SHERWIN WILLIAMS PRO+

Painter Skills Program

Part 1

Ready to achieve more?

Introductions

Firstname Lastname
name@email.com

1. Name

2. Something interesting about yourself

3. What you're hoping to get out of the session

Expectations for the Week

- Wear appropriate attire
- Be on time
- Turn off phones
- Actively participate
- Be respectful
- Voice your questions, comments and concerns

Why PRO+ Training Program?

143,000

vacant construction positions nationwide

80%

of contractors are in need of skilled labor

Source: Tradesmen International

What’s it like to be a Painter…

e: Tradesmen International

A career in Painting trades...

"This is such a great time to get into the industry because the baby boomer generation is starting to think about retirement, and there are very few young entrepreneurs entering the fields"

"Not only can you paint a house by yourself," he explains, "but you can actually make a lot of money doing this."

Source: Tradesmen International

So What?

Course Agenda

Classroom

Hands-on Training

Today's Agenda

Section 1
Paint Basics

Section 2
The Painting Process

Section 3
Patching & Applicators

Section 4
Jobsite Safety

Section 1

Paint Basics

What's in the Can

Painter Skills Program | Part 1

Objectives

After this session, you will be able to ...

- Identify different types of paint and the differences between them
- Describe the performance properties, uses and limitations of each type of paint
- Explain what type of paint to use and why for each of the following:
    - Ceilings
    - High-traffic areas
    - Low-traffic areas
    - Children's bedrooms or playrooms
    - Kitchens and bathrooms
    - Trim
- Explain how to calculate the amount of paint you need to buy using a Paint Coverage Worksheet

What Makes Up Paint?

Pigments
Provide color, opacity and durability

Solvents
Are liquids that help make the paint spreadable on the substrate

Binders
Are responsible for film formation and adhesion

Additives
Are raw materials added to paint to enhance paint performance

What Makes Up Paint?

Resins/Latex (~40%)

Acrylic (Latex Paints)

Alkyd (Oil Paints)

Epoxy (Epoxy Paints)

Pigments (~30%)

Titanium Dioxide

Pigments

Paint Fillers

Extenders

Containers (~15%)

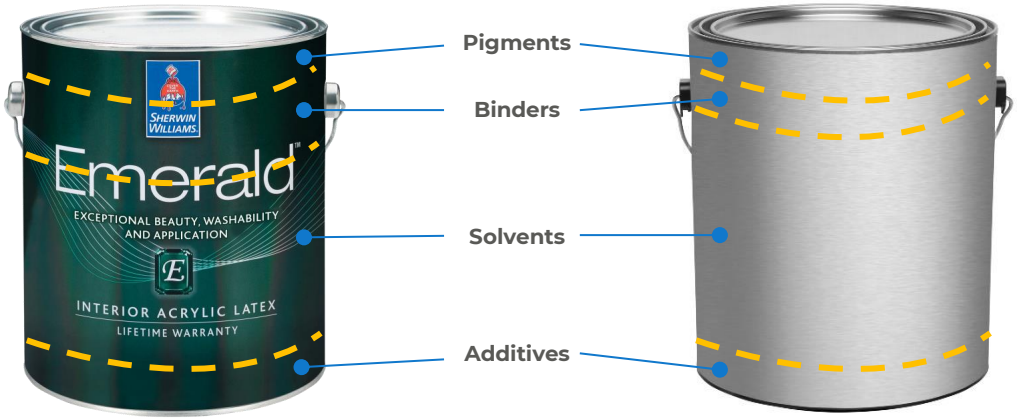
Metal or Plastic

Additives (~5%)

Solvents (~10%)

Quality vs. Price

Paints with premium-quality pigments, binders, solvents and/or additives last longer and look better than basic-quality paints.



Premium Quality **Basic Quality**


Quality
Ingredients = quality
Paint
SHERWIN WILLIAMS.
For The PROS

Different Types of Paint

Latex

Water-based

Alkyd

Oil-based

Latex Paint

- **Water-based paint**
- **Features and benefits**
  - Low odor compared to solvent paints
  - Fast drying
  - May have a lower environmental impact
  - Easy cleanup
- **Two types of latex**
  - 100% acrylic
  - Vinyl acrylic

Alkyd Paint

- **Oil-based paint**
- **Features and benefits**
  - Smooth, high-gloss finish
  - Good flow and leveling
  - Hard, nonporous finish
  - Resistant to humidity

Volatile Organic Compounds

- VOCs, volatile organic compounds, are gases that are emitted into the air from products or processes. Some VOCs can react with other gases to form air pollutants after they are in the air. Some VOCs are harmful by themselves.
- The allowable level of VOCs in paint, and other products, is regulated by federal, state and local air quality districts to protect human health and the environment.
- There are paints and coatings formulated to meet specific regulations for all regions of the U.S., Canada and Mexico.

	Latex	Alkyd
Base	Water-based	Oil-based
Drying Time	Quick: can usually apply second coat same day	Slower: must wait eight hours or more to apply second coat
Cleanup	Soap and water	Mineral spirits
Other Considerations	▪ Superior flexibility ▪ Superior gloss and color retention ▪ Nonyellowing ▪ Lower odor compared to Alkyds ▪ VOC compliant ▪ Variety of surfaces ▪ Longest-lasting finish ▪ Resists peeling and blistering	▪ Superior flow and leveling ▪ Tolerates poor surface preparation ▪ Harder finish ▪ Resists humidity ▪ Can be used in cooler temperatures ▪ UV breakdown (chalk, fade) ▪ Becomes harder and more brittle with age ▪ Mildew attacks soy-alkyd resin faster

Section 1

Pop Quiz

Latex vs. Alkyd

1. Which resin is better for exterior use?

A. Alkyd
B. Vinyl acrylic
C. 100% acrylic

2. Oil-based paint never mildews.

A. True
B. False

3. Which is more resistant to blistering?

A. 100% acrylic
B. Alkyd
C. Vinyl acrylic

4. **The longest-lasting latex finish in either interior or exterior paints is:**

A. Vinyl acrylic
B. 100% acrylic

Common Paint Terms

- Drag
- Durability
- Gloss (sheen)
- Hide
- Scrubbability
- Substrate
- Viscosity
- VOC
- Washability

A Guide to Gloss & Sheen

Room-by-Room Recommendations

Section 1

Pop Quiz

Paint Recommendations

1. What type of paint finish should you use in a hallway?

A. Flat latex
B. Semi-gloss latex
C. Eg-shel
D. Both B and C

2. There are specialized coatings for school lockers.

A. True
B. False

3. A flat finish is more durable than a gloss finish.

A. True
B. False

4. What is the most common finish used on trim work?

A. Flat
B. Gloss
C. Satin
D. Semi-gloss

How Much Paint Do I Need?

The following calculations are for one-coat applications on smooth, flat, nonporous surfaces.

Calculating Interior Space

- Length of room
- Width of room
- Height of room
- Number of doors
- Number of windows

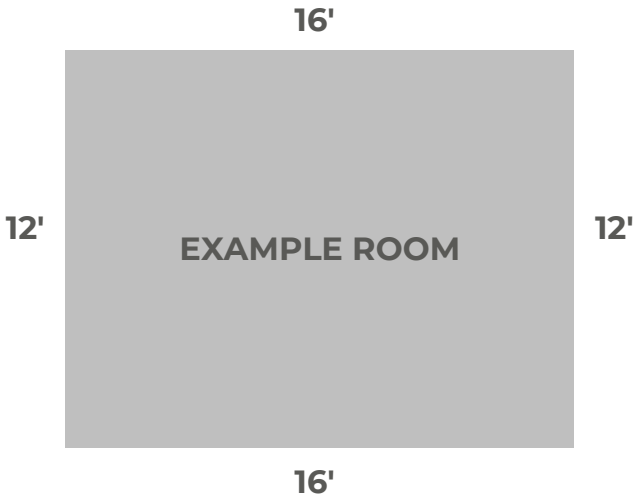
Paint Coverage Worksheet

Ceiling area	=	Area of ceiling to be painted
Trim area	=	Area of trim/woodwork/doors to be painted
Wall area	=	Area of walls to be painted (including windows, doors and trim)
Wall – trim	=	Area of walls less windows, doors and trim
Area ÷ 350	=	**Number of gallons**

Ceilings & Floors

If the ceiling or floor is to be painted,
multiply the room length by the room width.
This gives you the area of the ceiling or floor in square feet.

Example
A room is 16 feet long and 12 feet wide.
16 × 12 = 192 square feet



Calculating Wall Areas to Paint

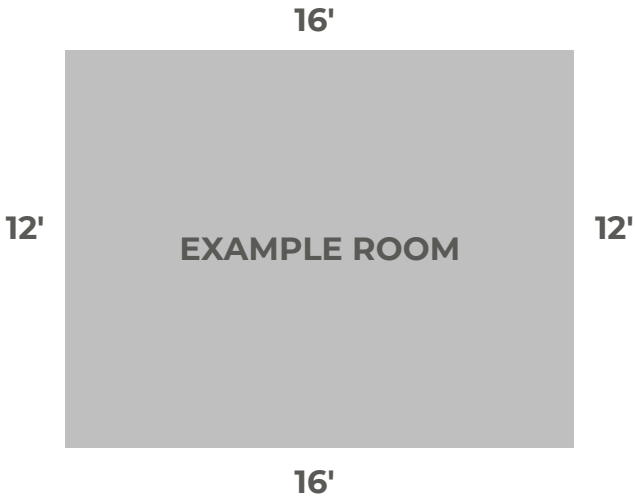
1. Add the length and width of all four walls to get the room perimeter.

