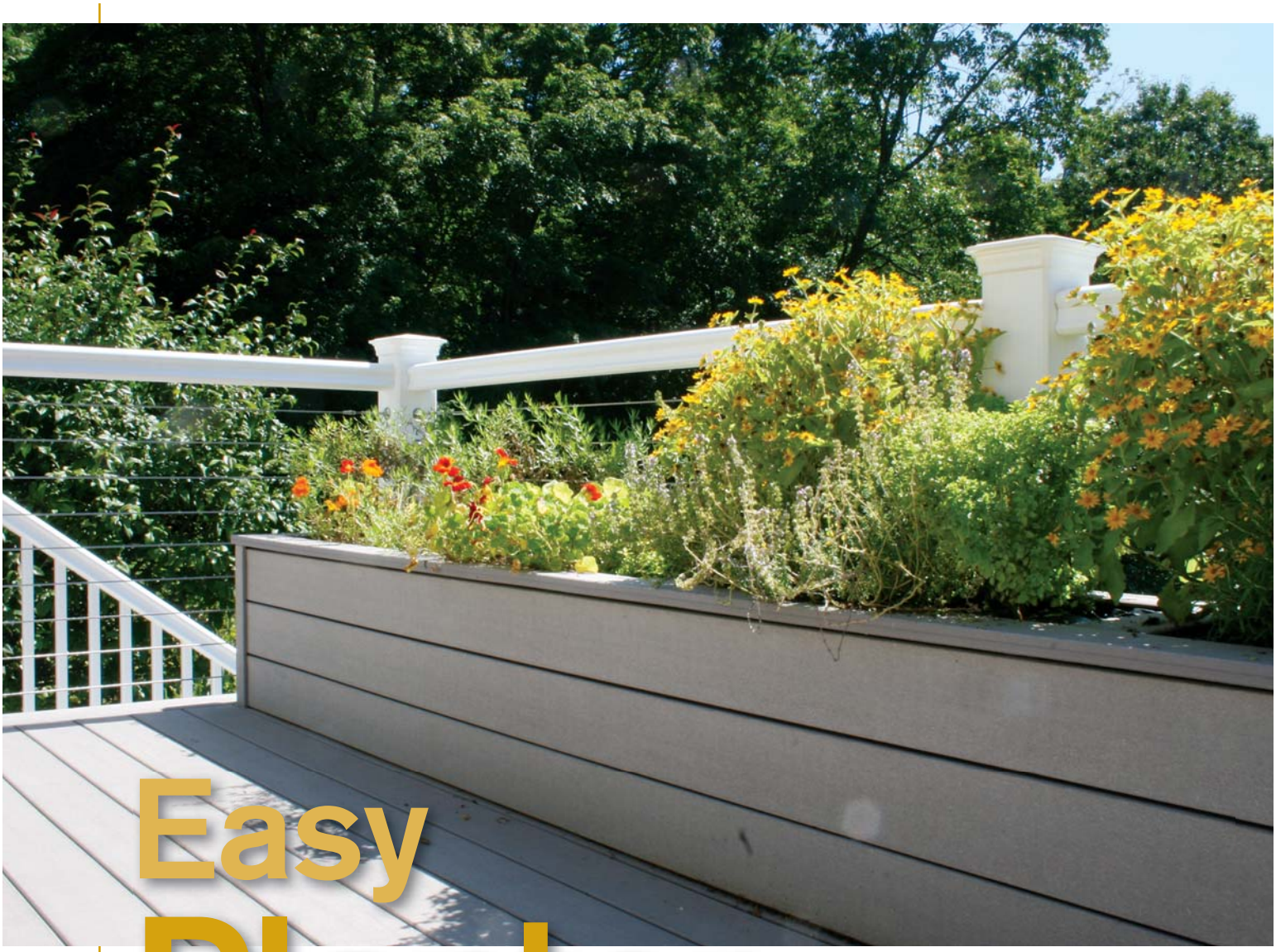

# Easy Planter Boxes

by Brent and Jennifer Benner

**Build a basic pressure-treated frame around a store-bought plastic liner and dress it up to match the deck**

Planters enhance the appearance and the function of a deck, making them popular add-ons for customers. Plantings soften the rigid look of decking material and provide bursts of flower color that clients love. Large planters filled with tall plants like ornamental grasses or shrubs can be used to create privacy or conceal eyesores like utility boxes and storage areas. And a planter that puts a bounty of fresh herbs or tomatoes right at the chef's fingertips makes a perfect complement to an outdoor kitchen.

