

# ASCEND HOBBIES

## ALPHA

### FREE FLIGHT GLIDER BALSA AIRPLANE KIT INSTRUCTION MANUAL

<http://www.ascendhobbies.com>

[ascendhobbies@outlook.com](mailto:ascendhobbies@outlook.com)

<https://www.youtube.com/@ascendhobbies>

Wingspan: 813mm

Length: 610mm

Wing Area: 9.75dm<sup>2</sup>

Airfoil: Asymmetric Airfoil

Dihedral Angle: 6°

Flying Weight: None

Power Required: None

Speed Controller Required: None

Servos Required: None

Battery Required: None

Prop Required: None

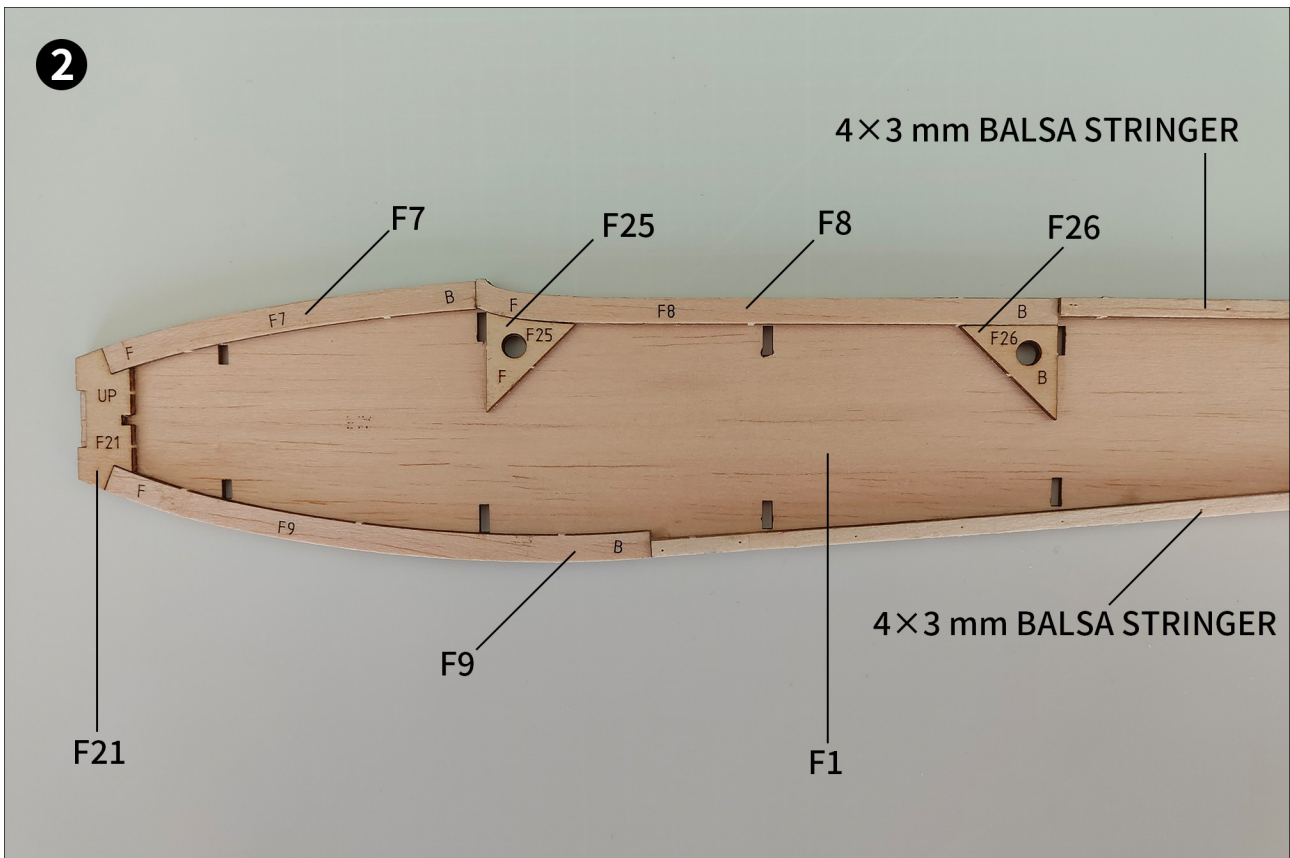
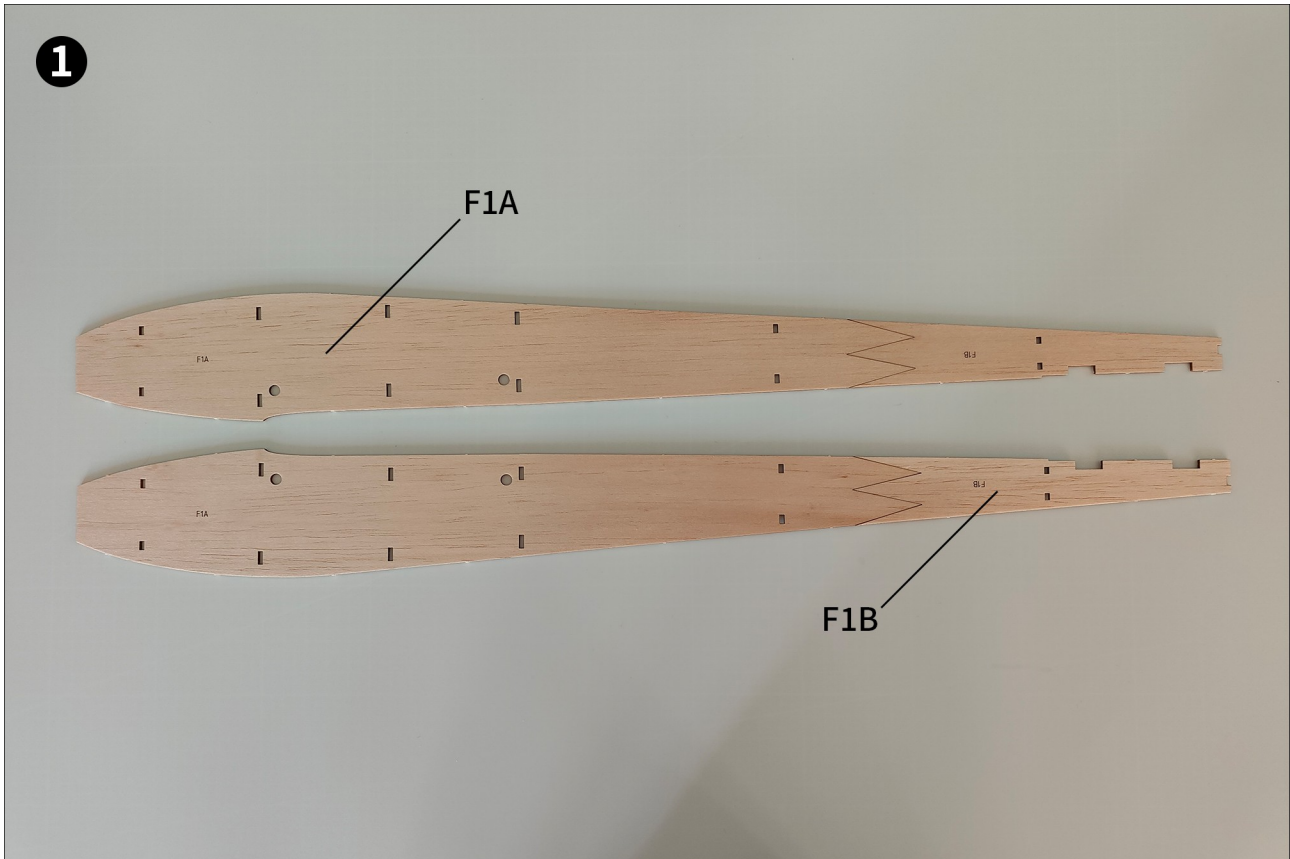
Radio Required: None

CG (Center of Gravity): 40mm Rearward of wing leading edge

The design center of gravity (CG) is located 75mm aft of the wing leading edge. For the initial flight, the CG should be set slightly forward of the design position to ensure enhanced stability and controllability. Subsequent flights may allow for fine adjustments of the CG location in accordance with pilot preference and handling characteristics.

Note: This balsa model aircraft kit does not include covering material or any electronic equipment.