2. Multiply the perimeter by wall height (8 feet) to get the total wall area.

Example

16+16+12+12 = 56

56(8) = 448



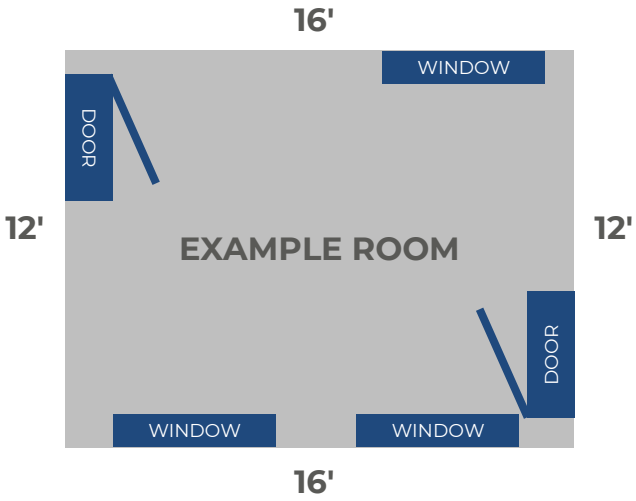
Subtract Trim & Door Areas

- Number of doors × 21
- Number of windows × 15

Example

2(21) = 42

3(15) = 45



Calculating Wall Areas to Paint

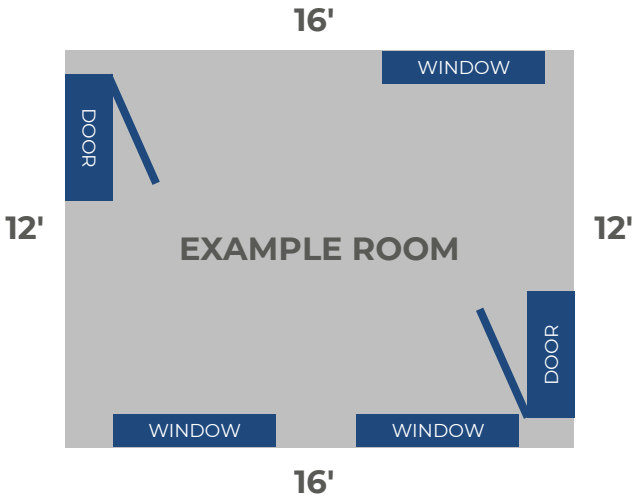
Door area + window area = total trim to subtract

Subtract trim area from the wall area.

Example

42+45 = 87

448-87 = 361

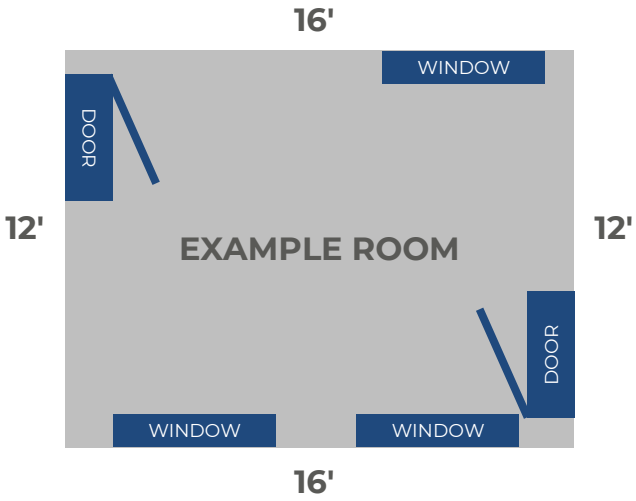


Calculate Number of Gallons

Divide all areas by 350.

Example

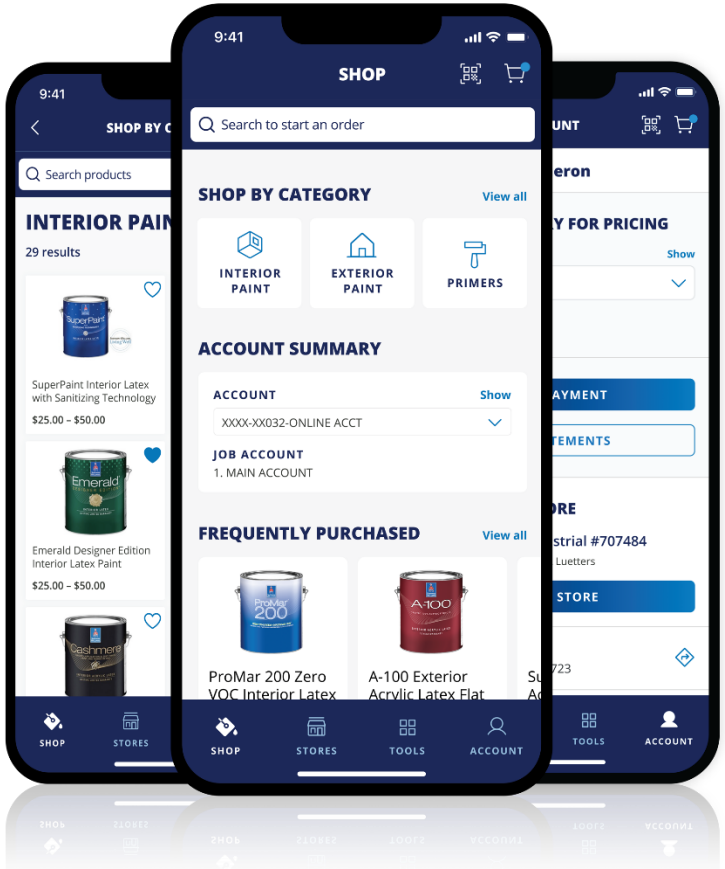
361/350 = 1.03 gallons



Keep It Simple With the PRO+ App

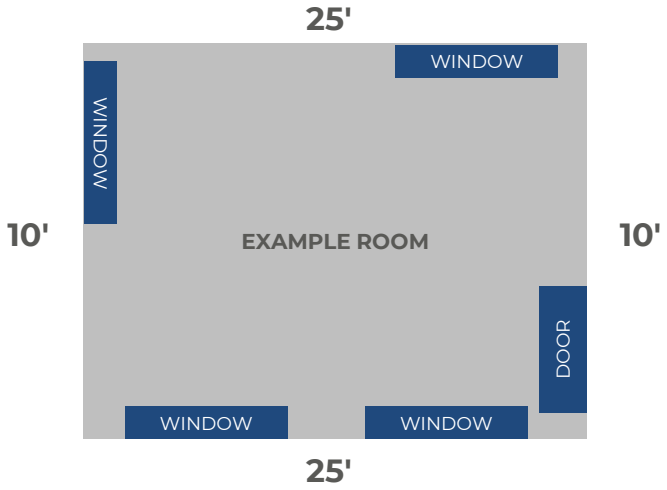
Download on the App Store

Google play

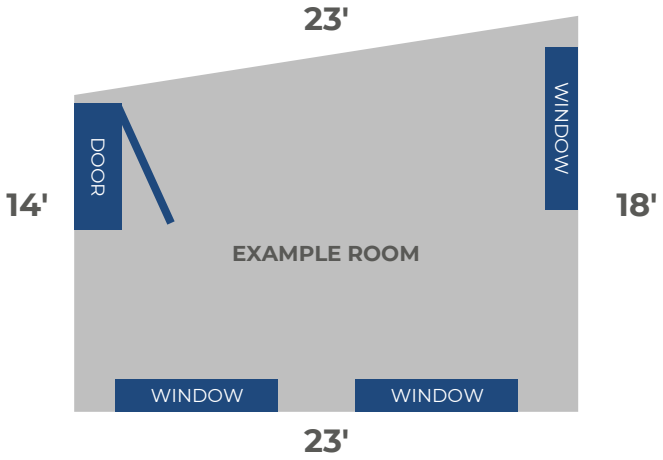


Activity: Calculating Gallons

Example 1



Example 2



Let’s Review

You should now be able to:

- Identify two different types of paint and the differences between them
- Describe the performance properties, uses, and limitations of each type of paint
- Explain what type of paint to use and why for a variety of areas (ceilings, high traffic, etc.)
- Explain how to calculate the amount of paint you need to buy

Section 2

The Painting Process

Follow the Steps

Painter Skills Program | Part 1

Objectives

When you've finished this section, you will understand ...

