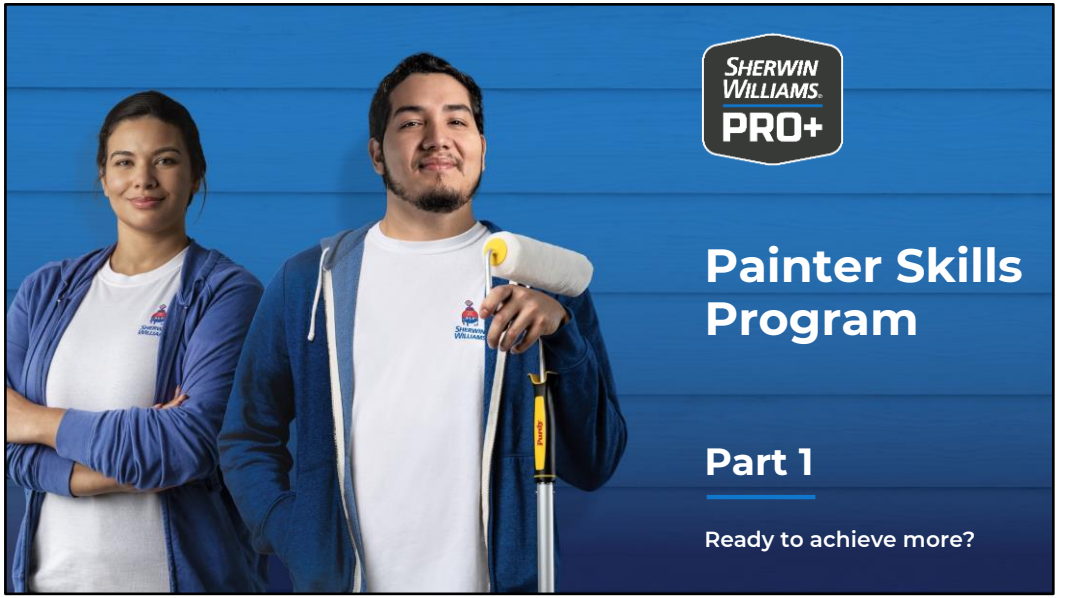


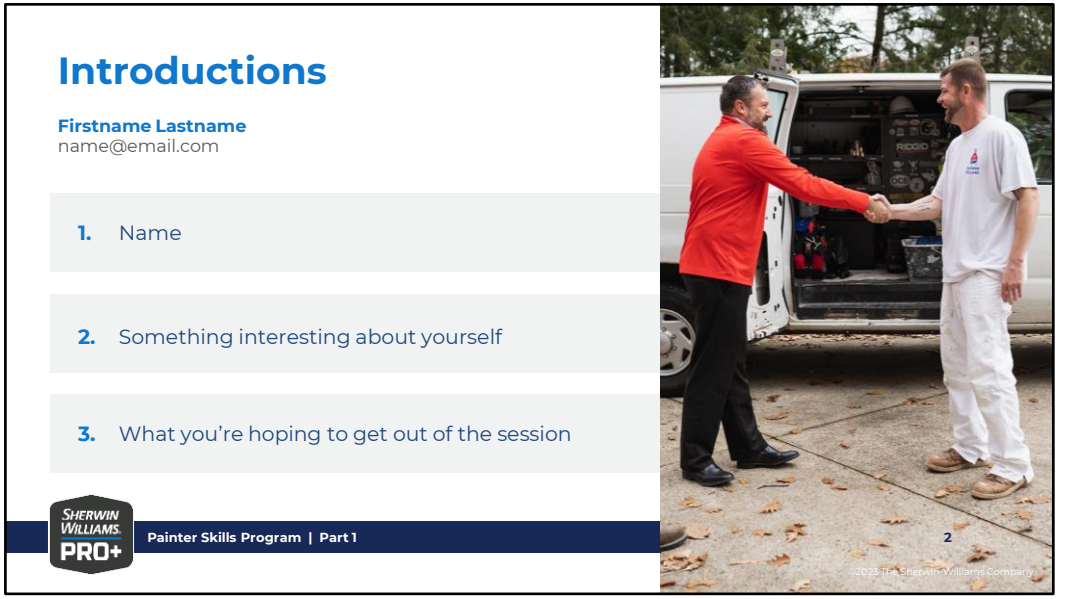
Instructor Notes:

Start time

What to wear

What to bring

Treat it as an interview



Instructor Notes:

We're going to start out with some introductions. Let's go around the room: Stand up, give your name, explain what you're hoping to get out of the session this week and next, and then tell us something interesting about yourself.

Go around the room and have each participant introduce themselves.

Instructor Notes:

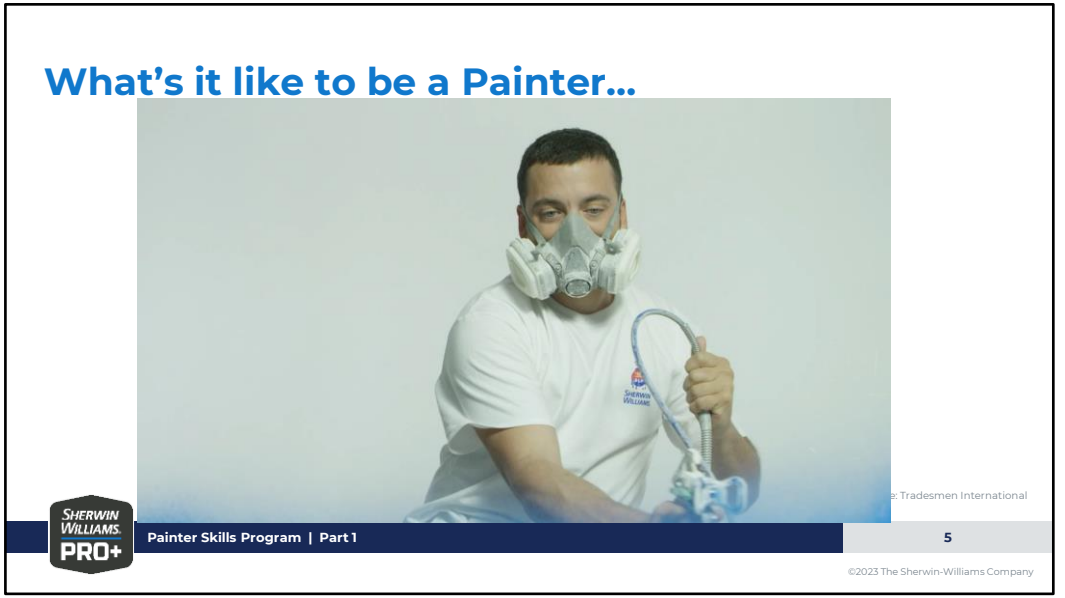
Now that I know what you're looking to get out of the week, let's talk about what I expect of you this week.

Review slide.

Instructor Notes:

A recently released survey by the Associated General Contractors of America revealed that nearly 80% of construction businesses are having a hard time finding qualified skilled labor. Beginning first in small isolated pockets when home construction bottomed out in 2011, the labor shortage is now in full bloom, with repercussions being felt throughout the nation.

According to the Bureau of Labor Statistics and the National Association of Home Builders, there are currently 143,000 vacant construction positions nationwide. In fact, a recent survey by NAHB revealed that 69% of its members were experiencing delays in completing projects on time due to a shortage of qualified workers, while other jobs were lost altogether.



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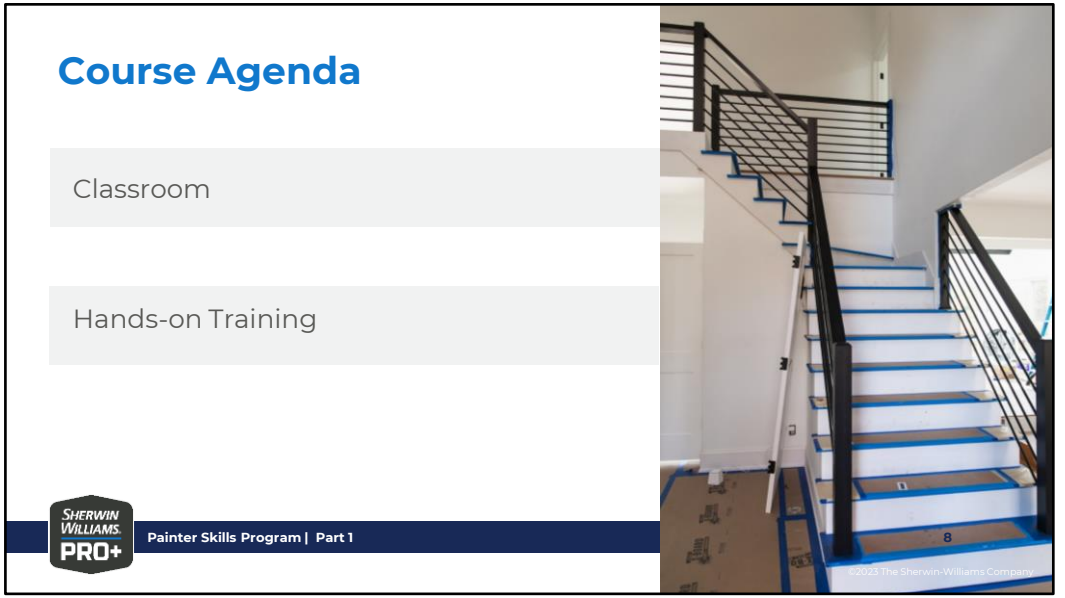
Instructor Notes:

So what?

At Sherwin-Williams, we are about our customers, and we recognize that when they can't complete projects or find the workers to paint on the jobsite, our business also suffers. Every day, customers walk into Sherwin-Williams stores across the nation and ask our staff if we know of anyone (painters) looking for work.

So here we are today, and our goal this week is to provide you with the skills necessary to leave this session having a job with a successful painting contractor in your area. Beyond that, your career opportunities in the construction/painting trades are endless.

When you win, our customers win and Sherwin-Williams wins — let's win together!



Instructor Notes:

The overall goal of this training is to educate and train new painters by providing a fundamental understanding of the basics of paint, application and applicators, and basic troubleshooting.

The training contains the following sections:

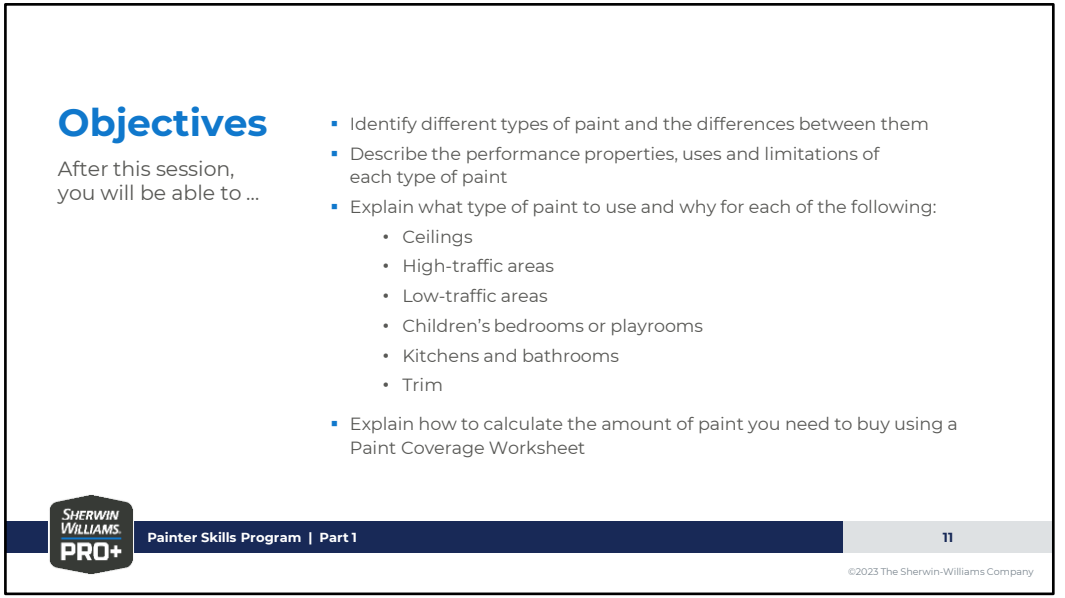
- Paint Basics
- The Painting Process
- Patching and Applicators
- Jobsite Safety

Instructor Notes:

Today, we're going to review … *(read slide)*

<u>Instructor Notes</u>:

Introduce yourself and provide a brief background of your experience.



Instructor Notes:

Participant guide Part 1 Page (5)

We're going to start at the beginning — with paint basics. This section is designed to help you understand paint, what the different types of paint are and what types of paint you should use for different rooms or areas. Lastly, we'll finish with a worksheet to help you figure out how much paint you'll need to cover a given area.

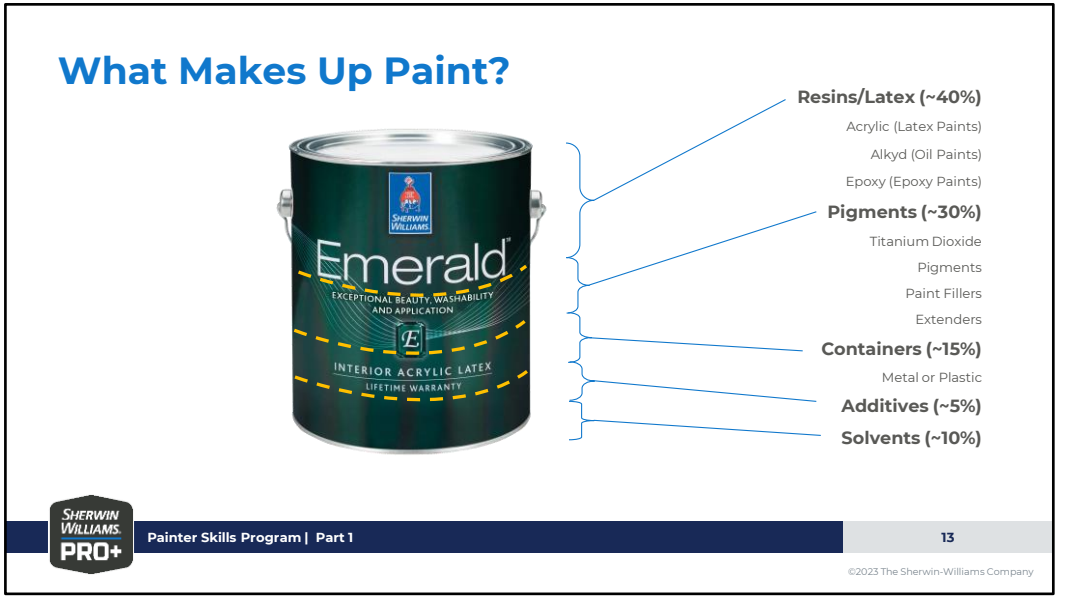
Instructor Notes:

Participant guide Part 1 Page (6)

Let's take a brief look at what makes up paint. There are four basic ingredients found in all paints. They are:

- Pigments, which provide the color, opacity and durability
- Binders, which help the paint film stick to the surface
- Solvents, which are the liquid parts of paint that makes it spreadable, and
- Additives, which are other things that can be added to paint to give enhanced performance, such as anti-mildew additives

Each ingredient has its own job to do, yet when they come together, they form a dried paint film that provides color and protection. The quality of the ingredients makes a big difference in the quality of the finished paint job. With paint, quality means longevity.



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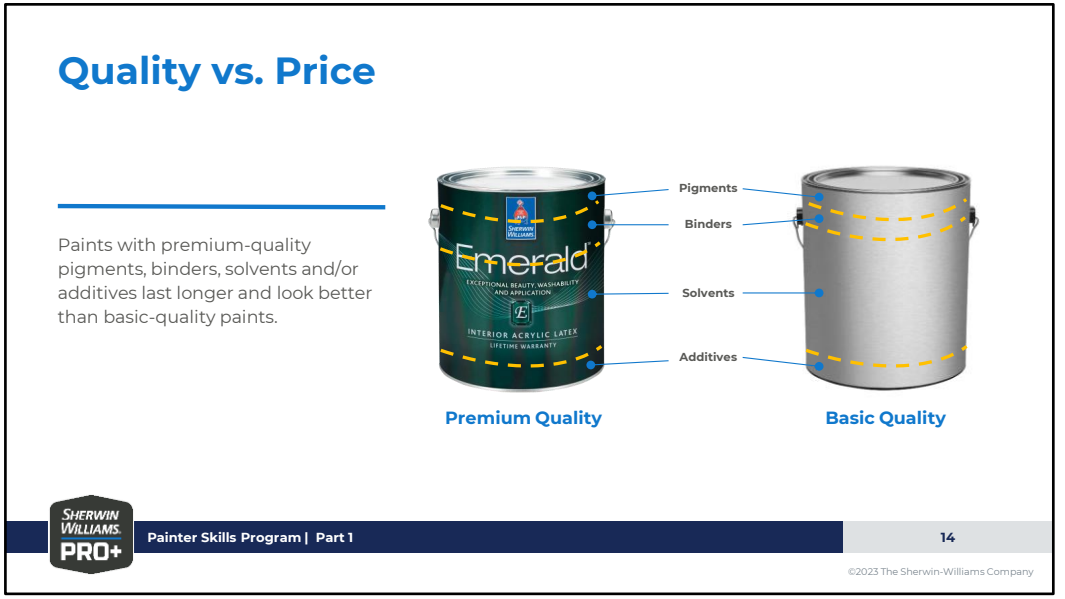


Instructor Notes:

Participant guide pg 6

Also, changing the ingredients or relative quantities of these ingredients gives you different grades of paint. Paints that contain premium pigments or special additives are usually priced higher than other paints.

For example, quality pigments like titanium dioxide provide higher-quality and better-finished results than a paint that has a lot of silica, which is mainly a filler.

Paints that contain premium-quality pigments, binders, solvents and/or additives last longer and look better than basic-quality paints. They also cost more. Top-quality products contain the highest concentration of quality ingredients, which provide the greatest amount of protection and hiding. As with anything, the better the ingredients, the better the results.

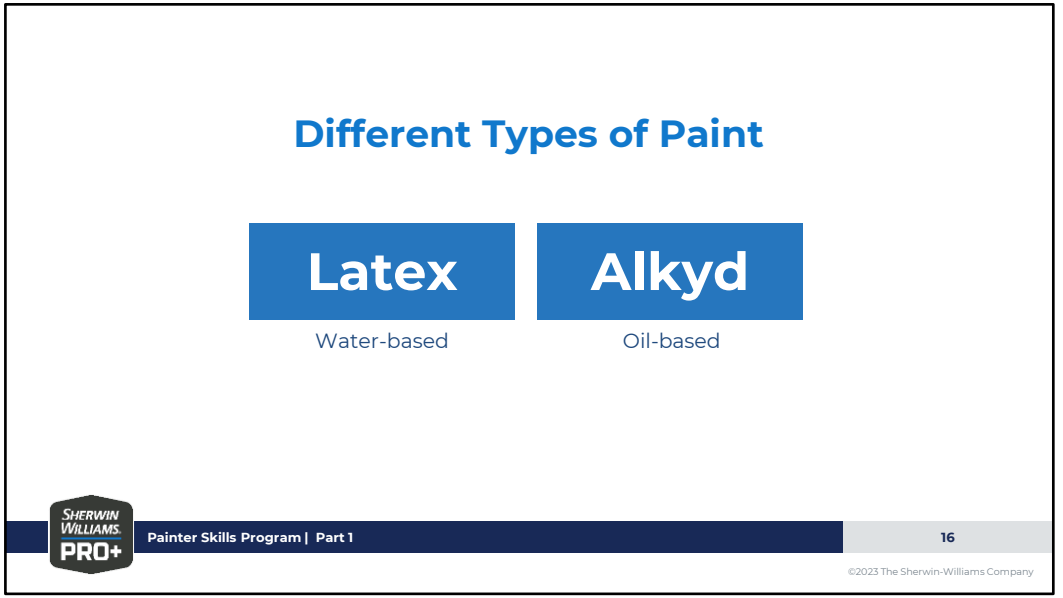
Let's look at an example. Here you see the ingredients of a top-quality and a basic-quality flat latex wall paint. Notice that the lower-cost paint contains more solvent (in this case, water) and fewer solids than the top-quality paint. In general, paint with a high solvent content is lesser quality than paint with a large volume of binder and pigment solids.

The top-quality paint will be more washable and more durable. Furthermore, a lower-priced paint will probably need repainting sooner, making the final cost as much as or more than that of the top-quality paint.

Instructor Notes:

Click to start Video. NOTE: If internet connection is not available, video can be played directly from jump drive folder.

YouTube Link: https://youtu.be/R0RhrqJuXQo?si=fPSzMSxqt_o8E4Rk



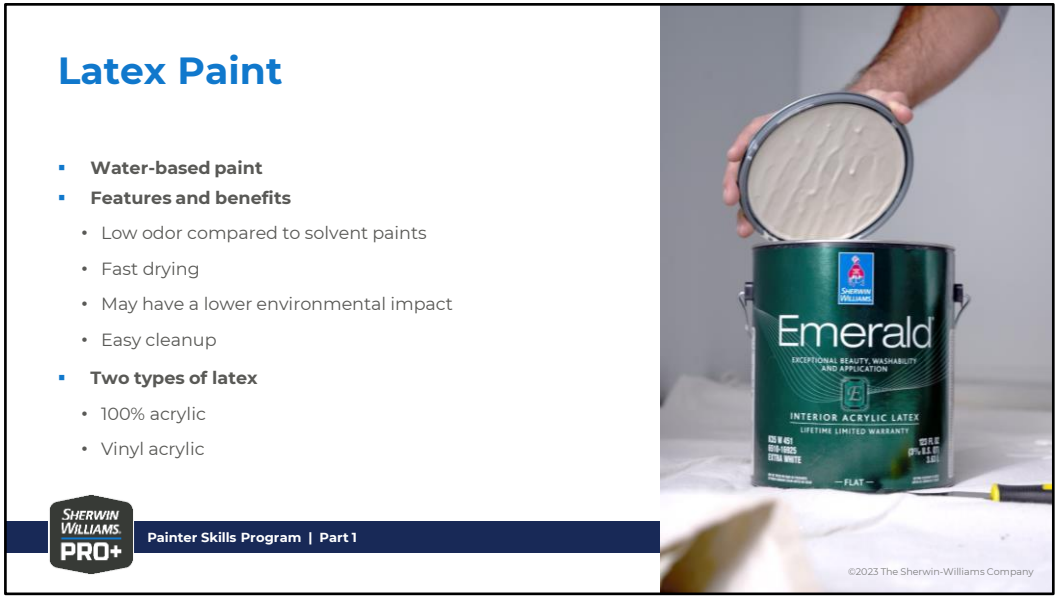
Instructor Notes:

Participant guide pg 6

It's also important to keep in mind that there are different types of paint. For our purposes today, we're going to look at latex and alkyd paint.

If you've heard the terms "water-based" or "oil-based" paints, then you probably already know some things about latex and alkyd paints. "Latex" and "alkyd" refer to the solvent that is used to make the paint — remember, the solvent is the liquid part of paint that makes it spreadable. "Latex" is what most people call water-based, and "alkyd" is what most people call oil-based.

Let's look closer at each type of paint and its characteristics.



Instructor Notes:

Participant guide pg 6

Latex is a water-based paint. Since water is odorless, the paint smell from a fresh coat of latex paint is minimal compared to other types of coatings. Also, since water evaporates relatively fast, latex paint dries more quickly than other types of paint and is usually dry enough for a second coat that same day.

Some of the features and benefits of latex paint include:

- Low odor
- Fast drying
- Low environmental impact
- Easy cleanup

Also note that there are two types of latex paint: 100% acrylic and vinyl acrylic:

- **100% acrylic** provides superior flexibility and color and gloss retention. It is typically used in exterior products.
- **Vinyl acrylic** provides a harder, more durable surface and is typically used in interior products.

Instructor Notes:

Participant guide pg 7

Alkyd is what most people mean when they say “oil-based” paint.

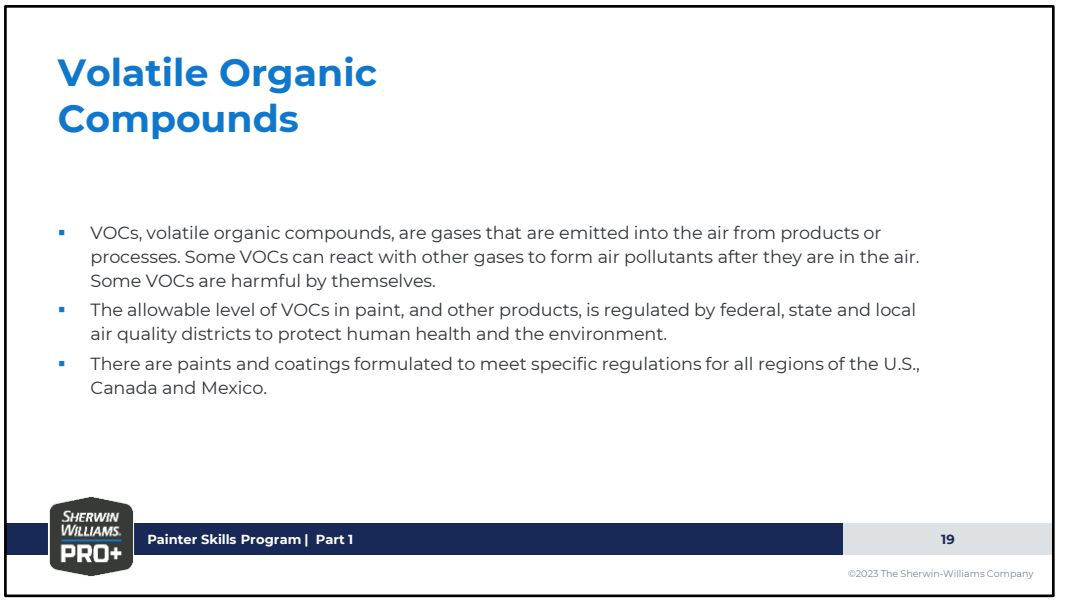
Alkyd paints typically dry slower than latex paints. The slower drying time allows the paint more time to level and flow, achieving a smoother finish. Alkyd paints can be easily cleaned or wiped.

Some features and benefits of alkyd paint are:

- Smooth finish
- Good flow and leveling
- Harder finish
- Allows for washability

There are some drawbacks to using an alkyd, such as:

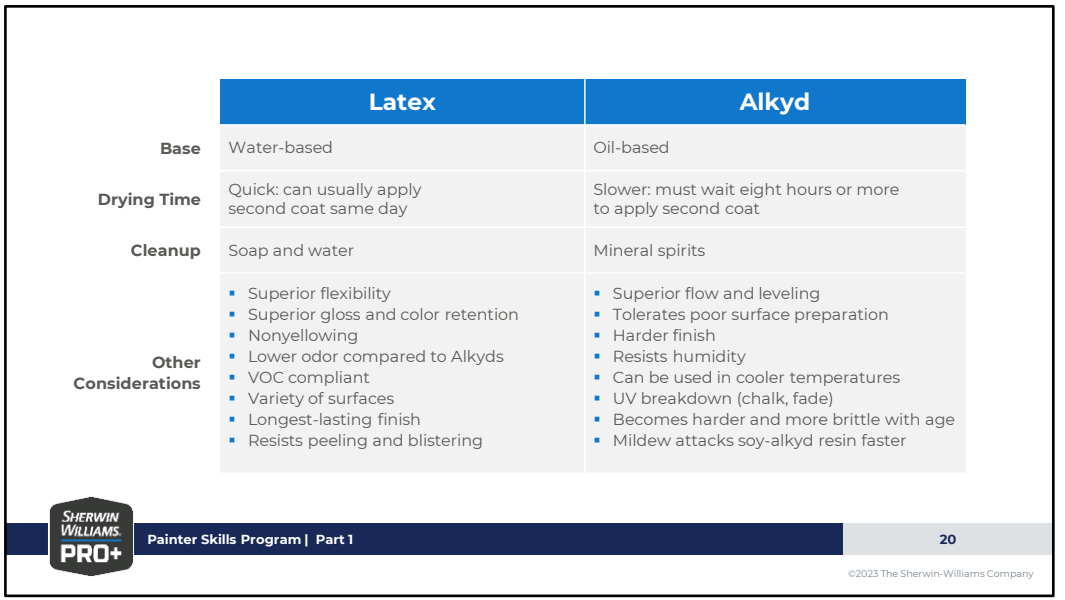
- Requires mineral spirits or other solvents to clean up
- Tends to chalk and fade with exterior exposure



Instructor Notes:

Another thing to consider about alkyd paint are VOCs. VOC stands for “volatile organic compound.” VOCs are environmentally regulated compounds that occur in many different industrial settings and consumer products, including paint. They are regulated by the EPA and other organizations. VOCs can be important because you’ll come across some jobs that regulate the quantity of VOCs that are acceptable.

You should be aware that there are interior products available that are low-odor, latex formulations without silica and meet the requirements of zero VOCs. These products have extremely low odor, which make them ideal to minimize disruptions in occupied areas.



Instructor Notes:

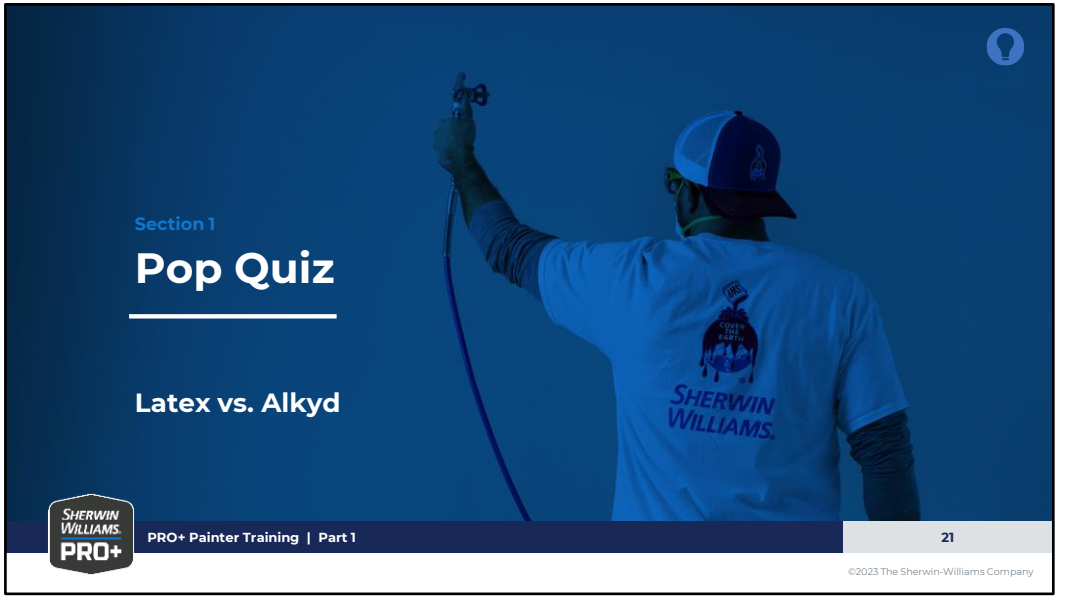
Participant guide pg 8

Take a look at this chart, which highlights some of the differences between latex and alkyd paints. It does a great job of outlining what we just went through:

- **Base:** As we've already said, latex is water-based, while alkyd is oil-based.
- **Drying time:** Latex dries faster than alkyd. Latex paint can usually take a second coat the same day, while alkyd paint takes four hours or more to dry.
- **Cleanup:** Latex cleans up with just soap and water, while alkyd requires mineral spirits.