## 1. FUSELAGE ASSEMBLY



3

4×3 mm BALSA STRINGER

F1

F2

F2

4×3 mm BALSA STRINGER

4

F19

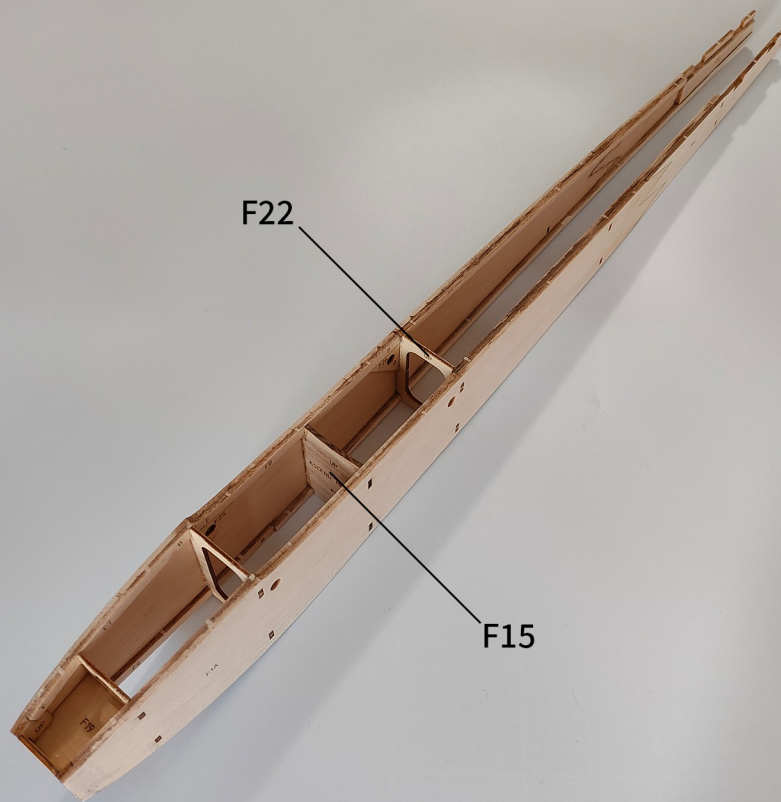
F17

F23

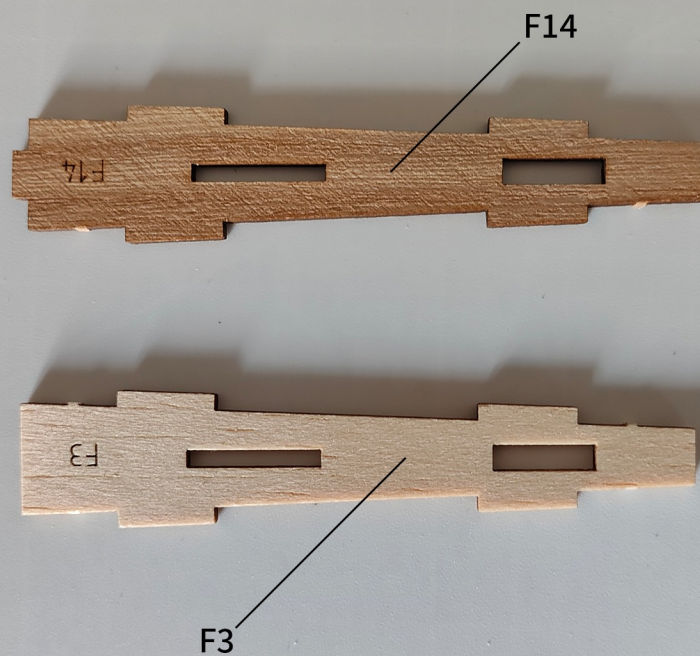
F18



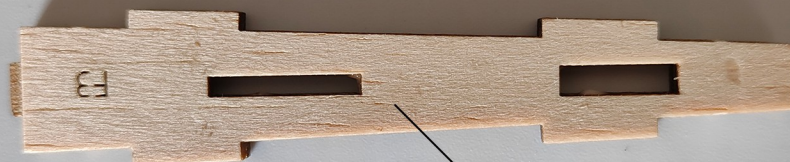
5



6



7



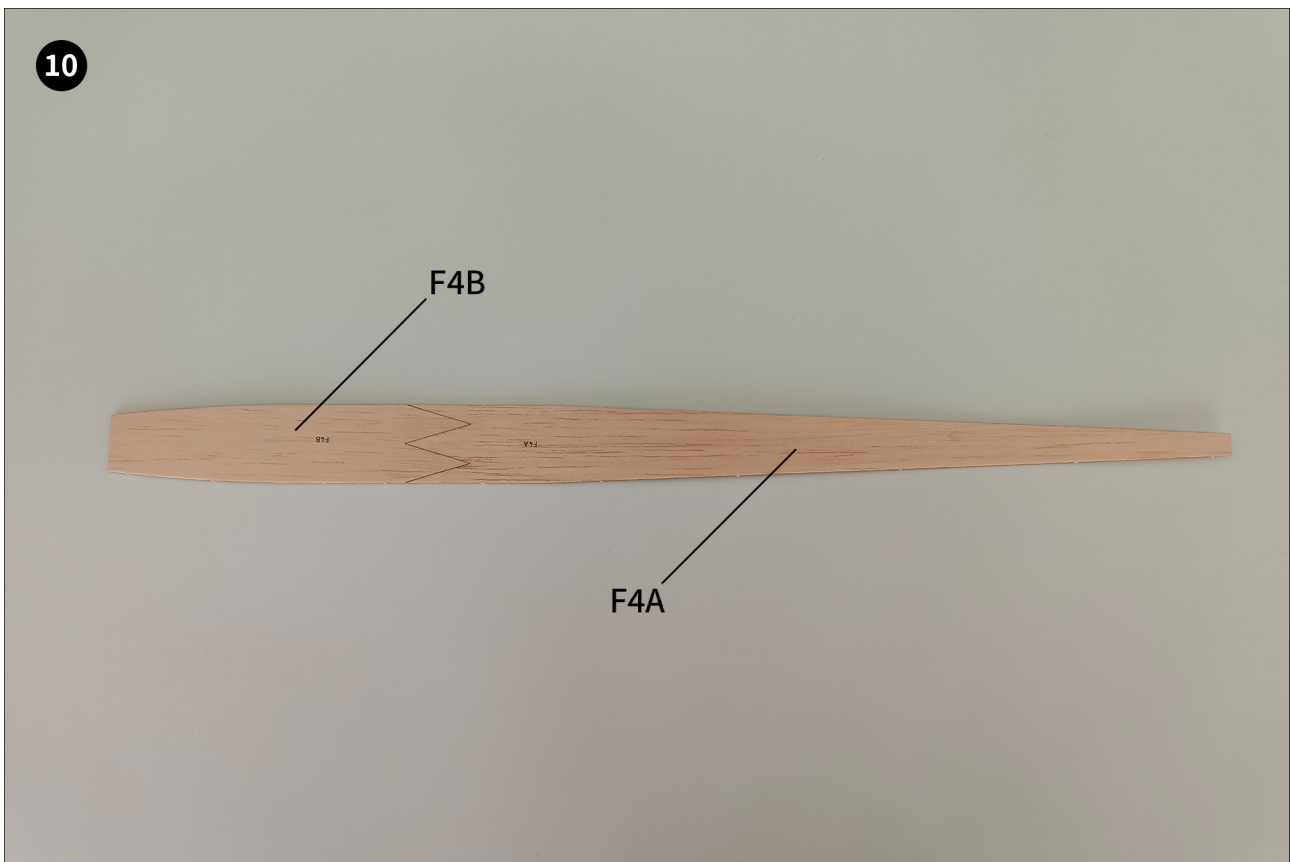
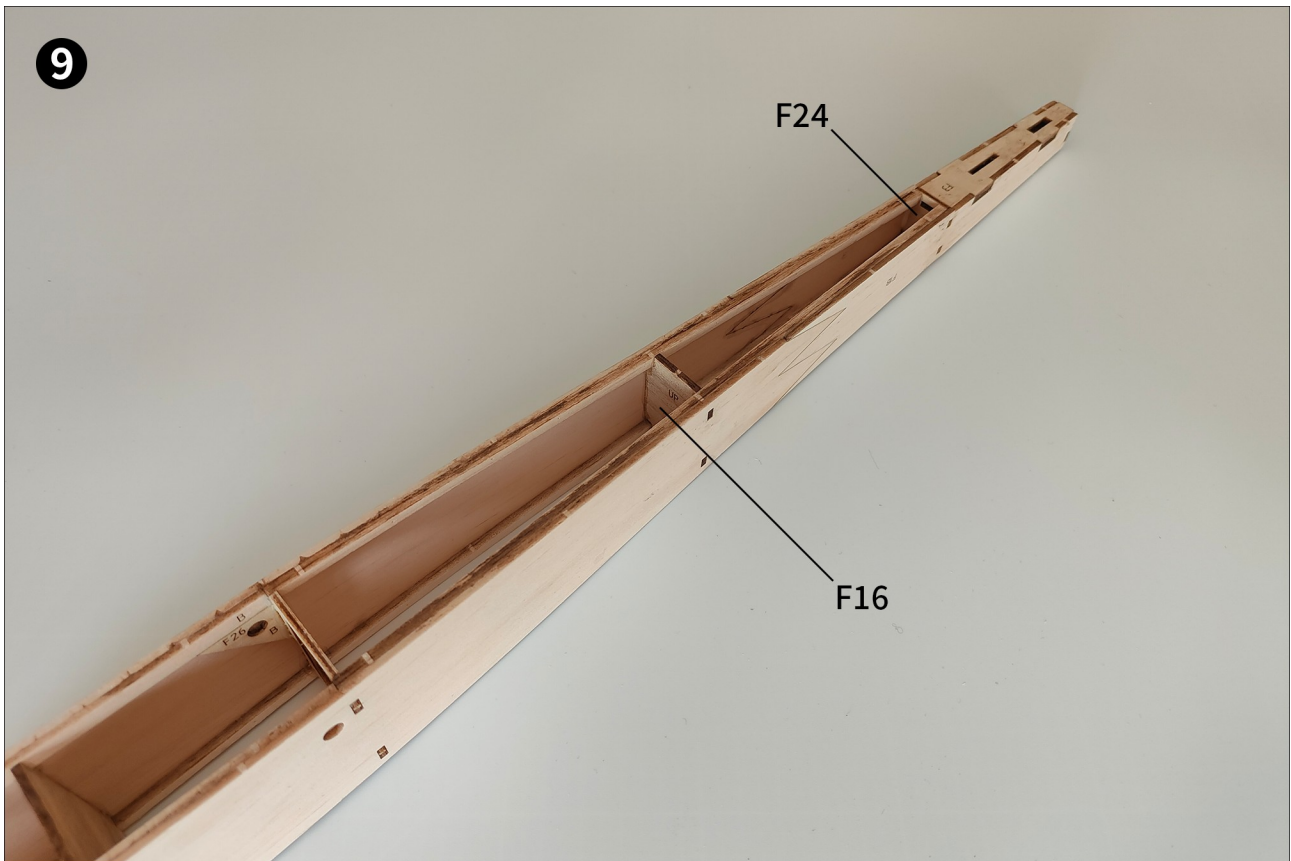
F3 & F14

