



Porch Primer:
**Wood
& Water**

Understand
the Victorian
porch's
anatomy
and you'll
know how to
care for it.

BY ERIC HOLLENBECK
PHOTOGRAPHY COURTESY OF BLUE OX MILLWORKS



Photograph by Chris Little

HOW DOES A PORCH SURVIVE MORE THAN 100 YEARS?

The porch and its decorative elements take the most weather abuse of any part of the house, second only to wooden gutters. The porch's flat, horizontal surfaces and decorations collect water, which then seeps into the wood. Luckily for homeowners, instead of seeping into the wood through the long grain (the sides or edges), water enters wood most readily through the end grain (at the end of a piece or where the joints are). When you understand how wood reacts, you can properly maintain it.

Opposite and right: Historically accurate millwork on this new vintage-style home is designed to keep water moving so it can't damage the wood.



Joints need special treatment with caulking and paint to make them waterproof and long-lasting.

MAKE IT LAST

Follow these tips for preserving your historic home's exterior.

- 1 Try to accurately re-create original millwork when replacing balusters, columns, handrails and the like; they were designed to last. If you are restoring pieces without any existing examples—such as your porch was removed in a “remuddle” or replaced with inferior design—use other sources to help you. Finding clues: There may be photos at the local heritage/preservation office, talk to longtime residents, find a home similar to yours that doesn't have the elements removed, or research homes from the same architect or time period of your home.
- 2 Redwood and cedar, used on many historic homes, require a top-grade, oil-based primer because the acid in the wood reacts with the steel fasteners and causes discoloration. Once primed, you can top it with latex if desired. Recently available, some specially formulated latex primers may also do the trick.
- 3 Paint will help preserve the wood; rely on visual inspection for how often to repaint. If paint is bubbling, that means water or moisture has gotten into the wood; the blisters form as the water migrates out. If paint is cracking, the paint has lost its elasticity and it is too old. Scrape off all traces of failed materials before repairing joints, priming or painting.
- 4 Dirt and soot will accumulate at the joints and hold in moisture, which will damage the paint and joints. Clean your porch periodically with water from the hose to keep repair jobs to a minimum.
- 5 To repair joints, you need to use enough flexible painters' caulk to keep that joint flexible. Build up enough material to create about 1/8-inch round to keep water off the end grain and flowing to the long grain and away from the joint. A really good job should last 5-10 years.

For information on iron railings, see page 36.



Photograph by Stephen Phillips Photography

BUILT-IN PROTECTION

Knowing trapped water would create an environment for rot, Victorian builders built mechanical methods to discourage water from entering the end grain.

To illustrate this craftsmanship, note the design of the baluster pictured on page 11. The turned portion of the baluster starts and ends in a round over, which keeps the water from sitting on the flat end grain created by the turned design. Columns are the same, and this is why handrails always have hand-molded tops that shed water. It is also why the porch floors were pitched slightly to the outside: to send that water away.

NATURAL MOVEMENT

Another point to remember: Wood never stops expanding and contracting as it gets wet and becomes dry. But the movement is always lateral, not longitudinal: A board expands



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widthwise, not lengthwise. Therefore, a 1" x 6" x 12-foot board may be 5 15/16-inches wide in the summer and 6 1/16-inches wide in the winter—but it is always 12 feet long. Why is this important? Take handrails and columns, for example. Where the two meet (the joint), one piece (the end grain in the handrail) will expand and contract, and the other (the long grain in the column) won't. These joints need special treatment with caulking and paint to make them waterproof and long-lasting (see "Make it Last," page 10).

By keeping in mind that maintenance includes controlling water, you can keep your porches lasting forever. ❁

Bio: Eric Hollenbeck, founder and master craftsman of Blue Ox Millworks, grew up in Eureka, California. Eureka's rich architectural heritage, with its reputation of more Victorians per capita than any city in the state, inspired his 38 years in the Victorian millwork business. Nationally, hundreds of buildings have benefited from Hollenbeck's passion and commitment to quality workmanship. For more information, call (800) 248-4259 or visit blueoxmill.com.