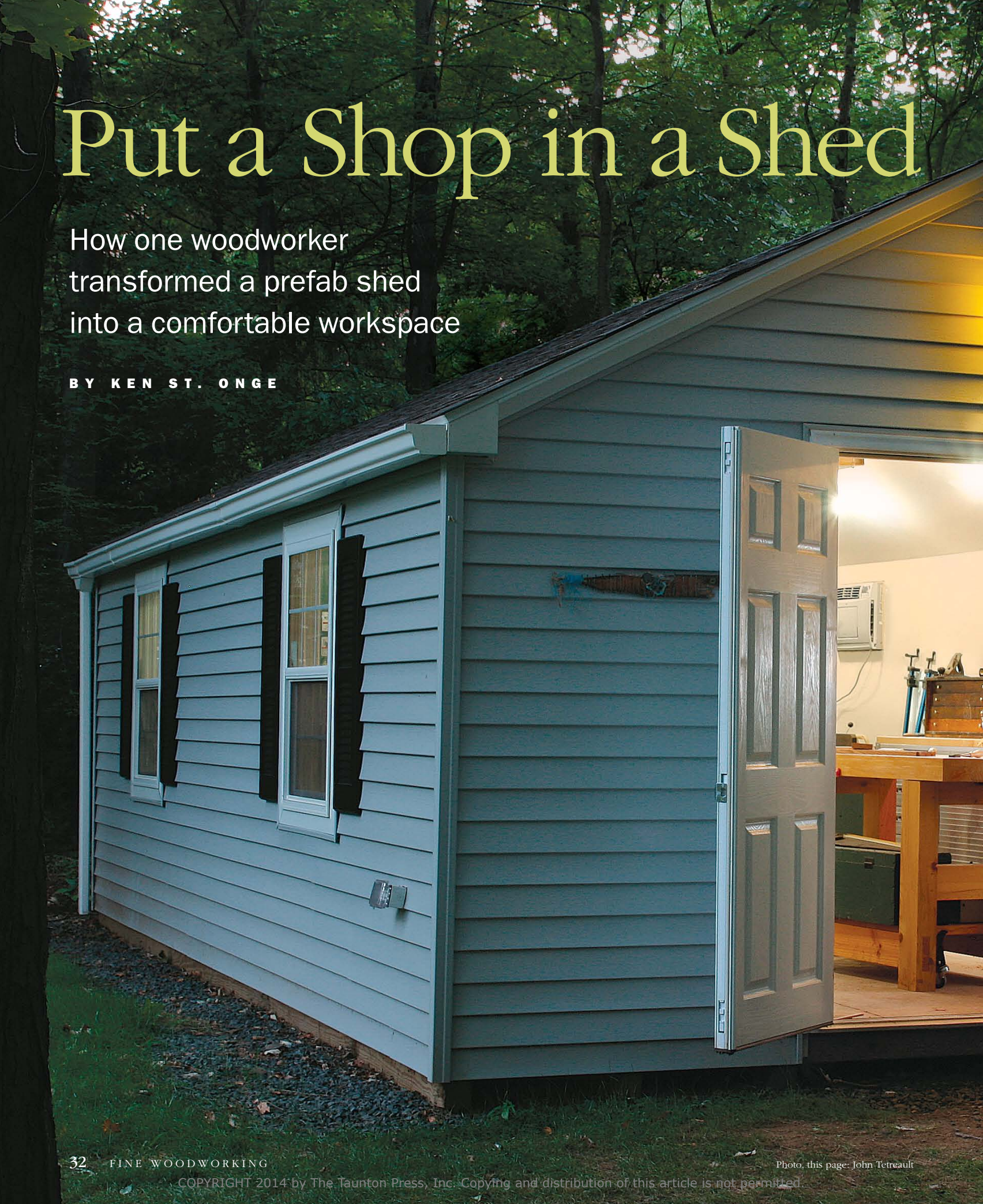
Put a Shop in a Shed

How one woodworker transformed a prefab shed into a comfortable workspace

BY KEN ST. ONGE



Photo, this page: John Tetreault

Working as an editor at *Fine Woodworking* is a great job, and one of the best benefits to the job is access to an amazing shop. It's big, bright, heated and cooled, and full of great tools and machines. You could build just about anything in it.

After I left the magazine for a new job, I did all of my woodworking in my small two-car garage, but it was a struggle. Power, lighting, and temperature control were limited. And because I shared space with our cars I was always moving machines around, often while in the middle of a project. On top of that, my tool and machine collection had long since eclipsed the space. For all these reasons, fixing up the garage wasn't an option. My finished basement is a family room, so it was out, too. An addition to the home or a stand-alone building would have been too expensive. I had to find a better path to a shop.

Then, one day, I saw a flyer for a company that makes and delivers completed sheds to your property, and thought, "Could it work?" As I've since discovered, the answer to that question is an emphatic "yes." Because a pre-built shed doesn't need a cement foundation and is completely constructed in a factory setting, it's much less expensive than building an addition or stand-alone shop on your property. These sheds can have taller ceilings than a garage and bigger doors than a basement, both big pluses for a woodworker. You can put a shed just about anywhere, which is a great thing if you want to avoid disturbing your sleeping family and neighbors.

