

SPECCRETE MICROTOP OVERLAY

POLYMER MODIFIED CEMENTITIOUS SKIM COAT OVERLAYMENT

PRODUCT DESCRIPTION: Speccrete® Microtop Overlay is a pre-blended polymer modified, non-shrink cementitious applied overlay for resurfacing concrete flatwork or hardscapes in applications ranging from feather edge to 1/8 inch (3.0 mm) maximum. Speccrete® Microtop Overlay is formulated with very fine additives and aggregates along with the addition of white Portland to provide a very light off white base color that can accept integral pigments for color modification during application, or can be modified after placement and cure with either acid or acrylic stains for desired color effects. Speccrete® Microtop Overlay can be smooth troweled or applied by splatter gun for a knockdown finish. Speccrete® Microtop Overlay contains added plasticizers and finishing agents that help minimize efflorescence formation and freeze thaw related spalling and cracking surface degradation. Typical applications include interior or exterior floors and building entrances, patios, pool decks, sidewalks, driveways and related flatwork.

BENEFITS: ALLOWS THE USER THE ABILITY TO APPLY DECORATIVE TOPCOATS TO OLD OR WORN CONCRETE SURFACES THAT WOULD OTHERWISE HAVE TO BE REMOVED OR TORN OUT... PROVIDES A NEW SURFACE FOR DECORATIVE STAINING OR TREATMENTS

COMPOSITION: Portland / CSA based cements, selected aggregates, polymer modifiers and proprietary chemical additives. This product contains no calcium chloride or added chlorides that contribute to reinforcement steel corrosion or efflorescence concerns.

TECHNICAL DATA:

WORKING & PERFORMANCE PROPERTIES @ 70°F (21°C) (APPROXIMATE);	
Initial Set per :	1.0 hours
Final Set per :	3.0 hours
Coverage per 45 lb. bag	Covers 96 sq. ft. at 1/16 inch (9.0 m2 at 1.5 mm thick)

*All tests run at 15% water to powder ratio = 3.24 quarts water / 45 lb bag for trowelable consistency

COMPRESSIVE STRENGTH PER ASTM C-109:	
1 day:	2185 psi (15.0 Mpa)
3 days:	4150 psi (28.5 Mpa)
7 days:	5250 psi (36.1 Mpa)
28 days:	6400 psi (44.1 Mpa)
FLEXURAL STRENGTH PER ASTM C-78:	
7 days:	870 psi (6.7 Mpa)
28 days:	1620 psi (11.2 Mpa)

SURFACE PREPARATION: Proper surface preparation of the concrete substrate is critical for successful application of the Speccrete® Microtop Overlay. The substrate must be in a structurally sound condition, free of gaping cracks (wider than hairline), and free of oil, grease, dirt and all other surface contaminants that would interfere with adhesion of the Speccrete® Microtop Overlay. The ideal substrate to be covered should have some absorptive porosity or texture (surface profile), and should not repel water when applied. All cracks, spalls, or holes need to be patched or repaired prior to application. This type of cleaned, profiled surface can be obtained by use of pressure washing, sand blasting, or blast tracking (steel shot). **JOINTS:** All expansion joints within the existing concrete need to be kept open and should not be covered by the overlayment. These joints can be marked during application with a trowel and are usually incorporated into the desired end pattern or texture of choice. Placement of Speccrete® Microtop Overlay over expansion joints or other moving cracks and joints that are not repaired beforehand or allowed to expand can telescope or transfer through to the overlay surface causing additional cracking or possible delamination of the material. Non-moving cracks or spalls can be repaired with Specco 101LV injection epoxy or Specco Floor Weld Polyurea crack injection for faster set or low temperatures, taking care to keep the injection material inside the crack and not overfilled onto the concrete surface. Once the Speccrete® Microtop Overlay is installed, a control joint can be sawed through the substrate at a minimum of 1/3 the depth to allow for continued movement. This joint should be sawed as close as possible to the original crack.

CURE TIME: Allow a 28 day minimum cure time for application to new concrete slabs. When repairing old or cracked concrete, all repair mortars or epoxies have to be allowed proper cure times as well. Allow at least 30 minutes for polyurea injection repairs, 12 hours for epoxy injection repairs, and 3 – 4 days for cement mortars.

MIXING: Accurately measure out the correct water amount for each bag of Speccrete® Microtop Overlay and add to a clean mixing bucket. A 45lb bag (20.45kg) will require 3.24 quarts (3.05L) of water to achieve the proper trowelable consistency. Add additional water up to 4.25 quarts (4.01L) for a more fluid "pancake batter-semiflowable" consistency if a more fluid application is desired. Warmer temperatures or lower humidity levels may also require the use of the higher water level amount. Note that variations or inconsistent measuring in the amount of water added will result in differences in end color and texture. Add any selected pigments or colorants (liquid or powder) per the dosage rate specified by the color manufacturer, taking care to measure identical amounts with each batch to ensure uniformity. Using a mechanical mixer, mix material at low speed until it is fully blended and a uniform, lump free consistency is obtained.

APPLICATION: Pre-dampen the substrate prior to applying Speccrete® Microtop Overlay so that it is uniformly damp but has no free standing water or puddles. Apply Specco Speccobond primer to the surface at a typical rate of 150-200 square feet per gallon approximately 1-2 hours before application. The Speccobond will dry to a slightly tacky, clear consistency within 1 hour at 70°F average conditions. Apply the mixed Speccrete® Microtop Overlay from the walls outward at an approximate 1/8 inch thickness by use of an adjustable gauge rake. Once the material is gauge raked to a uniform thickness, the surface can be troweled to a smooth finish typically using a rounded corner fresno. Do not overtrowel the material. Drying time is typically between 1 hour (+/-) 15 minutes depending on thickness and weather conditions. Allow the applied surface to "air cure" for a recommended minimum of 24 hours before cleaning and foot traffic, and 48 hours before applying any stains or sealer topcoats to reduce the chance of any blushing or whitening effects.

CAUTIONS: For thicker applications ranging from 1/4 to 1/2 inch maximum in a single pass, the use of Speccrete Stampable Overlay is recommended. For thicker applications ranging from 1/8 to 3/8 inch maximum in a single pass, the use of Speccrete Fine Overlay is recommended. Mix Speccrete® Microtop Overlay for approximately 5 minutes. Do not mix more material than can be placed in 20 minutes. The temperature of the mixed material should ideally be between 45° F to 70° F, do not apply below 40°F or above 90°F. Use only potable water for mixing. Clean mixing equipment between batches. When mixing Speccrete® Microtop Overlay, the water-to-powder ratio is very critical, do not vary the specified water amount or over water. Do not re-temper. 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. High humidity and lower temperatures will slow rate of strength gain. Do not apply if rain is expected within 24 hours of application. Do not apply to frozen, frost filled or hot surfaces.

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: 45 lb. (20.45 kg) bags **STORAGE:** 40°F to 90°F

SHELF LIFE: 1 year properly stored

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 – 02-10-10