

CABINET REFINISHING MADE EASY

The Complete Step-by-Step System to Transform Your
Kitchen Like a Pro

Homeowner & Professional Systems Using Modern Waterborne
Technology

By Expert Cabinet Refinisher

Welcome: Your Kitchen Transformation Starts Here

This guide covers both homeowner-friendly and professional-grade cabinet refinishing systems, so you can choose the right approach for your project and budget.

What you'll achieve:

- Flawless, durable finish using modern waterborne technology
- Clear guidance on homeowner vs. professional coating systems
- Confidence to tackle this project or properly evaluate contractors
- Insider knowledge that separates good finishes from exceptional ones

This guide provides complete instructions for **Homeowner Systems** (Benjamin Moore, Sherwin-Williams, Inslx) and **Professional Systems** (Renner, Envirolak, Centurion, Icro). Choose the path that matches your goals.

Let's get started.

The Complete Cabinet Refinishing Framework

Follow these 13 steps in order. Where processes differ between Homeowner and Professional systems, both approaches are clearly marked.

STEP 1: Assess Your Cabinets & Choose Your System

Before buying anything, understand what you're working with and choose between Homeowner or Professional systems.

Cabinet Assessment Checklist:

- **Material type:** Real wood, laminate/thermofoil, or MDF?
- **Current finish:** Stained, painted, or varnished?
- **Damage level:** Are doors warped, veneer peeling, or deep gouges present?
- **Door style:** Flat (slab) or raised panel?
- **Hardware condition:** Will you reuse, replace, or paint over existing hardware?
- **Kitchen usage:** High-traffic family kitchen or lower-use space?

Homeowner vs. Professional Systems: Which is Right for You?

Feature	Homeowner System	Professional System
Products	Benjamin Moore Advance Sherwin-Williams Emerald Urethane, Inslx Cabinet Coat	Renner, Envirolak, Centurion, Icro (with matching primers)
Availability	Local paint stores, ready to buy	Order online, ships to your door in 3-5 days
Expected Lifespan	5-7 years with proper care	10-15+ years with proper care
Durability	Good - handles normal use	Excellent - handles heavy abuse
Cost	\$200-400 for average kitchen	\$400-600 for average kitchen

Application	Brush, roller, or sprayer	Sprayer recommended (can brush/roll)
Skill Level	Beginner to Intermediate	Intermediate to Advanced
Best For	DIY homeowners, budget-conscious projects, low-traffic kitchens	High-traffic kitchens, rental properties, clients wanting maximum durability

The Honest Truth:

Homeowner systems (BM Advance, SW Emerald Urethane, Insix Cabinet Coat) are excellent waterborne trim paints. Perfect for DIYers, you'll get 5-7 years with proper care.

Professional systems (Renner, Envirolak, Centurion, Icro) are purpose-built cabinet coatings with dedicated primers. They offer 10-15+ year lifespan, superior chemical resistance, and exceptional hardness.

PRO TIP: Unsure? Start with Homeowner System for your first project. Once you've mastered the technique, upgrade to Professional Systems.

STEP 2: Safety First - Proper PPE (Personal Protective Equipment)

Your health is non-negotiable. Even low-VOC waterborne coatings require proper protection. This applies to both systems.

Essential PPE Checklist:

RESPIRATORY PROTECTION:

- **Dust mask (N95 or better):** For sanding operations. Must be NIOSH-approved.
- **Half-face respirator with organic vapor cartridges:** For spraying waterborne coatings. Look for P100 filters with organic vapor cartridges (combination cartridges).
- **If brushing/rolling only:** N95 mask is sufficient during application, but upgrade to respirator if you notice any odor or irritation.
- **NEVER use just a dust mask when spraying:** Even low-VOC waterborne coatings create aerosol particles that require proper respiratory protection.

EYE PROTECTION:

- **Safety glasses:** For sanding, cleaning, and brush/roller application
- **Full-face shield or goggles:** When spraying (provides complete eye protection from overspray)

SKIN PROTECTION:

- **Nitrile gloves:** Chemical-resistant gloves for handling all coatings, cleaners, and solvents. Replace when torn or saturated.
- **Long sleeves:** Wear old long-sleeve shirt or painter's coveralls to protect arms
- **Barrier cream (optional):** Apply to exposed skin before starting work

HEARING PROTECTION (if using power tools):

- **Ear plugs or earmuffs:** When using orbital sanders, routers, or other power equipment

WORKSPACE VENTILATION REQUIREMENTS:

- Always work in well-ventilated area: open garage, windows, use fans
- For spraying: cross-ventilation required (intake + exhaust)

- Never spray in enclosed space
- Work at 50-85°F, humidity below 70%

CRITICAL WARNING: If you experience headaches, dizziness, nausea, or respiratory irritation while working, STOP immediately, go outside for fresh air, and reassess your ventilation and PPE. Your body is telling you something is wrong.

