



[Subscribe](#) | [Advertise](#) | [Search](#)

The Contractors' First Choice

A Product of [Technology Publishing](#)
[PaintSquare](#) | [JPCL](#) | [JAC](#) | [PWC](#) | [Paintspace.net](#) | [Paint BidTracker](#)



[Home](#) | [Back Issues](#) | [News & Events](#) | [Buying Guides](#) | [Community](#) | [Resources](#) | [Classifieds](#) | [Standards](#)

Hot Topics: [Green coatings](#) | [Decorative painting](#) | [Surface preparation](#) | [Color](#) | [Paint application](#) | [Customize Me!](#)



Welcome back, ben
[Your Profile](#) | [Logout](#)

PWC Article Archives

Green That Gets It Done

Published in: [PWC](#), [November 2009](#)

| [More](#)

[Back to Issue](#) | [Free Product Information](#)

Today's ecofriendly coatings can deliver top-notch results. Here's how.

Cynthia A. Challenger



A durable, "pet safe" exterior stain and clear coat beautify and protect a cedar log home. Contractor T Paul Sek works exclusively with green coatings.

Few people would argue with the idea of "green" coatings. After all, they're safer for people and the environment.

The catch has always been performance. Green paints need to perform at least as well as conventional products to make a difference.

Unfortunately, problems plagued the first generation of green coatings, and their reputation still persists. Worse, many painters still think they have to pay more for those poor results.

"Both of these perceptions are false," says contractor Daniel Macris, president of GreenWave Solution in Atlanta.

Any cost difference is "not substantial," and "the quality and performance of green coatings on the market now often are better than higher-VOC counterparts," says Macris, who buys green coatings exclusively.

Growing green

Macris and many other contractors nationwide are so sold on today's ecofriendly paints that they have built successful businesses on them.

T Paul Sek Eco-Friendly Painting in California began using green coatings in 2003 and has used them exclusively since 2007.

"We had some bumps in the road in the early days," says co-owner Debbie Sek. "But now, we have found products that we are happy with—and suppliers that are eager to provide support, which is also very important.

"As long as you choose the right product for each specific application, green coatings can surpass the performance of conventional products."

Coverage and adhesion get high marks from contractor Ken Odell, of the Philadelphia area.

"The new tinting systems in many eco-friendly paints provide really great coverage, even when the difference in colors is dramatic," he says.

Material matters

Most makers of green coatings attribute their improvement to greater R&D investment by raw-material suppliers.

"Suppliers have made a concrete effort to develop products specifically designed for green coatings," says Michele Margotta Neary, of United Gilsonite Laboratories. "Because the quality of these materials has increased dramatically, coatings formulators now have enhanced abilities to make finished goods that match the performance, appearance and durability of high-VOC paints."

Other manufacturers, ironically, cite the return of options from yesteryear. Milk paints, linseed oil, tung oil and similar products first used in the paint industry's early days are back, producing ecofriendly, durable, attractive finishes when used for the right applications.

Selecting coatings

Careful selection of green coatings is critical. "Too often, it is assumed that 'greener' coatings are always lower-VOC coatings, and that's just not the case," observes Robert Wendoll, director of environmental affairs at Dunn-Edwards Corp.

For example, if more green coats are needed to achieve the desired appearance, or the surface will need more frequent repainting, the eco-advantage is lost, Wendoll says.

"The most important thing is to make sure that the performance characteristics of the product match the performance requirements of the job," he says. "Where VOC content is a concern, we advise selecting the lowest-VOC product that will meet performance needs."



After they pass muster in the lab, Dunn-Edwards' green paints are field tested by professional painters.

Fortunately, today's market has a record number of products from which to choose. "The growth in availability of low- or zero-VOC products has been exponential," notes Perry Foreman, trade sales product manager with Diamond Vogel.

On the flip side, however, this means a wide range in quality, performance and pricing.

The right balance

Diamond Vogel focuses on maximizing the life cycle of the materials used by increasing durability. "Now, we have the additional motivation to reduce the total amount of VOC and conserve all of the resources required to produce a gallon of paint," he adds.

The key is to do so while meeting performance expectations for touch-up, coverage, flow and leveling as well as end-user demands for durability, stain resistance, stain removal and scrubability.

"Contractors definitely need to try different brands to identify the products that meet their expectations for performance," asserts Rocky Prior, president of Southern Diversified Products, which makes Mythic Paints.

"These coatings are quite new, including products introduced by major manufacturers," Prior notes. "So unlike conventional paints, where quality is comparable from brand to brand at a given price point, the difference in performance can be extensive."

