



HAWK RESEARCH LABORATORIES, LLC.
High Performance Coating Systems









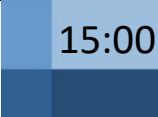
RESURFACING REFERENCE GUIDE

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INTRODUCTION

How to Use This Resurfacing Reference Guide

	The light bulb icon will provide helpful tips at any point in the Resurfacing process
	This icon will provide important notes
	Mix ratio for resin
	Mix ratio for catalyst
	Mix ratio for reducer
	The Spray Gun icon will provide recommended spray gun settings
	The clock icon will provide recommended drying times and induction times

Safety

General Safety

Precautionary Measures

- ✦ Before use, read and understand all warnings and precautions on labels and safety data sheets of all Hawk products handled, as the blended combinations may contain different hazards.
- ✦ All product labels and safety data sheets contain vital precautionary information for safe handling, use, and storage.

Housekeeping

- ✦ Keep all products in the original containers and only combine products as directed.
- ✦ Clean up spills immediately to prevent contamination, wet floors and slips, and do not allow any spills to enter drains.
- ✦ Keep equipment clear from work area to prevent trip hazards.
- ✦ When mixing and using any product, immediately close containers to prevent spillage.
- ✦ Wash hands before and after eating or drinking and using the restroom.
- ✦ Store products in well-ventilated areas and away from HVAC intake vents to prevent fumes from spreading to other areas.

Application Process

- ✦ Resurfacing specialists should protect themselves from inhalation of sanding dusts, mists and vapors, skin contact and absorption, and eye contact.
- ✦ Use a local exhaust fan to circulate fresh air and to remove unwanted air from the work area. The exhaust fan should be running during the entire resurfacing process.



Local exhaust fan can be shut off while masking to prevent movement of plastic sheeting and protective paper.

INTRODUCTION

Recommended Personal Protective Equipment

Eye and Face Protection

- ✦ Safety glasses with side shields to prevent eye contact
- ✦ Face shield to prevent face or skin contact

Skin Protection

- ✦ Chemical-resistant gloves to protect hands
- ✦ Anti-static spray suits to prevent skin contact and skin absorption

Inhalation Protection
















- ✦ Non-air supplied respirators with the following:
 - Cartridges approved for protection against particulates (sanding)
 - Cartridges approved for protection against acids and bases (preparation work, cleaning and etching)
 - Cartridges approved for protection against organic vapors (topcoats)



OSHA does not recommend negative-pressure respirators to prevent isocyanate exposure.

- ✦ Positive pressure supplied air respirators should be used when spraying coatings containing isocyanates and should not be removed until all vapors and mists have dissipated

PPE Recommendations

	EYES	SKIN	RESPIRATORY
Sanding			
Preparation Work			
Cleaning and Etching Process			
Primer Application			
Topcoat Application			



Gloves for etching should be chemical-resistant.

Site Evaluation

- ✦ Residents, including pets should not be in the house or apartment during the resurfacing process.
- ✦ Ensure electricity and water are available.
- ✦ Establish where electricity can be accessed.



Using one outlet may not be ideal and may trip a circuit breaker.

- ✦ Determine if there is ample lighting to perform all necessary work.
- ✦ Find an appropriate staging area.



The staging area should not be in the resurfacing area. Select an appropriate area for the staging and mixing of the chemicals, as well as filling, cleaning, and adjusting of the spray gun. Remember that this area should be secure and isolated from untrained, unprotected people.

In colder weather, Hawk products should be mixed indoors at room temperature.

- ✦ Find a suitable area for the air exhauster, including its exhaust hoses, and any other equipment needed to complete the resurfacing process.
- ✦ Resurfacing area should be clean and tidy.
- ✦ Pilot lights should be extinguished while spraying.
- ✦ Locate any vents in the resurfacing area and cover. Vents may lead to other areas of the house or apartment and circulate solvents.
- ✦ Check for any dripping water onto the area being resurfaced.



Dripping water will prevent coatings from adhering to the surface and will damage the finish. See FAQs/Troubleshooting Section for guidance on how to work around a small drip.

- ✦ Check for any grout repair that may be required before resurfacing.
- ✦ Spraying will trigger smoke alarms and should be disabled while resurfacing.

Equipment

- ✦ Plastic sheets and runners should be laid out to protect the home from dirt and debris.
- ✦ Equipment should not be set up in the resurfacing area, but in a separate work area.
- ✦ Create plastic walls or a plastic spray booth to help control air movement, and contain dust, overspray, and acid fumes, which can damage surfaces and cause personal injuries.



Air Management

- ✦ Place the intake exhauster fan hose in the resurfacing area to aid in the circulation of air.
- ✦ Air exhauster should be running at least 15 minutes prior to spraying to ensure proper air flow.
- ✦ The air exhauster and fresh air respirator compressor should not be in the resurfacing area.



Ensure that output hoses are not pointed towards other occupied areas and away from cars.

Chemicals

- ✦ If the weather is cold, all resins and StoneFlecks™ Ultra Multicolor products should be taken inside immediately to keep the products from freezing.



Place materials in a tub of warm water before mixing.

- ✦ Keep containers closed when not dispensing product.

PREPARATION WORK

Preparation Work



In preparation for resurfacing, clean project areas thoroughly. Coatings will adhere best on clean, dry surfaces.

Local air exhauster should be in use before the application of any Hawk product and can be shut off when masking to prevent movement of plastic sheeting and paper. Also, the appropriate personal protective equipment should be donned.

Ceramic and Porcelain Surfaces

- ✦ Remove the caulk lines on areas to be resurfaced.
- ✦ Mask any surface that does not require deglossing, including mirrors, fixtures, and the floor near the resurfacing area.
- ✦ Use Surface Wash to help eliminate soap scum and residue from the surface.



Heavy soap scum may need to be scraped off.

- ✦ For heavy-duty soap scum, scrub area with 60-80 grit sandpaper.
- ✦ Apply undiluted MicroClean™ Step I Cleaner evenly over the entire surface and use either a Super Scrubber, 200 grit sandpaper, or a Scotch Brite Pad to scrub.
- ✦ Rinse with water and dry thoroughly.
- ✦ Apply PorcEtch™ 1000 Etching Solution evenly to the surface, using a brush. Allow etching solution to dry for approximately 10-15 minutes.* Rinse. Remove all residue from the etching process.

*May take longer on higher humidity or colder days.



When etching, use chemical-resistant gloves.



Do not allow the etching solution to contact any area that will not be resurfaced as it will dull the surface. Etching fumes will also damage any fixtures. Be sure to mask fixtures in plastic as paper will not be effective. Take precautions when applying PorcEtch 1000 Etching Solution overhead or on walls as product may drip or splash or use CreamEtch. For colored surfaces, PorcEtch 1010 Extra Strength Etching Solution is recommended and will leave more residue than the 1000 etching solution.

- ✦ Rinse with water and dry thoroughly.
- ✦ Apply undiluted MicroClean Step II DeFilmer evenly over the entire surface and use either a Super Scrubber, 200 grit sandpaper, or a Scotch Brite Pad to scrub and remove particulates. Rinse thoroughly with warm water and sponge dry. The surface is pH neutral.
- ✦ If any repairs are required, use ProFil™ Compound to fill in any chips or cracks.

- ✦ Check grout and repair with ProFil Compound or Tile Grout. If grout has been removed, ensure that the area is clear of any debris.
- ✦ Remove all oils and dirt from the resurfacing area by applying Surface Wash or Surface Treater.
- ✦ Mask flooring and any areas where overspray or resurfacing is not intended.



Ensure masking lines are even or coating will also be applied unevenly.



- ✦ Vacuum any debris or contamination.
- ✦ Clean with Surface Wash or Surface Treater prior to primer application.

Fiberglass, Acrylic and Cultured Marble Surfaces

- ✦ Use Surface Wash to clean the entire area which will be resurfaced.
- ✦ Lightly scuff (degloss) surface using 180 grit sandpaper or 120 grit for an orbital sander.



60-80 grit sandpaper may be used on the base of the tub but may be too abrasive for the sides or top of a tub.

- ✦ Apply undiluted MicroClean™ Step I Cleaner evenly over the entire surface and use either a Super Scrubber, 200 grit sandpaper, or a Scotch Brite Pad to scrub.
- ✦ Rinse with water.
- ✦ Apply undiluted MicroClean Step II DeFilmer evenly over the entire surface and use either a Super Scrubber, 200 grit sandpaper, or a Scotch Brite Pad to scrub and remove particulates. Rinse thoroughly with warm water and sponge dry. The surface is pH neutral.
- ✦ Dry repair area completely before applying ProFil Compound to any repairable minor cracks or chips. (May not be compatible with flexible surfaces). For major cracks and chips, use QuickSet™ 5 Epoxy Filler.



