

Legends Roleplaying™ Weapon Making Guide - adapted from Jammie and Lauren Middleton

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Not every situation at Legends can be settled amicably, and sometimes, a character will need to fight their way out of a situation. So what does a character do then?

This tutorial will teach you the basics on crafting a Legends safe weapon, as well as tips and tricks to help you go beyond the basics and save you time and effort.

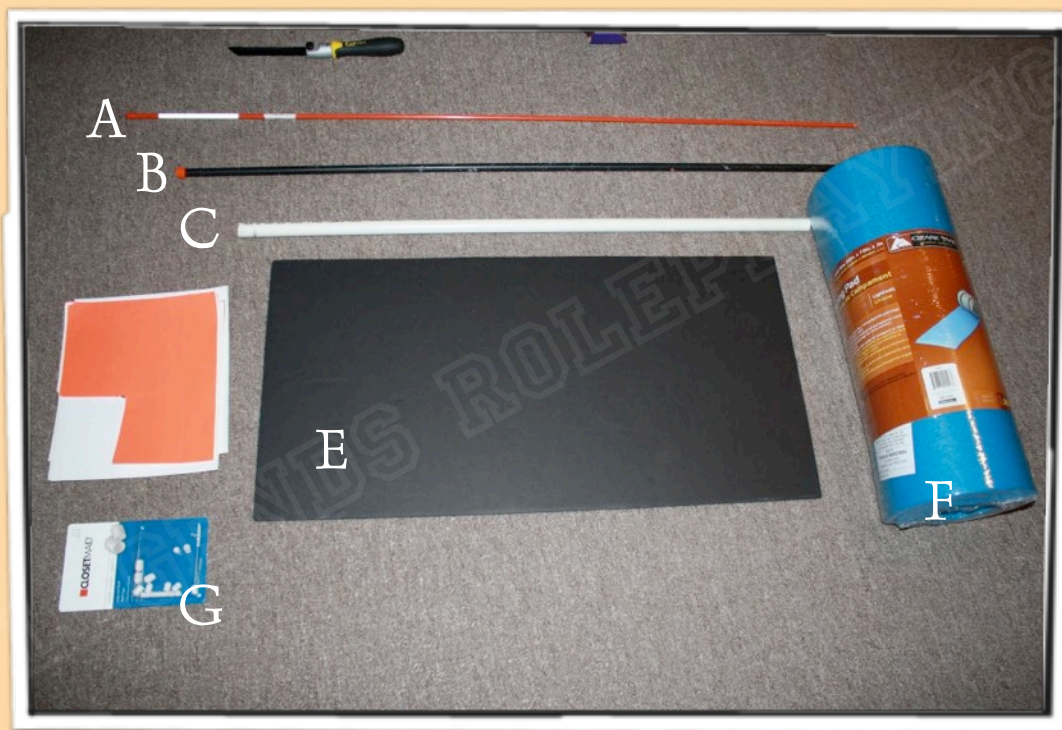
If you are already a decent weapon maker, or are only looking for the basic weapon making information, here is the information you need:

(PS: Standard PVC construction rules are still very much acceptable, if you so choose.)

Materials

Weapons at Legends come in a variety of sizes and shapes, and depending on what size weapon you are producing will decide what materials are safe to use in their manufacture. I have included a checklist at the end of this tutorial to help you shop for parts. Although there are slight variations in the material used, in general, you will need the following items:

D



(A) Fiberglass resin driveway markers. These usually come in orange or yellow, in four to seven foot lengths and can be purchased at Home Depot or Lowes, as well as other hardware stores. Usually they cost about \$2.00 each. These are only appropriate for short weapons, or one handed weapons 36 inches and under. Any longer than that and the weapon begins to develop “whipiness”, where the weapon bends when swung at an opponent, causing it to snap forward at the moment of impact and increasing the force with which your opponent is struck. An excessively whippy weapon will not pass the safety standards of Legends. If you are making a warhammer, or some other weapon that is excessively top heavy, you may not be able to create a weapon using a driveway marker due to the excessive whip that will occur. Driveway markers produce the lightest possible weapons.

(B) Carbon Fiber Pultruded Kite Rod. This can be found at a number of kite websites, including: www.goodwinds.com (This is my preferred site), www.kites.tug.com , www.kitebuilder.com , or www.catchthewind.com . There are other sites, but I have seen the sizes needed on these sites: For smaller weapons (48 inches or less) .505 outer diameter kite rod is appropriate, while for bigger weapons, you will need to purchase .610 outer diameter kite rod. This can be expensive for polearms! Although it is possible to use Carbon Fiber, I would suggest Fiberglass rods.

(Not pictured, but similar to B) Fiber Glass Rod: they are called filament wound epoxy tubes at www.goodwinds.com and are significantly cheaper than carbon fiber rod (as of March 2013, a 60” rod is \$14.99 and an 84” rod is 23.99) You will want to purchase .602 or .610 outer diameter rods if you intend on making a two handed weapon or a polearm. (Goodwinds only carries the .602)

(Also not pictured) Fiberglass Golf club: you can often buy these from a golf pro shop or find them for free as they are thrown out when they snap, usually right near the club’s head. You can simply saw off the section that is jagged, and this will give you a good weapon core.

