

# A-01: Basic Construction Overview

This lesson is designed to give you an understanding of the basic materials used in Amtgard construction techniques, their strengths and weaknesses, what they're used for, and where to get them



# Weapon Cores

A core is the rigid skeleton that is used to form the basis of your weapons. Metal and Wood are not allowed to be used as weapon cores. Some common cores are listed below.

## PVC

Inexpensive and readily available at most hardware stores, this material can be used as a core. However, its weight and flexibility make it somewhat undesirable.

Look for Schedule 40 with Diameters of 1/2" to 1".

## Bamboo

Inexpensive (sometimes free), this material can be a really desirable core, especially for longer weapons. However, its quality can be inconsistent. Nearly impossible to acquire in Alaska. The bamboo sold at hardware stores in the summer is not the type you'll want to use for Amtgard construction.



# Weapon Cores – Continued

## Graphite

These cores usually come in the form of broken golf clubs and can usually be found at golf repair shops inexpensively and sometimes for free. The golf clubs **must** be graphite. Steel, aluminum and wood are **not** okay.



## Fiberglass

Fiberglass spars are an inexpensive core with great construction properties. They're normally used for building kites, and can be purchased at most kite supply stores such as Good Wind Kites:

<http://www.goodwindkites.com>

Look for Fiberglass Tubing with an Outer Diameter of .414 or .505" for short weapons and .602 or .745 for long weapons such as pole arms and spears.



# Shield Cores

Shields can be made out of almost any material so long as it is safe. Plastics, Wood and Metal are all allowed. Below are the most common materials used for shields.

## Saucer Sleds

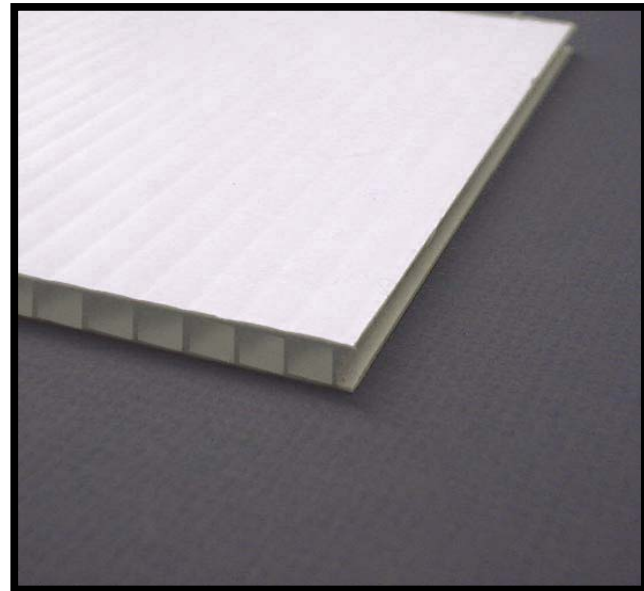
Not difficult to acquire, these sleds are perfect for Amtgard Shields. They are pretty inexpensive in the Winter and Spring.

Look for sleds made of a sturdy plastic.



## Corrugated Plastic

Also known as Sign Board or Coroplast. This material is light, strong and durable. It can be cut into any shape desired. It is, however, not cheap and difficult to acquire in Alaska. Some of our members attempt to bring some home whenever they're abroad.



# Shield Cores - Continued

## Plank Foam

This material is becoming more and more common in Amtgard as a core for shields. It comes in sheets and can therefore be cut into any shape desired. Additionally, it is very light and doesn't require any additional padding.

Unfortunately, it is fairly expensive and difficult to acquire in Alaska.



# Weapon Foam

Several kinds of foam are used for making Amtgard weapons. We'll cover some of the most common ones.

## Pool Noodle

By far the most common material used in Amtgard combat, this foam is easy to acquire when in season. It is inexpensive, and is very easy to use. Look for it at Wal-Mart and Fred Meyer in the summer time and The Toy Quest all year round.



## Camp Pad

These are the sheets of foam that are placed underneath a sleeping bag while camping. They're very durable, and fairly inexpensive. This foam can be used to create flat blades, shaped weapons and to reinforce stabbing tips. Look for it at Wal-mart for \$5-7.



# Foam

## Pipe Insulation

This foam is great for courtesy padding and for the rim of your shield. In order for it to be used for strike-legal padding, it must be layered. It can be purchased at any Hardware store.



## Open Cell Foam

This foam is good for adding a little bit of niceness to your equipment. Also good for the face of your shield. Also used in arrow construction.

This foam can be purchased at Joann and Fred Meyer



# Tape

A Variety of tapes are commonly used in Amtgard construction.

## Duct Tape

I recommend the 3M/Scotch brand duct tape as it is light and easy to work with. It comes in a variety of colors and is very durable.

## Electrical Tape

Good for use in any place where you want to apply a good deal of compression. Do *\*not\** use this tape on any striking surface as it will destroy your foam over time.

## Clear Packing Tape

The kind you use to tape up a box before mailing it. This tape is often used to cover your sword and provide a protective 'skin' for the striking surface.

## Cloth/Athletic Tape

This tape is often used on the handle of swords to provide a better grip.



# Fabric

All weapons are required to have a cloth cover on the strike-legal portions. And shields without covers are just plain lame.

## Broadcloth

Probably your best bet for covering equipment, this fabric is inexpensive, fairly durable and comes in a variety of colors and patterns. It does require that you actually sew the cover though.



## Tights

For those of you who can't or won't sew a cover, a more expensive alternative is lady's tights. Look for opaque microfiber tights. And remember, if you can see through the cover, it isn't legal so you may need to double up on them.



# Tools

Here are some common tools you'll want to have around if you start making your own equipment.

## Hack Saw

Any inexpensive hack saw will do. This tool is used to cut your weapon cores down to a desired length.



## Dust Mask

I can't stress enough the importance of wearing one of these when you're cutting a weapon core. Trust me, you do NOT want to be breathing fiberglass, graphite or PVC dust.



## Utility Knife

I recommend a knife with a long retractable blade. This will allow you to readily cut through the thicker foams.