8

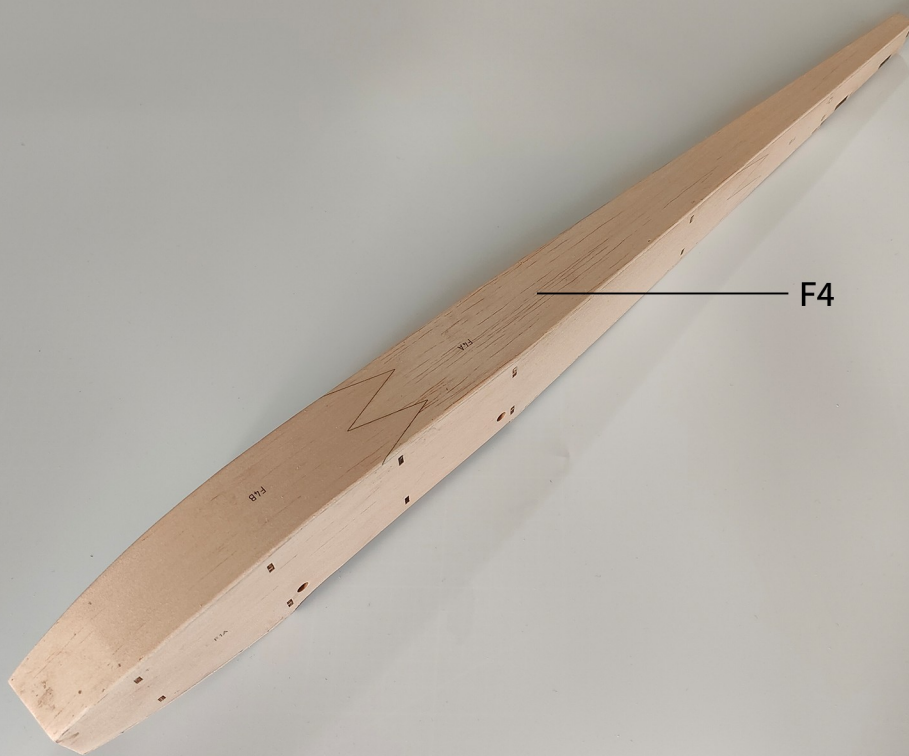


F24

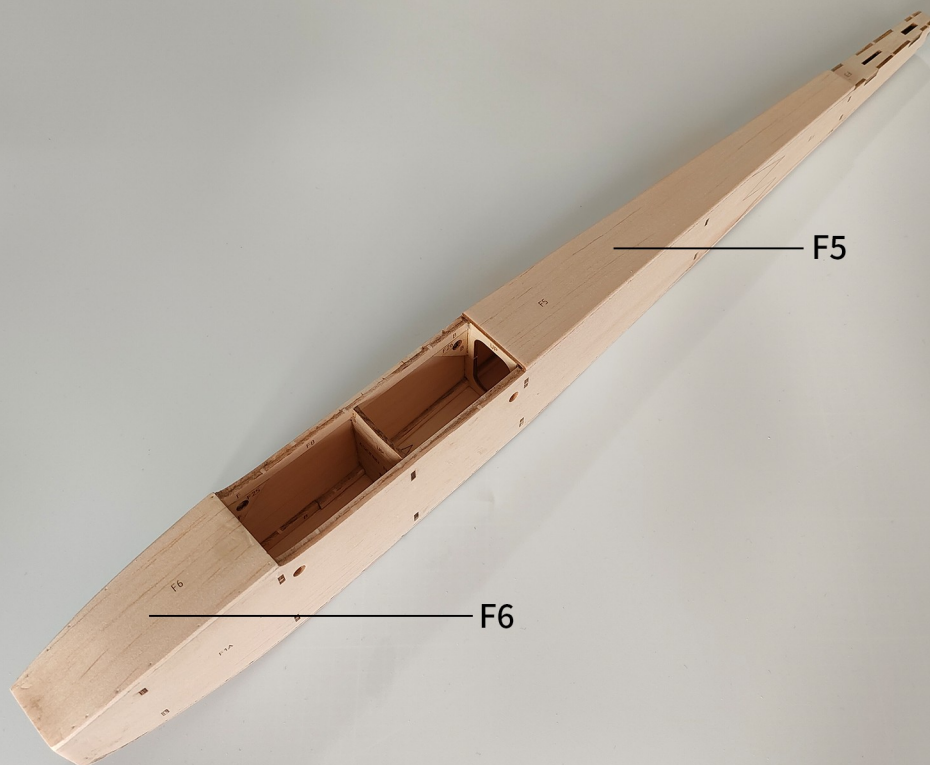




11



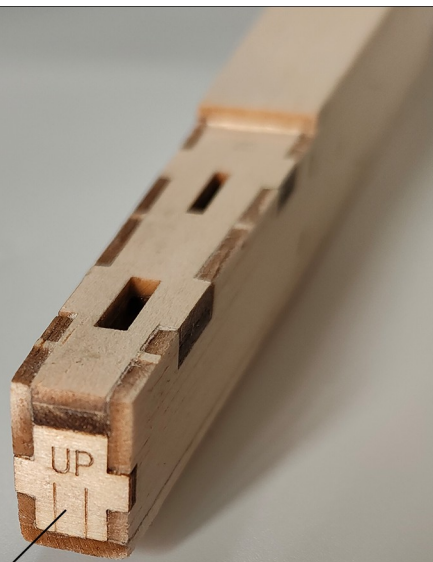
12





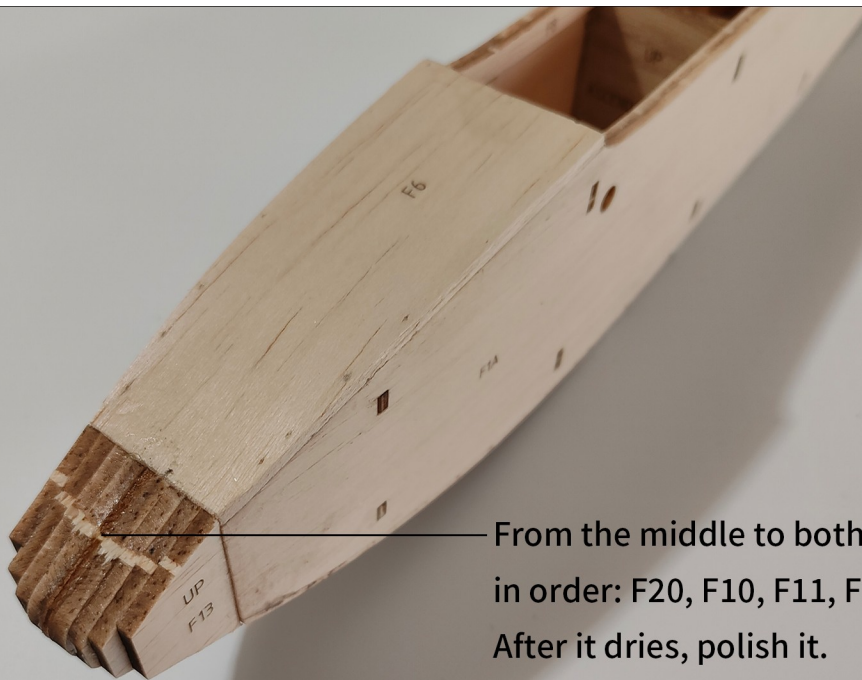
13

F27



14

From the middle to both sides  
in order: F20, F10, F11, F12, F13.  
After it dries, polish it.





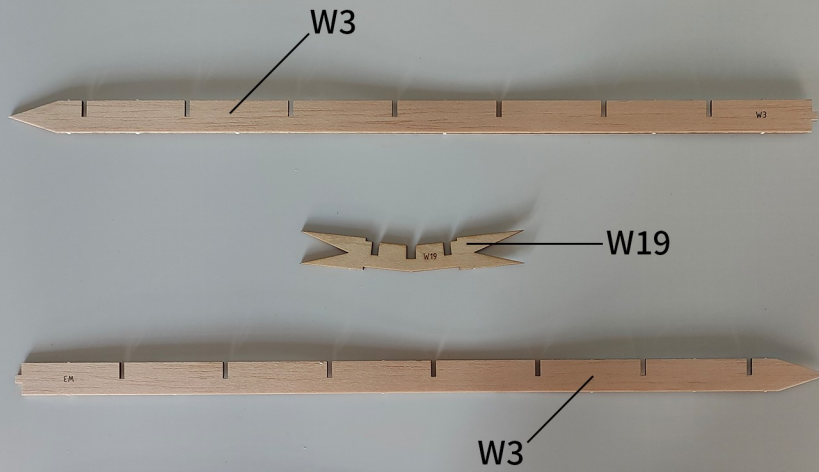
15

The square wooden strips are sanded into triangular sections and then glued to the tail of the aircraft after the model's skin is finished, to reinforce the vertical tail.