(C) Schedule 40 CPVC. This material could be used as a weapon core, but this is inadvisable. CPVC weapons tend to be heavier, slower, and more inclined to whipiness. CPVC pipe can be used however between the pommel and the hilt of the sword to give a hard grip.

(D) Duct tape. Rolls are best for covering large areas, while small individual sheets (shown as orange “D”) can be used to accent your color scheme. What color duct tape you choose to purchase is going to depend on the weapon you decide to make. You may use any fantasy appropriate colors in weapon construction at Legends, but designs that violate the spirit of Legends will not be allowed in game (inappropriate patterns, such as peace sign or mustache duct tape, or designs in the duct tape that violate Legends code of conduct). Players should attempt to choose colors for wooden weapons that are appropriate, and metal weapons should be greys, silvers, or blacks. Flourishes, design elements, and other fine details can be in any color of your choosing. Duct tape can be picked up at most chain stores, although the widest range of colors can be found at craft stores such as Michaels, AC Moore, or Joanne’s Fabrics

(E) Cardboard or “foam core” (Foam core shown in the above picture). This is for the design phase of your weapon construction. Cardboard can often be obtained free, while foam core can be purchased inexpensively at most craft stores, or at Walmart.

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(F) Blue camp foam. This is a half inch foam camping pad which can be purchased at a number of different chains, but is most commonly found at Walmart. Currently, it is carried under the brand name of Ozark Trails.

(G) Core Caps. These should be large enough to cover the ends of the weapon core but still stay snug, and can be bought at Home Depot.

(H) Hilt wrap. String, rawhide, or other materials can be used to wrap the hilt to make for a comfortable grip.

(I) A hand saw. This is used to cut the weapon core. More on weapon cores in the individual weapon sections.

(J) A long bladed kitchen knife. This tool is extremely helpful in carving the camp foam once the initial construction of a blade is completed. These can be purchased at any retail chain. I have used an inexpensive kitchen knife with a 10" blade purchased at the Christmas Tree Shop for years for this exact purpose. It is suggested that you purchase a knife sharpener as well to keep this knife cutting foam cleanly. It is time to sharpen your knife when your carving of the camp foam begins to tear out small craters of foam rather than slicing cleanly and smoothly.

a box cutting knife. This is used to cut camp foam and is fairly easy to purchase at any hardware store, or large retail chain .

(K) A sharpie. Used to mark the blue camp foam as well as help in designing your weapon.

(L) Spray adhesive. You can use any spray adhesive that is safe for use on foam, however, my suggestion is Scotch Brand Super 77 spray adhesive. **Each different numbered spray adhesive has a different purpose, so this number is important!** Although this may not be the only spray adhesive that will work, you are advised to use this if this is your first weapon or you are unwilling to recreate your weapon if the spray adhesive does not bind.

(Not shown but also useful)

Hot glue gun and glue sticks. This will be used in the construction of a hilt, but also for gluing down caps on the weapon core. It is not advised you use super glue, as this will eat through the blue camp foam.

Box cutter or utility knife. This can be used to cut the blue camping foam a little more smoothly. Different models can be purchased at any hardware store, and come in either disposable or reusable models.

PLEASE SEE THE RULEBOOK FOR ALL REQUIRED WEAPON DIMENSIONS.

