **△ WARNING**

CANCER and REPRODUCTIVE HARM - www.P65Warnings.ca.gov

# TYPICAL PHYSICAL DATA

Working time	20 minutes
Flow life	15 minutes

## Compressive Strength, ASTM C109 Mod.\*

4 hours	2000 psi (13.8 MPa)
24 hours	4000 psi (27.6 MPa)
28 days	6500 psi (44.8 MPa)

\*Data obtained at 70°F (21°C)