A hair dryer can be used to dry the area before repairing.

- ✦ After making the necessary repairs, wipe with Surface Wash to remove any oils and dirt.
- ✦ Mask floors and areas where overspray may adhere.



Ensure masking lines are even or coating will also be applied unevenly.

PREPARATION WORK

- ✦ Vacuum any debris or contamination.
- ✦ Clean with Surface Wash or Surface Treater prior primer application.

Previously Resurfaced Areas

If the Coating Is Adhering Well

- ✦ Use Surface Wash to eliminate soap scum or residue.
- ✦ Using a 180 grit sandpaper, scuff (degloss) the surface.
- ✦ Mask floors and areas where overspray may adhere.



Ensure masking lines are even or coating will also be applied unevenly.

- ✦ Vacuum any debris or contamination.
- ✦ Clean with Surface Wash or Surface Treater prior to primer application.

If There Are Minor Peeling Areas

- ✦ Sand and feather around the area that is delaminating.



Wet sanding should be used on fiberglass and acrylic substrates. Dry sanding should be performed on all other substrates.

- ✦ If the portion underneath the delaminated coating is glossy, scuff (degloss) the surface with sandpaper. Apply PorcEtch™ 1000 Etching Solution (on ceramic, porcelain, or metal surfaces).
- ✦ Mask floors and areas where overspray may adhere.
- ✦ Vacuum any debris or contamination.
- ✦ Clean entire area using Surface Wash prior to primer application.
- ✦ Use QuickPrep™ Wipe-On Primer and Bonding Agent for porcelain, ceramic, or metal surfaces or PlasticPrep™ Bonding Agent for fiberglass surfaces on the delaminated area.



When applying the bonding agent, apply to the edges of the delaminated area but do not oversaturate. Use a hair dryer where the bonding agent was applied to prevent lifting.

If the Coating Needs to Be Completely Removed

- ✦ Use an orbital sander attached to a wet and dry vacuum or 60-80 grit sandpaper to mechanically strip the coating from the entire surface.
- ✦ Sand and feather out any leftover paint.
- ✦ Rinse entire surface with sponge and ensure the area is dust-free.
- ✦ Apply undiluted MicroClean™ Step I Cleaner evenly over the entire surface and use either a Super Scrubber, 80 grit sandpaper, or a Scotch Brite Pad to scrub. Do not oversaturate the area.



Inspect and repair grout lines before using MicroClean Step I Cleaner. Acidic solutions will open grout and may cause pinholes, which will affect the appearance of the primer and topcoat.

- ✦ Apply undiluted MicroClean Step II DeFilmer evenly over the entire surface and use either a Super Scrubber, 80 grit sandpaper, or a Scotch Brite Pad to scrub and remove particulates. Rinse thoroughly with warm water and sponge dry. The surface is pH neutral.
- ✦ Use Surface Wash to clean the surface to be Resurfaced.
- ✦ Make any necessary repairs.
- ✦ After making the necessary repairs, wipe with Surface Wash to remove any oils and dirt.
- ✦ Mask floors and areas where overspray may adhere.



Ensure masking lines are even or coating will also be applied unevenly.

- ✦ Vacuum any debris or contamination.
- ✦ Clean with Surface Wash or Surface Treater prior primer application.

Laminate Surfaces



Appliances should be removed for complete resurfacing projects.

- ✦ Use Surface Wash to clean the entire area which will be resurfaced.

Thoroughly clean the area surrounding the sink and any metal surfaces with a putty knife or similar.



- ✦ Make repairs and sand around repairs to level surface and fill in seams.
 - Use ProFil™ Compound to fill any chips or cracks.

PREPARATION WORK

- Glue down any loose edges.
- Bubbles and blisters should be broken and repaired.
- Caulk that encroaches the area to be resurfaced should be removed.
- ✎ Sand 80 grit to scuff the entire laminate surface.
- ✎ Sand and slightly round 90° edges.



Coatings do not adhere well to 90° edges and will be the first place for the coating to peel.

- ✎ Mask floors and areas where overspray may adhere.



Ensure masking lines are even or coating will also be applied unevenly.

- ✎ Vacuum any debris or contamination.
- ✎ Clean with Surface Wash or Surface Treater prior primer application.

Cabinets



Open wood-grain cabinets should be sealed prior to resurfacing.
Remove all hardware prior to Resurfacing.

- ✎ Scuff (degloss) the entire surface with 180 grit sandpaper.
- ✎ Clean surface with Surface Wash or Surface Treater prior to primer application.

If resurfacing MDF and other wood:

- ✎ Make all necessary repairs and smooth surface.
- ✎ Scuff (degloss) wood with 220 grit sandpaper. Begin with a smaller area.
- ✎ Lightly apply Surface Wash to clean area prior to primer application.

Hard Surfaces

- ✎ Clean surface with Solvent Wash and a green Scotch Brite pad.
- ✎ Repair any cracks or chipping with QuickSet™ 5 Epoxy Filler
- ✎ Mask floors and where overspray may adhere.



Ensure masking lines are even or coating will also be applied unevenly.

- ✎ Vacuum any debris or contamination.
- ✎ Clean with Surface Wash or Surface Treater to remove all oils and dirt.

- ✦ Apply QuickPrep Wipe-On Primer and Bonding Agent.

Concrete Pools and Spas



If the pool was previously resurfaced, power wash the entire surface to remove the old coatings.

- ✦ Scrub the surface with trisodium phosphate.
- ✦ Use concrete or vinyl patches to make any repairs.
- ✦ Concrete must be dry prior to resurfacing.



Coating will not adhere well to wet or damp concrete. Tape a plastic sheet over a portion of the concrete. If moisture is visible after waiting overnight, the concrete is not dry. Repeat, until moisture no longer appears under the plastic.

- ✦ Prime repair surfaces prior to resurfacing.

Stainless Steel

- ✦ Use Surface Wash to remove oils and dirt from the surface.
- ✦ Scuff the surface with 220 grit sandpaper.
- ✦ Wipe again with Surface Wash prior to primer application.

PRIMER APPLICATION

Primer Application



Prior to primer application, remove all dirt and debris from the substrate using Surface Wash, Surface Treater or air compressor.

QuickPrep™ Wipe-On Primer and Bonding Agent

- ✦ Wipe QuickPrep™ Primer and Bonding Agent on hard surfaces like porcelain, ceramic and tile. Do not use on acrylic, fiberglass or laminate surfaces.
- ✦ Apply with lint-free towelette or the use the pre-moistened pack.
- ✦ Spread evenly over the entire surface, especially over areas that see a lot of moisture, such as the areas around drains, soap dishes, handles and fixtures.
- ✦ Do not oversaturate and do not allow to puddle.
- ✦ Allow 15 minutes to dry. If several hours have lapsed since the original application, reapply.

PlasticPrep™ Bonding Agent

- ✦ Ideal for use on cultured marble, fiberglass and acrylic surfaces.
- ✦ Apply with lint-free towelette.
- ✦ Spread evenly over entire surface, especially over areas that see a lot of moisture such as the areas around drains, soap dishes, handles and fixtures.
- ✦ Do not oversaturate and do not allow to puddle.
- ✦ Allow 15 minutes to dry. If several hours have lapsed since the original application, reapply.

UltraGrip™ 4000 Primer System

- ✦ Prior to mixing, invert bottle of UltraGrip 4000 Resin for 1 minute and shake well for at least 1 minute.



Always wear appropriate personal protective equipment. Visit the Safety Page to see Hawk's recommended PPE.

If applying StoneFlecks™ Ultra Multicolor Finish after the primer, use the coordinating UltraGrip 4000 Primer Resin.

- ✦ Shake UltraGrip 4000 Catalyst well before mixing.
- ✦ Mix ratio:



2 parts UltraGrip 4000 resin



2 parts UltraGrip 4000 catalyst



1 part UltraGrip 4000 reducer



If rolling on the primer, reducer may not need to be added.

- ✦ Mix to a smooth consistency. No induction time necessary.
- ✦ Before applying primer, wipe the area with a tack cloth to create a clean, dust-free surface.



If priming a countertop, make sure that the entire area is covered.

- ✦ Apply 2 medium coats, which is approximately 5 to 6 mils wet. Use an air hose to accelerate drying time. Total dry time is 15 to 20 minutes.



While drying between coats, check for abnormalities in the surface of the coating.

- ✦ After primer is dry to the touch, wipe with a tack cloth to smooth roughness or overspray.

PRIMER APPLICATION

UltraGrip™ Lo 4300 Primer System



Low odor
Low VOC
Complies with districts that limit the VOC content of architectural coatings

- ✎ Shake resin and catalyst well before mixing.
- ✎ Mix ratio:



2 parts UltraGrip Lo 4300 resin



1 part UltraGrip Lo 4300 catalyst



2 parts UltraGrip Lo 4300 reducer

- ✎ Mix to a smooth consistency. No induction time necessary.
- ✎ The mixture should always be strained into the spray cup.
- ✎ Before applying primer, wipe the area with a tack cloth to create a clean, dust-free surface.