Some other considerations include:

- Both alkyd and latex can be used on a variety of surfaces.
- Latex offers superior flexibility, superior gloss and color retention, and is nonyellowing.
- Latex is low odor and generally has lower VOC content.
- Alkyds offer superior flow and leveling, tolerate poor surface preparation, and achieve a harder finish.



Instructor Notes:

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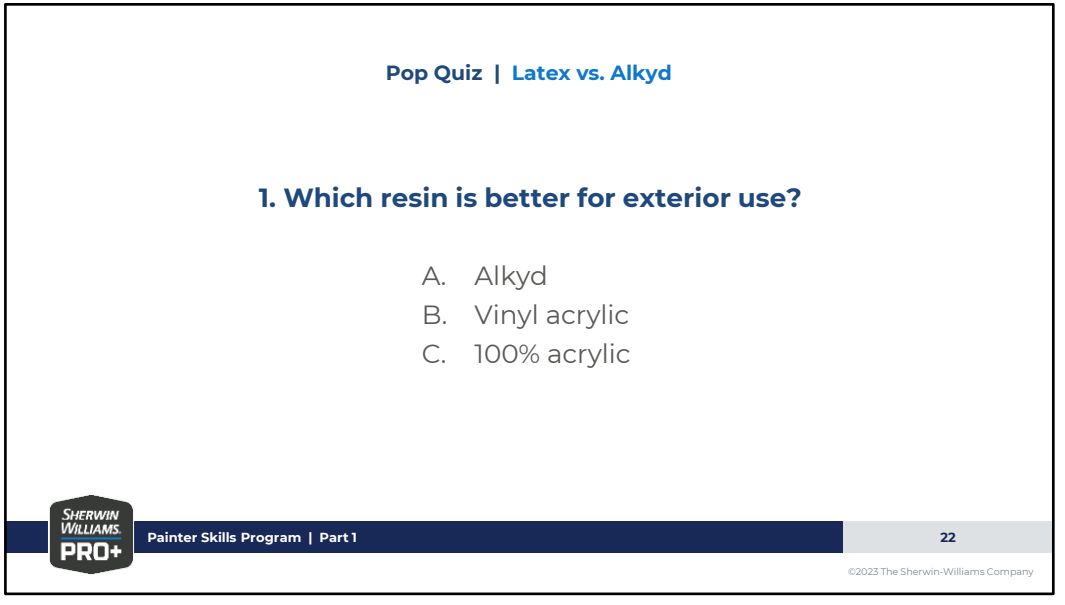

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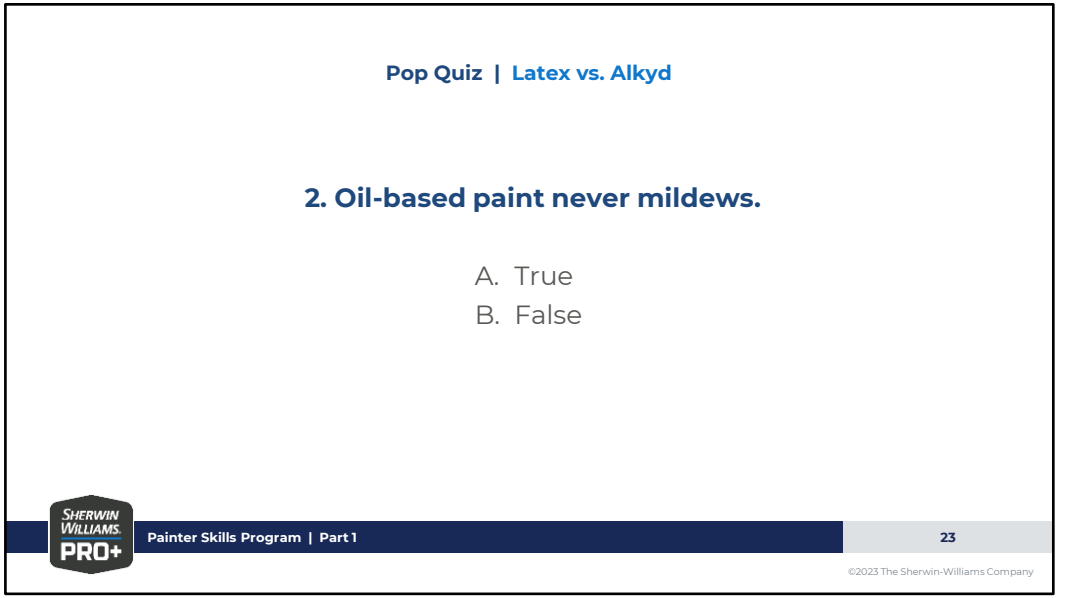

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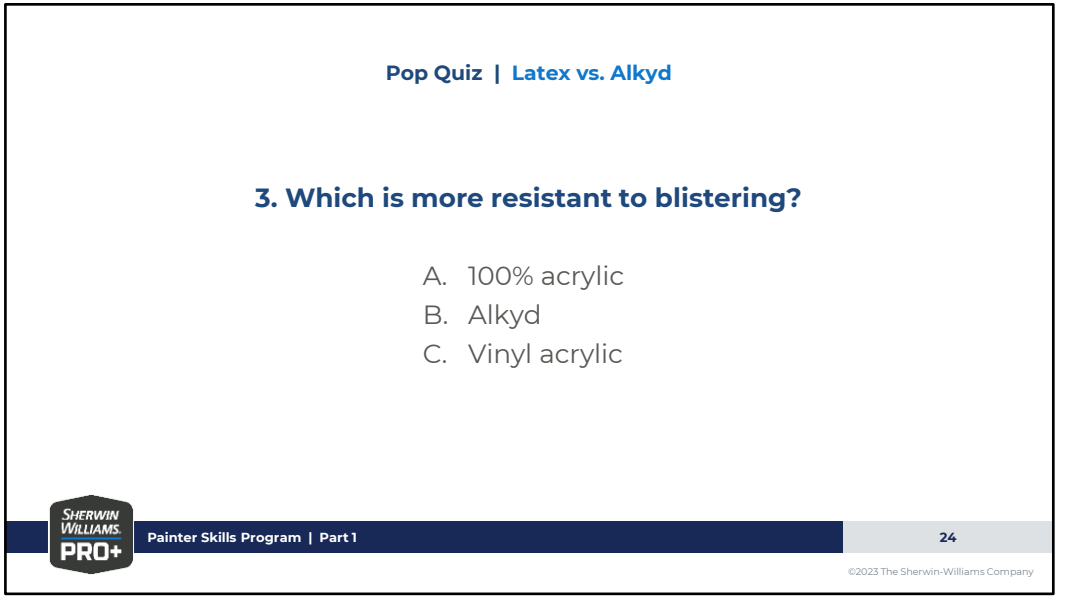

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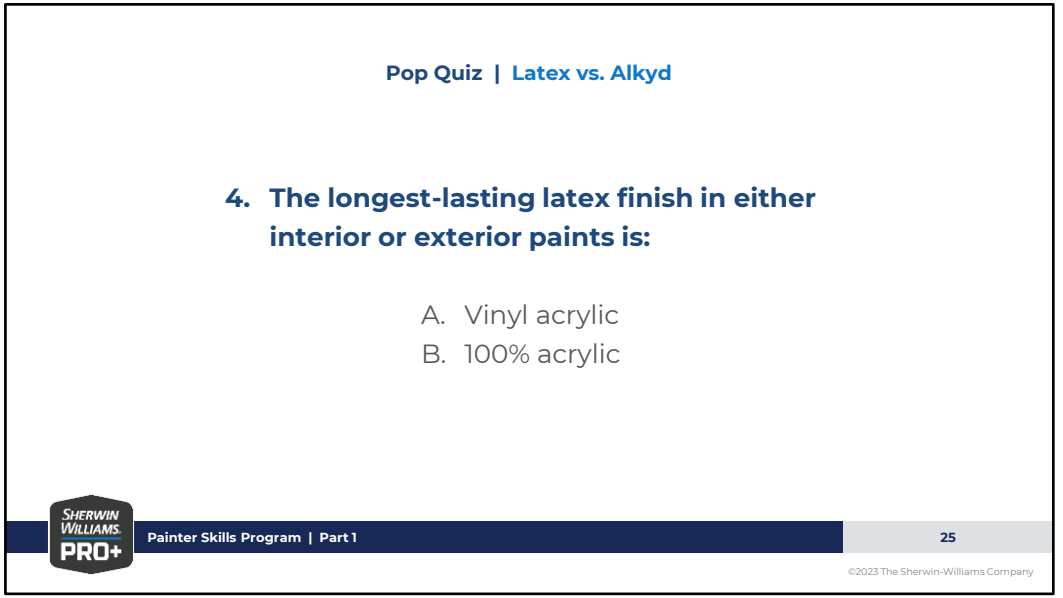

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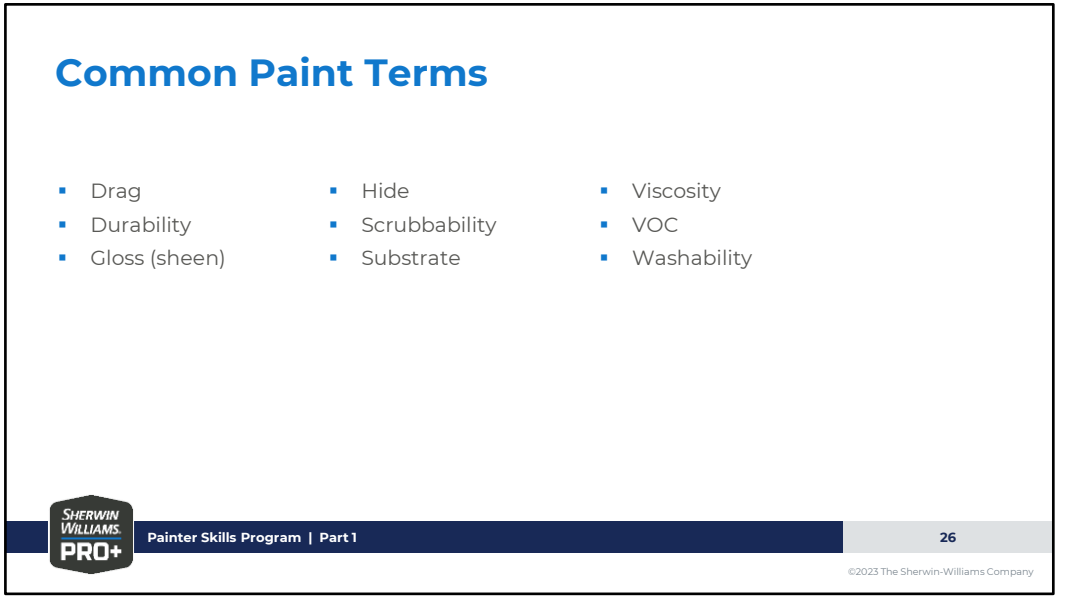
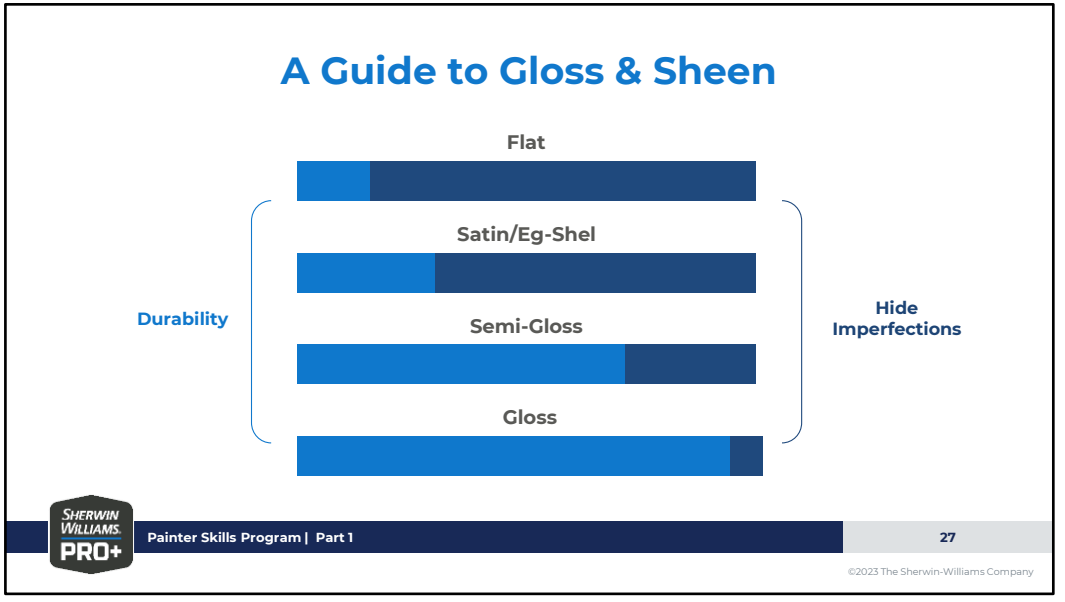


Instructor Notes:

Participant guide pg 9

Next, we want to briefly touch on some of the paint terms that you will sometimes hear people in the industry use. Try to become familiar with these terms to be able to better communicate with your peers and vendors in the industry.

- **Drag:** the resistance of a coating when applied with a brush
- **Durability:** the ability of coatings to hold up against weather, air pollution, sunlight, detergents, etc. and continue to look attractive
- **Gloss (sheen):** relates to the difference between paint finishes, such as gloss, semi-gloss, eg-shel, satin and flat
- **Hide:** the ability of the coating to hide the surface or the previous coating
- **Scrubbability:** the ability of a coating to maintain its integrity after scrubbing with an abrasive soap; the higher the number of scrubs and the less paint film that comes off, the more scrubbable the paint is
- **Substrate:** the surface being coated
- **Viscosity:** the thickness of paint in the can
- **VOC:** volatile organic compound, an environmentally regulated substance found in paint, primarily composed of solvent
- **Washability:** ease with which washing will remove dirt from the paint's surface without causing damage



Instructor Notes:

Participant guide pg 10

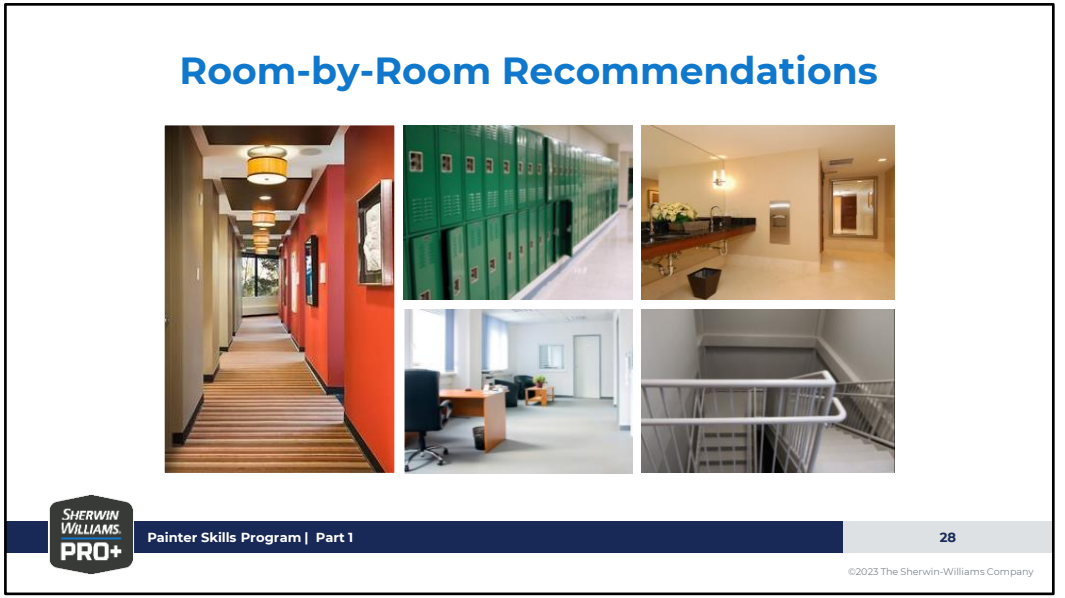
Gloss and sheen should always play a factor when making room-by-room recommendations.

There are many different types of paint and finishes to choose from. Sheen is an important part of a quality coating. When deciding on which gloss and sheen level — that is, deciding between flat, eg-shel, satin, semi-gloss or gloss — you should consider durability and hiding qualities.

If you look at this chart, in terms of durability, flat is generally the least durable, and as you progress along the continuum, durability increases, which means gloss is the most durable.

Just the opposite is true when it comes to hiding imperfections. A flat hides the most imperfections, and as you move along the continuum, the ability to hide imperfections decreases. Why? Because gloss surfaces have mirrorlike qualities, reflecting the greatest amount of light. Therefore, surface imperfections are more noticeable.

One point of interest is that as new paint formulations are introduced, special paint products are now available that are both flat and scrubbable.



Instructor Notes:

Let's look at a few examples of why sheen matters and why you use different sheens in different areas.

If this were the room you would be painting, what sheen should you recommend for the …

1. Ceiling
    - Designated sheen: flat latex
    - Reasons:
        - Minimal splatter
        - Won't yellow with age
        - Flat finish to mask irregularities or lap marks
        - Economical

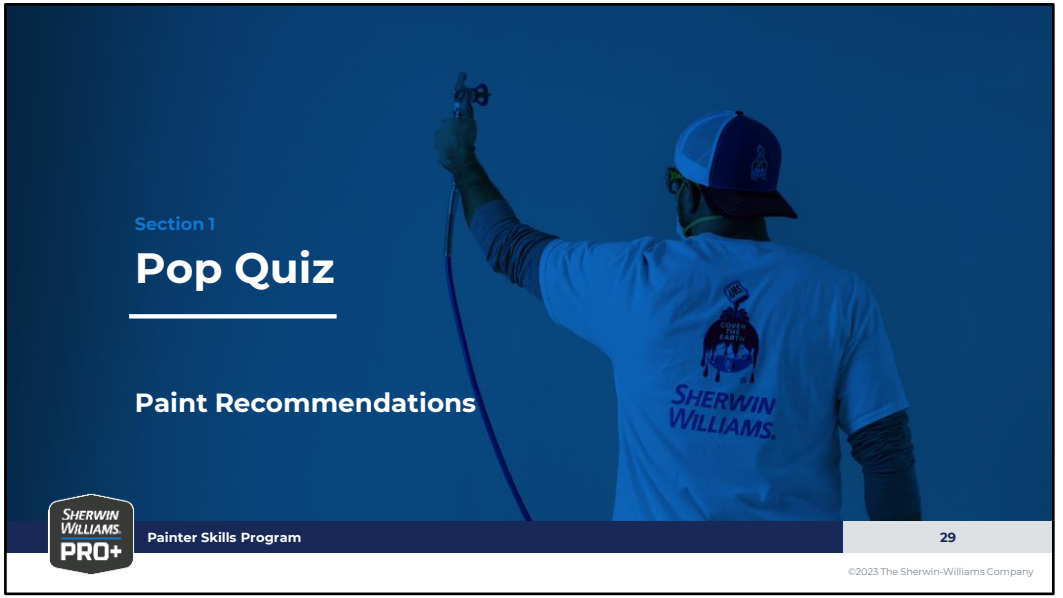
2. Trim, doorframes and doors
    - Designated sheen: gloss or semi-gloss latex
    - Reasons:
        - High-use area
        - Requires durable, washable finish
        - More lustrous appearance

Our next example is high-traffic areas such as hallways. High-traffic areas are one example where not just any coating will survive. Constant scrubbing and harsh chemicals require a hearty product designed to withstand stains caused by crayons, beverage spills and dirt. What sheen do you think we would need here?

Designated sheen: satin or semi-gloss latex

Reasons:
- Washability
- Stain resistance

Traditionally, semi-gloss was recommended for high-traffic areas such as hallways.



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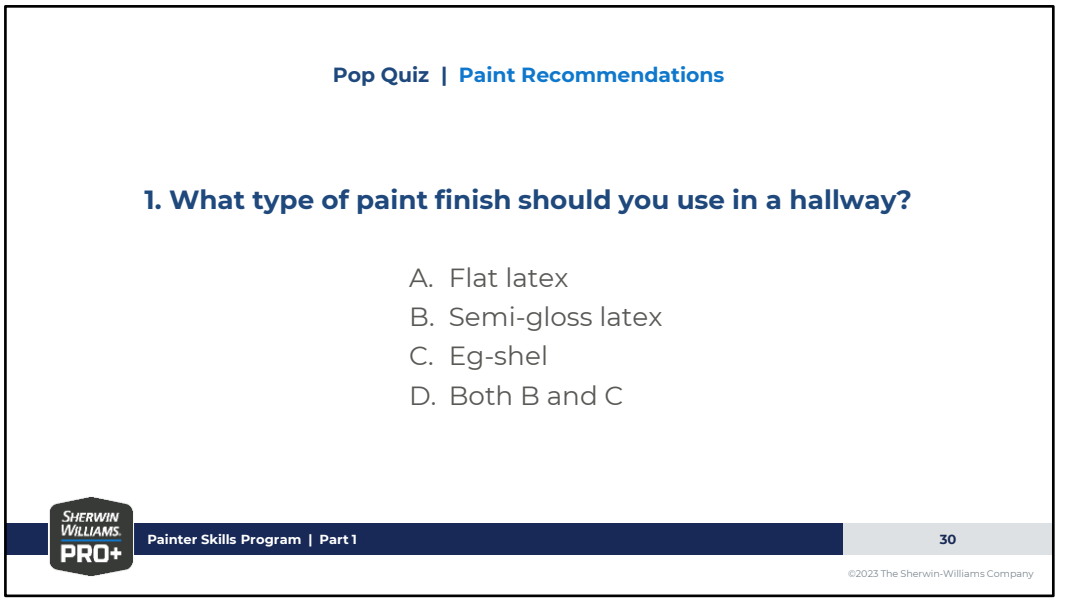

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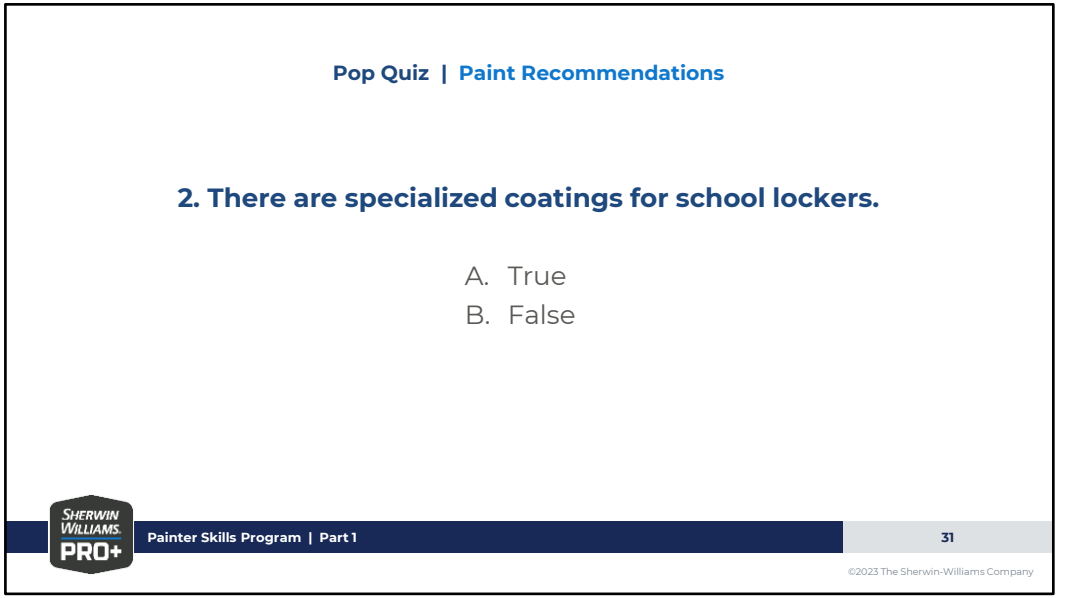

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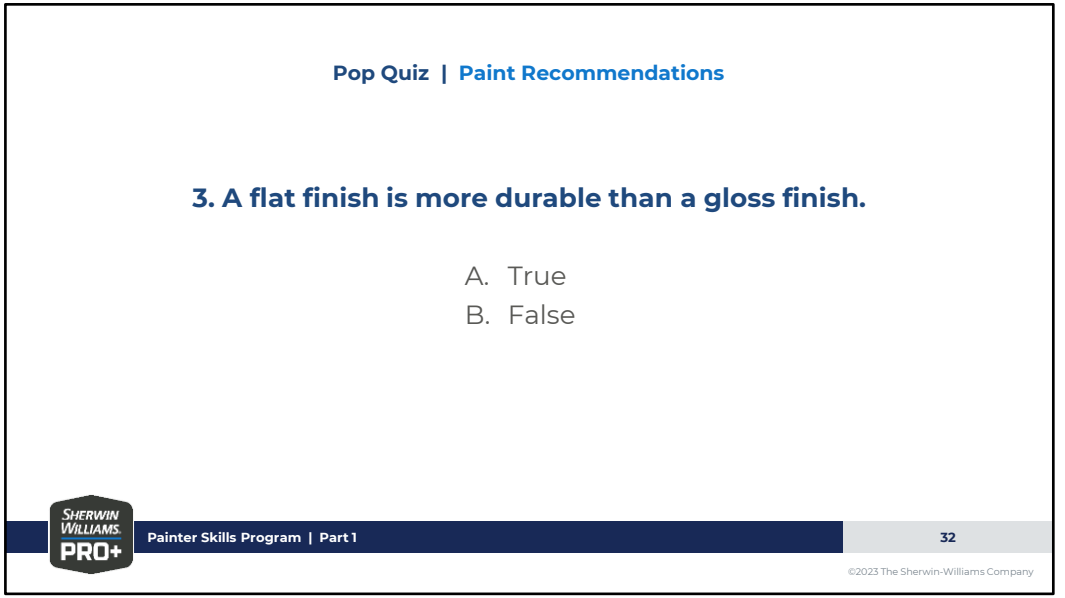

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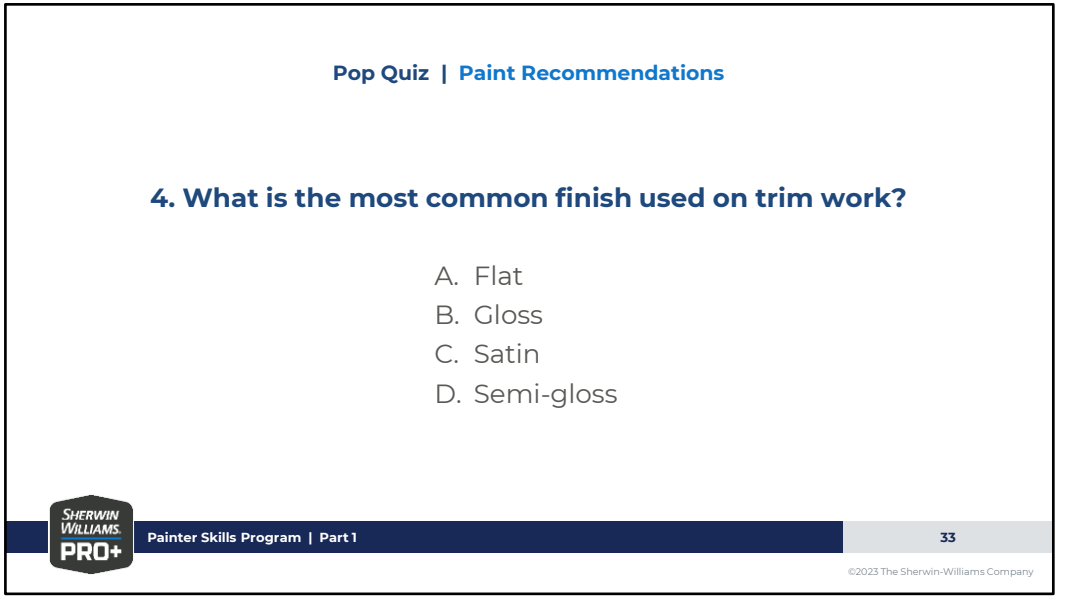

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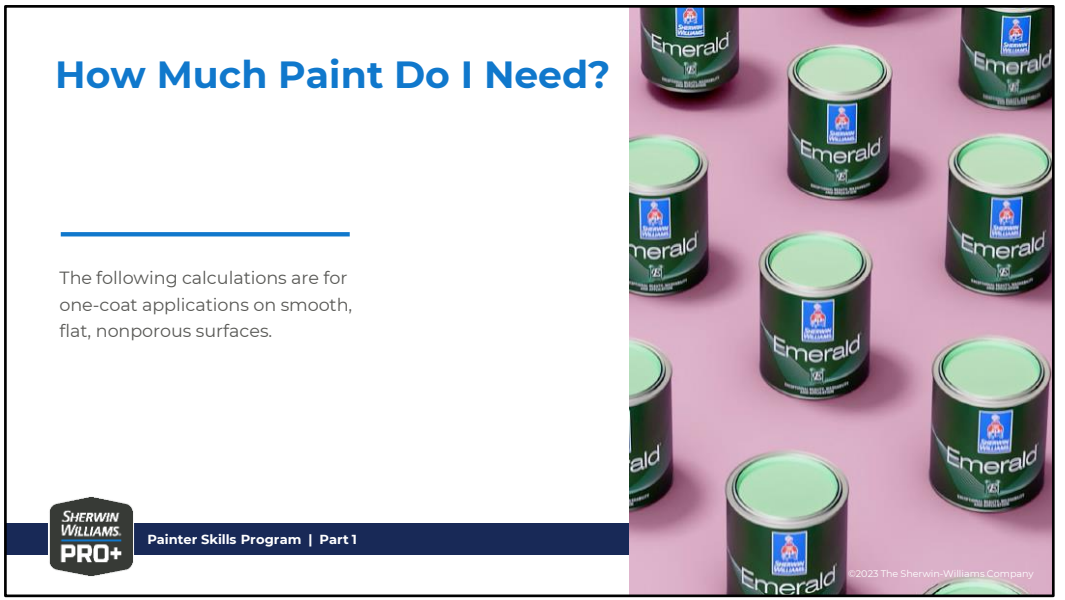


<u>Instructor Notes</u>:

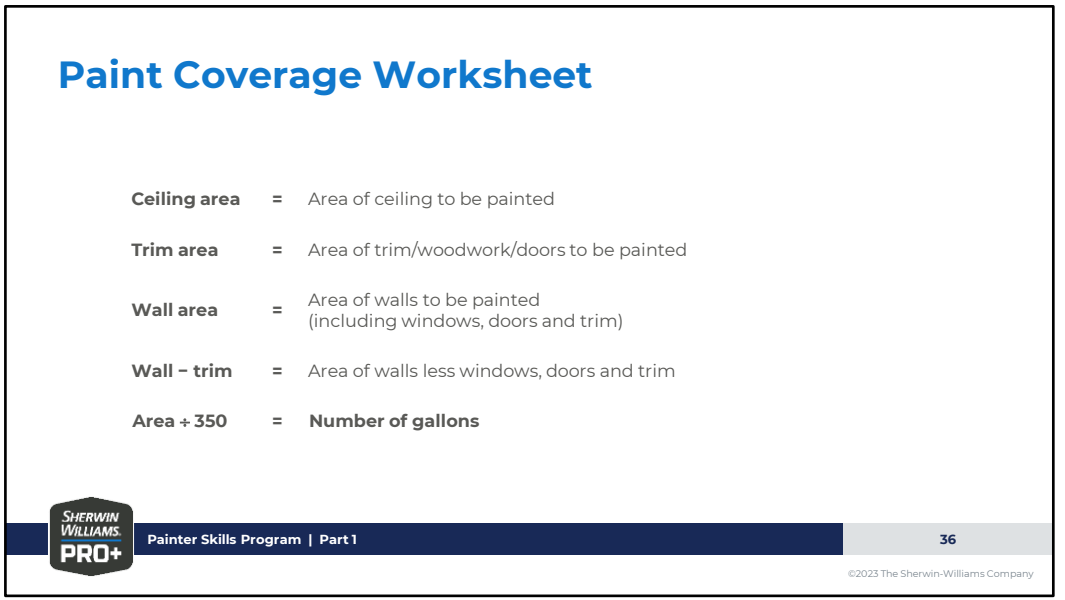
In the last section, you learned how to select the right paint for the job. Now we'll discuss how to determine the right **amount** of paint for the job.