16

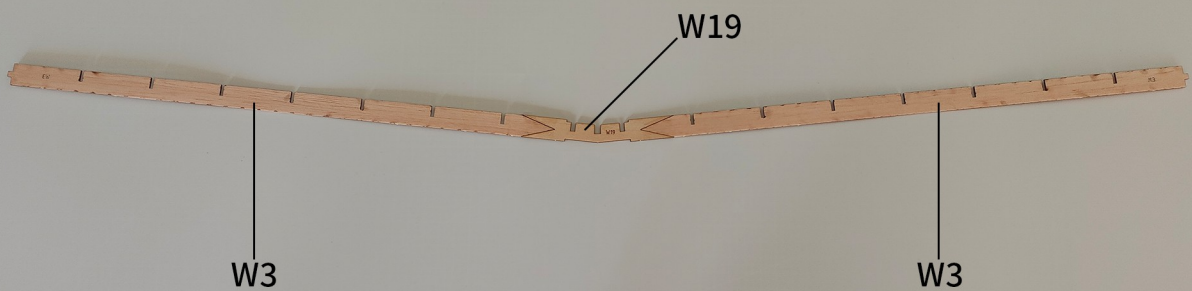
## 2. WING ASSEMBLY

1

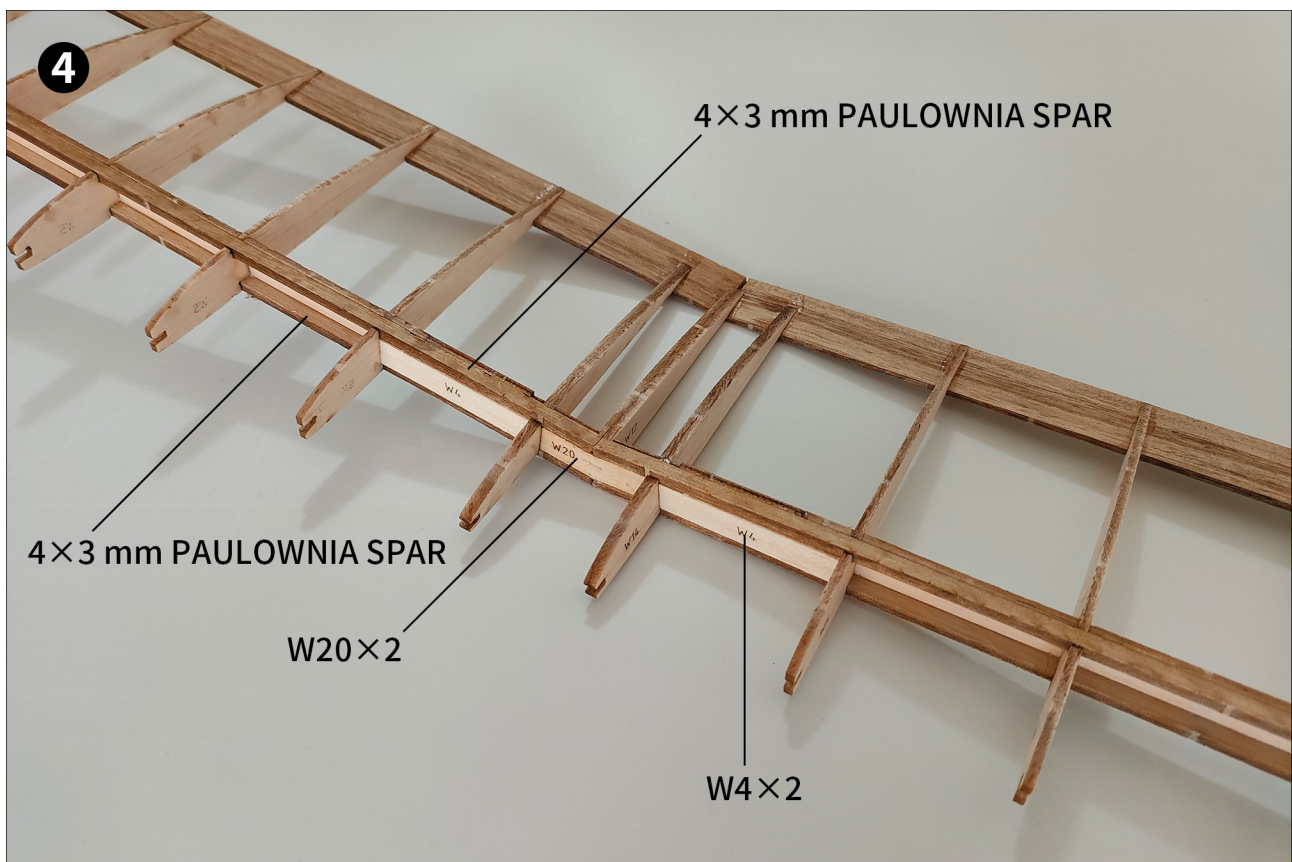
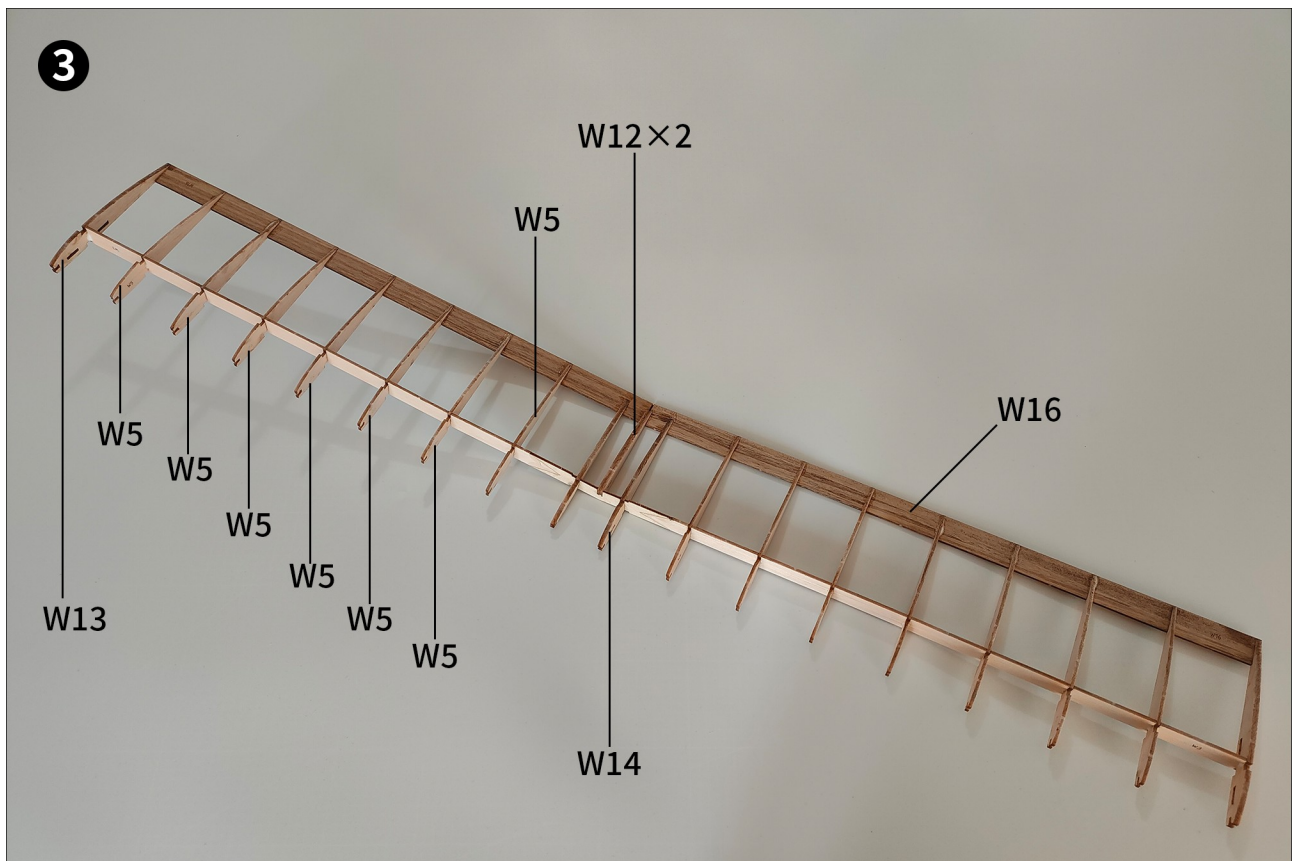


