

ACRYLIC SURFACE REPAIR PROCESS

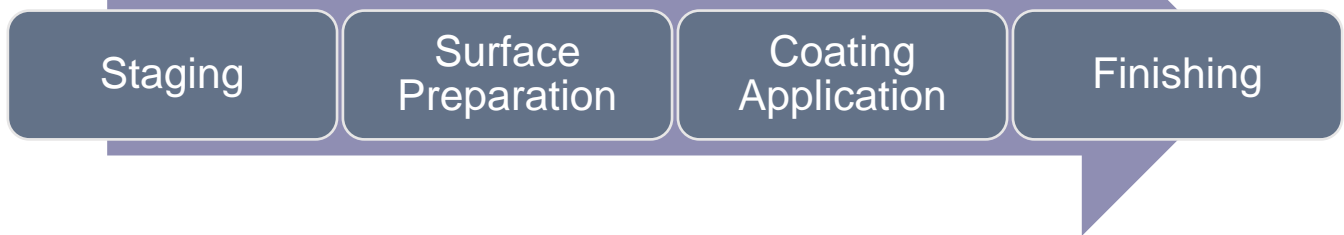
Redux 650 System for Hot Tubs and Spas

This guide provides step-by-step instructions for completing repairs on acrylic substrates using the Redux 650 system. Instructions for major structural repairs are not included in this guide.

RECOMMENDED SUPPLIES		
EQUIPMENT (not included in kit)	COATINGS AND CHEMICALS	SUNDRIES
Airbrush Spray Gun and compressor <u>AND/OR</u> HVLP spray gun with turbine	Redux 650 Coating System - color-matched basecoat and clear coat <ul style="list-style-type: none"> • Part A Pigmented Bases • Part A Clear Resin • Part B Catalyst • Redux Pro Tints • Reducer (as needed) 	Wet/Dry sandpaper ranging from coarse (80 grit) to fine (1500 grit)
Handheld grinding tool with grinding disc (as needed)	Redux Fillers <ul style="list-style-type: none"> • Redux 130 High Performance Spa Putty Part A Resin • Redux 130 High Performance Spa Putty Part B Hardener 	Cloths <ul style="list-style-type: none"> • Lint-free cloth • Microfiber towel
Variable speed buffing/polishing machine with foam and wool buffing/polishing pads	Redux Buffing Compounds <ul style="list-style-type: none"> • Redux 710 Coarse Buffing Compound • Redux 730 Medium Buffing Compound Redux 750 Polishing Compound	PPE <ul style="list-style-type: none"> • Respirator (not included in kit) • Safety glasses (not included in kit) • Disposable gloves
Industrial heat gun	Redux 210 Universal Bonding Agent	Tools <ul style="list-style-type: none"> • Mixing sticks • Mixing cups • Touch-up brush
	Redux 840 Repair Blender	
	Isopropyl Alcohol/Alcohol Wipes	
	Redux Spray Gun Cleaner (not included in kit)	



Four Phases of Acrylic Surface Repairs



SURFACE REPAIR AREAS DEFINED

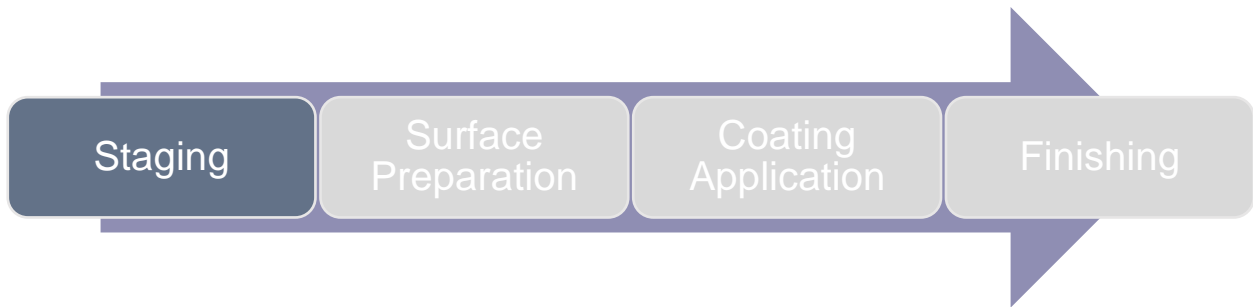


Each repair is comprised of three key areas:

