

EYE FOR DESIGN

Approaches to creating great-looking decks

Blocking Under an Inlaid Pattern

by Kim and Linda Katwijk

Inlays always need a lot of blocking between the joists for support. But it's easy for even a seasoned deck builder to underestimate how much time and work it will take to install it — and then lose his shirt on the job. Unfortunately, a design can look simple on paper and still require a week to install the blocking for it.

Most decking products allow a maximum overhang of just 3 inches beyond a support member, so generally speaking, designs that have more board ends require more blocking. I once inlaid a compass rose that was so intricate that rather than use blocking, I inset a sheet of $\frac{3}{4}$ -inch pressure-treated plywood flush with the top of the joists.

A word of caution: Install blocking vertically, even though it may be tempting to install it on the flat because it's easier. You're using it in the first place because the decking doesn't span the joist bay and needs support. Imagine a 300-pound visitor stepping on that blocking — do you want it vertical, as it's strongest, or on the flat, as it's most convenient for you?

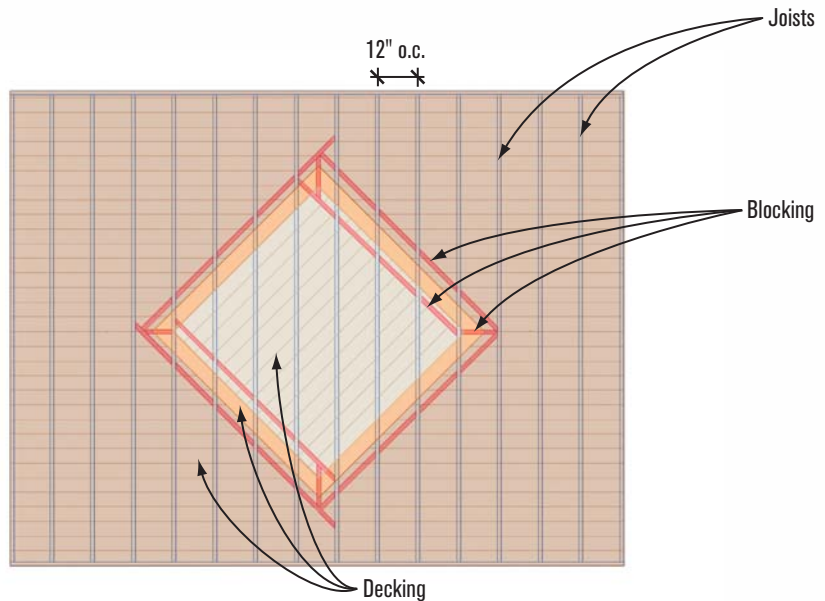
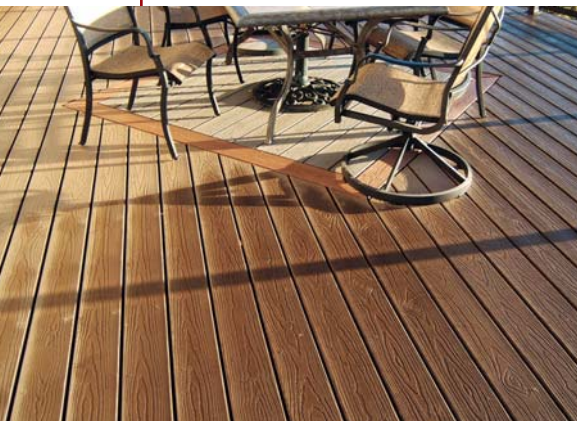


Figure 1. Because the inlaid composite decking in the photo (left) runs at 45 degrees to the joists, the joists had to be spaced at 12 inches to avoid overspanning the decking, as shown in the illustration above. To support the ends of the decking boards where they fell between the joists, 32 pieces of blocking were required.



EYE FOR DESIGN



Figure 2. Though there weren't many pieces of decking in this curved inlay, the amount of time spent blocking, bending, and cutting them out took the author by surprise.



Figure 3. Blocking parallel to the joists for the long inlay on the upper deck was relatively simple (above left), but blocking the curved section on the lower deck took a lot of layout and numerous individually cut pieces (above right).