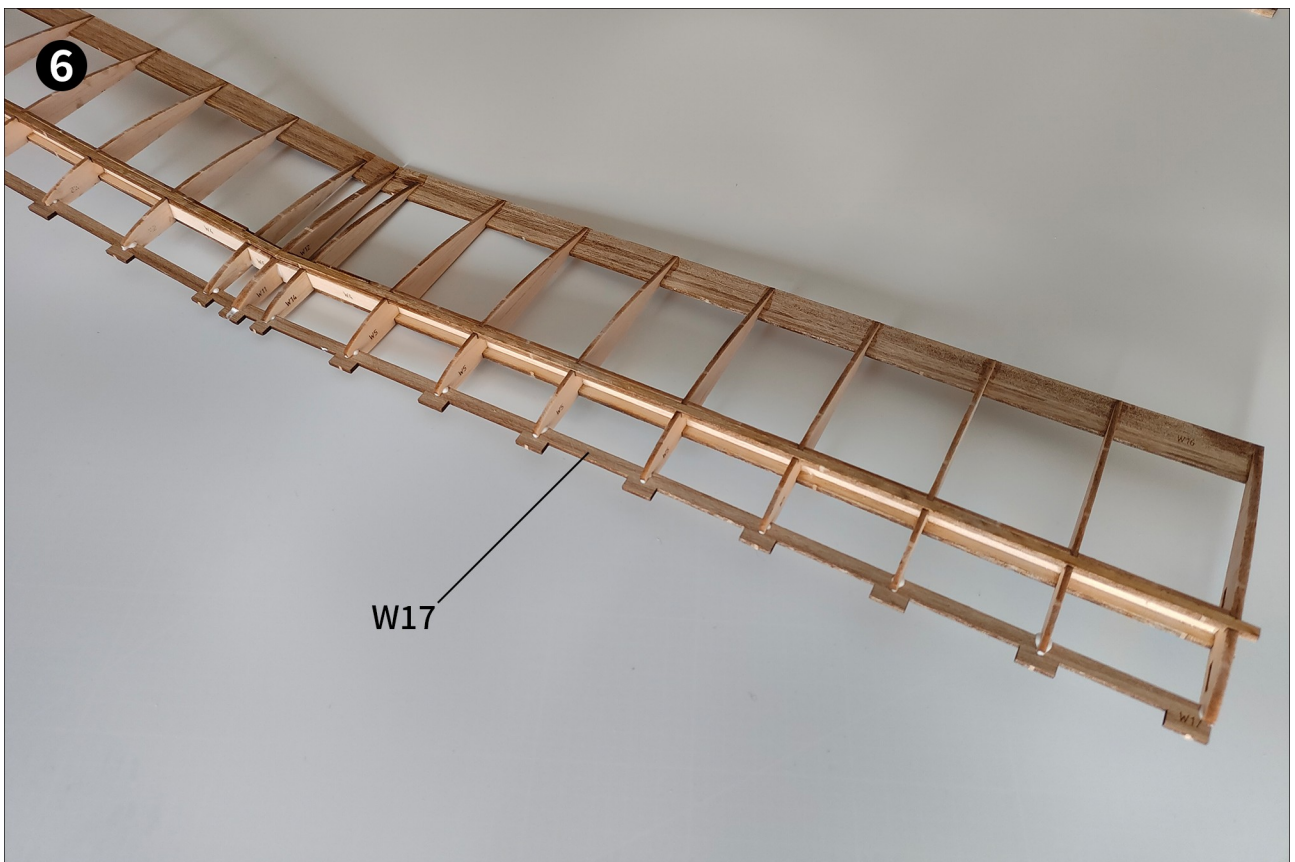
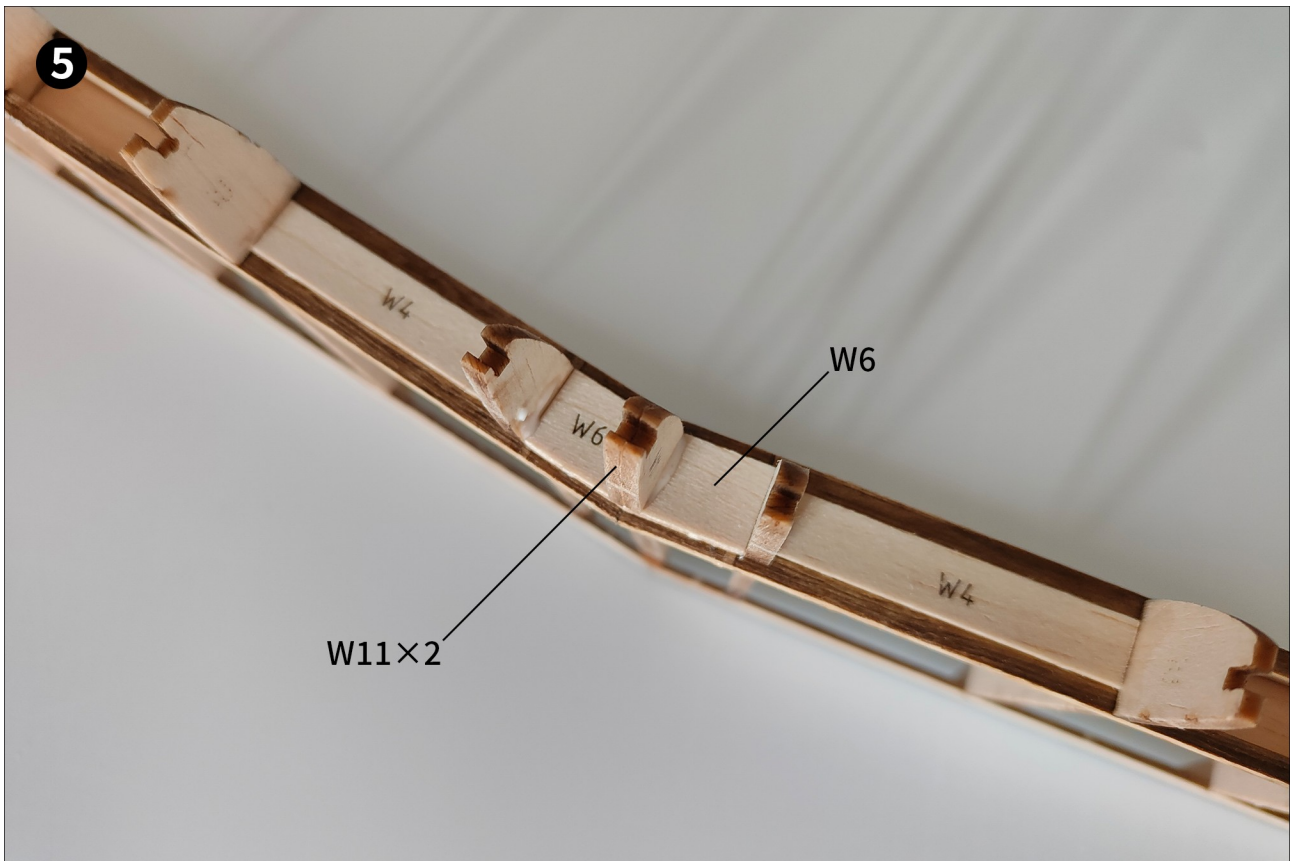
All parts that need to be spliced need to be aligned using a ruler during the bonding process to prevent deformation.

2

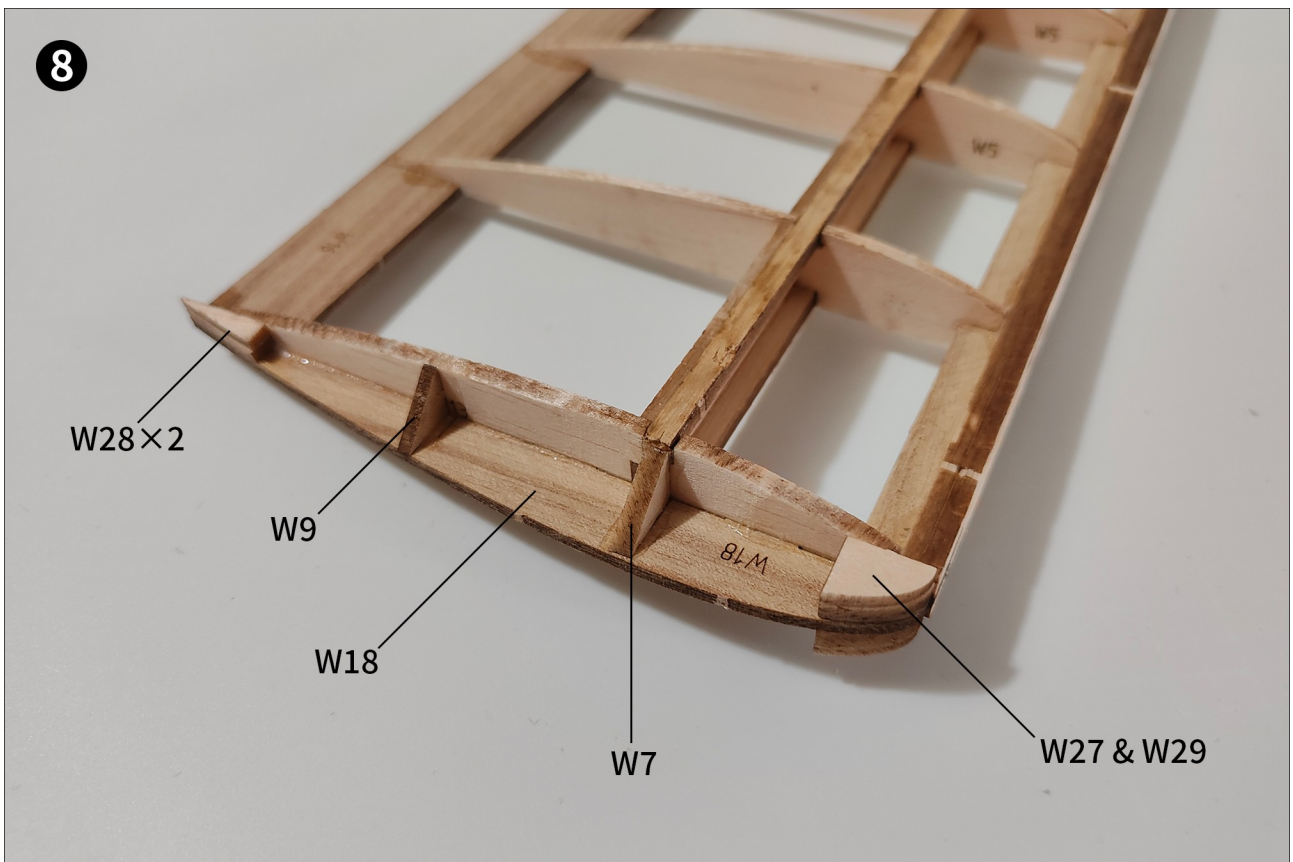
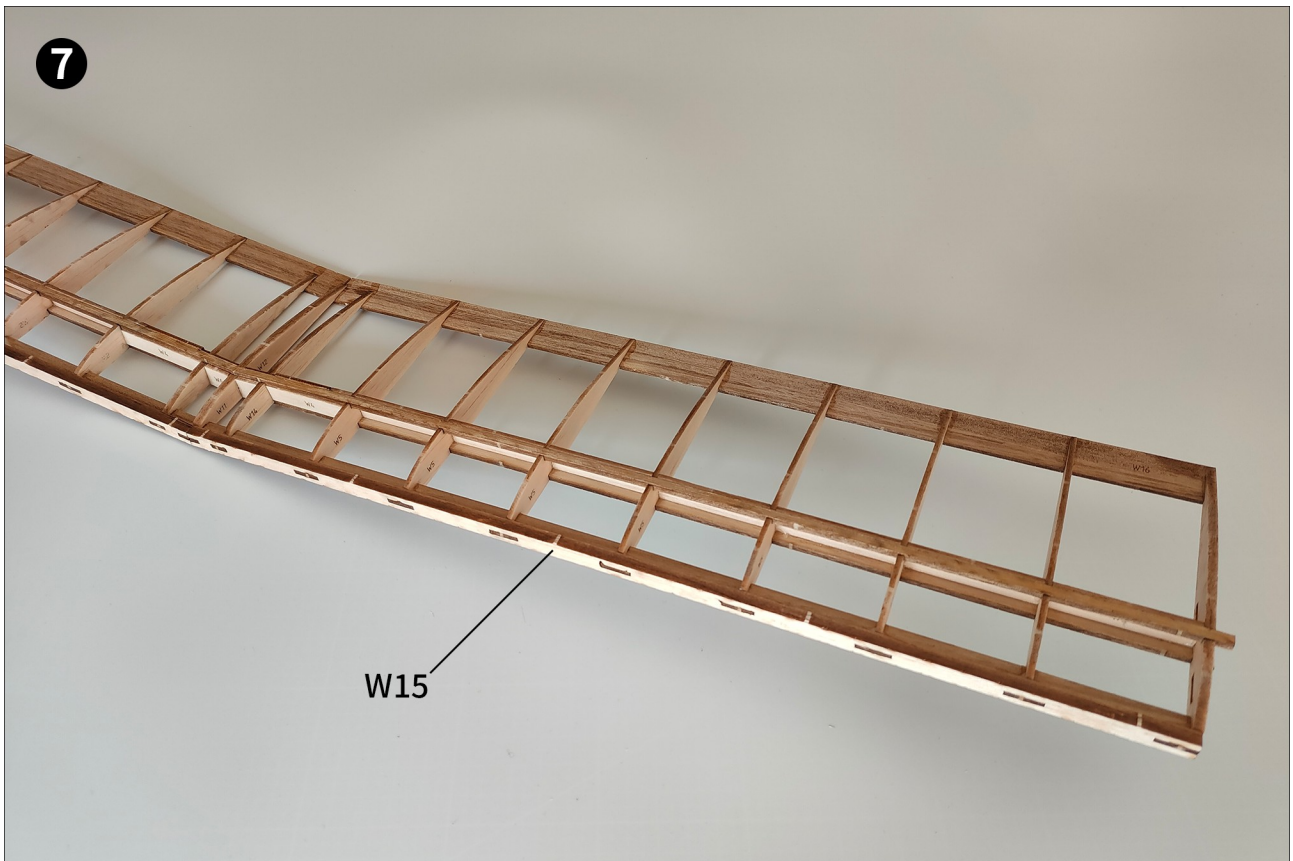




