

# Choosing Green While Maintaining Your Old Home's Interior Finishes

**BY KATYE T. CHARETTE**, LEED AP BD+C, Executive Director, U.S. Green Building Council, Maine Chapter  
*Maintaining your home's interior finishes is a necessary part of upkeep and can yield impressive results. There's nothing like a fresh coat of paint to revitalize your living space. Here we discuss interior wood finishes and paints and how to "choose green." These will give long-lasting results and high indoor air quality while treading gently on the planet and honoring the architectural heritage of our old New England homes.*

## WOOD FINISHES

Wood finishes are coatings that protect wood while enhancing its natural beauty. They can also change wood's appearance by adding sheer color to hide defects.

A finish is a liquid, paste, or gel that can be spread thinly onto wood. There are two basic types of wood finish: those that form a film or coating and those that penetrate the surface. Film finishes, which cure hard and can be built up in layers, include varnish, shellac, lacquer, water- and latex-based semitransparent stains, and solid-color stains. Penetrating finishes are oil-based and don't cure to a hard film. They include tung and linseed oil and oil-based stains. (See Healthy House Institute, [www.healthyhouseinstitute.com](http://www.healthyhouseinstitute.com))

Historically, many of these products have contained high levels of volatile organic compounds (VOCs), solvents, heavy metals and carcinogenic chemicals, contributing to poor indoor air quality and toxicity. Fortunately, due to public demand, the Clean Air Act, and the rising popularity of green building rating systems like LEED (Leadership in Energy and Environmental Design), the availability of water-based finishes has increased substantially.

## WHAT IS A VOC?

Volatile organic compounds (VOCs) are emitted as gases from certain solids or liquids. They include a variety of chemicals, which may have short- and long-term adverse health effects. Concentrations of many VOCs are up to 10 times higher when released indoors. VOCs are emitted by a wide array of products, including paints and lacquers, paint strippers, cleaning supplies, pesticides, building materials and furnishings, office equipment like copiers and printers, correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions, according to the Environmental Protection Agency.

When choosing a wood finish, opt for lower-VOC or water-based finishes. Green Seal standards offer an excellent tool for selecting a safe and high-performing wood finish. The applicable standard for wood finishes is Green Seal Standard for Stains and Finishes, GS-47, which includes product performance requirements and health requirements. (See [www.greenseal.org](http://www.greenseal.org).) As of this writing, however, the list of products bearing the Green Seal certification is limited.

The LEED green building rating system specifies that clear wood finishes, stains, sealers, and shellacs "applied to interior elements must not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004." This means that you should look for products whose VOC contents do not exceed 275 grams per liter (gpl) for clear wood finishes, varnish, sanding sealers, and lacquer; 350 gpl for faux finish coatings like clear topcoat, decorative coatings, and glazes; and 250 gpl for interior stains.

## GREEN PAINT

Like wood finishes, the hallmark of a green paint is the absence or at least the minimization of VOC's. Thanks to

waterborne colorants, VOC-free formulations are widely available. Here, too, Green Seal offers a robust standard to guide your choice. The applicable standard for paints and coatings is GS-11, which covers wall, anti-corrosive, reflective coatings, floor paints and primers, and undercoats. This list of Green Seal-certified products includes paint and primer by YOLO Colorhouse, available locally at Maine Green Building Supply. Many other brands available at national and local retailers carry low- and no-VOC paint formulations, too.

Zero-VOC paint may still have an odor while wet, and some people may be sensitive to it, even if it is truly VOC-free. Most companies offer zero-VOC paint, but check labels. The quality and prices of paints are comparable to older VOC formulas and will go on the same way with rollers and brushes. For the best quality and widest range of colors you may have to resort to a premium line.

## ARCHITECTURAL HERITAGE

Maintaining your home's architectural heritage may be a goal of your interior refinish project. If so, look for paints that are part of the National Trust for Historic Preservation's palette. To date, the palette includes over 250 historic colors. Visit the National Trust for Historic Preservation's website, [www.preservationnation.org](http://www.preservationnation.org), for more detailed information.

## LEAD PRECAUTIONS

I would be remiss if I did not mention the importance of mitigating the risks of lead paint in your home. Lead was used as an ingredient in interior paint until the mid-1970s and lead paint is most common in buildings built before 1950. In fact, more than half of Maine homes may have lead paint! According to the State of Maine Department of Environmental Protection, hundreds of children in Maine are poisoned by lead each year, mostly by exposure to dust from old lead paint. If any paint in your home is peeling or if your plans include scraping or sanding, you should test for lead paint first. Lead check kits can be self-administered and are available at most hardware stores. Or you can find a lead-abatement professional at <http://www.maine.gov/dep/waste/lead/findalp.html>.

The Maine DEP has published a handy guide called "Don't Spread Lead: A Do-It-Yourself Guide to Lead-Safe Painting, Repair, and Home Improvement," available at [http://www.maine.gov/dep/waste/lead/documents/dont\\_spread\\_lead.pdf](http://www.maine.gov/dep/waste/lead/documents/dont_spread_lead.pdf). Definitely consult this guide before embarking on your interior refinishing project. For more guidance, call the Maine DEP Lead Hazard Prevention Program at 800.452.1942. ■

The Maine Chapter of the U.S. Green Building Council, a 501c3 nonprofit membership organization, is committed to creating a sustainable built environment in Maine. Founded in 2003, USGBC ME is Maine's foremost coalition of leaders from across the building industry working to promote buildings that are environmentally responsible, profitable, and healthy places to live and work. The Maine Chapter of the U.S. Green Building Council is pleased to join Greater Portland Landmarks in the effort to encourage energy efficiency in older buildings.

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