- The general steps to follow when painting any room
- Primer
- Protect fixtures and accessories
- How to apply paint with a brush or roller
- Cleaning tools
- The jobsite cleanup expectations
- The key characteristics of brushes, rollers, caulk, sealants and fillers

Key Painting terms

- Cutting In
  - Painting along the ceiling, around doors, trim and windows and along other objects that you cannot paint with a roller
- Feathering
  - Creating a transitional finish between a paint brush line and a roller cover line
- Lap Marks
  - These marks (usually stripes) occur when painters paint on top of a dry section of paint

General Steps in the Painting Process

Step 1: Prepare the surface, including priming if necessary

Step 2: Protect fixtures and accessories

Step 3: Apply the paint

Step 4: Clean up painting tools

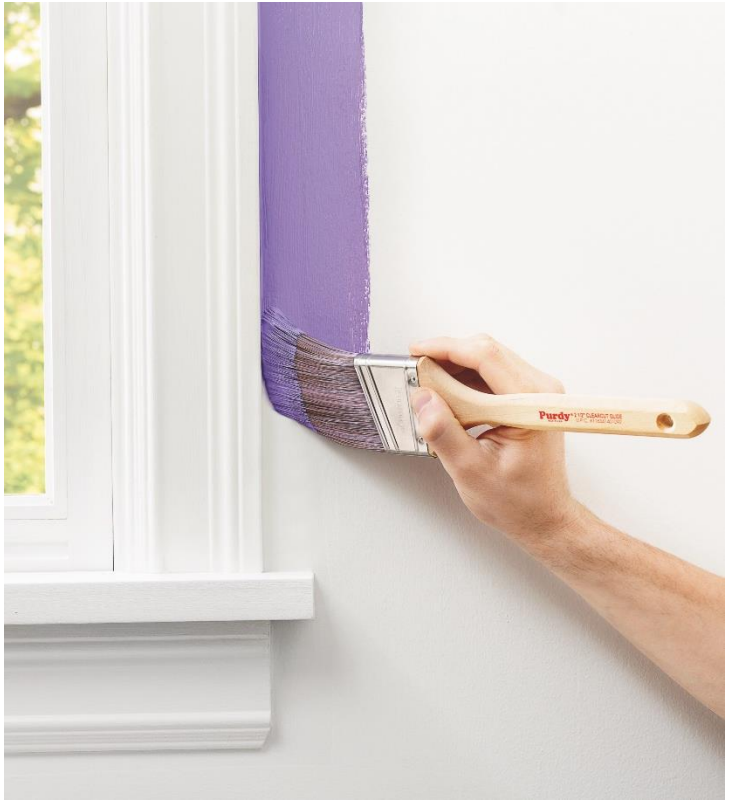
Step 5: Clean up work area and replace fixtures

Step 1

Prepare the Surface

Four important surface requirements:

- Clean
- Dull
- Dry
- Sound



Step 1

Prepare the Surface

- Patch as needed
  - Shrink-free spackling vs. other patching materials
- Caulk as needed
- Clean the surfaces
- Spot prime patches to ensure an even finish

Step 1

Prepare the Surface

- **Primers**
  - Support adhesion
  - Specially formulated coatings that provide adhesion to the substrate
  - Seal the surface
  - It is especially vital to prime when the surface is bare.

- **Benefits of primers**
  - Seals and hides
  - Holds gloss and bonds
  - Surfaces and resists corrosion

Step 1

Prepare the Surface

- **Caulks and sealants**
  - Create a smooth, clean finish to paint
  - Typical applications:
    - Crown, floor and door moldings
    - Kitchens and bathrooms
    - Interior and exterior around windows
  - Seldom-thought-of applications:
    - Underneath door thresholds
    - Around light fixtures, water spigots and air conditioners


SHERWIN WILLIAMS.
For The PROS
Preparation

Step 2

Protect Fixtures & Accessories

Remove, cover and/or tape items

Use masking tape or cover with a drop cloth:

- Moldings
- Floors
- Windows/doors
- Adjoining walls not to be painted

Remove

- Switch plates
- Register grill
- Light fixtures
- Outlet covers
- Doorknobs
- Window treatments

Step 3

Apply the Paint

Before You Paint

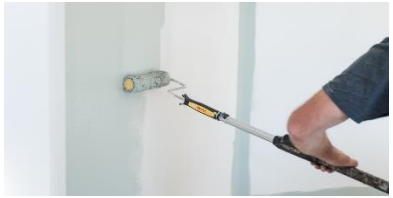
- Stir the can of paint just before you start.
- Stir upward from the bottom, not just in a circle.

Cutting In

Paint along the ceiling, around doors, around trim and windows, and around other objects that you cannot paint with a roller.

Feathering

Create a transitional finish between a paintbrush line and a roller cover line.



Lap Marks

These marks (usually stripes) occur when painters paint on top of a dry section of paint.

Step 3

Apply the Paint

Trim First

- Cut in 2 inches around windows, doorways and corners.
- Start at the top and work your way down.
  - Paint ceilings first and then woodwork, walls and floors.
- Paint in narrow bands to maintain a “wet edge.”
- Don’t stop painting in the middle of a large area.
- Blend areas where roller and brush meet in the corners by smoothing with soft brush strokes (feathering).

Step 3

Apply the Paint

Tips for Using a Brush

- Use a brush designed for the area to be painted.
- Dip the brush to only one-third to one-half the depth of the bristles.
- After dipping the brush in paint, tap the side of the container to remove excess.
- Hold the brush as you would a pencil.
- Use the full width of the brush to apply paint.
- With the right technique, you'll be able to paint a 12-inch strip before reloading.

Step 3

Apply the Paint

Tips for Using a Roller

- Work from top to bottom in a paths 2 × 3, ceiling to floor, and then backroll.
- Don’t overfill the roller tray.
- Prepare the roller with masking tape to remove lint.
- Don’t overload the roller with paint.
- Don’t spread paint too thinly on the roller (½-inch cover 2-by-3-foot area).
- Use even pressure on the roller.
- Angle the roller periodically during painting.
- Get as close to the edge of woodwork as possible.


Brush &
Roller Basics
SHERWIN WILLIAMS.
For The PROS

Step 4

Clean Up Painting Tools

- Brushes: Scrape excess paint on the container edge and then clean in either soap and water (for latex paint) or mineral spirits (for alkyd paint).
- Rinse frames and other tools clean with an appropriate cleaner.
- Spin brush or roller to remove excess water.
- Wrap and store.

Step 5

Clean Up Work Area & Replace Fixtures

- Carefully remove masking tape.
- Fold the drop cloth into its center to avoid getting paint or debris on the floor.
  - Use a clean, white cloth to wipe off stray paint.
  - Use soap and water for latex.
  - Use mineral spirits for alkyd.
- Replace fixtures you removed, such as switch plates, doorknobs and register covers.
  - Be sure the paint is dry before replacing these.

Section 2

Pop Quiz

Painting Process

1. List in order the five steps for painting.

A. Clean the work area
B. Paint
C. Prepare the surface
D. Protect fixtures
E. Clean your tools

1. List in order the five steps for painting.

C. Prepare the surface
D. Protect fixtures
B. Paint
E. Clean your tools
A. Clean the work area

2. Which step do you do first in the painting process?

A. Cut in
B. Roll the paint on the wall
C. Prime

3. A substrate to be painted must be what?

A. Clean and dry
B. Dull and primed
C. Dull and sound
D. Both A and C

Lunchtime

Section 3

Patching & Applicators

How to Choose the Right Tools

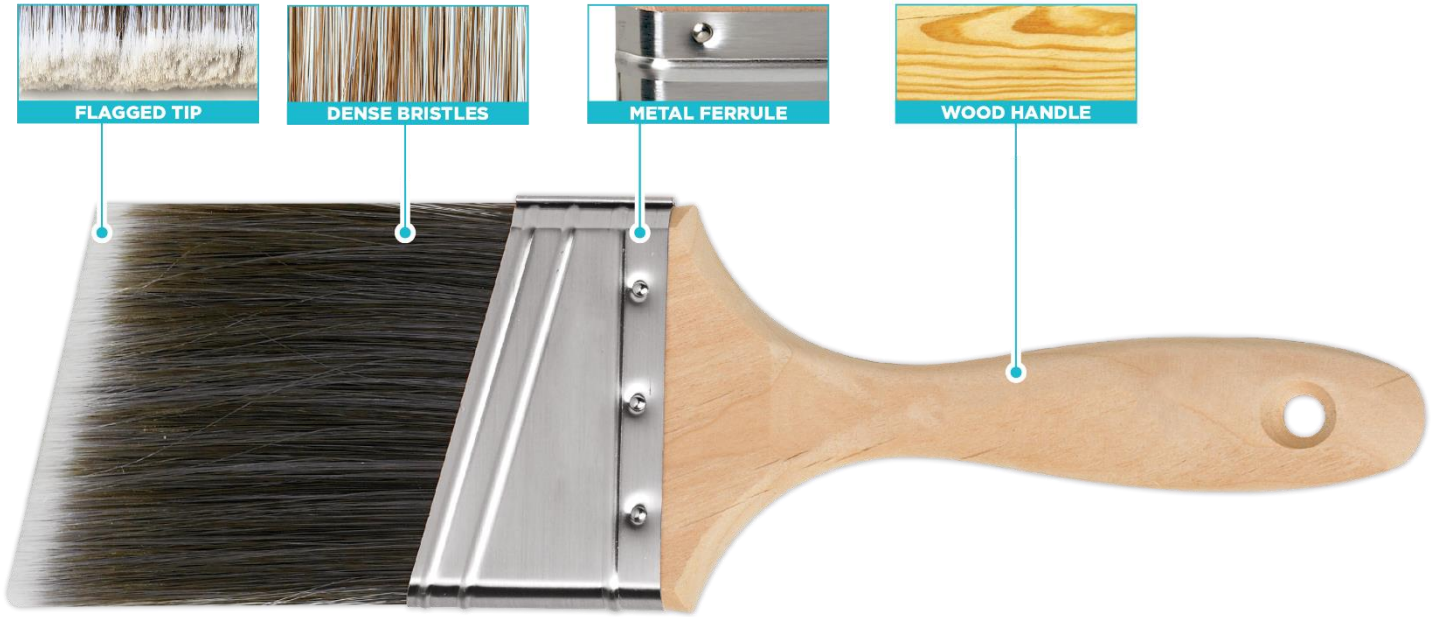
Painter Skills Program | Part 1

Objectives

After this section, you will have a general understanding of the abilities and characteristics of basic …

- Brushes
- Rollers
- Caulks and sealants
- Fillers

Parts of a Brush



Types of Filaments

Natural China Bristle

- Hog hair from China
- The best material for oil-based coatings
- Not recommended for latex coatings

Nylon Filament

- Maximum resistance to abrasion
- Most malleable synthetic filament (best flag)
- Loses shape in high heat and humidity

Types of Filaments

Polyester Filament

- Stiffer than nylon
- Retains shape in all environments
- Less costly than nylon

Nylon/Polyester Blend

- Best of both filaments
- Soft tip from nylon in longer lengths
- Shape retention by shorter polyester filaments

Types of Brushes

Angle sash brushes are used to cut in around windows and doors and at the ceiling line.