If priming a countertop, make sure that the area is completely covered.

- ✎ Apply 4 light coats, which is approximately 5 to 6 mils wet. Use an air hose to accelerate the drying time. Total dry time is 15 to 20 minutes.



While drying between coats, check for abnormalities in the surface of the coating.

- ✎ After primer is dry to the touch, wipe with a tack cloth to smooth roughness or overspray.

StoneFlecks™ Ultra Multicolor Finish



For best results, use a coordinating UltraGrip Primer Resin color.

- ✦ Lightly agitate container to mix. Do not shake heavily.



StoneFlecks Ultra Multicolor Finish is temperature sensitive. Do not allow product to freeze.



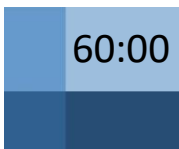
Recommended spray gun settings: 5 or 1.8 fluid set, depending on the spray gun.

- ✦ First coat should be sprayed lightly and allow to air dry between coats. Apply 3 coats which should cover the entire surface – one coat applied vertically and the next horizontally and so on.



StoneFlecks Ultra Multicolor Finish appears differently when being sprayed.

- ✦ Using a low heat setting on a hair dryer or air hose, air dry the painted surface. Pay close attention to the back splash or edges, which are usually more heavily coated.



Dry time is approximately 60 minutes, depending on the humidity. StoneFlecks Ultra Multicolor Finish is dry when the haze on the surface disappears and when the colors shift and dry to the touch.

- ✦ De-nib the area by lightly sanding with 400 grit sandpaper and wipe with a tack rag, which will remove the dust.



Do not use water or any solvent to clean the StoneFlecks Ultra coating before topcoat is applied.



Customizing StoneFlecks™ Ultra Multicolor Finish

Mixing StoneFlecks Ultra Finish Colors

- ✦ Different StoneFlecks Ultra Multicolor Finish colors can be mixed together to create a customized color.
- ✦ Spraying one color over another color will also create a customized appearance.

Dynamic Fleck Enhancer

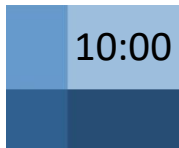
- ✦ Spray on top of basic StoneFlecks Ultra Multicolor Finish application.
- ✦ Mix ratio:



1 part StoneFlecks Ultra Multicolor Finish



1 part Dynamic Fleck Enhancer



Mix well and allow 10 minutes for induction.



Spray gun settings: Low air pressure. Fluid set is dependent on the size of the flecks desired. All the colors from the StoneFlecks Ultra Multicolor Finish will spray at the correct gun setting. For best results, hold the spray gun 18 to 24 inches away from the surface.



Do not use water or any solvent to clean up StoneFlecks Ultra Multicolor Finish.



The Dynamic Fleck Enhancer mixture can be reused, but should be stored in a different container. Hawk can provide additional containers.

Dynamic Fleck Enhancer Tint

- ✦ Dynamic Fleck Enhancer is also available in different tints to provide additional customization.

STONEFLECKS™ ULTRA MULTICOLOR FINISH

Dream Metallics™ Collection

- ✦ Spray on top of the StoneFlecks Ultra Multicolor Finish for a more dramatic effect or mix with StoneFlecks Ultra Multicolor Finish for a subtle metallic accent. The mix ratio will depend on the intensity desired.

Spray gun settings:

Fuji T-70 siphon feed: # 1.3 fluid set
Fluid adjustment knob: 2.5 turns open
Air control approximately 65 % open
Pattern control at 75 % full open



Sicmo siphon feed: # 1.4 fluid set
Fluid adjustment knob: 2.25 turns open
Air control approximately 80% open
Pattern control at ¾ turns out from fully opened

Titan siphon feed: # 3 fluid set
Fluid adjustment knob: 1.25 turns open
Air control knob 35% open
Pattern control ½ turn from full open



Do not overapply any of the Dream Metallic colors. The accents will intensify as they dry.

Fast Dry Additive

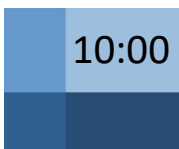
- ✦ Combining the StoneFlecks Ultra Multicolor Finish with Fast Dry Additive creates a water-resistant finish, which is ideal for areas surrounding showers or tubs
- ✦ Mix ratio:



4 parts Fast Dry Additive



1 part IsoFree Plus™ Catalyst



Mix well and allow 10 minutes for induction. Use this mixture within 1 hour of catalyzing.

STONEFLECKS™ ULTRA MULTICOLOR FINISH



6 parts StoneFlecks Ultra Multicolor Finish



1 part *catalyzed* Fast Dry Additive

- ✦ Lightly stir and mix well. No induction time is necessary.
- ✦ Apply the StoneFlecks Ultra color infused with catalyzed Fast Dry Additive in the same manner as the basic StoneFlecks Ultra Multicolor Finish application.

Topcoats GlasTech™ Lo 9000, 9100 and 9200 Topcoat Systems



Low odor
Low VOC
Complies with districts that limit the VOC content of architectural coatings

- ✦ When the primer is dry to the touch, wipe the surface with a tack cloth.
- ✦ Shake well GlasTech Lo 9000, 9100, and 9200 resins prior to mixing.
- ✦ Mix ratio:



2 parts GlasTech Lo 9000 resin



1 part GlasTech Lo 9000 catalyst



1 part GlasTech Lo 9000 reducer

- ✦ Mix to a smooth consistency. No induction time is necessary.
- ✦ Apply tack coat. Use air hose to dry for approximately 2 minutes. Follow tack coat with 1 medium coat. Use air hose to dry for 5 minutes. Apply a 2nd medium coat. Use air hose to dry for 10 minutes. Spray a final moderate to heavy coat.



After the application of each coat, examine the coatings for contamination or abnormalities while drying.

- ✦ Remove masking after the coating is dry to the touch. While waiting for topcoat to dry, begin cleaning the work area. Use Spray Gun Cleaner or Spray Gun Magic to clean the spray gun.



The GlasTech 9000 topcoat will be dry to the touch in 24 hours.

The GlasTech 9100 topcoat will be dry to the touch in 60 minutes.

30:00

The GlasTech 9200 topcoat will be dry to the touch in 30 minutes.



In districts where VOC limits for architectural coatings are not governed, the original GlasTech 9000, 9100 and 9200 topcoats are available and the same mix ratios apply.

GlasTech™ 9000 Rolling and Brush On Topcoat Catalyst

✦ To roll or brush on the GlasTech 9000, 9100, or 9200, use the following mix ratio:



4 parts GlasTech 9000 resin



1 part GlasTech 9000 rolling/brush on catalyst

- ✦ Mix to a smooth consistency. No induction time necessary.
- ✦ Do not use a roller larger than ¼ inch to apply coating.
- ✦ Drying time will increase; however, only 1 coat may be applied.

GreenTech™ 9300 Topcoat System

- ✦ When the primer is dry to the touch, wipe the surface with a tack cloth.
- ✦ Shake GreenTech 9300 resin prior to mixing.
- ✦ Mix ratio:



4 parts GreenTech 9300 resin



1 part GreenTech 9300 catalyst



1 part GreenTech 9300 reducer

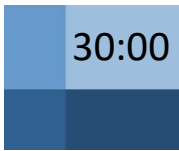
- ✦ Apply tack coat. Check for any contamination or abnormalities in the tack coat. Immediately spray 1 medium coat. Use an air hose to dry for 5 minutes. Apply a 2nd medium coat and use an air hose to dry for 10 minutes. Spray a final moderate to heavy coat.



After the application of each coat, examine the coatings for contamination or abnormalities while drying.



If a 4th coat is necessary, allow surface to dry 15 minutes before applying the final moderate to heavy coat.



Allow 30 minutes to dry. Remove masking after the surface is dry to the touch.

CounterCote™ Lo 9500 System for Countertops and Laminate Surfaces



Low odor
Low VOC
Complies with districts that limit the VOC content of architectural coatings

- ✦ When the primer is dry to the touch, wipe the surface with a tack cloth.
- ✦ Shake resin well prior to mixing.

For a Smooth Finish:

- ✦ Mix ratio:



4 parts CounterCote Lo 9500 resin



1 part GlasTech Lo 9000 catalyst



1 part GlasTech Lo 9000 reducer

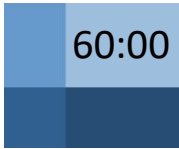
- ✦ Mix to a smooth consistency. No induction time necessary.

