

A schematic diagram of a fuselage section. A horizontal line represents the fuselage. Above it, a vertical rectangular section is labeled "FUSELAGE SECTION". A curved arrow points downwards from the fuselage section, indicating a bending moment. A vertical arrow points upwards from the fuselage, indicating a shear force.

A right triangle is shown with a horizontal leg of 3.5 inches. The right angle is at the bottom-left vertex, indicated by a square symbol. A vertical dashed line extends upwards from the right-angle vertex, and a horizontal dashed line extends to the right from the same vertex, meeting at the top-left vertex of the triangle. The horizontal leg is labeled 3.5" with a dimension line.

Diagram illustrating the assembly of the rudder. The fin is made of 1/16" Balsa and is glued to the side of the fuselage. The bend for the rudder trim is indicated as 1". The height of the rudder is 1-5/8".

3"

TAIL GLUED ON  
FUSELAGE BOTTOM

STALL

Perfect Glide

DIVE - OUCH!

20 feet

Cut wing, tail and fin from 1/16" balsa. Shape fuselage from strip 3/16"x1/2"x 11.5" balsa, tapering evenly to 3/16" depth at tail. This taper is necessary to provide an angular difference between wing and tail. Glue tail on bottom of tail end. Use a white glue or for faster assembly use "Crazy Glue", (be careful). Glue fin to side of fuselage above tail. It does not matter that it is off-set. Score bottom of wing about 1/2 way through at DIHEDRAL joints Crack joint and lift tips to 1.5" dihedral. Glue tips at angle shown. When dry, mark centre line on wing and glue on top of fuselage, 3" back from nose, making sure everything is square. Sand wing, tail and fin to round square edges.

To decorate, use felt markers, rather than paint, as paint can add too much weight.

3"  
WING 1/16" BALSA  
FLAT CENTRE  
SECTION

Dihedral  
(Upward angling of wing)

## FLYING

First test flights should be made by gently throwing the model horizontally at its normal flying speed. The model should glide in a straight line at a gentle angle to land about 20 feet from launching point. If Model climbs and suddenly drops (stall) add a little more clay to nose.

Diagram illustrating the assembly of the fuselage:

- GLUE FIN TO SIDE OF FUSELAGE
- TAIL - LIGHT
- 1/16" BALSA

A diagram of a rectangular box. The height is labeled 2" and the width is labeled 6". The box is open on the right side.

6"

## 12" Beginners Hand Launch Glider

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