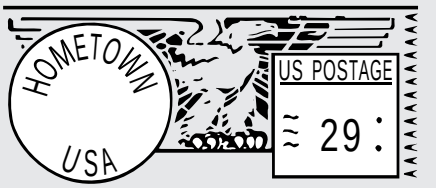
# LETTERS




## Subfloor Suggestions

To the Editor:

I appreciated the article "A Guide to Construction Adhesives" (9/94). It is my understanding, however, that plywood and OSB should always be installed with spaces between sheets for expansion.

I am just now beginning a major project on an unfinished house that has had the floors installed just as in the article — that is, glued and nailed to the joists, with the tongue-and-groove joints also glued, and without any spaces between sheets. In this case, one-inch OSB was used.

There is some swelling at the joints, most of which seems to be from excess adhesive. My plan was to sand the joints flush, then install underlayment and the terra cotta tile my client requested.

I have two questions: When is it okay to install sheet goods without a space between them? Can you recommend the best underlayment for this situation?

Bob Kelly
Estate Restorations
Center Barnstead, N.H.

*Stephen Smulski responds:*

*I'm afraid you're reading something into the article that isn't there. Plywood, OSB, and other wood-based panels should always be spaced at least 1/8 inch along the edges and at the ends regardless of whether the tongue-and-groove is glued or not. Panel products are typically quite dry when sold — 6% to 10% moisture content — and should be expected to expand when exposed to moisture during construction. Panels whose edges are tightly butted when installed can't expand laterally, so they buckle outward instead. Edge swelling can happen too, especially in OSB and waferboard, because voids in these panels' edges take up moisture much faster than their faces do. Most OSB and waferboard makers seal the edges to minimize moisture pick-up. When practical, it's a good idea to coat site-cut edges with a water repellent.*

*According to ANSI Standard A108 ("Specifications for Installation of Ceramic Tile") and the Tile Council of America (Princeton, NJ; 609/921-7050), plywood is the only wood-based panel that's suitable for use as subflooring and underlayment beneath tile floors. The ANSI recommendations, which also appear in the American Plywood Association's* Residential & Commercial Design/Construction Guide *(Tacoma, WA; 206/565-6600), apply only to floors framed no more than 16 inches on-center and where the deflection caused by the total load on the floor doesn't exceed 1/360 of the span. Subflooring and underlayment panels should always be spaced at least 1/8 inch at edges and ends; joints should be staggered.*

*Floor construction depends on how the tiles will be installed. For tiles bonded with organic or epoxy adhesives, for example, both span-rated subflooring (minimum 19/32 inch) and underlayment or exterior-grade sanded plywood (minimum 11/32 inch) are recommended.*

*When epoxy mortar is used, the underlayment should be at least 15/32 inch thick. You can skip the underlayment with epoxy mortar as long as the ends of all subflooring panels fall atop joists, and the edges, including tongue-and-groove joints, are supported by solid blocking.*

*A cementitious backer unit, or CBU, is specified when tiles are laid in dry-set mortar or latex portland cement. The subflooring must be span-rated and at least 15/32 inch thick.*

*Underlayment isn't needed when tiles are set in a bed of reinforced cement mortar at least 1 1/4 inches thick. Span-rated subflooring 19/32 inch or thicker is required, as is a cleavage membrane of polyethylene or 15 lb. roofing felt between subflooring and cement.*

*In your case, the best bet is to overlay the OSB with 15/32-inch plywood underlayment.*

## Re: Receptacle Wiring

To the Editor:

The illustrations included in "Tracing 3-Wire Circuits" (*On the House*, 9/94) are wrong, although the accompanying text is correct. The "hot" wire should, as you say, always be connected to the side of the receptacle with brass terminal screws. Your illustration shows the opposite configuration. If you visualize the receptacle as a face with eyes and mouth, the narrow (hot) slot and brass screws will always be on the *right* side, not the left side as Figures 1 and 2 show.

Michael J. Berman
Property Buyers Inspection Service
Media, Pa.

## A Different Drum

To the Editor:

Regarding the story "South Florida Condominium Is for the Birds" (*Eight-Penny News*, 7/94): We're splitting hairs here, but I'm willing to bet ya dinner that the woodpeckers in Florida are doing their "jungle drums" thing on an EIFS (exterior insulation finish system) surface, not a traditional three-coat stucco system. EIFS properly applied (minimum 3/4-inch rigid foam, followed by mesh imbedded in basecoat, then finish) *does* lend itself to a somewhat hollow sounding wall. When tapped lightly, the wall is in effect a sounding board.

Stucco, on the other hand, is 3/4- to 7/8-inch cement over metal lath and building paper: When tapped, it sounds solid and does not resonate. Unless you've got woodpeckers the size of turkeys — or birds with armor piercing beaks — I'd be surprised if they could generate any significant noise on a stucco wall. They might as well tap on the sidewalks.

Steve Thomas
Columbus, Ohio

Keep 'em coming! We welcome letters, but they must be signed and include the writer's address. The *Journal of Light Construction* reserves the right to edit for grammar, length, and clarity. Mail letters to *JLC*, RR 2, Box 146, Richmond, VT 05477.