

Product Review: Fortress Iron Railings



I was asked by a customer of mine to install a Fortress Handrail system on his newly rebuilt deck. He had already ordered the materials, and just needed me to put it all together for him. Up to this point, I had never installed this rail system before. In fact, it had been many years since I had done an iron railing at all. The recent projects I have had that

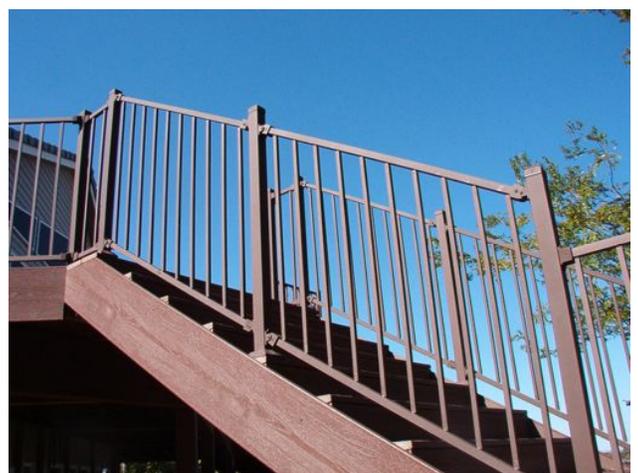
required metal railings were all subcontracted out to welding and fabrication shops that built them and installed them on site.

The distributor of the product here locally, Randy, from Boise Cascade, provided me with excellent advice and guidance on getting started. Like most products I get involved with, I also come up with some techniques of my own. More on that later.

What you see pictured are the Classic straight panel and adjustable panel or rake sections in Rustic Brown. We used 36" posts on the flat parts of the deck, and 44" posts trimmed to height on the stairs.

The homeowner wanted to help with the install, and his second set of hands proved very valuable and did speed things up. The install started with the straight sections as I thought this would be the best place to develop the sequencing. I started up against the house with the first post. Oh, by the way, all of the posts used here have a base plate on them with four holes for the fasteners to attach through. We screwed the post to the deck using 5/16 x 6" Torx Lags.

The first tip I would offer you is to construct a 1x2 stick of the length between the two rail mounting brackets on the posts. I measured down 1 1/4" from the top of the posts, drilled a 7/32" hole here and attached the first screw in the bracket. After the second and final screw, I used the 1x2 as a spacer to determine the location of the bottom bracket. It worked great, and once established, really speeded up the following posts.



The horizontal rail sections come in 6' sections; so for even spacing of posts, if you have to trim rail sections, make sure to take equal amounts off each end. And also be sure to use matching Fortress touch up spray paint on any fresh cuts before assembly.

After we got the system in place, we were able to install all of the flat surface rail sections in about 6 hours. The steps were next and things came to a grinding halt.



I may have made more out of it than I needed to, but I wanted to make sure that every stair section was evenly spaced as well as plumb. I found that a sheet of OSB clamped to a secured upper post and setting on the stair treads with a 2x2 as a spacer for the bottom rail of the Fortress rail worked perfect. It allowed for the next post to be positioned and clamped and then the section placed in front and marked for trimming. The Fortress angle brackets have a drain hole in them and if this line is extended across the mock up rail section with the

bracket held on to the post, this is where the rail should be cut. NOTE: It took me screwing up one section before I figured this out.

After marking, we would trim the rails, slip on the brackets, return it up against the OSB, clamp it in place, and mark the holes for drilling the posts. This also worked perfect. We would then attach the brackets to the upper fixed post, slip in the rail, attach the brackets to the loose post, slide it onto the rail, and then secure the post to the deck. This deck had 10 sections of stair rail on each of the two stair runs. 20 total and this took another 12 total hours.

To finish up, we trimmed the stair posts to the same height as the others and put on the caps and base collars.

Now, I am not sure if we did something wrong or this is just the way it is, but several of the stair sections, in order to center the rails in-between the posts, required that I notch the mounting brackets. I had to do this with a disc grinder while holding the bracket with vice grips. It all worked fine, but again I question if this is just the way it is, or did I do something wrong. Doesn't matter I guess, it looks great from all points of view.

All in all, this job was a lot of work and quite the learning experience. The end result is quite stunning and has already gathered up complements from the neighbors. **I would use this system again and again.** It is rock solid, firm, straight, true, and plumb. And should be for many years to come.

If this is your first attempt at Installing Fortress rails, I suggest you have: pencils and a tape measure, a couple of cordless drills, a recip saw with a metal blade, some 7/32" steel bits, a #1 screwdriver for the base trims, a #3 tip for the bracket screws, 4 quick clamps, two magnetic torpedo levels, a sheet of OSB, a 1x2, a 2x2, an angle grinder, a hand file, and a #30 Torx tip for the post lags. And some patience and willingness to take your time. Rush this project and it will suffer. How good it looks when done is a direct reflection on the time you spend on the details.

For more information, warranty info, and install instructions from the factory point of view, visit www.fortressiron.com