Remember, the following calculations solve for one-coat applications on smooth, flat, nonporous surfaces. You will need to buy more paint if you wish to do two or more coats or if the surface is textured.

Instructor Notes:

For interior paint jobs, you must be able to measure or give a fair estimate of a room's:

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



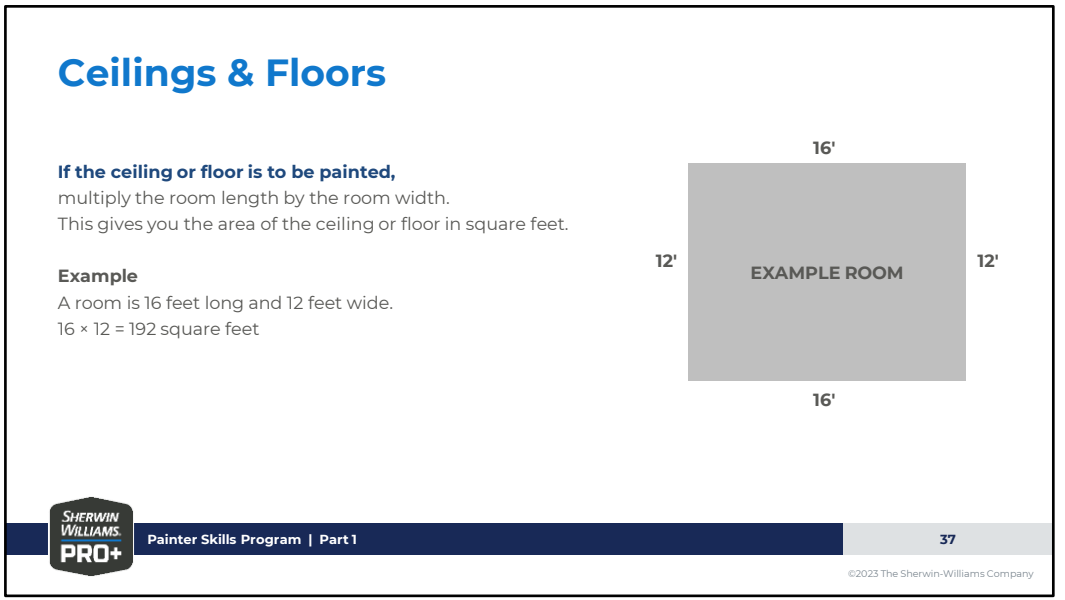
Instructor Notes:

Participant guide pg 11

Next, you will see the Paint Coverage Worksheet. Use this worksheet to calculate quantities needed for each job. Let's look at the different sections of the Paint Coverage Worksheet.

Interior Areas

- Ceiling area
- Trim area
- Wall area
- Wall minus trim
- Area divided by 350 = number of gallons

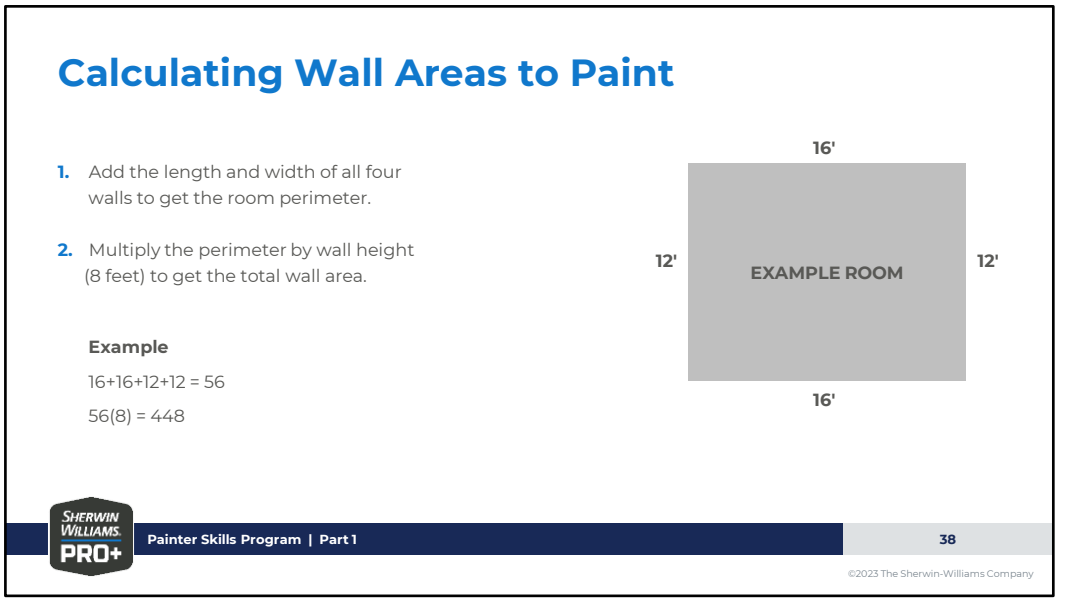


Instructor Notes:

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.

For example, the room length in the example is 16 feet, and the width is 12 feet.

Room length × room width = 16 × 12 = 192 square feet for ceiling or floor.



Instructor Notes:

To determine the area of the walls to be covered, determine the area and then subtract the area for the trim, doors and windows.

Length + length + width + width (16 + 16 + 12 + 12 = 56' perimeter)

- For example, 56 × 8 (height of ceiling in feet) = 448 square feet

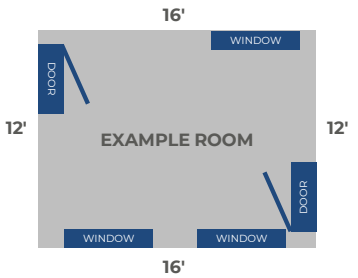
Subtract Trim & Door Areas

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

Example

2(21) = 42

3(15) = 45



Instructor Notes:

To calculate door areas, multiply the number of doors in the room by 21 square feet (area of a standard door)

- For example, 2 doors × 21 square feet = 42 square feet to subtract for doors

To calculate window areas, multiply the number of windows by 15 square feet (area of a standard window)

- For example, 3 windows × 15 square feet = 45 square feet to subtract

Calculating Wall Areas to Paint

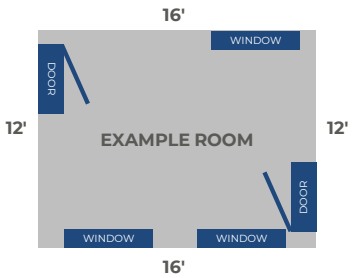
Door area + window area = total trim to subtract

Subtract trim area from the wall area.

Example

42+45 = 87

448-87 = 361



Instructor Notes:

Door area + window area = total trim to subtract

- For example, 42 (door area) + 45 (window area) = 87 square feet to subtract for trim areas

Subtract trim areas from the wall area

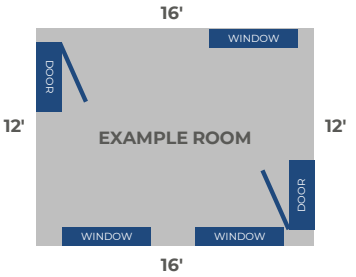
- For example, wall area − trim area = 448 wall area − 87 trim area = 361 square feet of walls to paint

Calculate Number of Gallons

Divide all areas by 350.

Example

361/350 = 1.03 gallons



Painter Skills Program | Part 1

41

Instructor Notes:

(average gallon of paint will cover 350–400 square feet)

For example:

Wall paint gallons = wall area (less trim area) ÷ 350 =

- 361 ÷ 350 = 1.03 gallons

Trim paint gallons = trim areas ÷ 350 =

- 87 ÷ 350 = 0.25 gallons (¼ gallon, or a quart)

Ceiling paint gallons = ceiling area ÷ 350 =

- 192 ÷ 400 = 0.55 gallons (about a ½ gallon)

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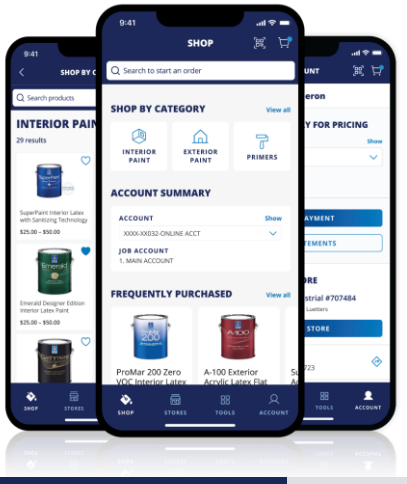

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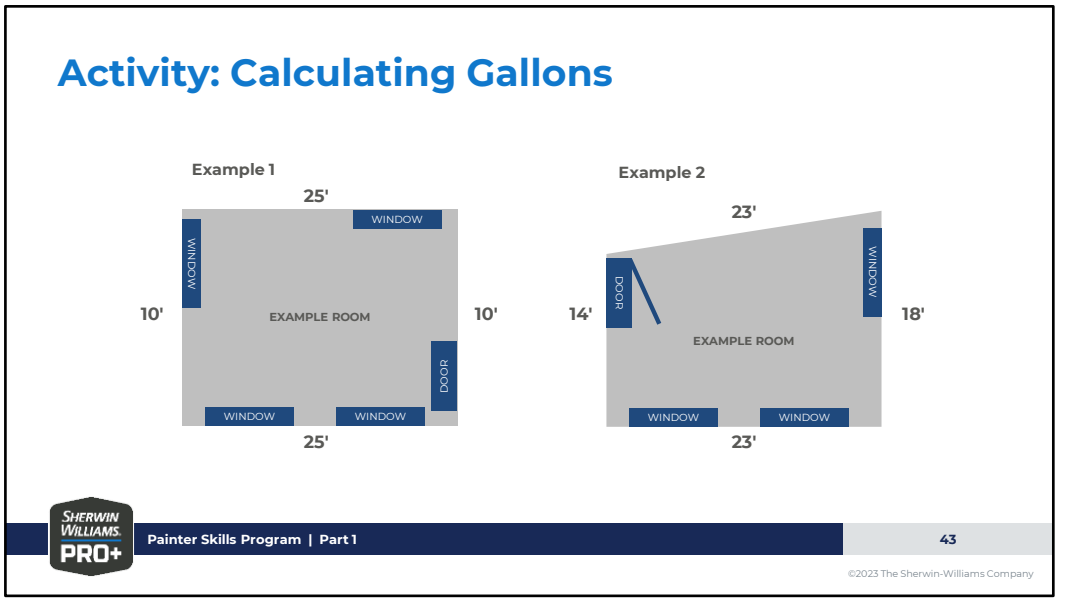
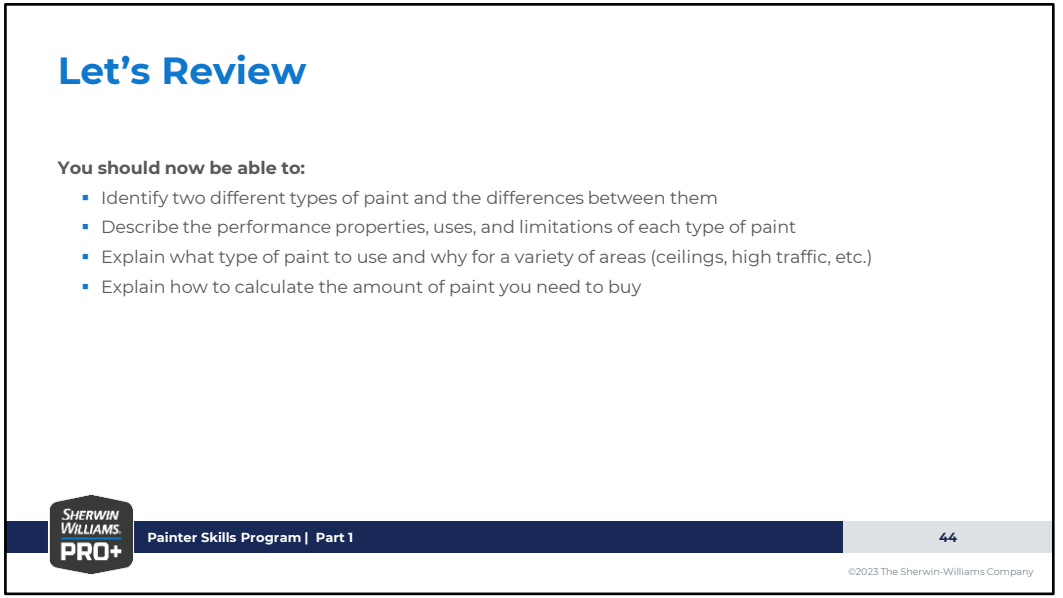
Instructor Notes:



Instructor Notes:

In your groups, calculate the amount of wall and ceiling paint needed for these rooms.

In most instances, you won't have to calculate this information because it will be part of the job specification; however, this is good to know in the event you find yourself in need of more paint.



Instructor Notes:

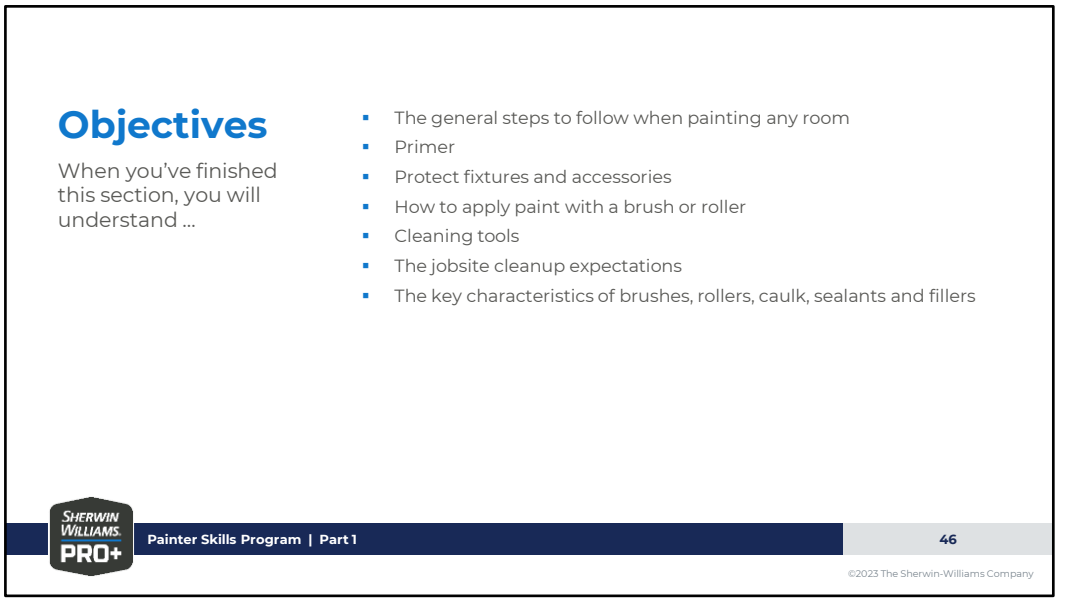
You should now be able to:

- Name two different types of paint and the differences between them
- Explain what type of paint to use and why for each of the following:
  - Ceilings
  - High-traffic areas
  - Low-traffic areas
  - Hallways
  - Bathrooms
  - Trim
- Explain how to calculate the amount of paint you need to buy using the Paint Coverage Worksheet

Instructor Notes:

Now that you know more about the basics of paint and different types of paint, which paint to use in which area, and how to figure out how much paint you need, let's talk about how to apply paint.

In this section, you will learn about the general steps involved in any painting process from beginning to end. You'll have a good understanding of the importance of proper surface preparation and the purpose of primers, and you'll also understand the workmanship standards for applying paint with brushes or rollers. You'll learn about the qualities that make a good brush or roller and how to pick the right tool for the job at hand. Lastly, you'll be able to describe the key characteristics of brushes, rollers, caulk, sealants and fillers.

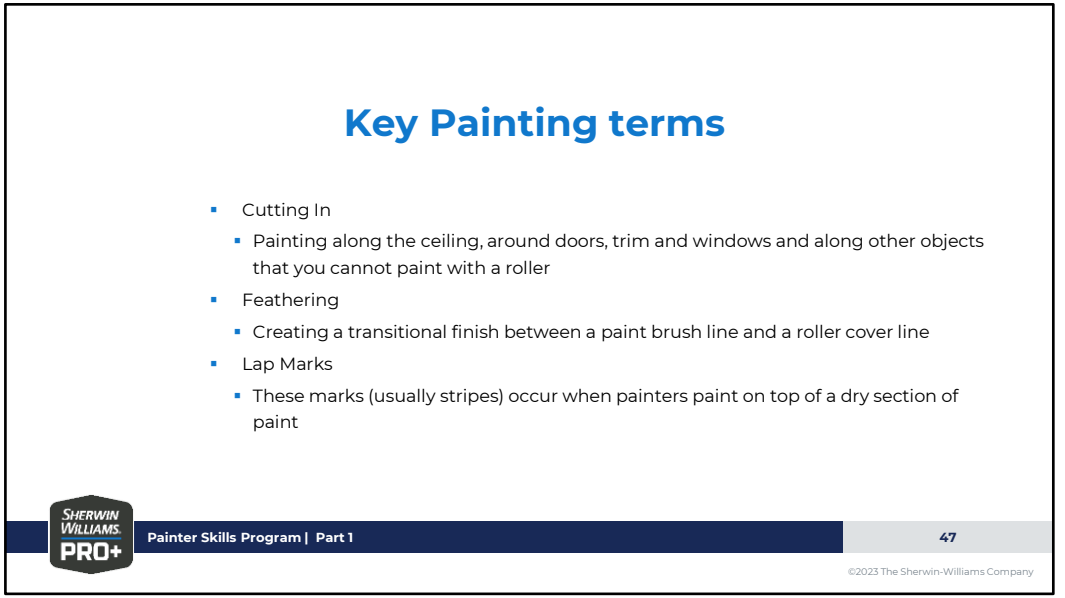


Instructor Notes:

Participant guide pg 13

When you've finished this section, you will be able to:

- List and describe the general steps you should follow when painting any room
- Explain some of the steps involved 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
- Explain how to clean up the work area and replace fixtures and accessories
- Explain some key characteristics of brushes, rollers, caulk, sealants and fillers



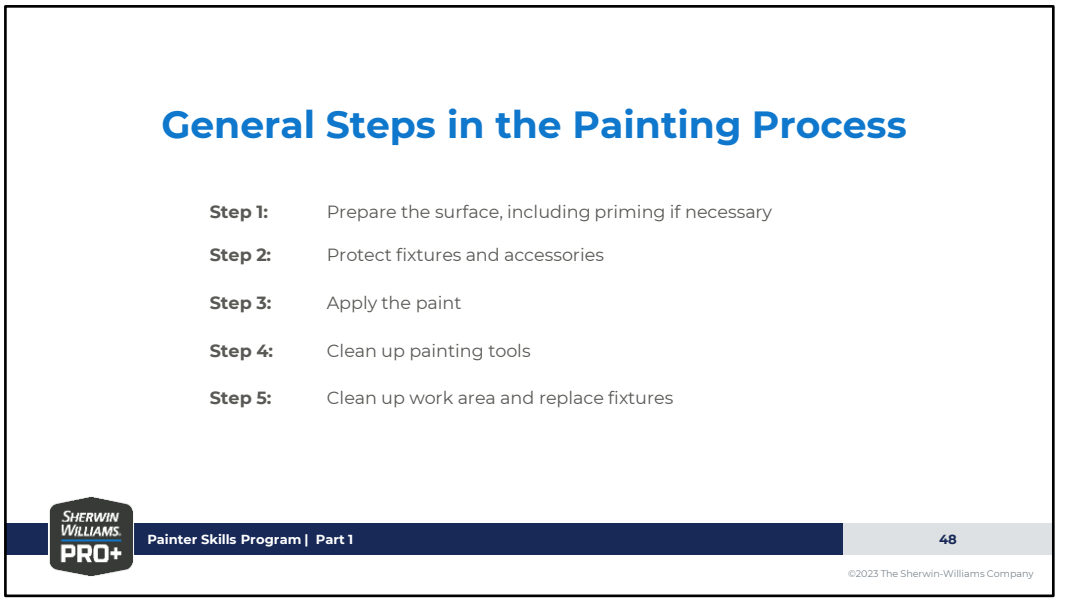
<u>Instructor Notes</u>:

Although there will be many different settings and circumstances surrounding your painting jobs, the basic process to follow when painting is the same:

- Prepare the surface properly, including the use of primers when appropriate
- Protect fixtures and accessories
- Apply the paint
- Clean up painting tools
- Clean up work area and replace fixtures and accessories

On commercial jobsites, you will likely be doing a lot of prep work.

Let's look at each of these steps in more detail.



Instructor Notes:

Participant guide pg 13

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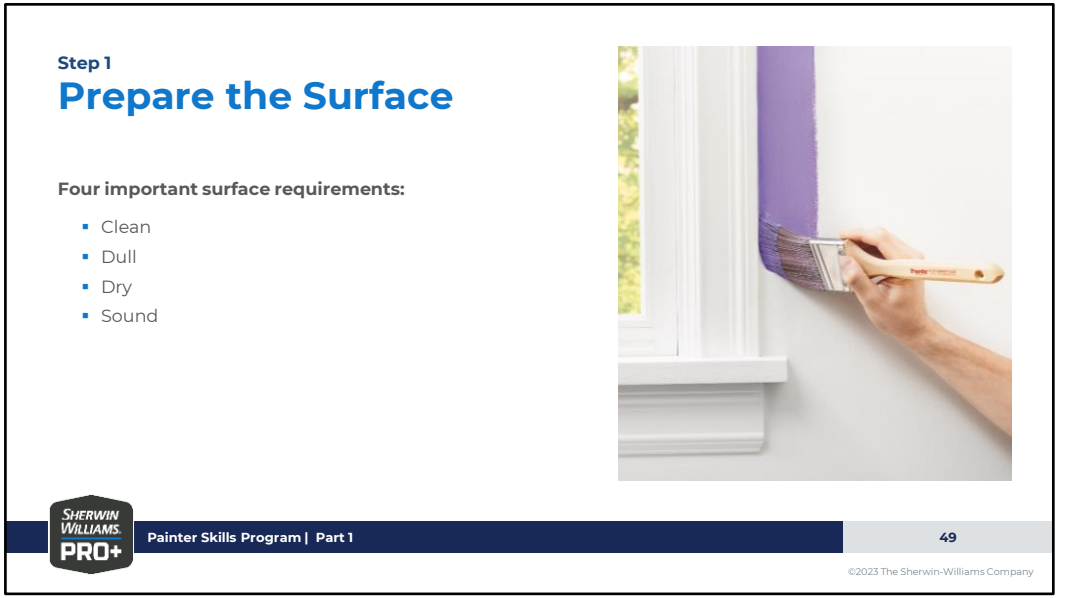


Instructor Notes:

Participant guide pg 13

Preparing the surface is arguably the most critical step in the painting process, so we're going to spend a lot of time here. We're going to discuss the requirements for surface preparation and the role and importance of primers.

The length of time your high-quality job endures often depends on how well you prepare the surface before painting. A poorly prepared surface can significantly reduce the life of a coating, even when it's the very best quality available.

It's important for you to recognize and follow these important preparation factors for good paint adherence: clean surface, dull (not glossy) surface, dry surface and sound/stable surface. If you take these four words seriously, you can be assured of long-term satisfaction with your paint job.

Clean Surface

Before you apply anything to the walls, the surface must be clean. This means removing all dirt, dust, loose paint, rust, mildew and any other contaminants. Usually detergent and rinsing will be sufficient, but mildew should be removed with a mixture of household bleach and water.

Dull Surface

Glossy surfaces tend to be too smooth for paint to properly adhere. Paint tends to run or sag on surfaces that are not sufficiently dull. Keep the following tips in mind:

- Rough up surfaces by sanding or using a liquid deglosser product.
- Sanding is more effective and cheaper, but a liquid deglosser is faster and more convenient.
- They both do a good job.

Dry Surface

Any moisture under the paint will eventually cause blisters and ruin the finish. In order to prevent this, follow these two guidelines:

- Surfaces must be thoroughly dry before they are primed or painted.
- Appropriately use putties such as caulk or spackle to seal spaces around window and door seals to prevent water from seeping in — but be sure it's completely dry before applying a coating to it.

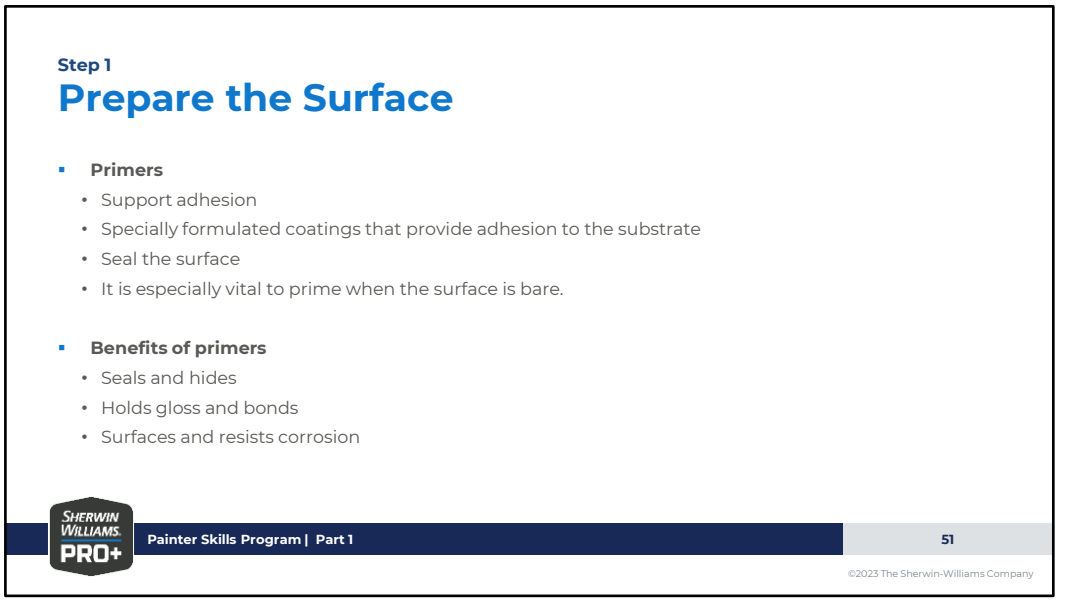
Sound Surface

Your surface must be stable. Painting a barn door that is peeling and falling off the hinges will likely not end well.

Instructor Notes:

You may need to patch holes, cracks and minor depressions prior to painting. You can use spackling to fill in nail holes and cracks. Spackling will improve the final appearance of your paint job, making the surface appear smooth and consistent.

We'll talk more about specific kinds of fillers later in this module.



Instructor Notes:

Primers are another important factor when you're preparing a surface to be painted. Primers are specially formulated coatings that adhere well to bare surfaces and help produce a quality result. A primer is used as a first coat, and the paint is applied over it once it is dry. It's an important step to ensuring a quality paint finish.

Adhesion is a critical issue with paint. A good topcoat of paint needs something to grab onto. Think of a primer as being one piece of Velcro and the topcoat as a second piece of Velcro. When both are together, there is a firm grip. But when the topcoat is applied without the primer, sometimes the surface does not provide enough for the paint to adhere properly.

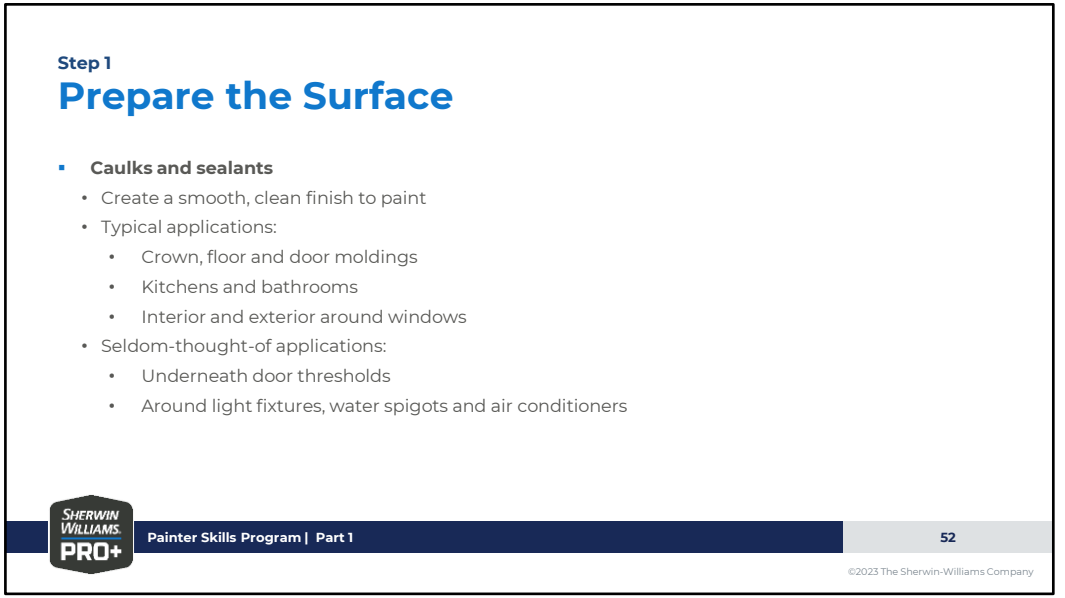
It is especially important to use primers when:

- Painting new wood or another surface that has never been painted before
- Repainting a surface that is badly deteriorated
- Painting a surface that has been stripped or is worn down to the original surface material

Some other benefits of using a primer include:

- Seals: helps seal out stains, graffiti, odor, moisture, etc.
- Hides: helps hide previous color, surface marks, etc.
- Bonds: helps promote adhesion of the topcoat
- Holds gloss: helps maximize gloss and leveling of enamel topcoats
- Creates an even surface appearance: helps achieve a uniform topcoat
- Resists corrosion: helps promote corrosion resistance

Often, it is worthwhile and wise to use a primer to ensure the best performance from your paint job. Choosing the right primer is important to match the situation that is present. Uniform appearance of the finished paint film is an achievable goal when primers are used first.



