

Picture-Framing a Deck

Borders not only provide panache, they also improve safety and profits

by Joe Cracco

Installing a border around the outside of a deck, also known as “picture framing,” adds interest to an otherwise ordinary job and can push an already great deck to the next level. It isn’t difficult to do, but it does take some forethought and planning. You can’t simply run the boards wild, trim their ends, and screw down a border.

I would argue that improved aesthetics alone merit the extra effort of picture framing, but there’s at least one more benefit: Picture framing makes a deck safer for your clients and their guests by defining its shape and calling attention to stairs and deck edges (**Figure 1, next page**). This is particularly helpful for those who don’t see as well as they used to — whether that’s due to macular degeneration or simply too many trips to that new outdoor bar.

You can also use picture framing to highlight areas of interest, such as a fire pit or a tree growing up through the deck, and it’s great for defining places set aside for a specific use, like seating areas, grilling spaces, and outdoor kitchens. In this article, I’ll take you through design considerations, planning, layout, framing, and construction.

Designing Picture Frames

In its simplest form, a picture frame can be a single board around the edge of the deck (**Figure 2, next page**). While this may lack punch, it’s certainly a more refined look than leaving the ends of the field boards exposed. What keeps this configuration from having more visual impact is that the picture-frame board parallel to the field boards looks like a field board, the only difference being the miter



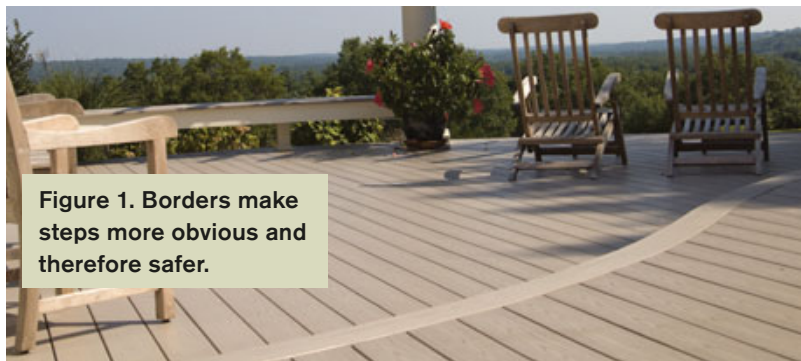


Figure 1. Borders make steps more obvious and therefore safer.



Figure 2. A single board around a deck adds a look of refinement.



Figure 3. Detail strips of a different width dress up even single-color picture frames.



Figure 4. A color that contrasts with the field makes a picture frame pop.



Figure 5. Running the field decking on a diagonal emphasizes the border.

at the corner. One way to differentiate a single-board picture frame is to add a narrow detail strip (**Figure 3**); another is to use a different color, which can be dramatic (**Figure 4**). A third way to help the picture frame stand out is to turn the field boards on a diagonal. Use two colors and the picture frame really pops to life (**Figure 5**).

Sometimes a single row of picture framing can be lost under the bottom rail. It could take two or more rows of picture framing to see just one row exposed inside the railing. In any event, a second or third row of picture framing will add impact and more clearly define the edges of the deck (**Figure 6**). Be careful to keep a sense of scale, though. A double or triple picture frame can look too heavy on a small deck. One trick to lighten the look of this type of frame is to use a border color that doesn't contrast dramatically with the field color.

Ultimately, it's an aesthetic choice. I highly recommend making a colored drawing of the deck for your



Figure 6. Wider borders have a greater visual impact, but the deck has to be large enough for the border to be in proportion.

clients to review. Combine this with a mock-up of the design using actual samples of the decking to get their buy-in. What you think looks great might look just awful to them.