Of course, planter boxes are also a great upsell for deck builders. But while they're easy to build, they do require some thought beyond simply constructing boxes and filling them with dirt. For one, contained gardens can tack on a few hundred pounds — especially once they've been watered — and the deck must be able to handle the extra weight. It's a good idea to double the joists where the planters will sit.

Water presents other challenges — and opportunities as well. Plants need it to grow and flourish, so you'll have to provide for drainage and shield the decking materials from moisture. You can also increase customer satisfaction and your profit by building in a watering system.

## Liners

A liner keeps the wood of the planter box from directly contacting soil moisture, which might cause rot or insect problems. For clients who are planning on growing edibles, liners also prevent any worry about lumber treatments leaching into the soil.

One option for a liner is a rubber membrane, such as PondGard from Firestone (800/428-4442, firestonesp.com). Drop-in metal liners made from copper or galvanized steel are another possibility, but they can be tricky to locate and often need to be custom ordered.

We prefer plastic containers that we can drop into a wood frame. They are quick, reliable, and — when you factor in the labor costs of other methods — relatively cheap. The self-watering EarthBoxes (888/917-3908, earthbox.com) used in this project cost about $30 each (**Figure 1**).

**Figure 1. A self-watering container like the one shown above can be easily dropped into a wood frame.**

## Irrigation and Drainage

Container plantings tend to dry out quickly in the heat of the summer and sometimes need a drink almost daily. No one wants to drag a hose around all summer, though, so offer your clients a watering system.

Drip irrigation on a timer is a great way to simplify the chore of watering and get plants the water they need. Irrigation tubing can be run behind planters, or for a planter that sits out in the open, it can be run underneath the decking and up through the bottom. Then, individual tubes with emitters are placed at the base of the plants to deliver water right where it's needed. Numerous sources, from home-and-garden centers to plumbing suppliers, sell kits. Two to consider

Figure 2. The outer frame of the planter box is essentially a stud wall made from treated lumber.

Figure 3. A plywood face stiffens the planter's frame and provides nailing for finishes (left). The author leaves out sections of plywood to fit the planters around the newels (below).

are Netafim (888/638-2346, netafimusa.com) and DripWorks (800/522-3747, dripworksusa.com).

An excellent alternative to drip irrigation is a self-watering container. It comes with a reservoir, which needs only periodic replenishments of water. When the reservoir is full, the water slowly wicks through the soil, providing moisture to the plant roots. To make watering even simpler for your clients, you can set up an automated watering system to refill the reservoir.

While plants need water, they shouldn't be swimming in it. Good drainage is a must for planter boxes. Be sure the liner and planter have adequate drainage holes. If you will be supplying the potting soil, choose what is called a soilless mix, which typically contains a blend of peat moss, composted pink bark, or coir; vermiculite; and sand or perlite. Regular dirt from the backyard tends to have poor drainage and can be the kiss of death for plants in a container.

## Building the Boxes

Because the dimensions of the planter assembly depended on the size of the liner, we purchased the liners first and used them as a guide. We also factored in the measurements of the decking materials that we were going to use for the fascia.

Making the frame was straightforward; we fastened pressure-treated 2-by stock together with stainless steel screws (**Figure 2**). We attached 3/4-inch pressure-treated plywood to the outside of the frame — for stability as well as to provide a place to attach the decking fascia (**Figure 3**).