TOPCOATS

- ✦ Apply 1 tack coat. Use an air hose to dry for approximately 5 minutes.
- ✦ Apply medium coat and air dry for 5 minutes. Spray another medium coat and air dry for 5 to 10 minutes.
- ✦ Apply final moderate to heavy coat.



After the application of each coat, examine the coating surface for contamination or abnormalities during drying.



Allow 60 minutes to dry. Remove masking after surface is dry.

For a Textured Finish

- ✦ Mix ratio:



4 parts CounterCote Lo 9500 resin



1 part GlasTech Lo 9000 catalyst



1 part GlasTech Lo 9000 reducer

- ✦ Mix to a smooth consistency. No induction time necessary.
- ✦ Apply tack coat. Use air hose to dry for approximately 5 minutes.



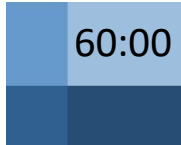
Spray gun settings: 2.0 or 5 fluid set depending on the spray gun with low air pressure. Gun can be set with less air and more material and adjusted for the desired amount of texture.

Spraying should be approximately 18 inches from the surface to texturize.

- ✦ Spray 4 light coats, allowing each coat to dry before spraying the following coat. An air hose can be used to speed up drying time.



After the application of each coat, examine the coatings for contamination or abnormalities while drying.



Allow 60 minutes to dry. Remove masking after surface is dry.

For Rolling:

✦ Mix ratio:



8 parts CounterCote 9500 resin

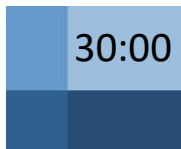


1 part GlasTech 9000 Rolling/Brush On catalyst

- ✦ Mix to a smooth consistency. No induction time necessary.
- ✦ Apply 1 coat.



Paint roller should not exceed ¼ inches.



Allow 30 minutes to dry. Remove masking after surface is dry.



In districts where VOC limits for architectural coatings are not governed, the original CounterCote 9500 topcoat is available and the same mix ratio applies.

CabinetCote™ Lo 9700 Topcoat System



Low odor
 Low VOC
 Complies with districts that limit the VOC content of architectural coatings

- ✦ When the primer is dry to the touch, wipe the surface with a tack cloth.
- ✦ Shake resin well before mixing.
- ✦ Mix ratio:



4 parts CabinetCote Lo 9700 resin



1 part GlasTech Lo 9000 catalyst



1 part GlasTech Lo 9000 reducer

- ✦ Mix to a smooth consistency. No induction time is necessary.
- ✦ Apply a moderate tack coat.
- ✦ Immediately follow with another light to moderate coat.



CabinetCote topcoat dries quickly. Be sure the previous coat is dry to the touch before applying the next coat.

- ✦ Apply 3-4 coats until the coverage is desired.
- ✦ Masking can be removed when coating is dry to the touch in approximately 30 minutes.
- ✦ Hardware can be attached after coating is completely dry in approximately 24 hours.



In districts where VOC limits for architectural coatings are not governed, the original CabinetCote 9700 topcoat is available and the same mix ratio applies.

IsoFree Plus™ Lo 6500 and 6600 Topcoat Systems



Low odor
Low VOC
Isocyanate-free formula
Complies with districts that limit the VOC content of architectural coatings
Available in 24-hour or 4-hour cure times

- ✦ When the primer is dry to the touch, wipe the surface with a tack cloth.
- ✦ Shake resin well prior to mixing.
- ✦ Mix ratio:



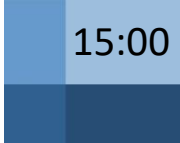
4 parts IsoFree Plus resin



1 part IsoFree Plus Lo catalyst



2 parts IsoFree Plus Lo reducer

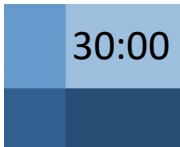


Mix to a smooth consistency. Allow 15 minutes for induction.

- ✎ Apply tack coat. Use an air hose to dry for approximately 5 minutes.
- ✎ Spray 2 medium coats, allowing 10 minutes of drying time after each coat.
- ✎ Apply a final moderate to heavy coat.



Coating should be 5 to 6 mils wet.



Allow 30 minutes to dry. Remove masking after surface is dry to the touch.



In districts where VOC limits for architectural coatings are not governed, the original Isofree Plus 6500 and 6600 topcoats are available and the same mix ratios apply.

StoneGard™ Lo Topcoat System



Low odor
 Low VOC
 Complies with districts that limit the VOC content of architectural coatings

- ✎ When the primer and/or mid-coat is dry to the touch and denibbed, lightly sand with 400 grit sandpaper, wipe the surface with a tack cloth.
- ✎ Shake resin well prior to mixing.
- ✎ Mix ratio:

TOPCOATS



2 parts StoneGard Lo resin



1 part GlasTech Lo 9000 catalyst



1 part GlasTech Lo 9000 reducer

- ✦ Mix to a smooth consistency. No induction time is necessary.
- ✦ Apply 3 medium coats. Allow solvent to flash for a few minutes between coats.



StoneGard topcoat will be dry to the touch in approximately 4 hours.

StoneGard 24Hr will be dry to the touch in approximately 30 minutes.

- ✦ Masking can be removed after the topcoat is dry to the touch.



In districts where VOC limits for architectural coatings are not governed, the original StoneGard topcoat is available. The same mix ratio applies; however, the original StoneGard catalyst and StoneGard reducer should be used.

IsoFree Plus™ StoneGard Lo Topcoat System



Low odor
Low VOC
Isocyanate-free formula
Complies with districts that limit the VOC content of architectural coatings

- ✦ When the primer and/or mid-coat is dry to the touch, wipe the surface with a tack cloth.
- ✦ Shake resin well prior to mixing.
- ✦ Mix ratio:



2 parts Isofree Plus StoneGard Lo resin

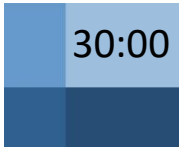


1 part IsoFree Plus Lo catalyst



1 part Isofree Plus Lo reducer

- ✦ Mix to a smooth consistency. No induction time necessary.
- ✦ Apply 3 medium coats. Let solvent flash for a few minutes between coats.



Allow 30 minutes to dry. Remove masking after surface is dry to the touch.



In districts where VOC limits for architectural coatings are not governed, the original Isofree Plus StoneGard topcoat is available. The same mix ratio applies; however, the original Isofree Plus catalyst and StoneGard reducer should be used.

SpaCote™ Topcoat System

- ✦ SpaCote Topcoat system is made for spas, pools, and hot tubs of fiberglass, cement, concrete, vinyl, and Gunnite
- ✦ Shake resin well prior to mixing
- ✦ Mix ratio:



2 parts SpaCote resin



1 part SpaCote catalyst



For spraying, add 1 part SpaCote reducer.

- ✦ Mix to a smooth consistency. No induction time is necessary.
- ✦ Using a 3/8 inch nap roller, apply 1 coat.

12:00:00

Allow coat to dry for approximately 12 hours.

- ✦ Apply 2nd coat.
- ✦ Let the surface dry for a minimum of 5 days.



If the Resurfaced surface becomes wet (from rain) or the temperature drops below 50°F, add an additional day of drying time.

FiberBond™ 5000 Topcoat System

- ✦ FiberBond 5000 Topcoat System is recommended for stairs and diving boards
- ✦ Shake well prior to mixing
- ✦ Mix ratio:



2 parts FiberBond resin



1 part FiberBond catalyst



For spraying, add 1 part FiberBond reducer.

- ✦ Mix to a smooth consistency. No induction time is necessary.
- ✦ Using a 3/8 inch nap roller, apply 1 coat.

12:00:00

Allow coat to dry for approximately 12 hours.

- ✦ Apply 2nd coat.
- ✦ Let surface dry for a minimum of 5 days.



If the Resurfaced surface becomes wet (from rain) or the temperature drops below 50°F, add an additional day of drying time.
The black resin should only be used for striping or marking.

GlasTech™ Lo 8000 and Lo 8500 Topcoat Systems



Low odor
 Low VOC
 Complies with districts that limit the VOC content of architectural coatings

- ✦ When the primer and/or mid-coat is dry to the touch, wipe the surface with a tack cloth.
- ✦ Shake well before mixing.
- ✦ Mix ratio:



2 parts GlasTech Lo 8000 or 8500 resin



2 parts GlasTech Lo 8000 or 8500 catalyst



1 part GlasTech Lo 8500 reducer (for sprayable coating)

- ✦ Mix to a smooth consistency. No induction time is necessary.



Mix only the amount necessary. Pot life is 30 to 45 minutes.

- ✦ Apply moderate coat. Use air hose to dry for 2 minutes. Apply a 2nd medium coat.
- ✦ Recommended wet film thickness is 3 to 4 mils.



