IMPERIAL CONCRETE COUNTERTOP MIX

TECHNICAL DATA & APPLICATION INSTRUCTION

PRODUCT DESCRIPTION

Kingdom Products Concrete Countertop Mix is engineered to be exceptionally strong and formulated to produce high quality commercial grade countertops with minimal shrinkage and resists cracking and curling when proper procedures are followed. The combination of finely graded sands and premium graded, select decorative aggregates, combine to make the perfect mix needed to create professional cast-in-place or pre-cast countertops. This mix is suitable for hand troweled, ground and polished or hand pressed finishes.

APPROXIMATE COVERAGE

Varies by thickness - On average each 60 lbs bag will cover approximately

- 3.5 sq ft at 1.5" thickness
- 2.75 sq ft at 2" thickness

MIXING

DO NOT OVERWATER! - This is a dry mix. Use a total of 80 to 90 ounces of water to one bag of Imperial Concrete Countertop Mix. *If using the Imperial S.C.A. Self-Compacting Additive, use only 68-70 oz of water to 2 oz of S.C.A. per bag. Use a rotary style/drum concrete mixer. Do Not attempt to use a hand/drill mixer. First, wet the drum of mixer or mixing vessel and dump excess water out of mixer. Next add about 80% of total mix water to mixer drum. Then add dry powder to the liquid slowly, allow the mix to absorb the water slowly while mixer is turning to avoid the mix from balling up due to low slump. Mix completely for 3 to 5 minutes with until mixing process is completed. It may be necessary to stop mixer and scrape any dry powder remaining on mixer walls into mix. At this point, it may be necessary to add the remaining 20% of the water. Do not add more water than suggested. Continue with mixing process until a uniform blend is achieved. **DO NOT OVERWATER!** - This is a dry mix.

APPLICATION

Mix is suitable for cast-in-place or pre-cast applications. Water content may be adjusted up or down 5 ounces per bag, depending on use. Do not over water. Pre blend pigments or other admixtures with the mix water prior to adding water content to the mixer drum.

REINFORCEMENT

Reinforce countertop with $4 \times 4 \times 6$ gauge mesh, ladder wire or truss type welded wire. Arrange the wire in a grid pattern and tie together. Avoid tying or anchoring the reinforcement to the support framework beneath countertop. Apply reinforcement at all re-entrant corners in a 45° fashion. Reinforcement should be located mid depth to lower 2/3 inch depth of placement in the countertop.

FINISHING TIP / CURING

Set time will be determined by physical temperature of substrate, the temperature of the mix water, the temperature of bagged material dry mix itself and overall weather conditions at the time of pour. Vibrate and condense mix upon placement in form work. Upon reaching final set time (Approx. 4 hours) this mix will set fast, do not leave unattended when achieving final set, trowel as necessary until desired finishing effect is created. Keep temperature consistent with the pour day through curing process if possible. Cover with poly to hold in moisture and allow a slow curing time. Tent poly if possible to avoid water marks in finished product of a hand troweled surface. PSI of 7200 by 28 days.

POLISHING

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Polishing may be achieved in 2 to 7 days depending on degree of set at time of polishing. For exposed aggregate or a terrazzo look, start at 50 grit and cut until decorative stone in mix is exposed to desired degree of exposure. Work your way up through the scale of polishing discs in sequence from 50 grit to 100 to 300 to 600 to 800 to 1500 and work your way up through the scale up to 3000 grit and buff. Generally, the tighter the sequence of jumps in grit size of the resin pads during the polishing steps, will produce a nicer final product. Wide ranges of jumps between grit sizes in resin pads will increase pad wear and may minimize the polished effect in final product.

SEALING

Kingdom Products recommends film forming coatings for maximum stain resistance. Acrylic sealers, epoxies, poly-aspartics, polyurethanes and lithium densifiers are all suitable.

STORAGE

Do not subject **Imperial Concrete Countertop Mix** to moisture prior to use. Keep product in a cool dry location. In cold climates, store the product at room temperatures and bring product to a temperature range of 60° to 80° prior to use. Colder material may take longer to achieve final set time, while hot material may set very quickly.

PACKAGING

Imperial Concrete Countertop Mix is available in three standard colors and can be pigmented to any shade desired. We offer the mix in the color white, gray and charcoal. Custom colors can be blended in bulk and packaged by request or pigmenting on site is acceptable.

GRAY MIX - Silver Gray colored cement matrix with white sand, gray and mother of pearl aggregates.

WHITE MIX - Natural white cement matrix utilizing white sand and mother of pearl white aggregates with also a hint of gray.

CHARCOAL MIX – Dark Gray cement matrix utilizing and mother of pearl white, gray aggregates with also a hint of terra cotta.

SHELF LIFE

Keep in cool, dry location in a tightly sealed container. Avoid storing directly on top of a concrete slab. Place a barrier between the countertop mix bags and the concrete floor (i.e. plastic, pallet, etc.)

SPECIAL NOTES

Please consult Material Safety Data Sheet (MSDS) and read Warranty information prior to use. FOR PROFESSIONAL USE ONLY!

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