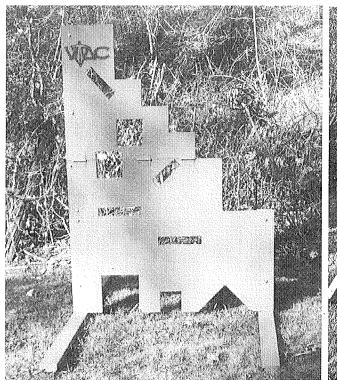


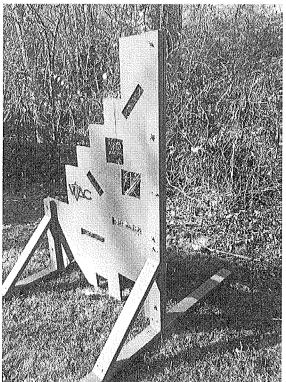
Base legs are 72" long and have holes at ends so barricade can be staked into the ground.

Barricade is secured to base legs with 1/4" bolts and wing-nuts. Barricade and legs are marked.

Build A Portable Viking Tactics® (VTAC®) Training Barricade

By Dave Klaus





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If you've ever shot from behind the VTAC Barricade—or have only seen photos of it in *Green Eyes & Black Guns* or any of the outstanding VTAC training videos—you know how critical this piece of gear is to your training.

If you own a shooting range or have the ability to leave your VTAC Barricade at the range, fine—you won't need this article. Just build a fixed-construction unit and leave it at the range.

I can't leave a Barricade at the range, and don't always get to use the SUV or pickup to go to the range. Often as not, I have to drive my 2000 Accord beater (it just won't die), and the fixed construction VTAC Barricade is too big to fit. Actually, it won't fit in the SUV either. So, I needed a transportable barricade that would disassemble and fit in the Honda.

A "knock-down" or folding unit would do the trick, but after checking the internet for plans, I discovered I'd have to do it on my own. What I did is illustrated below, although of course it's only one way to skin this cat.

I'm very pleased the finished unit is easily man-portable (the heaviest part is only 34 pounds and $3' \times 4''$) and fits easily into my Honda's trunk with the rear seat folded down.

Kyle and his crew have built mountains of these fixed units they can pump one out in half a day. I had never built even one, and this unit took me about two days including design and paint drying time.

The design is rock-solid, so all you have to do is fabricate your own unit. The various offset parts are specifically designed to give maximum rigidity when assembled. The description is quite detailed, so if you're an experienced woodworker skip the details and just check the photos. Let's get started.

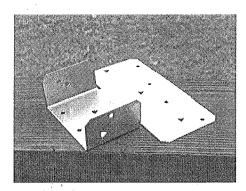
CONSTRUCTION SUPPLIES

Kyle told me to use hardwood or regular-grade plywood, but <u>NOT</u> treated plywood because "treated plywood becomes Pringles Potato chips quickly, as did the non treated, but painted non treated last forever and doesn't ripple and bend. They are also lighter."

I bought my stuff at Lowes because they have a 10% military (active or retired) discount. Thanks Lowes!

Here's the material I used to build this puppy:

- 1- 4' x 8' x 3/4" <u>NON PRESSURE TREATED</u> plywood*, cut as follows:
 - One 4' x 36" piece
 - One 30" x 36" piece
- 4- 2" x 4" x 8' pine boards**, cut at the store as follows:
 - Two- 6' lengths
 - Two- 28" lengths
 - Two- 24" lengths
 - One- 48" length
- 8- 5/16" x 3" hex head bolts
- 16- 5/16" washers
- 8- 5//16" butterfly nuts (wing nuts)
- 3- 4" x 4" Strong-Tie Twin Post Cap (Lowes #51759)



- 3- 3" entry door hinges***
- Box . 3" Primeguard Exterior Screws
- Box 3/4" Primeguard Exterior Screws
- 1 gal. Exterior paint in color of your choice

Paintbrushes/roller as desired Cardboard Firing Slot Templates see below)

- 1- Fabric small parts storage bag
- 1- Surplus 5.56 double-mag pouch****
- 1- ½" box-end wrench
- * I actually used 23/32" because that's all they had available the day I bought my stuff. It's only 1/32" less than 3/4"; close enough for government work. Buy the sanded stuff—at least on one side.
- ** Make sure you buy dead-straight boards, which is a bit of a challenge. I used non-pressure treated pine for weight savings, but these boards could be pressure treated.
- *** Buy hinges that will lay completely flat when closed. Not all designs do; check it in the store before you buy (see photo below).
- **** This covers the exposed sharp edges of the lower vertical support bracket during storage and transportation. Any padded pocket will do; I just used an extra double-mag pouch.