Planning and Estimating

Once you know what the deck will look like, you'll need to know how it all goes together so you can price it, sell it, order materials, and build it. Let's start with the decking material itself. The more consistent the product is, the easier your job will be. Some composite decking has a cup to it that makes installation more difficult. And some boards are theoret-

ically reversible, but when you reverse them, the gapping changes because they are not symmetrical (**Figure 7, next page**). On a deck I built from a composite product recently, the planned dimensions didn't work out because of asymmetrical boards.

The products I've had good luck with include tropical hardwoods like ipe and mataverde, as well as most PVC boards. Composite boards I've used include Latitudes (877/463-8379, latitudesdeck.com), which is symmetrical and reversible; and CorrectDeck (now named DuraLife Siesta; 866/322-7452, gaf.com), which isn't flat, but it's not reversible, so flatness isn't

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Figure 7. When deck boards aren't uniform, the precise fits required for a picture frame are more difficult.

critical. I generally like Fiberon's Horizon decking (800/573-8841, fiberondecking.com) — it wins major points for containing 74 percent recycled and 8 percent reclaimed materials — but I've had trouble reversing it because it's not always symmetrical. As a result, you have to pay close attention when you install it or the gaps won't be consistent.

It's a lot easier to estimate decking if you're planning to use fasteners that don't require grooved boards. With exposed fasteners, you can order just square-edged boards. When using

grooved boards and hidden fasteners, however, you have to remember to also order ungrooved decking to run along the deck's perimeter. Matters get more complicated if you use grooved decking and have a contrasting-color double-row picture frame. Then you need to order grooved boards for the field, grooved boards in the picture-frame color for the inner course, and square-edged boards in the picture-frame color for the outer course. If you also run the field color to the edge of the deck anywhere, you'll need square-edged decking for the field color as well — four different types of boards (**Figure 8**).

With decking running about \$3 per lineal foot, you'll want to lay out the picture frame to minimize waste. To do that without relying on a lot of butt joints, you need to order different lengths of material. I figure out which lengths I'll need and how much of each length I should order by drawing a scale plan view of the deck (**Figure 9**), including the picture frame and other details, like where the railing posts will be. Using an architect's scale to measure each board, I make a rough cut list organized by color and type of board (grooved or square-edged), and indicate which pieces will come out of what stock. The field boards can be ordered in a similar way, but realistically, you don't need to be as painstaking with them.

Soon after I take delivery, I rough-cut the picture-frame stock according to the original cut list to verify I have all the material I need. If I'm short a particular board, there's time to get it delivered and not delay job completion. On a simple picture frame, though, this step isn't necessary.

Framing and Blocking

I frame picture-framed decks a little differently than standard decks. There are two basic rules: Deck boards