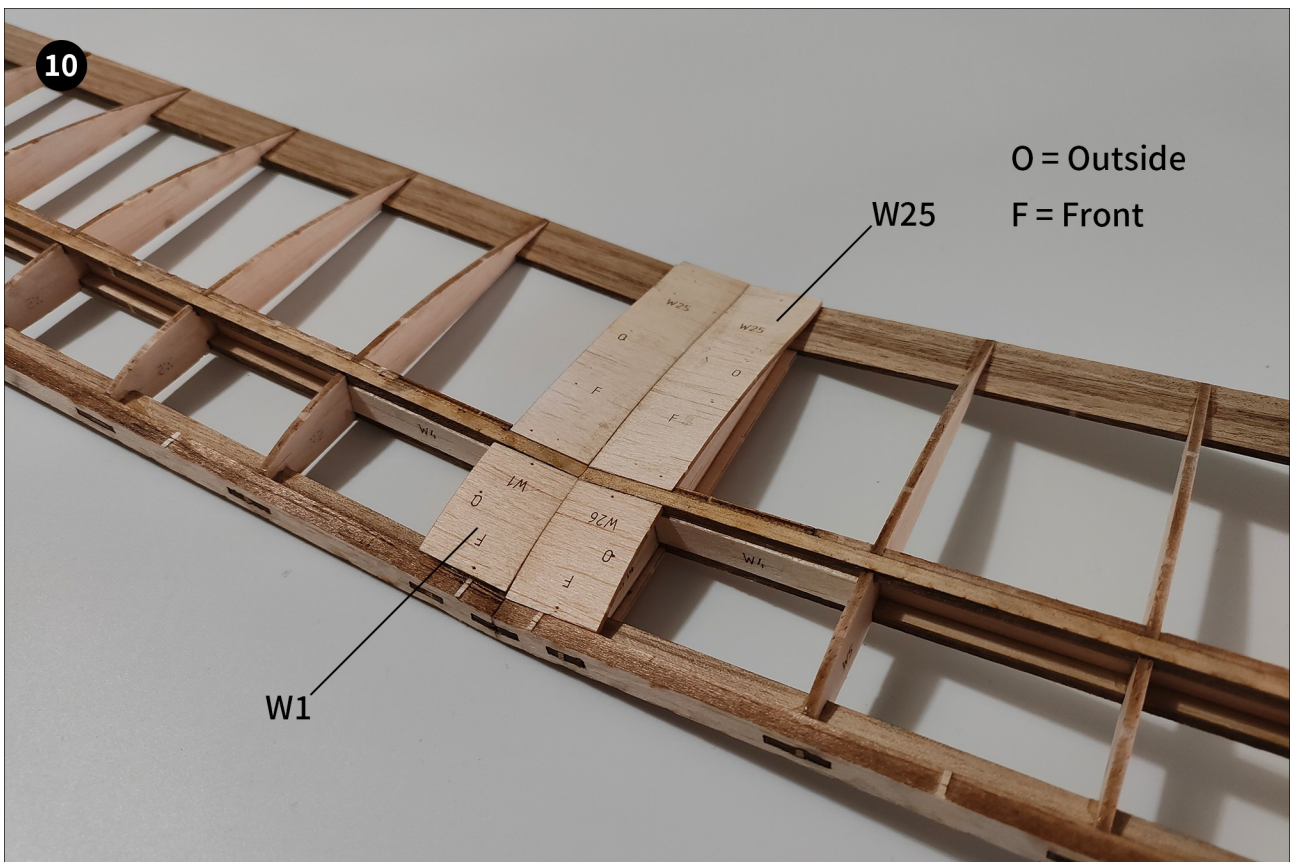
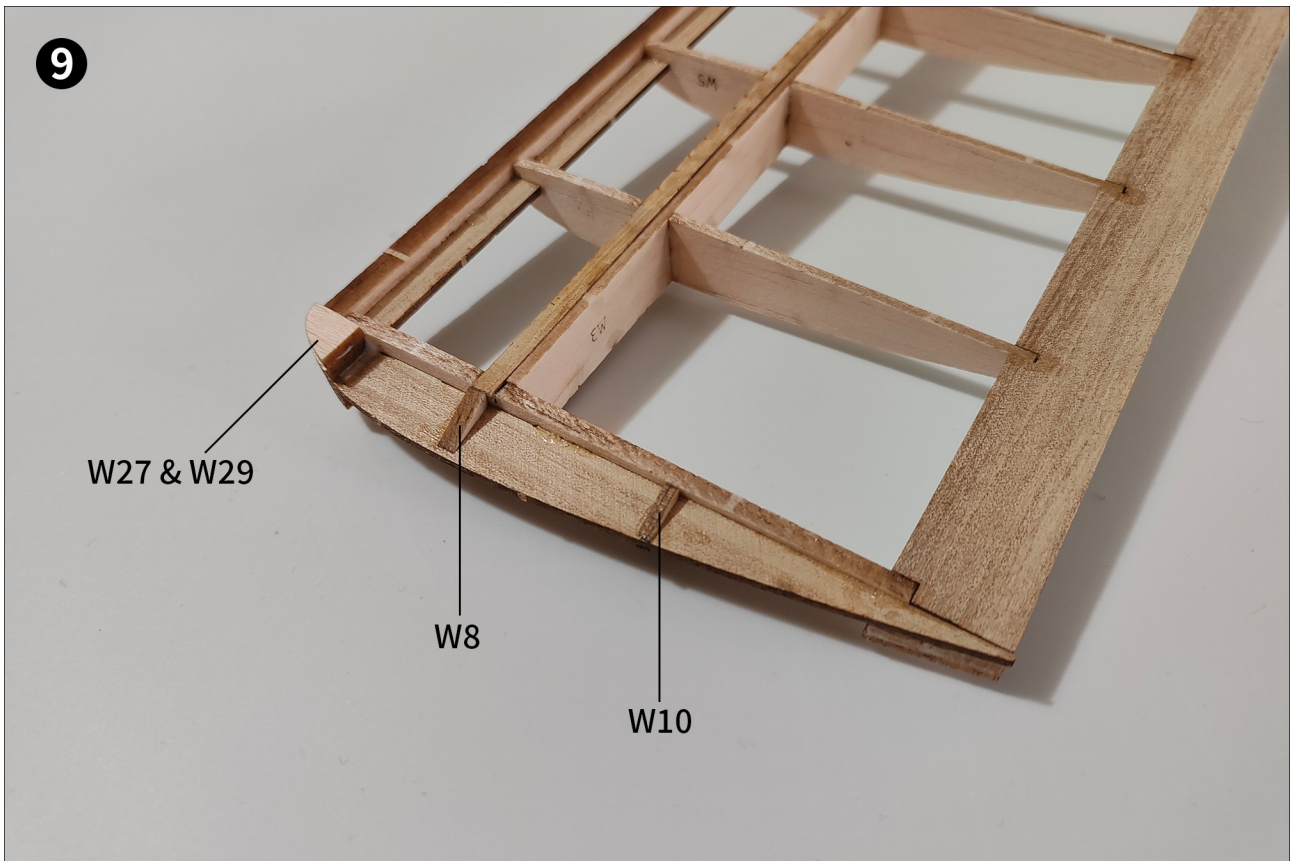




