

the **CrossFit** JOURNAL ARTICLES

Strategic Shopping

Outfitting a CrossFit Gym on the Cheap

Eddie Lugo

Hardly a week passes that I don't hear someone say, "I hear you opened a gym. That must have cost a fortune." My usual response is, "No, not really. You would be surprised at how small the start-up costs are relative to mainstream commercial fitness facilities." Typically, their eyes glaze over at this point, their eyebrows wrinkle, and I suspect that they walk away thinking, "Yeah right, no need to play it down. There is no way you can own a gym without spending a bundle." Well, there is.

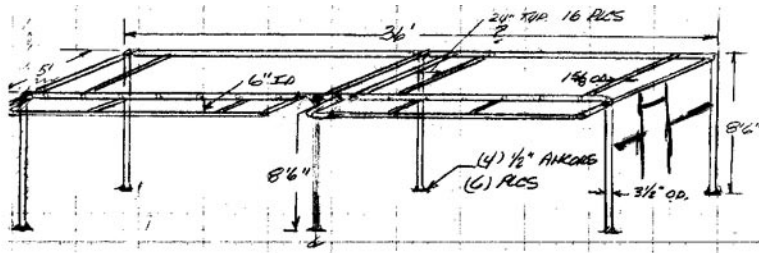
Part of the start-up process is not only to plan gym layout but to prioritize equipment purchases by determining which are required for the exercises that are most important and used most frequently—the staple movements that make up the core of our core. In my analysis, the core movements boiled down to the pull-up, squat, handstand push-up, and running—all things that require no significant cash outlay and are enough to establish an initial client base around. For the items that do require fairly large expenditures, there are often creative work-arounds, what I like to call the circumnavigation of retail purchases.

This article is essentially the story of how we at newly opened CrossFit San Diego effected such a circumnavigation and managed to open our doors with a minimum of cash outlay—and a minimum of construction aptitude. Few individuals achieve anything like this on their own,



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and I'm not one of them. It took a lot of help—and a bit of luck—to get it done. Our story demonstrates that outfitting a functional facility doesn't have to cost a small fortune, and I hope it will help spur the induction of additional affiliates into the CrossFit family.

Pull-up bars

The pull-up is a movement so functional that it is nearly impossible to have a complete facility without pull-up bars or, at the very least, something to hang on.

An Internet search for adequate pull-up bars—ones that can safely withstand vigorous kipping, yields a number of results, some good, some bad, and many ugly. Couple that requirement with the need to accommodate several trainees at the same time, and the combined total cost, along with the dreaded shipping charges, is more than significant.

Welders and steel fabricators to the rescue! I have yet to meet a member of these professions who doesn't consistently express a love for the manipulation of raw material. Most, if not all, say it's more pleasure than work. Lucky for me. As a city kid, it's common for me to sift through a tool box in complete bewilderment. One of these master craftsmen happened to be within earshot of my gripes and decided to lend a hand.

The next step was to find a reputable metal supplier—the cheaper the better (after all, metal is metal). Once you have that resource, all you need are a schematic of the pull-up bar and some instructions for the welder. In our case, a 36-foot-long pull-up bar that can support forty people at the same time required an expenditure of \$1,100 for materials. Our welder compensation “package” came in at a whopping \$20, in the form of a case of domestic beer with tax! The total cost for an adult-playground-worthy, “monkey-bar” was \$1,120.

Not inconsequential, but my requirement was mass and strength. (And if you figure the cost per trainee, for forty people performing pull-ups simultaneously, it comes out to a mere \$28 per capita—a bargain even compared to the flimsy, non-kippable, single-person units available on the Internet.) You can adjust your specifications to suit your facility's needs—and budget.

Parallettes

My experiences with parallettes have been great, whether for working the L-sit, the press-to-handstand, or the lovely pass-through.

My original parallette build took approximately two hours for a single pair. My hacksaw skills were shoddy at best, I had no power tools, and my work area was insufficient. The result was significant perspiration, a little blood, and maybe even a rage-induced tear or two.