Companies should be able to provide data to back their performance claims, says Wendoll. Dunn-Edwards, for example, evaluates performance with numerous lab tests, followed by field-testing with professional painters.

Thinking outside the label

At Ethos Healthy Paints & Wall Coverings in Pennsylvania, Bill Stevens sells only paints from manufacturers that have formulated their green coatings from the ground up.

"There are products on the market that have been developed by reformulating existing conventional paints," says Stevens. "They have lower VOC content, but the performance of the paint often is decreased."

Vermont Natural Coatings is one of those “green from the ground up” manufacturers. Since its inception in 2004, the company has aimed to create safe, professional-grade wood finishes. The binder in its low-VOC products is whey protein, a by-product of cheese making.

What ‘Green’ Means—and what It Doesn’t

Numerous organizations certify paints and coatings as “green” (see “[Green Schemes](#),” May-June PWC). But few also evaluate performance.

“To a certain extent, the private, third-party certification groups serve as a coercive force in the marketplace,” explains Stephen R. Sides, Vice President of Science, Technology and Environmental Policy with coatings industry associations NPCA/FSCT.

“However, due to the fact that there are so many third-party certification groups, their power is greatly diminished in driving formulation changes, and they can create confusion in the marketplace, both for their subscribers and for those interested in finding a conforming product.”

Green certifiers include Green Seal, Green Wise and the Master Painters Institute (MPI).

The MPI Green Performance Standard is the most widely recognized standard that considers many elements of performance (based on extensive testing according to ASTM or stricter methods) as major criteria in its evaluation of green coatings. A listing of MPI Approved Products that also meet the organization’s Green Performance Standard can be found at www.paintinfo.com.

MPI’s GPS list is a “filtered” version of the organization’s Approved Product list, explains president Barry Law. GPS-certified products have many more requirements than those on the Approved Products list; the more general list has performance requirements but little in the way of “green” requirements.

Sustainability and performance

“We believe that you can’t have sustainability without considering performance, so our initial standard [MPI GPS-1] sought to consider performance plus the lowest VOC levels that met all major regulatory mandates,” says Law.

The second version of the Green Performance Standard (GPS-2) anticipated future VOC requirements, leading to a requirement of 50 g/L or less for both interior and exterior paints.

MPI is now developing a third version of its standard (GPS-3) that will add emissions ratings to its requirements for VOC content and performance testing, according to Law.

Green Seal (www.greenseal.org) revised its GS-11 standard in Fall 2008, increasing requirements on various aspects of performance, says Linda Chipperfield, vice president of marketing and outreach. Products must meet limits for adhesion, flow and leveling, opacity and other features. Interior topcoats must meet scrubability and washability requirements, while exterior products must meet performance levels for fade resistance, flexibility and water resistance. Currently, five companies have opted to participate in the Green Seal program.

Green Wise certification (www.greenwisepaint.com) comes from the Coatings Research Group, an international group of paint makers with an ISO-certified testing laboratory. Green Wise-certified products meet what the group calls “environmentally determined” performance standards.

The LEED Green Building Rating System, developed by the U.S. Green Building Council, has received growing interest from the building community. The use of qualified paints, coatings and other products earns points towards building certification. But none of the LEED coatings requirements considers performance.

Gregory Hebert, Business Manager for Vermont Natural Coatings, sums up the situation nicely:

“MPI has a long history of creating performance standards and can help manufacturers and applicators find common language and guidelines to compare environmental and performance attributes.

“Green Seal and others in their category have a role in helping manufacturers that need an environmentally badged authority to lend weight to a product’s listed environmental attributes.

“LEED is having a significant impact on product choices. Regardless of structure type, owners are working with architects and contractors to choose durable, safe coatings. Across all budgets, in homes and commercial spaces, the people that use the buildings want a healthy environment and recognize that green materials add value.”

“We’ve found that unless you target high performance and safety as your primary manufacturing goals, the product is supported by the label instead of the reverse,” says business manager Gregory Hebert.

Adds Stevens: “Contractors should be willing to explore all possible options and not simply stick with their traditional suppliers if they want to truly explore the full potential of eco-friendly paints.”

Be careful, too, about how the paint’s overall VOC content is determined. “You can’t always trust the labels on what is ‘green’ or not,” observes contractor Mitch Stevens of Parable Painting in Pennsylvania. “For many products, it only refers to the VOCs contained in the base paint. When a coating is tinted at the store, the VOC content in the tint can drive the levels higher again.”



Parable Painting, near Philadelphia, operates with an ecofriendly focus. Owner Mitch Stevens advises reading “green” paint labels closely. VOC content levels may refer only to the untinted base paint, he notes.

