

SCIENTIFIC CONCRETE POLISHING MANUAL





PERSONAL PROTECTION

It's always recommended to wear the appropriate Personal Protective Equipment (PPE) for the task at hand and follow your employer's safety policy. Commonly known PPE such as safety glasses, gloves, earplugs, respirators, etc, are recommended as needed. For further information on OSHA requirements, visit <https://www.osha.gov/Publications/osh3151.pdf>

INSTRUCTIONS

PREP

- 1) Evaluate the floor, ensuring the concrete can absorb water and is not sealed or blocked off by glue, sealers or other obstructions.
- 2) OPTIONAL* If removal is needed, use one of the Orange Series Diamonds and run with 50% overlap passes as needed.
- 3) Protect surfaces by using specialty tape, paper, plastic, etc

APPLICATION

- 1) Clean and soak down the slab with water, keeping it wet for one hour.
- 2) Use a vacuum or squeegee to remove all standing water from the slab.
- 3) Using a pump-up sprayer, apply SCP Cutter (2:1 with water) immediately on the saturated slab.
- 4) Keep the slab wet with the SCP Cutter for 45 minutes and agitate with a push broom or scrubber.
- 5) Using the Green Series Diamonds run with 50% overlap, ensuring that RA levels are below 90 using an RA Meter.
- 6) Clean the slab.
- 7) Using a pump-up sprayer, apply non diluted SCP Hardener.
- 8) Keep the slab wet with the SCP Hardener for at least 45 minutes.
- 9) Using the Yellow Series Diamonds run with 50% overlap, ensuring that RA levels are below 35 using an RA Meter
- 10) Clean and dry the floor
- 11) OPTIONAL* If coloring, apply dye and let dry.
- 12) OPTIONAL* Apply Hydropolish and let dry
- 13) Using the Red Series Diamonds run with 50% overlap, ensuring that RA levels are below 15 using an RA Meter
- 14) Dry burnish with 3000 grit pad on high speed burnisher.
- 15) Using a fine mist pump sprayer and microfiber pad, apply SCP Sealer.
- 16) Let dry
- 17) Dry burnish with a 3,000 grit pad or heat pad on a high speed burnisher
- 18) Make sure project area is clean, presentable, and free from debris

SCIENTIFIC POLISHING



TOOL SERIES • ROUGHNESS AVERAGE (Ra)

ORANGE SERIES • Ra: 130+

GREEN SERIES • Ra: 150-61

YELLOW SERIES • Ra: 85-26

RED SERIES • Ra: 36-0



CREAM POLISH*



Cutter



Ra: 85-26

Yellow Series



Hardener



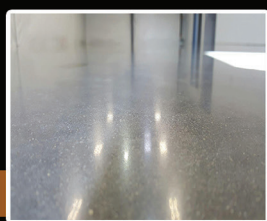
Ra: 36-0

Red Series



Sealer

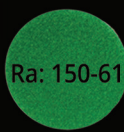
*Cream Polish is contingent upon surface conditions and FF & FL levels



FINE AGGREGATE POLISH



Cutter



Ra: 150-61

Green Series



Hardener



Ra: 85-26

Yellow Series

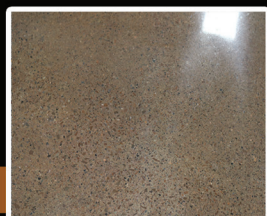


Ra: 36-0

Red Series



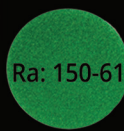
Sealer



ADDING COLOR



Cutter



Ra: 150-61

Green Series



Hardener



Ra: 85-26

Yellow Series



Add Color

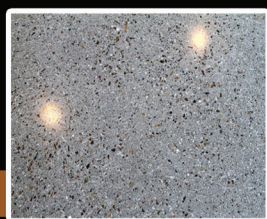


Ra: 36-0

Red Series



Sealer



MEDIUM & HEAVY AGGREGATE POLISH



Cutter

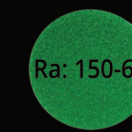


Ra: 130+

Orange Series



Hardener



Ra: 150-61

Green Series



Hardener



Ra: 85-26

Yellow Series



Ra: 36-0

Red Series



Sealer



COATING & CONTAMINANT REMOVAL



Ra: 130+

Orange Series



Ra: 150-61

Cutter



Green Series



Hardener



Ra: 85-26

Yellow Series



Ra: 36-0

Red Series



Sealer



PRODUCTS & COVERAGE RATES

Appropriate Concrete Protector repair products (see repair manual)