United States Plastic Corporation is an online retailer of consumer plastic products. As FED Ex and UPS can't ship ten-foot sections, USPC will pre-cut your PVC order to the exact specifications you dictate at no extra charge to you and deliver it to your doorstep (normal shipping charges apply). This is very convenient for us. They also sell the accessories you need to complete the set (PVC elbows, T's, and end-caps).

The additional cost at this company over what you would pay at somewhere like Home Depot or a local plumbing supplier is insignificant. The 1-inch PVC is \$1.57/foot, and the more you purchase at one time, the cheaper your per unit cost will be. (At the same time you can also order six-foot lengths of PVC to use for unweighted skill and flexibility work.) If you're like me, and a lot of the people I speak with, eliminating manipulation time and applying it elsewhere is a good use of your time,



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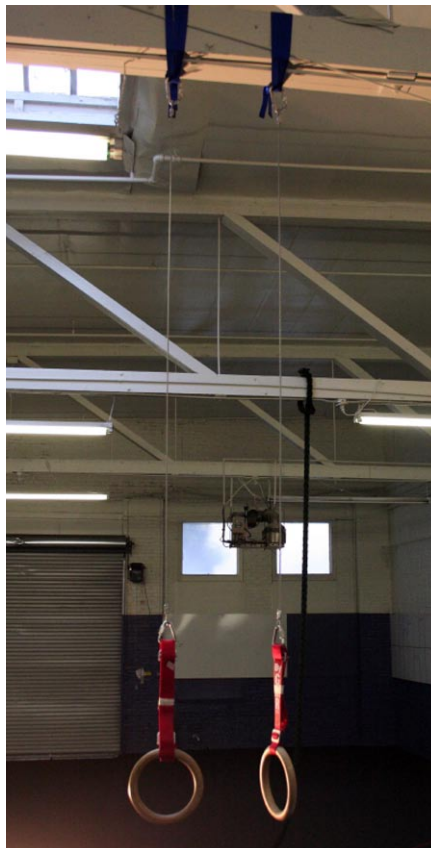
and if you're an affiliate in the process of your facility setup, this equates to six to ten hours of solo time saved as well as potentially considerable amounts of rage and tears. Once the material is in hand, proceed with assembly per the instructions in issue 13 of the CrossFit Journal (or on the Drills and Skills website).

A couple of alternative methods for construction and aesthetics show promise. Schedule 80 PVC, as opposed to 40, is better suited for threading the ends of the pieces to allow for disassembly and additional portability, and it renders them virtually indestructible. Access to a pipe threader and pre-threaded tees, elbows, and end caps are all you need to make stronger and more travel-friendly parallettes.

You can eliminate the lateral travel that pass-throughs and other dynamic moves create by using tool dip (available at your local home improvement or hardware store) to coat the end-caps on the feet with a liquid that, when dry, mimics the grip material found on most tool handles. This eliminates slipping of the parallettes on the floor. Where this isn't feasible, warranted, or welcome, rubber inner tubing cut to the width of the end cap is also adequate.

Rings

Gymnastics rings are an apparatus symbolic of both strength and power. When you see them, it's difficult not



to stare in awe because of what these two circles demand from the body—one of the reasons we love them.

The problem is they can be expensive. Couple this with their consistent use in CrossFit WODs, and, once again, the cash outlay to accommodate a large group can be considerable. But there are ways around it.

Competition set

You can expect to pay approximately \$100 to \$120 for a competition set, rings and straps only. If you want the entire setup—rings, straps, cables, swivels, dampeners, and beam hardware—you will pay roughly \$450, shipping included, at Norbert's Athletic Products.

