

Product Information

Generic Type: Polymer modified cement

General Properties: Smith's 4 in 1 Overlay is a single bag formula dry mix requiring only addition of water to produce a permanent bonding cement overlay for both interior and exterior installations. This unique mix does not require a bond coat and allows the installer to apply the product as a stamped overlay, spray texture, trowel substrate or vertical surface. Smith's 4 in 1 Overlay is suitable for applications from vehicular traffic to residential flooring and countertops. Its heat reduction characteristics make Smith's 4 in 1 Overlay an excellent product for pool decks and patios. Do not freeze.

- Water only – no more additive waste
- Horizontal & Vertical applications
- Ultra high polymer modification
- Low Odor
- Multiple applications – 1 bag
- Superior performance
- High strength (rated for vehicle traffic)
- Interior and Exterior application
- Ready to stamp immediately
- Saves time and labor

Recommended Use: Designed for any non-flexible surface requiring a maximum strength cement overlay as well as a resurfacing layer over existing coatings and substrates.

Not recommended for: Flexible or unstable substrates.

Colors: White powder, pigment packs available.

Performance Properties:

Testing conducted after 21 day cure by independent laboratory

ASTM Test #	Result
Freeze/Thaw Resistance C666 <i>Specimens were frozen in air and thawed in water per ASTM C666 procedure B representing Freeze/Thaw through one product life.</i>	No visible effect
Compression Strength D695 <i>1.25" diameter by 1" high cylinders were compressed at a rate of .05 inch/minute until failure.</i>	5119.31 psi
Taber Abrasion D1242* <i>CS10 wheels for 500 cycles with 500 gram load to determine total mass loss</i>	.0163 mg loss
Tensile Strength D4541 <i>PATTI JR Adhesion Tester with F1 Piston Assembly</i>	927.4 psi
Impact Resistance D2794 <i>1/2" ball dart (14.4 lbs) dropped from 40"</i>	576.0 inch lbs.
Lap Shear Strength D5868 <i>Material was applied between grit blasted 1/8th aluminum straps 1" wide with a 1" overlap and pulled using United Tensile Tester</i>	166.38 psi
Accelerated Weathering G154	Minimal Effect
Shrinkage C596	Exceeds standard

Mildew Resistance	G21	Class A
Fire Resistance	E108	Class A
Flame Spread	E84	Exceeds standard

Mixing Ratio: Water only

4 quarts	50 lbs bag*
<i>* Ratio varies depending on desired application. Refer to Application Instructions section.</i>	

Pot life & Cure Times:

Pot life	30-60 minutes*
Seal/Stain application	12 hours
Light Traffic	12 hours
<i>* Pot life varies depending on water mix ratio and environmental conditions. Note: Cure times vary depending on temperature, humidity, airflow and the water amount mixed with Smith's 4 in 1 Overlay.</i>	

Coverage: per 50 lbs bag

1/4 to 1/2 inch stamp coat	20-30 sq ft
1/16 to 1/8 inch trowel coat	75-100 sq ft
Spray - knock down texture	125-150 sq ft
<i>Note: Coverage depends on surface porosity and product build.</i>	

Storage Conditions: Moisture free environment at 50-90°F

Liquid Release Agent: Strongly recommend Smith's Super Release. Traditional liquid release agents may not work due to the high levels of polymer contained in Smith's 4 in 1 Overlay.

Sealers: Do not apply Smith's Seal WB directly over integral colored or uncolored Smith's 4 in 1 Overlay as hazing may occur. Smith's Royal Seal, Smith's Polyurethane WB and Smith's Polyurethane SB may be applied directly to Smith's 4 in 1 Overlay. All Smith's sealers can be applied over Smith's 4 in 1 Overlay installations that have been stained with Smith's Color Floor or Color Wall.

Shelf Life: Unopened bag – 3 years

Ordering Information:

Prices may be obtained from Smith Paint Products, Sales Representative or local Smith's Color Floor Dealer.

Upon information, belief and to the best of our knowledge, the information contained herein is true and accurate as of the date of issuance of this particular product and any and all information conveyed, expressed or implied is subject to change without prior notice. We guarantee our products to conform to Smith Paint Products' quality control mechanisms, but not to any other standards. We assume no responsibility for coverage, performance or injuries resulting from use, misuse or uses not described in any promotional materials. Promotional materials are not a supplementation to any contract or expand any term or condition of the product purchase agreement, if any is reduced to writing. Liability, if any, is limited to replacement of the purchased product upon presentation of valid sales receipt or invoice, and no damages for any consequential, liquidated or other damages are provided under this Limitation of Liability and Limited Warranty. NO OTHER WARRANTY OR GUARANTY OF ANY KIND IS MADE BY SMITH PAINT PRODUCTS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. DO NOT PURCHASE AND USE THIS PRODUCT IF YOU



Smith Paint Products

2200 Paxton Street, Harrisburg, Pennsylvania 17111

(717) 233-8781

Application Instructions

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. These instructions should be followed closely to obtain the maximum service from the coatings.

Area Preparation: Be sure to mask or cover all areas that are not intended to be covered with Smith's 4 in 1 Overlay.