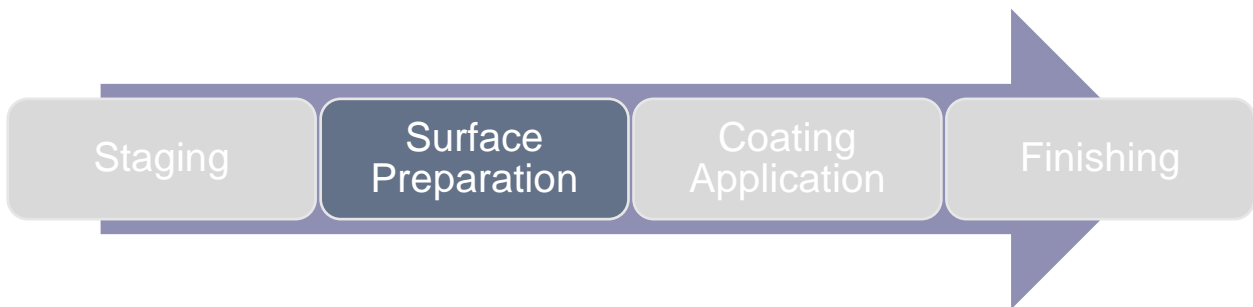
The damage area – chips or cracks on the surface of the acrylic (major structural damage is not included in this guide)

The feathering/blending area – typically about 50% wider than the damaged area, the feathering area is used to blend the repair area with the original finish

The buffing and polishing area – typically at least 50% wider than the feathering area, but may require more to achieve a seamless repair



- 1) Coatings and chemicals should be brought to room temperature prior to beginning repairs.
- 2) Mask off surrounding areas and mechanical components to protect from dust and overspray as needed.
- 3) Drain water, then dry and clean the repair area using isopropyl alcohol.
- 4) Ensure repair area is well lit.
- 5) Locate working power outlet.
- 6) Ensure area is well ventilated, using air movement equipment if necessary.
- 7) Complete all structural repairs, including fiberglass patches, expandable foam, etc. prior to beginning the surface repair process.



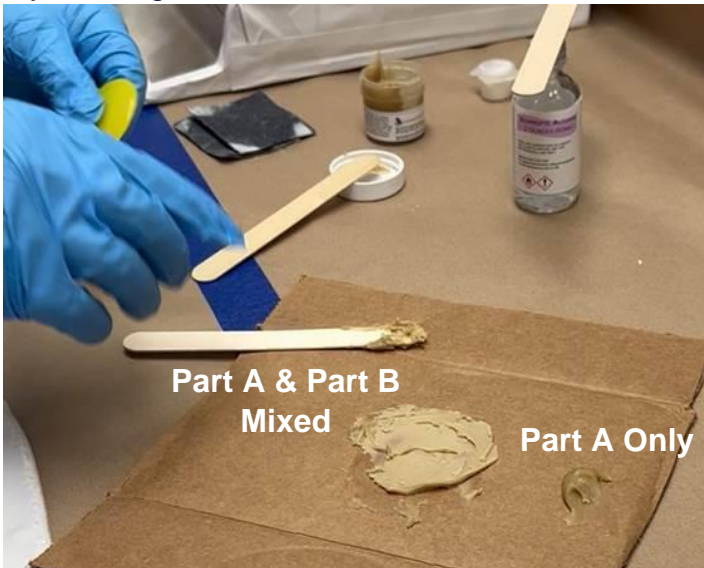
Sanding

- 8) Confirm surface is clean and dry.
- 9) Using **80 to 180 grit** sandpaper, sand edges of the damage area to remove loose fragments. Only sand the immediate area of the damage. More severe damage may require grinding or more coarse sanding.
- 10) Using isopropyl alcohol and a lint-free tack cloth, clean the damaged area to remove sanding dust.



Filling chips and scratches

- 11) Mix a golf ball-sized portion of Redux 130 High Performance Spa Putty Part A Resin with a pea-sized drop of Redux 130 High Performance Spa Putty Part B Hardener and mix well.
- 12) Apply filler to the damaged area to a slight excess. Excess filler will be removed by sanding later.