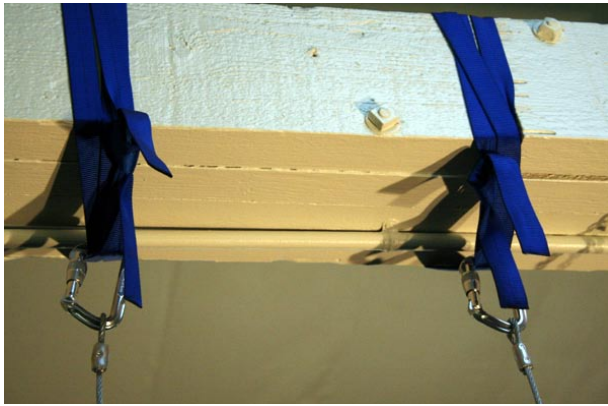
Hybrid set

This set requires a pair of rings previously purchased through gymnastics equipment manufacturer AAI (or elsewhere), twelve feet of 1-inch webbing (available at any climbing store or online at www.rei.com for 32 cents a foot), two 6-foot lengths of 3/8-inch pre-crimped cable, (see photo at left) and two 5,000-pound capacity locking carabiners, available at outdoors or hardware stores. The total cost is approximately \$150, or \$300 less than the official set.

The setup is relatively easy. Loop the webbing around your beam (in my case a 7" x 7" wood beam) and tie it with a water knot to secure it; place the carabiners through the 1-inch webbing and the cable eyelet; hook



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up the other end of the cable to the ring hardware; and you now have a hybrid set that will support significant static loads and inverted hangs—but not dynamic moves such as giant swings, etc.

Tyler Hass's new Elite rings are another excellent alternative, and less expensive than my hybrid version.

Even cheaper are seine purse rings (rings only). Seine purse rings, originally intended for hoisting large loads of fish in a net, were described on the CrossFit message board, and so far they have proven to be a wonderful and economical substitute. The grip circumference of these rings is slightly smaller (3 3/8") and the inner diameter of each ring is a bit larger (7 5/16") than competition wood rings, which are 3 5/8" and 7 1/16" respectively. They are made up of a high-tensile engineered plastic with a capacity to withstand heavy loads.

They are available online, and two will put you out approximately \$38 (shipping included). Total cost for a set worthy of everything except dynamic load-bearing is \$60, our cheapest handstand-push-up-worthy set yet (see photo at left below for ways to connect these rings to steel cable).

Other alternatives

Homemade PVC rings are significantly cheaper, to the tune of a few hundred dollars less. This is where you can get creative because the use for these rings is, and should be, limited to dips, muscle-ups, L-sits, and feet-on-the-floor push-ups (body inversion not recommended). With these as an option, a lack of cash needn't prevent you or your clients from using rings.

United States Plastic Corporation, again, will cut PVC to the lengths you require (in this case, two 28-inch pieces



of schedule 40 PVC pipe). You can find instructions for do-it-yourself PVC rings on the CrossFit message board.

Climbing ropes

Our ropes were purchased from West Marine boating supply company. Their reputation for selling quality rope

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(strong and reliable) made them the obvious choice.

I lucked into a shopping scenario that I think could be replicated at a similar location near you. I was able to purchase a particular rope that typically retails at \$11.75/foot for \$3/foot, a 75 percent discount! The “trick” was a bit of luck and a little investigation.

Most stores experience some level of product returns. Establishments like West Marine are no different. In my case, a consumer who had ordered a 90-foot length of 2-inch rope accidentally received 1-inch rope instead and returned it to the store. The store could not put it on the sales floor because it was a special order. So they offered me the entire length, including an eye-splice on one end, for \$270 (\$3/foot).

I originally went in to purchase four ropes at a reasonable price, but after hearing the per-foot price of the returned 1-inch rope, I rethought my needs and settled for one. My total cost would have been upward of \$300 for a single rope with the additional cost of the eye splice (see the photos below for a strong, cost-effective substitute for the eye splice). I now have four ropes that



are each 22.5 feet long that I purchased for the price of one, a savings of \$750.

So next time you're in the market for climbing rope, or any rope for that matter, go straight to customer service and ask them about excess inventory or returned items. Retailers are concerned with product turnover (more sales), and you should be willing to assist them with this dilemma—I'm sure they will appreciate the sale.

Plyo boxes

“Kelly” and “Fight Gone Bad” (FGB) are two CrossFit benchmark workouts that utilize plyo boxes for box jumps. A group of twenty on a two-round FGB (ten on the stations in two complete setups, and ten counting reps) would require only two boxes, whereas a group of 8 doing “Kelly” ideally requires a box for each person, an expensive WOD. An Internet price search for your standard 20-inch plyo box yields an average cost of \$99, without shipping.