After the application of each coat, examine the coatings for contamination or abnormalities while drying.
 The thicker the coats, the softer the coating will be.

15:00

Allow 15 minutes to dry. Remove masking after surface is dry to the touch.

Other/Accessories GrouTech™ System

✦ Mix ratio:

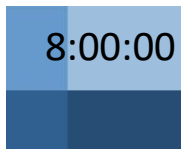


1 part GrouTech resin



1 part GrouTech catalyst

✦ For regrouting, apply by float.



Approximate cure time is 8 hours.

✦ For repairs, use a small spreader. Clean off area and wipe neighboring tiles with Surface Wash.



Add a small amount of reducer if thinning is necessary.

The GrouTech resin can be cured within 5 to 10 minutes by using a heat gun. Do not heat the resin directly and keep the heat gun moving.

GlazeTech™ System

✦ Mix ratio:



4 parts GlazeTech resin



1 part GlasTech 9000 catalyst

✦ Mix to a smooth consistency. Reduce as necessary.

✦ For best results, apply with an artist brush.

✦ Depending on the thickness applied, cure time can range between 48 to 72 hours.

StandFast™ Non-Skid Additive

✦ For steel tub application:

- Remove all soap residue using Surface Wash.
- Apply undiluted MicroClean™ Step I Cleaner evenly over the surface and use either a Super Scrubber, 200 grit sandpaper, or a Scotch Brite Pad to scrub.
- Apply undiluted MicroClean Step II De-Filmer evenly over the surface and use either a Super Scrubber, 200 grit sandpaper, or a Scotch Brite Pad to scrub and remove particulates. Rinse thoroughly with warm water and sponge dry. The surface is pH neutral.
- Mix StandFast Non-Skid Additive as follows:



4 parts resin



2 parts catalyst (use coordinating catalyst)



3 parts StandFast Non-Skid Additive

- With a 3-inch roller, apply the StandFast mixture to surface and spread evenly.
- Allow solvent to flash. Apply a second coat.
- Cure time depends on the topcoat used.



If using Non-Slip Stencils, apply QuickPrep™ Wipe-On Primer and Bonding Agent prior to rolling the StandFast mixture. Carefully remove stencil(s) 15 minutes after rolling the second coat.

✦ For fiberglass or previously Resurfaced tubs

- Remove all soap residue using Surface Wash.
- Sand (degloss) area where StandFast Non-Skid Additive will be affixed.
- Follow mix instructions and applications above.
- If using stencils, apply PlasticPrep™ Bonding Agent on fiberglass surfaces. PlasticPrep Bonding Agent may not be effective on previously Resurfaced fiberglass surfaces.

SureStep™ Bathtub Mats

- ✦ To ensure proper bonding of SureStep Mats, clean with Surface Wash prior to adhesion.
- ✦ Prepare surface by using SureStep Adhesion Promoter.



If too much Adhesion Promoter is applied, use reducer to remove excess or use one Adhesion Promoter pre-packet.

- ✦ Peel and stick bath mat to the desired area. Roll over the mat to remove any air bubbles.



If air bubbles cannot be eliminated, make a small incision to release the air and reattach.

SureStep™ Walk-In Tub Accessibility Steps

- ✦ SureStep Walk-In Tub Accessibility Steps are available in three sizes and provides an easy entrance point without the higher cost associated with a full-shower installation.

Preparing the Tub

- ✦ To prevent possible damage and exposure to dust and debris during the installation process, clear out the entire area.



Make sure the tub is completely dry.

- ✦ Cover bottom of tub.



Tape tarp or paper to the bottom of the tub to prevent scratching and to collect the debris.



When installing the accessibility steps on cast-iron bathtubs, Hawk recommends covering all walls and surfaces due to the substantial amount of dust that will be generated.

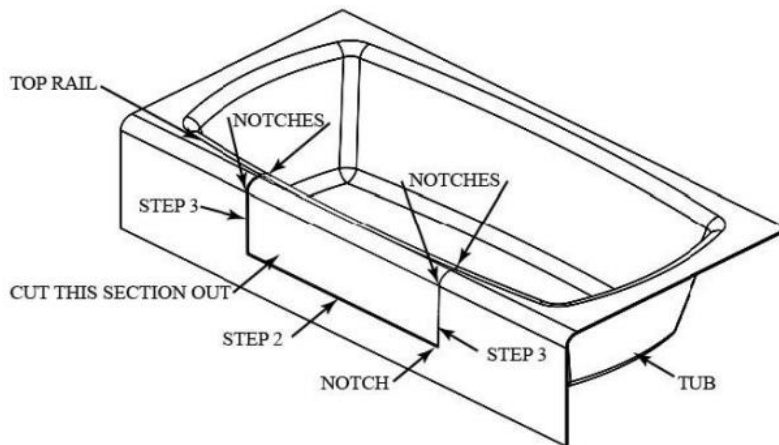
- ✦ Determine where the accessibility step will be installed and use the template included in the SureStep Kit to trace the outline.

Cutting the Tub



While cutting the tub, always wear appropriate eye protection and filter mask.

- ✦ Cut the tub according to the figure below:



Visit www.hawklabs.com for detailed instructions and to view an instructional video.

- ✦ Carefully remove the cut out.
- ✦ Sand down any rough edges to prevent snags during installation.
- ✦ Clean up the entire area prior to accessibility step installation.

Installation

- ✦ Determine which SureStep Kit is appropriate for the bathtub.
- ✦ Complete instructions are available at www.hawklabs.com as well as an instructional video.

Cleaning

- ✦ Clean spray gun equipment after each stage (primer, mid-coat, topcoat, etc.)



Spray gun cleaning after each stage will help prevent build-up, clogging and prolong the life of the spray gun.

- ✦ Make sure coatings are dry to the touch before removing masking.



While removing the masking, make sure coating is not also lifted. Do not lean or touch the coating during masking removal.

- ✦ Roll tarps and/or plastic protective sheets
- ✦ Carefully remove plastic from faucet and shower heads, ensure that water is not activated during removal.
- ✦ Remove masking from tub last.
- ✦ Reattach any hardware that was removed prior to Resurfacing.
- ✦ Caulk as necessary without stepping or leaning on any currently Resurfaced areas
- ✦ FINAL INSPECTION
 - Check for overspray, dust, or abnormalities in the coating
 - If present, ask the customer to inspect the completed project.
- ✦ Turn off and remove the air exhauster.



Care must be taken when dismantling and taking out the air exhauster hoses. The hose may contain dried paint, which may scatter when moved.

- ✦ Leave the residence in the same condition prior to working.
- ✦ Ask the resident/customer to continue ventilating until coatings are fully cured.

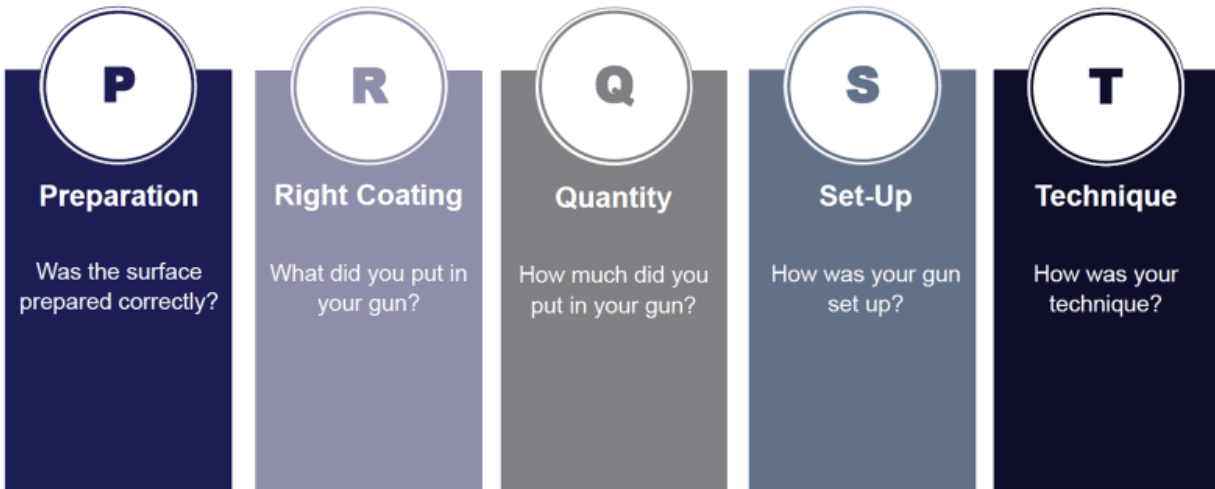
Next Day, if Needed

- ✦ For bathtubs, dampen a MicroMesh 1500 Abrasive Pad and add a small amount of shampoo. Rub away any roughness from the Resurfaced surface. Keep smoothing until the surface is glossy. Also use a buffing compound and polish after the sand.