Safe Disposal:

Never pour coatings down drains. Let paint dry in cans or take to hazardous waste facility. Dispose of rags in sealed metal container.

STEP 3: Gather Your Materials & Set Up Your Workspace

Your shopping list depends on which system you've chosen. Here are the specific products for each path.

HOMEOWNER SYSTEM - Materials List:

Coating Products (Choose ONE):

Option 1: Benjamin Moore Advance

- Primer: Benjamin Moore Fresh Start Multi-Purpose Primer (or BIN Shellac-Based)
- Topcoat: Benjamin Moore Advance (Satin or Semi-Gloss)
- Where to buy: Benjamin Moore dealers

Option 2: Sherwin-Williams Emerald Urethane

- Primer: SW Extreme Bond Primer (or BIN Shellac-Based)
- Topcoat: Sherwin-Williams Emerald Urethane Trim Enamel (Satin or Semi-Gloss)
- Where to buy: Sherwin-Williams stores

Option 3: Inslx Cabinet Coat

- Primer: Inslx Stix Waterborne Bonding Primer
- Topcoat: Inslx Cabinet Coat (Satin or Semi-Gloss)
- Where to buy: Benjamin Moore dealers, some independent paint stores

PROFESSIONAL SYSTEM - Materials List:

Complete Professional Coating Systems (Choose ONE):

Option 1: Renner System

- Primer: Renner waterborne primer (system-specific)
- Topcoat: Renner waterborne cabinet coating (1K or 2K)
- Hardener: If using 2K system, order matching hardener

Option 2: Envirolak System

- Primer: Envirolak waterborne primer
- Topcoat: Envirolak waterborne cabinet coating
- Hardener: If using 2K system, order matching catalyst

Option 3: Centurion System

- Primer: Centurion waterborne primer
- Topcoat: Centurion waterborne urethane
- System components as specified by manufacturer

Option 4: Icro System

- Primer: Icro waterborne primer
- Topcoat: Icro waterborne cabinet coating
- Follow manufacturer's complete system recommendations

Where to Order: Homestead Finishing, Target Coatings, and other distributors sell direct to consumers with color-matching and 3-5 day shipping. Read technical data sheets carefully.

Universal Supplies (Both Systems Need These):

Cleaning & Prep:

- Dawn dish soap (original blue) or Krud Kutter cleaner/degreaser
- Hot water
- Microfiber cloths and sponges
- Bucket
- Denatured alcohol (for final wipe-down—mix 50/50 with water)

Sanding & Repair:

- 180-grit sponge-type sanding pads (Surf Prep brand or similar flexible sanding sponges)
- 320-grit sandpaper (for between-coat scuffing only)
- Sanding block (optional—sponges work great by hand)
- Wood filler or two-part Bondo filler
- Putty knife
- Painter's tape (2-inch roll)
- Tack cloths (buy a full box)

Application Tools:

- **For Spraying (Recommended for Best Results):**
- **Budget Airless Sprayers:**

- • Budget airless sprayer (Graco, Wagner, HomeRight brands)

- • 308 Fine Finish tip (required for smooth cabinet finish)

- • Airless is faster for large projects, easier to learn

■ **HVLP/Gravity-Feed Sprayers:**

- • Gravity-type HVLP gun with 1.8mm or 2.0mm tip

- • Requires air compressor (minimum 3-4 CFM at 40 PSI)

- • Better atomization = smoother finish, but slower application

■ **Professional Upgrade Option:**

- • **Titan ED 655** - excellent cabinet-specific gun for a bit more money

- • Purpose-built for fine finishes, worth the investment if doing multiple projects

■ **All Spray Methods Need:**

- • Cone strainers/filters

- • Extra tips (308 for airless, 1.8/2.0mm for HVLP)

- • Tip cleaning tools

■ **For Brush/Roller Application (If Not Spraying):**

- • High-density foam rollers (4-inch, 1/4-inch nap)

- • Premium angled brush (2.5-inch)

- • Paint trays and liners

- • Note: Spraying produces superior results, but quality brush/roller work is acceptable

■ **Both Methods Need:**

- • Stir sticks (never shake waterborne coatings)

- • Mixing cups with measurements

- • Flow additive (Floetrol or manufacturer-recommended)

Workspace Setup:

- Drop cloths or plastic sheeting

- Sawhorses or portable work table

- Screw organizer or labeled Ziploc bags

- Cordless drill with screwdriver bits

- All PPE items from Step 2
- Ventilation fans
- Bright work light

Workspace Requirements: Well-ventilated area (garage, outdoor covered space) at 50-85°F, humidity below 70%. Set up sawhorses for horizontal spraying—never vertical.