Flat sash brushes can be used as a cut-in tool by painters who prefer not to have an angle to their brush.

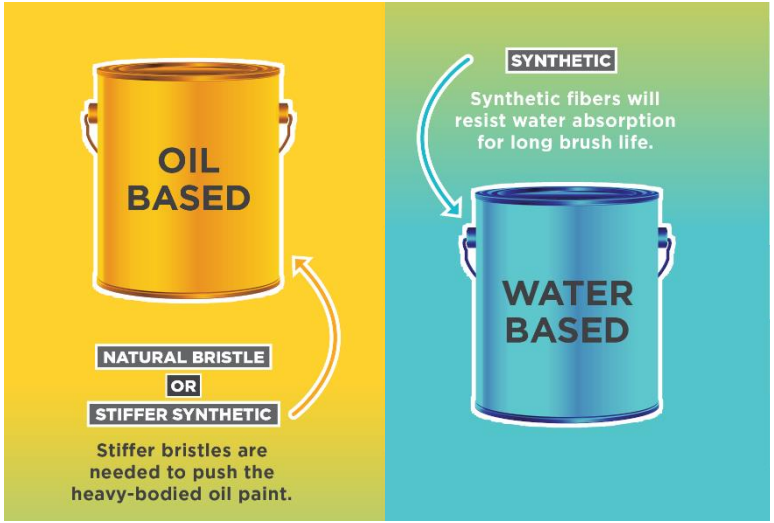
Wall brushes hold a lot of paint and are perfect for large surface areas (outside).

Brush Performance Characteristics

- Paint pickup
- Paint release
- Finish and film thickness
- Durability
- Cleanup

Selecting the Right Brush

- Type of paint
  - Natural bristle for alkyd
  - Synthetics for latex
- Determine wear factor for the surface to be painted
- Use your own preference for handle and flex



Parts of a Roller

Roller Fiber Types

Polyester

- Excellent durability
- Use with both latex and oil-based coatings
- Excellent paint pickup and release

Nylon/Polyester Blend

- Good durability
- Soft nylon fibers leave a fine finish.
- Use with both latex or oil-based coatings

Mohair

- Natural fabric leaves an extremely fine finish.
- Shed resistant
- Use with oil-based gloss paints, stains and varnish

Roller Fiber Types

Sheepskin

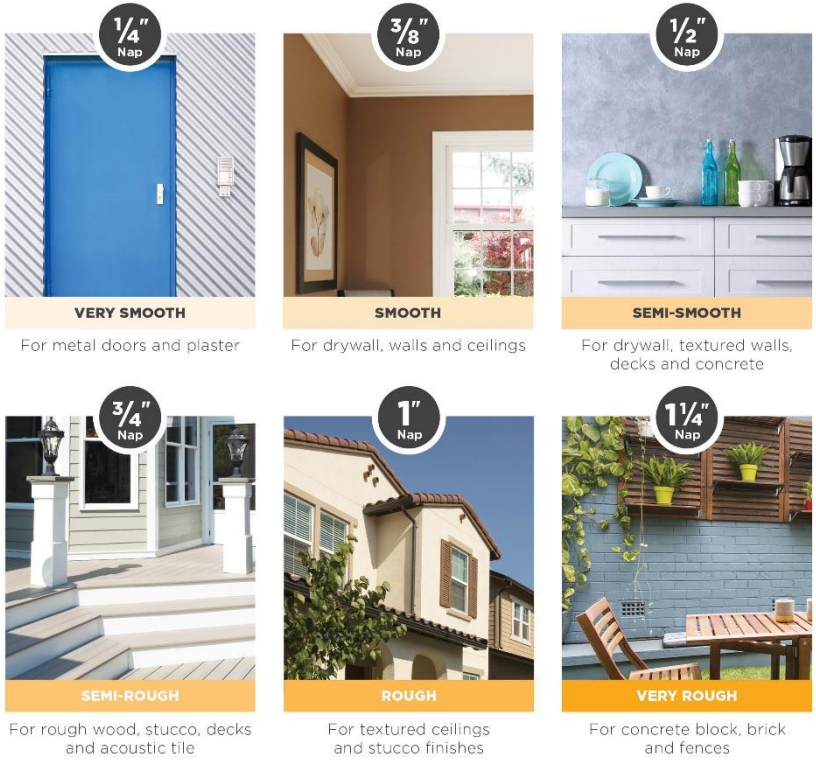
- Naturally absorbent
- Ideal for use with oil-based coatings
- Excellent paint pickup and release

Soft Woven

- Lint free
- Use with both latex or oil-based coatings
- Extremely fine finish

Roller Cover Nap Heights

- **3/16" to 1/4"**
  Metal doors to plaster
- **3/8" to 1/2"**
  Drywall to light texture
- **3/4" to 1"**
  Texture ceiling
- **1 1/4" to 1 1/2"**
  Rough surfaces



Roller Cover Performance Characteristics

- Paint pickup
- Paint release
- Lint free
- Finish and film thickness
- Durability
- Cleanup

Selecting the Right Roller Cover

- Type of paint
  - Latex coatings
    - Polyester, polyester/nylon or soft woven
  - Alkyd or solvent-based coatings
    - Natural fiber covers

- Determine the durability requirements and the texture of the surface to be painted.

Other Applicators

Mini-Rollers

- Great for use in small areas or hard-to-reach areas
- Available in both smooth foam and woven fabrics
- For use with any coating

Extension Poles

- Use to extend your reach and increase your productivity


Spray
Application
SHERWIN WILLIAMS.
For The
PROS


Repair &
Touch-Up
SHERWIN WILLIAMS.
For The PROS

Introduction to Caulks & Sealants

- The basic function of a caulk or sealant is to provide a flexible seal in gaps created when two materials are joined together (the joint).

- Joints should be sealed to:
  - Keep water out
  - Keep air and drafts out
  - Prevent damage caused by weather
  - Provide attractive finish
  - Effectively keep insects out

Flexibility Matters

Why Does the Seal Have to Be Flexible?

Flexibility allows walls, ceilings, molding, etc. to move as the building or structure “settles” after construction or as a response to expansion and contraction from heat, cold and/or humidity.

Parts of a Caulk Tube

Cut area for nozzle opening

Nozzle

Inner seal

Cartridge walls (plastic or fiber)

Foil liner (if applicable)

Plunger (inside)

Latex Caulks & Sealants

4 Types of Latex Formulations

Vinyl acrylic latex	Acrylic latex	Siliconized acrylic latex	Clear caulks (siliconized acrylic)

Sealants: Siliconized Acrylics

Silicone Sealants

Most common systems for non-water-based sealants:

- Tubs and tiles
- Kitchens and bathrooms
- Windows and doors

Caulk & Sealant Performance Characteristics

Property	Vinyl Acrylic Latex	Acrylic Latex	Siliconized Acrylic Latex	100% Silicone
Paintable with oil and latex paints	X	X	X	
Easy to apply	X	X	X	
Fast setting				X
Good water resistance		X	X	X

Remember: 100% silicone is NOT paintable.

Selecting the Right Caulk & Sealant

Determine:

- The surfaces to be sealed
- Whether the sealant must be paintable
- The durability necessary for the project
- The flexibility needed for the project
- The dry time necessary for the project

Filler Types

- **Spackling and patching compound**
  Ideal for filling and smoothing plaster cracks, nail holes and joints

- **Lightweight spackling compound**
  Good for filling holes or cracks; very easy to use

- **Wood filler/painter's putty**
  Ideal for sealing and repairing small openings, cracks or holes in wood surfaces

Selecting the Right Filler

Determine:

- The size of patch needed
- The surface type

Section 3

Pop Quiz

Caulks & Sealants

1. Which caulk is not paintable?

A. Acrylic vinyl

B. Siliconized acrylic

C. 100% silicone

2. What are some areas to check for caulking?

Note: Provide at least four. Each correct one over four will be a bonus point.

2. What are some areas to check for caulking?

Crown mouldings, windows, backsplashes, bathtubs, external water faucets, external light fixtures attached to the house, doorjambs, baseboards, etc.