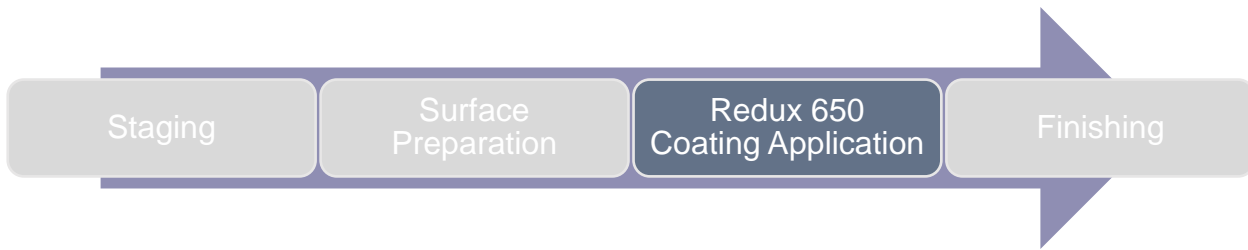


- 13) Allow the filler to dry for 20-30 minutes.
- 14) Use **180 grit** sandpaper to lightly sand the filler until it is flat and smooth, feathering edges. Then use **400 to 600 grit** sandpaper to lightly sand the damage area. Continue sanding with **1000 to 1200 grit** sandpaper, then lightly sand the edges of the damage area using **1500 to 2000 grit** sandpaper.
- 15) Using a lint-free cloth and isopropyl alcohol or an alcohol wipe, clean the damage and feathering areas to remove sanding dust.

Bonding Agent

- 16) Using a lint-free cloth, wipe Redux 210 on repair area in straight, even wiping motion vertically, then repeat horizontally. Do not over-apply or allow it to puddle. Allow to dry 10-20 minutes prior to applying coating. Must be re-applied after 12 hours if coating hasn't been applied.





Redux 650 Color-Matched Basecoat

- 17) Shake color-matched Redux 650 Part A Resin container.
- 18) Mix Redux 650 Part A Color-Matched Resin with Redux 650 Part B Catalyst in a 1:1 ratio.
- 19) Using the airbrush or HVLP spray system, spray the damage area until the repaired area is covered, allowing coating to tack up between coats.

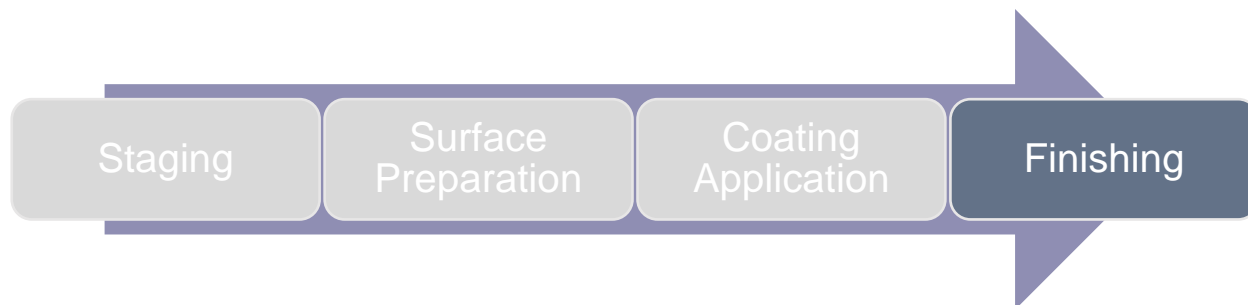


- 20) Gradually expand your spray pattern into the feathering area until the entire sanded area is covered, allowing coating to tack up between coats. To minimize the amount of blending required, take advantage of seams or edges to define where repair work ends.
- 21) Reference the Redux 650 Shade Guide for instructions on how to replicate marble patterns.

Redux 650 Clear Coat

- 22) Mix Redux 650 Part A Clear Resin with Redux 650 Part B Catalyst in a 1:1 ratio, then reduce (if needed) using Redux 650 Reducer, then add to previously used but unwashed spray cup.
- 23) Spray clear coat over damage and feathered areas, feathering out on the outer edges of the repair area.
- 24) For the final coat around the edges of the repair, add in 10% of **Redux 840 Repair Blender** to the tinted clear coat remaining in the spray cup, and spray edges with a feathering technique.
- 25) Allow repair area to completely dry (approximately 60 minutes), then using **1500 to 2000 grit** sandpaper, wet sand the edges of the repair to remove any scratches or overspray.





Buffing and Polishing

- 26) If scratches are still noticeable, use Redux 730 Medium Buffing Compound on a foam buffing pad.
- 27) Polish with Redux 750 Polishing Compound on a foam polishing pad to achieve desired gloss and eliminate swirl marks.
- 28) Allow repair area 24 hours @ 70 degrees F and 50% relative humidity to cure before returning to service. Exposure to moisture before the repair has fully cured can compromise the quality of the finish.

SAFETY

The Redux family of products is designed and intended for industrial use by trained professionals who are familiar with the inherent risks and hazards of the product. Before storing, mixing, or applying this product, read and understand all the product's Safety Data Sheets. For a copy of the SDS, contact Hawk Research Laboratories at (630) 227-0050 or (800) 321-4295. This product may be blended with other products prior to use, and therefore may possess the hazards of all the products blended.

NON-WARRANTY

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Revised 2/21/2023

