

Simple Single Skin Wing

The simplest form of wing for a foamie model is a wing cut from the Foam sheet using the curvature of the roll of wall foam to help create an airfoil section. This can also be improved by cutting the wing profile into the fuselage where it attaches or maybe the strut depending on your model

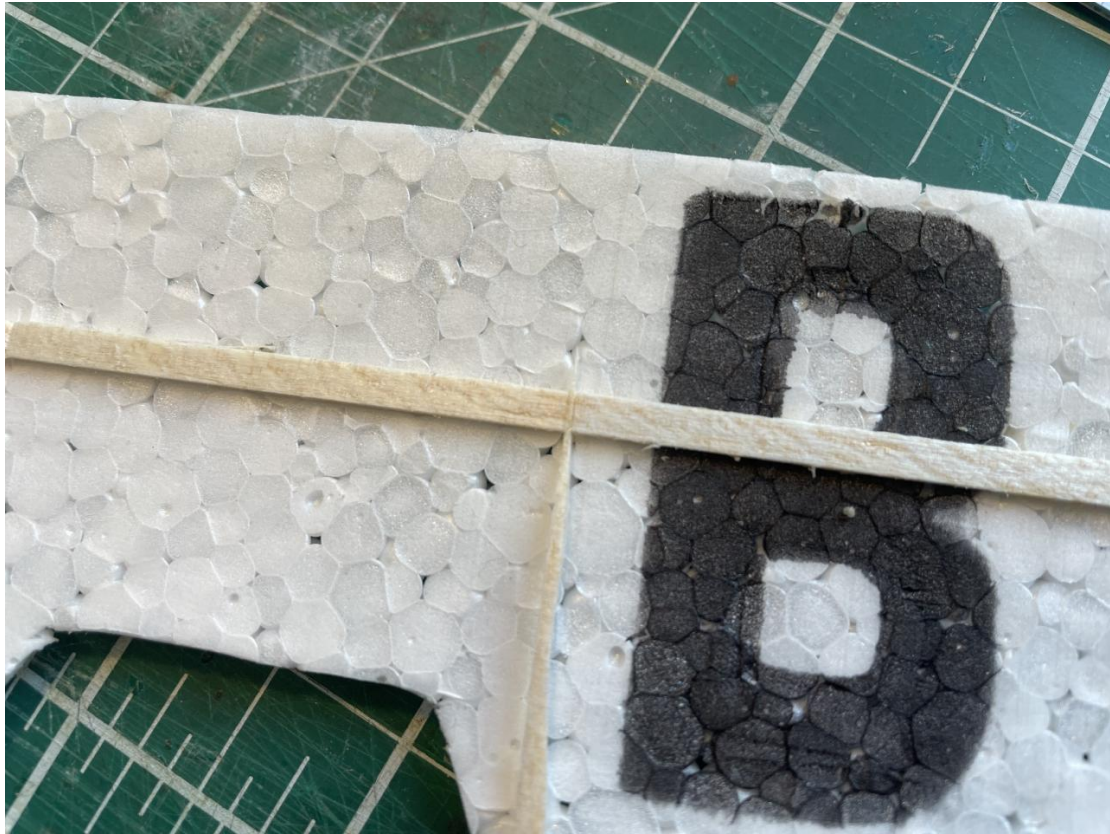
To give it a bit more rigidity I have added a $1/32'' \times 1/8''$ spar, placed at about $1/3$ of the chord. My favored glue for foamies is Copydex. This has the added benefits of being able to use it as an instant grab adhesive like UHU Por when you need the grab but also you can stick things before it properly dries which allows some re positioning – ideal for fixings wings and tails as some alignment can be done before it goes off. Another big advantage is it forms a rubbery bond, ideal when your model finds the wall or more likely the ceiling

The spar of $1/32'' \times 1/8''$ was glued to the underside of the wing in a continuous length before adding any dihedral. Once it had dried I then carefully cut the spar at the point I wanted to add the dihedral without cutting into the wing. My model has a flat centre section so I did this either side of that.

If you hold the wing and gently pull in some dihedral a gap will open up in the spar. Into the gap that has now been created I pushed a slither of $1/32''$ that had been cut to give a very fine end. By trial and error I was able to find the right amount needed in the gap to give me the correct dihedral, in this case $1/2''$ at the tip



I then cut off the fine end of the wedge so I knew where to line it up to and reinserted with a bit of thick Cyano. Cyano is not foam safe so you need to be careful



Once this had dried I then cut off the remain part of the wedge



The end result is a very light wing and given by the strength of the foamie Stampe I made a few years ago more than enough for the job. My Stampe has been poked off the rafters with a big stick several times