Surface Preparation: The surface preparation phase should be viewed as the most important. Proper substrate preparation results in the product's longevity, minimizes potential failures and creates the best environment for an aesthetically pleasing work of art. In short, the more detail and time allotted to this phase of the project will dramatically affect the appearance and durability of the installation.

- 1) Remove loose particulates and other foreign materials. If an existing coating is not structurally sound (e.g. peeling, flaking, etc), remove from the intended application surface.
- 2) Chase any substrate cracks

Textured Surfaces:

- 3) Repair substrate cracks with proper materials. Create a texture via a grinder on exposed surface materials used to repair cracks.
- 4) Proceed to "Tape Test" section below.

Smooth Surfaces:

Concrete and other porous substrates:

- 3) For smooth troweled concrete, it is best to create a profile. Liberally apply Smith's Green Clean to a 20 feet x 20 feet section of the substrate with ½ inch nap roller cover.
- 4) Allow the gel to remain on the substrate for 20 minutes. Green Clean must remain damp.
- 5) For exterior application, utilizing a 12,000 work units* pressure washer in conjunction with a 0 degree rotating tip, remove the Smith's Green Clean with overlapping line patterns. For interior surface preparation, agitate Smith's Green Clean utilizing a floor buffer (small area) or an auto-scrubber (large area) with Mal-grit brush attachments while rinsing with clean water. Extract material utilizing a wet/dry vacuum or lower the squeegee uptake bar on the auto-scrubber. Continue to flush and agitate the substrate until the rinse water is clear.
- 6) Allow surface to dry.
- 7) Repair substrate cracks with proper materials. Create a texture via a grinder on exposed surface materials used to repair cracks.

- 8) Proceed to "Tape Test" section below.

Tile and non-porous substrates:

- 3) Create a profile utilizing a traditional low speed floor buffer in conjunction with a black pad.
- 4) Thoroughly flush area with water. If grease or other hydrophobic materials are present, clean intended application surface with an ammonia and water solution.
- 5) For exterior application, utilizing a 12,000 work units* pressure washer in conjunction with a 0 degree rotating tip, clean application area utilizing overlapping line patterns. For interior surfaces, extract material utilizing a wet/dry vacuum or lower the squeegee uptake bar on the auto-scrubber. Continue to flush and agitate the substrate until the rinse water is clear.
- 6) Allow surface to dry.
- 7) Proceed to "Tape Test" section below.

* Power wash = 0 degree rotating nozzle with 12,000 work units (Work Units = Gallons per Minute x PSI)

Tape Test

A tape test will help determine the effectiveness of the surface preparation process. Apply several 1 foot strips of high quality 2" clear packaging tape to various locations on the substrate. Aggressively press the tape onto the substrate with the heel of your hand. Fold one end of the tape into itself and pull it off of the substrate as vigorously as possible. Examine the adhesive layer in a bright light looking for residue that was pulled from the substrate. Little dust or other foreign particles should be visible. Areas with visible foreign material need to be rinsed again until the surface is free of these contaminants.

Mixing Instructions: Smith's 4 in 1 Overlay can be applied as a spray texture, hand trowel, stampable overlay or vertical wall mix. Smith's 4 in 1 Overlay incorporates a high level of polymer modification allowing for the water to product ratio to be adjusted in order to accommodate application methods, specific substrates, weather conditions and other jobsite variables. Mix with cool potable water only. In a 5 gallon pail mechanically mix Smith's 4 in 1 Overlay utilizing a drill with a ½ inch mortar mixing paddle (egg beater style) while adding the recommended ratio of water.

Note: Cement mixer is not recommended

Spray Texture/Hand Trowel: Mix thoroughly a 50 lbs bag of Smith's 4 in 1 Overlay with 5.5 quarts of cool potable water. A consistency similar to "pancake batter" is desired for the ready to use Smith's 4 in 1 Overlay. The ready to use material should "flow" off the mortar paddle when remove from mixing pail.

Application Instructions

Stampable Overlay: Mix thoroughly a 50 lbs bag of Smith's 4 in 1 Overlay with 4 quarts of cool potable water. A consistency similar to "a thick milkshake" is desired for the ready to use Smith's 4 in 1 Overlay. The ready to use material should have "body"; resulting in some of the product to remain on the mortar paddle when removed from the mixing pail.

Vertical Wall Mix: Mix thoroughly a 50 lbs bag of Smith's 4 in 1 Overlay with 3.5 quarts of cool potable water. A consistency similar to "cookie dough" is desired for the ready to use Smith's 4 in 1 Overlay. A majority of the ready to use material should remain on the mortar paddle when removed from the mixing pail.

