

Crafting Props from Foam for Beginners

Polystyrene and Styrofoam

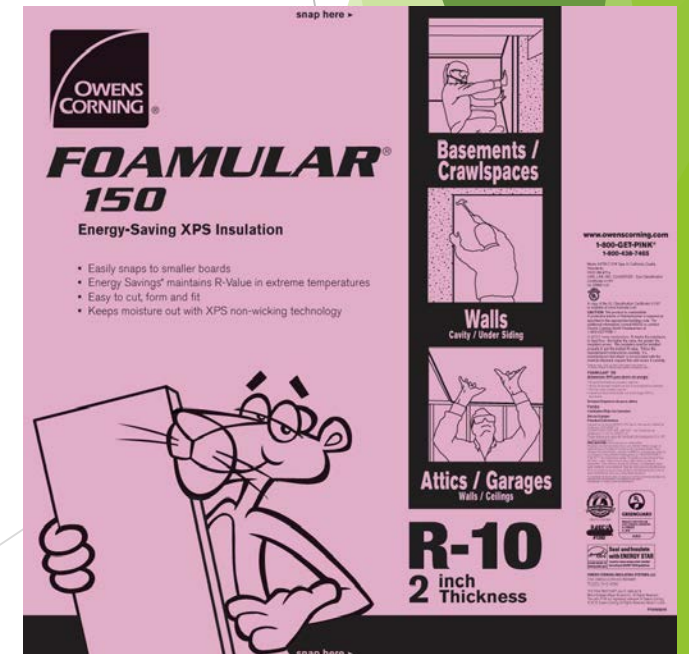
- ▶ The pink board (or blue at Lowes)
- ▶ Closed cell rigid foam board.
- ▶ Insulation board.
- ▶ Expanded polystyrene (EPS, XPS)

Common sizes are 4x8 @ ½", ¾" & 1".

Buy at hardware store or lumber supply usually under \$15.

Polystyrene and Styrofoam

- ▶ Pros:
 - ▶ Cheap.
 - ▶ Lightweight.
 - ▶ Easy to find.
 - ▶ Easy to work with.
- ▶ Cons:
 - ▶ Can be messy and wasteful.
 - ▶ Not indestructible.



OWENS CORNING®

FOAMULAR®
150
Energy-Saving XPS Insulation

- Easily snaps to smaller boards
- Energy Savings* maintains R-Value in extreme temperatures
- Easy to cut, form and fit
- Keeps moisture out with XPS non-wicking technology

Basements / Crawlspaces

Walls
Cavity / Under Siding

Attics / Garages
Walls / Ceilings

R-10
2 inch Thickness

www.owenscorning.com
1-800-GET-PIPS®
1-800-438-7483

snap here >

Tools

Common tools Used:

- ▶ Box cutter
- ▶ Clamps
- ▶ Sanding block, electric hand sander
- ▶ Files
- ▶ Rasp
- ▶ Horse brush
- ▶ Heat gun, clothes iron
- ▶ Hot knife
- ▶ Hand Saw

You don't have to own all these to build props. Cheap places to buy Dollar Tree and Harbor Freight.



Dollar Tree
\$1



Harbor Freight
\$14



Harbor Freight
\$8



Harbor Freight
\$3[^]



Dollar Tree
\$1



Amazon
\$5



Amazon
\$6



Harbor Freight
\$13

Adhesives

- ▶ Glues that work:
 - ▶ Polyurethane glue aka Gorilla Glue
 - ▶ Spray Foam
 - ▶ Epoxy
 - ▶ Gripper Paint
- ▶ Glues I would avoid for foam:
 - ▶ Wood Glue
 - ▶ Foamboard glue (liquid nail)
 - ▶ Spray adhesive
 - ▶ Rubber Cement

The build

- ▶ Four stages:
 - ▶ Planning
 - ▶ Building
 - ▶ Carving
 - ▶ Finish

Planning

- ▶ What are you building and why?
- ▶ Before you do anything think of a budget.
- ▶ Reference, reference, reference.
- ▶ Measure and blueprint.
- ▶ Take into account real life physics and portions.

Goals & Budget

- ▶ Cost vs Detail
- ▶ Cost vs Durability

Ultimately what is the end goal? How cheap can you make it to reach that goal?

Do you have the tools needed or do you need to buy them?

Consumables: Sand paper, Knives, and glue.

