esene TradeLines

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With the internet the world seems to have become a smaller place. We can all share ideas and information across town, across country and across the world faster than ever. Part of the benefit of this is we can also make the most of the experiences of others and learn from their mistakes, which will hopefully save us time and frustration later. This issue we have an in depth article for you which has some interesting insights into colour and is well worth a read $\dots~$ $\ref{eq:constraint}$



Painting the hard way

With the cold starts over winter, it can be tempting to either stay in bed or just stay snuggled up in a dressing gown. Still as we all know, when it comes to painting, most shortcuts end up creating more work than they save, as one of our Resene staff found out the hard way...

"Never decide to paint a room while you are still in your dressing gown and slippers as I once did.

One morning I got up and decided my bedroom was ready for the second topcoat. Not wanting to get dressed right then I decided to paint in my PJs. Up the ladder I go and start painting. As I went to move along the wall my slipper slipped off. As I was lying on the floor with paint all over me I realised I had tried to grab the wall on my way down and across the wall were my fingermarks going from the top in an arch all the way to the bottom. Lesson learnt. I got dressed and finished the job."



Tips, tricks and stories

Remember to give us your best decorating stories and advice and be in

Enter the Resene great professional decorating story and tip competition and make the most of your chance to enjoy fame and fortune just for sending us in your best painting/decorating tip or funny story. We've got thousands of dollars worth of prizes to give to commercial customers with a worthy decorating story or tip to share.

Get your decorating tip or funny story into your local Resene ColorShop, post to Resene Marketing, PO Box 38242, Wellington Mail Centre, Lower Hutt 5045, New Zealand or email to update@resene.co.nz with subject header - Tips Comp by 31 July 2014. The best will score cash, the rest will score prizes, the ones who don't enter will miss out completely!

When the colour makes the paint fail

This article was written by PQA Inspector Dave Lick and an excerpt is reprinted with permission from an international MPI (Master Painters Institute) newsletter. MPI content describes best practices for commercial, institutional, and light industrial painting.

Here's a scenario known to frustrate all parties on a paint project - and although this incident involved new construction, the same problem can surface on a maintenance repaint:

- The architect designed a school the latest of many done by the firm.
- The specification writer prepared the detailed spec.
- The colour consultant released the colour schedules.
- The general contractor had the project nearing completion.
- The paint contractor prepared to start application.
- The paint store tinted the paint order to the selected colours.
- The specified paint was applied.

- The students came to school.
- The surface marked excessively, prompting students to further mar the finish.
- The school board demanded answers.

What happened? Who is responsible?

Not my fault

The architect and the specification writer are approached first. They respond that the specified semi-gloss high-performance architectural latex (a product approved under MPI #141) had been used with considerable success on school after school with no such problem. In fact, MPI's High-Performance Architectural Latex standards (MPI #138, #139, #140, and #141) are designed to be its highest-performing interior latex standards.

The painting contractor is approached next. He responds that he followed the spec and purchased the specified semi-gloss latex coating, tinted to the colour selected.



>> The paint manufacturer is up next. He insists that the proper material was supplied and tinted with universal colourants (which are now increasingly zero VOC) to the colour chip selected by the colour consultant. The paint batch was checked at the lab and found to meet spec. A drawdown was made, and the colour was found to be within the acceptable tolerance range.

The challenges of deep tones

So what happened?

The key to the answer is that the semi-gloss latex required the addition of about 15 ounces of universal colorants to the base to achieve the desired colour.

Too much of most universal or glycol-based colorants can have an adverse effect on a paint's properties, including a reduction in abrasion and mar resistance; a drop in sheen from semi-gloss to low gloss; delayed drying time (sometimes twice as long as expected); and poor hiding that can mean extra coats

So, using deep colours can affect paint performance as well as the project's ability to meet schedule, budget and aesthetic requirements. Since deep hues are in vogue with today's design community, here are guidelines for successfully specifying and applying these materials.

How tinting affects paint performance

Deep colours affect paint performance in two ways:

- Colour pigments are softer than white pigments; and
- In-store colourant systems can change the characteristics of the paint.

Colour v. white pigments

A good white paint typically has greater resistance to abrasion and marking than deep tints and accent colours do, because the clear bases used for deep colours lack the titanium dioxide (TiO2) that makes white paint white.

But TiO2 is not just a whitener. It's harder than most colour pigments. That hardness makes a big difference in the paint's resistance to impact and marking. So a paint film loaded with TiO2 will be more robust than one loaded with soft colour pigments.