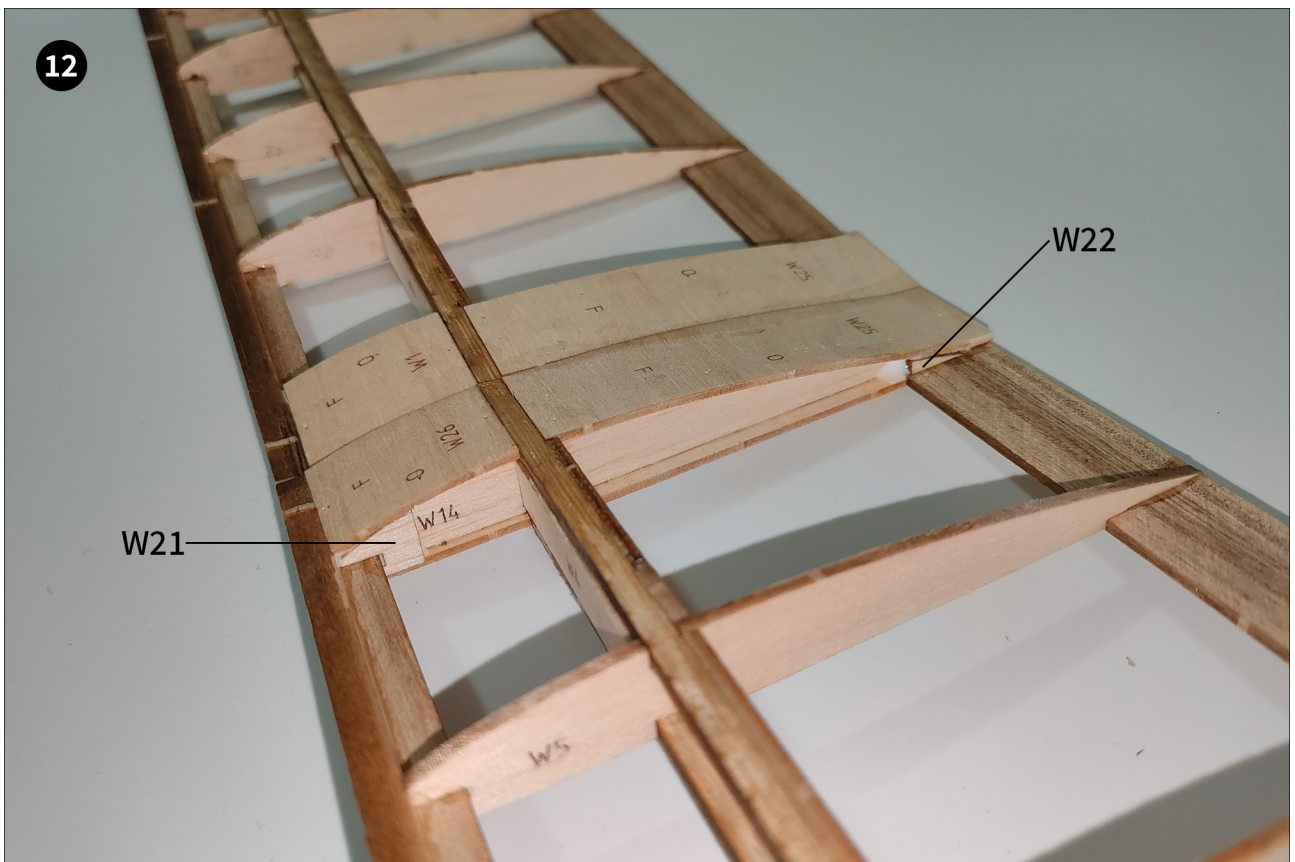
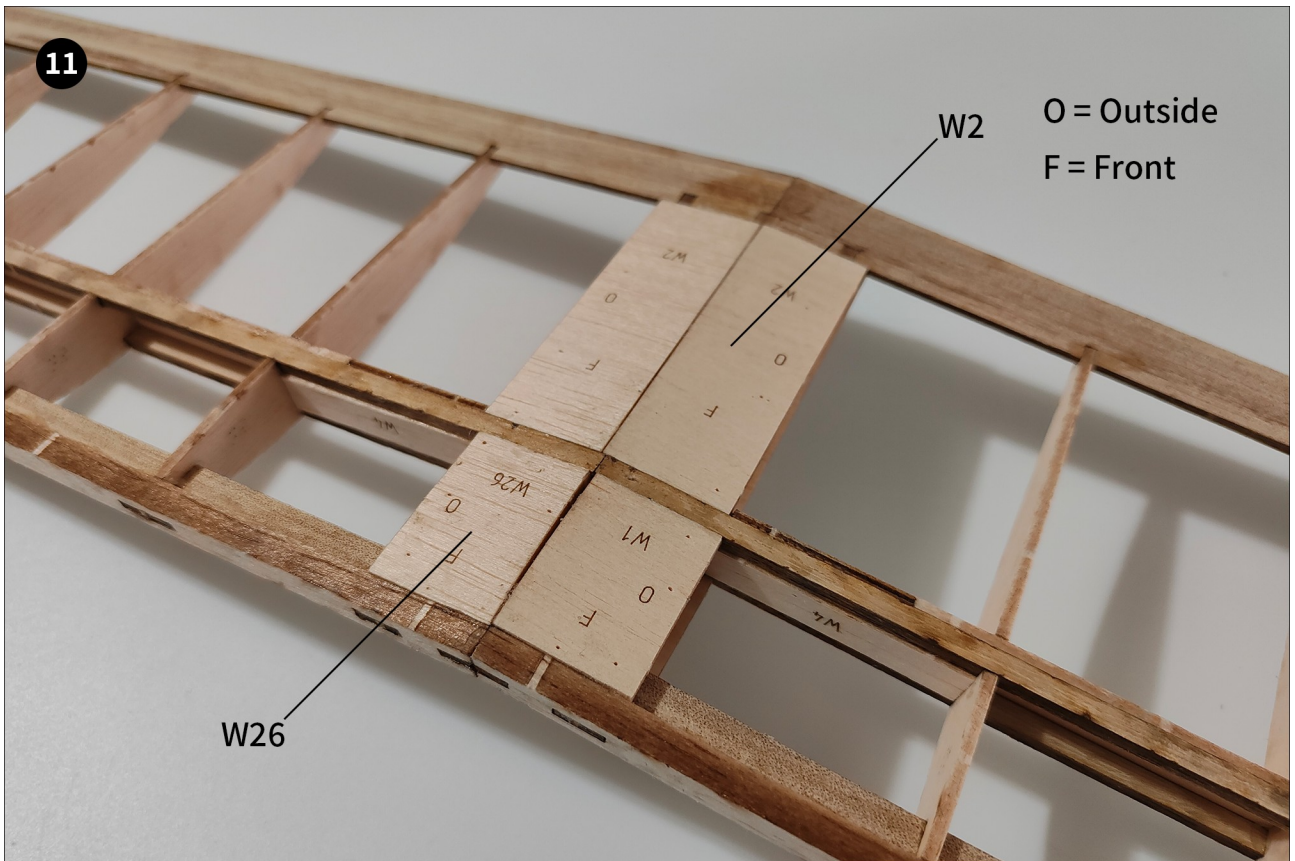