Curves around the tub should be shiny. Never polish the floor of the tub.

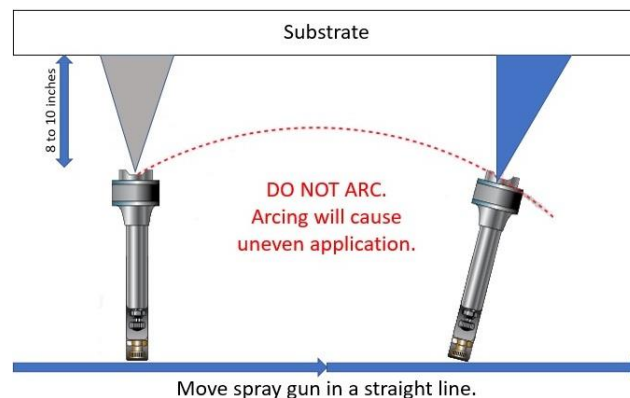
Five Troubleshooting Points



HAWK RESEARCH LABORATORIES, LLC.
High Performance Coating Systems

Tips and Tricks

- ✦ Spray suits and hoses should be cleaned regularly – after each job. Spray Gun Magic can be used to remove dried paint from spray suits.
- ✦ Use tweezers to pick up any hair or small particulates that may fall into the coating.
- ✦ Add BioZapp or Fresh Scents to the topcoat systems when more humid, to help cover odors
- ✦ Remember to caulk around drains.
- ✦ Keep mil thickness consistent throughout process
- ✦ Always have adequate lighting.
- ✦ Do not use abrasive cleaners, like Comet, to clean tub before etching. No residue should be on the surface before etching.
- ✦ During warmer months, containers may swell. Open swollen containers slowly.
- ✦ For optimum results, keep the spray gun in a straight line approximately 8 to 10 inches away from the substrate.



FAQs and Troubleshooting

FAQs from Consumers

- ✦ Will the refinisher need to access any utilities while the work is being performed?
 - Running water is essential for many steps of the Resurfacing process.
 - Electricity is needed to power equipment and provide lighting throughout the Resurfacing process.
 - A room-temperature work environment is crucial for the coating to spray and cure properly. (Room temperature should range between 60°F and 80° F. Curing times may vary if above or below the given temperatures.)

- ✦ At what point of my renovation should I schedule the Resurfacing?

For the bathroom:

 - Complete all tile work, such as grout repair, loose tile, plumbing work, etc. prior to Resurfacing. Repair work may chip or damage the Resurfaced surface.
 - Painting of walls should be done after Resurfacing is completed. The refinisher will need to mask walls and surrounding areas. Although a low-adhesive painter's tape will be used, it may pull fresh paint from walls.
 - Be sure to remove all personal items from Resurfacing area, such as towels, soap bottles, shower curtains, etc.

For the kitchen:

 - Hawk recommends that appliances are removed from the Resurfacing area to allow the refinisher to access all surfaces, such as sides and edges.
 - Be sure to clear items from cabinets and countertops, which are being Resurfaced.

- ✦ Can other construction work be performed the day of the Resurfacing project?
 - It is important that the Resurfacing area be free of dust and construction debris prior to the refinisher's arrival.
 - Hawk does not recommend scheduling other construction work being performed. Although the construction work may be in another area of the residence, dust may settle on the wet Resurfaced surface. In addition, traffic throughout the residence can create dust bumps on the Resurfaced surface, even if the room is properly masked and ventilated.

- ✦ Can I remain in the residence while the Resurfacing work is completed?
 - Residents, including pets should not be in the home during the Resurfacing process.

- ✦ What cleaners should be used on the Resurfaced surface?
 - Use non-abrasive cleaners only. 409 Cleaner or Dawn Dishwashing Liquid is preferred. Rinse thoroughly and do not leave any cleaner or soap residue on the surface.

- ✦ Are there other special precautions that should be taken with the Resurfaced surface?
 - Do not cut directly on the Resurfaced surface. Always use a cutting board.

- Do not place any hot items directly on the Resurfaced surface. Always use a trivet or potholder between the hot item and the surface.
 - Do not use any solvents or dyes on the surface. Dyes will stain the coating.
 - Do not use any abrasive cleaning pads, which may scratch the surface.
- ✦ I left a rag on my counter and it left a spot. What can I do to fix it?
- Allow the area to dry and the spot should return to normal. If spot does not return to normal after the area is dry, the surface will need to be sanded and Resurfaced.
- ✦ What should I do if there is damage on the Resurfaced surface?
- Call a professional refinisher as soon as possible or the damage will worsen with time.
- ✦ I have a leaky faucet, will it damage the Resurfaced surface?
- Yes, a leaky faucet may damage the surface. Call a plumber to fix the leak.

FAQs from Refinishers

- ✦ What happens if water gets on the wet painted surface?
- Use a paper towel to soak the excess water. Dry using air hose and smooth the paint surface.
- ✦ There is a small drip from the faucet. What can I do to prevent water from dripping on the Resurfacing surface?
- If the dripping cannot be stopped or immediately repaired, create an IV line using a rubber glove and an 8- to 10-inch vinyl hose. Place the glove over the spout and tape well. Securely attach hose to the longest finger of the glove and place the other end of the hose into the drain or overflow hole to capture the drip.
- ✦ What do I do if I see particles floating in the resin?
- Always shake all components well before mixing and using.
- ✦ The caulk is shrinking and is pulling paint away from the tub. How do I fix this?
- If the caulk is acrylic, sand the area and repaint.
- ✦ While removing the masking, the tape is also removing the coating. How can I fix the area?
- Stop the removal and use a razor to cut the masking. Mix a small amount of Part A (resin) and Part B (catalyst) and use a paint brush to touch up the area.
 - If using StoneFlecks Ultra Multicolor Finish, use a small brush to touch up the area.
- ✦ It is humid and the masking tape will not stick. What can be done?
- Ensure good air flow in the work area. Use Moisture Extractor on the taping area or use a small hair dryer to remove excess moisture.
- ✦ Why is the paint evaporating so quickly?
- Paint will dry faster at higher temperatures. A slower reducer is recommended for hotter temperatures.

✦ Why is the coating drying in a rough texture?

Check the following:

- Is the spray gun clean? Paint contaminants may cause irregularities during spray.
- Is the spray gun at the correct fluid setting?
- Was the coating mixed at the proper ratio? Check the information in this training guide to ensure the proper mix ratios were used.
- Is the spray technique correct? The coating should be sprayed evenly and consistently.

✦ I am out of reducer. What can I do to finish my project?

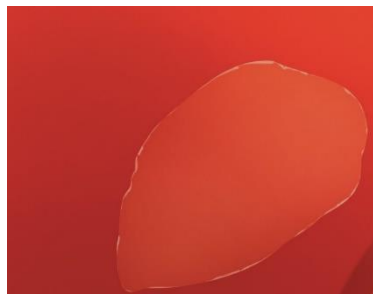
- Call Hawk and ask to speak to one of our technical specialists.

✦ Will spraying affect smoke alarms?

- Spraying will trigger the smoke alarms. Remove smoke alarms and place outside of the spraying area. If removing the smoke alarms is not possible, keep fans in the work area and keep air flowing.

WHAT ARE THE MOST COMMON PAINTING MISTAKES?

✦ Poor Paint Adhesion



Possible causes:

- ✓ Improper cleaning and preparation of the substrate
- ✓ Incorrect reducer
- ✓ Contamination of spray equipment

Solution:

- Remove the coating completely. Determine the initial cause and reapply.

✦ Blushing: Dull milky haze on the coating which occurs when moisture is trapped in the coating



Possible causes:

- ✓ Inappropriate temperature (below 60°F or above 95°F)
- ✓ Excessively high spray gun pressure
- ✓ Reducer is too fast for the conditions

Solution:

- If blushing is apparent during application, add a slower reducer to the mixture to slightly hinder solvent evaporation
- If blushing appears after painting has been completed, sand the surface and reapply.

✦ Pinholes



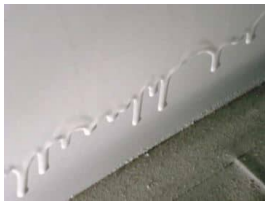
Possible causes:

- ✓ Contaminants in the spray gun
- ✓ Poor spraying technique (heavy or wet coats)
- ✓ Reducer is too fast for the conditions

Solution:

- Sand the surface and reapply the coating.

✦ Sags and Runs



Run



Sag

Possible causes:

- ✓ Applying too much paint
- ✓ Holding spray gun too close to the substrate
- ✓ Moving spray gun too slowly
- ✓ Adding too much reducer (paint too thin)
- ✓ Incorrect spray gun setting

Solution:

- Sand the surface and reapply the coating.