Instructor Notes:

Participant guide pg 14

Another, often-critical part of surface preparation is caulks and sealants.

Caulks and sealants are a very important step to protect the integrity of a surface and ultimately your paint job. Caulks and sealants are used to join two surfaces and to keep out moisture, wind and insects. They are often used on:

- Crown, floor and door moldings
- In kitchens and bathrooms, such as along the edge of a sink
- Around windows — both interior and exterior

Some often-overlooked applications for caulks and sealants include:

- Underneath door thresholds
- Around light fixtures, water spigots and air conditioners

Like fillers, caulks and sealants improve the final appearance of the paint job by making the surface appear smooth and consistent. We'll discuss different types of caulks and sealants later in this module.

Instructor Notes:

https://www.YouTube.com/watch?v=rUgkaBiame8&index=11&list=PLAEZY2hC-IOBWHYPr-Rat1R3ZXbHaTw9_

Instructor Notes:

Participant guide pg 14

Next is Step 2: protect fixtures and accessories.

Before beginning a painting project, you need to protect fixtures and accessories from spills, stray brush strokes and paint splatters.

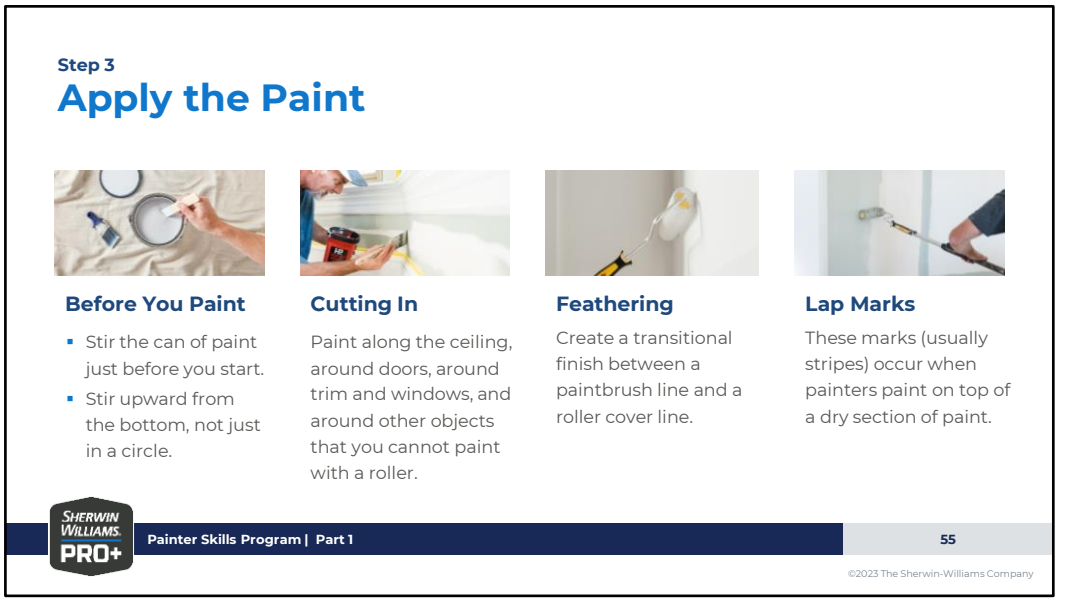
Taping, covering and removing items are the most common ways to protect nearby surfaces.

The following should be taped with masking tape around the edges or covered with a drop cloth:

- Moldings, windows, doors, adjoining walls that are not to be painted, and floors

Other items are easier to remove than to paint around, such as:

- Switch plates, register grills, light fixtures, doorknobs, draperies and shutters



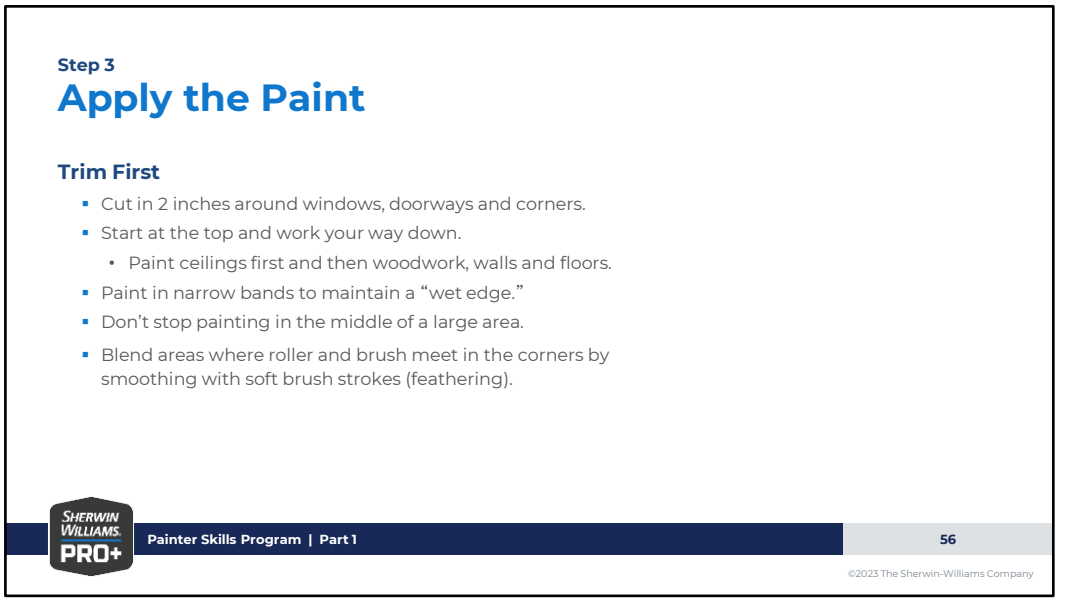
Instructor Notes:

Participant guide pg 14

- Following the workmanship guidelines in this third step will make applying paint easier and the job better quality.

Before you paint, remember to:

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

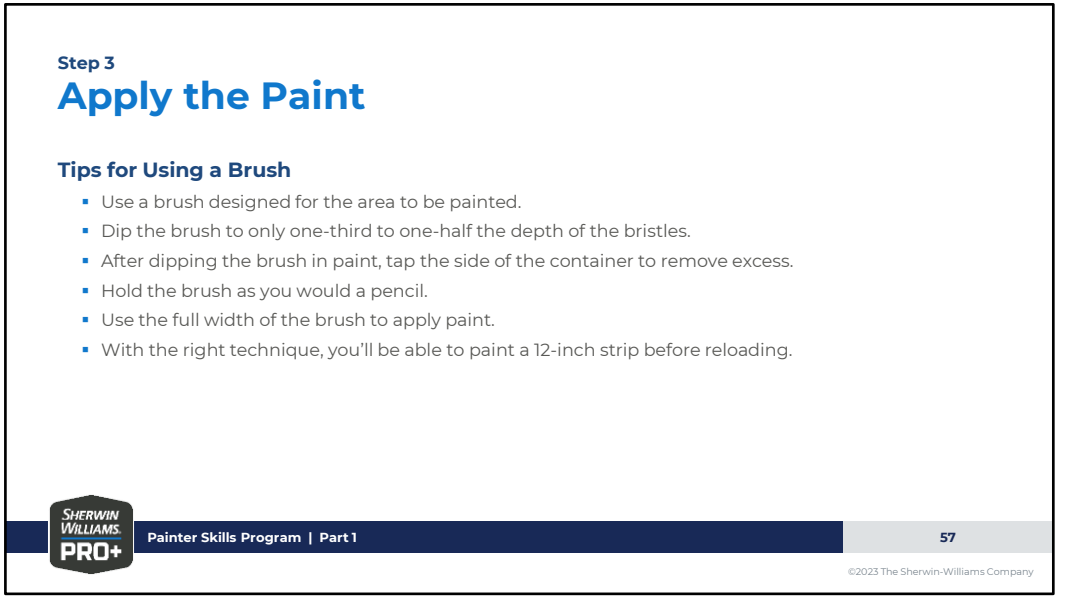


Instructor Notes:

Participant guide pg 15

You should always trim the jobs first.

- "Cut in" about 2 inches around windows, doorways and corners using a brush to paint approximately 2 inches in from the edges.
- Start at the top and work your way down — for example, paint ceilings before you paint walls.
    - Paint the ceiling first and then the woodwork, walls and floors (if applicable).
- Cover the surface in narrow bands to avoid complete drying between sections that are next to each other.
- Work from the dry area into the nearby wet area — this keeps a good "wet edge" and prevents excessive film buildup that will cause "lap marks."
- Do not stop painting in the middle of a large area.
- Blend areas where the roller and brush meet in the corners and around edges by smoothing with soft brush strokes (a technique called feathering).

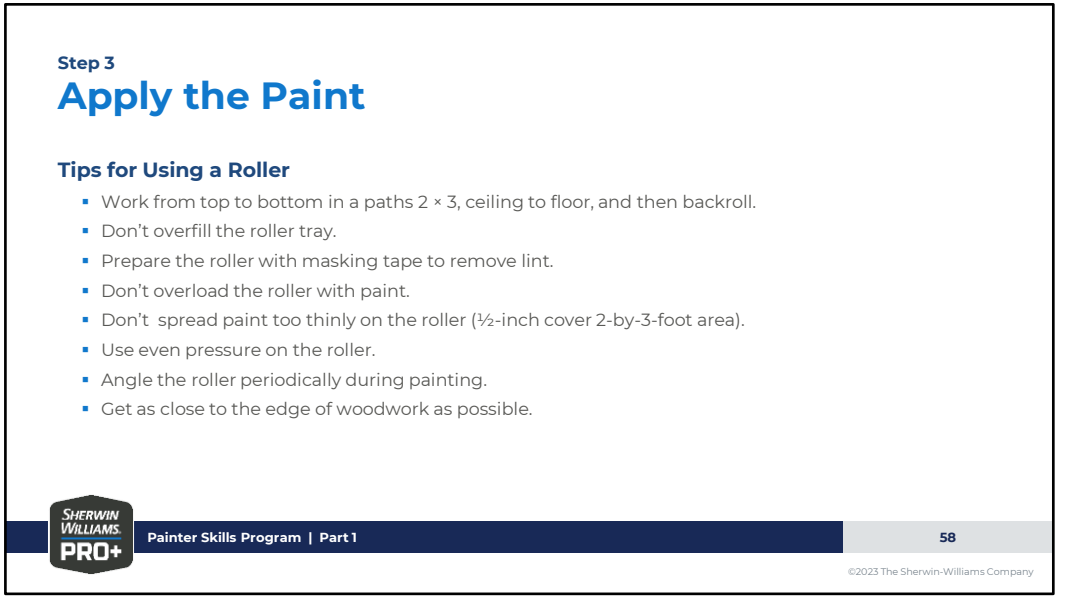


Instructor Notes:

Keep the following tips in mind when you are using a paintbrush to apply the paint:

- Use a brush designed for the area to be painted — for example, use trim brushes for windows.
- Dip the brush to only one-third to one-half the depth of the bristles.
- After dipping the brush in paint, tap both sides gently on the side of the can to remove the excess; then apply directly to the surface. Never scrape paint off a brush.
- When cutting in, hold a brush as you would a pencil.
- Work from the dry area into the nearby wet area — this keeps a good "wet edge" and prevents excessive film buildup that will cause "lap marks."
- Use the full width of the brush to apply paint.

With the right amount of paint on a brush and proper technique, you should be able to paint a 12-inch strip before reloading.



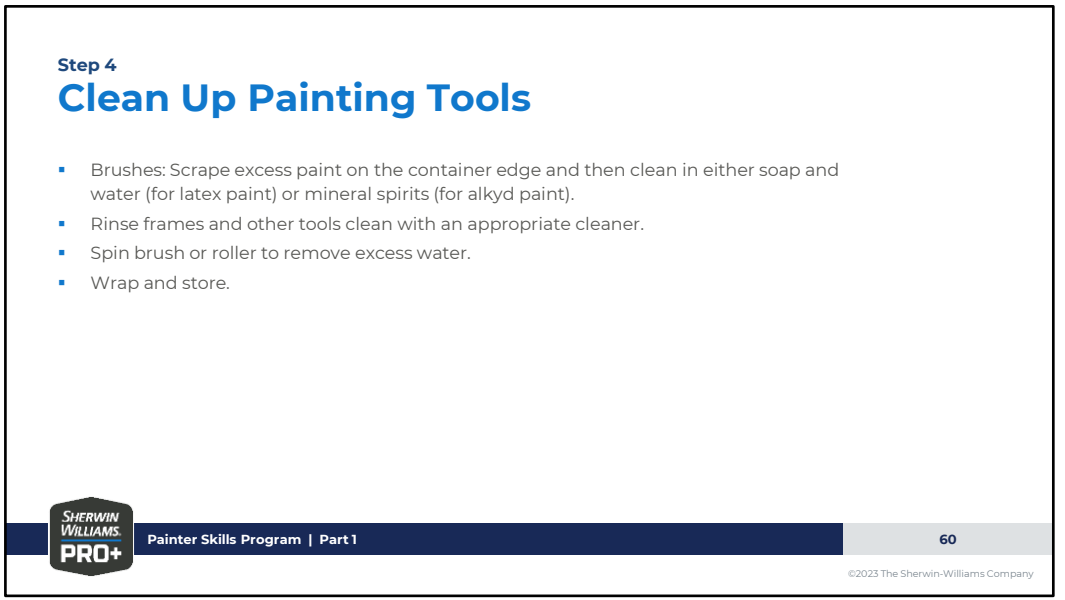
Instructor Notes:

Keep the following tips in mind when you are using a roller to apply the paint:

- Remember, you want to start at the top and work your way down — for example, paint ceilings before you paint walls.
- Don't overfill the roller tray. Overfilling a tray can cause you to overload your roller and put too much paint on at one time.
- Prepare roller with masking tape to remove lint before dipping it in your paint.
- Avoid spreading paint too thinly on the roller. A typical roller "load" should cover about a 2-by-3-foot area. If you're going farther than that, you're liking just picking up the paint you've already put down or may be causing unevenness in your finished product.
- The same goes with applying pressure on a roller. You want to apply pressure consistently to ensure a consistent smooth finish. Also, you want to angle the roller periodically to ensure you're getting all the small nooks in the wall.
- Blend areas where the roller and brush meet in the corners and around edges by smoothing with soft brush strokes (a technique called feathering).

Instructor Notes:

https://www.YouTube.com/watch?v=HAlObuM_eJQ&index=9&list=PLAEZY2hC-IOBWHYPr-Rat1R3ZXbHaTw9_



Instructor Notes:

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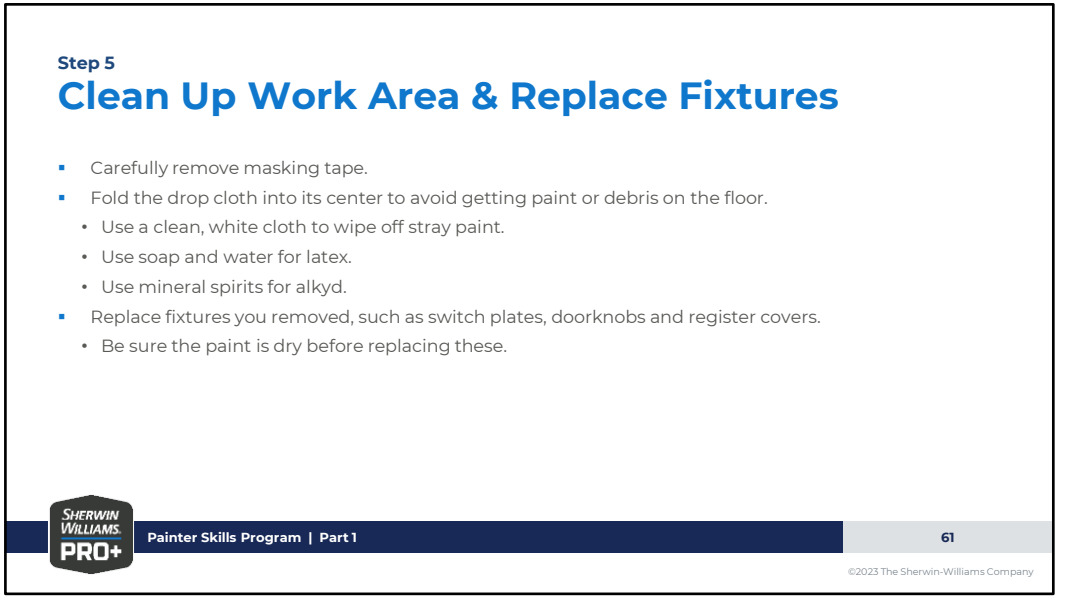
Brushes and rollers may be used for more than one paint job — if they have been cleaned properly. Wise painters follow these rules for their tools:

- Wipe the brush or roller on paper towels to get most of the paint off.
- Clean tools used in alkyd paint or other solvent-based coatings with mineral spirits.
- Use water and soap to clean tools used for latex paint.
- Rinse tools clean with water.
- Shake brush or roller to remove excess water.
- Wrap and store for a future project.

Tools aren't the only things that can be reused. Unused paint can be used to touch up any nicks or scratches that happen over time. If a skin forms on the paint surface, remove it before using the paint for a second time.



Instructor Notes:

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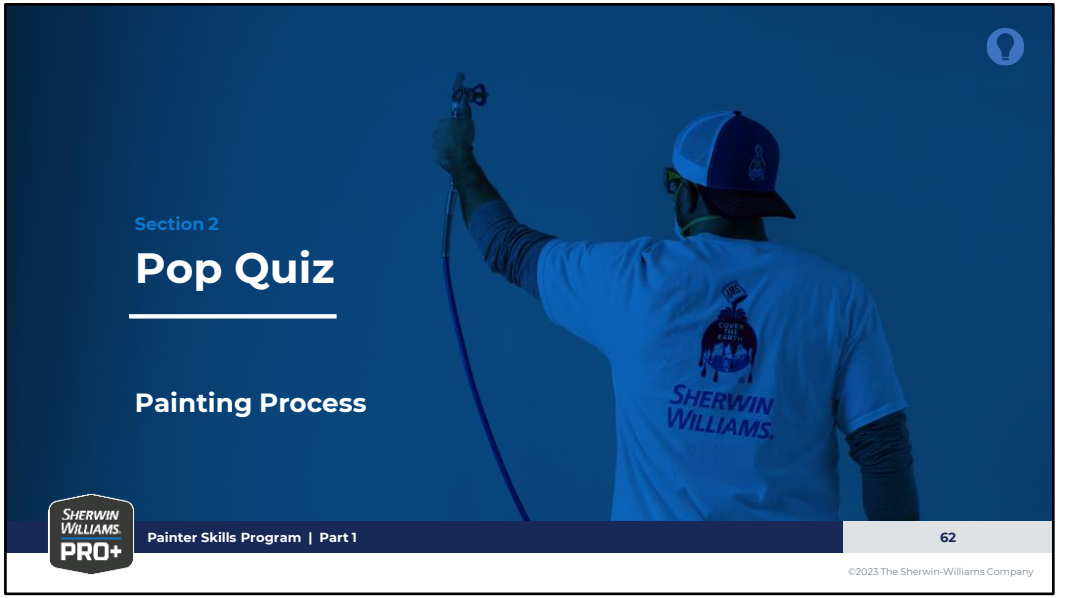
The last step in the painting process is to clean up the work area and put things back where they belong in the newly painted room. This includes the following:

- Carefully remove the masking tape from woodwork and accessories.
- Fold the drop cloth into its center to avoid getting any paint or debris onto the floor of the newly painted room.
- Use a clean, white cloth to wipe off any stray paint splatters from woodwork or accessories.
- Use soap and water for latex paint and mineral spirits for alkyd paint.
- Replace fixtures that you removed, such as switch plates, doorknobs and register covers.

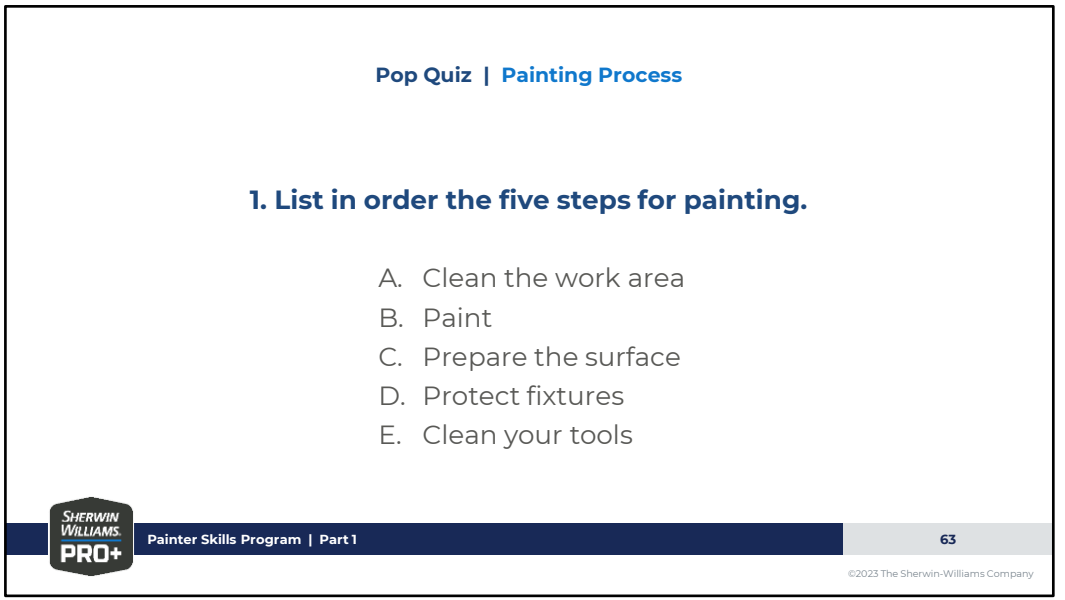
Be sure you wait until the paint is dry before replacing these items — otherwise, they may adhere to the paint and become painted in place.



<u>Instructor Notes</u>:

It’s time to test your knowledge on what we’ve covered so far!

Your team is made up of the group at your table. We will keep score; the group that scores the highest on the quizzes this week will receive a prize at the end of the week!



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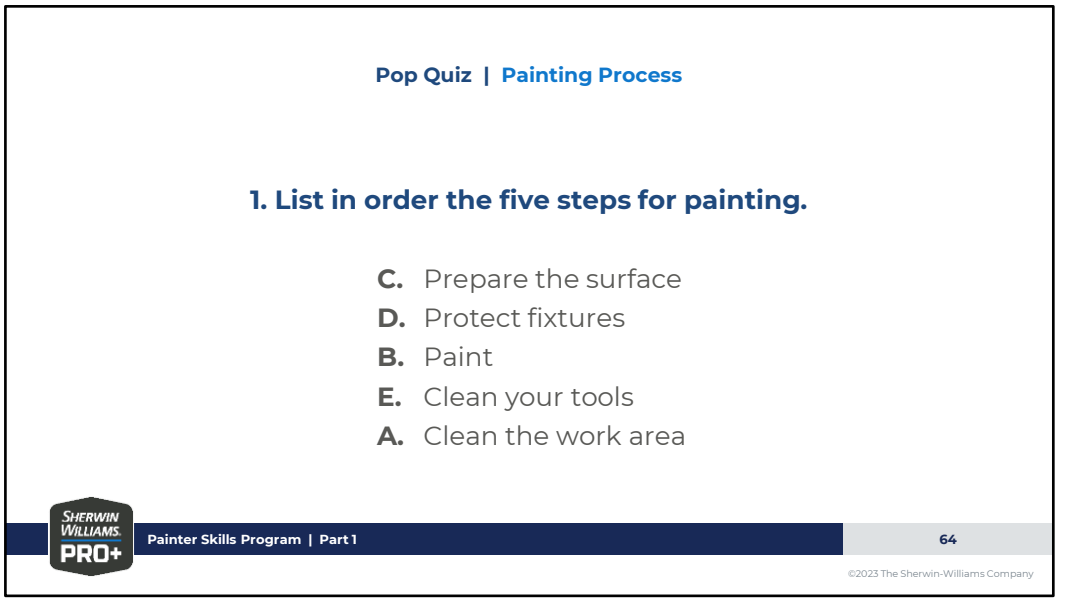

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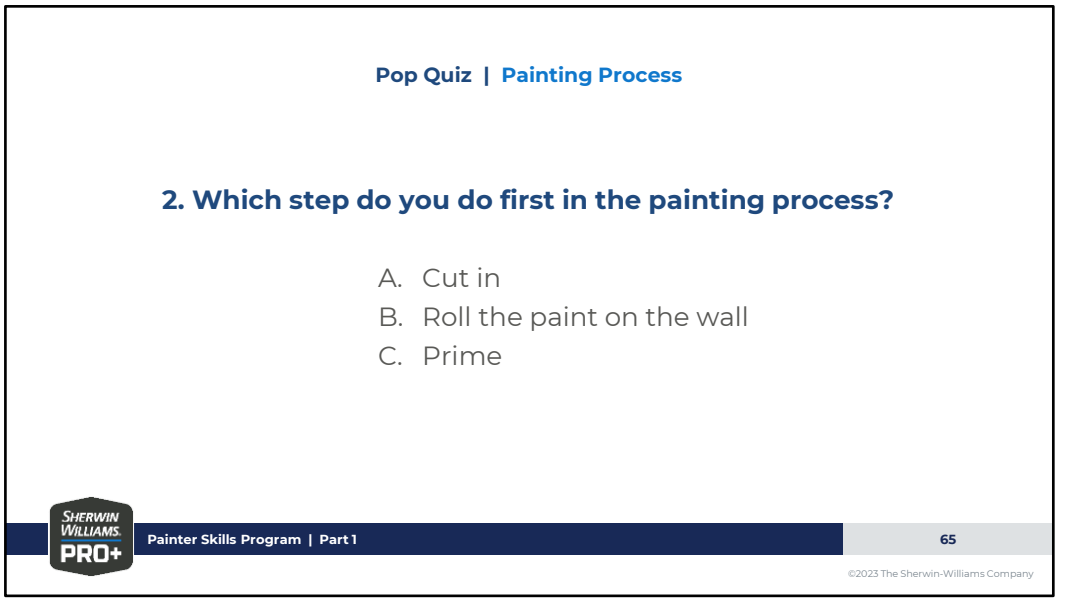

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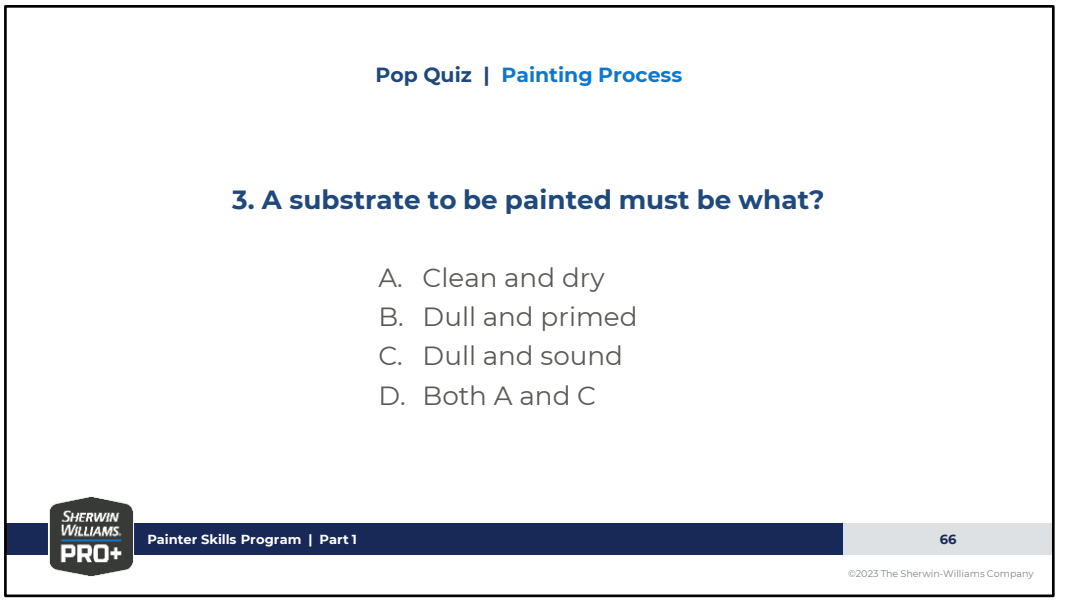

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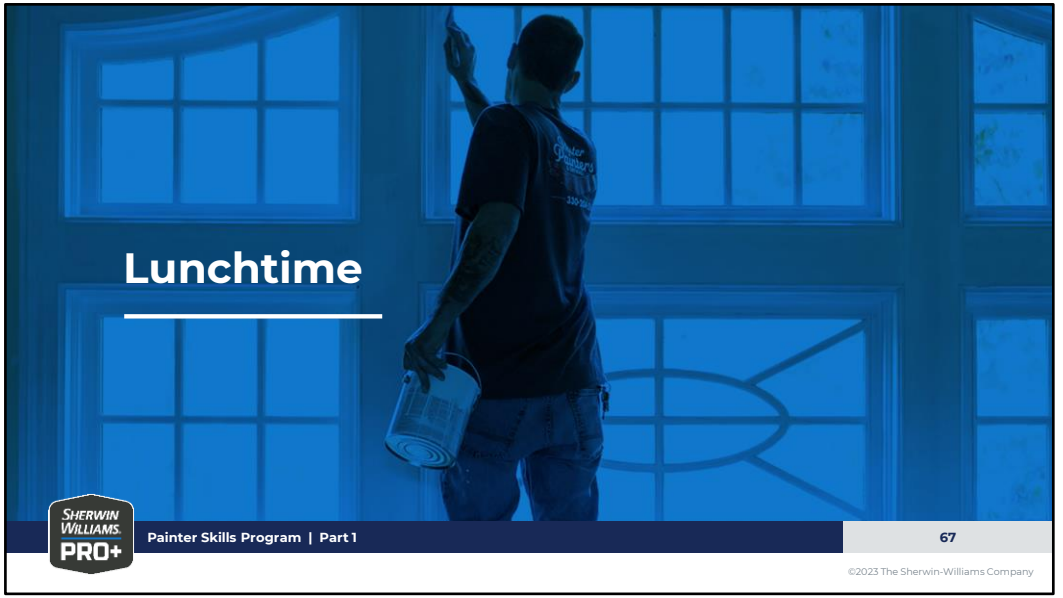
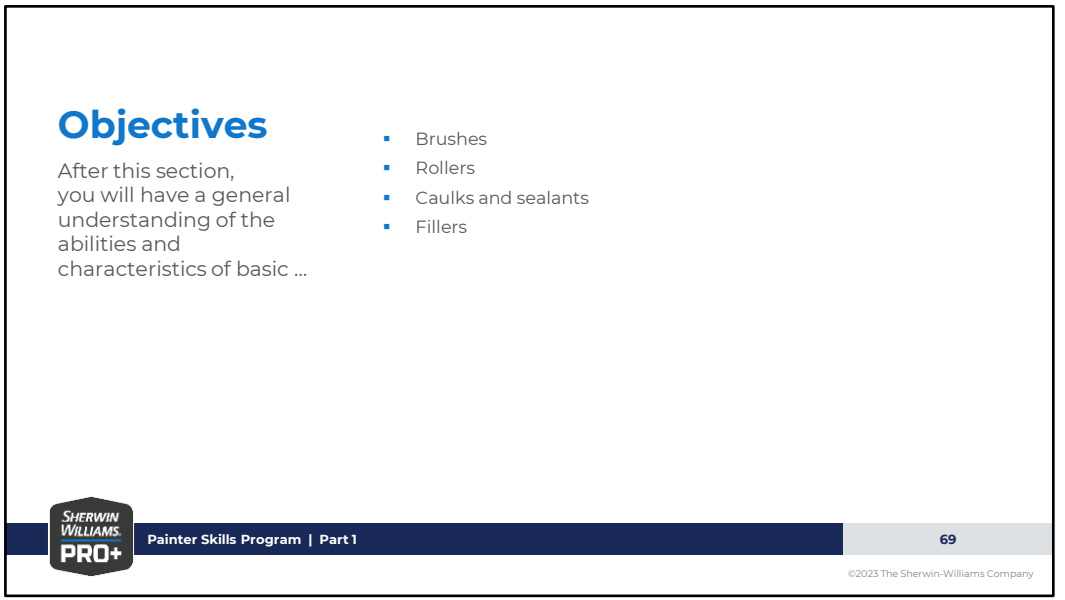


Instructor Notes:

Instructor Notes:

Participant guide pg 17

Now that you understand the general steps in the process of completing any paint job, we next turn to discussing the tools of the trade — the most important of which are brushes, rollers, caulks and sealants, and fillers.