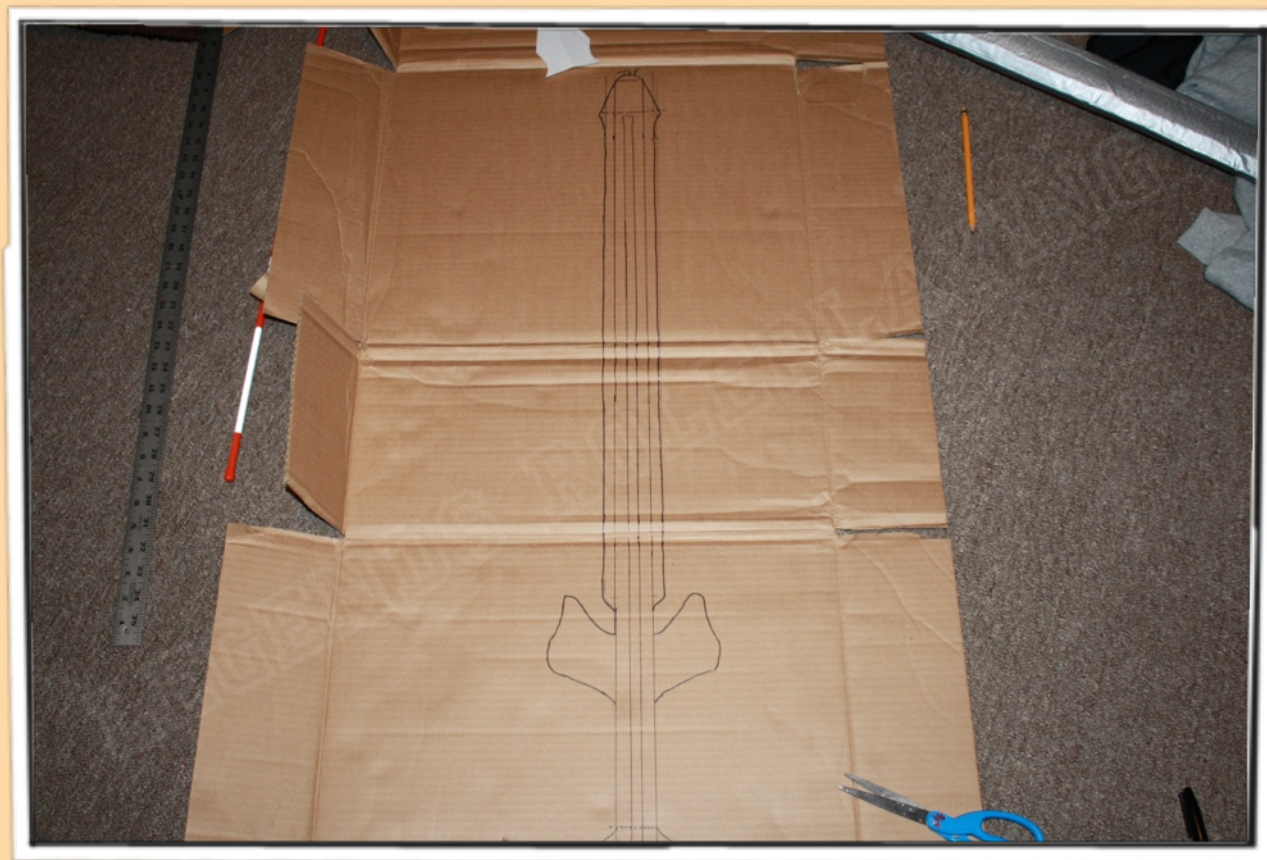
Construction:

This section will show you how to make a simple sword out of blue camp foam with a driveway marker core.

The first step is designing your weapon. You will need either a large piece of cardboard, or a piece of foam-core as well as something to draw with and a ruler. First, decide what the total length of your weapon will be. Your weapon core should be three inches shorter than your overall length, with 2 inches at the thrusting end of the weapon and one inch at the bottom. Make two marks on the cardboard to show where the weapon will begin and end. Lay your weapon core down on the piece of cardboard and trace around the edge of the weapon core. Then, take a ruler and mark a distance a half inch out on either side of the weapon core. This is the minimum thickness of the weapon and is a guide for making a safe weapon. You can make your blade wider than this, but you can never make your weapon thinner than the area you have just drawn.



Now, you can begin the creative part: deciding what your weapon will look like. Once you've drawn a pattern that you are happy with, you can cut out this pattern from the cardboard and use it as a guide when we get to carving the blue camp foam.



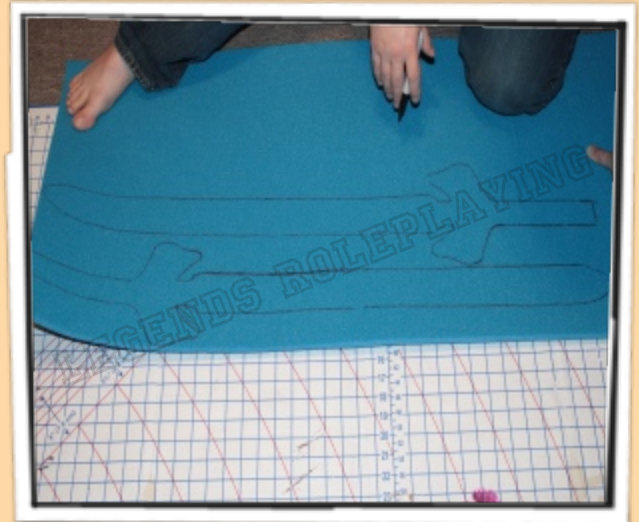
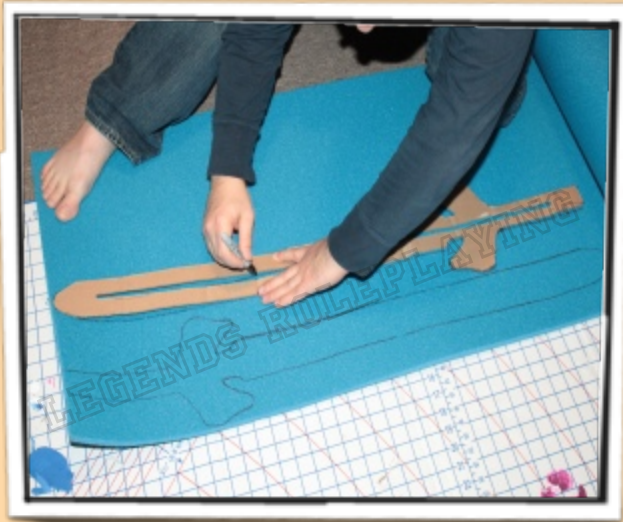
The first step is to prepare the core. The core must be 3 inches shorter than the entire length of the weapon and must have a cap at either end. Measure the fiberglass rod and place a small strip of tape around the fiberglass rod where you will be cutting. Mark the spot where you will be cutting, then measure again.



