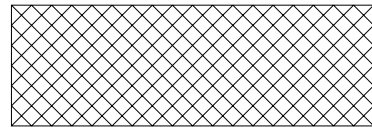
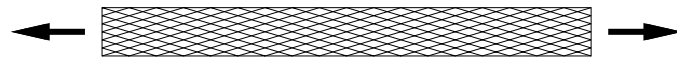


Strong and Flexible Cloth Hinges

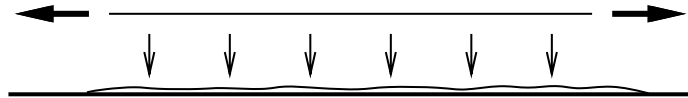
0.75 oz glass, or 0.8 oz Kevlar cloth, +/-45.
Glass is more flexible, Kevlar is tougher.
Cut 2.5 times wider than final hinge strip.



Pull on ends to shear as much as possible



Wipe laminating epoxy on polyethylene.
Put down cloth strip while still pulling ends
(to get it straight). Tape the ends down.



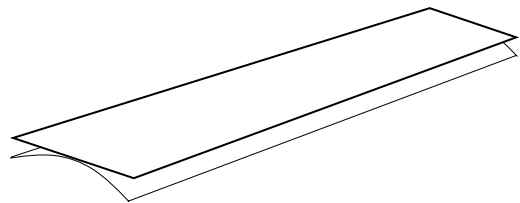
Blot strip as much as possible with toilet paper,
using hard roller or large dowel.



Cover with another layer of polyethylene.
Weight down with foam to keep it flat.
High pressure is not necessary.



Cloth strip is tear-proof, but very flexible
across the narrow direction because of the
shallow fiber angle. It is about 2 mils thick
for glass, about 5 mils for Kevlar, with
perfectly feathered edges.



The thorough blotting makes the strip porous,
allowing bonding to balsa using Ambroid which
will not stiffen the flexing fibers. Thinned
Ambroid can be brushed on top and through
the pores. For the best bond, precoat the
balsa and sand the strip with 600 grit to
remove the shine.

