

TIM,

We have recently noticed a green board on the exterior of some homes under construction. Would you explain the purpose of this new product?

Most likely, you have seen a type of WRG (water-resistive barrier). But before I put my building geek hat on, allow me to back up and explain what a WRB is and why we need one in the first place.

No matter how carefully it is applied, siding, brick, stucco, or other siding is likely going to leak at some point in its service life. The layer beneath the siding—the water-resistive barrier, or WRB—is what will protect the wood framing in your home from rot and mold when water sneaks in through the exterior cladding.

Now that we understand what a WRB is and what it does, let’s briefly look at the old products and explore some of the newly improved options available today.

In years past, the old standby WRB was asphalt felt paper. Back in the day, asphalt felt paper was made from cotton rags, but today it’s a much lighter material made from corrugated paper and sawdust. Though the International Residential Code still requires asphalt felt paper (or approved substitute) over wall sheathing or studs, manufacturers actually intended it for use of the roof.

Builders can still find two modern versions of this old standby at many lumberyards: number 15 felt, which weighs between 7 and 14 lb. per 100 sq. ft., and at



least one grade of number 30 felt, which is heavier.

Today’s builders have many more options than the felt paper of the past. Advances in building science have led manufacturers to introduce many new products that easily out-perform asphalt felt.

These new products have revolutionized the weatherization of structural roof and wall systems with new state of the art water-resistive barriers.

PLASTIC HOUSEWRAP

After felt paper came plastic housewrap. Housewrap is designed to allow the passage of water vapor but not liquid water, the idea being that bulk water won’t get to the sheathing, but water vapor will be able to escape. Two well-known brands are Tyvek and Tytar (there also are a number of others) make up the bulk of these products. When properly installed, these products form an excellent WRB and have a proven track record. Unfortunately, they can be unforgiving when improperly installed and this has left an opening for some of the newcomers to the market.

ZIP SHEATHING

Huber’s new Zip sheathing system is a type of OSB with a coating of resin-im-

pregnated paper on the exterior. Typically, this system has a green exterior and is likely what you have seen on under-construction homes recently. Once installed and the seams taped, the exterior requires no further protection before the siding is installed.

LIQUID-APPLIED WRBS

The next newcomer to the marketplace is liquid-applied barriers. Rolled or sprayed on to form a continuous, seam-free coating that is waterproof but vapor permeable, these barriers form an effective air barrier as well as a superior WRB, as these barriers are not compromised by fastener penetrations. These products have been slower to catch on as they are a little more complicated to install. Typically, a two-step process, beginning with a base coat and finishing with a top coat, liquid-applied can be more expensive than the other options.

Whether you are building a new dream home or adding a new room onto your existing home, make sure you hire a professional builder who is well versed in the advantages of water-resistive barriers. With the right professional builder by your side, your new home or remodel will be well protected from the elements and serve you and your family for many trouble-free decades to come. **BG**



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