You will need a saw to cut through the fiberglass, and if you can cut the core underneath a running faucet, this will reduce the number of fiberglass shards that come into contact with your skin while preparing the core. Please note, driveway markers come with a sharpened tip. You will need to cut this off, as it is never safe to use in a weapon, even when covered with a cap. Plug in your hot glue gun, and when ready, glue rubber tips to the ends of the core. Once this has cooled, cover these ends with duct tape as well. Take the core and make certain it still fits in the overall design of the weapon – it still allows 2 inches from the “business end”, and 1 inch from the hilt end. Make adjustments as necessary. Next, it is time to prepare the camp foam.



Trace two copies of your design on the camp foam. Blue camp foam tends to roll, so when you trace these designs in such a way that the rolling of the foam PRESSES the two pieces together, rather than pulls them apart (see picture). Using a utility knife, cut at a ninety degree angle to the surface of the blue camp foam.



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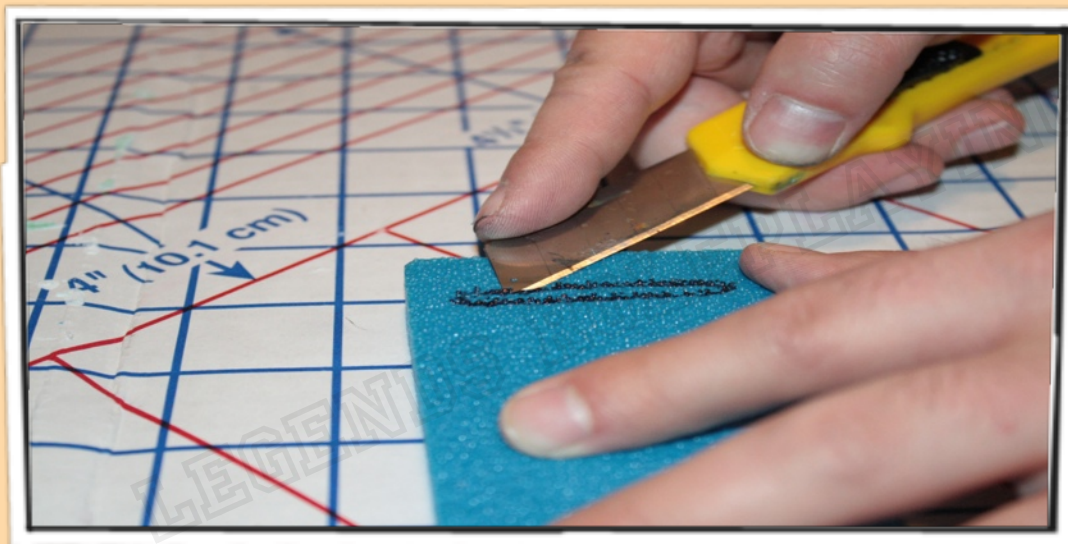
Once you have cut out the two halves of your sword, it is time to cut a channel out of the inside surface of the sword for the core to rest inside.

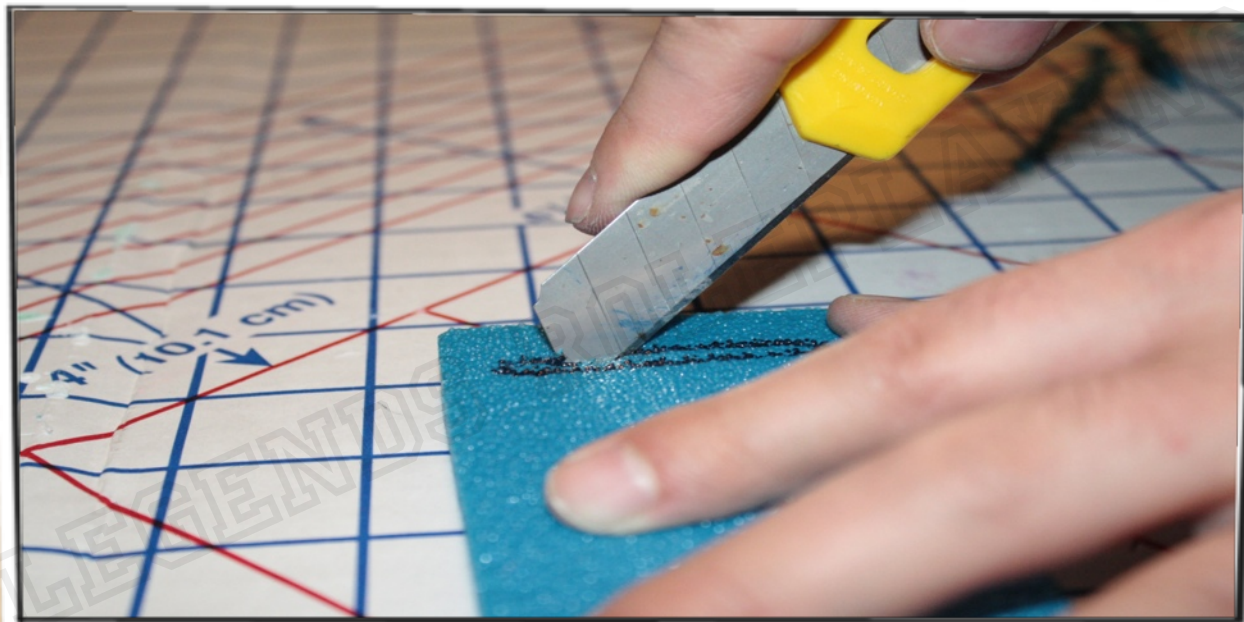
Before going any further, **it is important to note: this next step is the most crucial step in the entire instruction manual to do correctly.** If you cut too deep in this next section, you WILL ruin the weapon. Take extreme care on the next step to make the depth of your trough no deeper than the photo seen below.

