

Wiesel XP

This construction manual shall be used as a guide for the assembling of the Wiesel XP. In addition to the wings, the fuselage and the vertical stabilizer you need the following things:

- 4mm balsawood (elevons)
- 2 control horns and 2mm wire
- 3M 90 spray adhesive
- 3M 50mm strapping tape
- 5min Epoxy or hot glue
- coloured Monta tape
- 4mm CFRP Pipe (Length 800mm)
- RC Components

The spray adhesive and the strapping tape are both available on our website (www.epp-modelle.de) if go to accessories.

1. Remove the foam cores from their beds. Use the sandpaper or a scrap piece of foam to clean off any melted foam debris.

Now apply epoxy or hot glue to bond the foam cores together. Use the bottom foam beds to align the cores. The bottom side of the wing should have a small V-shape whereas the top side is straight.

Trace the 4mm carbon spar on the top site foam core using a pen or marker. The radio gears are installed on the bottom side, so trace them on this side. The positions for the spar and the radio gears are as shown in the drawing. Pay attention to the position of the centre of gravity (105mm +/-5mm from the nose backwards). Use a sharp knife to do the cut-outs. Use 5min epoxy to glue the carbon pipe to the core. Now position the receiver and the battery on the fuselage. Trace them on the epp and make the cut-outs (The cut outs should be a bit smaller, as the RC components won't be glued but pinched into the core).

Make cuts about 6mm deep to run the cables of the radio gears to joint of the two wing cores.

2. Remove the RC components in order to spray a light cote of 3M 90 spray adhesive on the wing and the fuselage. Now you should wait about 5min to allow the adhesive to evaporate, before you start taping the model. In the meantime you can start putting the RC Components in place. Apply the 50mm strapping tape as shown in the figure standing down. It is important that you tape the wing equally on the top and bottom side in order to avoid twisting of the wing. The taping is necessary to make the wing and fuselage bending proof and torsion proof.

3. Take the 4mm balsa wood and cut it as shown in the figure. The elevon should be 430mm long, 40mm deep at the outer side and 30 mm deep at the inner side. You can round the wing and the elevons at the outer side as shown in the figure. Before you attach them you will first need to bevel a 45-degree angle at the hinge edge of each elevon. Now you simply tape (strapping tape) the elevon to the trailing edge by leaving enough room so it doesn't bind. You should apply one stripe at the top and one at the bottom of the elevon.

4. The wing and fuselage are now ready to be covered with Monta tape. After this you can install the control horns on the elevons. Now connect the control horns with the servo horns by using control rods (2mm wire). The attachment can be done by using Z bends.

Plug the radio gear cables into the receiver and use double sided tape to attach the wing to the fuselage. Adjust the elevon movement to an approximate deflection $\pm 20^\circ$ to start with.

5. Check the position of the centre of gravity again (105mm ± 5 mm from the nose). Use a plumb to adjust the CG.