Let's Review

You should now be able to:

- List and describe the general steps to follow when painting any room
- Explain some of the steps involves in proper surface preparation
- State the importance of using primers
- List some tips for applying paint with a brush or roller
- Explain how to clean tools, clean the work area and replace fixtures
- Explain key characteristics of brushes, rollers, caulk, sealants and fillers

Section 4

Jobsite Safety

Safety Is No Accident

Painter Skills Program | Part 1

Jobsite Safety Agenda

- Trip hazards
- Spills
- Ladder safety

Trip Hazards

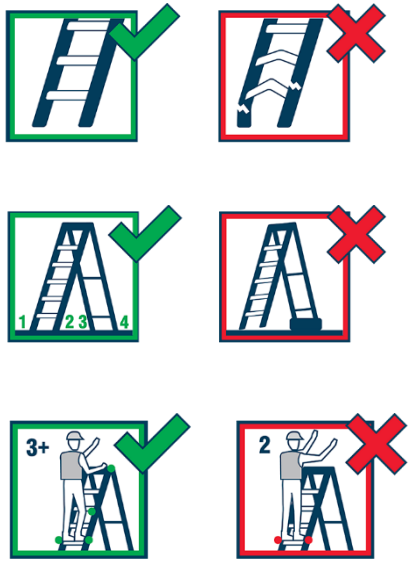
- Drop cloths
- Plastic sheeting
- Tools
- Paint
- Extension cords

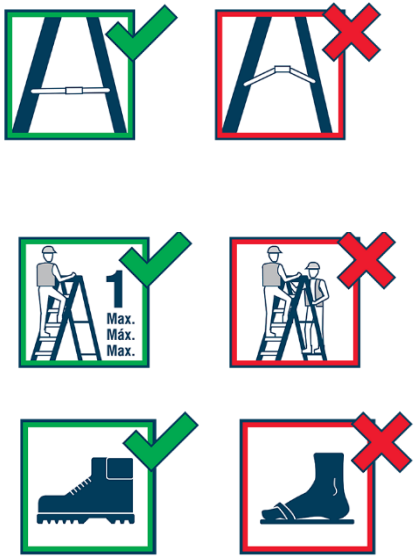
Spills

- Have a garbage can readily available
- Pour with caution
- Seal lids tightly

Step Ladder Safety

- Inspect for damage
- Lock spreaders
- 4 feet on the floor
- Only 1 user at a time
- Minimum 3 points of contact
- Wear proper footwear





Today's Agenda

Section 1
Product 101

Section 2
Substrates

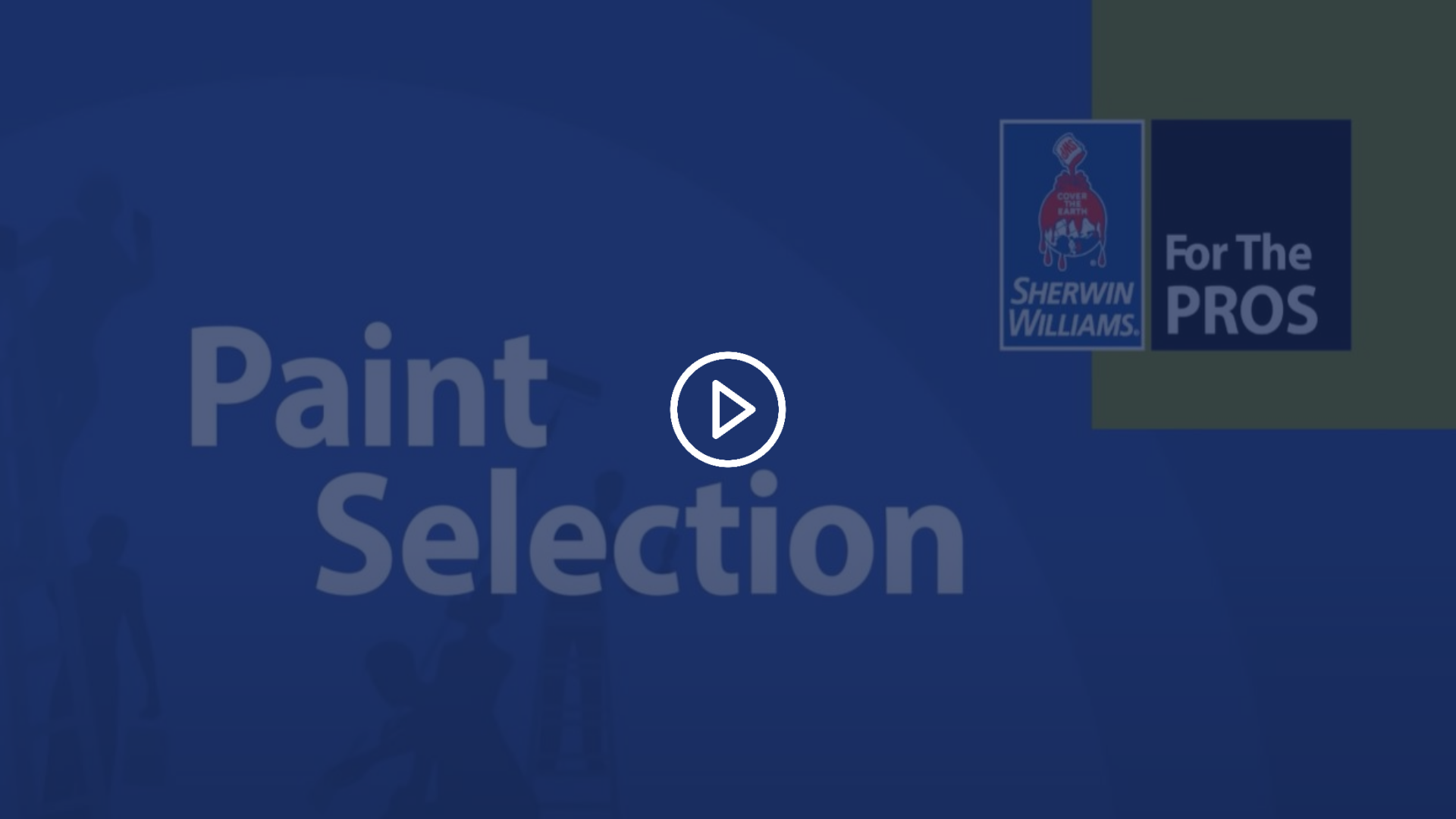
Section 3
Common Paint Terms & Troubleshooting

Section 4
The Value of Sherwin-Williams®

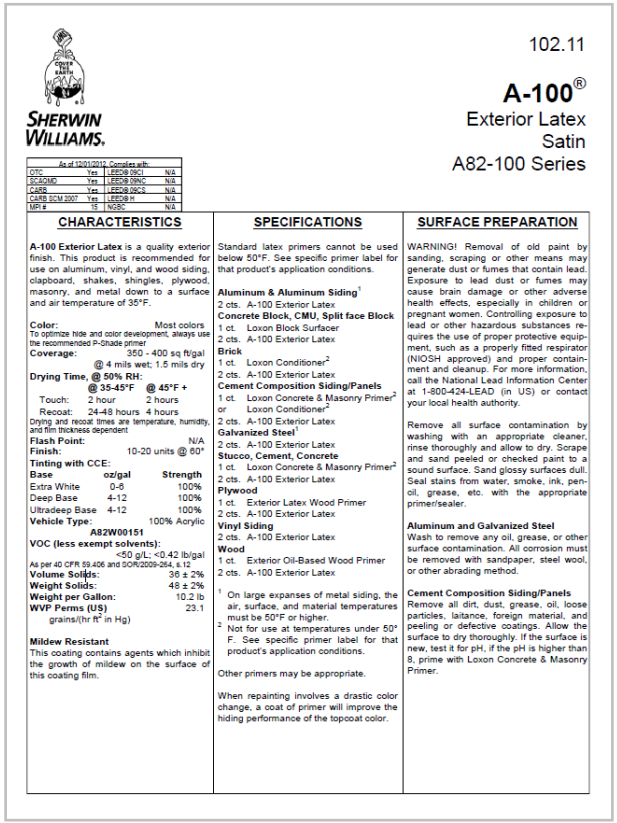
Painter Skills Program

Part 2

Welcome back!


Paint
Selection
SHERWIN WILLIAMS.
For The
PROS

Data Pages



SHERWIN WILLIAMS.

102.11

A-100®
Exterior Latex
Satin
A82-100 Series

As of 12/01/2012, Complies with:			
OTC	Yes	LEEDB 09CI	N/A
SCAQMD	Yes	LEEDB 09NC	N/A
CARB	Yes	LEEDB 09CS	N/A
CARB SCM 2007	Yes	LEEDB H	N/A
MPI #	15	NOSC	N/A

CHARACTERISTICS

A-100 Exterior Latex is a quality exterior finish. This product is recommended for use on aluminum, vinyl, and wood siding, clapboard, shakes, shingles, plywood, masonry, and metal down to a surface and air temperature of 35°F.

Color: Most colors
To optimize hide and color development, always use the recommended P-Shade primer
Coverage: 350 - 400 sq ft/gal
@ 4 mils wet; 1.5 mils dry
Drying Time, @ 50% RH:

	@ 35-45°F	@ 45°F +
Touch:	2 hour	2 hours
Recoat:	24-48 hours	4 hours

Drying and recoat times are temperature, humidity, and film thickness dependent
Flash Point: N/A
Finish: 10-20 units @ 60°
Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-6	100%
Deep Base	4-12	100%
Ultradeep Base	4-12	100%

Vehicle Type: 100% Acrylic
A82W00151
VOC (less exempt solvents):
<50 g/L; <0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12
Volume Solids: 36 ± 2%
Weight Solids: 48 ± 2%
Weight per Gallon: 10.2 lb
WVP Perms (US) 23.1
grains/(hr ft² in Hg)

Mildew Resistant
This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

SPECIFICATIONS

Standard latex primers cannot be used below 50°F. See specific primer label for that product's application conditions.