Choosing Your Spray Equipment:

Spraying produces superior results. Here's how to choose equipment for your budget.

Budget Airless (\$200-400): 308 Fine Finish tip, 1500-2000 PSI. Fastest learning curve, great for large projects.

HVLP/Gravity Feed (\$150-300 + compressor): 1.8-2.0mm tip, 25-30 PSI at gun. Smoother finish, lower overspray. Needs 3-4 CFM compressor.

Titan ED 655 (\$400-600): Purpose-built for cabinets. Worth it for multiple projects or professional work.

Renting: Tool rental shops have pro sprayers—smart for one-time projects.

PRO TIP: 308 Fine Finish tip is essential for airless—standard tips create orange peel.

STEP 4: Remove Doors, Drawers & Hardware

Proper organization prevents reassembly headaches. This step is identical for both systems.

Systematic Removal Process:

1. **Take photos:** Photograph each cabinet section from multiple angles before touching anything
2. **Number everything:** Use painter's tape and permanent marker. System: Top left = 1A, next right = 1B, etc.
3. **Remove in order:** Start from one corner and work systematically
4. **Hardware organization:** Place all screws for each door in labeled sandwich bag
5. **Stack strategically:** Stack doors with cardboard between them. Maximum 4 high.

PRO TIP: Take more photos than you think you need. You'll reference them constantly during reassembly. Most DIYers fail because they skip proper labeling.

STEP 5: Deep Clean Everything

Both systems require spotless surfaces. Waterborne coatings are unforgiving about contamination.

The Professional 4-Stage Cleaning Process:

Stage 1: Degrease - Dawn/hot water or Krud Kutter. Scrub all surfaces, change water frequently. Wear gloves.

Stage 2: Rinse - Multiple passes with clean water. Remove ALL soap residue.

Stage 3: 50/50 Alcohol/Water Wipe - After dry, wipe with 50/50 mixture. Removes oils and silicones. CRITICAL for adhesion.

Stage 4: Inspect - Feel surfaces—should be squeaky clean. Re-clean if questionable.

CRITICAL: The 50/50 alcohol/water wipe separates success from failure. Waterborne coatings won't bite through contamination—you must remove ALL oils and silicones.

Drying Time: Let everything dry completely (minimum 4 hours, overnight better) before sanding.

STEP 6: Scuff Sand for Primer Adhesion

Goal: dull the existing finish for primer adhesion. Don't remove it unless there's major peeling.

Professional Scuff Sanding Method:

Use **180-grit sponge-type sanding pads** (such as Surf Prep brand or similar flexible sanding sponges). These conform to profiles and details better than paper, making the job faster and more thorough.

The Dulling Process: • Use 180-grit flexible sanding sponge on all surfaces • Goal: Remove sheen and create uniform dull surface • You're NOT removing the finish unless there's major peeling • Sponges conform to grooves, profiles, and details easily • Work methodically—every surface must be dulled

Proper Technique: • Moderate pressure—let the sponge do the work • Sand WITH the grain on flat surfaces • Sponge flexibility handles edges and details naturally • Check your progress—surface should be uniformly dull with no shiny spots • Wear N95 mask and safety glasses

After Scuff Sanding: • Vacuum all surfaces thoroughly • Wipe down with tack cloth • Final wipe with 50/50 denatured alcohol and water mixture • Surface should feel slightly rough to the touch

Only sand aggressively if major peeling or flaking exists. Otherwise, just dull uniformly. Modern bonding primers adhere to properly scuffed finishes.

PRO TIP: Sponge pads like Surf Prep last longer, conform to profiles, and make scuff sanding 2-3x faster.

STEP 7: Fill Imperfections & Repair Damage

Fix every flaw now. Waterborne coatings have excellent clarity and will show imperfections.