✦ Orange Peel



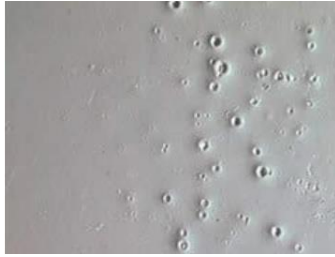
Possible causes:

- ✓ Improper spray gun setting
- ✓ Inadequate amount of reducer (coating is too thick)
- ✓ Material is not mixed well
- ✓ Forced drying method is too quick
- ✓ Not sufficient dry time between coats
- ✓ Painting when ambient

Solution:

- For a light orange peel, sand or buff with a polishing compound
- For an extreme orange peel, sand smooth and reapply the coating

Fisheyes



Possible causes:

- ✓ Improper cleaning and preparing of the substrate

Solution:

- If occasional fisheyes appear after the first coat, add Hawk's Fisheye Eliminator.
- If many fisheyes occur, the coating may need to be completely removed and reapplied. Make sure surface is completely clean and clear of any contamination.

Wrinkling



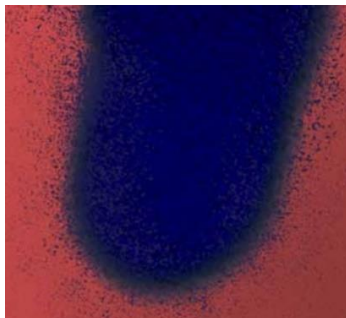
Possible causes:

- ✓ Heavy coat applied before previous coat is dry
- ✓ Trapped solvents and unequal drying of thicker coats
- ✓ Fast reducers can also contribute if not dried thoroughly
- ✓ Rapid changes in temperature

Solution:

- Coating needs to be completely removed and reapplied

✿ Spray Dust



Possible causes:

- ✓ Incorrect spray gun settings
- ✓ Spray gun too far from substrate
- ✓ Insufficient amount of reducer

Solution:

- Sand surface and reapply the coating

OTHER POSSIBLE ISSUES:

- ✦ Alligator Cracking: Cracking which looks like the scales of an alligator
 - Possible causes
 - ✓ Applying the coating over a flexible surface
 - ✓ Applying the topcoat before the primer is dry
 - Solution
 - Remove the cracked surface by sanding or scraping. Clean thoroughly and reapply the coating

- ✦ Bubbling or Blistering: Bubbles on a cured surface
 - Possible causes
 - ✓ Solvent evaporating quickly
 - ✓ Moisture trapped under coating surface
 - Solution
 - Sand surface and reapply coating or add slower reducer

- ✦ Cracking: Splitting or fine cracking on surface
 - Possible causes
 - ✓ Too many coats applied
 - ✓ Cracking of the substrate
 - Solution
 - Remove damaged coating and reapply

- ✦ Cratering: Holes or depressions on surface
 - Possible causes
 - ✓ Moisture or water in spray equipment
 - ✓ Cracking of the substrate
 - Solution
 - Remove damaged coating and reapply

- ✦ Cracking: Fine cracking all over the surface
 - Possible causes
 - ✓ High humidity
 - ✓ Incorrect reducer addition (too thin)
 - Solution
 - Remove damaged coating and reapply

- ✦ Flattening: Loss of gloss
 - Possible causes
 - ✓ Cracking of the substrate
 - Solution
 - Remove damaged coating, repair substrate and reapply coating

- ✦ Lap Marks: Color variations when one coat overlaps another
 - Possible causes
 - ✓ Coating was applied when overlap area was dry
 - Solution
 - Work in smaller areas to reduce time between lap coats

- ✦ **Mud Cracking: Cross-hatch patterned cracking**
Possible causes
 - ✓ Coating applied too thick
 - ✓ Surface was not properly preparedSolution
 - Sand surface until smooth and reapply the coating

- ✦ **Poor Hiding: Shadowy appearance**
Possible causes
 - ✓ Coating applied too thin
 - ✓ Coating not mixed correctlySolution
 - Apply a heavier film coat
 - Check the mix ratios

- ✦ **Solvent Trap: Residual solvent remains in the coating**
Possible causes
 - ✓ Excessive film buildSolution
 - Test the surface hardness and adhesion properties. If the coating will not adhere or cure properly, remove the damaged coat and reapply. Use air hose to dry the coating.

Spray Gun Cleaning

One of the most important steps in Resurfacing is to ensure spray equipment is working at its best. New spray guns work like a dream, but without proper cleaning, continuous use will quickly diminish spray gun efficiency.

All of Hawk's coatings are formulated to adhere to their substrates and therefore, will also adhere and build up in the spray gun. Proper cleaning should include two types of cleaning:

- ✦ Short-Term on the Job Cleaning
- ✦ Periodic Deep Cleaning

Short-Term Cleaning

After each job, dispose of excess paint in an approved waste container for authorized disposal. Flush the spray gun and spray gun cup with reducer to prevent paint from hardening.

TURBINE POWERED SPRAY GUN:

For a turbine-powered spray gun, add 3 to 4 ounces of reducer to the spray gun cup. Shake spray gun well and vigorously. Completely open the product adjustment setting, lower the air pressure, and spray into the approved waste container. Continue to spray until spray stream is clear.

- ✦ Head and Body of Spray Gun: Use a small amount of reducer on a soft to medium bristle brush to clean. Also, use some reducer on a towel or paper towel to wipe the exterior surface.
- ✦ Spray Gun Cup: Rinse cup with reducer. Use a steel or stiff nylon brush to remove any dried paint from cup, gasket channel, and the underside of the lid.
- ✦ Cup Gasket: Use a soft bristle brush to clean and remove any hardened paint.
- ✦ Inspect back check valves, tubing, and gaskets and replace if worn or damaged.

NON-TURBINE POWERED SPRAY GUN:

For a non-turbine-powered spray gun, add 3 to 4 ounces of reducer to the spray gun cup. Secure the lid and shake vigorously.

If the gun is pressurized, completely open the material valve, pull spray gun trigger and spray into an approved waste container.

If the gun is not pressurized, empty reducer from spray gun cup into the approved waste container. Use a solvent reducer squeeze bottle and inject reducer into the open pickup tube while holding the trigger open. Keep flushing until the stream becomes clear of paint.

- ✦ Head and Body of Spray Gun: Use a small amount of reducer on a soft to medium bristle brush to clean. Also, use some reducer on a towel or paper towel to wipe the exterior surface.
- ✦ Spray Gun Cup: Rinse cup with reducer. Use a steel or stiff nylon brush to remove any dried paint from cup, gasket channel, and the underside of the lid.
- ✦ Cup Gasket: Use a soft bristle brush to clean and remove any hardened paint.
- ✦ Inspect back check valves, tubing, and gaskets and replace if worn or damaged.




Periodic Deep Cleaning

Flushing with reducer daily will help minimize buildup and keep the spray gun functioning efficiently. However, a periodic deep-cleaning is necessary to remove residual paint within the spray gun, which will require disassembling.

Disassemble the following:

- ✦ Spray gun head from gun lid
- ✦ Gasket
- ✦ Air tubes
- ✦ Check valves
- ✦ Air cap
- ✦ Nozzle

APPENDIX

-  Head plate assembly
-  Springs
-  Needles

Using the Spray Gun Magic pail kit, dilute 1 part Spray Gun Magic cleaner with 2 parts water. Place spray gun cup and spray gun (tip down) into the pail. Soak time can vary from a few minutes to overnight depending on the amount of residual paint. Use a wire brush to loosen any dried paint.



When using Spray Gun Magic Cleaner, do not soak air cap, fluid adjustment housing, or spray gun cap, which may become pitted when soaking in excess amounts of time. In addition, Spray Gun Magic Cleaner may cause pitting in low-grade aluminum parts over prolonged exposure.

All other parts can be soaked in 100% Isopropyl Alcohol. Use assorted brushes and dental tools to thoroughly clean and remove all dried paints on the spray gun parts.

After cleaning, rinse all parts with clean water and dry.

Reassemble spray gun. Replace any gaskets, air tubing, check valves, or any other parts, as necessary.

After fully reassembling the spray gun, add 3 to 4 ounces of reducer to the spray gun cup. Keep material adjustment valve open and air pressure low, spray reducer into an approved waste container. Check for proper spray function and pattern.