TOOLS

You'll need tools to do four things:

- Cut holes in the plywood for saw blade entry
- Cut the plywood to shape (edges and holes)
- $\,$ Cut 45° corners on the diagonal support members
- Drill the bolt holes & attach screws

There are several ways to do these tasks, so use whatever tools you ordinarily use. I used:

- ½" corded hand drill (electric drill didn't have enough power)
- 2" hole saw
- 11/32" drill bit (1/32" larger than my 5/16" bolts)
- Jigsaw*
- Compound mitre saw (for 45° cuts)
- Bench vise
- Mallet
- X-Acto knife and new #11 blade
- 2" painter's blue masking tape
- 16" x 24" builder's square (steel or aluminum)

^{*} I've got a DeWalt plunge router, but it didn't cut the holes fast enough, so I went with the drill/hole saw/jigsaw.

CONSTRUCTION

Firing Slot Templates

Dead simple. Make cardboard templates from any heavy cardboard you have available. Make these sizes:

- 2" x 8"

- 2" x 7"

- 2" x 10"

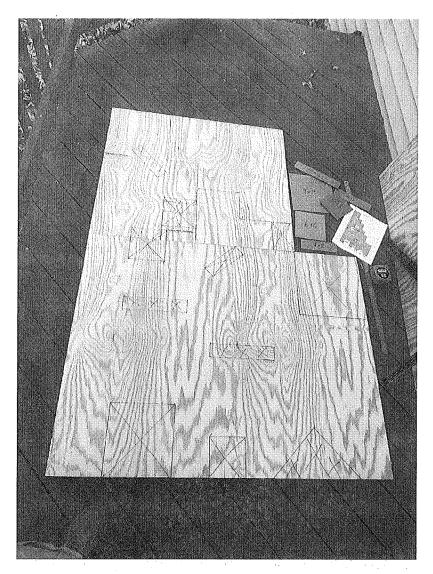
- 5" x 5"

- 6" x 6"

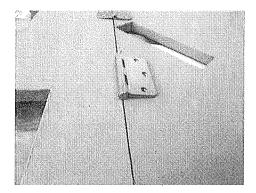
- 9" x 9"

Plywood Face

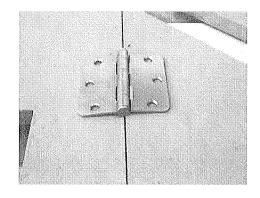
1. Push the top and bottom plywood pieces together. Lay out "stair step" pattern on top and bottom pieces. Use the steel square to ensure your lines are straight and square. I put the smoothest side on the shooter's side because I don't want to be distracted by splinters when I'm training.



- 2. Measure twice and cut once. Make sure!
- 3. Cut the stair step pattern with the jigsaw.
- 4. Measure the locations for the various firing slots. I measure to one corner, then use the steel square to ensure the template is properly aligned.
- 5. Cut holes in the corners of the firing slots with the 2" hole saw, then finish with the jigsaw.
- 6. The cutting process may leave attached splinters; remove by hand. You can use a belt sander on each side for a smoother surface; I didn't bother and don't regret it.
- 7. Paint all edges of the plywood sheets; the edges will soak up a considerable amount of paint. Remember thinner coats will dry much faster than thick coats. I decided on Flat Dark Earth, but paint it whatever color you want.
- 8. Paint both sides of the plywood. I used two coats, jus' 'cuz I wanted to. One would probably be OK. I used a paint roller because I like the stippled finish it gives.
- 9. Lay both pieces on a flat surface and tightly butt the top piece in the proper location against the bottom piece. This tight alignment is important for maximum rigidity of the final structure.
- 10. Screw all three hinges in place on the SHOOTER'S side of the plywood face pieces. **FOR MAXIMUM REGIDITY, IT IS EXTREMELY IMPORTANT THE HINGES ATTACH TO THE SIDE OPPOSITE THE VERTICAL SUPPORTS.** See the photos above for details.
 - Double check that the hinges will lay completely flat when closed as shown in the photo.