Spray Application:

- 1) Using a chip brush, free coat expansion joints and edges with Smith's 4 in 1 Overlay.
- 2) Spray Application requires a 2 coat application. The first coat is applied thin and can be integrally colored. This coat is referred to as a skim coat which can be troweled, squeegeed or applied via a hopper gun with high pressure (approximately 40-45 lbs).
- 3) If patterning, apply a tinted base coat while keeping expansion joints free of material build up. After skim coat is completely dry and structurally sound, create the pattern of choice with patterning fiber tape or a stencil. (Omit this step if not patterning).
- 4) If patterned, pull tape or stencil to expose pattern before Smith's 4 in 1 Overlay cures.
- 5) Allow skim coat to dry.
- 6) Apply the second or finish coat with a hopper gun utilizing low air pressure (approximately 15 lbs). The finish coat can also be integrally colored. Apply the finish coat to achieve a textured appearance (approximately 80% of the application area).
- 7) As the finish coat begins to setup, "knock down" the finish coat utilizing a hand trowel to achieve the desired appearance and texture.
- 8) After completely dry (usually the next day), use a blade scrapper to groom and remove loose product.
- 9) Grind control joints free of any Smith's 4 in 1 Overlay with a 1/8 inch diamond blade. Blow substrate clean.
- 10) If integral color was not used, apply Smith's Color Floor (horizontal) or Color Wall (vertical) to achieve the desired color and appearance.
- 11) Review "Sealer" section of the Smith's 4 in 1 Overlay Product Data Sheet. Apply the appropriate Smith's sealer to fully cured installation.

Trowel Application:

- 1) Using a chip brush, free coat expansion joints and edges with Smith's 4 in 1 Overlay.
- 2) If patterning, apply a tinted base coat while keeping expansion joints free of material build up. After base coat is completely dry and structurally sound, create the pattern of choice with patterning fiber tape or a stencil. (Omit this step if not patterning).
- 3) Apply Smith's 4 in 1 Overlay and trowel texture to desired appearance.
- 4) If patterned, pull tape or stencil to expose pattern before Smith's 4 in 1 Overlay cures.
- 5) After completely dry (usually the next day), use a blade scrapper to groom and remove loose product.
- 6) Grind control joints free of any Smith's 4 in 1 Overlay with a 1/8 inch diamond blade. Blow substrate clean.
- 7) Apply Smith's Color Floor (horizontal) or Color Wall (vertical) to achieve the desired color and appearance.
- 8) Review "Sealer" section of the Smith's 4 in 1 Overlay Product Data Sheet. Apply the appropriate Smith's sealer to fully cured installation.

Stamp Application:

- 1) Using a chip brush, free coat expansion joints and edges with Smith's 4 in 1 Overlay.
- 2) Apply Smith's 4 in 1 Overlay via a trowel or gauge rake to desired material build.
- 3) Mist Smith's Super Release agent onto stamp/skin as well as troweled material.
- 4) Texture Smith's 4 in 1 Overlay with interlocking stamps or skins (prevent material build up in expansion joints).
- 5) After stamping, remove perimeter edge tape before Smith's 4 in 1 Overlay hardens.
- 6) After completely dry (usually the next day), use a blade scrapper to groom and remove loose product.
- 7) Grind control joints free of any Smith's 4 in 1 Overlay with a 1/8 inch diamond blade. Blow substrate clean.
- 8) Apply Smith's Color Floor (horizontal) or Color Wall (vertical) to achieve the desired color and appearance.
- 9) Review "Sealer" section of the Smith's 4 in 1 Overlay Product Data Sheet. Apply the appropriate Smith's sealer to fully cured installation.

Vertical Application:

- 1) Vertical Application is recommended as a 2 coat application for installations over cinderblocks, brick or other patterned substrates. The first coat is applied thin. This coat is referred to as a Skim Coat (follow mixing instructions for Hand Trowel), which is troweled onto the substrate.
- 2) Allow skim coat to dry.
- 3) Apply Vertical Wall Mix via a metal trowel to 1/4 to 1 inch material build.



Application Instructions

Vertical Application:

- 4) If texture or stamping is desired, mist Smith's Super Release agent onto stamp/skin as well as troweled material.
- 5) Texture, stamp and or carve to achieve the desired appearance.
- 6) Completely clean surface of any loose particulates and release agent.
- 7) Apply Smith's Color Wall (vertical) to achieve the desired color and appearance.
- 8) Review "Sealer" section of the Smith's 4 in 1 Overlay Product Data Sheet. Apply the appropriate Smith's sealer to fully cured installation.

Moisture/Alkalinity: The absence of an effective vapor barrier may create an environment for moisture vapor transmission as well as high levels of alkalinity in concrete slabs (generally, but not limited to interiors). Introducing an impermeable coating/flooring system to this environment may result in blistering or general failure. Thus, a calcium chloride test (ASTM F-1869) and/or relative humidity probe (ASTM 2170) should be conducted and is the responsibility of the installer. Smith Paint Products is not responsible for failures due to the presence of moisture vapor emissions and/or high levels of alkalinity.

Application Directions:

	Material	Surface	Ambient	Humidity
Best	50-85°F	65-85°F	65-90°F	10-60%
Minimum	50°F	50°F	50°F	0%
Maximum	95°F	95°F	95°F	80%

Clean Up: While Smith's 4 in 1 Overlay is still wet, equipment may be cleaned with water.

Precautions: KEEP FROM FREEZING. Do not apply when air, material and surface temperatures are expected to fall below 50° F (4.4° C) within four hours of completed application.