Paint sellers can help with this issue. Third-party certification agencies (see “[What Green Means](#),”) can also provide information. However, use caution when considering these ratings; different groups use many different criteria.

Putting it to the test

The most effective way to determine the right products for a given application is to physically test them.

Sek first narrows her choices by looking at the MSDS and other technical data sheets to determine the nature of the ingredients. She considers only nontoxic products with very low or no VOC content, and she prefers water-based formulations whenever possible.

Green Start, Great Finish: Tips for Success

Getting better performance from green coatings means more than buying the right product. It can also demand a shift in application and usage, including curing times, open times, color density and film thickness.

Start by familiarizing yourself with the product’s technical data. “Read the MSDS and other technical data sheets, and learn what applications are appropriate for the product,” says contractor Daniel Macris, who uses green coatings exclusively in his business.

Contact the supplier or your sales rep if you need help: “They should be willing to work with you,” Macris advises. Above all, he adds, “follow the preparation and application instructions recommended by the manufacturer.”

Be prepared to learn some new application techniques. Low- and no-VOC paints tend to dry quicker, thus



allowing shorter working times.

Keeping a wet edge requires care, according to Perry Foreman, of Diamond Vogel.

Avoid cutting in too long before roller or spray application, advises Casey McCormick, of McCormick Paint. One quick fix is to add small amounts of water to thin the product, says Mitchell Stevens, of Parable Painting.

A low-VOC, durable satin finish by Vermont Natural Coatings (VNC) is applied to an older maple floor that has been sanded and refinished. Fast drying time allows for more than one coat per day.

Trial and error

Keep an open mind about green paints, and experiment with roller naps and spray tips to find the “sweet spot” for applying each coating, says Rocky Prior, of Southern Diversified Products.

The easy cleanup and lower odor should make up for any initial awkwardness in application, according to Michele Margotta Neary, of United Gilsonite Laboratories.

Surface preparation may require a new approach if using a green coating over a conventional product. “If a deck, for example, has been previously stained with an oil-based product, you will need to take that coating off all the way down to the original bare wood in order to get the biggest benefit from using a green coating,” explains Debbie Sek of T Paul Sek Eco-Friendly Painting.

Fortunately, she notes, there are a wealth of new green prep products as well (see “Greener Prep,” May-June PWC).



Then she evaluates the company and its manufacturing and testing practices. “If all our initial criteria are met, then we test, and test again, and then test some more,” she says. “Working with the products is the only way to truly know if it will meet our requirements for durability, appearance, ease of application and other characteristics.”

Companies should have data to back performance claims. Here, UGL tests two water-based ZAR Ultra Max products: polyurethane over wood stain.

So if you are wondering whether you can get the performance you want from green coatings, the answer is a resounding yes—as long as you carefully evaluate your options and find the right products that meet your needs.

“There is no reason everyone shouldn’t be using green coatings,” asserts Macris.

Odell, the Philadelphia-area contractor, goes further: “As a business owner, I have the responsibility to take care of my employees and provide excellent products that meet the needs of my clients, from those with allergic sensitivities to parents with young children to hospitals. And in general, I have the responsibility to help take care of the planet.

“Well-designed, high-performance green coatings make it possible to do all of these things.”

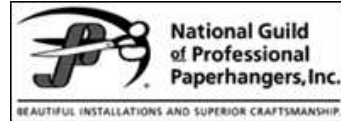
Contact Cynthia A. Challener, Ph.D., at challener@vmlink.net.

PAINTING & WALLCOVERING CONTRACTOR ©2009 Technology Publishing Company

Join the Conversation:

Add your comment (Comment will be displayed as posted by ben kim)

PWC is proud to be a partner of:



PWC is a media ally of:



The Technology Publishing Network

PRINT:



WEB:



EXPLORE PWC: [Home](#) | [Back Issues](#) | [News & Events](#) | [Buying Guides](#) | [Ask Dr. Paint](#) | [Community](#) | [Education](#) | [Classifieds](#) | [Standards](#)
[Contractors' Bulletin Board](#) | [Contractors' Research Council](#) | [Profiles in Success](#)

GET PWC: [Subscribe](#) | [License/buy our content](#) | [Advertising Media Kit](#)

KNOW PWC: [About PWC](#) | [Privacy policy](#) | [Terms & conditions](#) | [Site Map](#) | [Search](#) | [Contact Us](#)

© Copyright 2009-2010, [Technology Publishing, Co.](#), All rights reserved

2100 Wharton Street, Suite 310, Pittsburgh PA 15203-1951; Tel 1-412-431-8300; Fax 1-412-431-5428; E-mail webmaster@paintsquare.com