

the **CrossFit** JOURNAL ARTICLES

Mobility in Design

A Portable Pull-Up Structure

Doug Chapman



One of the main challenges facing new CrossFit affiliates, once you find a box and get some equipment, is figuring out where everything should go. The layout of the platforms and pull-up bars, and where you put your medicine balls, kettlebells, rings, and other equipment will enhance or diminish the experience your clients will have. If your facility is disorganized, your classes will be too.

Workout programming, space organization, and class flow are essential to operating successful group and individual training. Getting your layout and equipment right gives you the opportunity to train larger numbers of people in relatively small spaces. Larger classes—of, say, 15 to 30 people—require the instructor to have strong skills in handling equipment and class flow. The ability to morph, move, and manage large groups in

effective workouts is strongly affected by your facility's layout.

CrossFit Ann Arbor/HyperFit USA had more than more than 30,000 people-hours of CrossFit training in 2007 (up from 24,000 in 2006), with class sizes ranging from a high of 77 people to as small as one. Even before we found CrossFit several years ago, our bootcamp classes often had 30 to 50 people in them, with a very limited amount of equipment. The key then as now is organization and leadership.

When we were getting ready to open our main facility (the “compound”) in August of 2006, I knew that we would need to be able to move equipment and change up the facility depending on the class and the workout. One of the major issues I saw was pull-up bar placement.

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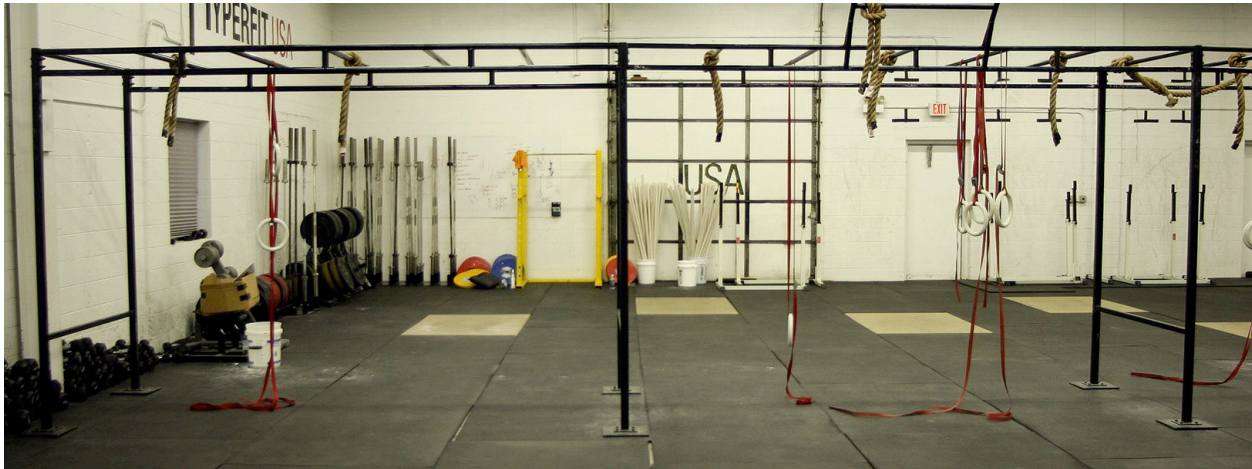
Mobility in Design (continued...)

If the bar was hung from a garage-doortype opening, we wouldn't have access to it for the four months out of the year when it is too cold to open the doors. (It is -5 degrees Fahrenheit here in Ann Arbor as I write this.) In the previous facility we trained at, we had access to six one-person bars that hung off the wall at kip-preventing proximity. This was a serious constraint on our CrossFit training. When you have a thirty people in a workout, they can tend to bottleneck at the bar.

Before setting up the compound, I visited a few affiliates, observed some classes, and borrowed some ideas. I really liked Brand X's bar, but the idea of fixing it permanently to the ground didn't sit well with me. I didn't want to commit to giving up a certain segment of floor space, and I wanted to be able to have pull-ups done anywhere I needed them done in a given workout. And fixing it to a wall required more linear bar length and wall space, which would be a problem with the shape and layout of our gym.

So I borrowed the tube design and took a crazy step: I made the entire pull-up bar mobile. A few people can pick it up and move it anywhere as needed—even outside. Being mobile does not mean unstable though. The width of the apparatus and the size of the base plates allow it to support numbers of even the most violent kippers. I came up with a sectional design that is easy to assemble, to move, and to disassemble if need





be. The initial design was for a structure 24 feet long and 5 feet wide, with the top bar at 8 feet and the lower bar at 7.5 feet. The monkey bars attached crosswise along the top of the structure are 24 inches apart and are also used for suspending rings for dips or for additional pull-up bar space. We added another section before the CrossFit certification seminar we hosted last April that has a larger diameter bar (to vary the grip on pull-ups). It adds another 12 feet of overall length and therefore 24 feet of pull-up bar space (utilizing both sides of the structure). Our overall useful pull-up space is now 72 feet of bar with room for 24-plus people around the outside at anytime and another 18 on the interior monkey bars if necessary. And with just a few people to hoist it, the whole thing moves inside or outside and can be disassembled simply by removing twelve half-inch bolts which attach the frame section to the stands.



The next addition will be another 24 feet in total length (so, 48 more feet of useful bar), but the width will be 6 feet this time instead of 5. Our current bar had some rock to it until we added 12-inch plates to the bases. The additional width will increase the overall footprint a bit, but it will increase stability and add room for pull-ups in the middle even when the outside is use. The net result is to be as adaptable as possible, in as many ways as possible.

Doug Chapman is the owner of [HyperFit USA](#), with more than twenty years of training experience and certifications in CrossFit (of course), Olympic weightlifting, running, and kettlebell training. HyperFit USA conducts over 30,000 personhours of training each year, with clientele including professional athletes, Olympic hopefuls, soccer moms, grandparents, and kids. We currently run classes in three locations, and will be expanding our offerings with the opening of another full-time box opening in March 2008.

HyperFit Pull-up
Bars