Dixieline Lumber is a large, retail chain that specializes in lumber products. They also possess a lumber mill that will craft any item you can imagine, so long as it's made of wood, of course. My original intention was to buy plywood and construct plyo boxes myself, but, after discovering the minimal costs associated with the milling and craftsmanship, I gave them the go-ahead to do the entire box fabrication for me.

To do this, you will need a set of instructions for the milling department. You can either duplicate the exact measurements of an existing plyo box, or you can draft your own. I did a bit of both, providing my own design adapted from the specs of commercially available boxes.

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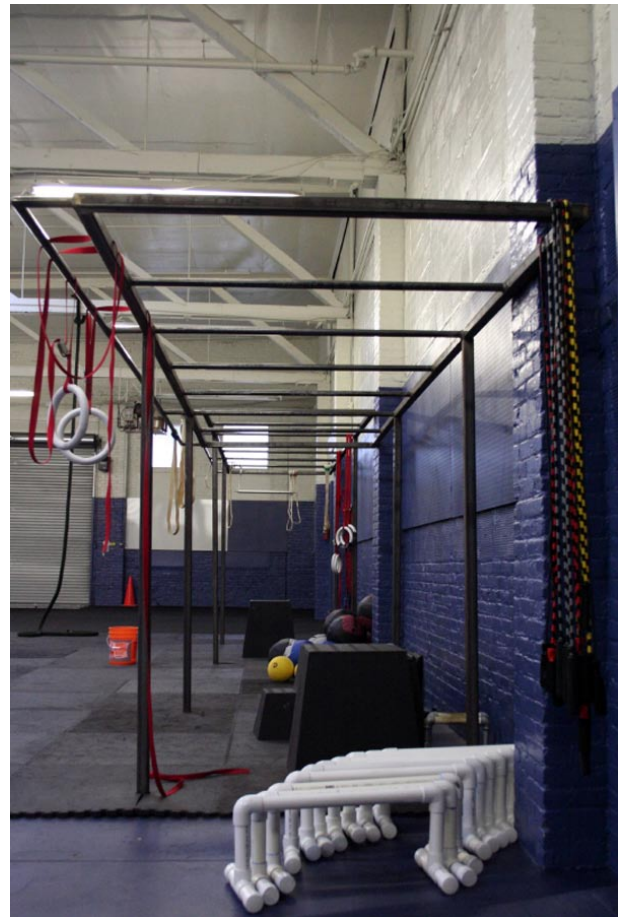
My diagrams illustrated two 24-inch, two 20-inch, and two 10-inch high boxes, all made from 3/4-inch plywood. The total cost, milling included, was \$205 (\$175 for milling and \$30 for the plywood). That's six boxes with a large base, angled upward, with beveled edges and a large foot surface, for approximately \$600 less than retail!

Any local lumber company can accomplish this feat, so long as they possess a mill. The mill employee I conversed with cut me off midway into every sentence—he quickly understood what I wanted and what had to be done. Their experience with their craft is immense. Lean on them.

Because of this experience, we wonder what else local mills can manufacture at such a discount. In addition to producing custom exercise equipment, they could even create furniture and/or fixtures for your gym. For instance, CFSD needed a place to store our clients' valuables during their sessions. So, we contracted with Dixieline to make four separate cubicle shelves. Our total cost of \$400 rivals that of any similar product, even at somewhere like IKEA.

A little help from your friends

Overall, outfitting CFSD has taught us many things. Perhaps the most relevant here is that a lack of excess startup capital can sometimes be a blessing in disguise. Sharing our grumbles and frustrations with others about the difficulties and expense of retail purchases caused many of the people around us, some whose talents were dormant or unknown to us before, to step forward and help. There is no substitution for this community effort. Being vocal about your needs and remaining diligent in your search for gear where utility is the aim lends itself well to the circumnavigation of retail purchases, whether luck plays its part on cue or not.



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