

ON SITE WITH **Advantech**

I first heard about Advantech subflooring from a brochure at a local lumberyard. It immediately got my interest for two reasons: It was less

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expensive than plywood and promised to be

better. The plywood we were getting was less square than it should have been, and we were having some problems with buckling and delamination. In one case, several sheets of $\frac{5}{8}$ -inch fir plywood delaminated before they were even installed. With the price of $\frac{3}{4}$ -inch T&G fir plywood at well above \$20 per sheet and climbing, I was willing to take a look at a competing product.

Advantech also promised to be more water resistant than fir plywood and at the time was priced about 20% less than fir plywood. The manufacturer also claimed that it was square and flat, and it had a self-spacing feature that was appealing (see photo, next page).

What Is Advantech?

I never considered switching to OSB subfloor because of its tendency to swell. However, we switched over to OSB wall sheathing about three years ago, mainly because some of the plywood sheathing we were getting was so out of square. OSB works well on side-walls as long as it is always protected from the elements.

This new panel resists swelling and delamination



Advantech is like OSB but, according to the manufacturer (Huber Engineered Woods; 800/933-9220; www.huber-wood.com), contains more resins and bonding agents than standard OSB. The panels are sanded on both sides, which helps give the material a more consistent thickness. A 3/4-inch sheet of Advantech weighs a few pounds more than a 3/4-inch sheet of OSB. The product is distributed mainly east of the Mississippi.



Advantech's tongue and groove are consistently milled and void free. Butting the edges together automatically leaves the proper gap on the top face.



The author finds that gluing and nailing with ring-shank nails results in a problem-free installation.

First Experience

We first tried Advantech subfloor on a 3,800-square-foot house. My crew and I installed the floor in February, so it saw plenty of snow and rain. In some areas the snow was piled on the Advantech for weeks at a time, but after it melted there was no swelling or soft spots. In contrast to OSB, there's no swelling along cut edges.

We found the manufacturer's claims of easier installation to be basically true. One carpenter working alone was able to install almost the entire subfloor. This is because the panels are stiffer and lie flatter than plywood. Also, the tongue and groove are consistently milled, and take little persuasion to fit together. There's almost no pounding with sledgehammers while one guy stands on the panel to keep it flat. The sheets space themselves automatically along the length, but you still have to space the butt ends. The manufacturer recommends 1/8-inch spacing at the ends.

Fastening

Because the material is very dense, hand nailing Advantech is harder than hand nailing plywood. With pneumatic nailers, this is not really an issue. We



mainly use ring-shank nails, and always glue the subfloor. We did have a chance to try a screw gun on a recent job, but found we can work faster with our air nailers. Screwing the floor gives a little more peace of mind and ensures that the fastener won't back out. But with the combination of plenty of glue and ring-shank nails, I'm confident that the floor will be as solid and durable as a screwed floor at less cost. Also, I always try to use TJM I-joists which, along with the Advantech, results in a very stiff, flat floor.

Roof & Wall Sheathing

We also tried the Advantech 5/8-inch square-edge roof sheathing. The material seemed quite heavy, and had a very slippery underside, making it tricky to position. My carpenters weren't too thrilled with the weight of the material, so I figured I wouldn't try it again. A few months ago, however, my supplier offered me a good price on 120 sheets of the stuff. When it showed up at the site, I was surprised to see it was T&G. At first, the crew was not happy about seeing Advantech roof sheathing again. But the fact that it was T&G made it go a little faster (no need for H-clips), and the material also seemed a little lighter. One plus is that the tongue-and-groove connection will do more to keep water out of the house if a storm comes up before the roof gets papered. Also, I'm less concerned about swelling and delamination if the sheathing gets saturated.

I've inquired about Advantech wall sheathing, but it hasn't been readily available at the lumberyards I deal with.

Since that first job, I've put down around 8,000 square feet of Advantech subflooring and nearly 5,000 square feet of roof sheathing. It's a product I plan to keep using, given its competitive pricing and other advantages when compared with plywood. Its main disadvantage is that it's heavier than plywood, but that's compensated for by the fact that it installs more easily.



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