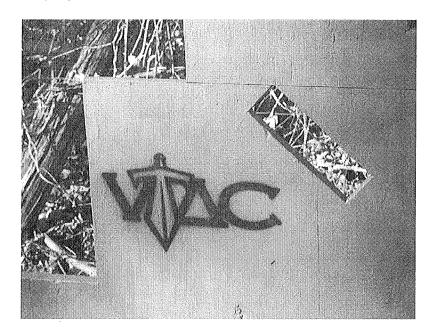


- Ensure the centerline of each hinge is exactly on the centerline of the butt joint between the top and bottom plywood face parts.



- The location of the hinge nearest the tall side of the Barricade is VERY IMPORTANT. If you get it too close to the outside edge of the plywood face you'll end up trying to drill through the hinge to attach the vertical support (ask me how I know that).
- Paint the hinges; it won't stay on too well, but will look nice for a while!

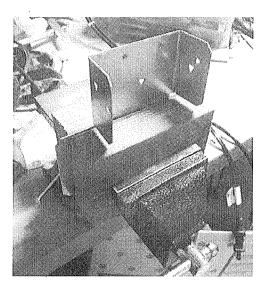
I did not invent this basic Barricade, and neither did you—Kyle and his VTAC crew did. We have a moral responsibility to put their logo on our Barricades. The next two steps will take you through this simple process.

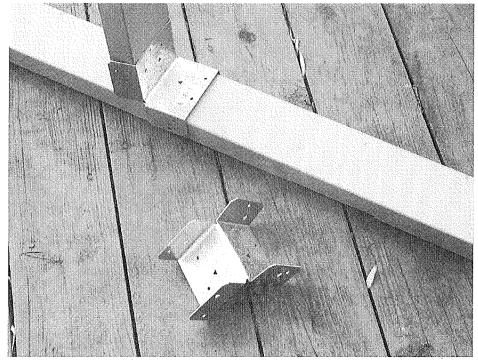


- 11. To create your VTAC® stencil, photocopy the attached logo onto a sheet of "cover stock" paper (NOT normal copy paper)—cheap to do at a copy shop. Carefully cut out the black parts with an X-Acto knife with a new #11 blade and metal straight-edge. Avoid cutting through the thin support lines, or your stencil won't lie close to the plywood face.
- 12. Tape the stencil place with the 2" blue painter's masking tape and add scrap paper around the outside edges to mask overspray. Use a contrasting color to paint the logo (flat black is always a good choice). When you spray, hold the can about 9" from the surface and ensure the spray is always 90° from the plywood surface as you sweep your hand back and forth. If you spray at an angle a lot of the paint will go under the edges of the stencil. This will happen anyway, but it's a lot worse if you don't hold the spray at a 90° angle.

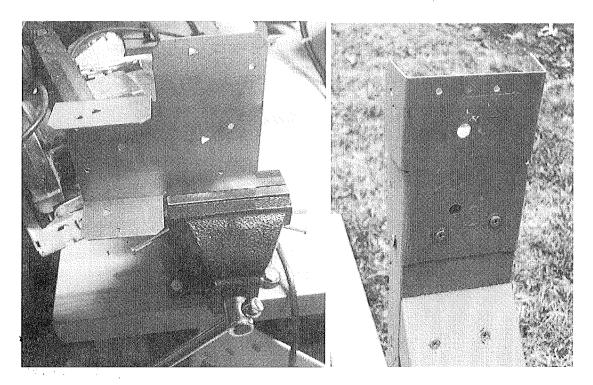
2' X 4' SUPPORT STRUCTURE

1. I could not find an off-the-shelf fitting that would give me the rigidity I want for the vertical/horizontal join, so I decided to make my own. Bend \underline{two} of the 4" x 4" Strong-Tie Twin Post Caps (weird name, but that's what they call them) in a bench vise as shown. These will securely tie the vertical supports to the base legs. If your bench vise is not deep enough to fit the part, use a couple of heavy metal plates or 2x4s to support the bend line while you tap the ears into position with a mallet.

