



How To Build A Boffer Weapon

The key to a safe weapon

A safe weapon is the key to a safe and fun filled event. An unsafe weapon can lead to you hurting someone or someone hurting you. By following these instructions closely we can help to avoid these situations. If at any time during building one of these weapons you have a question feel free to contact one of our staff members on the following page (http://www.realmsofadventure.net/Contact%20Us/Contact_Staff.cfm). Never rush making your weapons it should take about one half hour to one hour to make a safe and long lasting weapon.

Supplies

- **PVC Pipe:** $\frac{3}{4}$ " Is generally the best. However you can use $\frac{1}{2}$ " for shortwords or smaller. (Available at most plumbing supply stores.)
- **Hack saw or Pipe cutter:** Obviously for cutting down of piping. Pipe cutters work best.
- **File:** To smooth edges of the pvc pipe.
- **Pipe Insulation:** 5/8" wall thickness (Available at the links on our website http://www.realmsofadventure.net/links/larp_gear.cfm)
- **Utility Knife:** To cut tape and foam (the extendible ones work best).
- **Open Cell Foam:** Green high density mattress foam or gray air conditioner insulation foam(Available at most craft, fabric stores)
- **Duct Tape:** Available in many colors (See our website for blade, handle colors) some industrial supply companies carry the harder to find colors such as Grainger™ (<http://www.grainger.com>) or TapeMonster.com.
- **Marker:** Needed to mark pipe and foam.
- **Hockey Grip Tape or Tennis Racket grip:** Used to wrap the handle.



How to build

- Use a tape measure and marker to mark up the PVC, 4 inches shorter then the desired [weapon length](#) (See Fig.1 & Fig. 2).

Type	Minimum Length (in inches)	Maximum Length (in inches)
Small Weapon	10	18
Short Sword	19	36
One Handed	37	46
Two Handed	47	62
Claws / Fists	12	18
Polearm/Spear	56	72
Staff	56	72
Thrown	2	24

Fig. 1

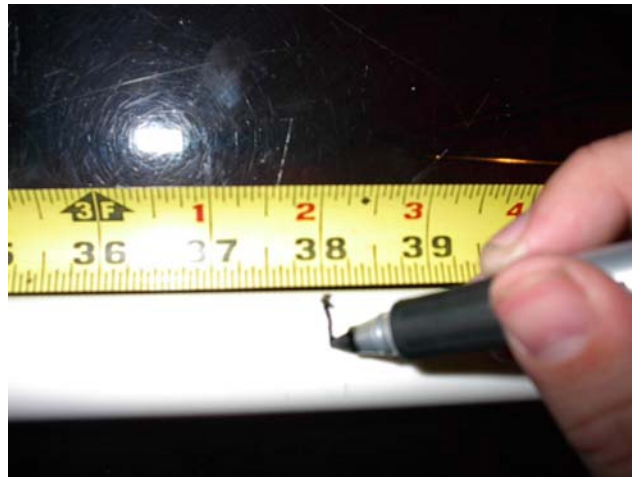


Fig. 2

- Using your pipe cutter or hacksaw cut the PVC pipe. File down any sharp edges that might tear through the taped ends (See Fig.3).

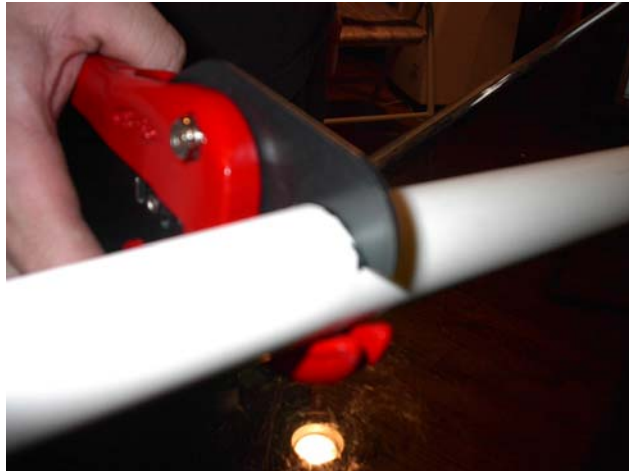


Fig. 3

- ❑ Take two 3" pieces of tape and cut it lengthwise in half to cover both ends of the PVC (See Fig.4).