HELPFUL TIPS TO KEEP SPRAY GUN WORKING PROFICIENTLY

1. Use an approved spray gun lubricant to keep spray gun needle and other moving parts lightly greased.
2. If needed, adjust spray gun clasps for proper fit.
3. Needle packing should be checked and replaced as necessary. Adjust packing by turning packing nut until the needle does not reset when the trigger is released. Turn back packing nut until the needle resets into the nozzle when the trigger is released.
4. If the cup gasket needs to be replaced, but a new one is not on-hand, the gasket can be reversed (inside out). Replace as soon as possible.
5. Back check valves must be cleaned and checked for proper operation. Air should flow in one direction and the cup should remain pressurized. If needed, replace valve.
6. Old dental picks can also be used to clean dried paint from small areas of the spray gun.
7. A steel brush can be used to remove residual paint from the cup rim and the gasket channel under the lid. Do NOT use a steel brush on the air cap, nozzle, or needle as it can damage these parts. For best results, clean air cap, nozzle, and needle with a soft bristle brush.



Periodic spray gun deep-cleaning is also an excellent time to inspect the turbine's power cord, airline, and air filtration system. Replace any parts as needed.

Resurfacing Method for Bathtubs

- ✦ Spraying on a white-on-white tub is difficult and this method divides the bathtub into 12 separate sections. Each section is sprayed individually and then overlapped at each breakpoint.



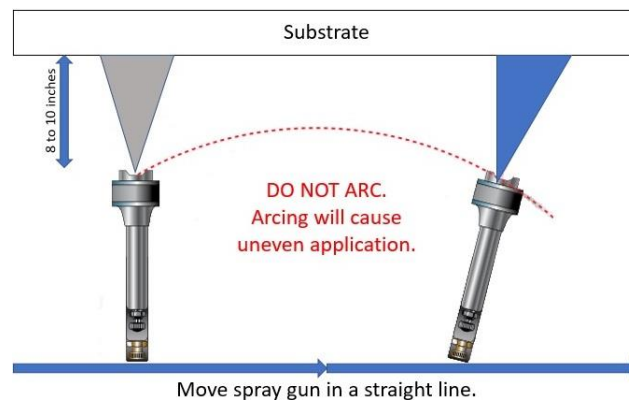
For the most consistent results, spray all coats using the same SPEED and same DISTANCE away from the substrate.



When spraying, move arm back and forth and keep wrists locked unless going around a breakpoint or radius.

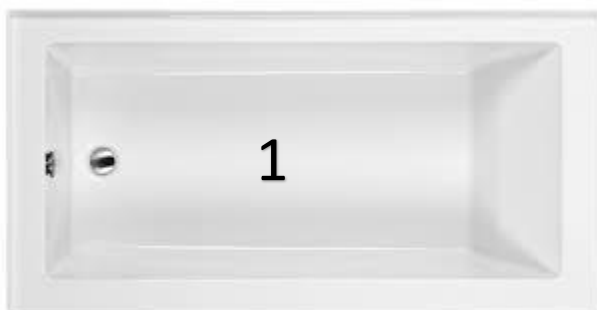


Each spray pass should cover the previous pass approximately 50%.



Sequential Order of the 12 Separate Sections

1. Tub Floor



- ✦ Begin at the back left corner and spray from back to front and front to back, overlapping 50% of the previous pass.
- ✦ For the following coat, begin on the back right corner and spray from right to left and left to right, overlapping 50% of the previous pass.

APPENDIX



Do not spray up the tub wall. Spray should not exceed 1 inch up the tub bottom.



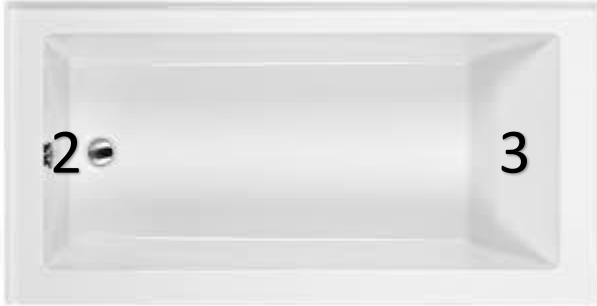
Primer application is typically 2 coats. Use an air hose to expedite dry time between coats.



Topcoat application is typically 4 coats. The first 2 coats are tack coats, which are light and smooth. Lighter coats will lessen the likelihood of paint runs. The 3rd coat will be sprayed with a wet edge and applied heavier than the tack coat. The spraying distance from the substrate should be between 6 to 8 inches (instead of the typical 7 to 8 inches). The 4th and final coat is also a wet edge application.

If the 4th coat is imperfect, allow it to dry for 15 minutes and reapply.

2. Drain Tub Wall
3. Foot Tub Wall (opposite the drain wall)

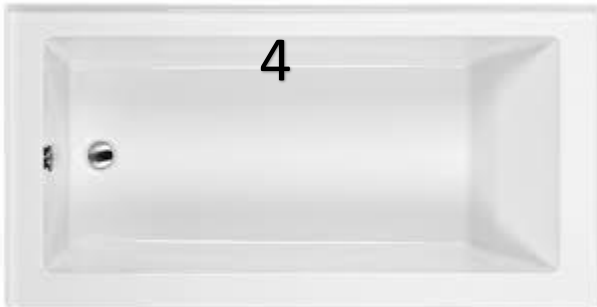


✦ For both sections, start at the back lower edge and spray to the top where the radius reaches the flat rail and then from top to bottom.



For best results, spray 5 to 6 passes. If fewer than 5 to 6 passes, the overlap is too wide. Make sure that all passes start and end at a breakpoint.

4. Back Tub Wall



- ✦ Begin at the lower left corner of the back wall. Spray left to the right tub wall and from left to right, until the top rail is reached.



For best results, spray 5 to 6 passes, ensuring a 50% overlap. If fewer than 5 to 6 passes, the overlap is too wide.

Make sure that all passes start and end at a breakpoints.

5. Inner Front Tub Wall (Drain Side)
6. Inner Front Tub Wall (Foot Side)

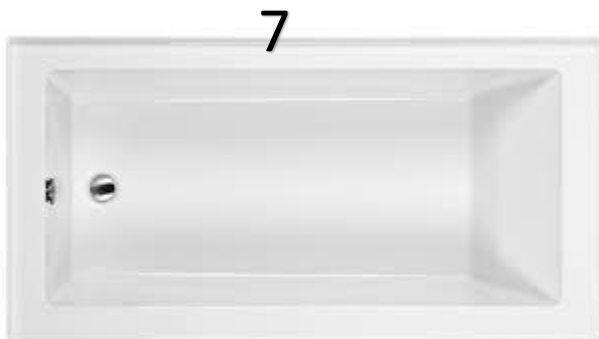


- ✦ For both sections, begin at the outer lower edges and spray towards the center.



Both sections shall meet in the center with a 50% overlap.

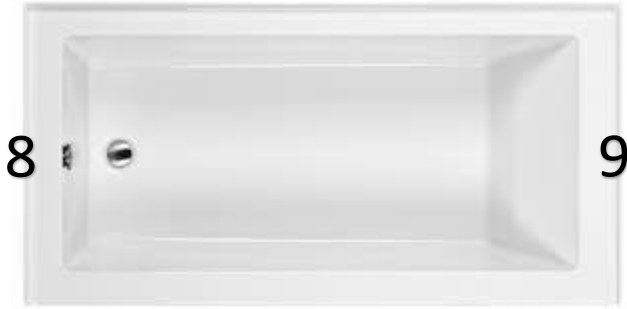
7. Back Top Deck



- ✦ Begin at the far left top corner. Spray left to right along the wall crease. Spray right to left with a slight overlap to the top radius.

8. Top Drain Side Deck
9. Top Foot Side Deck

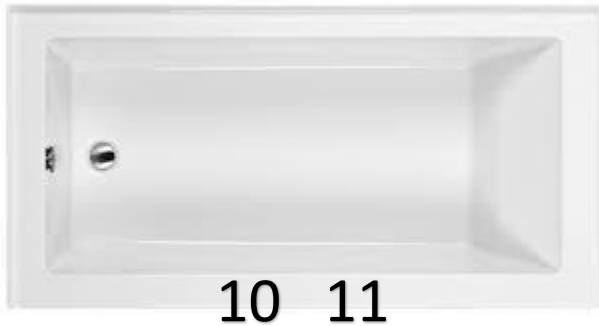
APPENDIX



- ✦ Begin at the back corner. Spray back to front along the wall crease. Spray front to back with a slight overlap at the top radius.

10. Front Deck

11. Front Top Rail



- ✦ Begin at the left side wall seam. Spray from left wall seam to right wall seam. The first pass should cover the front inner top radius and half of the top front deck.
- ✦ The second pass (section 11) begins at the right wall seam. Spray from right seam wall to the left seam wall. The pass should overlap the front skirt.



Keep spray distance consistently 7 to 8 inches from the substrate. Since this is the front portion of the bathtub, any inconsistencies or irregularities will be noticeable.

12. Tub Skirt (Front Face)



- ✦ Begin at the left top corner. Spray from left to right and right to left, overlapping 50% with each pass. Continue spraying from top to bottom and bottom to top.