Repair Checklist:

- Fill old hardware holes with quality wood filler
- Fix dents and gouges (two-part Bondo works best)
- Repair loose joints with wood glue
- Fix veneer chips
- Address any water damage

Application: Clean area with 50/50 alcohol/water mixture → press filler into defect → overfill slightly → let cure → sand flush with 220-grit → wipe with tack cloth.

STEP 8: Prime Your Cabinets

Professional systems use dedicated primers; homeowner systems use general-purpose primers.

HOMEOWNER SYSTEM - Priming Instructions:

Use the primer that pairs with your topcoat. BIN Shellac-Based works well for wood; Stix or Extreme Bond for laminate.

- Put on PPE (respirator if spraying)
- Stir primer thoroughly (never shake)
- Strain if spraying
- Apply one thin, even coat to all surfaces
- Check for drips within 5 minutes
- Drying time: 4+ hours (overnight better)
- Scuff sand with 320-grit before topcoat
- Tack cloth + 50/50 alcohol/water wipe

PROFESSIONAL SYSTEM - Priming Instructions:

Use the manufacturer-specified primer. These systems are engineered as complete packages—don't substitute generic primers.

- Read manufacturer's technical data sheet completely
- Put on full PPE (respirator, gloves, safety glasses)
- Mix primer per manufacturer instructions (some require additives)
- Strain through cone filter if spraying
- Follow recommended spray pressure (typically 25-30 PSI for waterborne)
- Apply thin, even coat—professional primers build better in multiple thin coats
- Monitor temperature and humidity closely (these systems are more sensitive)

- Drying time per manufacturer specs (usually 2-4 hours)
- Scuff sand with 320-grit
- Tack cloth + 50/50 alcohol/water wipe before topcoat

CRITICAL: Professional coating manufacturers provide technical support. Call them with questions.

STEP 9: Scuff Sand Between Coats (The Professional Secret)

Scuff sanding between coats is essential for both systems. This separates amateur work from professional results.

1. Wait for coating to fully dry (minimum 4 hours)
2. Lightly scuff with 320-grit—NOT removing coating, just creating tooth
3. Very light pressure
4. Wipe with tack cloth
5. Final wipe with 50/50 alcohol/water
6. **Repeat between EVERY coat**

Why: Waterborne coatings dry fast and trap dust. Scuff sanding removes imperfections and provides adhesion.

STEP 10: Apply Topcoats

Apply your waterborne topcoats. Process is similar, but Professional coatings require stricter attention to specs.

HOMEOWNER SYSTEM - Topcoat Application:

BM Advance, SW Emerald Urethane, and Inslx Cabinet Coat are user-friendly and self-level well.

Coat 1: Thin coverage coat → Dry 4-6 hrs → scuff sand 320 → clean

Coat 2: Build coat for coverage → Dry 4-6 hrs → scuff sand 320 → clean

Coat 3: Final smooth coat → NO SANDING → Cure 7 days

- **Can add Floetrol:** If brush marks are visible, add 4-8 oz per gallon
- **Airless spraying:** Use 308 Fine Finish tip, 1500-2000 PSI, 8-12 inches from surface
- **HVLP/Gravity spraying:** 1.8-2.0mm tip, 25-30 PSI, 8-10 inches from surface
- **Brushing/Rolling:** Maintain wet edge, work in sections, foam rollers for flat areas
- **Temperature:** 50-85°F ideal, humidity below 70%

PROFESSIONAL SYSTEM - Topcoat Application:

Professional coatings produce superior results but require precision. Follow specs exactly. Mix 2K systems with hardener before each session.

- **Read technical data sheet:** Every professional system has specific requirements
- **2K systems:** Mix coating with hardener at exact ratios. Pot life is limited (4-8 hours typically)—only mix what you'll use
- **Strain every time:** Use cone filters before spraying
- **Monitor conditions closely:** Temperature and humidity windows are tighter than homeowner products
- **Airless spray setup:** 308 Fine Finish tip, pressure per manufacturer (typically 1500-2200 PSI for waterborne)

- **HVLP spray setup:** 1.8-2.0mm tip, 25-30 PSI at gun (use pressure gauge at gun, not just compressor)
- **Titan ED 655 users:** This gun is designed for cabinets—follow included setup guide for optimal results
- **Film thickness:** Professional coatings build in thin layers. Don't try to get coverage in one coat
- **Distance and speed:** 8-10 inches from surface (HVLP) or 10-12 inches (airless), consistent moderate speed

Coat 1: Very thin seal coat → Dry per specs → scuff sand 320 → clean

Coat 2: Build coat → Dry per specs → scuff sand 320/400 → clean

Coat 3: Perfect finish coat → NO SANDING → Cure per manufacturer (7-14 days)

STEP 11: Paint Cabinet Boxes & Frames

Same process for both systems. Apply your coating to installed boxes using the same technique as doors.

