

Boffer Weapon Construction

There is only one general boffer construction technique that has been approved for use in Rampant games. Other construction designs have been developed and weapons from these designs are often approved for game use. However, these techniques require a higher level of skill and a greater knowledge of materials to produce a safe weapon. We recommend that a new player construct his first weapon from the simple technique described below and as he gains a greater understanding of what is required to produce a safe, durable weapon, begin to construct weapons from these alternative designs.

Regardless of construction technique, all weapons must pass inspection by a Rampant marshal at each event. If deemed unsafe, a weapon will be prohibited from game play until the defect is remedied. If you do come to a Rampant event with a weapon of unapproved design, the possibility of your weapon being rejected is high. Therefore, we suggest that all players with weapon skill bring a weapon of the approved design, as they usually can be repaired on the spot, bringing the weapon up to safety standards quickly.

Four specific materials are used in the construction of Rampant approved weaponry. Limited substitutions may be addressed on a case by case basis:

1. 3/4" diameter CPVC pipe or 1/2" diameter graphite rod
2. Duct tape (appropriately colored for weapon type)
3. Open cell pillow/mattress foam
4. 5/8" thick pipe insulation foam (NOT the more common 3/8" thick)

For weapons exceeding 46" in total length, PVC pipe can be substituted for CPVC pipe. PVC pipe is a more rigid and heavier material, and should only be used on weapons of longer length to prevent "whippiness."

The following instructions describe the technique for building virtually all hand held weapons. Variations for the construction of Staves, Two Handed Weapons, and Thrown Weapons are described later in the section.

1. On a piece of paper, draw the blueprint for your weapon. Organize your thoughts, by defining the overall shape, grip length, cross-guard and other basic dimensions.
2. Determine the total length of the weapon you wish to make. Consult Table 3.1 for a list of weapon dimensions.
3. Cut the CPVC (or PVC or graphite rod) piping approximately four inches shorter than the total weapon length. Foam padding at the ends of the weapon will be added later to recover this 4" length.
4. Reduce the sharpness of the cut end of the pipe by applying a piece of heavy duct tape over it. A sharp pipe end can cut the foam, damaging the weapon, and rendering it useless.
5. In two places, along what will be the blade or shaft of the weapon, wrap several layers of duct tape around the pipe, such that the diameter is slightly larger than the inner hole diameter of the pipe foam. This will help hold the foam securely in place. You may wish to fold and expose some of the sticky side of the tape, so that the pipe foam will actually stick to the core. When creating weapons of longer lengths, such as staves or very long two-handed weapons, the player may wish to secure three or four areas along the pipe length in this manner.
6. Using a durable pen, mark the point where the cross hilt of the weapon (if you have one) or handle will go. Slide the foam over the length of the weapon until it lines up with the inked mark. Cut the foam so that it extends 3/4" over the tip end of the pipe (the other end of foam should still be lined up with the ink mark).
7. Secure the insulation foam to the pipe with either duct tape or glass strapping tape at the handle end.
8. Determine the desired length of the cross hilt, and cut the foam to that length. Using the butt end (uncovered by tape) of the CPVC pipe, cut a hole in the center of the foam. Slide the cross hilt onto the weapon until it is firm against the bottom of the blade or shaft. Secure the hilt in place with duct tape or strapping tape.

9. The butt end or pommel of the weapon must be padded with foam and covered with duct tape. Counterweights may be used in the butt of the weapon, but they must be well-secured and heavily padded with foam.
10. Slice some small scraps of foam, and pack them into the 3/4" section of foam that extends beyond the end of the pipe. Cover the hole with a small piece of duct tape. This will help prevent the pipe from coming through the tip on a thrusting attack.
11. Building the thrusting tip and properly attaching it is one of the more difficult tasks of boffer weapon construction. Most weapons will fail inspection due to some flaw in this process or deterioration of the tip. It is important that a minimum amount of duct tape be applied along the length and tip of the weapon. The more tape that is applied, the harder and heavier the weapon will be. This makes the spongy foam less effective and the weapon is more likely to injure a player.
12. Cut the pillow foam so that a piece of it will completely cover the diameter of the foam tube and will be about three inches long. An ideal thrusting tip might measure 2" x 2" x 3". Unroll a 2 foot length of duct tape (do not cut it yet), and attach it to the base of the hilt so that you may unroll the tape up the blade or shaft of the weapon. When you reach the top of the shaft, place the pillow foam on the tip of the weapon, and tape over the pillow foam thrusting tip (compressing it from a 3" length to a 2" length). Continue unrolling the tape as you apply it down the opposite side of the handle. Repeat this same process on the remaining uncovered portion of the shaft and tip. Using this method, the foam and thrusting tip should have no more than one layer of tape over them. Small pieces of duct tape may be used to cover any exposed areas.
13. Cover the hilt with duct tape and apply a small 1" x 2" x 2" piece of pillow foam to the base of the weapon, as well. Players will reduce the slipperiness of their weapon grip if they wrap a rope, length of tacky grip, leather, or some other material about the handle area of the weapon.
14. If the weapon you are considering is a battle ax or mace, cut a section of pillow foam into the shape of the weapon head. Attach this foam to the shaft below the thrusting tip and cover it with a single layer of duct tape.
15. Using a pin or small nail, poke many holes in the thrusting tip, ax blade, or mace head. This will allow the foam to "breathe," and recover its shape more quickly after being compressed during a weapon blow.

Shield Construction

Shields come in many designs: Round, heater, oval, rectangle, and triangle to name just a few. Other designs are certainly possible, but the overall area may not exceed 452 square inches, and the longest dimension may not exceed 30". All size limitations include the foam edging required on all design types. The following table gives maximum dimensions for common shield shapes:

Table A.1: Common Shield Types & Maximum Dimensions

Shield Shape	Vertical Maximum	Horizontal Maximum (when vertical is at maximum)
Round	24"	24"
Rectangle	30"	15"
Heater	30"	22"
Triangle	30"	30"
Oval	30"	22"