Any deeper and you will risk the integrity of the weapon. Additionally, be careful if you are using a utility knife blade rather than a dremmel tool to not cut all the way through the blue camp foam.

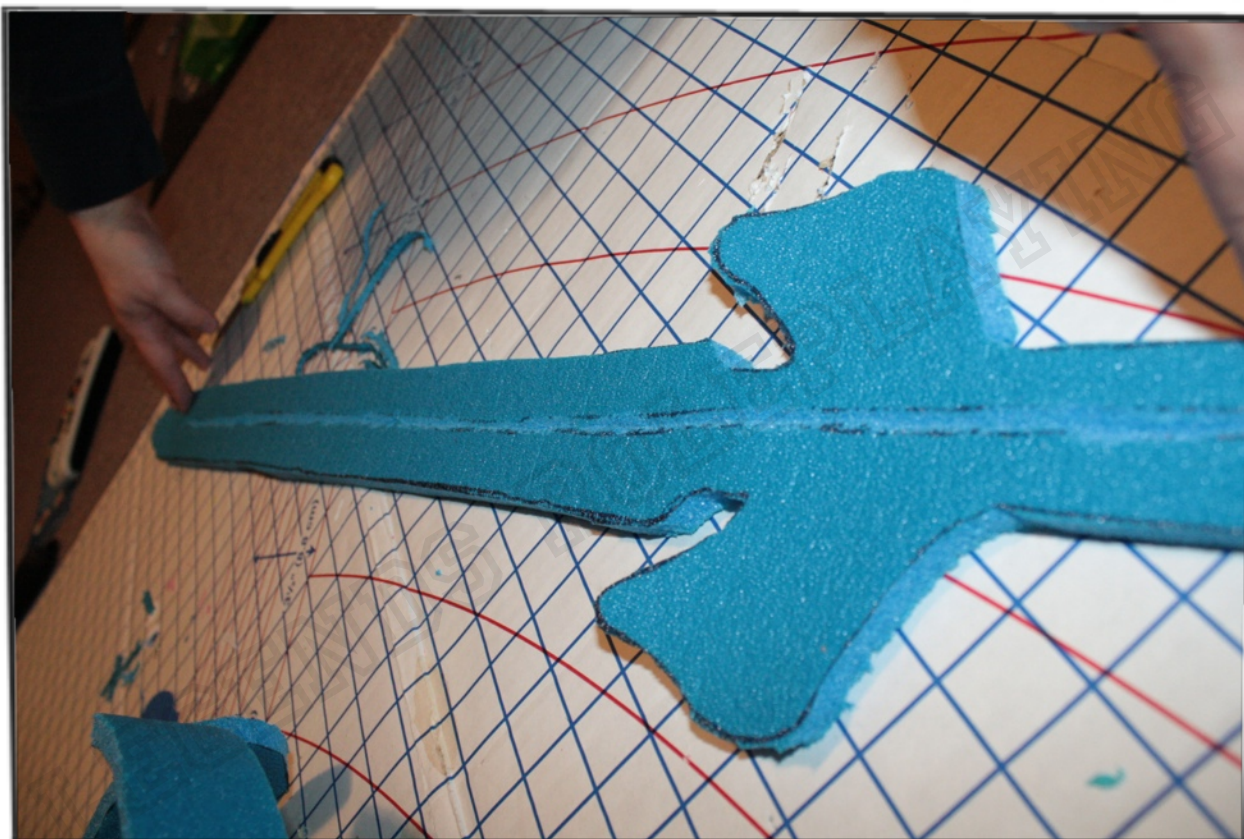
The ideal method for doing this involves taking a dremmel tool with a grinding attachment. Mark the center of the sword on the blue camp foam, and mark where the core will sit. Carefully gouge out a shallow trough for the weapon core to sit in. This trough should not be deep enough for the whole core to sit inside – this should be just deep enough to seat the weapon core, and the rough texture will give the weapon core a higher surface area to contact the blue camp foam, increasing the effectiveness of the spray adhesive.