Instructor Notes:

We're going to look at general characteristic and abilities of brushes, rollers, caulks and fillers.

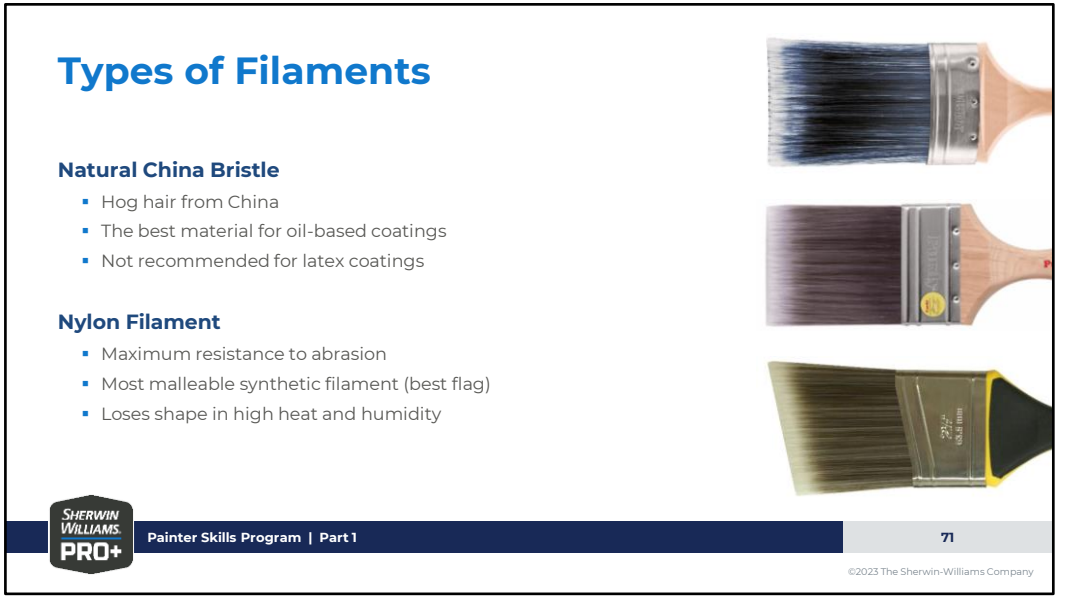
First, we'll talk about brushes.

Instructor Notes:

Participant guide pg 18

A brush's quality is determined by the quality of the components that go into it. The function of these brush parts affects pickup and release, finish, and durability:

- Filament: hairlike strands that apply the paint to the surface
- Ferrule: metal band that connects the filament to the handle
- Plugs: blocks inside the ferrule that connect the filament to the ferrule
- Epoxy setting: cement that binds the filament ends to the handle
- Handle: part of the brush the painter holds



Instructor Notes:

There are four kinds of filaments that are used: natural China bristle, nylon, polyester and nylon/polyester blend

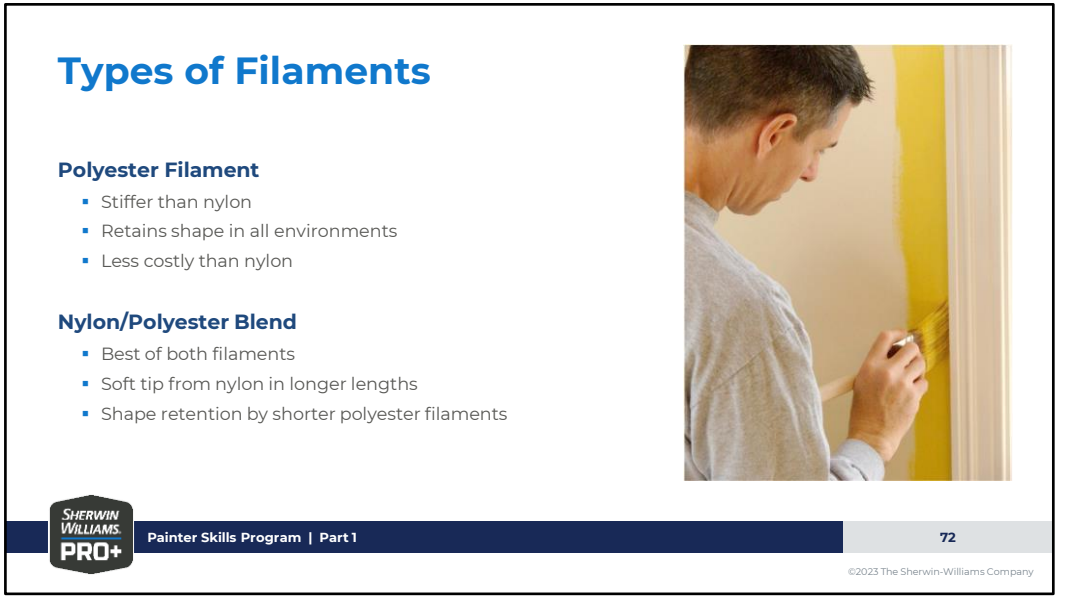
Let's take a closer look at the different types of filaments and how they lend very different performance properties to different brushes.

Natural China Bristle

First, natural China bristle comes from hogs and is widely used for paintbrushes. Many professionals still prefer to use it for applying oil-based paints, varnishes and shellacs. Natural bristles are not as durable as synthetic brushes and are NOT appropriate for applying latex paints like Duration or Emerald.

Nylon

Second, we have nylon filaments. Nylon was developed during World War II, when natural bristles were not available. Nylon has excellent pickup, release and finish and is more durable than any other filament. It can be used for any type of paint. However, nylon brushes are not good in high temperatures or humidity because the filaments in the brush become limp and unmanageable. They're great for painting things like concrete block walls.



Instructor Notes:

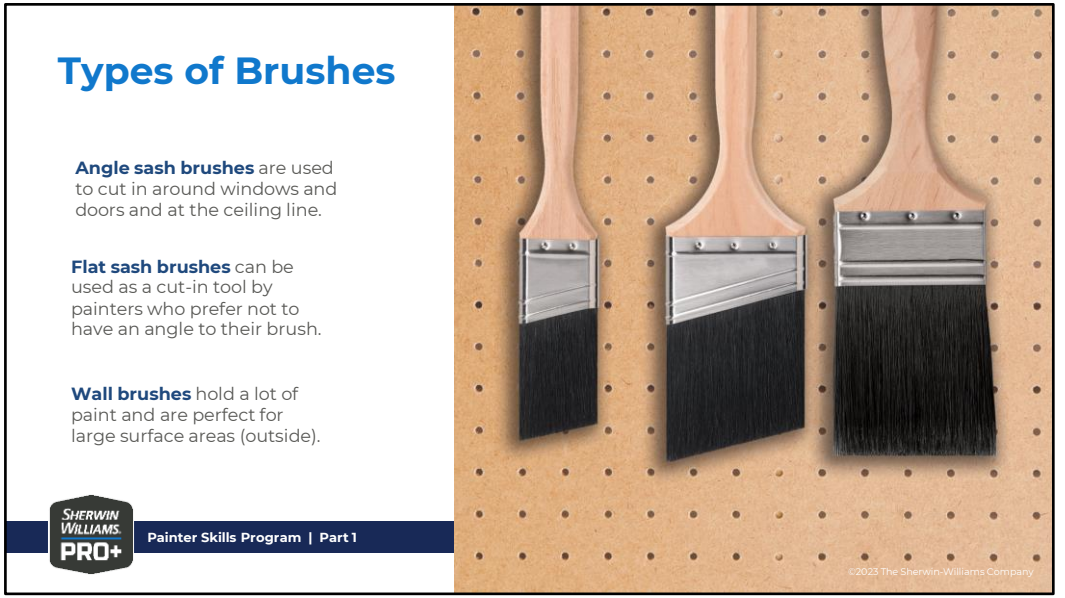
Polyester

Next, there's polyester. Polyester filaments are synthetic and have excellent pickup, release and finish. Although it is less durable than nylon, it holds up better in very hot and humid weather. Polyester can be used for any type of paint.

Nylon/Polyester Blend

Lastly, there's nylon/polyester blend filaments, which has the advantages of both materials. Like nylon, it has excellent pickup, release and finish. It has the temperature and humidity resistance of polyester and the durability of nylon. It also has excellent pickup, release and finish, and may be used for any type of paint.

These are both great for cutting in!



Instructor Notes:

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Each paint job requires the right tool. Paintbrushes come in a variety of shapes and sizes.

Here are some basic brush types and their ideal uses:

- **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, especially outdoors.

Brush Performance Characteristics

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

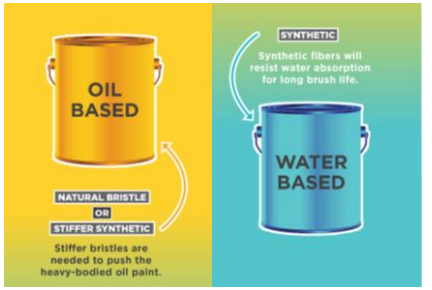
Instructor Notes:

The key features of a paintbrush are as follows:

- Paint pickup: The brush should be able to pick up an appropriate amount of paint.
- Paint release: This is how easily the paint transfers from the brush to the surface being painted.
- Finish and film thickness: The brush you choose should apply paint at a consistent thickness and finish.
- Durability/cleanup: A brush that is durable and cleans up well will last longer and be able to be reused on many jobs.

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

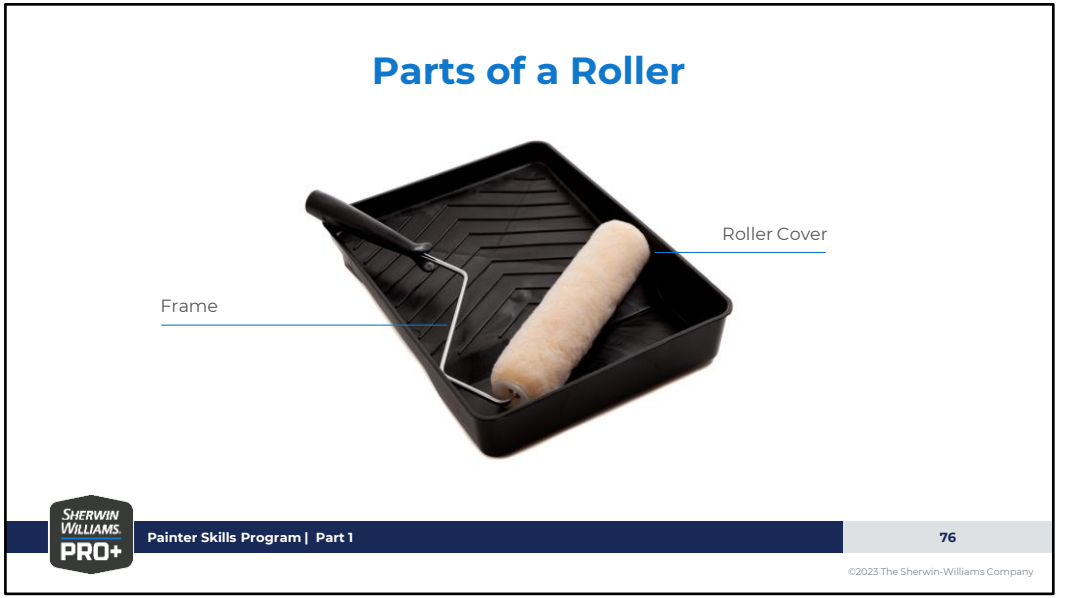


Instructor Notes:

There are four main points to consider when selecting the right brush.

1. The type of paint. Natural bristles should be used only for alkyd (oil-based) paint. If the paint is latex, you must use a synthetic filament.
2. You need to consider the wear requirements of the surface to be painted. In other words, how much wear and tear will this surface be subjected to?
3. The type of brush. Remember, there are special brushes for every job, whether it's a wall brush, a flat sash or an angular sash brush, just to name a few.
4. Your own preference in handle and flex will also help determine which brush is right for you. It is interesting to note that preference is in part determined by geography — because painters in different regions learn the trade a little differently from each other. For example, in the Southeast, many painters prefer using a flat trim brush to cut in, as opposed to in the Northeast where an angle sash brush is used most often.

Now that we've discussed the qualities to look for in a brush, let's move on to rollers.



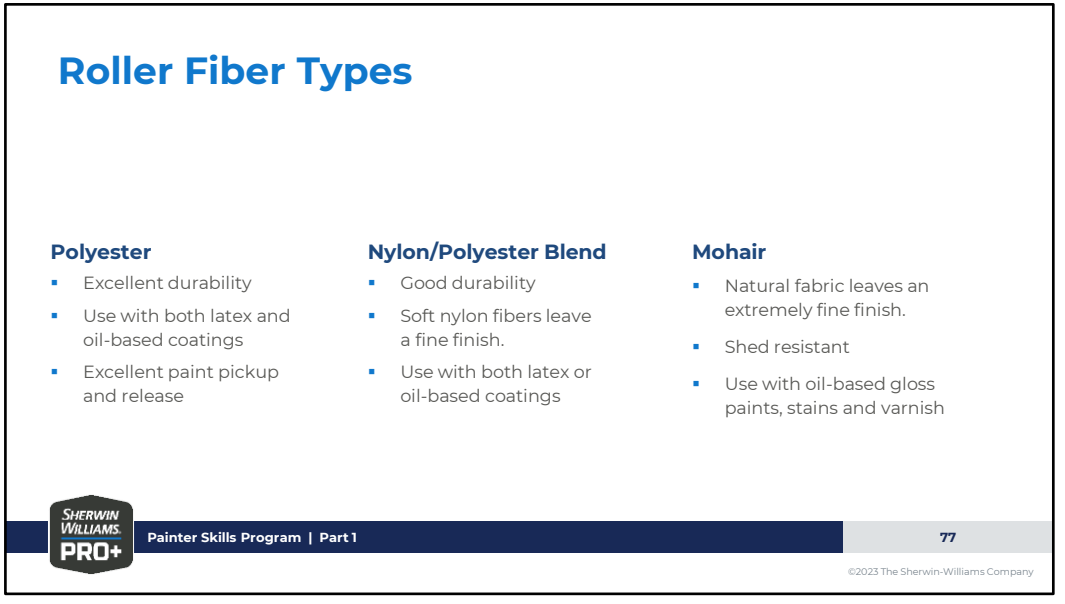
Instructor Notes:

Participant guide pg 20

This section describes how and why rollers differ in quality and function. You can select the right rollers for the job when you know these differences.

First, a roller consists of two main parts:

1. The roller cover, which is really the roller core plus the fabric over it — it's the part you roll in paint.
2. Then there is the frame, which is the hardware that you put the roller cover onto, and it also includes the handle.



Instructor Notes:

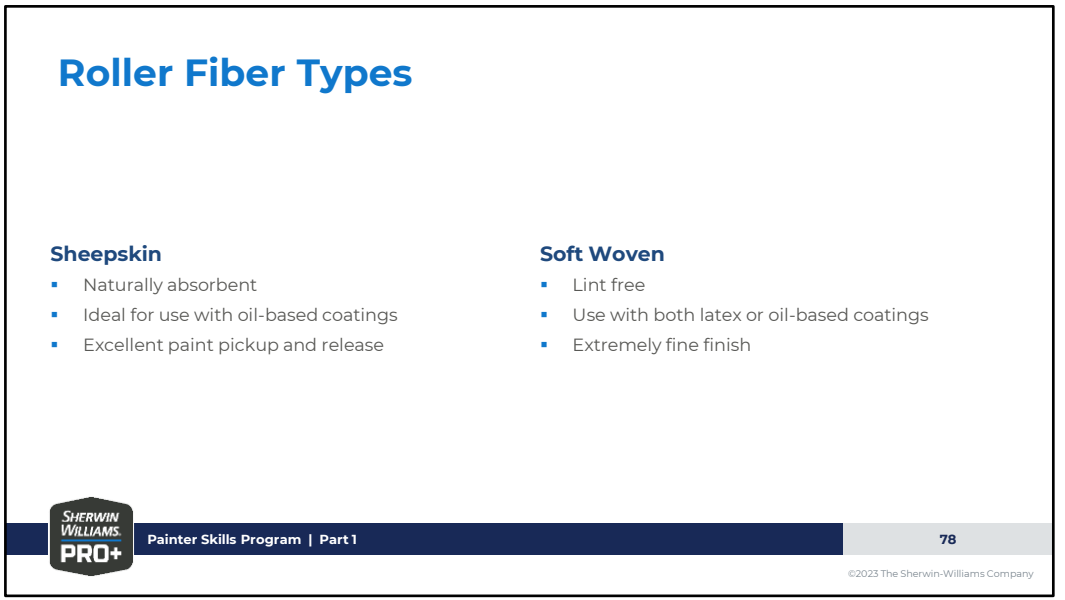
There are five main types of fibers used for roller covers:

- Polyester
- Nylon/polyester blend
- Mohair
- Sheepskin
- Soft woven

Polyester fibers have excellent durability and paint pickup and release. They can be used with both latex and alkyd paints.

Nylon/polyester blend rollers offer good durability and can be used with both latex and alkyd paints. The soft nylon fibers leave a fine finish.

Mohair rollers are shed-resistant, natural fabrics that leave an extremely fine finish. They are ideal to use with alkyd paint and other oil-based gloss paints, stains, varnish and shellacs.



Instructor Notes:

Sheepskin fibers are naturally absorbent and have excellent paint pickup and release. They are for use with only alkyd paints.

Soft-woven rollers are virtually lint free, give an extremely fine finish and can be used with both latex and alkyd paints.

Instructor Notes:

Participant guide pg 21

Nap, or pile height, refers to the amount of fabric that sticks up from the core, and different pile heights are better for different surfaces. A good rule to follow is the smoother the surface, the shorter the nap; the rougher the surface, the longer the nap. Pile heights range from 1/16 inch to 1 1/2 inches.

For example, if you are painting smooth walls, you should use a 1/4-inch nap. For a sand-textured wall, use a 3/8-inch pile. For rougher, light stucco or masonry, try a 3/4-inch nap. And the longer naps, such as 1 1/4 inch, should be used only for very rough surfaces like brick, cinder block and stucco.

Roller Cover Performance Characteristics

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

Instructor Notes:

Now, let's switch gears. We'll briefly talk about the performance characteristics you'll look for in a quality roller cover, which are similar to the characteristics you look for in a brush:

- Paint pickup: The roller's ability to pick up an appropriate amount of paint reduces your labor.
- Paint release: This ensures even paint coverage and a smooth finish.
- Lint free: Just as you don't want a brush that sheds, a roller with a lot of lint can ruin the finish.
- Finish and film thickness: Look for a roller that provides consistent paint film application and finish.
- Durability and cleanup: A roller that is durable and easy to clean can be reused on many different jobs.

Instructor Notes:

Participant guide pg 21

There are three main things to consider when selecting the right roller cover for your job:

1. Type of paint
    - Use synthetic roller covers such as polyester, soft woven and polyester/nylon blends for latex paint.
    - Use natural fibers such as sheepskin and mohair for alkyd paint.

2. Determine the durability requirements of the project.
3. Determine the texture of the surface to be painted.

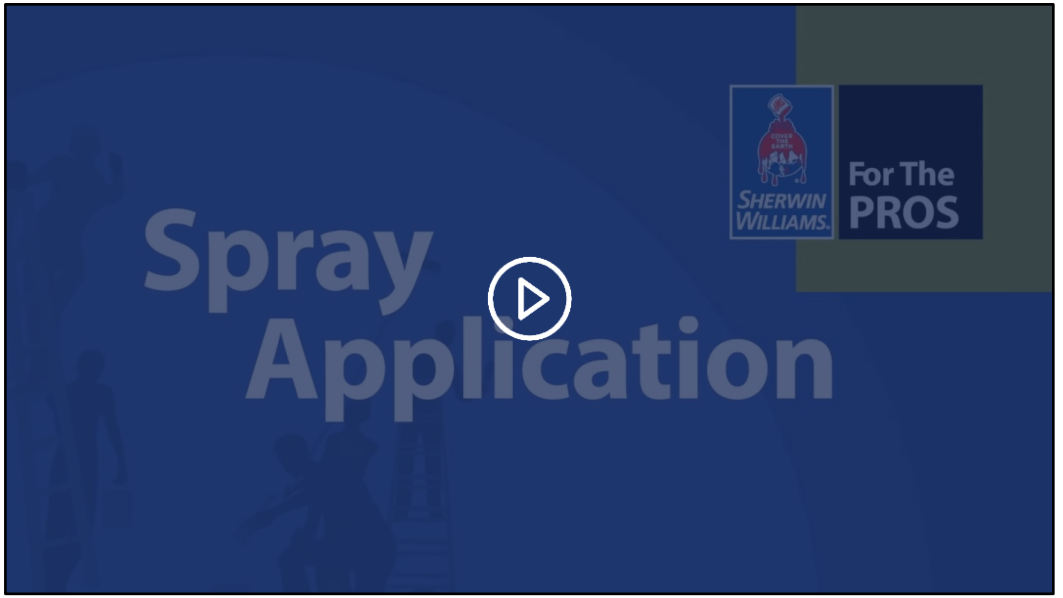
Instructor Notes:

Participant guide pg 22

You should also be aware that there are many other specialty rollers and applicators that you can use. While you won't use them on every job, they will make certain paint jobs go more smoothly.

Some examples of specialty rollers and applicators are as follows:

- **Mini-rollers** are great for use in small or hard-to-reach areas, such as on cabinets and doors and behind toilets. They come in both smooth foam and woven fabrics. They can be used with any type of coating.
- **Extension poles** are used to extend your reach and increase your productivity because you won't have to go up and down the ladder and move it every few feet. Extension poles are available in many lengths and styles to accommodate any project.



Instructor Notes:

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Instructor Notes:

https://youtu.be/0s7J-c97ObA?si=BK3cn5RXOKgLBaSe

Instructor Notes:

Next, we'll talk about caulk and sealants.

The basic function of a caulk or sealant is to provide a flexible seal in the joint where two materials come together, such as:

- Interior around windows and doors and on trim, such as baseboards and crown molding
- Exterior around windows and doors, between wood siding boards and garage eaves, and to seal brick to siding (i.e., connecting two different substrates)

Joints should be sealed to:

- Keep water out
- Keep air and drafts out
- Prevent damage caused by weather
- Provide an attractive finish
- Effectively keep insects out

Flexibility Matters

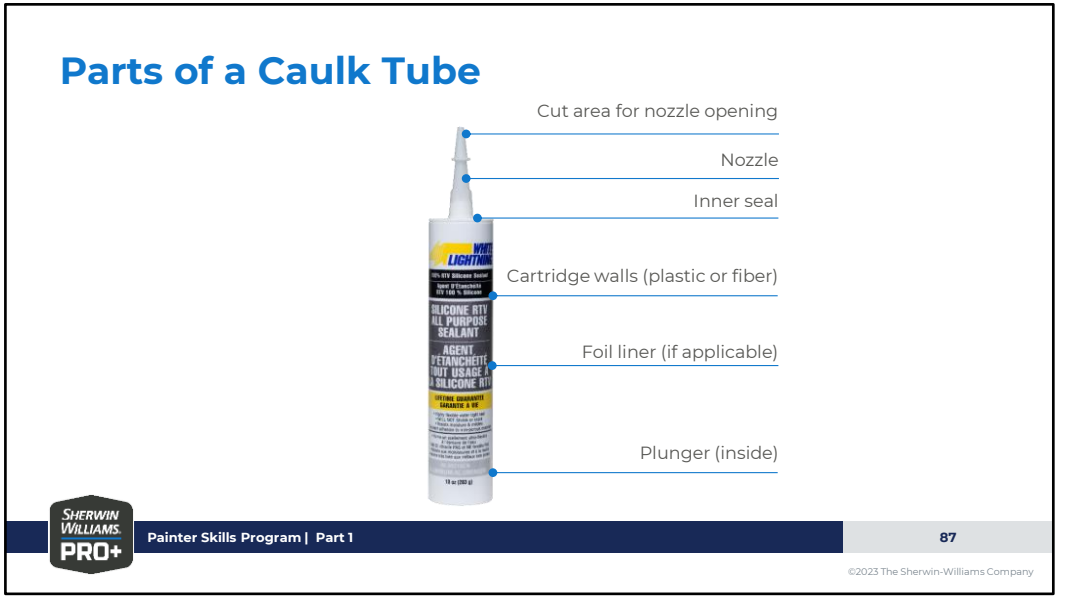
Why Does the Seal Have to Be Flexible?

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.

Instructor Notes:

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.



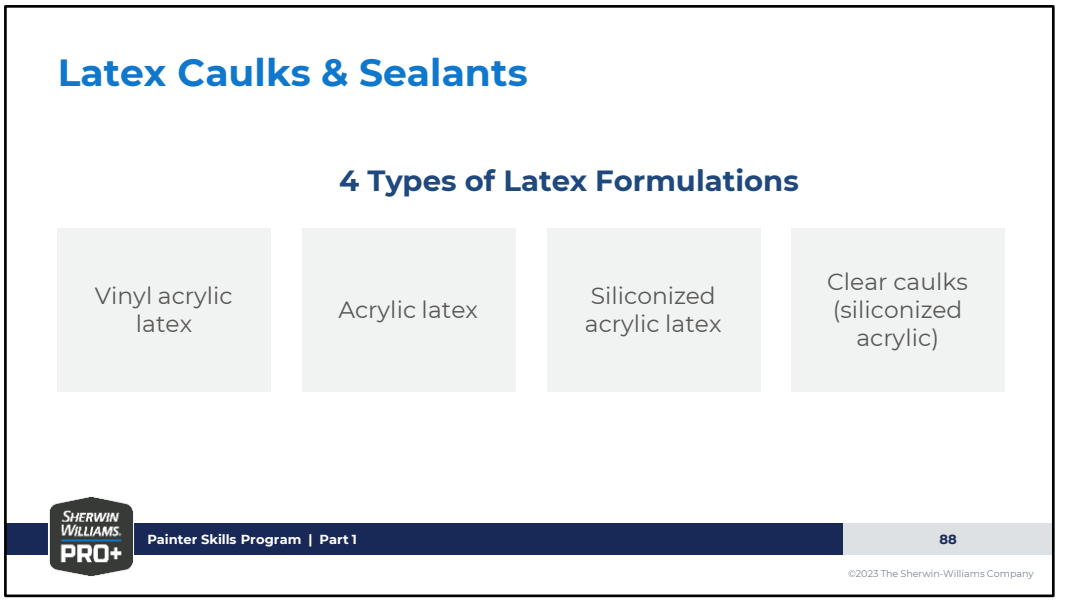
Instructor Notes:

Participant guide pg 22

Caulk comes in tubes of either paper or plastic. The material the tube is made of has no effect on the quality of the caulk — it's simply a matter of preference.

The parts of the caulk tube are as follows:

- **Nozzle:** The oblong, slender piece of plastic at the end of the caulk tube
- **Cut area for nozzle opening:** The very tip of the nozzle, which is cut at a 45-degree angle and through which the caulk is extruded
- **Inner seal** (if applicable): An extra layer of packaging used to help keep the caulk pliable. If the tube of caulk you're using has an inner seal, you'll need to follow the instructions on the tube for removing the inner seal before use.
- **Cartridge walls:** The body of the caulk tube that is made of either plastic or cardboard
- **Foil liner** (if applicable): Another layer of packaging used to help keep the caulk pliable
- **Plunger:** The back of the caulk tube that is pushed up by the caulk gun to force the caulk out of the nozzle opening



Instructor Notes:

<u>Instructor Notes</u>:

Participant guide pg 23

If this were the room, you would caulking/sealing.

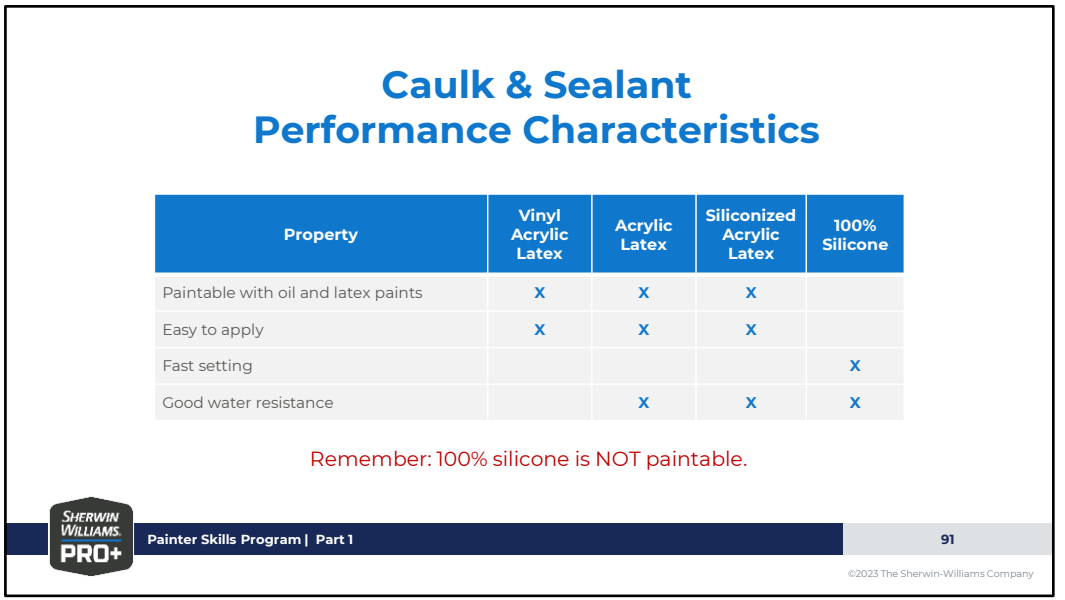
Silicone Sealants

Most common systems for non-water-based sealants:

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

Instructor Notes:

Participant guide pg 23



Instructor Notes:

Participant guide pg 23

This chart compares and contrasts caulk and sealant performance characteristics for the various types we talked about and includes a few types that we didn't specifically call out.