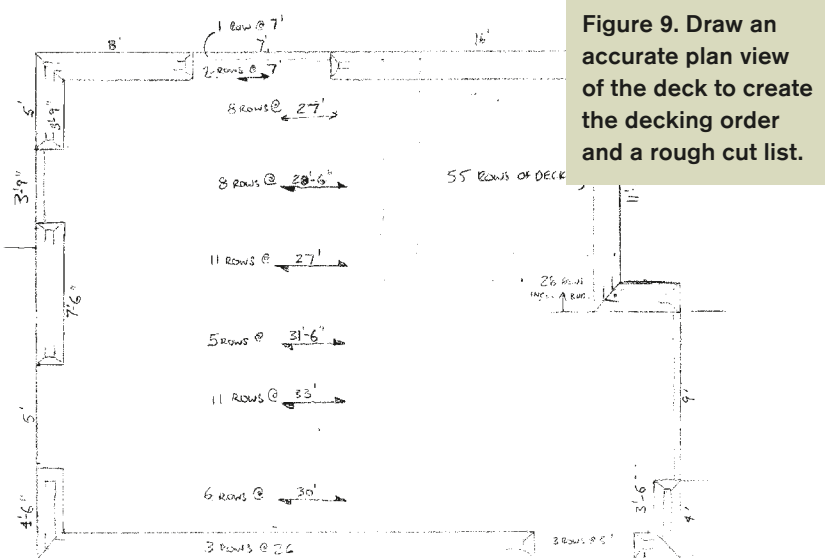
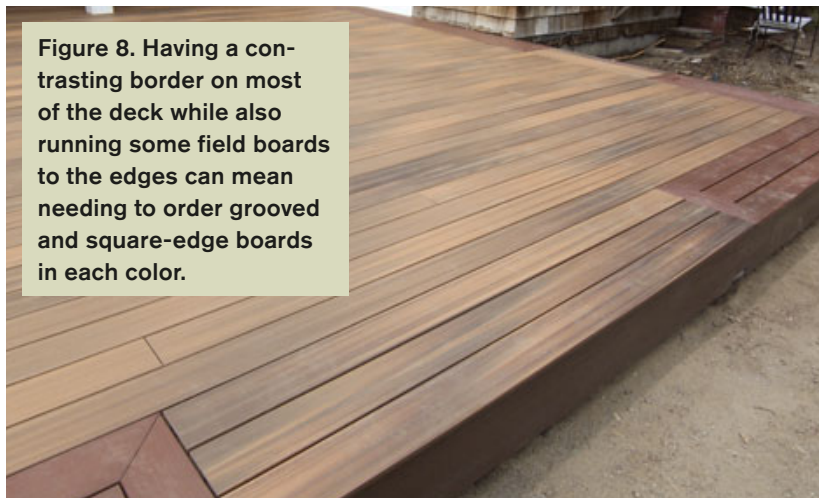


Figure 9. Draw an accurate plan view of the deck to create the decking order and a rough cut list.

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Figure 10. Where the border runs perpendicular to the joists, blocking is required for support.



Figure 11. Corners often require solid blocking to fully support the ends of the deck boards.



Figure 12. Mark the border layout on the joists and blocking.

can't run parallel to their supporting framing, and the end of every piece of decking needs to be supported.

The picture frame on the deck shown in Figure 8 used the field color at all locations a person could enter or exit the deck. Wherever the darker color of the picture frame would meet the lighter field color, I marked the framing so I'd know where I had to install blocking to pick up the return detail at the end of the darker sections.

Picture-frame boards that run parallel to the joists require blocking between the joists at the edges of the deck for support (Figure 10). Space the blocking the same as the joists. Also, there will have to be a joist on each side of the deck to catch the ends of the field decking (the "inboard" side of the blocking will be nailed to this joist). For a triple picture frame, the spacing for those two joists is close to 16 inches on center ($5\frac{1}{2}$ -inch board + $\frac{3}{16}$ -inch gap \times 3 rows = $17\frac{1}{16}$ inches; subtract 2 inches for the overhang and a skirtboard; then add 1 inch to keep the joist in from the ends of the field decking to make installing the clips easier).

On a deck with a single picture frame, the joist supporting the ends of the field boards is a lot closer to the deck's edge joist. Assuming a $5\frac{1}{2}$ -inch deck board, $1\frac{1}{2}$ inches for the deck's

edge joist, a $\frac{3}{4}$ -inch skirtboard, and a $1\frac{1}{4}$ -inch overhang, you're left with only $1\frac{1}{4}$ inches between the rim joist and the inside edge of the picture frame board. Add another $1\frac{1}{4}$ inches (approximately) to keep the special joist in from the ends of the field decking to make installing the clips easier, and you have a $2\frac{1}{2}$ -inch gap between the last two joists.

At corners, you'll need to get a little fancier (Figure 11). If the corners are mitered, you can install vertical blocking on a 45-degree angle (at a 90-degree corner); but for lap corners or multiple-miter corners, you'll probably need to install blocking on the flat. Despite my best attempts to convince clients that a waterproof membrane over the blocking is needed, they often refuse to pay to cover the extra materials and time. Lesson learned: Build it into the base price rather than offer it as an option.

