



## Painting Prep & Surface Preparation Basics

Ultimate DIYer Free Library – Painting & Caulking Series

A professional-quality paint job starts with proper preparation. This guide helps homeowners understand how to prep surfaces so paint adheres properly and lasts longer.

### Why Prep Matters

Skipping prep is the #1 reason paint jobs fail. Proper prep improves adhesion, appearance, and durability.

### Cleaning Surfaces

Paint will not stick to dirt or grease. Wash walls, remove residue, and let surfaces dry completely.

### Repairing Wall Damage

Fill holes, repair cracks, sand smooth, and feather edges so patches disappear after paint.

### Sanding for Adhesion

Light sanding helps paint bond and smooths rough areas. Remove dust afterward.

### Masking & Protection

Use painter's tape, drop cloths, and remove outlet covers to protect surrounding areas.

### Priming Basics

Use primer on repairs, bare surfaces, stains, and drastic color changes.

## ◆ Priming Basics: How It Works & Why It Matters

Primer is more than just “cheap paint.” It is a **bonding layer** designed to stick to surfaces that finish paint cannot, and to create a compatible surface for the final coat.

Primer does three critical things:

- **Seals** porous surfaces
- **Bonds** incompatible materials together
- **Creates uniform color and sheen**

Skipping primer is one of the most common reasons paint peels, flashes, or fails early.

---

## ◆ Understanding Paint Types: Latex vs Oil-Based

Before priming correctly, you need to understand the two main paint families.

### Latex (Water-Based) Paint

- Water clean-up
- Flexible when dry
- Dries fast
- Most modern interior and exterior paints

Latex paint **does not bond well to glossy or oil-based surfaces** without proper priming.

---

### Oil-Based Paint

- Solvent clean-up (mineral spirits)
- Hard, durable finish
- Slower drying
- Common on older trim, doors, cabinets, and window sashes

Oil-based paint **repels water**, which is why latex paint will not stick to it directly.

---

## ◆ Why Oil & Latex Don't Mix

Latex and oil paints fail for one simple reason:

## **Water and oil do not bond.**

If you apply latex paint directly over oil-based paint:

- The latex sits on the surface instead of bonding
- It may look fine at first
- Weeks or months later, it begins peeling or scratching off

This failure is mechanical, not cosmetic.

---

## **◆ How Primer Makes Oil & Latex Compatible**

Primer acts as a **bridge coat** between incompatible surfaces.

A proper primer:

- Bonds chemically or mechanically to the oil-based surface
- Dries into a surface that latex paint *can* bond to
- Locks everything together into one stable system

This allows you to safely:

- Paint latex over oil
  - Paint oil over latex (in specific cases)
  - Convert old homes to modern latex systems
- 

## **◆ Choosing the Correct Primer**

### **Option 1: Bonding or Transition Primer (Recommended)**

- Designed to bond to glossy or oil-based surfaces
- Accepts latex topcoats
- Ideal for trim, doors, cabinets, and older homes

Best choice for homeowners.

---

### **Option 2: Oil-Based Primer**

- Excellent adhesion
- Seals stains and tannins
- Slower drying and strong odor

Latex paint **can go over oil-based primer** once fully cured.

---

### **Option 3: Shellac-Based Primer (Specialty Use)**

- Ultimate stain blocker
- Extreme adhesion
- Strong fumes, fast drying

Used for smoke damage, heavy stains, or severe bleed-through.

---

## **◆ Correct Priming Process When Mixing Paint Types**

### **Step 1: Identify the Existing Paint**

- Rub a hidden area with alcohol
  - Paint on cloth = latex
  - No transfer = likely oil-based
- 

### **Step 2: Clean Thoroughly**

- Remove grease, wax, and residue
  - Especially important on trim and cabinets
- 

### **Step 3: Scuff Sand**

- Light sanding creates mechanical grip
  - Critical on glossy or oil-based finishes
- 

### **Step 4: Apply the Correct Primer**

- Use bonding or oil-based primer

- Allow full cure time (not just “dry to touch”)
- 

### **Step 5: Apply Latex Finish Paint**

- Once primer cures, latex paint bonds normally
  - No peeling, no scratching, no failure
- 

### **◆ Common Priming Mistakes to Avoid**

- Skipping primer to “save time”
  - Using latex primer over oil paint
  - Painting too soon before primer cures
  - Assuming all primers are the same
  - Not sanding glossy surfaces first
- 

### **◆ When Primer Is NOT Optional**

Primer is required when:

- Painting over oil-based paint
  - Covering raw drywall or wood
  - Sealing stains or water damage
  - Making drastic color changes
  - Painting glossy or factory-finished surfaces
- 

### **Ultimate DIYer Rule of Thumb**

**If you’re unsure whether paint will stick — prime it.**

Primer is cheaper than repainting.

---

© Ron King – The Ultimate DIYer | Where You Learn To Be Your Own Handyman.