Scaffolding Made Easy

by Dave Crosby

A problem with scaffolds is that it often takes more time to set them up than it takes to do the job itself. So builders tend to avoid using them. Then, at best, they end up in uncomfortable, dangerous, or unproductive situations. At worst, they end up falling. Having been in this situation myself, and yet hesitant to press my luck any further, I've always wished for a fast, safe, and easy-to-use scaffold system.

Three-Legged Broncos

For working heights of up to about 12 feet, The Bronco (ReechCraft, 2001 First Ave. North, Fargo, ND 58102; 888/600-6160; www.reechcraft.com) is as good as it gets. This scaffold system uses two tubular aluminum tripods with adjustable folding legs to support a plank up to 24 feet long and a load of up to 600 pounds (see Figure 1). Two of the legs have adjustment holes every 1 1/2 inches and the third leg has holes every 3 inches, so the horses will easily accommodate uneven ground: up to a 30-inch difference in elevation across 4 feet (Figure 2). The horses can be set up in seconds and provide a secure, stable working platform from less than a foot off the ground up to about 70 inches to the top of the plank. Because the platform height is less than 6 feet, no fall protection is required, yet you can easily work at the top of an 8-foot wall built on short stemwalls.

Light and easy to carry. The folded-down horses take up very little room (Figure 3, next page), and I found that I could easily carry both horses (46 pounds) and a 12-foot 2x10 with a 2x4 strongback. The scaffold can be set up in seconds, so this kind of efficiency makes an unbeatable argument.

Setup. The legs are adjusted with a spring-loaded pin that you depress with your thumb. By turning the sliding leg clockwise, the detent is overridden and you can quickly position the leg and lock it in place. When I first saw this, I thought it wouldn't work very long because dirt would get into the mechanism and jam it. My suspicions were groundless, however. Knock the big chunks off with a scrap of lumber, give it an occasional shot of WD-40, and you're good to go. When we were cleaning our trowels, I'd give the horses a quick wash if I thought of it, but they got no special attention, and they never quit working.

Stability. Properly set up, the Broncos provide a comfortable working platform throughout the adjustment range. You can set up the horses facing each

Figure 1. At its maximum height, which is still less than 72 inches, no fall protection is required with Bronco scaffolding.

Figure 2. Square-tube aluminum tripods with adjustable legs provide a stable platform on uneven terrain.

Figure 3. When folded, the Broncos are compact and easy to carry or store.

Figure 4. The MonoJack is easy to set up and provides a working platform up to 16 feet high, with a minimal footprint on the ground.

other, or facing the same direction, or each facing opposite directions, which allows for flexibility in tight spaces. However, they're most stable when facing each other. If you place them both facing the same direction or opposing each other, incorrect adjustment becomes more noticeable.

Versatility. I've used a pair of Broncos for everything I could think of, including light demolition, framing, wrapping walls, installing gutters, plastering, and pouring concrete bond beams. No doubt we'll find more uses. For really heavy work or where conditions could be particularly unsafe, I'd still want pipe staging, but for everything else, the Broncos are great. Because they have only three legs, they are well-suited for uneven surfaces, and that third (opposing) leg will fit in between studs, so you can set the horses up in tight spaces or where the framing would normally be in the way. You can also pass the folded-down horses through a stud bay easily, so moving between areas is simple and quick. I've seen photographs of these horses used on top of a pitched roof, but I haven't tried that yet.

With the legs fully retracted, a couple of 2x10s will sit on the top rung about 36 inches off the ground, so when the Broncos aren't being used as scaffolds, they make a good on-site work table. The manufacturer keeps coming up with new attachments as well — the most recent addition is a bracket that turns one of the Broncos into a miter saw stand.

Because the Broncos fold down so compactly and have rubber feet, they're suitable for indoor use, too. At $329 to $369 a pair, they're about twice as expensive as a pair of 5-foot pipe frames with X-braces and leveling feet, but the speed, convenience, and versatility make them well worth the price.

The MonoJack

Another innovative scaffold system from the same manufacturer uses a high-tech version of a wooden contraption which was common all over New England once upon a time. I'm happy to report that the updated version is faster, much easier to use, and a whole lot safer.

The MonoJack (Figure 4) is a telescoping scaffolding system that one person can set up from start to finish in less than three minutes, according to the manufacturer.

With a properly rated plank, one pair of MonoJacks can span up to 24 feet, and has a load rating of 500 pounds per pair with a maximum plank height of 16 feet. The tubular leg sections telescope independently of each other, allowing for quick height adjustments without having to remove the plank. The latch mechanism is designed to adjust at 6-inch increments. If less than 6 inches is required, you can adjust the angle of the leg until you

have a level platform.

One of the most appealing features, after an easy setup, is the fact that you couldn't get a much smaller footprint — after all, there are only two legs on the whole system. Difficult ground conditions such as uneven surfaces, obstructions, and flower beds are no problem. The two most common questions (often expressed as objections by those who have never used these before) are, "Is it safe?" and "Won't it damage the siding?" The answers, in short, are "Yes" and "No."

Safety. We were all pretty skeptical about the stability before we got up on the plank, but if the legs are set to the correct angle and the plank is properly fastened, the scaffold is surprisingly stable. The job we tried these on was only one story, so we never did try the scaffold at full height, but at that height it felt secure.

Use with siding. As for damaging the siding, you would need a sledge hammer to damage the siding on the house shown here, but the manufacturer explains that there's no problem even with vinyl: A protective pad included with each MonoJack precludes scratching and a beveled leading edge allows the MonoJack to be adjusted smoothly without catching on the bottom edge of the siding. The 3/4-inch outside corner radius means there are no sharp corners or edges to damage the siding, and the amount of surface area in contact with the siding results in minimal force applied to the side of the building. According to the manufacturer, "If a pair of properly set MonoJacks is evenly supporting 500 pounds, only 20%, or 100 pounds, of pressure per jack is applied to the siding. That pressure is distributed over 240 square inches, with an equivalent [force] of 6.6 ounces per square inch."

We didn't have the chance to work this system as hard as the Broncos, and we certainly haven't used it enough to make a recommendation. But where we did use it, it worked well, and it's worth a look. The MonoJack System is available for around $650 per pair.