With the blocking complete, I lay out for the ends of the field boards (Figure 12). At the sides of the deck I need to determine where the field boards will end so I can allow enough room for the picture frame. (Because I don't want to rip field boards to fit within the picture frame, I install them first and fit the frame to the overhang (usually $1\frac{1}{4}$ inches) to the

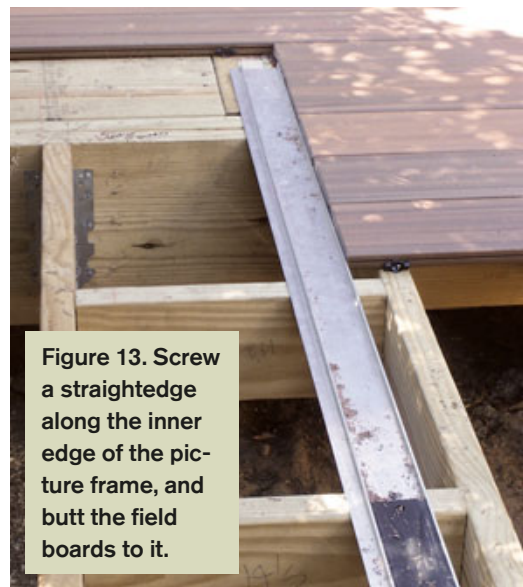


Figure 13. Screw a straightedge along the inner edge of the picture frame, and butt the field boards to it.

thickness of the skirt ($\frac{3}{4}$ inches). To avoid possible math errors, I hang the tape measure past the framing that 2 inches. Then I measure in the full width of the picture frame plus one extra gap — in this case $17\frac{1}{16}$ inches ($5\frac{1}{2}$ -inch board + $\frac{3}{16}$ -inch gap \times 3 rows) — and mark that point on the framing at each end. Finally, I snap a line (parallel to the main joists) on top of the blocking between the points I marked and label it as the edge of the field decking. Attaching a straightedge on this line makes it easier to fill in the field boards first, saving the picture framing for last (Figure 13).

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Figure 14. Aligning a border with a feature such as a door not only looks sharp, it helps guide traffic.



Figure 15. Pocket screws from below are a slick way to hide fasteners at the ledger and rim joists.



Figure 16. Hidden fastener nailers speed installation but can be awkward to use.



Figure 17. Use a layout square and a circular saw to miter corners after installation.

In some circumstances, it may be more important to line up the picture frame with a part of the house or a fixed object and then cut the field decking to fit within the border (**Figure 14**).

Installing the Picture Frame

For years, I face-screwed the first board against the house. That still works, but for this particular deck, I wanted to conceal the fasteners, so I used stainless steel pocket screws from below (Kreg Tool; 800/447-8638, kregtool.com). I also attached the last picture-frame board to the rim this way, covering the elongated holes with the skirtboard (**Figure 15**).

After I had installed the rows of picture-frame decking next to the house (leaving the miters uncut), I could really start to make some time installing the field boards. The ends of the field boards were butted tight to the straight edge installed earlier. On this deck, I used Fiberon's (880/573-8841, fiberondecking.com) hidden fasteners and its Eliminator Ballistic Nail-Screw gun to speed up production.

It isn't a perfect system, but it's faster than installing a screw at each clip with an impact driver. The tough part is that in order to use my weight to keep the board in contact with the joist, I have to stand on the already installed decking and hold the gun backwards, firing it toward myself (**Figure 16**). Otherwise, on joists that are a little low, the clip rotates to below the board when you shoot the screw-nail, which makes fastening the next board problematic. Additionally, you need to make sure the gun is seated properly or the screw-nail won't drive all the way in, and can sometimes miss the hole in the fastener.