The nature of in-store colourants

The vast majority of colorants that a store uses to tint your paint consist of powdered pigment dispersed in a liquid that contains glycols and surfactants (even with zero-VOC systems). So adding substantial quantities of material (e.g. 15 ounces per gallon) that will become a permanent part of the paint film can, for all practical purposes, change the paint formulation.

One readily noticeable difference may be a substantial increase in dry time, due to all of that non-drying glycol/surfactant being added to the can.

Matching another manufacturer's colour

The problem can be exacerbated when a paint store is asked to match a colour chip from a different manufacturer.

We realize that this happens all the time, but be advised that a paint company designs its bases and tint systems to produce its own colour system – not that of a competitor. Trying to match another company's deep colours may require adding excessive tint base, leading to all the problems described above: a drop in sheen, delayed dry times, weak hiding power, and reduced resistance to burnishing and marking.

Most store reps running the tint machines are aware that adding excessive colourant may degrade the paint's properties and still not precisely match the competitor's chip. However, when an anxious customer asks for more colorant because the shade "isn't quite right," the rep understandably finds it difficult to say no, and the customer generally gets his way.

Other issues

The nature of the pigment can also affect performance. For example, some colour systems create darker browns by adding yellows in the tinting process. On a building exterior, southern exposure walls that are exposed to more U.V. light may exhibit excessive fading.

Other colour systems, however, may obtain the same dark brown with alternative colour mixtures or pigments, and the result is a very colourfast finish.

Tips for applying deep tones

A well-meaning contractor may believe that deep – and accent-coloured

paints require four, five or even six coats to achieve hiding. Here are options to avoid this trap.

- Ask if the paint supplier can recommend a primer or intermediate coat that will provide optimal hiding underneath the colour specified.
- Learn which undercoat colours enhance the hiding power of which topcoat colours. For example, if a yellow topcoat is specified, the area should first be undercoated with an absolute pure white. Avoid any shadowing or grey tone, which can telescope through the yellow. Red finishes are best undercoated with a brownish red, which has more robust hiding power than pure red.

In either case, it's critical to first achieve a totally uniform base colour before applying the deep tone accent colour.

- Follow the manufacturer's instructions on dry time between coats. Applying a new coat before the previous coat has completely cured can compromise hiding power. Picture this: You're rolling out a brilliant, deep red, but you allow only "dry to touch" time before applying the next coat. The new coat will re-wet and soften the previous one, causing it to get picked back up in the roller, so you end up removing some of the previous coat while applying the next. That's not conducive to good hiding!
- Some paint manufacturers now offer colour tint bases in basic colours (e.g. red, yellow, and blue). When a store tint machine starts with a base that has the initial pigmentation built into the base, fewer ounces of colorant will be needed to achieve the desired colour.

Repainting non-uniform surfaces

Sometimes we see repaint projects where the surface is already discoloured with spots in a different colour (for example, a green wall is touched up with blotches of yellow patching compound).

The owner now wants a colour change to orange. If the painter tries to apply the orange intermediate and topcoat directly over this wall, the result will be a washed-out orange over the yellow patching material, and a muddy orange over the green areas.

It could take *many* more (nine or 10?!) finish coats to achieve a uniform appearance on this wall than either the painter or facility manager had planned. And even then, the underlying difference in colour may still telegraph through. The solution is to first apply a suitable primer/undercoat to create an absolutely even all-over colour, using the guidelines above.

Tips for specifying deep colours

We often see specifications that call for one coat of primer, plus one or two coats of intermediate/topcoat. However, as we've discussed, this may fall far short of what's needed to achieve suitable hiding and the desired finish with deep tints and accent colours.

So we make sure our specs also include the phrase, "Deep and accent clear-base colours may require 1-2 more coats to achieve the proper hide."

If the right undercoat/primer is strategically chosen to complement the intermediate and topcoat, and the undercoat/primer is carefully applied to achieve a totally uniform appearance, suitable hiding may be achieved with two coats of primer and two coats of finish.

The key to success is to minimize surprises. Do a test patch first. The time to realize you have a problem should be after the second coat, not after the sixth.

Know the potential impact of your colour choice before the project starts.

Resene tinters are highly concentrated and we have an extensive system of colour tones to minimise the amount of tinter you need to achieve your desired colour. The Resene Enamel and Acrylic Undercoats are changing to a white and varishade option, which will provide a series of undercoat shades to suit Resene colours. Resene colours are matched to their appropriate undercoat for the optimal finish. When you send us a colour for matching, our Colour Lab focuses on achieving your desired colour with the minimum amount of tinters and in the most reproducible manner possible, so that your colour can be tinted consistently.

Catch you next month!