References

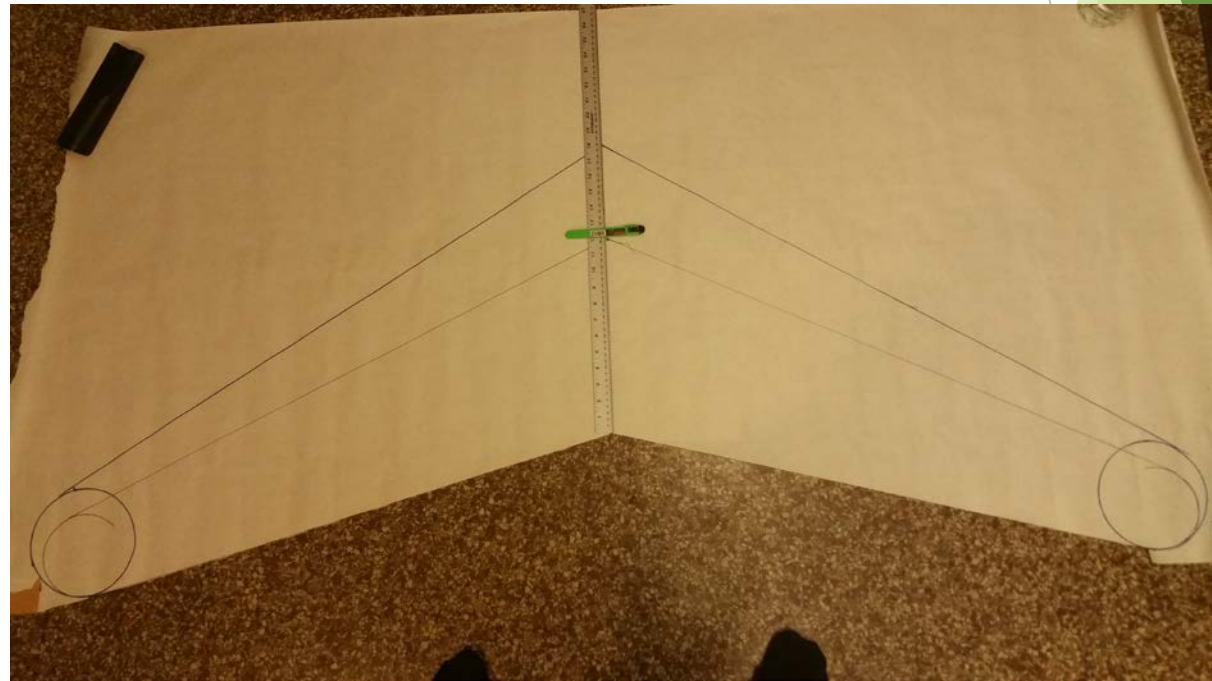
- ▶ Get as many as possible. Front, back, and side at minimal.
- ▶ I prefer to print.
- ▶ If small enough print to scale.
- ▶ If from a 3D game get the 3D model.
- ▶ Research dimensions. Wikia is your friend.
- ▶ Sometimes the manga is better than the anime.

Size it up. Mind reality.

- ▶ Use references and researched dimensions.
 - ▶ [Cosplay Size Calculator](#)
- ▶ Unless you are doing a live action character the portions are not going to be right.
- ▶ Camera angles can distort objects.
- ▶ Sometimes these things just don't work in real life, so fake it.

The blueprints

- ▶ What material are you going to use?
- ▶ Print or draw a template.
- ▶ Think about how things come together.

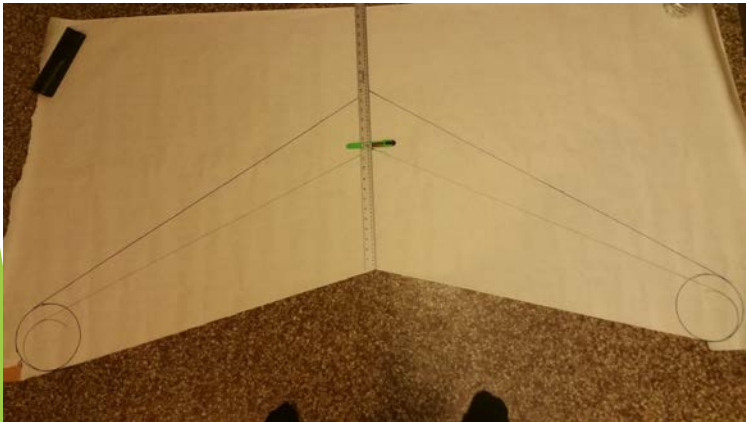


Building

- ▶ Use template to cut basic shape.
- ▶ Build up for larger pieces by gluing layers.
- ▶ Clamping:
 - ▶ Use as many as you.
 - ▶ Spread the pressure.
 - ▶ Do not clamp directly unto your work surface.
- ▶ Think about structure strength.

Building

- ▶ Use a template to cut basic shapes.