Fig. 4

- ❑ Next take a length of tape and fold it in half to make a basic double-sided tape and spiral it down the blade (See Fig.5).



Fig. 5

- ❑ Now comes the hard part getting your pipe insulation over your PVC pipe. The simplest way is to separate the insulation and lay the PVC in it like a trough, and pull the sides together which is difficult but easier then trying to wiggle it down a duct taped pipe. This is not easy but you must get it to go all the way down,

remember to leave the foam extending 1" past the end of the pipe for filling and a thrusting tip (See Fig.6). Once the foam is over the pipe, make sure to cinch it closely together and secure it with a few thin strips of tape.



Fig. 6

- ❑ You now need to secure the foam to the pipe nearest the handle (See Fig.7). Make sure not to compress the foam too much.



Fig. 7

- ❑ Take some spare foam (Open Cell) and stuff it inside the cavity at the end of the sword and secure it down with tape similar to the way you taped the ends of the pipe. (See Fig.8).



Fig. 8

- ❑ Cutting the thrusting tip is a very important step make sure to cut a piece of the open cell foam slightly larger than the top of the pipe foam (about a 2' circle or square will do) (See Fig.9). And about 2" tall as well.



Fig. 9

- ❑ Apply the thrusting tip with a 6" piece of duct tape split in half lengthwise. Do not apply any downward pressure to the thrusting tip. It should not be compressed at all when attached. The tape is only there to hold it in place. (See Fig. 10)



Fig. 10

Constructing The Crossguard

- ❑ Now we are going to construct your crossguard. If your sword does not have one skip to [Constructing your Pommel](#).
- ❑ Cut your second piece of pipe foam down depending on the size of your weapon. Use good judgements here don't make a crossguard that is too BIG or too small. (See Fig.11).



Fig. 11

- ❑ Cut a small hole through the center of the foam to slide snugly over the pvc. Now slide the crossguard over the pommel end of the weapon all the way up to the bottom of the foam that starts the blade. (See Fig.12)



Fig. 12

- ❑ Take some foam (open cell) and stuff the crossguard (Both ends). Make sure to tape the ends as you did to the end of the pipe. (See Fig.13).



Fig. 13

- ❑ This step is where you can make your blade look nice or sloppy. Take a length of tape that will go from the crossguard to the end of the pipe foam at the tip of the sword. Smooth out the tape from the middle out. (Be careful not to cover the thrusting tip twice.) (See Fig.14) Note: Spiral Wrapping the tape around the blade will almost definitely cause it to fail safety inspection.



Fig. 14

Constructing your Pommel

- ❑ Start by cutting a 2 ½" piece of pipe foam. Attach that in the same manner as the blade. Remembering to leave a 1" space at the end to stuff with foam (open cell) and tape it over like you did with the PVC. (See Fig.15)



Fig. 15

- ❑ Attach the pommel to the handle as you did the blade in Fig.7. Now tape over the rest of the pommel to cover the rest of it like you did the blade. (See Fig.16).



Fig. 16

Finishing your weapon

- ❑ Wrap your handle with one of the following: Hockey tape, Tennis racket grip, or Leather. This allows the sword to be more comfortable during long battles. (See Fig.17).



Fig. 17

- ❑ You need to poke several holes in the thrusting tip using either a pin or CAREFULLY using the utility knife, to allow the air to escape on impact. (See Fig.18).



Fig. 18

- ❑ If you followed this guide carefully you should have a safe and passable weapon!! (Fig. 19)



Fig. 19