Notice that when it comes to ease of use, high performance, water resistance, flexibility and durability, your best bet is usually going to be siliconized acrylic latex.

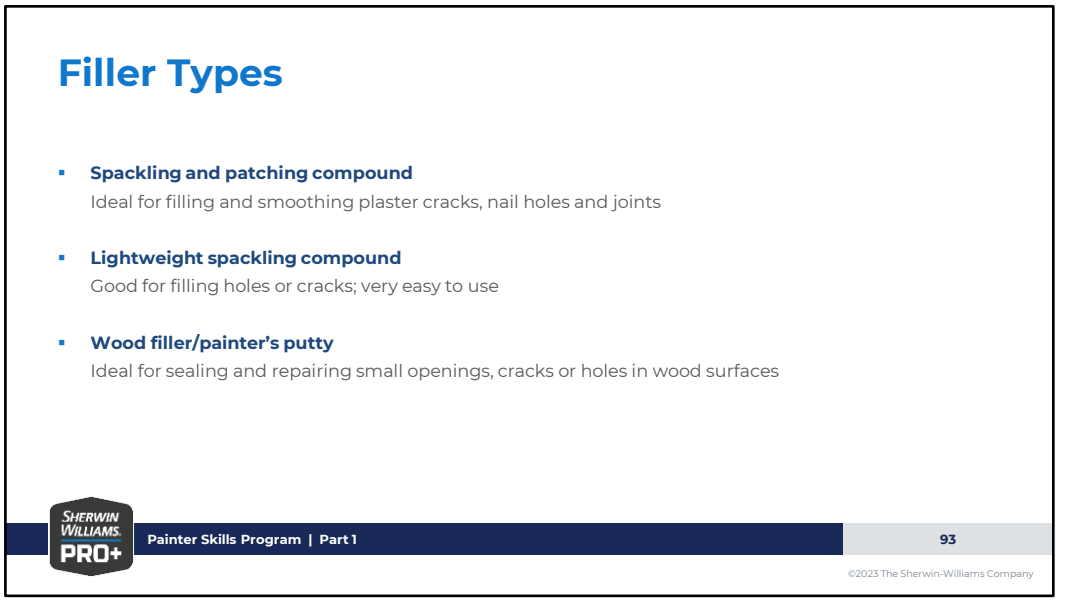
Selecting the Right Caulk & Sealant

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

Instructor Notes:

Participant guide pg 24



Instructor Notes:

As you recall, fillers are used to repair holes or cracks in a surface prior to painting. There are several different types of fillers you can choose from, including:

Spackling and patching compound

- Can be used indoors or outdoors and is ideal for filling and smoothing plaster cracks, nail holes and joints

Lightweight spackling compound

- The most common spackling used inside and is usually used only inside
- Good for filling holes or cracks
- Very easy to use — often it doesn't even need to be sanded

Wood filler/painter's putty

- Ideal for sealing and repairing small openings, cracks or holes in wood surfaces

Instructor Notes:

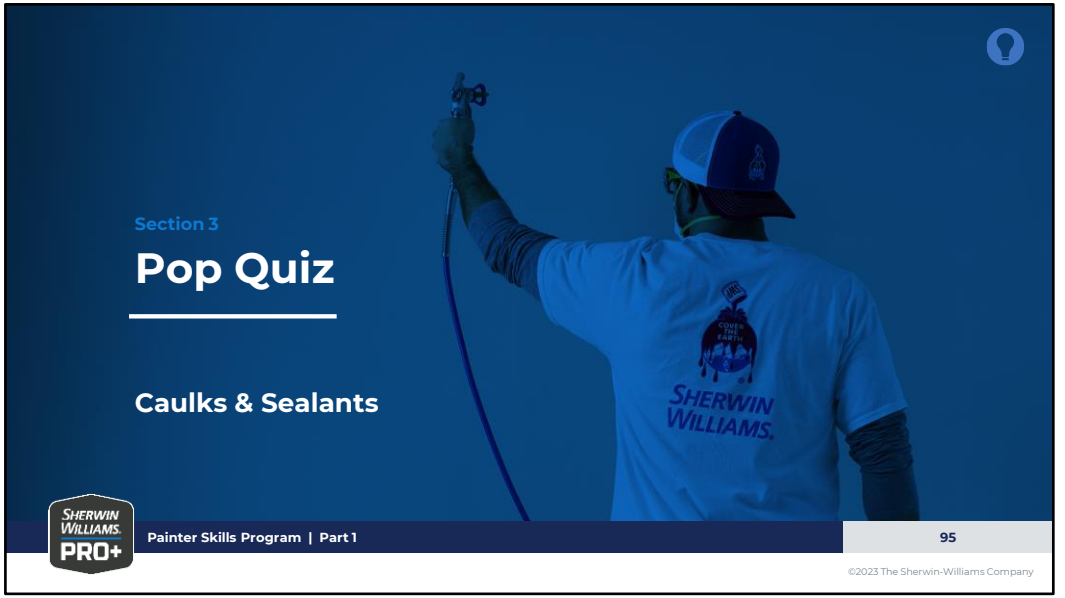
Some things to consider when trying to select the right filler are as follows:

What size is the patch?

To repair a nail hole, use lightweight spackling compound, allow it to dry, spot prime it and paint. For more extensive repair work, such as to fix a hole in the wall where a doorknob went through the drywall, you'll probably need to use something heavy duty like drywall compound.

What type of surface are you repairing?

Don't use window glazing to fill a nail hole in drywall. Don't use lightweight spackling to fill a nail hole in rough-sawn cedar. And remember, read the label or ask for help if you're in doubt about what surfaces the compound is designed for.



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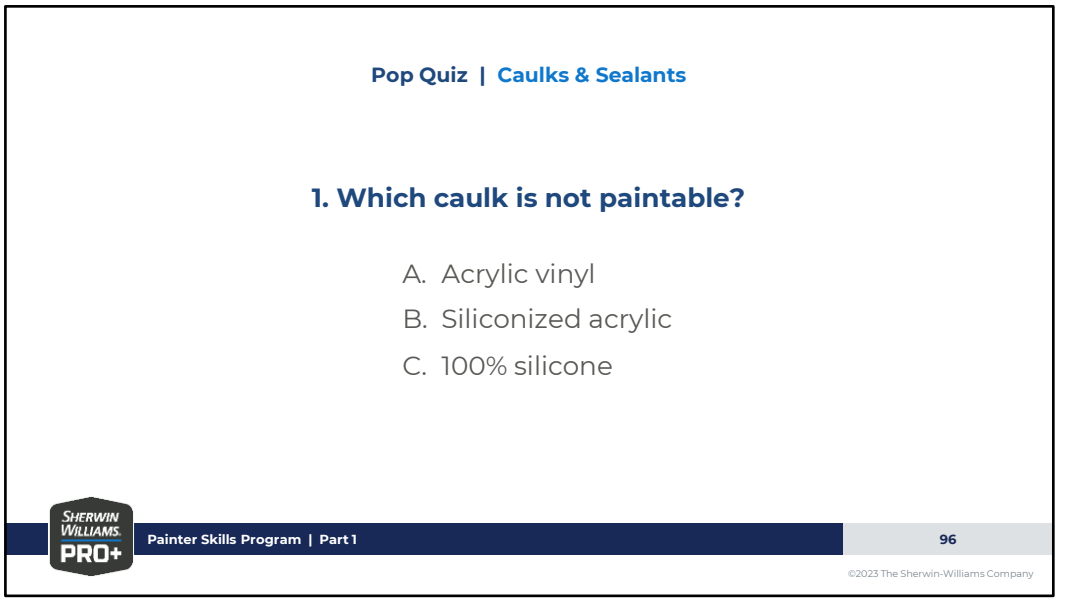

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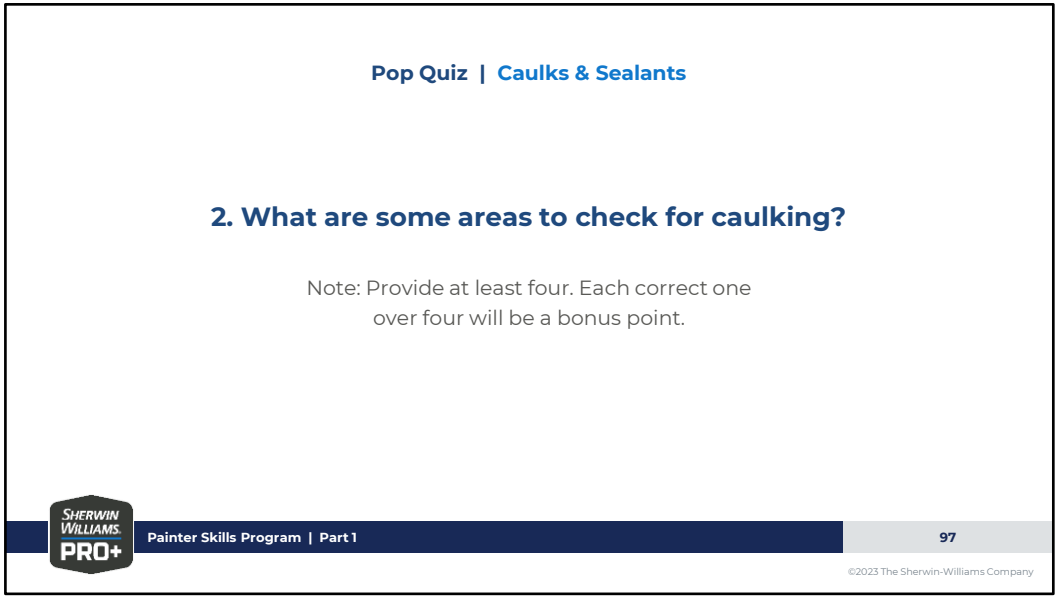

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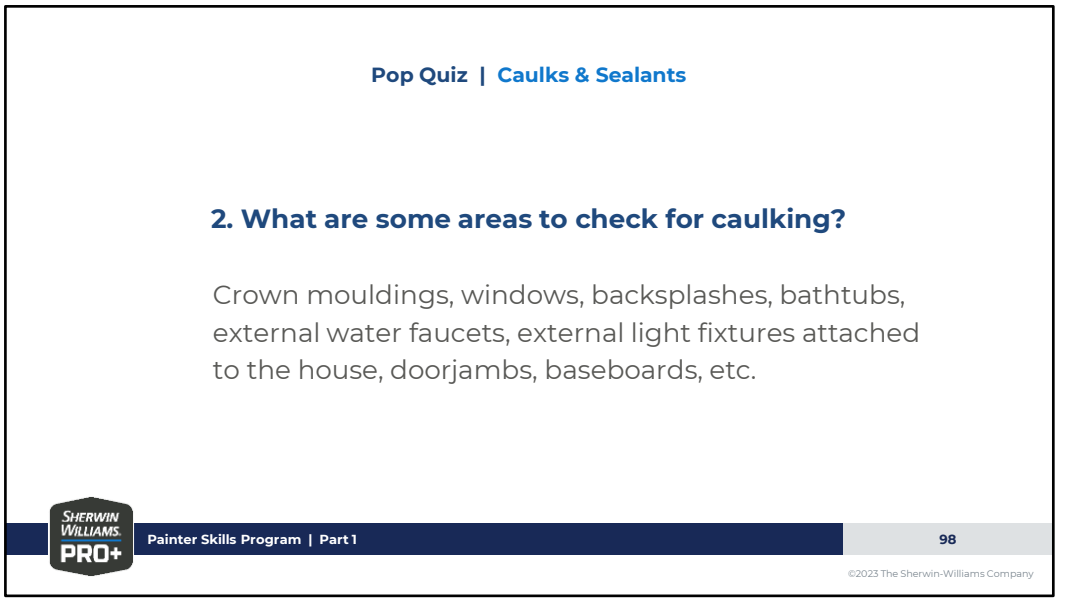

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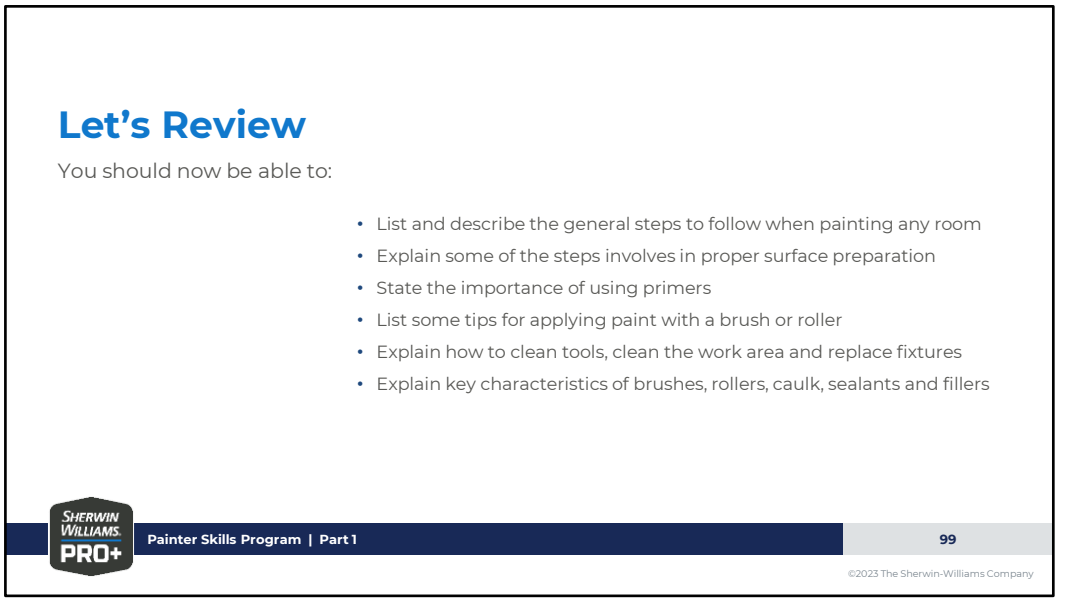


<u>Instructor Notes</u>:

Now that we've finished this section, you should be able to:

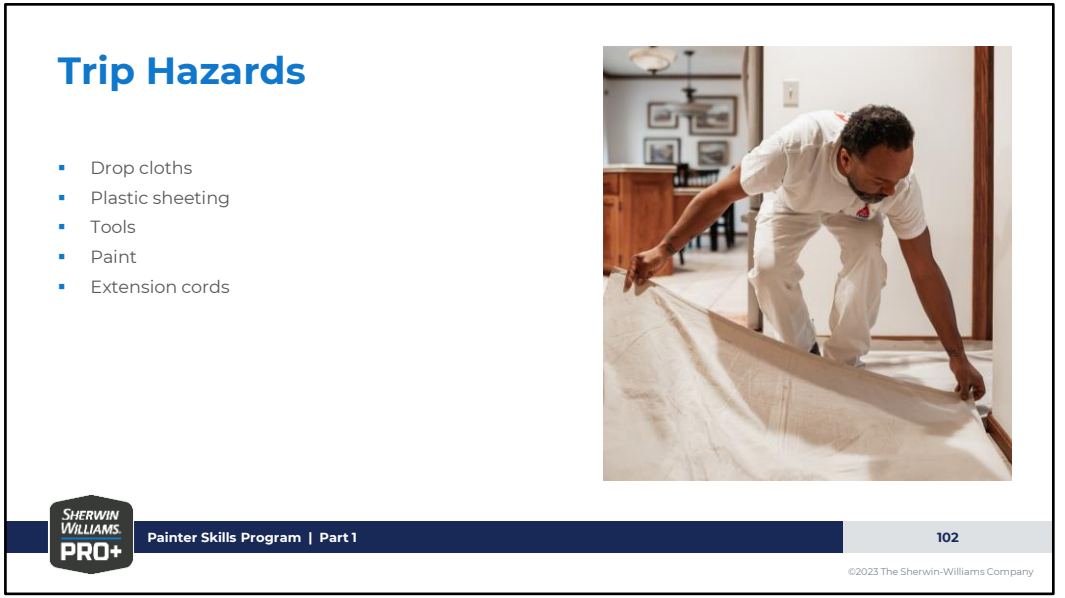
- List and describe the general steps you should follow when painting any room
- Explain some of the steps involved in proper surface preparation
- State the importance of using primers
- List some tips for applying paint with a brush or roller
- Explain how to clean tools
- Explain how to clean up the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

Instructor Notes:

Safety is very important in any environment. We're going to identify common accidents that occur on jobsites and discuss ways to prevent them and address them if they occur. Let's start by defining what PPE is. "Personal protective equipment" refers to protective clothing, helmets, goggles or other garments or equipment designed to protect the wearer's body from injury or infection.

Instructor Notes:

Let's look at four general categories of jobsite safety: trip hazards, spills, ladder safety and respirator fitting.



Instructor Notes:

Participant guide pg 23

When you're busy on a jobsite, it's easy to unknowingly create trip hazards for yourself and other.

- Drop cloths can easily create a trip hazard. Ensure the drop cloth is smooth and flat on the floor surface. Sometimes, drop cloths on hard floors can cause slippery environments, so step with caution.
- Similarly, plastic sheeting tends to statically stick to things. It should always be taped down to ensure it is secure.
- Tools and paint cans can cause easy trip hazards. If you unintentionally step on an extension pole, you may severely injure yourself. Keep your work area and aisle tidy and clean of debris at all times.
- Lastly, make sure to place extension cords in a way that avoids common walking paths. Always tape the cords to the floor and ensure they're visible (don't run them under drop cloths).

Instructor Notes:

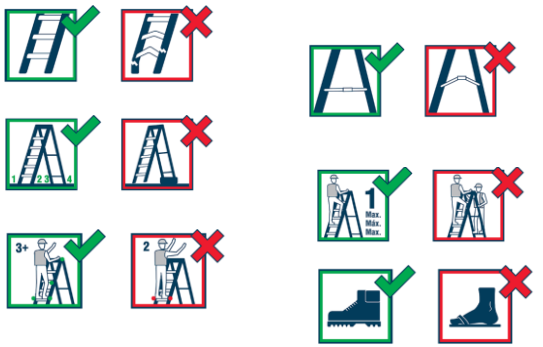
Participant guide pg 23

Accidents happen, and sometimes things get spilled. Always be prepared with a bag or garbage bin on the jobsite readily available in the event of a spill. Additionally, it's always a good idea to pour paint with caution using a rag or drop cloth underneath to catch excess drips. Always seal the lids of pails or gallons tightly between uses.

If a spill occurs, contain it as best you can. Clean with rags in a circular motion immediately. Do not wait for the spill to dry before cleaning — someone may come by and slip on the wet area.

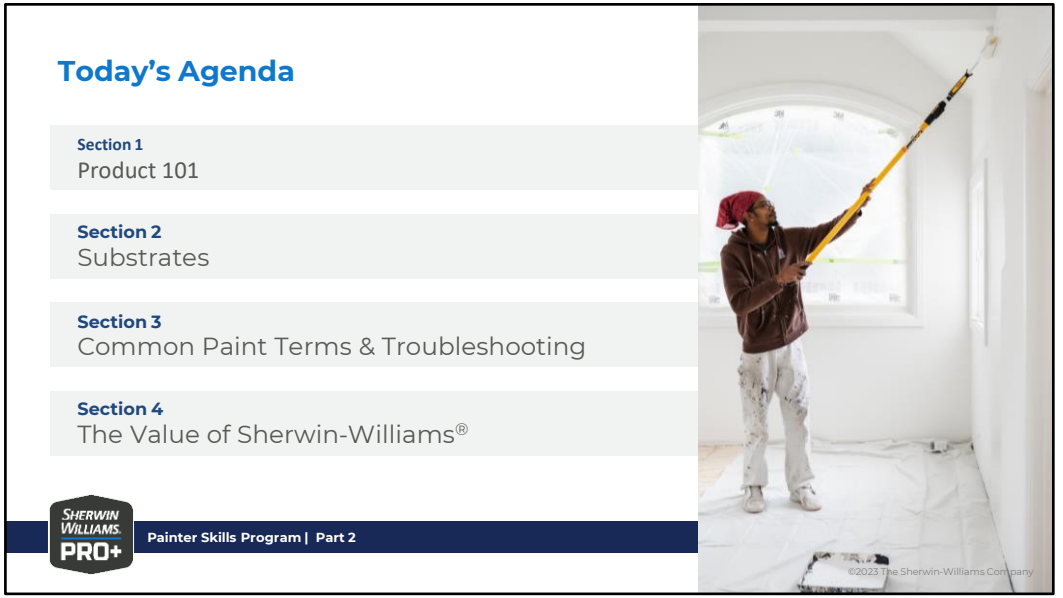
Step Ladder Safety

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



Instructor Notes:

Participant guide pg 23



Instructor Notes:

Today, we're going to review… *(read slide)*

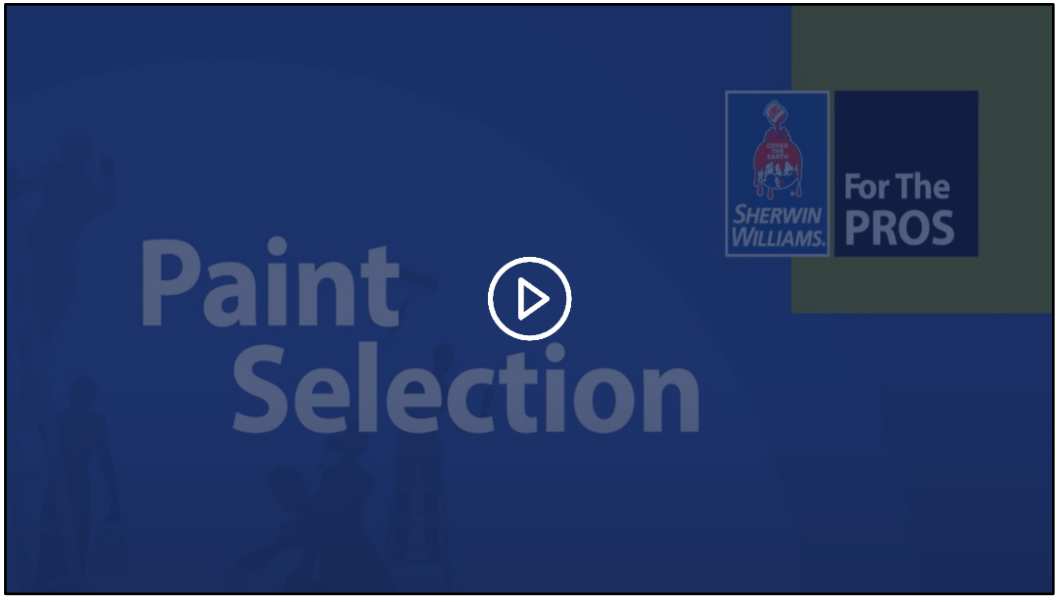
Instructor Notes:

Welcome to the Pro Painter's Institute Painter Training Program.

(Introduce yourself and explain your background)

(Review any housekeeping items: restroom locations, smoking areas, class expectations, etc.)

Throughout the week, I will be your contact. If something happens (like you're running late), call, text or email me to let me know *(write contact information on board or pass out cards).*



Instructor Notes:

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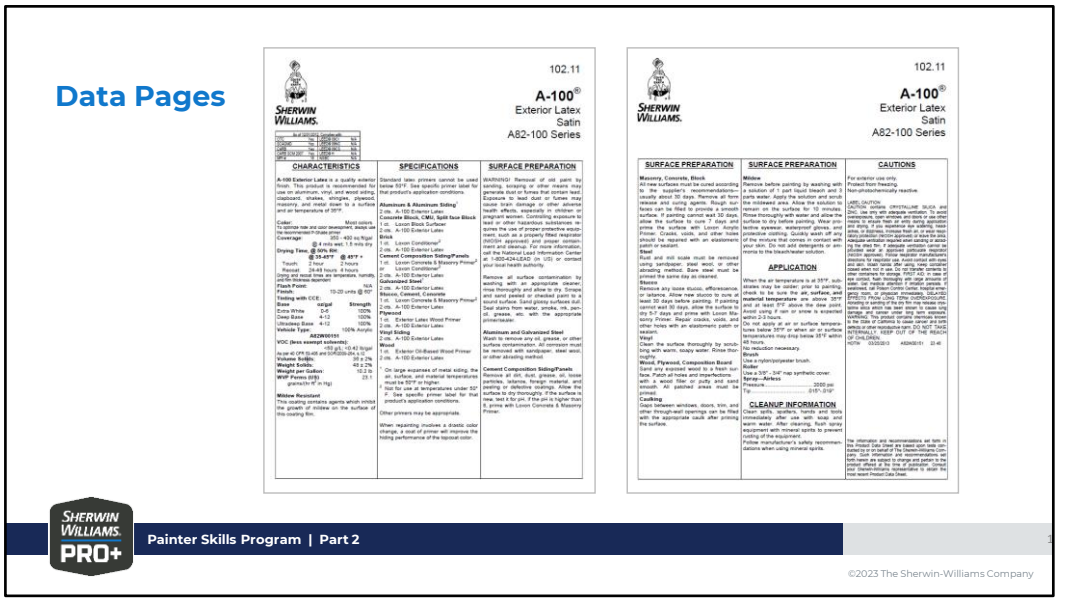


Instructor Notes:

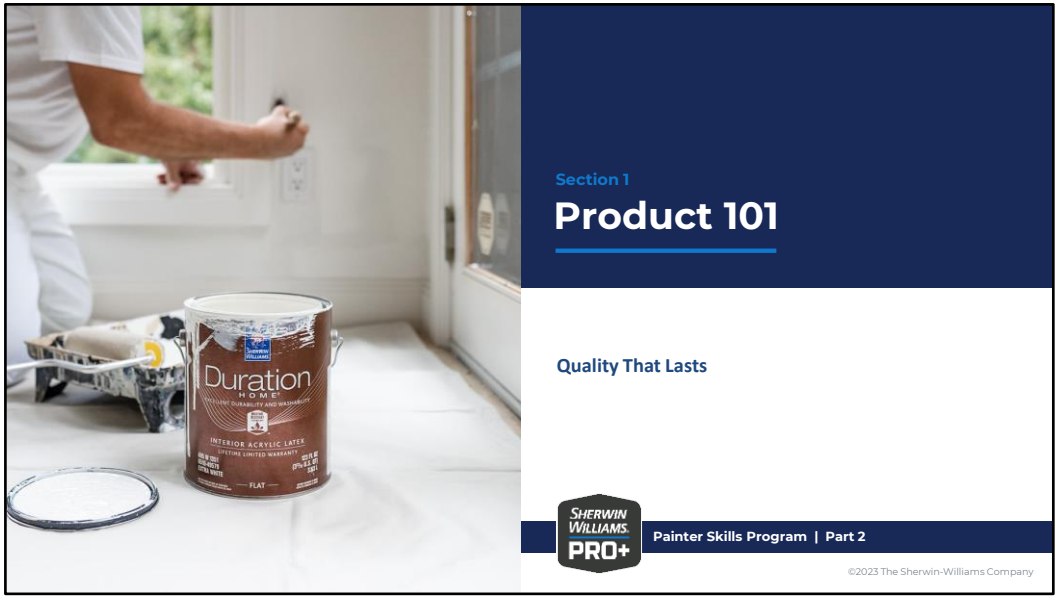
Participant Guide Part 2 (Page 5)

Each of our products has a data page associated with it.

The data page can tell you a variety of information, including

- Dry time
- Recommended application environments
- How thick the paint needs to be applied

It also outlines how the paint needs to be cleaned up.



<u>Instructor Notes</u>:

Need info here…

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

Instructor Notes:

Participant Guide Part 2 (Page 7)

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

Instructor Notes:

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

Instructor Notes:

Participant Guide Part 2 (Page 7)

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

Instructor Notes:

Participant Guide Part 2 (Page 7)

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.

Instructor Notes:

Participant Guide Part 2 (Page 8)

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

Instructor Notes:

Participant Guide Part 2 (Page 8)

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

Instructor Notes:

Participant Guide Part 2 (Page 9)

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

Instructor Notes:

Participant Guide Part 2 (Page 9)

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® Pigments

Instructor Notes:

Participant Guide Part 2 (Page 10)

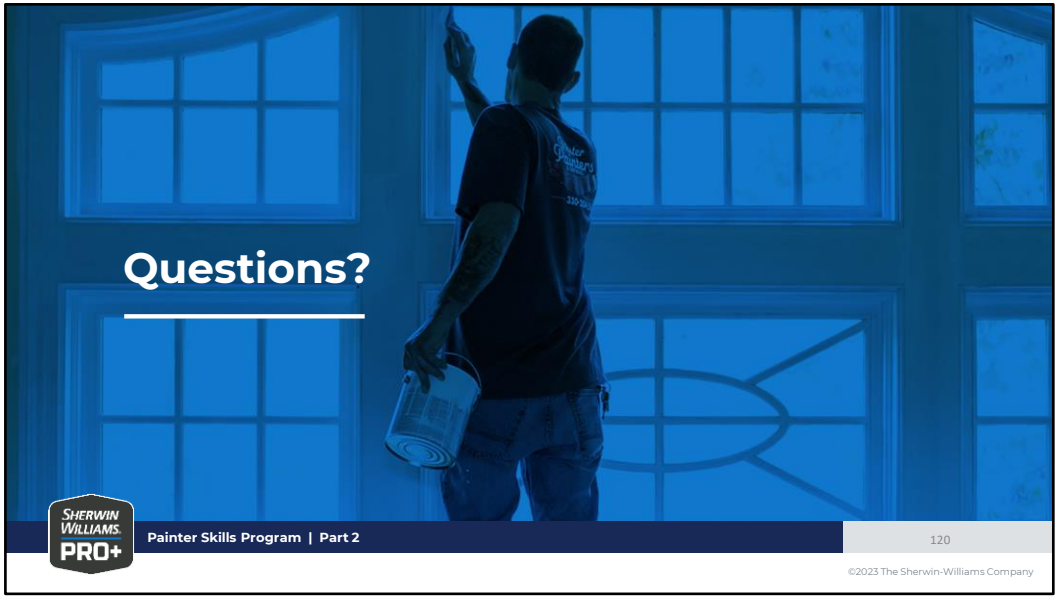
Emerald Urethane Trim Enamel Interior/Exterior Waterbased

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

Instructor Notes:

Participant Guide Part 2 (Page 10)



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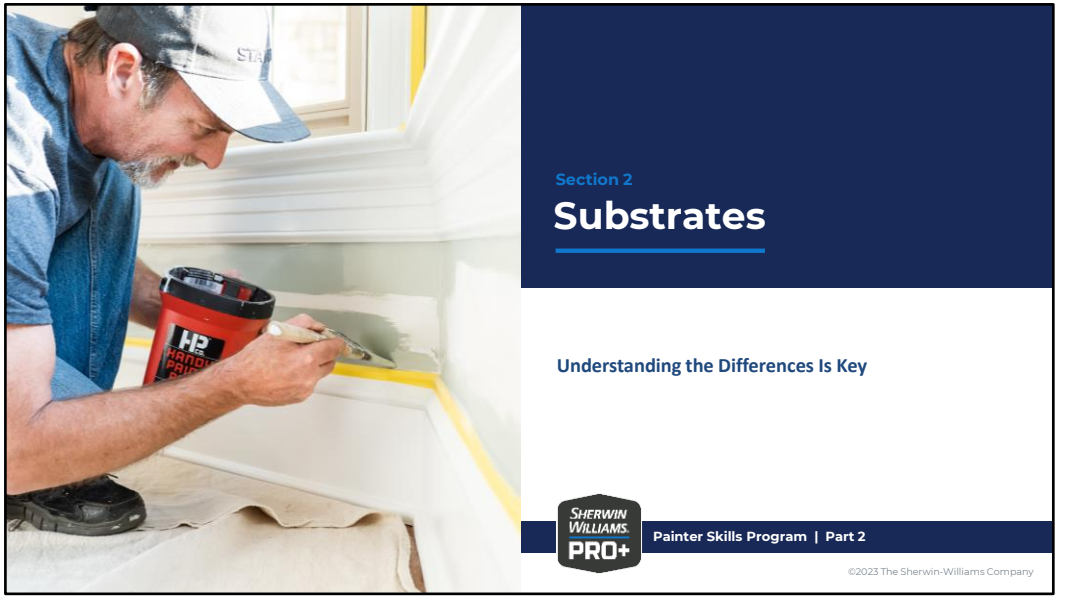


Instructor Notes:

Participant Guide Part 2 (Page 12)

Now, let's talk about the surfaces that can be painted, sometimes called a **substrate**.