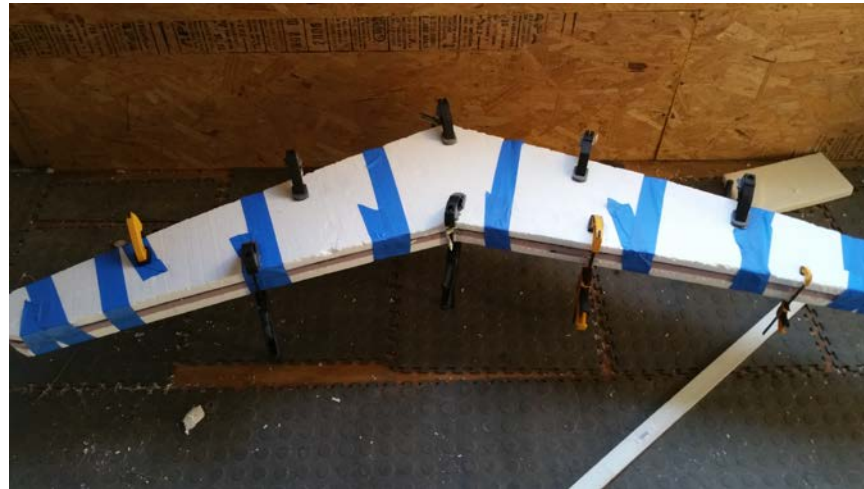
Building

- ▶ Build up for larger pieces by gluing layers.



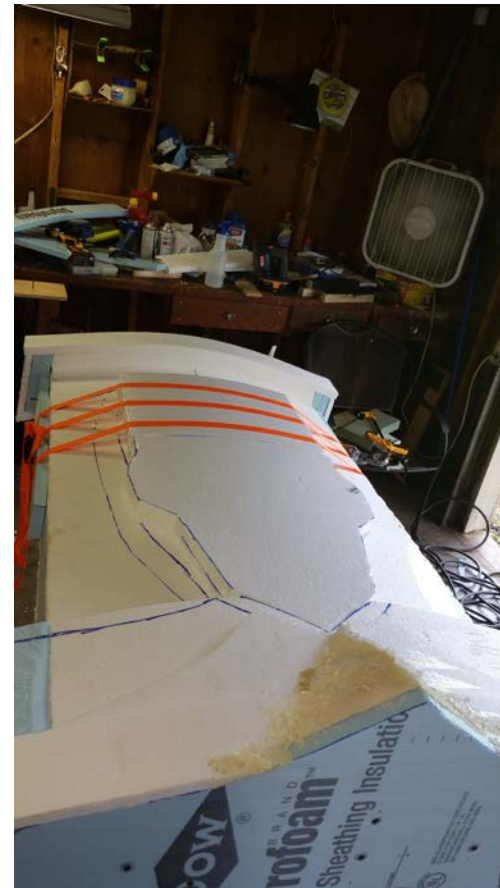
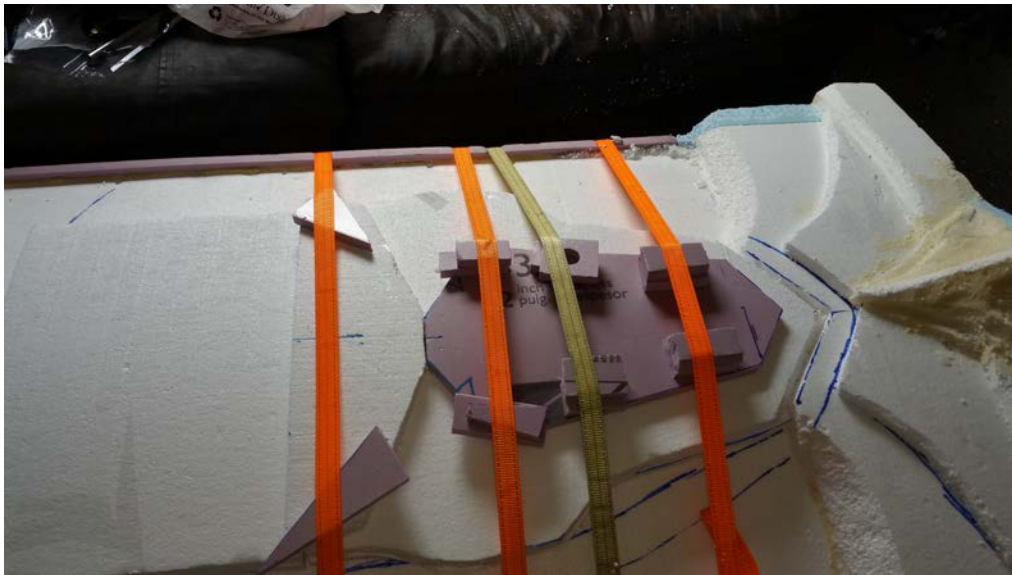
Clamping

- ▶ Use as many as you can.
- ▶ Spread the pressure.
- ▶ Do not clamp directly unto your work surface.



Sometimes a clamp wont work.

- ▶ Weight
- ▶ Straps



Carving

- ▶ Big cuts to small cuts.
- ▶ Use hand saw to remove large straight pieces.
- ▶ Use horse brush or rasp to make bevels and curves.
- ▶ Use files to get small areas and straight edges. Good for fine detail.
- ▶ Use low grit sand paper for fine detail.

Carving



Box cutter and saw



Brush and rasp



File

Finishing

- ▶ Fillers
- ▶ Sanding, more sanding.
- ▶ Sealing
- ▶ Painting

Questions?