1. Remove everything from cabinets
2. Clean interiors thoroughly (Dawn/hot water or Krud Kutter → rinse → 50/50 alcohol/water wipe)
3. Tape off walls, countertops, backsplash
4. Scuff sand all surfaces with 180-grit sponge pads (dull the finish)
5. Vacuum and tack cloth
6. Prime all surfaces (inside and out)
7. Scuff sand → clean → apply topcoat sequence
8. Work top to bottom (uppers first, then lowers)

PRO TIP: Spraying boxes produces best results. If brushing/rolling, use foam rollers and angled brushes.

STEP 12: Cure Time & Reinstallation

Professional coatings (especially 2K) cure faster than homeowner products.

Cure Timeline (Both Systems):

Stage	Homeowner	Professional (2K faster)
Touch dry	1-2 hours	30-60 min
Recoat	4-6 hours	2-4 hours
Reinstall	7 days	7 days
Full cure	21-30 days	14-21 days (7-10 for 2K)

Reinstallation: Wait 7 days → reinstall hardware → reference photos → hang doors → adjust hinges.

STEP 13: Care & Maintenance

Proper care maximizes lifespan.

- **First 30 days:** Treat gently, no harsh cleaners, no slamming
- **Daily:** Wipe spills immediately
- **Weekly:** Clean with mild soap and water
- **Avoid:** Harsh chemicals, abrasive pads
- **Protect:** Install soft-close hinges, use door bumpers
- **Expected life - Homeowner:** 5-7 years high-traffic, 8-10 years moderate-use
- **Expected life - Professional:** 10-15 years high-traffic, 15-20 years moderate-use

Common Mistakes & How to Fix Them

These mistakes apply to both systems, though Professional coatings are less forgiving.

Coating Stays Soft/Tacky:

Too cold, too humid, contaminated surface, or too thick. Fix: Improve conditions. If still soft after 7 days: strip and restart.

Poor Adhesion/Peeling:

Insufficient cleaning (most common). Fix: Strip → clean properly (TSP + alcohol wipe) → prime → recoat.

Orange Peel Texture:

Wrong spray pressure or distance. Fix: After cure, sand with 400-grit → apply thin final coat at proper settings.

Visible Brush Marks:

Coating drying too fast. Fix: Add flow additive. Future coats: use foam roller or switch to spraying.

Fisheyes (Craters):

Silicone contamination. Fix: Strip completely → clean with acetone → alcohol rinse → prime → recoat.

Runs and Sags:

Applied too thick. Fix: After cure, sand flat → recoat with proper thickness.

Prevention: 95% of problems trace to poor surface prep. Clean thoroughly (TSP + alcohol wipe), sand properly, scuff between coats.

Your Project Timeline

Both systems follow similar timing. Professional systems may ship in 3-5 days if ordering online.

Day 1: Assess, choose system, buy supplies/order coatings, set up workspace

Day 2: Remove doors, clean (Dawn + rinse + 50/50 alcohol/water), dry overnight

Day 3: Scuff sand with 180-grit sponges, fill imperfections, repairs

Day 4: Prime all surfaces, dry 4+ hours, scuff sand 320-grit, clean

Day 5: First topcoat, dry, scuff sand, clean

Day 6: Second topcoat, dry, scuff sand, clean

Day 7: Final topcoat, cure 7 days

Days 8-14: Cure time, then reinstall hardware and doors

Your Path to Professional Results

You now have complete roadmaps for both systems. Whichever you choose, you're equipped with insider knowledge.

Quick Recap:

Homeowner System: BM Advance, SW Emerald, Inslx Cabinet Coat. 5-7 years lifespan. Available locally. User-friendly.

Professional System: Renner, Envirolak, Centurion, Icro. 10-15+ years lifespan. Order online. Requires precision.

Universal Principles:

- Surface prep is everything: Dawn/Krud Kutter + rinse + 50/50 alcohol/water
- Thin coats always win: Build gradually
- Scuff sand between every coat with 320-grit
- Proper PPE: Respirator when spraying, N95 when sanding
- Patience: Wait 7 days before reinstalling

When Hiring:

Ask: What coating system? How many coats? Do you scuff sand between coats? What's the warranty?

You're now armed with knowledge for exceptional, long-lasting results.

— Expert Cabinet Refinisher