Once the field decking is installed, I cut the remainder of the picture frame to fit. For the first side of a

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corner, a speedy approach is to secure all the boards in place, letting them run long, then cut all the boards at one time with a circular saw and a layout square (**Figure 17, page 5**). I use a 1-foot square for the outer boards, with its flange hooked to the outermost board. Because the

gaps between the deck boards are too tight for the flange of the big square to fit into, I cut the innermost board with the smaller square as the guide; its flange is $\frac{3}{16}$ inch thick, the perfect size for the gap. The cut at the innermost board can be finished with a chisel.

The deck needs to be quite square for this method to work. If the angle is off, it will be noticeable by the time you place the outermost board on the mating side. A safer approach for a deck that isn't exactly square is to measure the angle from both sides and draw a line for the miter that exactly splits the angle. Then install one entire row of picture-frame boards and cut them along the marked line before proceeding to the next row.

The mating boards on the other side of the corner are cut individually. If the angle isn't exactly 45 degrees, you can adjust the angle of the cut by shimming the one edge of your square (**Figure 18**). Knock off the sharp top edge with a block-plane (**Figure 19**). On decking that has a uniform top surface, I'll do this with a $\frac{1}{8}$ -inch roundover bit in my trim router so that all top edges of the board have the same roundover.

When the picture frame is parallel to the field boards, fastening the picture-frame boards in place is like fastening any other board in the field. But where the picture-frame will be perpendicular to the field boards, you'll need to slot the end of the field boards at least every 16 inches to receive the decking clips if you're using hidden fasteners (**Figure 20**). This can be done with a trim router and slotting bit or with a biscuit joiner.

Once the clips are installed, you're ready to install the first picture frame board. Don't put clips in the miter, because that will inhibit expansion and contraction of the boards during temperature changes.

On this particular design, the boards making up the picture frame don't just end in a square cut in places such as steps, where the field boards run to the edge of the deck. The first board and the third board have



Figure 18. A piece of paper or cardboard between a square and the board is a quick and consistent way to make minor angle adjustments.



Figure 19. Bevel abutting edges with a few passes of a block plane.



Figure 20. Slots cut in the ends of field boards accommodate the hidden fasteners for perpendicular picture-frame boards.

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mitered corners, effectively picture framing the second board while the three rows together picture frame the deck (**Figure 21**). To make sure the boards were cut correctly and lined up exactly with the field boards, I

installed all three rows of picture framing and marked the miters beginning at the groove in the field boards. I then removed the picture-frame boards, made my cuts, and reinstalled the boards. Note that the

inner and middle boards are grooved and the outer board is square-edged. The remaining piece of the picture frame is square-edged, too, so that no grooves are visible when looking at the side of the deck.

To fit the field decking that runs to the edge of the deck between the picture frames, I fully grooved both ends of each field board, and slid the pieces into position (**Figure 22**). The bottom edge of the field boards had to be chamfered as well so they would clear the screws holding the clips.

The final step to securing the outer decking is to install the pocket screws in the holes drilled earlier in the outer joists. I would not use this solution to hold the back of the board down, because stepping on the overhanging leading edge of this board would leverage the board up, and I believe the screw would pull out eventually. However, these pocket screws hold down only the front of the board, so I think they're fine.

And by the way, all the screw-nails are 316 stainless steel — the good stuff. In Rhode Island's salty air, and with treated lumber being as corrosive as it is, it doesn't make sense to try to save a few dollars by using 304 stainless, which has a lower nickel content and is far less corrosion resistant.

Picture framing can be subtle or it can be bold, but don't underestimate the value of aesthetics. It will take longer to produce a picture-framed deck so you'll have to charge more. Upsell your clients on the value of a sharper-looking deck — it's something different, something their neighbors don't have. It will set you apart from your competition, and because the extra money is for labor and not materials, it should put more money in your pocket. ❖

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Figure 21. A returned miter joins the outer boards of a picture frame.



Figure 22. The ends of field boards fitting between two perpendicular picture-frame boards are fully slotted to slide into place over the hidden fasteners (above). Beveling the bottom of the field board allows it to clear the hidden fasteners' screws (right).