Start Simple

If you're new to inlaid designs, start with something simple and figure on the possibility that the project may end up being an "ego deck." I've done a couple of ego decks myself; I love to brag about them and show them off — but I didn't make a profit on them because I failed to anticipate just how much time they would take.

Let's take a look at a very simple design, a square of a contrasting color set into a deck at a 45-degree angle to the main decking (**Figure 1, page 1**). While this would have been easy enough to draw on paper or to lay out in place, I designed it on a computer using DeckTools (DeckTools Software; 877/276-0762, decktools.com). I played with the dimensions until they looked good to my eye, then I fine-tuned them to work with full-width deck boards.

The decking crossed the joists at 45 degrees, so spacing the joists 16 inches on center would have over-spanned the deck boards under the pattern. To remedy this, I spaced the joists 12 inches on center, in addition to installing 32 pieces of blocking. Adding a border around the square didn't require any more blocking and greatly enhanced the look by picture-framing the design.

Introducing Curves

When you introduce curved pieces to the design, the complexity of the work increases tenfold. For more complex designs, I find SoftPlan (SoftPlan Systems; 800/248-0164, softplan.com) is easier to use. In the project I describe next, the inlay consisted of several curving pieces. Using a computer drafting system was very helpful, as it provided the radii of the curves as well as the location on the framing of the centerpoints of the radii.

Behold one of my own ego decks (**Figure 2**). The main body of the deck

EYE FOR DESIGN

is Fiberon Tropics Jatoba (800/573-8841, fiberondecking.com). To create the inlay, I “wove” three pieces of Fiberon Tropics Cypress decking around one piece of Tropics Mahogany and made the pieces of Cypress curve off in different directions, like reeds growing in a lake. The pattern bridges two levels of the deck and provides a



Figure 4. With proper heating equipment, bending composite decking is possible, but demanding.



Figure 5. The curved decking of the inlay was used as a pattern to mark the field decking for cutting. Then, the curved pieces were laid in place and marked for cutting from below.

visual link between the spaces.

The design seemed simple enough. From the computer drawing, I knew that on the upper deck, the vast majority of the inlay would sit over 3 joist bays (spaced at 12 inches on center). Blocking it would take 69 pieces, all square cut (**Figure 3, page 2**). On the lower deck the blocking would be more complicated, as each piece of the pattern heads out in a different direction. For each curved piece of decking, I estimated 60 pieces of blocking would need to be cut, all at different angles and sometimes with different angles on each end.

Cutting and Bending

For this design, I needed to bend 10 deck boards. I did this by first making a plywood platform off to the side of the deck, to which I screwed jigs of two-by material cut to form the appropriate radii (**Figure 4**). Then I used the Heatcon (800/556-1990, heatcon.com) bending system to heat each board to 240°F, which takes about 45 minutes. In the meantime, I worked on the main decking. Once a board reached the correct temperature, I bent it along the jig, where it was allowed to cool. (For more on bending decking, see *Tool Kit*, May/June 2007; free at deckmagazine.com.)

I ran the main field decking first, lapping it into the area of the inlay. Using the bent decking as a pattern, I traced the curves onto the main decking using a carpenter pencil held 90 degrees to the edge of the bent board. The thickness of the pencil created the perfect gap between the curved pieces and the main decking.

Next, I cut to the lines with a circular saw and a regular framing blade. It became more complicated as we began “weaving” the pieces in and out and around the center mahogany piece. I had to keep track of which piece went “over” which — fun, but tricky. Stainless steel trim-head screws secure the boards.

Once the main curved pieces were installed, I needed to fill in the remaining holes with Tropics Jatoba decking. I didn’t anticipate how difficult that would be. Each piece needed to be traced from the bottom, which required one person on top to hold the board, and one person underneath the deck to trace (**Figure 5**). Often, the joists or the blocking got in the way of the line. Then for the lower deck, I decided that what had looked good on paper did not look right in practice. Fixing the error required new blocking underneath the deck — a much more difficult task now that the decking was in place.

In the end, the client loved it, and I do too. Although I failed to make a profit that time, I figure it was a learning experience, and I will not repeat the same mistakes again. I also now have photos that I can show to prospective clients, because, yes, I feel confident that I can bid any design, anticipate the extra labor involved — and still keep my shirt. ❖

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