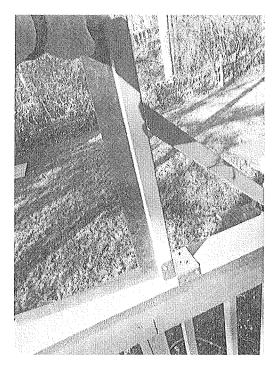




2. Bend one $4" \times 4"$ Strong-Tie Twin Post Cap into a cup shape as shown below (will tie the short and long vertical legs on one side).



- 3. Lay out the parts (base leg, vertical legs, diagonal braces, and plywood face) so you don't lose track of what goes where.
- 4. Use the compound mitre saw (or whatever) to cut the 45° corners on the diagonal supports. The length of the shorter side should be 24".
- 5. On each base leg, measure 37" from one end and make a mark. This is where the edge of the vertical leg will rest.
- 6. Position one of the 4" x 4" Strong-Tie Twin Post Caps that has been bent into proper shape and fasten with 34" exterior screws. Do the same for the other base leg (see photo above).
- 7. Use $\frac{3}{4}$ " exterior screws to fasten a 2' vertical leg to the base leg. Do the same for the other base leg. BE SURE TO USE 2' VERTICAL LEGS ON EACH SIDE!
- 8. Use the steel square to ensure the 2' vertical leg is exactly perpendicular to the base leg, then fix the bottom of the base leg into the bottom of the vertical leg with two 3" exterior screws. Do the same for the other side.



- 9. Put a diagonal brace in place on the same side as the metal fitting. Fix in place with two 3" exterior screws at each end, ensuring the screw tip does not project out the other side of the 2x4.
- 10. Screw the <u>cup-shaped</u> 4" x 4" Strong-Tie Twin Post Cap at the top of one of the 2' vertical legs. For maximum rigidity, the "V" cutout between the ears on each side must lay below the butt end of the short vertical support. Check the photo carefully to ensure you have it in the correct position—this is very important. Note this fitting is attached ONLY to the side with longest vertical support requirement.



11. Paint the entire support structure. I used two coats for best longevity.

BARRICADE ASSEMBLY

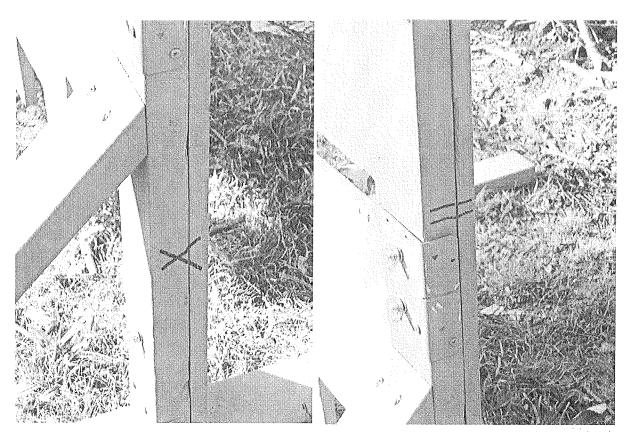
- 1. Place the support legs on the ground 4' apart, with the vertical legs aligned.
- 2. Place the unfolded plywood face against the vertical legs. Drill two 11/16" holes through the SHORT side and use a 5/16" x 3" screws, two washers, and a wing nut through each hole to hold it together. Use a ½" box end wrench to help fully tighten the wing nuts.