Substrates

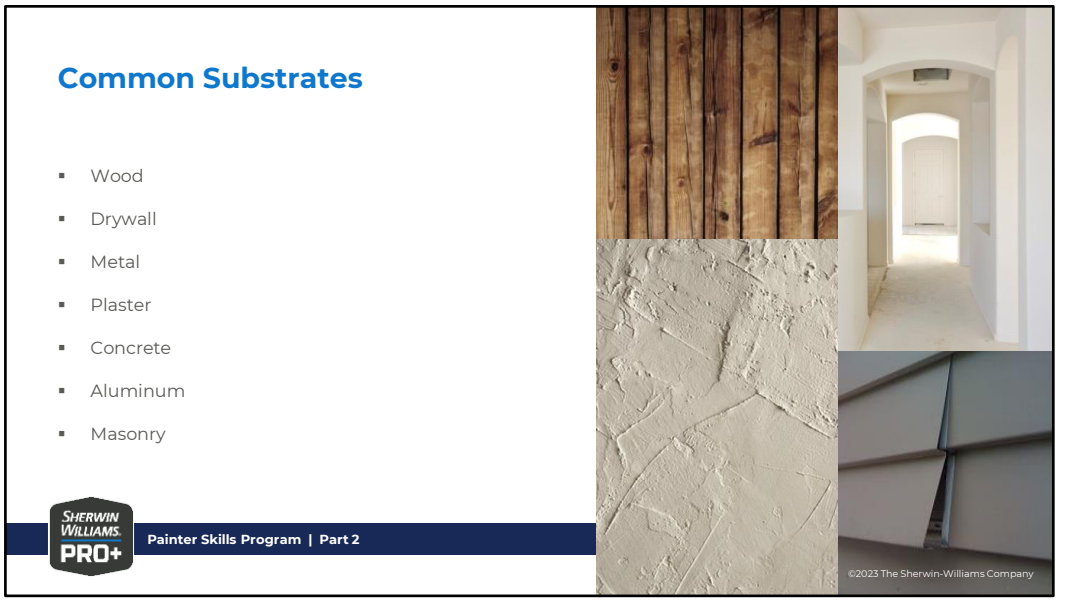
How many can you find here?

Instructor Notes:

Activity:

Ask the group to walk around the training facility and identify (in their teams) as many substrates as they can.

Come back and share as a group.



Instructor Notes:

Participant Guide Part 2 (Page 12)

There are many common substrates.

Today, we will review the things to look for relative to each substrate and cover a few things to be aware of that are unique to specific substrates.

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

Instructor Notes:

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

Instructor Notes:

Participant Guide Part 2 (Page 12)

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

Instructor Notes:

Participant Guide Part 2 (Page 13)

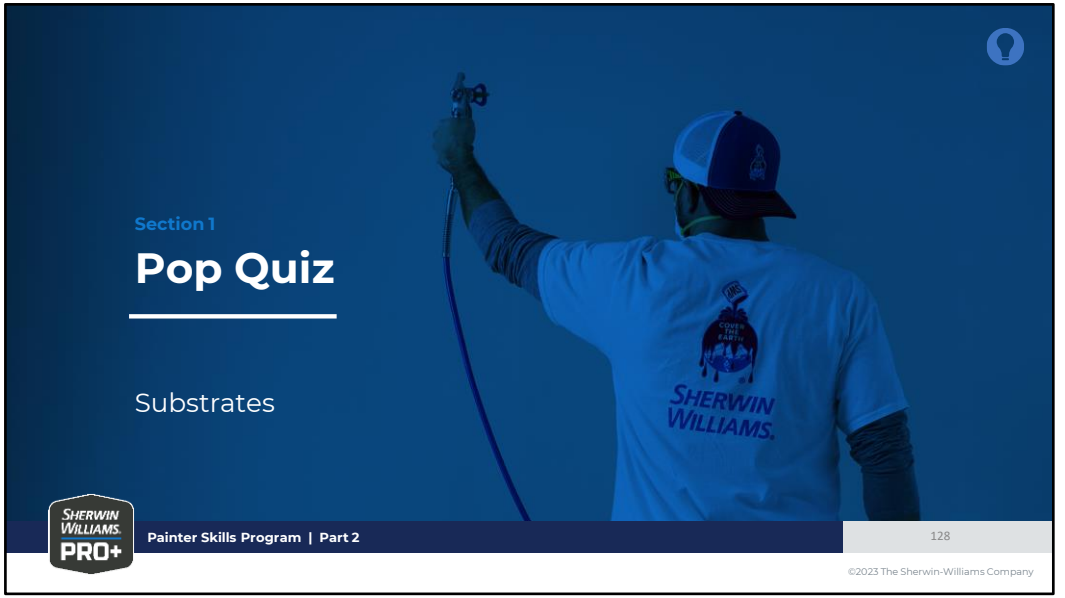
Common Substrates

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

Instructor Notes:

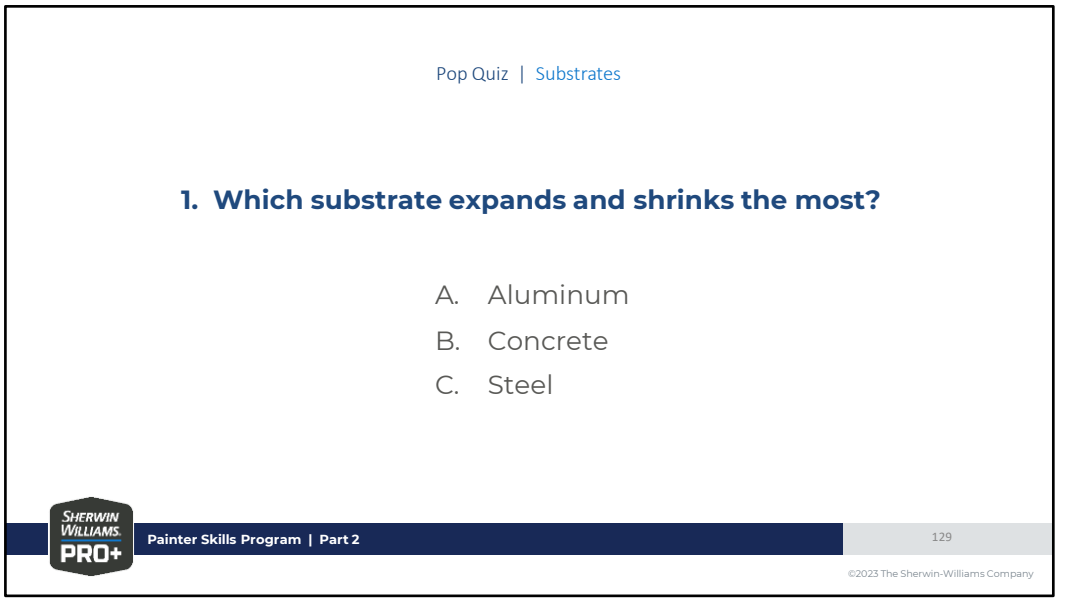
Participant Guide Part 2 (Page 13)



Instructor Notes:

Time to test your knowledge on what we've covered so far!

Your team is made up of the group at your table! We will keep score — the group that scores the highest on the quizzes this week will receive a prize at the end of the week.



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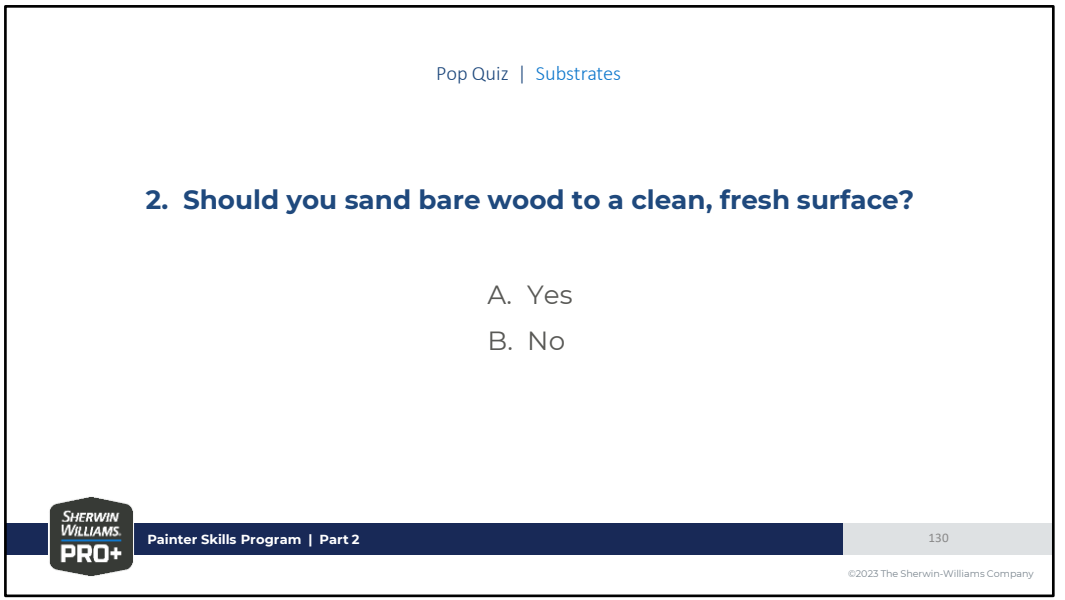

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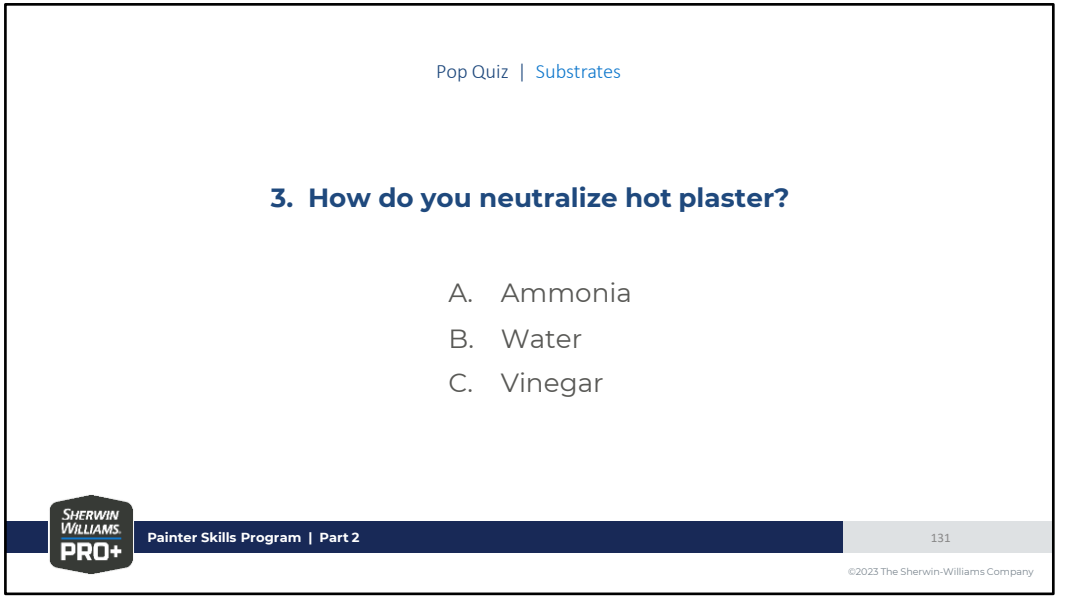

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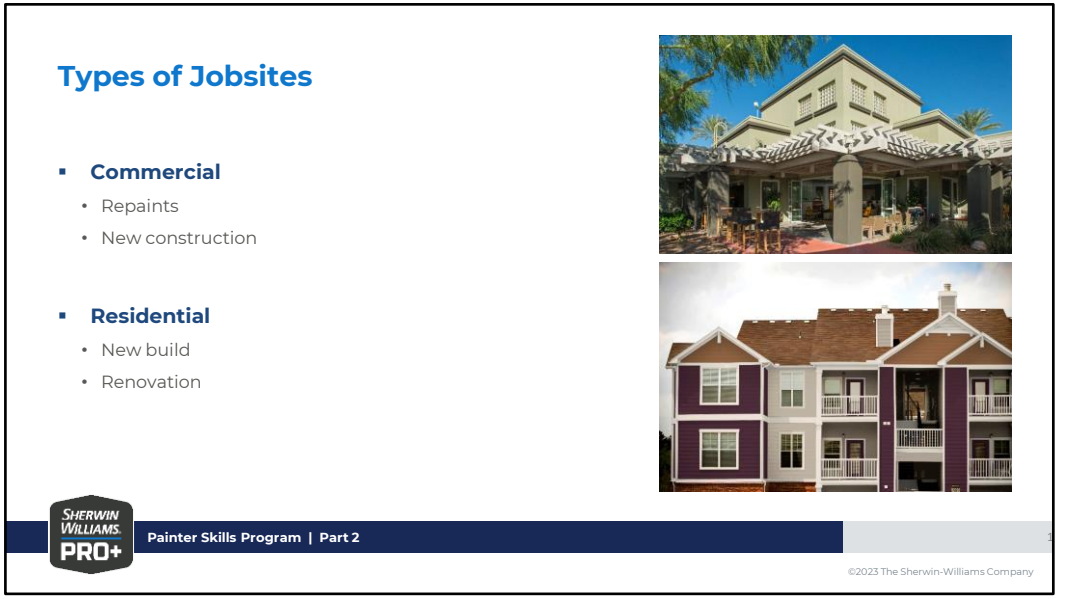


<u>Instructor Notes</u>:
Participant Guide Part 2 (Page 14)

Today, we're going to specifically spend time talking about products that are likely to be used on two types of jobsites:

- Commercial
- Residential

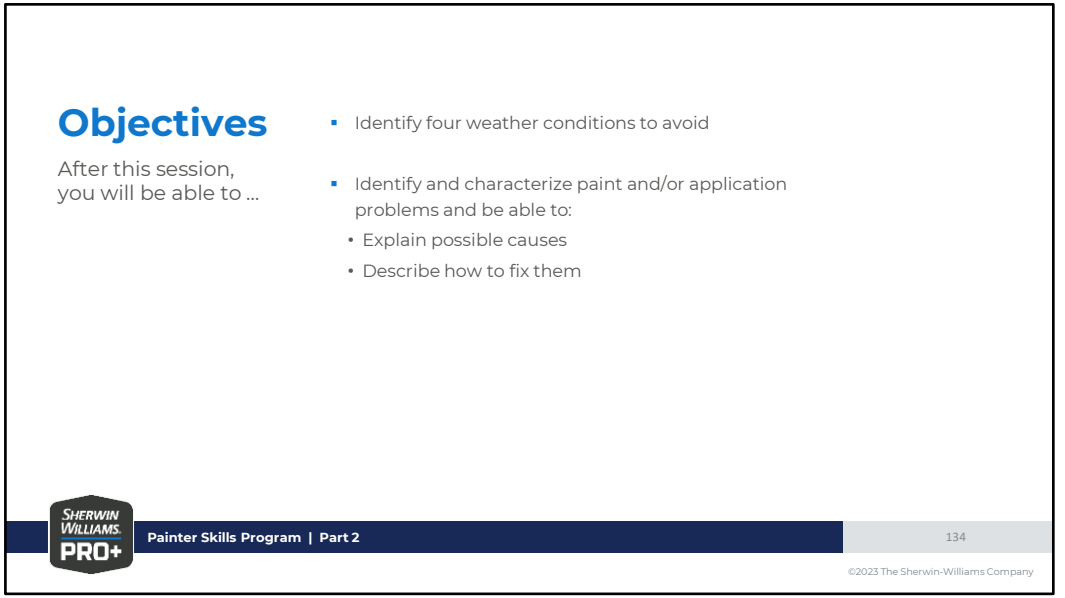
When we talk about **Commercial** jobs, this could mean an office repaint or even a new office building being built.

When we refer to **Residential**, there are new homes being built or renovations to current homes.

Instructor Notes:

Participant Guide Part 2 (Page 15)

In this section, we'll look at some of the problems that can occur with your paint job if you don't follow the guidelines we've laid out so far.

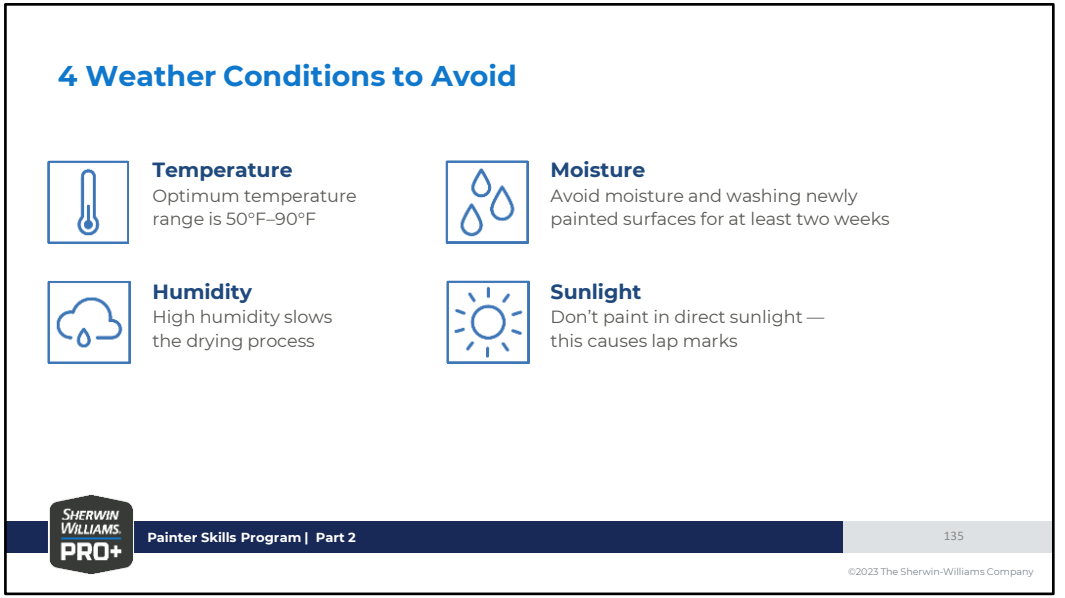


Instructor Notes:

After we've completed this section, you'll be able to:

Name four weather conditions to avoid and identify and characterize some exterior paint application problems and be able to:

- Explain some possible causes
- Describe how to fix them



Instructor Notes:

Participant Guide Part 2 (Page 16)

The best materials in the world and the right know-how all go to waste if the weather conditions aren't conducive to getting a quality paint job. Although you'll be working indoors in most cases, it's important to mention these weather factors because they will affect your job, too — just not as much as an exterior job.

Let's look at some of the conditions that can get in the way of a quality paint job.

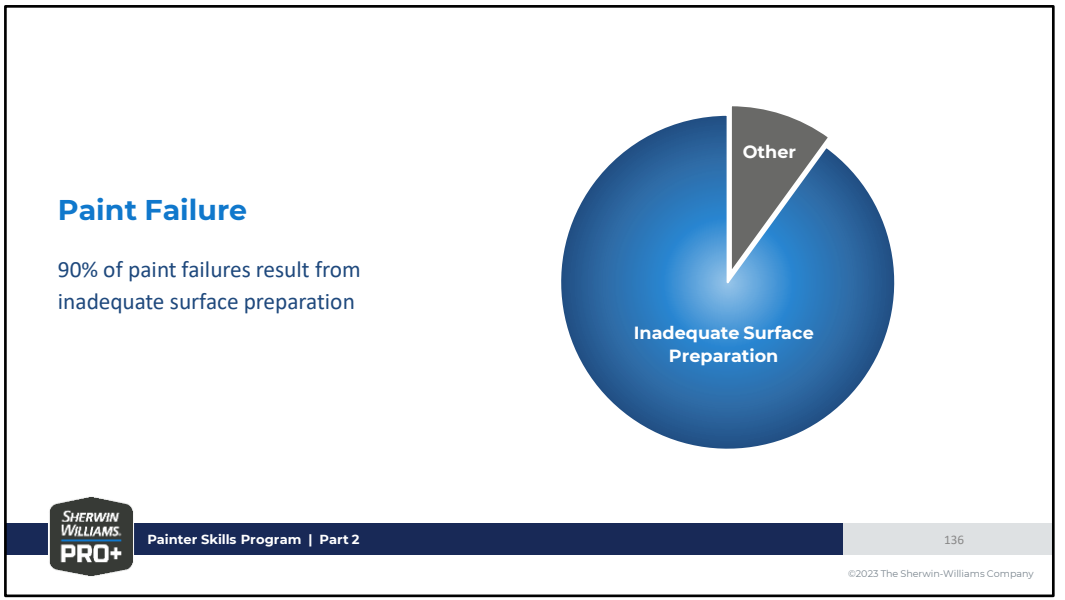
To be effective, paint relies on the absence of extreme temperature, high humidity, moisture and direct sunlight.

Optimum painting temperatures are between 50°F and 90°F. Higher temperatures speed drying time, making it difficult to maintain a wet edge and causing the dark strips where sections overlap. Lower temperatures slow down drying time, meaning the paint takes too long to form a solid film, which allows moisture underneath and causes blisters and peeling. It's not just the air temperature — you must also consider the temperature of the surface to be painted.

High humidity also slows the drying process. If low temperature or high humidity catches you unexpectedly, be sure to allow additional time for drying before applying a second coat.

Contact with any wetness on the newly painted surface should be avoided until the paint has completely dried. You should also avoid washing newly painted surfaces until at least two weeks after the paint has been applied.

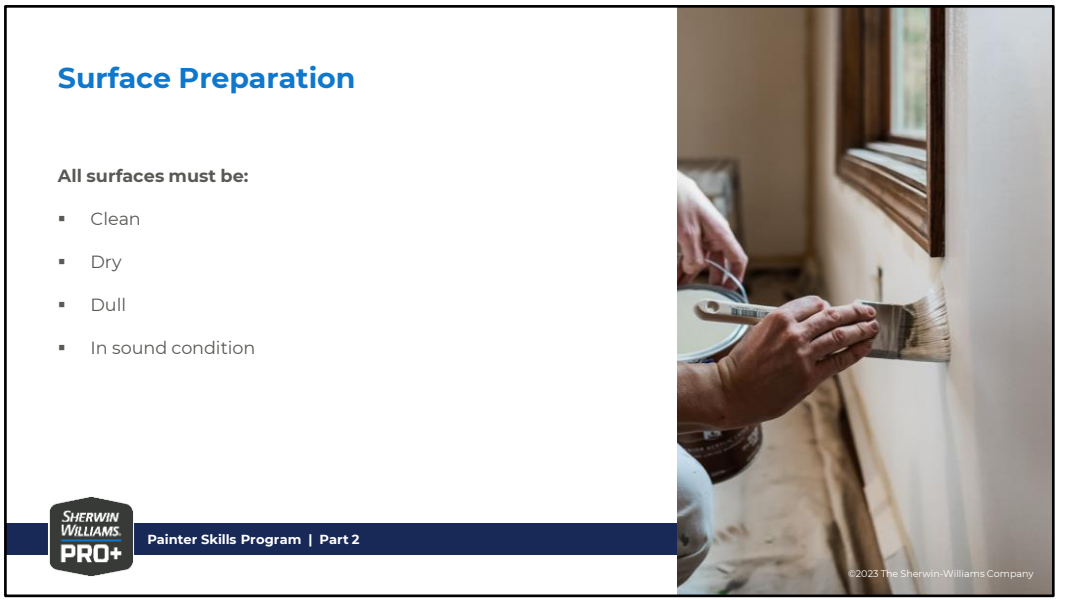
Direct sunlight speeds drying time, causing dark lap marks where sections overlap. This won't usually be an issue indoors but be aware if the sun is glaring on one wall or another. Start with one of the walls that's in the shade and work your way around the room.



Instructor Notes:

When we look at the reasons that paint fails, **90% are a result of inadequate surface preparation.**

Uncorrected surface problems, primarily moisture related, are the number one cause of paint failure. Simply painting over these problem areas is a futile exercise that costs additional time and money down the road. Proper attention to surface preparation prevents problems in most cases and produces a great-looking finish.



Instructor Notes:

Participant Guide Part 2 (Page 16)

Like we mentioned before, it's important for you to recognize and follow **these preparation factors for good paint adherence:**

- Clean surface
- Dry surface
- Dull (not glossy) surface
- Sound/stable surface

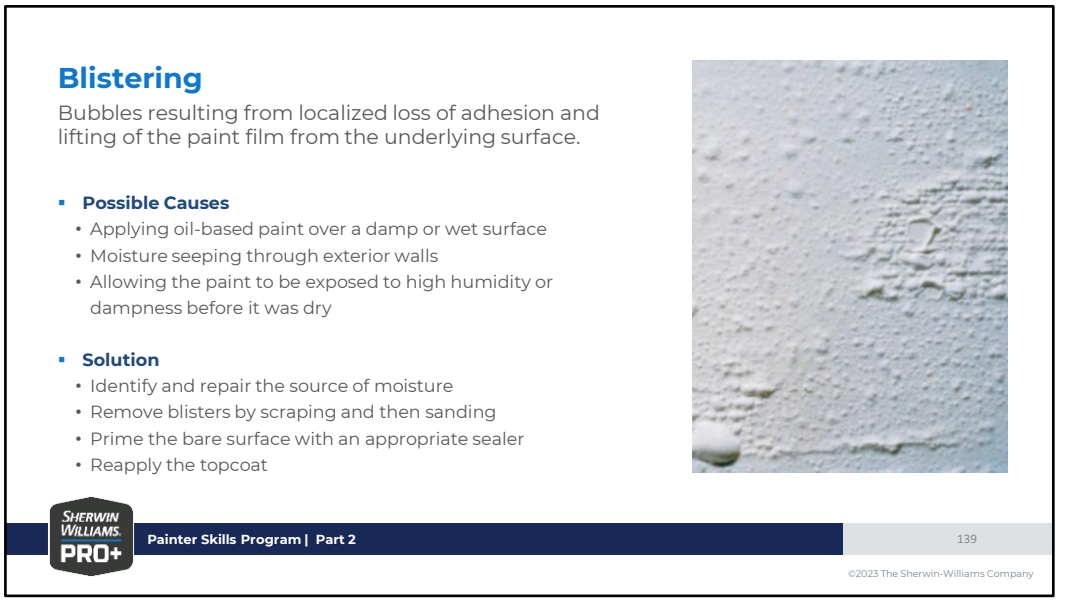
If you take these four items seriously, you can be assured of long-term satisfaction with your paint job.

Instructor Notes:

Unfortunately, not all situations can be ideal, and when paint problems occur, you need to be able to figure out what went wrong and how to correct it.

Some common interior paint problems we’ll discuss are:

(read list)



Instructor Notes:

Participant Guide Part 2 (Page 17)

Blistering describes the bubbles that form underneath a paint surface that ultimately cause a loss of adhesion of the paint film.

Some possible causes include:

- Applying oil-based paint over a damp or wet surface
- Moisture seeping into the home through the exterior walls
- Exposure of latex paint to high humidity or moisture shortly after the paint has dried, especially if there was inadequate surface preparation and/or poor ventilation in areas such as kitchens and bathrooms

To correct blistering, you must remove all the loose paint and then wash the areas with detergent, rinse and let dry. Then spot prime and reapply the finish coat.

Instructor Notes:

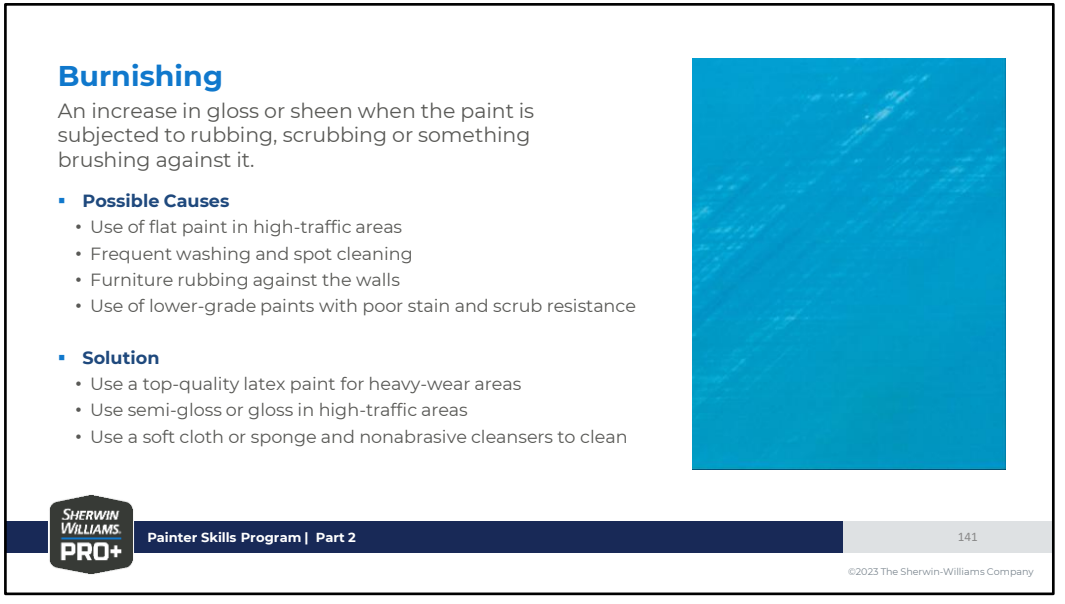
Participant Guide Part 2 (Page 17)

Blocking occurs when two painted surfaces stick together, like a door and a door jamb.

Some reasons for blocking may be:

- Not allowing sufficient dry time for the coat before closing doors or windows
- Using low-quality semi-gloss or gloss paints

To correct or prevent blocking, use top-quality semi-gloss or gloss acrylic latex paint. Low-quality latex paints can have poor block resistance, especially in warm, damp conditions. Follow paint label instructions regarding dry times. Acrylic latex paints generally have better early-block resistance than vinyl latex paints, alkyd or oil-based paints; however, alkyds develop superior block resistance over time. Application of talcum powder may relieve persistent blocking.



Instructor Notes:

Participant Guide Part 2 (Page 18)

Burnishing is an increase in the gloss or sheen of the paint film when it's subjected to rubbing, scrubbing or having an object brush against it.

