

Constructing a PVC Watersports Site & Distance Marker

Simple cost effective design - water tight durable (will not puncture) - visible - safe - unattractive to dogs

Materials:	Home Depot prices as of May 2009
(1) 5/16 X 3 1/4 Eye Bolt	(\$.60 ea.)
(3) 5/16 Hex Nut	(galvanized \$.19 or zinc \$.10 ea.)
(2) 5/16 Washer	(galvanized \$.20 ea.)
(1) 8 oz can of PVC primer	(\$3.87)
(1) 8 oz can of PVC Cement	(\$4.94)
(1) 3" Diameter X 10 Ft PVC 40PE Pipe	(\$.93 per foot)
(2) 3" PVC End Caps	(\$3.77 ea.)
(1) 8 oz tube of bath caulk	<u>(\$3.58)</u>
	Cost is about \$14.00 per marker (more if you only make one marker)

Electric Drill with a 5/16th drill

Saw to cut PVC (Or you can ask Home Depot to cut the pipe for you)

Pliers or wrench

- Measure and cut a 30" piece of PVC pipe.
- Using a 5/16th drill, drill hole in center of one of the end caps.
- Squeeze a small amount of caulk on the exterior hole drilled into the end cap
- Slip a hex nut onto the eye bolt and then a washer
- Insert the eye bolt into the exterior drill hole of the end cap
- Squeeze a small amount of caulk onto a washer and slip the washer, caulk down, over the post of the eye bolt on the inside of the end cap.
- Screw a hex nut down over the washer and tighten with a wrench or pliers
- Add a second hex nut over the first inside nut and tighten it down.

In a well ventilated area and while using gloves:

- Apply PVC primer to the inside of the end cap
- Apply about a two inch ring of primer to both exterior ends of the 30" pipe.
- Apply primer to the inside of the second end cap.
- Apply the PVC cement to the interior of the end cap with the eye bolt. Work quickly and do not let it dry.
- Apply a small amount of cement to the end of the pipe (exterior) Do not let it dry.
- Quickly, push the end cap onto the pipe and push it down tight.
- Apply the PVC cement to the interior of the second end cap and a small amount on the exterior end of the open pipe.
- Quickly, push the end cap onto the pipe and push down as far as possible.
- Let dry overnight.
- Add red stripes with red duck tape or paint.
- Add a stainless steel Carabiner clip to the eye bolt.
- Add anchor to marker via a piece of (3/16th galvanized link works great) chain. Use the carabiner clip on the appropriate chain link to quickly adjust depth and cause the marker to stand straight up in the water.

Test sites require a minimum of four Site Markers: 1 or 2 at the 100 ft mark (Depending on tasks being judged.), 2 markers at the 60 ft mark, and 1 or 2 at the 35 ft mark. A host group should have at least 6 distance markers on hand during an event. The four Slalom Markers can be made with 2" diameter PVC 40 Pipe and be any color other than Red and White.