Aluminum & Aluminum Siding[1]
2 cts. A-100 Exterior Latex
Concrete Block, CMU, Split face Block
1 ct. Loxon Block Surfacer
2 cts. A-100 Exterior Latex
Brick
1 ct. Loxon Conditioner[2]
2 cts. A-100 Exterior Latex
Cement Composition Siding/Panels
1 ct. Loxon Concrete & Masonry Primer[2]
or Loxon Conditioner[2]
2 cts. A-100 Exterior Latex
Galvanized Steel[1]
2 cts. A-100 Exterior Latex
Stucco, Cement, Concrete
1 ct. Loxon Concrete & Masonry Primer[2]
2 cts. A-100 Exterior Latex
Plywood
1 ct. Exterior Latex Wood Primer
2 cts. A-100 Exterior Latex
Vinyl Siding
2 cts. A-100 Exterior Latex
Wood
1 ct. Exterior Oil-Based Wood Primer
2 cts. A-100 Exterior Latex

[1] On large expanses of metal siding, the air, surface, and material temperatures must be 50°F or higher.
[2] Not for use at temperatures under 50° F. See specific primer label for that product's application conditions.

Other primers may be appropriate.

When repainting involves a drastic color change, a coat of primer will improve the hiding performance of the topcoat color.

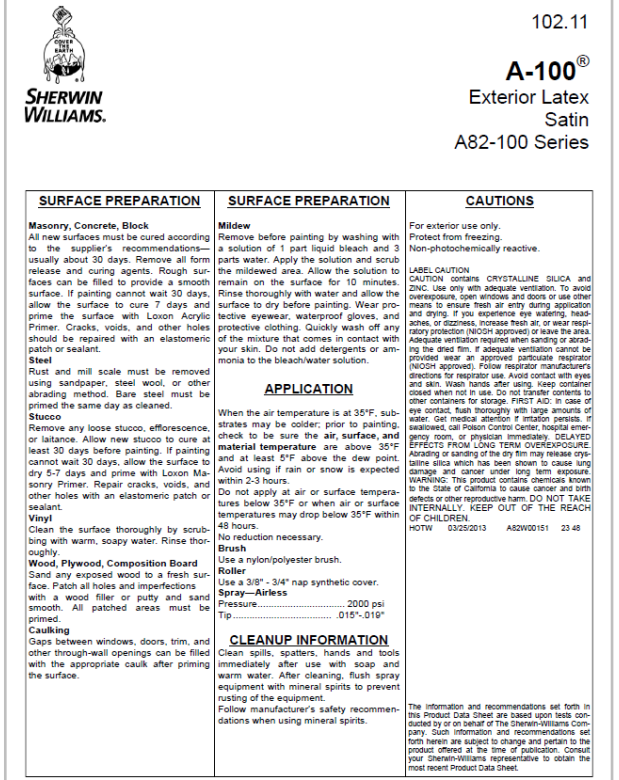
SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull. Seal stains from water, smoke, ink, pen-oil, grease, etc. with the appropriate primer/sealer.

Aluminum and Galvanized Steel
Wash to remove any oil, grease, or other surface contamination. All corrosion must be removed with sandpaper, steel wool, or other abrading method.

Cement Composition Siding/Panels
Remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, and peeling or defective coatings. Allow the surface to dry thoroughly. If the surface is new, test it for pH, if the pH is higher than 8, prime with Loxon Concrete & Masonry Primer.



SHERWIN WILLIAMS.

102.11

A-100®
Exterior Latex
Satin
A82-100 Series

SURFACE PREPARATION

Masonry, Concrete, Block
All new surfaces must be cured according to the supplier's recommendations—usually about 30 days. Remove all form release and curing agents. Rough surfaces can be filled to provide a smooth surface. If painting cannot wait 30 days, allow the surface to cure 7 days and prime the surface with Loxon Acrylic Primer. Cracks, voids, and other holes should be repaired with an elastomeric patch or sealant.
Steel
Rust and mill scale must be removed using sandpaper, steel wool, or other abrading method. Bare steel must be primed the same day as cleaned.
Stucco
Remove any loose stucco, efflorescence, or laitance. Allow new stucco to cure at least 30 days before painting. If painting cannot wait 30 days, allow the surface to dry 5-7 days and prime with Loxon Masonry Primer. Repair cracks, voids, and other holes with an elastomeric patch or sealant.
Vinyl
Clean the surface thoroughly by scrubbing with warm, soapy water. Rinse thoroughly.
Wood, Plywood, Composition Board
Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth. All patched areas must be primed.
Caulking
Gaps between windows, doors, trim, and other through-wall openings can be filled with the appropriate caulk after priming the surface.

SURFACE PREPARATION

Mildew
Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

APPLICATION

When the air temperature is at 35°F, substrates may be colder; prior to painting, check to be sure the **air, surface, and material temperature** are above 35°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 2-3 hours.
Do not apply at air or surface temperatures below 35°F or when air or surface temperatures may drop below 35°F within 48 hours.
No reduction necessary.
Brush
Use a nylon/polyester brush.
Roller
Use a 3/8" - 3/4" nap synthetic cover.
Spray—Airless
Pressure..... 2000 psi
Tip..... .015"-.019"

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment.
Follow manufacturer's safety recommendations when using mineral spirits.

CAUTIONS

For exterior use only.
Protect from freezing.
Non-photochemically reactive.

LABEL CAUTION
CAUTION contains CRYSTALLINE SILICA and ZINC. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE: Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.
HOTW 03/25/2013 A82W00151 23 48

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Sheet.

Section 1

Product 101

Quality That Lasts

SHERWIN WILLIAMS PRO+

Painter Skills Program | Part 2

Commercial & Residential

- Emerald® Designer Edition™ Interior Latex
- Duration Home® Interior Latex Coating
- Cashmere® Interior Latex
- SuperPaint® Interior Latex
- SuperPaint With Air Purifying Technology Interior Acrylic Latex
- ProMar® 200 Zero VOC Interior Latex
- Emerald Rain Refresh® Exterior Acrylic Latex With Self-Cleaning Technology

Commercial & Residential

- Latitude™ Exterior Acrylic Latex With ClimateFlex Technology™
- Premium Ceiling Paint
- Gallery Series™ Waterborne Topcoat
- Extreme Block® Interior/Exterior Waterbased Stain Blocking Primer – White
- Pro Industrial™ Pre-Catalyzed Waterbased Urethane
- Pro Industrial DTM Acrylic Coating
- Pro Industrial Multi-Surface Acrylic

Emerald Designer Edition Interior Latex

Flat, Satin, Eg-Shel and Gloss

- Paint and primer that delivers an ultrasmooth, uniform finish with our best hide yet
- Can be tinted to most colors, including 200 exclusive colors in the Designer Color Collection
- Formulated to offer brighter whites with higher hiding power
- Available in Ultra White, Extra White, Deep and Ultradeep bases
- Antimicrobial — contains agents that inhibit the growth of mold and mildew on the surface of the paint film

Duration Home Interior Latex Coating

Flat, Matte, Satin and Semi-Gloss

- Keeps busiest spaces protected — paint and primer that provides exceptional coverage with advanced stain-blocking technology
- Features moisture-resistant technology that offers quick return to service (as little as two hours) and durability in moist environments like bathrooms, laundry rooms or entryways
- Many stains wipe away easily with water — no scrubbing or harsh chemicals required
- Delivers excellent burnish resistance — with no color rub-off and less visible shine after washing
- Available in all colors, including deep accents and high-reflectance pastels
- Antimicrobial — contains agents that inhibit the growth of mold and mildew on the surface of the paint film

SuperPaint With Air Purifying Technology Interior Acrylic Latex

Why Customers Love It

- Contributes to better indoor air quality by reducing volatile organic compounds from potential sources like carpet, cabinets and fabrics*
- Innovative technology helps break down unwanted odors, such as those from cooking, smoke and pets
- Available in a wide variety of colors, including 540 curated hues from the Living Well™ collection
- Antimicrobial — contains agents that inhibit the growth of mold and mildew on the surface of the paint film

*The length of time SuperPaint With Air Purifying Technology actively reduces odors and formaldehyde depends on the concentration, the frequency of exposure and the amount of painted surface area.

Emerald Rain Refresh Exterior Acrylic Latex With Self-Cleaning Technology

Flat, Satin and Gloss

- Formulated to be self-cleaning by shedding dirt upon rain or water contact
- Self-priming, with exceptional application qualities
- Durability that lasts with excellent UV and weather protection
- Can be tinted in VinylSafe® paint colors, allowing customers to select from a limited number of darker colors formulated to resist warping or buckling when applied to sound, stable vinyl siding
- Mildew resistant — contains agents that inhibit the growth of mildew on the surface of the paint film

Latitude Exterior Acrylic Latex With ClimateFlex Technology

Flat, Satin and Gloss (Semi-Gloss in Canada)

- Formulated with ClimateFlex Technology to develop early moisture resistance in as little as 30 minutes and provide smooth application in temperatures ranging from 35°F to 120°F, so you can paint with confidence despite the forecast
- Outstanding hide, coverage and block resistance
- Can be tinted in VinylSafe paint colors, allowing customers to select from a limited number of darker colors formulated to resist warping or buckling when applied to sound, stable vinyl siding
- Mildew resistant — contains agents that inhibit the growth of mildew on the surface of the paint film

Premium Ceiling Paint

Flat

- High-hiding bright white with an extremely flat finish formulated to hide surface imperfections
- Self-priming, one-coat coverage
- Easy application with excellent uniformity
- Dries quickly and has excellent spatter resistance
- Mold- and mildew-resistant technology helps inhibit the growth of mold and mildew on the paint's surface

Gallery Series
Waterborne Topcoat

10 Gloss Matte, 20 Gloss Satin and 40 Gloss Semi-Gloss

- A hard-wearing, super-durable cabinet coating that helps get jobs done quickly with exceptional results
- Exclusively designed for professional spray application
- Delivers 2K performance in a user-friendly, 1K waterborne formula
- Hardness exceeds traditional architectural coatings
- Excellent chemical and moisture resistance
- Can be tinted in store with ColorCast Ecotoner® colorants

Emerald Urethane Trim Enamel Interior/Exterior Waterbased

Satin, Semi-Gloss and Gloss

- Waterbased trim enamel with exceptional flow and leveling for customers looking to give cabinets, doors and trim a smooth, luxurious finish
- Similar to alkyd coatings but with the convenience of a waterbased urethane modified alkyd formula that resists yellowing
- Versatile to interior or exterior applications
- Available in Ultra White, Hi-Hide White, Deep and Ultradeep bases that can be tinted to the exclusive colors in the Designer Color Collection, as well as a package Tricorn Black

Questions?