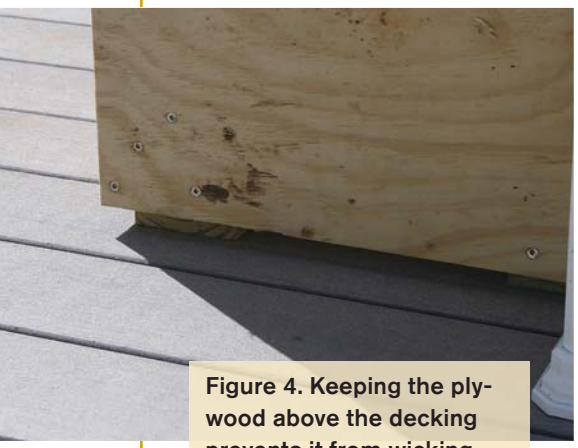

Figure 4. Keeping the plywood above the decking prevents it from wicking water, which could eventually cause delamination.

Then we screwed the planters to the joists (**Figure 4**).

To support the weight of the soil-filled containers, we installed 2-by risers along the bottom of the planter boxes. These were ripped so that the container's lip would just barely rest on the top of the frame (**Figure 5**). Next, a container was placed in position, and a 2 1/2 inch hole for drainage was marked and drilled (**Figure 6**).

The outside of the planter boxes is finished with TwinFinish composite decking (TimberTech; 800/307-7780, timbertech.com). Because it's generally less affected by water than is wood, composite decking is a great

Figure 5. Once filled with dirt, the liners will be too heavy to hang from their rims. Risers ripped from 2-by stock support the bottom of the liners. When installing the risers, place them where they won't interfere with the liners' drains.

Figure 6. With the liner in place, the author drops a marking pen through its overflow to mark the location of a drain hole (far left). The hole is large — 2 1/2 inches — to prevent clogging (left).

Figure 7. The lowest piece of the composite-decking facing is affixed to the planter from inside with screws (left). Subsequent pieces are attached with hidden fasteners (above).

Figure 8. The top of the planter is made from composite decking rabbeted to overlap the liner rims.

Figure 9. Screws hold down the surface facing, allowing it to be removed should the homeowners want to pull out the liners.

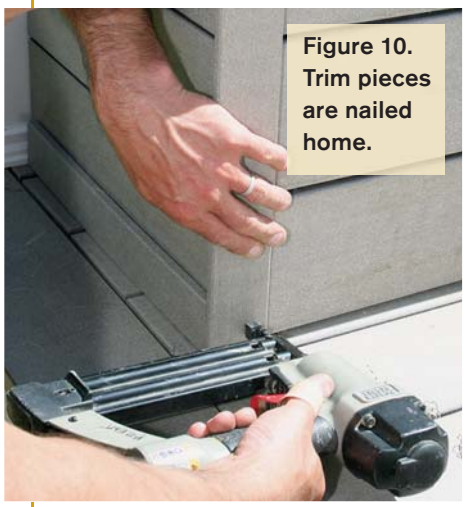

Figure 10. Trim pieces are nailed home.

material for planters. To fasten the lowest row of decking to the planters, we used screws from the inside; we used hidden fasteners to attach the rest (**Figure 7**).

The tops were a little more work than the sides. We wanted to cover up the lips of the EarthBoxes, yet allow them to be removed. So we ripped the decking to the right width and rabbeted the edges to fit over the EarthBoxes (**Figure 8**). To allow for removing the boxes, the tops are fastened down with screws, whose color matches the decking (**Figure 9**). A small piece of decking material finishes the corners (**Figure 10**).

After we built the planter, we installed a cable railing system to allow maximum light to reach the plants while still providing safety. Check with your local inspector about railing heights. Some inspectors measure from the decking, some measure from the top of permanent structures such as planters and benches. ❖

*Brent Benner is a carpenter, and Jennifer Benner, his wife, is a horticulturist and writer. They live in Roxbury, Conn.*