If you do not have access to a dremmel tool, there is an alternate method. Trace out the core on to the inner side of both pieces of blue camp foam. Take a utility knife, and running the blade almost parallel to the surface of the blue camp foam, score the blue camp foam along the entire length of where the weapon core will sit. Then, go back and “pick” out the foam that is in between the two score marks, making a trough similar to the one you would produce using a dremmel tool. An easy way to measure depth is this: if you can stand a dime in the trough, you should be able to see the words “In God We Trust” sticking out above the trough. Note in the first picture how the utility knife is almost parallel to the foam, while in the second picture, it is almost perpendicular. You do not want to hold your knife like in the second picture, as you are much more likely to cut too deeply.

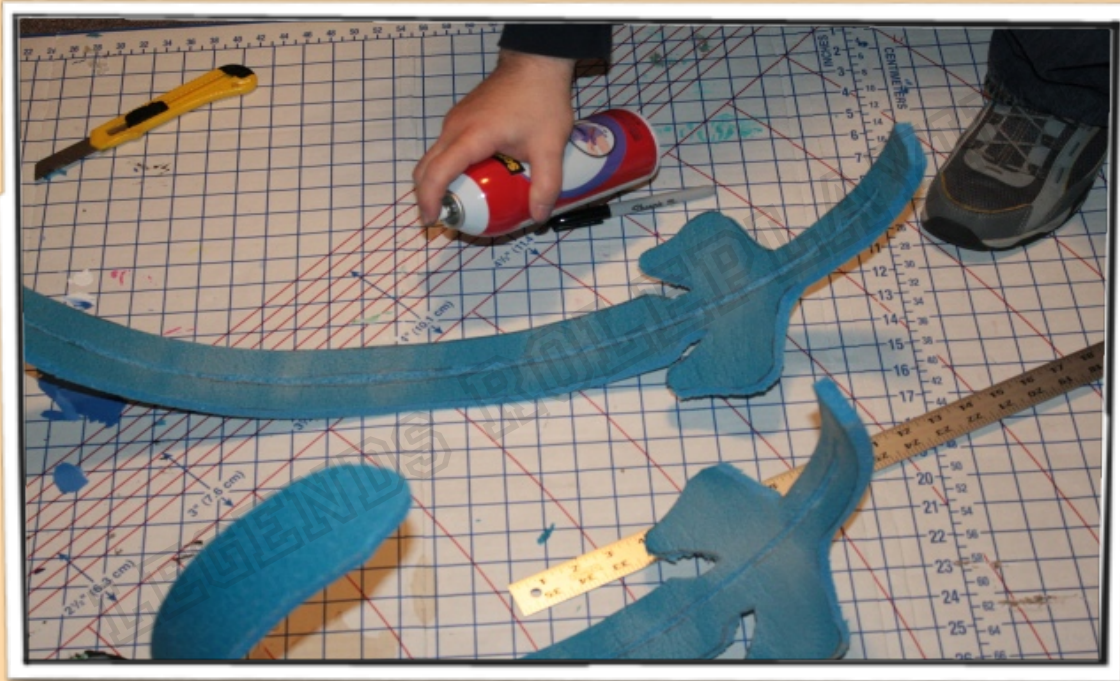




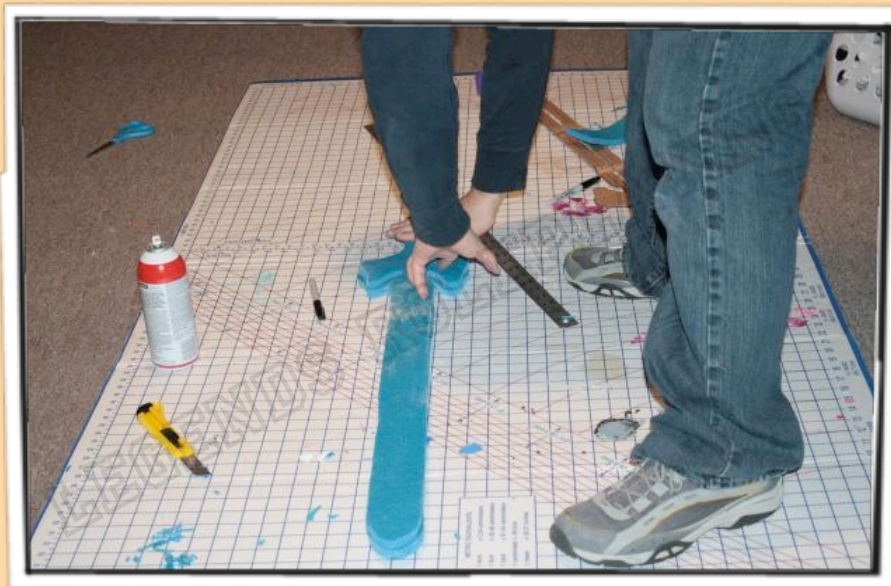
Notice the trough cut into the foam below. This is shallow enough to allow the core to sit properly but not so deep as to compromise safety of the weapon.