Section 2

Substrates

Understanding the Differences Is Key

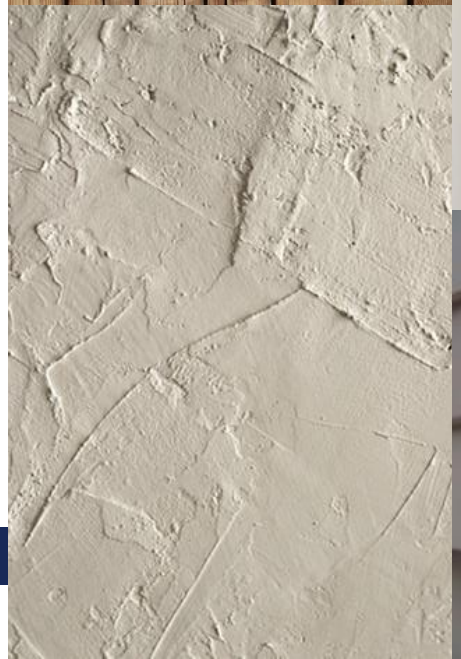
Painter Skills Program | Part 2

Substrates

How many can you find here?

Common Substrates

- Wood
- Drywall
- Metal
- Plaster
- Concrete
- Aluminum
- Masonry



Common Woods in Construction

- Pine
- Oak
- Cedar
- Redwood

Woods with tannins that need to be sealed

- Cedar
- Redwood

Look for a grayish color on wood

Always sand to fresh wood

Common Substrates

Drywall

- Interior walls
- Always prime

Plaster

- Smooth, hard finish
- High alkalinity in plaster and moisture causes spalling
- Neutralize using white vinegar
- Use alkaline-resistant primers

Common Substrates

Steel

- Expands and contracts
- Rust is a concern
- Proper rust preventive prime
- Film build is critical to prevent pinholes from rusting
  - Typical steel profile is 1–1.5 mils (microns)
  - Anticorrosive primer has a DFT of 2 mils or better

Aluminum

- Expands and contracts (almost twice the amount of steel)
  - Paint used must meet this demand
- Waterbased/latex paints are best

Common Substrates

Masonry

- Like plaster, it has a high alkalinity
- Brick, stucco, concrete and hardy plank
  - Hardy plank comes pre-primed, but you still want to apply an alkaline-resistant primer over the factory primer

Section 1

Pop Quiz

Substrates

1. Which substrate expands and shrinks the most?

A. Aluminum

B. Concrete

C. Steel

2. Should you sand bare wood to a clean, fresh surface?

A. Yes

B. No

3. How do you neutralize hot plaster?

A. Ammonia

B. Water

C. Vinegar

Types of Jobsites

- **Commercial**
  - Repaints
  - New construction

- **Residential**
  - New build
  - Renovation

Section 3

Common Paint Terms & Troubleshooting

Understanding the Root Cause

Painter Skills Program | Part 2

Objectives

After this session, you will be able to ...

- Identify four weather conditions to avoid
- Identify and characterize paint and/or application problems and be able to:
  - Explain possible causes
  - Describe how to fix them

4 Weather Conditions to Avoid

Temperature

Optimum temperature range is 50°F–90°F

Moisture

Avoid moisture and washing newly painted surfaces for at least two weeks

Humidity

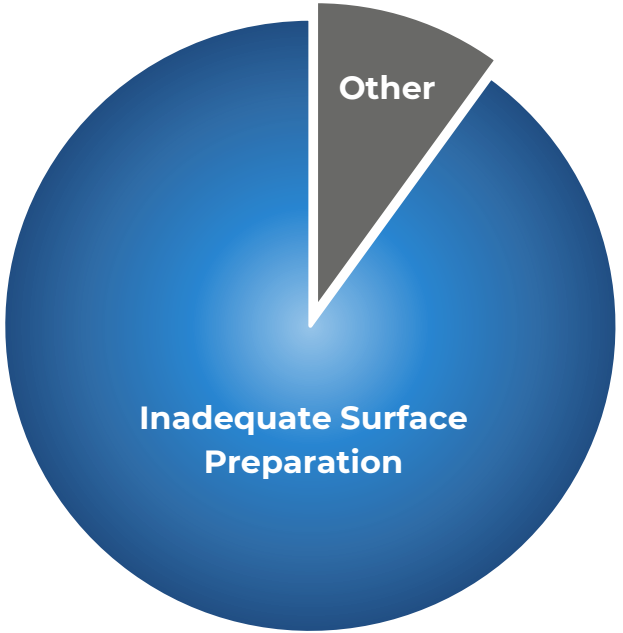
High humidity slows the drying process

Sunlight

Don’t paint in direct sunlight — this causes lap marks

Paint Failure

90% of paint failures result from inadequate surface preparation



Surface Preparation

All surfaces must be:

- Clean
- Dry
- Dull
- In sound condition

Paint Problems

- Blistering
- Blocking
- Burnishing
- Cracking or Flaking
- Foaming or Crating
- Lapping
- Mildew
- Picture Framing
- Print Resistance
- Roller Marks or “Stipple”
- Roller Spattering
- Sagging
- Sheen Uniformity
- Stain Resistance
- Surfactant Leaching
- Wrinkling

Blistering

Bubbles resulting from localized loss of adhesion and lifting of the paint film from the underlying surface.

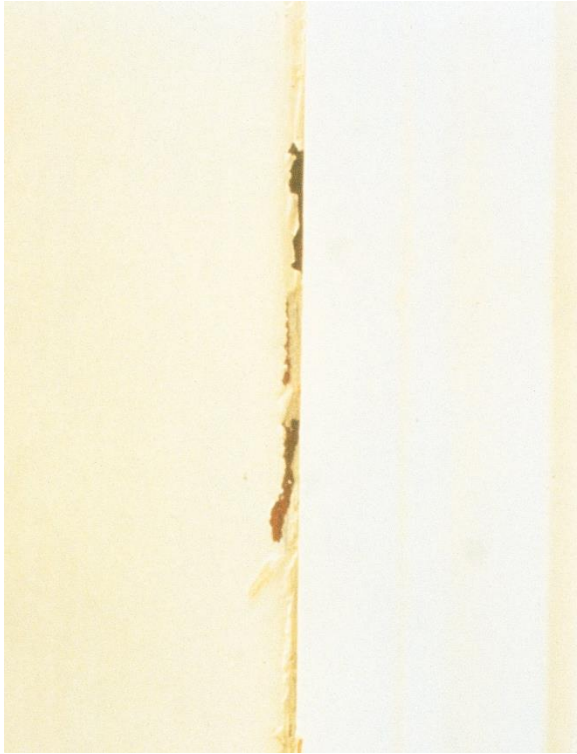
- **Possible Causes**
  - Applying oil-based paint over a damp or wet surface
  - Moisture seeping through exterior walls
  - Allowing the paint to be exposed to high humidity or dampness before it was dry

- **Solution**
  - Identify and repair the source of moisture
  - Remove blisters by scraping and then sanding
  - Prime the bare surface with an appropriate sealer
  - Reapply the topcoat

Blocking

An undesirable situation where two painted surfaces stick together.

- **Possible Causes**
  - Allowing for insufficient dry time before closing doors or windows
  - Use of low-quality semi-gloss or gloss paints
- **Solution**
  - Use top-quality semi-gloss or gloss acrylic latex paint
  - Acrylic latex paints have better early-block resistance than vinyl latex paints or alkyd paints, but alkyds develop superior block resistance over time
  - Talcum powder may relieve persistent blocking



Burnishing

An increase in gloss or sheen when the paint is subjected to rubbing, scrubbing or something brushing against it.

- **Possible Causes**
  - Use of flat paint in high-traffic areas
  - Frequent washing and spot cleaning
  - Furniture rubbing against the walls
  - Use of lower-grade paints with poor stain and scrub resistance

- **Solution**
  - Use a top-quality latex paint for heavy-wear areas
  - Use semi-gloss or gloss in high-traffic areas
  - Use a soft cloth or sponge and nonabrasive cleansers to clean

Cracking or Flaking

Dry paint film splitting through at least one coat, appearing as hairline cracks and leading to flaking.

