



## HIGH STRENGTH CEMENT MIX FOR COUNTER TOPS

**PRODUCT DESCRIPTION:** TI Kounter Kast is a pre-blended, non-shrink, fiber reinforced, high strength castable cement mix for precast or cast in place countertops. Kounter Kast is recommended for both interior and exterior countertop applications, and can be used in either casting upright for a hard trowel finish, or precast upside down for a wet cast “pressed” finish. Kounter Kast is a simple to use bag mix which provides high compressive strengths with or without optional coarse aggregate additions.

**BENEFITS:** HIGH EARLY COMPRESSIVE STRENGTHS...VERY LIGHT GRAY BASE COLOR CAN BE PIGMENTED EASILY...EASY TO MIX, PLACE, TROWEL OR TEXTURE...MINIMAL SHRINKAGE AND CURLING...FIBER FORTIFIED FOR INCREASED TENSILE AND FLEXURAL STRENGTHS

**COMPOSITION:** Portland/calcium sulfo-aluminate based cements, selected aggregates, polypropylene fiber, and water reducing, shrinkage reducing chemical additives. This product contains no calcium chloride or added chlorides that contribute to reinforcement steel corrosion.

<b>WORKING &amp; PERFORMANCE PROPERTIES @ PLASTIC CONSISTENCY / 70°F (21°C) (APPROXIMATE)*:</b>	
Initial Set per CRD C-C82:	2 hours
Final Set per CRD C-C82:	3.5 hours
Coverage per 50 lb. / 22.68 kg Bag:	3.60 sq. ft. at 1.5 inches thickness, 2.40 sq.ft. @ 2.0 inch thickness
Yield per 50 lb. / 22.68 kg Bag:	0.43 cubic feet / 0.021 cubic meters

\*Plastic consistency was obtained using 13.8% water to powder ratio = 3.31 quarts water / 50 lb bag

### TECHNICAL DATA:

<b>COMPRESSIVE STRENGTH PER ASTM C-227@ PLASTIC CONSISTENCY / 70°F (21°C) (APPROXIMATE):</b>	
1 day	5100 psi 35.70 mpa
3 days	7200 psi 50.40 mpa
7 days	8500 psi 59.50 mpa
28 days	9700 psi 67.90 mpa

**PREPARATION: Forming:** TI Kounter Kast is usually placed between 1.5 to 2.0 inches thick. Make sure all forming, bracing and edging materials are properly supported and tight fitting or caulked. Use water resistant plywood or concrete backer board for forming cast in place counters. Protect all existing cabinets and flooring from cement splatter during mixing and placement. **Reinforcement:** Steel reinforcement is recommended at the center of the counter top and on all supporting edges. This is typically ladder wire or 4 x 4 x 6 gauge expanded wire mesh combined with #3 pencil rod bar, which is typically placed near the bottom of the slab or at a minimum of 3/8 inch below the top surface. Commonly sized rebar pieces are usually too thick for counter top pours and are not recommended.

**DIRECTIONS: Mixing:** TI Kounter Kast can be mixed by hand using a “jiffy paddle type” mixer at low speed, or it can be machined mix by use of a concrete drum paddle mixer. Measure out the required water amount and add to the pail or mixer before adding the dry material to ensure easier mixing with less dusting. A 50 lb bag of Kounter Kast will require between 3.0-3.3 quarts of water for a firmer, press type mix., up to 4 qts for a more flowable, easy level mix. Periodically scrape the sides of the mixer or pail at regular intervals to ensure there is mix uniformity with no clumps. The lower water ratio can be used to produce a more “dough-like” consistency which is usually preferred for pressed (upside down) placements. Note - Pea gravel or other coarse aggregate additions, along with proper vibration can be used with Kounter Kast. If pea gravel is to be added, do not exceed 13 lbs (approximately 1 gallon by loose volume) per 50 lb bag. When adding pea gravel, the mix water will have to be reduced accordingly to maintain correct placement consistency. It is always recommended that a test mix or trial batch be tested to become familiar with product properties before actual product placement. If adding integral pigment color to the TI Kounter Kast mix, make sure to add evenly measured amounts to each batch, paying close attention to water content.

**DIRECTIONS: Mixing (continued):** measured amounts of both color and water to each batch to ensure surface uniformity and consistent color distribution in the final casting. **Placement** Kounter Kast should be placed in one

direction to avoid potential air entrapment and screeded into place taking care to fill in all voids and edges using vibration techniques for proper consolidation as necessary. Do not hard trowel the surface until after initial set is obtained. The use of a magnesium trowel rather than steel is recommended to avoid burning the surface. Do not overwork the final surface to avoid trowel burn. **Curing:** Wet curing by misting the surface is recommended for cast in place or troweled surface for a minimum of 2 days.

A troweling agent such as TI CYA can also be used as both a moisture retainer and troweling aid, and is especially helpful for exterior applications. Avoid direct sunlight, high air movements and wind, or high heat which can lead to shrinkage or increased chance of curling. For precast pours, if a moisture cure room is not available for multiple pieces, allow the mix to cure for 24 hours, then lift the slabs onto cantilever type racking to allow the bottom to air cure evenly with the top surface, then proceed to wet cure the entire slab for 2-3 days and let dry. **NOTE OF CAUTION.** The proprietary fibers used for this mix may become barely visible on the surface after troweling to a finish. They will remove naturally through the grinding and polishing process. If choosing to retain just a natural hard trowel finish, fibers may be quickly and safely removed by quick wafting with an ignited propane torch an inch or so above the surface. This is to be done prior to the application of any sealers which may be flammable. **Polishing & Sealing:** Allow the surface to cure for 2 days before polishing the surface. Final sealing/treating options can be use of a penetrating sealer/densifier or a topical "film" sealer such as an acrylic, polyurethane or polyurea. Allow this surface to cure for 3-4 days, then topcoat with furniture wax, beeswax or carnuba wax that can be buffed or polished to a high gloss, protective surface.

**CAUTIONS:** Mix Kounter Kast for approximately 3-5 minutes minimum to ensure uniformity. Do not mix more material than can be placed in 30-40 minutes. The temperature of the mixed material should be between 60°F to 80°F for ideal working properties. Use only potable water for mixing. Clean mixing equipment between batches. When mixing Speccrete® Counter Cast, the water-to-powder ratio is very critical, do not vary the specified water amount or over water. Do not re-temper or remix hardened material. Use of any extension aggregates will alter physical properties as listed. Protect from excessive sun, low humidity, rain and wind exposure, as well as temperature extremes that could prevent inadequate curing. Do not apply to overly cold or hot surfaces. Colder temperatures will extend open time and reduce rate of strength gain. Counter tops made with TI Kounter Kast are subject to typical concrete staining, wear and abrasion, and should always be sealed for added surface protection, pigment color retention and scratch resistance.

**WARNINGS:** Contains cement and silica, avoid inhalation of dust. Wear gloves, safety goggles, and OSHA approved dust respirator during mixing and placement. Refer to product M.S.D.S. (Material Safety Data Sheet) for additional safety information. Do not take internally. Avoid prolonged contact with skin. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

**NPCS HMIS SAFETY RATINGS:** HEALTH = 2, FLAMMABILITY = 0, REACTIVITY = 0, PROTECTION = E

**PACKAGING:** 50 lb. (22.70 kg) bags

**STORAGE:** 40°F to 90°F in a dry      **SHELF LIFE:** 1 year properly stored

**FREIGHT CLASS:** Item #42130, Sub 0, LTL 50 -Cement based grouting material in bags

**LIMITED WARRANTY:** This product is warranted to be of merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product. Revised – 03-08