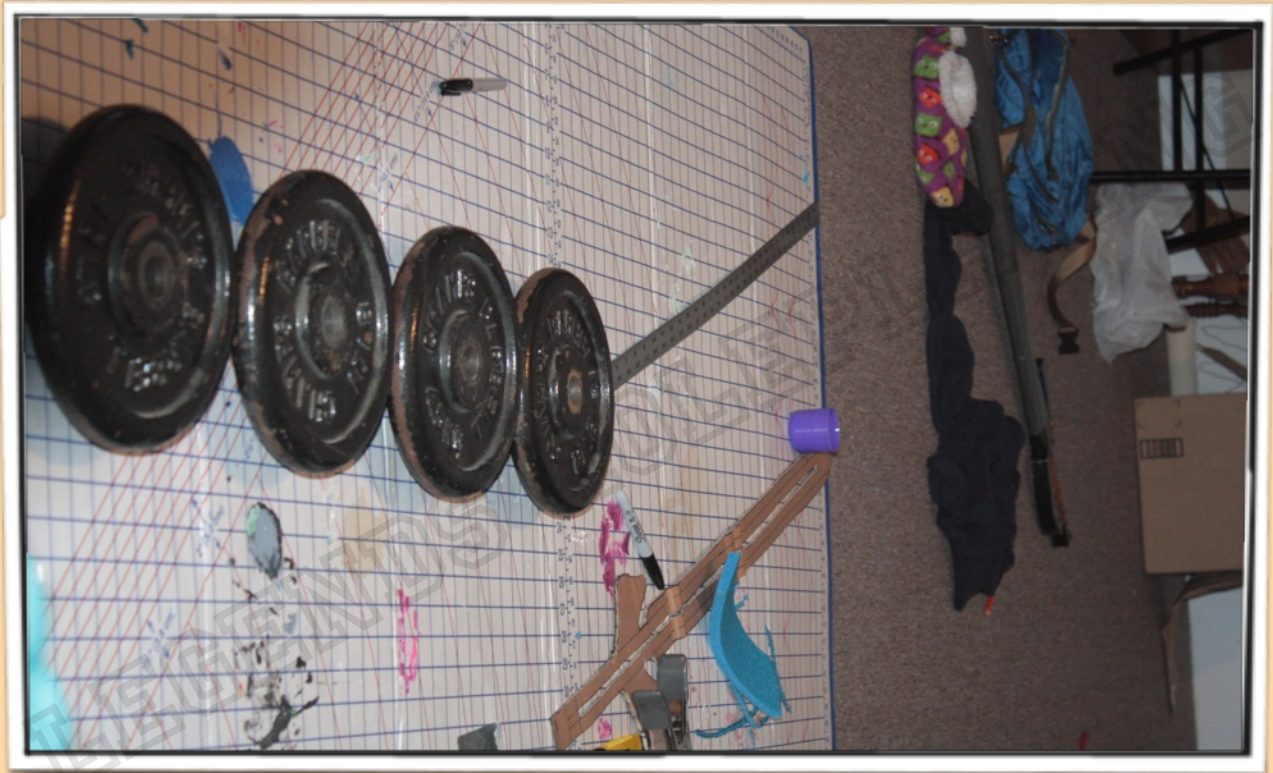
Next, find a dry outdoor area for you to use the spray adhesive. You will spray both pieces of camp foam, as well as the core itself with spray adhesive.



It is important at this point that you wait to mate the pieces together until the spray adhesive has become tacky. Once this has occurred, lay one piece of blue camp foam on the ground, and line the weapon core up inside the trough you have carved. Carefully lay the second piece of camp foam on top of the weapon core and form a foam sandwich.



Cover the foam with heavy weights (I've found books, water bottles, weightlifting weights all work excellent) and let stand overnight. The key is to make certain that the surfaces of the blue foam are pressed together in such a way that when dry, there is no gap between the two pieces of foam.



In the morning, your weapon should look like this:



Run the knife down the edge of the blade make the two halves of the blade even.



Now it is time to begin shaping the blade. The best tool to do this with is a long kitchen knife, and you will want to keep a knife sharpener nearby. When shaping the blade, it is important to not carve off too much material so that you make the minimum distance between the weapon core and the outside of the weapon less than $\frac{1}{2}$ an inch. To that effect, I take a black sharpie marker and mark the blade so that a half inch section in the middle is left alone on the blade.



If you shape the blade in such a way that the blade comes to a complete point in the center, usually your weapon will feel too “hard” and won’t pass safety inspection. For this reason I try to leave between $\frac{1}{3}$ and $\frac{1}{2}$ the thickness of each piece of camp foam running along the edge of the blade once shaping is done.