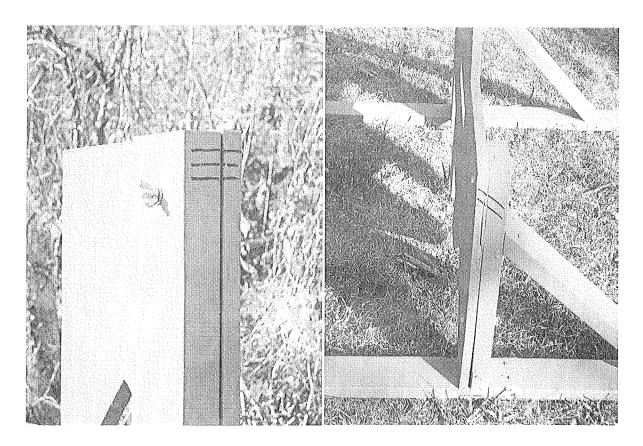


- 3. Place the 4' vertical support leg into the top of the cup created by the 4'' x 4'' Strong-Tie Twin Post Cap. Ensure the ends of the two legs butt together tightly and form a straight line.
- 4. Drill a hole THROUGH BOTH THE METAL 4" X 4" STRONG-TIE TWIN POST CAP AND VERTICAL LEG at the <u>top</u> of the 2' section and another through the <u>bottom</u> of the 4' leg. Install a 5/16" x 3" screw with two washers and wing nut through each hole.
- 5. Drill three more 11/16" holes above the metal fitting and install a 5/16" x 3" screw, two washers, and wing nut through each.



6. Put indexing marks in black permanent marker in the locations shown. These will make assembly in the field much faster.

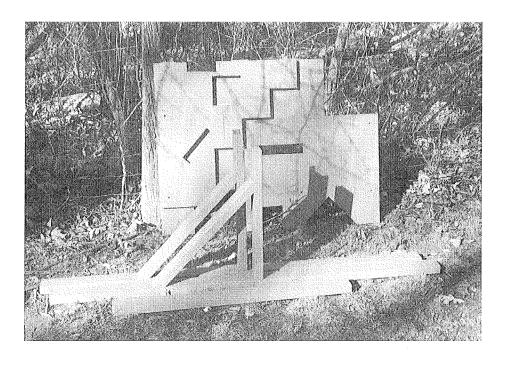




7. Test the assembly by giving it a good shake to ensure rigidity. It should be plenty rigid.

YOU'RE <u>ALMOST</u> FINISHED!

The Barricade knocks down into four parts and fits easily into a car trunk or back seat. Each part is easily man-portable, and most women can carry the parts without difficulty as well.



Make up a small bag to hold your bolts, washers, wing nuts, and box-end wrench and screw it to the exterior side of the 4' vertical support. This will keep them handy when it's time to assemble your Barricade at the range and will prevent lost parts. I recommend having a couple extra 5/16" x 3" bolts, wing nuts, and washers in the bag. If you lose one, it's a PITA to go looking at the last minute—or have a wobbly Barricade.

Originally I expected to bolt two lengths of webbing to the plywood face to make transport handholds. This turned out to be unnecessary because the firing holes provided perfect handholds.

TRAINING

Remember this VTAC® Barricade is a tool to improve your ability to hit the target from unusual positions. If you don't already have Kyle's book *Green Eyes & Black Rifles*, order it <u>here</u>. Nobody at VTAC made me put this section in—I strongly believe this is the best tactical carbine book larnin' you can get.

If you don't already have them, I unreservedly recommend his five training DVDs as well:

Rifle Drills Part 1 DVD

Rifle Drills Part 2 DVD

Rifle Malfunctions DVD

Pistol Drills Part 1 DVD

Pistol Drills Part 2 DVD

ONE LAST NOTE

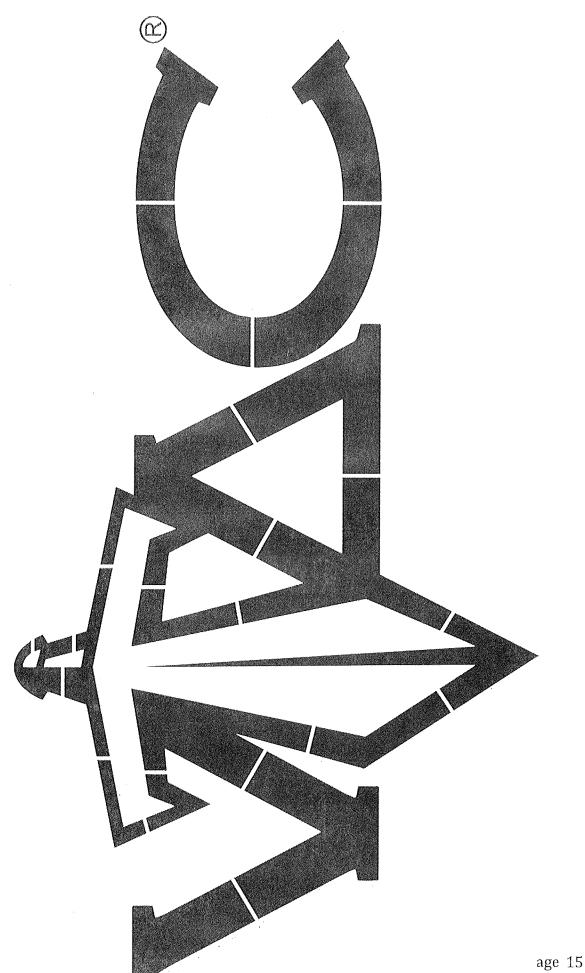
Remember that shooting in unusual positions from behind this Barricade could cause your shots to go over the range backstop if you don't maintain muzzle control.

Also, negligent discharges have the potential to be much more dangerous.

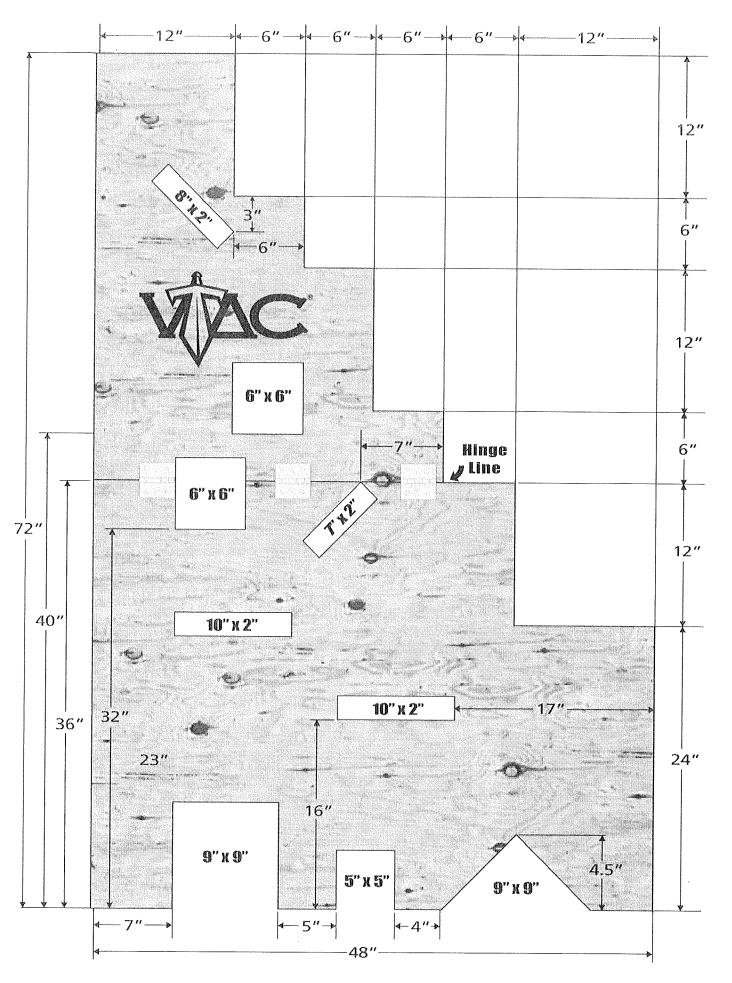
<u>Maintain your situational awareness and muzzle control</u> at all times!

Good luck and good shooting!

Dave Klaus December 2012 (This page intentionally left blank)



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