There are some challenges. First, you need to do some site work to make way for the shed. And sheds aren't typically built to handle heavy machinery such as tablesaws, bandsaws, and jointers, so I needed the manufacturer to beef it up. It also needed to be outfitted with electricity and insulated against the heat and cold. In the end, I spent around $9,000 to get a shed ready to become a shop. Any site or electrical work you need done will cost extra. I'll tell you about my experience, which should help you decide if this is the right option for you.

Before buying a shed, decide where to put it

The prospect of a new shop is exciting, and I was tempted to pick out the shed right away, but I discovered that I first

Get the yard ready

There is some site prep to do before the shed arrives, some of it requiring special equipment and serious labor. However, many shed manufacturers will do the work for an additional charge.

You might need to take down some trees. *Being a woodworker, St. Onge painted the ends of the logs and set them aside for future turning projects.*

Firm, level foundation. *The crushed stone used to support the shed is easy to level, but the ground beneath needs to be level, firm, and flat, too. That's where the hard labor is.*

Path for electricity. *To satisfy local building codes, St. Onge had to bury the shop's electrical supply from the main house. Check for other pipes and wires before digging.*

needed to figure out where in my yard I could put it. It turns out that there are four things that determine the size and location of your shed: local building codes, how level the site is and how accessible it is for delivery, and then figuring out how to get electrical power to the shed.

My town requires a shed to be at least 5 ft. from any property line, and smaller than 1,000 sq. ft. I picked a shed that was 14 ft. wide by 24 ft. long, plenty big enough to hold all of my machines and benches, and well within the town's square footage limit.

Now I had to find a spot for it. Keeping the local codes in mind, I looked around my backyard for an area that was fairly flat and level. If your yard is like mine, there is no spot that's both level and flat, so the next best thing is an area that can be made that way without too much work. Aim for a location with no more than a few inches of elevation change, because you'll need to dig deeper into the high areas to create a level area.

Then I had to lay out the exact spot for the gravel pad that will support the structure. Most gravel foundations need to be at least a foot larger in each direction than the shed, so I marked out a pad slightly larger than 16 ft. by 26 ft.

Before digging, you should verify with the shed company that there are no

Photos, this page, opposite page: Ken St. Onge

Delivery requires a lot of space. *A shed might be small for a building, but the manufacturer needs a wide path to get a truck into your yard to offload the shed onto the gravel pad.*

obstructions—trees, rocks, fences—that can interfere with delivery of the shed or entry to it. Pre-built sheds are typically delivered by trailer, so you'll need enough room for the truck and trailer to maneuver, and a grade that's not too steep for them to back over while they're placing the building. Prior to delivery, I had to take down some trees and level my yard's grade.

After you have all of that sorted out, you can get to work on the gravel pad for the shed. Check with the manufacturer for requirements on how deep to make the pad, and what type of gravel to use.

I was hoping the shed would be close enough to my house that I could wire it for electricity without needing a sub-panel in the shed. My electrician said that 100 ft. is the tipping point. Mine was just a bit farther away, so I'd need a subpanel. Per local codes, I also had to dig a trench for conduit and the electrical wires.

Customize the shed for shop use

When I was picking the size and model of the shed, I spoke with the manufacturer about its future life as a woodshop full of machinery. They advised me to reinforce the floor, spacing the 2x4 joists 8 in. on center. This would prevent the floor from sagging under the weight of my tablesaw, bandsaw, lathe, bench, jointer, and planer. The additional joists, it turned out, also made it easier for me to bolt the machines to the floor.

I was planning to heat and cool my shop, so I sprang for the best doors and windows I could afford. The better insulated and easier to air-seal they are, the less expensive it will be to heat and cool the shop. Also, make sure the door is big enough to get machines in and completed projects out. I also had the manufacturer install housewrap between the sheathing and siding (not a standard option) to help prevent water vapor from penetrating the walls.

For cooling, I planned to use a wall-mounted air conditioner, so I asked the manufacturer to frame out an opening for it. The upcharge was less than $100, and it saved me from having to retrofit the opening after the shed was delivered. The shop is heated with a 240-volt wall-mounted electric heater that I installed near the door.

Electricity and insulation complete the transformation

After the shed was delivered, I hired an electrician to install the sub-panel and

Add the comforts of home

Nobody wants to work in a stark storage shed. Add electricity, insulation, and drywall first, then hang lights, and heat or cool your new shop as needed.

Install the wiring. *St. Onge hired an electrician to ensure that all the work was done to code, and that the supply was adequate for his machinery and power tools.*

run circuits for lighting and outlets. I had worked out where I was going to put all of my tools beforehand, so I gave the electrician a map identifying where I wanted the outlets and boxes for the lights.

When the electrician completed the wiring, I got to work on sealing the walls, around the windows and doors, and between the floor sheathing. After that, I insulated the walls. I then hung drywall, mudded the seams, and painted the walls.

When I finally used my shop for the first time, it was glorious. I built a hanging till for my handplanes, and it was much more enjoyable than working in my garage. I couldn't be happier. □

Ken St. Onge, who lives in central Connecticut, is blissfully at work in his new shop.

No matter where you live, seal and insulate. *Spray foam along the studs (top), and caulk between the floor joints (right) minimizes air movement between the inside and outside, while insulation (below) helps keep the shop cool in the summer and warm in the winter.*

Hang drywall. *Then paint the walls and ceiling a bright color, which will reflect light and brighten the space.*

Photos, this page Ken St. Onge (top); Matt Kenney (bottom four)