Now is time to cut the foam. If you are nervous about messing up the weapon, you can take a piece of spare piece of foam to practice cutting. The key is long, continuous strokes. Line the knife up so that one end of the blade comes out the top of the weapon, aligned with the mark you made on the top of the blade, and the other end of the knife comes out through the mark you made along the knife's edge.



Make long, smooth strokes, and if you wish, every foot or so cut off the excess foam strip that is being produced by the shaping process.



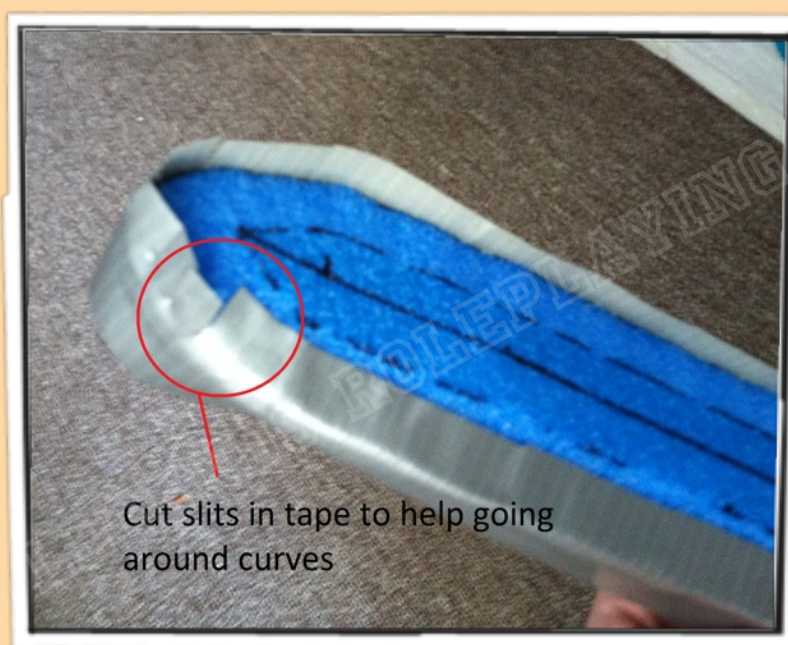
The finished sword after the shaping process.



Once you are satisfied with the shape of the blade, it is time to begin taping. The first piece of tape should run down the knife's edge of the blade.



In order to go around curves, you will want to cut small slits in the tape every $\frac{1}{4}$ inch or so to facilitate connecting the tape to the blade in such a way that you do not get a lot of wrinkles in the tape.



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Once you have gone all the way around the weapon, you will want to then go back and cover the flats edges of the weapon with tape as well. A few carefully placed pieces of tape will cover the blade sufficiently so that you cannot see any blue camp foam underneath. Once this is done, you can begin working on the hilt of the sword.

I prefer to leave blue camp foam underneath my handwraps, as it gives a softer grip, and also makes the weapon sturdier in that the entire length of the weapon is made out of one piece of camp foam. You can always carve away the blue camp foam where you will be placing the hilt, and add a harder material to shape the handle whatever way you wish (Hot glue works well, but can be difficult to get it to flow correctly. Feel free to experiment). Once you have decided you are happy with the hilt itself, it is time to wrap it in a material that will allow you to grip the sword firmly. By wrapping the grip material around the sword, then placing a dot of hot glue, you can continue to wrap the hilt, overlapping by about half the width of the material each time until you reach the pommel. Glue down the grip material, then cut off the excess.

At this point, feel free to decorate the weapon as you see fit.

All weapons will be inspected for safety every time you arrive at a Legends event — This is done at check-in. If you are unsure as to whether or not your weapon will pass inspection, please feel free to contact the Legends Staff, as they will be more than welcome to give you some tips, as well as inspect your weapon ahead of time to give you a rough idea as to whether or not your weapon will pass inspection. Regardless, use common sense, and remember we are all out there to enjoy ourselves and no one wants to hurt their fellow players and cast members. Above all, have fun!

Long one handed weapons, two handed weapons

These weapons can be constructed in a very similar manner to the smaller weapons, but in order to reduce the amount of whip of the weapon, we will be making two slight changes: one is using a stronger core, and the other is to use a three layer sandwich rather than two layers for the weapon. Weapon construction is essentially similar, but rather than digging a trough in the two layers of blue foam, a middle layer that has a section cut out for the weapon core will be used instead.

Polearms

Polearms have special concerns at Legends, and it is the only weapon that **MUST** have a thrusting tip at both ends. Use open cell foam to create the thrusting tip. The thrusting tips should be two inches of open cell foam at either end, and you can get away with reducing the distance at either end of the polearm from the end of the core to the end of the blue foam to an inch and a half. Sandwich the weapon core in three layers of camp foam, and attach the thrusting tip with tape to the end of the weapon, then make sure to tape the thrusting tip securely to the weapon. Air conditioning insulation strips sold at Home Depot are sold in long pieces that are 2 ¼ by 2 ¼ in strips, so make ideal material for making thrusting tips. Shape the thrusting tip to match the rest of the polearm and follow the directions for taping as normal.