- **Possible Causes**
  - Use of lower-quality paint
  - Overthinning or over spreading
  - Inadequate surface preparation or applying the paint to bare surface without primer
  - Aging alkyd paint

- **Solution**
  - Remove loose and flaking paint
  - Sand and feather the edges
  - Use a filler and prime if necessary

Foaming or Cratering

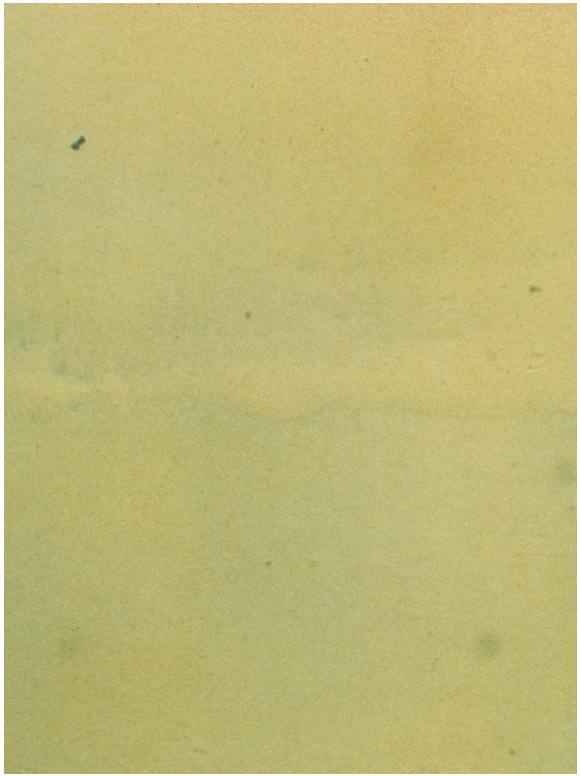
Formation of bubbles (foaming) resulting in small, round, concave depressions (cratering) when the bubbles break in the paint film during application and drying.

- **Possible Causes**
  - Shaking a partially filled can of paint
  - Using low-quality or very old latex paints
  - Rolling/brushing paint too rapidly or excessively
  - Using the wrong nap length
  - Applying a gloss or semi-gloss paint over a porous surface
- **Solution**
  - Sand problem areas before repainting
  - Avoid excessive rolling or brushing
  - Don’t use paint that’s over a year old
  - Seal or prime a porous surface before applying semi-gloss or gloss using a short nap roller

Lapping

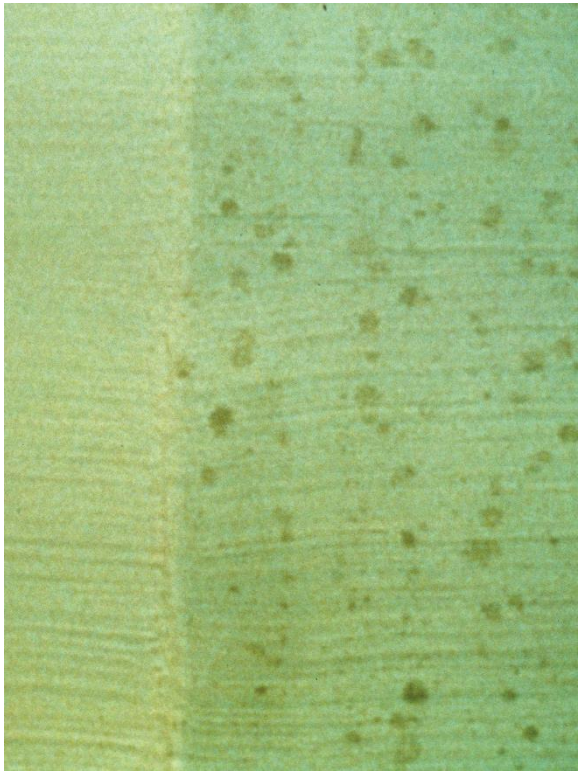
Appearance of a denser color or increased gloss where wet and dry layers overlap during paint application.

- **Possible Causes**
  - Failure to maintain a “wet edge” when painting
  - Using a low solids “economy” paint
- **Solution**
  - Maintain a wet edge
  - Use a top-quality acrylic latex paint
  - Use a primer or sealer on porous surfaces



Mildew

Black, gray or brown spots or areas on the surface of paint or caulk



- **Possible Causes**
  - Damp areas and/or areas that receive little direct sunlight
  - Using an alkyd or lower-quality latex
  - Failing to prime a bare wood surface
  - Painting over mildew
- **Solution**
  - Remove all mildew from the surface by scrubbing with a diluted household bleach solution
  - Rinse thoroughly
  - Use a top-quality latex paint

Picture Framing

Nonuniform color where the trim painting and the brushed areas are darker than the roller painted surface, resembling the frame of a picture.

- **Possible Causes**
  - Brush produces a thicker film than the roller
  - Adding colorant to a paint that cannot be tinted or using the wrong type or level of colorant
- **Solution**
  - Maintain similar spread rates with brushes and rollers
  - Don’t cut in the entire room before coating with a roller — work in smaller sections of the room to maintain a “wet edge”
  - Be sure correct colorant-base combinations are used
  - Shake paint thoroughly at time of sale

Roller Marks or Stipple

Unintentional texture patterns left in the paint by the roller.

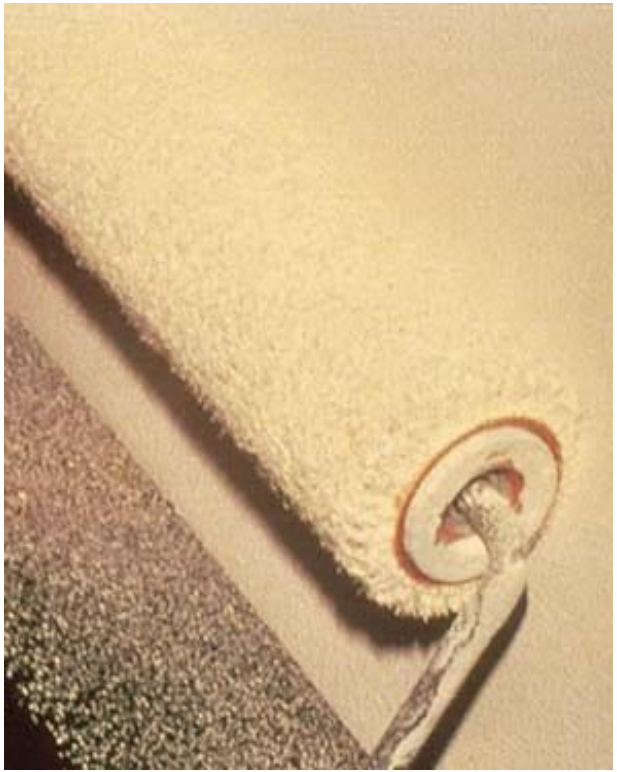
- **Possible Causes**
  - Incorrect or low-quality roller cover
  - Using lower-grade paint
  - Incorrect rolling technique

- **Solution**
  - Use proper roller nap for the paint and surface
  - Use a quality roller
  - Use high-quality paints
  - Follow the workmanship standards described for using a roller (wet down roller first, apply in “N” pattern, etc.)

Roller Spattering

Tendency of a roller cover to throw off small droplets of paint during application.

- **Possible Causes**
  - Using exterior paint on an interior surface
  - Using lower-grade latex paints
- **Solution**
  - Use higher-quality interior paints
  - Use high-quality rollers and a proper nap
  - Do not overload the roller with paint



Sagging

Downward “drooping” of paint film immediately after application.

- **Possible Causes**
  - Applying a heavy coat of paint
  - Working in humid and/or cool conditions
  - Using overthinned paint
  - Airless spraying with the gun too close to the surface
- **Solution**
  - While the paint is wet, brush out or reroll to evenly redistribute the excess
  - If the paint has dried, sand and repaint
  - Correct any unfavorable conditions:
    - Do not thin the paint
    - Avoid cool or humid conditions
    - Remove doors to paint them supported horizontally

Sheen Uniformity

Shiny or dull spots (also known as “flashing”) on a painted surface and uneven gloss.

- **Possible Causes**
  - Uneven spread rate
    - Failing to properly prime a porous surface or a surface with varying porosity
    - Poor application resulting in lapping

- **Solution**
  - Prime or seal uncoated surfaces
  - Apply paint from “wet to dry” to prevent lapping

Surfactant Leaching

Concentration of water-soluble latex paint ingredients, creating a blotchy brownish stain.

- **Possible Causes**
  - Painting in cool and/or humid conditions
- **Solution**
  - Wash the surface with a mild water-soluble detergent and rinse to remove discoloration

Wrinkle

Rough crinkles in the paint surface.

- **Possible Causes**
  - Applying paint too thickly
  - Painting during extremely hot weather
  - Exposing uncured paint to high humidity
  - Painting over a contaminated surface
- **Solution**
  - Scrape or sand the surface to remove the wrinkled coating

Activity: Paint Problems

Questions?

Section 4

The Value of Sherwin-Williams

Trademark Customer Experience

SHERWIN WILLIAMS PRO+

Painter Skills Program | Part 2

Discussion Items

- Educated store staff
- Supportive sales reps
- Professional tools
- Complete product line
- Locations
- Pro Programs
- And more …

Sherwin-Williams Sales Representative

- Product Recommendations
- Ability to visit contractors on their projects
- Assist with Marketing Materials
- Support Contractors to Close the Sale
- Support from the credit department

Sherwin-Williams Learning Pathway

Training Modules for Painters & Business Owners

- 11 Training Modules for Painters
- Product Knowledge
- Applicators & Tools
- Color Basics
- Pro+ Digital Tools
- Painters Career Path- NEW!
- PRO+ Webinars—Tips for Growing Your Business
    - Social Media
    - Rating and Review
    - Marketing 101
    - Estimating
    - Recruiting and Culture
    - Careers in Painting- Job board

Scan QR to Register for Sherwin-Williams Learning Pathway.

Questions?