Some possible causes of burnishing include:

- Use of flat paint in highly trafficked areas, where a higher sheen level would be practical
- Frequent washing and spot cleaning
- Objects (furniture, for example) rubbing against the walls
- Use of lower-grades paint with poor stain and scrub resistance

To prevent burnishing, you should paint heavy-wear areas that require regular cleaning (e.g., doors, windowsills and trim) with a top-quality latex paint, because this type of paint offers both durability and easier cleaning capability. In high-traffic areas, choose a semi-gloss or gloss rather than a flat sheen level. Clean painted surfaces with a soft cloth or sponge and nonabrasive cleansers.

Instructor Notes:

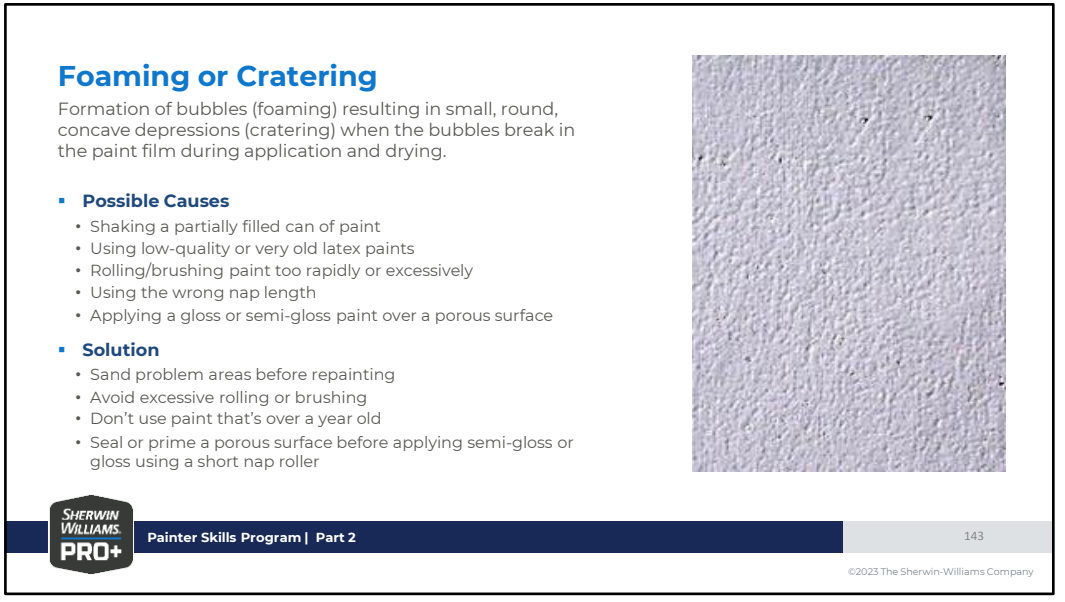
Participant Guide Part 2 (Page 18)

Cracking and flaking describes the splitting of a dry paint film through at least one coat as a result of aging, which ultimately will lead to complete failure of the paint. In its early stages, the problem appears as hairline cracks; in its later stages, flaking occurs.

Some reasons cracking and flaking occur are:

- Use of lower-quality paint that has inadequate adhesion and flexibility
- Overthinning or overspreading the paint
- Inadequate surface preparation or applying the paint to bare wood without first applying a primer
- Excessive hardening and embrittlement of alkyd paint as the paint ages

To correct cracking and flaking, remove loose and flaking paint with a scraper or wire brush, sanding the surface and feathering the edges. If the flaking occurs in multiple layers of paint, use of a filler may be necessary. Prime bare wood areas before repainting. Use a top-quality primer and topcoat to prevent a recurrence of the problem.



Instructor Notes:

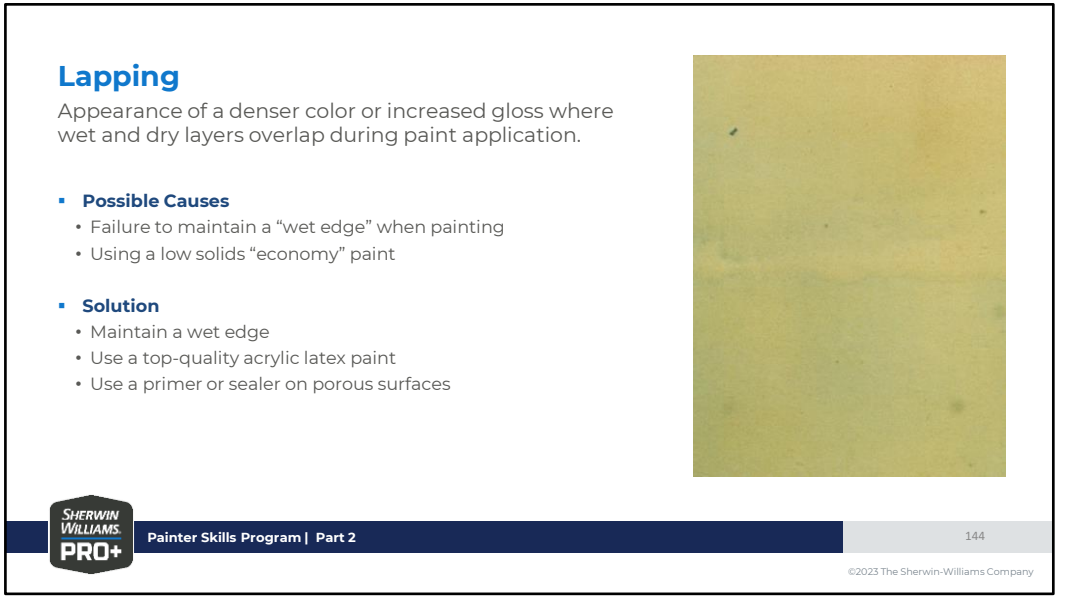
Participant Guide Part 2 (Page 19)

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

Some possible causes of foaming and cratering could be:

- Shaking a partially filled can of paint
- Using low-quality paint or very old latex paints
- Applying (especially rolling) paint too rapidly
- Using a roller cover with the wrong nap length
- Excessively rolling or brushing the paint
- Applying a gloss or semi-gloss paint over a porous surface

It's important to keep in mind that all paints will foam to some degree during application; however, higher-quality paints are formulated so the bubbles break while the paint is still wet, allowing for good flow and appearance. Avoid excessive rolling or brushing or using paint that is more than a year old. Apply gloss and semi-gloss paints with a short nap roller and apply the appropriate sealer or primer before using such paint over a porous surface. Problem areas should be sanded before repainting.



Instructor Notes:

Participant Guide Part 2 (Page 19)

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

In order to prevent lapping, it’s important to maintain a wet edge when painting by applying paint toward the unpainted area and then back into the just painted surface. This technique (brushing or rolling from "wet to dry" rather than vice versa) will produce a smooth uniform appearance. Using a top-quality acrylic latex paint makes it easier to avoid lapping problems because higher solids (pigments and binder) content makes lapped areas less noticeable. If substrate is very porous, it may need a primer/sealer to prevent paint form drying too quickly and reducing wet edge time. Alkyd paints generally have superior wet edge properties.

Instructor Notes:

Participant Guide Part 2 (Page 20)

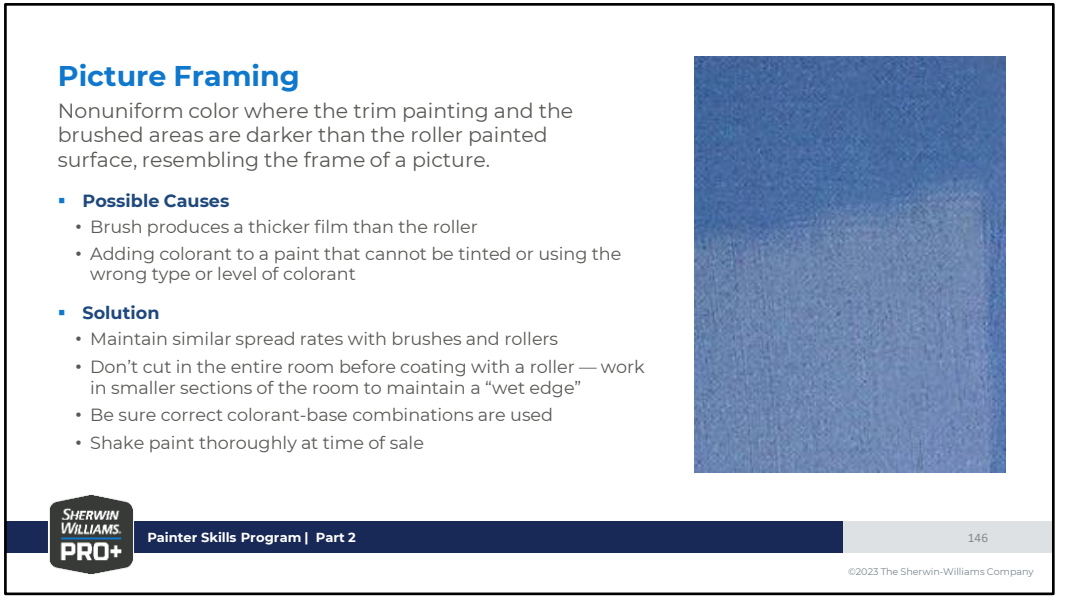
Mildew

Black, gray or brown spots or areas on the surface of paint or caulk. Mildew forms most often on areas that tend to be damp or receive little or no direct sunlight (e.g., bathrooms, kitchens and laundry rooms).

Possible Causes:

- Using an alkyd or oil-based paint or a lower-quality latex paint
- Failing to prime a bare wood surface before applying the paint
- Painting over a substrate or coating on which mildew has not been removed

To correct, you must remove all mildew from the surface by scrubbing with a diluted household bleach solution (one part bleach, three parts water) while wearing rubber gloves and eye protection. Rinse thoroughly. To protect against mildew, use a top-quality latex paint and clean, when necessary, with bleach/detergent solution. You may also want to consider installing an exhaust fan in high-moisture areas.



Instructor Notes:

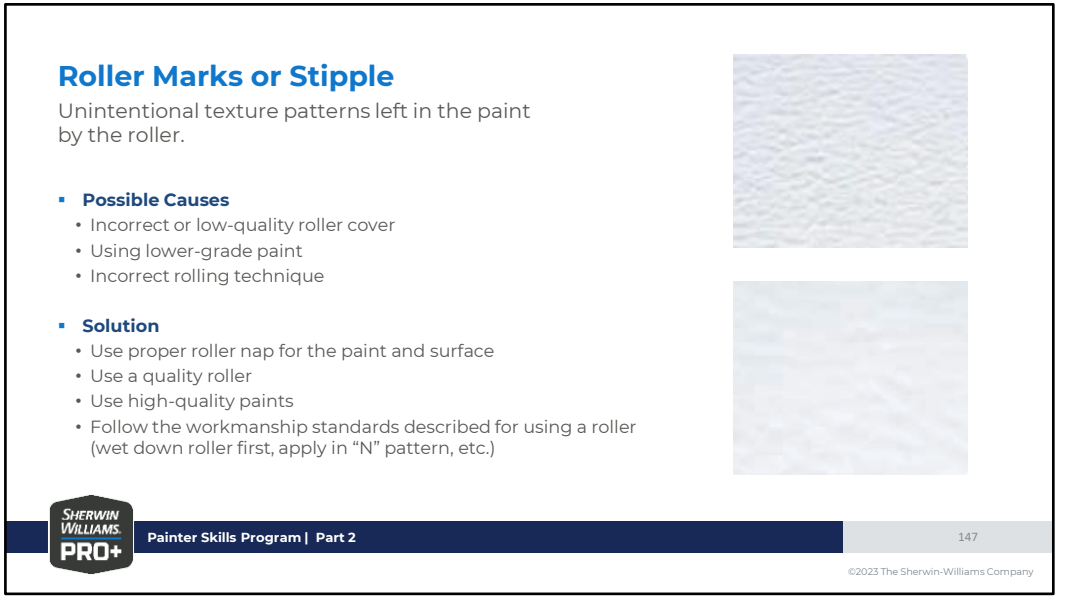
Participant Guide Part 2 (Page 20)

Picture Framing

An effect of nonuniform color that can appear when a wall is painted with a roller but is brushed at the corners. The brushed areas generally appear darker, resembling the "frame" of a picture. Also, sprayed areas may be darker than neighboring sections that are brushed or rolled. Picture framing can also refer to sheen effects.

Picture framing is usually a hiding (coverage) effect. Brushing will generally result in lower spread rates than rolling, producing a thicker film and more hiding. Another cause of picture framing is adding colorant to a paint that cannot be tinted or using the wrong type or level of colorant, resulting in a variation in color, depending on the application method.

To prevent picture framing, make sure spread rates with brushes and rollers are similar. Don't cut in the entire room before coating with a roller. Work in smaller sections of the room to maintain a "wet edge." With tinted paints, be sure the correct colorant-base combinations are used. Factory colors, as well as in-store tints, should be thoroughly shaken at time of sale.



Instructor Notes:

Participant Guide Part 2 (Page 21)

Roller Marks / Stipple

An unintentional textured pattern left in the paint by the roller.

There are many possible causes of roller marks and stippling, and most of them relate to what we learned earlier in *Application & Applicators*:

- Using incorrect roller cover
- Using lower-grade paint
- Using a low-quality roller
- Using an incorrect rolling technique

Solutions should all sound familiar:

- Use the proper roller cover; avoid using a nap that's too long for the paint and the substrate.
- Use a quality roller to ensure adequate film thickness and uniformity.
- High-quality paints tend to roll on more evenly due to their higher solids content and leveling properties.
- Pre-dampen roller covers used with latex paint and shake out excess water.
- Don't let paint build up at roller ends.
- Begin rolling at a corner near the ceiling and work down the wall in 3-foot square sections.
- Spread the paint in a zigzag "N" pattern, beginning with an upward stroke to minimize spatter. Then, without lifting the roller from the surface, fill in the zigzag pattern with even, parallel strokes.

Instructor Notes:

Participant Guide Part 2 (Page 21)

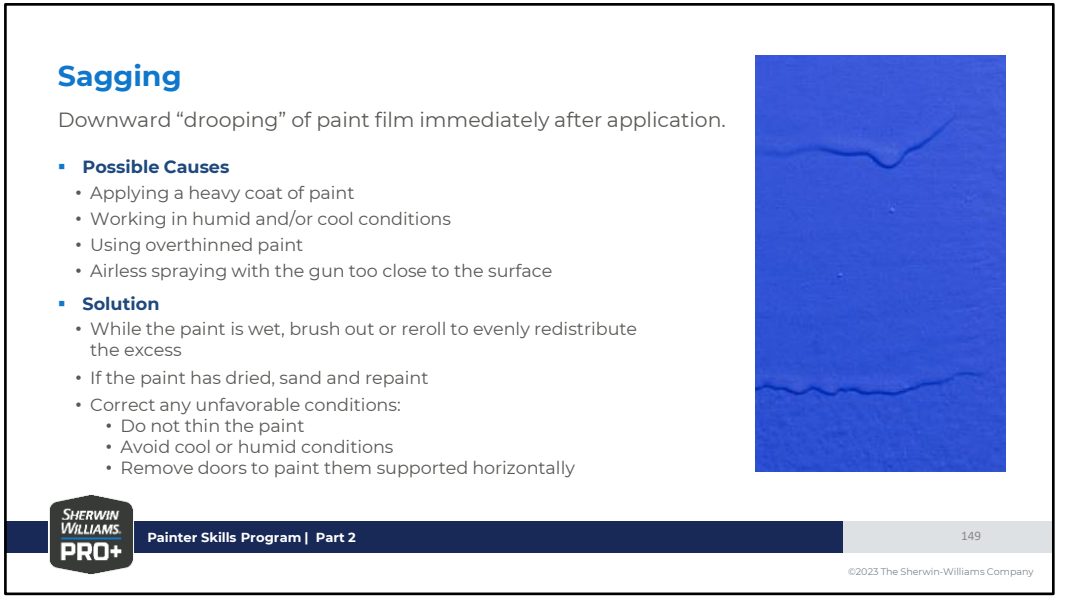
Roller Spattering

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

Possible Causes

- Using exterior paint on an interior surface
- Using lower-grade latex paints

To prevent spattering, it's important to note that higher-quality paints are formulated to minimize spattering. Using high-quality rollers, which have proper resiliency, further reduces spattering. In some cases, a quality wall paint may be preferred for ceiling work, for maximum spatter resistance. Overloading the roller with paint will result in excess spatter, as will overworking the paint once it is applied to a substrate. Working in 3-foot square sections, applying the paint in a zigzag "N" pattern and then filling in the pattern will also lessen the likelihood of spattering.



Instructor Notes:

Participant Guide Part 2 (Page 22)

Sagging

Downward "drooping" movement of the paint film immediately after application, resulting in an uneven coating.

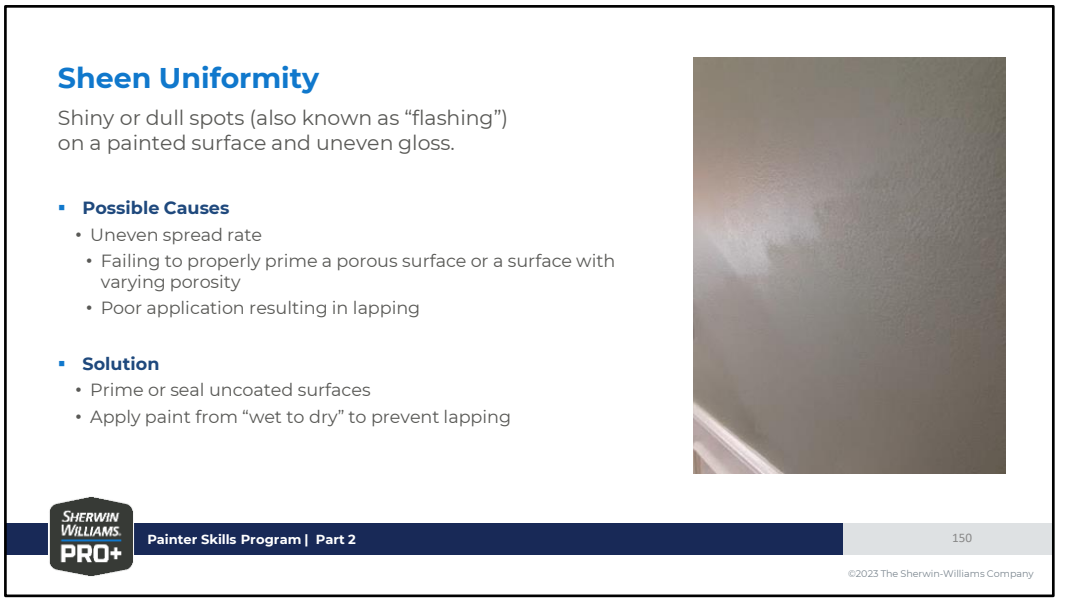
Possible Causes

- Applying a heavy coat of paint
- Applying in excessively humid and/or cool conditions
- Applying overthinned paint
- Airless spraying with the gun too close to the substrate being painted

To correct sagging, if the paint is still wet, immediately brush out or reroll to evenly redistribute the excess. If the paint has dried, sand and reapply a new coat of top-quality paint.

Also, be sure to correct any unfavorable conditions:

- Do not thin the paint
- Avoid cool or humid conditions
- Sand glossy surfaces
- Apply paint at its recommended spread rate
- Avoid "heaping on" the paint. Two coats of paint at the recommended spread rate are better than one heavy coat, which can also lead to sagging
- Consider removing doors to paint them supported horizontally



Instructor Notes:

Participant Guide Part 2 (Page 22)

Poor sheen uniformity looks like shiny spots or dull spots (also known as "flashing") on a painted surface or an uneven gloss.

Possible causes may be:

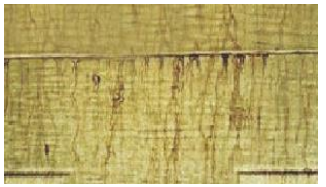
- Uneven spread rate, which means that you applied the paint heavier in some areas than in others
- Failing to properly prime a porous surface or a surface with varying degrees of porosity
- Poor application resulting in lapping

In order to prevent and correct poor sheen uniformity, bare surfaces should be primed/sealed before applying the topcoat to ensure a uniformly porous surface. Without the use of a primer or sealer, a second coat of paint will more likely be needed. Make sure to apply paint from "wet to dry" to prevent lapping. Often, applying an additional coat will even out sheen irregularities.

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

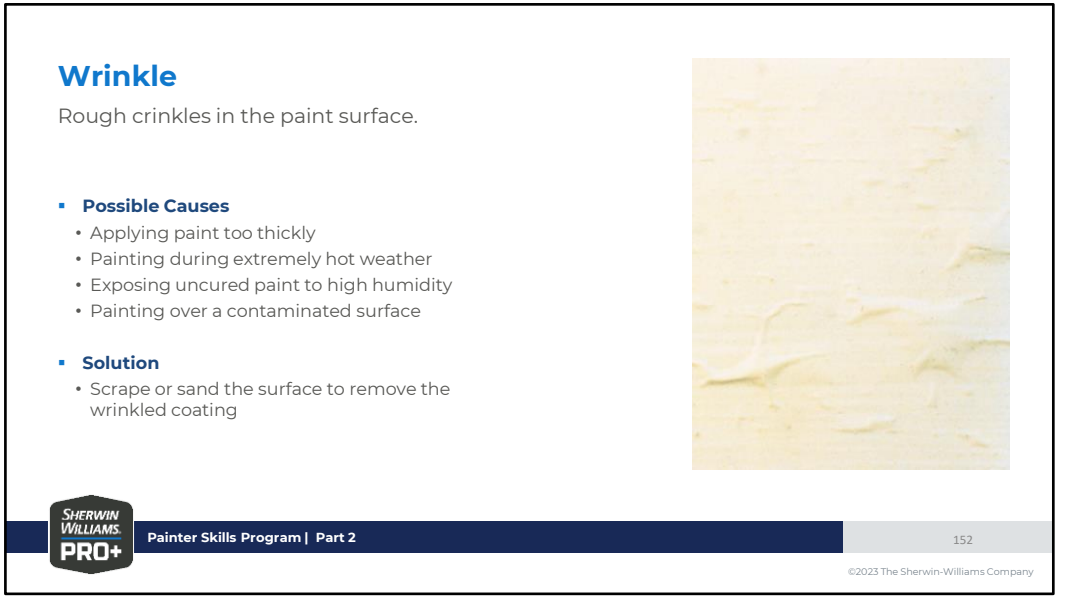


Instructor Notes:

Participant Guide Part 2 (Page 23)

Surfactant leaching is concentrated residue left behind after paint dries, causing staining, unsightly run, and gloss patterns. This problem most often occurs when you are painting during hot and humid days and the evenings are dry and cool. This allows the painted surface to cool and form dew. This accumulated moisture can "leach out" various paint components, causing the discoloration known as "surfactant leaching."

To correct surfactant leaching, flush the paint with clean water immediately before the stains have time to set up or harden. Scrubbing lightly with a soft brush is acceptable. If stains cannot be removed this way, you'll need to repaint during more favorable weather conditions.



Instructor Notes:

Participant Guide Part 2 (Page 23)

Wrinkling is a rough, crinkled paint surface, which occurs when uncured paint forms a "skin."

Some possible causes are:

- Applying paint too thickly (more likely when using alkyd or oil-based paints)
- Painting during extremely hot weather or cool damp weather, which causes the paint film to dry faster on the top than on the bottom
- Exposing uncured paint to high humidity levels
- Painting over a contaminated surface (for example, dirt or wax)

Solution

- Scrape or sand the substrate to remove he wrinkled coating.
- If using a primer, allow it to dry completely before applying the topcoat.
- Repaint (avoiding temperature/humidity extremes), applying an even coat of top-quality interior paint.

Activity: Paint Problems



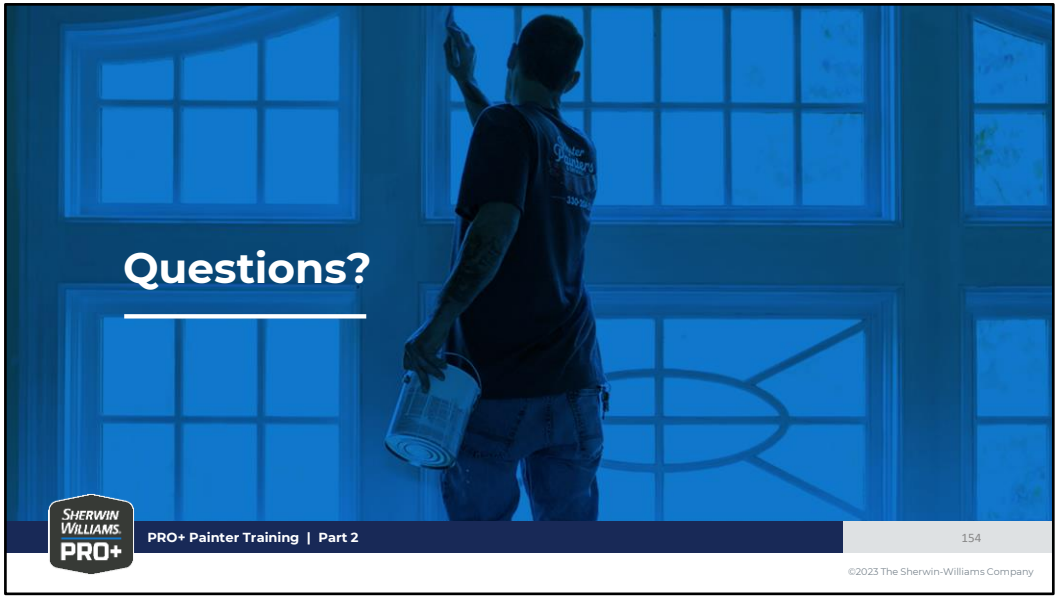
Instructor Notes:

Participant Guide Part 2 (Page 24)

Assign each group one of the three paint problems above.

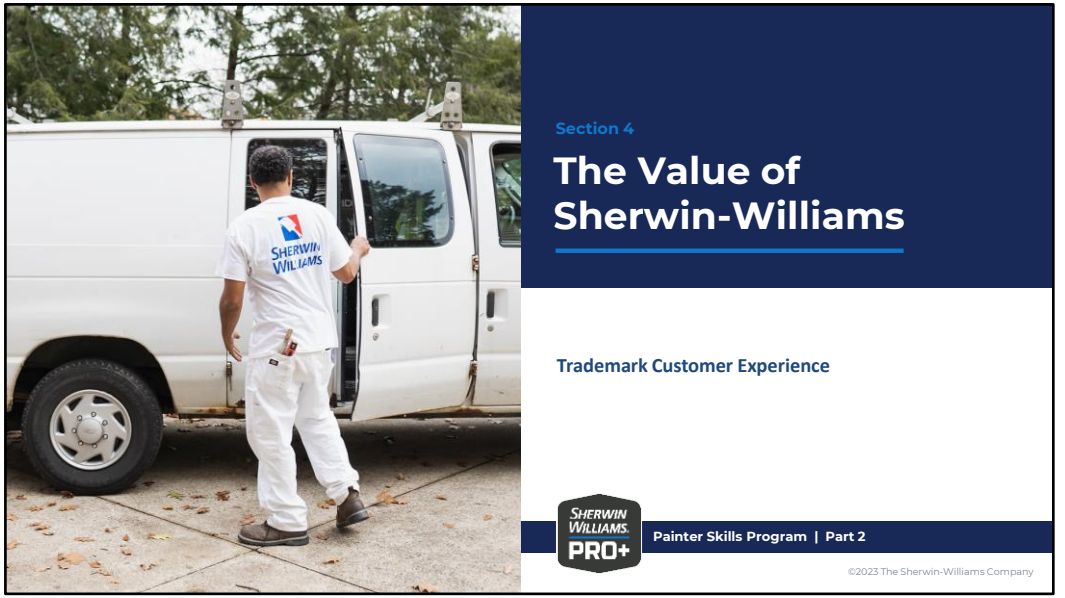
Have them diagnose the problem, explain why it may have happened and outline how to fix it.

Share as a group.



Instructor Notes:

What didn't we cover that you still have questions about?

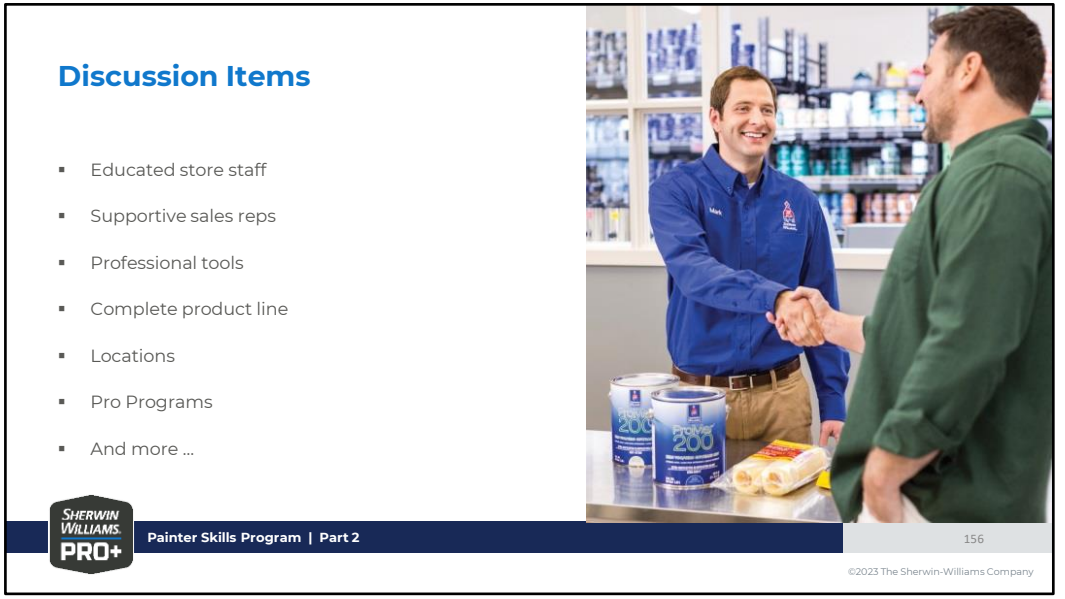


Instructor Notes:

Participant Guide Part 2 (Page 25)

Now, let's switch gears and talk about

Sherwin Williams and the valuable resource and tools we have available to you — our customer.



Instructor Notes:

Participant Guide Part 2 (Page 26-28)

Discuss each item, provide as many brochures/selling aids as possible.

- Educated store staff
- Supportive sales reps
- Professional tools (Spray, for prof. contractor, applicator)
- Complete product line
- Locations
- Pro Programs (ProDiscounts™ — all SW Pro Info)
- Delivery service
- Professional trade accounts
- Interior design consultants
- Custodian
- ProDiscounts
- ColorSnap

Sherwin-Williams Sales Representative

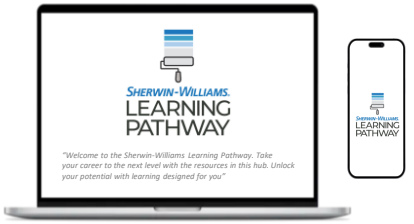
- Product Recommendations
- Ability to visit contractors on their projects
- Assist with Marketing Materials
- Support Contractors to Close the Sale
- Support from the credit department

Instructor Notes:

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.

Instructor Notes:

Instructor Notes:

What questions do you have?