SKU:	PRODUCT:	COVERAGE:	DRY TIME:
SCP- 6105-SCP-6107	SCP Hardener	300-400 sq. ft. per gallon	
SCP-6101-SCP-6103	SCP Cutter	300-400 sq. ft. per gallon	
SCP-6111-SCP-6113	SCP Sealer	1,500- 2,000 sq. ft. per gallon	40 min.- 1 hour
SCP-6123-SCP-6175	Slurry Gel	2-3 lbs. per 55 gallons	
(OPTIONAL) PL-5139-PL-5259	Ameripolish Surelock	400 sq. ft. per gallon	
(OPTIONAL) SCP-6169	Hydropolish	700-800 per gallon	4-6 hours

* Coverages and dry times vary depending on application techniques and temperature. Estimations are based on 70 degrees, 30 percent relative humidity. For more information, refer to TDS sheets.

EQUIPMENT

SKU:	EQUIPMENT:
WE-2692-TD	Warrior Leonidas 2692TD
ET- 73552	Never-Pump Backpack Sprayer
WES- 34337	Warrior Ride on Scrubber
SCP-61621	Polisher/Burnisher

TOOLS

SKU:	EQUIPMENT:
SCP-511115-SCP-5123	Poly Burnish Pad #3000
SCP-6155	Slurry Gel Bag
SCP-6233	Masking film
TP-7507	2" Green Specialty Tape
SCP-6231	Tape Gun
PL- 5205	Microfiber Pad
PL- 5201	Microfiber Handle
TJ- 3100	Aluminum Microfiber Pole
SCP-6249	Heat Pad
	Orange Series Diamond Tooling
	Green Series Diamond Tooling
	Yellow Series Diamond Tooling



SCIENTIFIC CONCRETE POLISHING



TOOLS (CONTINUED)

SKU:	EQUIPMENT:
	Red Series Diamond Tooling
	RA Meter
	Acetone Sprayer (if doing acetone dye)
	5 Gallon buckets
	Slurry pump and hoses
	Slurry tray
	Mop bucket
	Extra velcro
	Water hose and nozzle

COST & PRICING

Typical Product Cost: \$0.24

Typical Pricing: \$2.50

BENEFITS & FEATURES

- 1 One process is used for every level of concrete hardness
- 2 Dustless polishing system
- 3 Results are perfect every time when system is followed
- 4 Our Scientific Concrete Polishing system is not reliant upon topical polish guards for gloss or clarity
- 5 No more complicated diamond selection processes

Homeowners, retailers, big box stores, educational and medical facilities are discovering the amazing benefits of polished concrete flooring. Polished concrete is cost effective, using existing concrete and lowering maintenance costs. Polished concrete floors are not as vulnerable to damage as other materials and do not need replacing. Polished concrete is easy to clean, and won't harbor dust, dirt, or allergens. Polished concrete is beautiful and is available in a wide variety of colors and designs. Polished concrete is great for high foot traffic, saves energy by light reflectivity, and is an amazing sustainable flooring alternative.

Our Scientific Concrete Polishing dustless refinement process is performed wet to maintain clean air, and maintain a safe job site. Scientific Concrete Polishing uses science to produce beautiful and long lasting floors. If properly maintained, this system can outlast many other flooring options.



TIPS AND TRICKS

- For a Medium to Heavy Aggregate: Use Orange Series Diamonds to achieve aggregate exposure
- desired SCP Cutter should be applied at no more than 400 square foot per gallon.
- When grinding with Green Series Diamonds, it is best to crosscut to ensure even aggregate exposure.
- SCP Hardener should be applied at no more than 600 square foot per gallon.
- Initially, the floor must be totally saturated with water
- RA Meter readings must be done at each step
- If glue or coating removal is necessary, use the Orange Series Diamonds
- For larger aggregate applications, SCP cutter may used at lower water dilution or pure concentrate
- When applying SCP Sealer, massage into the floor with a microfiber pad to avoid streaking
- Add Slurry Gel (4oz.– 8oz. per 5 gallon bucket) for safe slurry disposal
- If applying multiple coats SCP Sealer, allow 1 hour in between coats

AMERIPOLISH®

SURELOCK

			
GOLD	RAW SIENNA	CARAMEL	SAND
			
TERRA COTTA	MAHOGANY	SADDLE BROWN	CHOCOLATE BROWN
			
WALNUT	BURNT SIENNA	CHESTNUT	RED
			
MAROON	SEPIA	EGGPLANT	TURQUOISE
			
SLATE BLUE	PATRIOT BLUE	GREEN	PINE GREEN
			
FOREST GREEN	GRAY	BLACK	MIDNIGHT BLACK

These color samples are only a representation of the Ameripolish Dye colors. Change in concrete slab colors will affect the appearance of the dye. Color results cannot be guaranteed. Actual colors may vary.