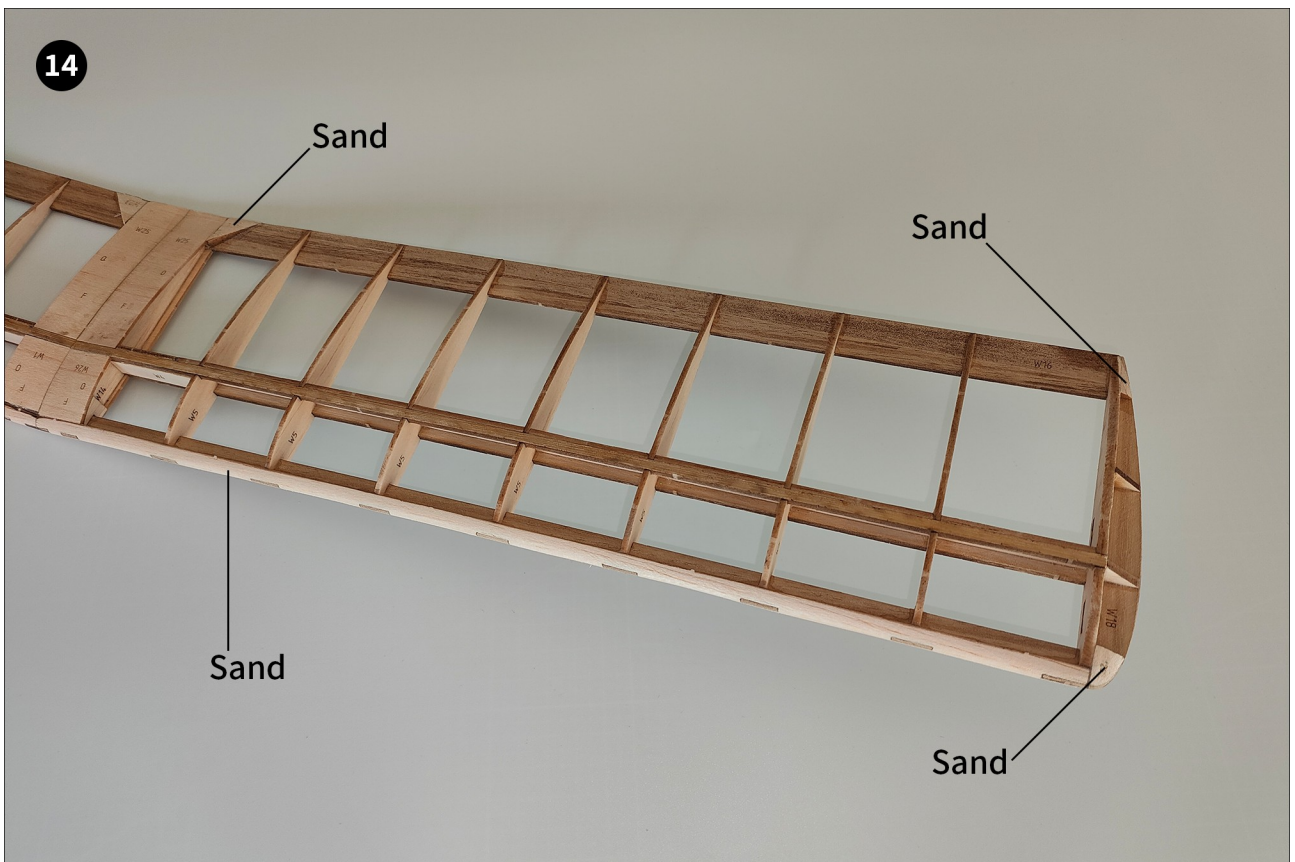
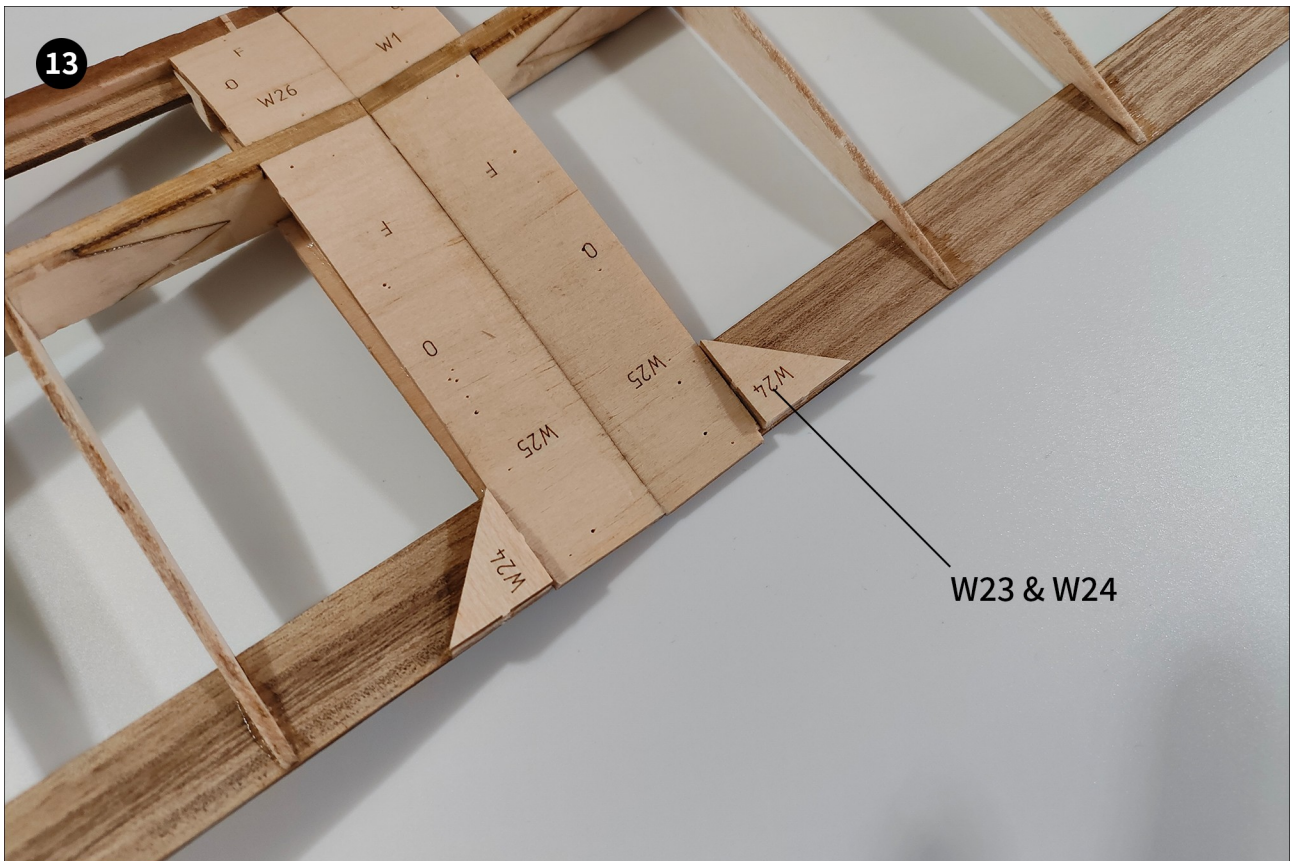










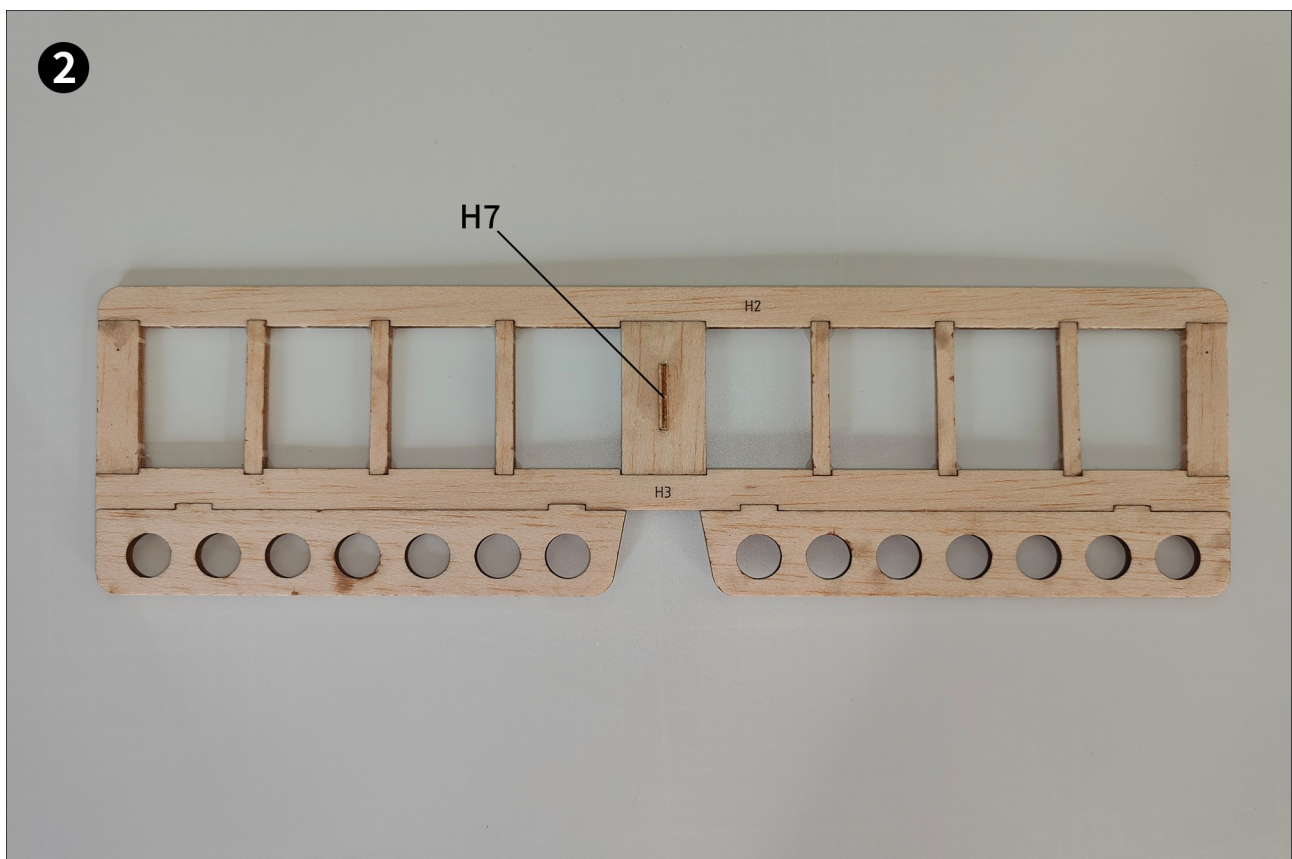
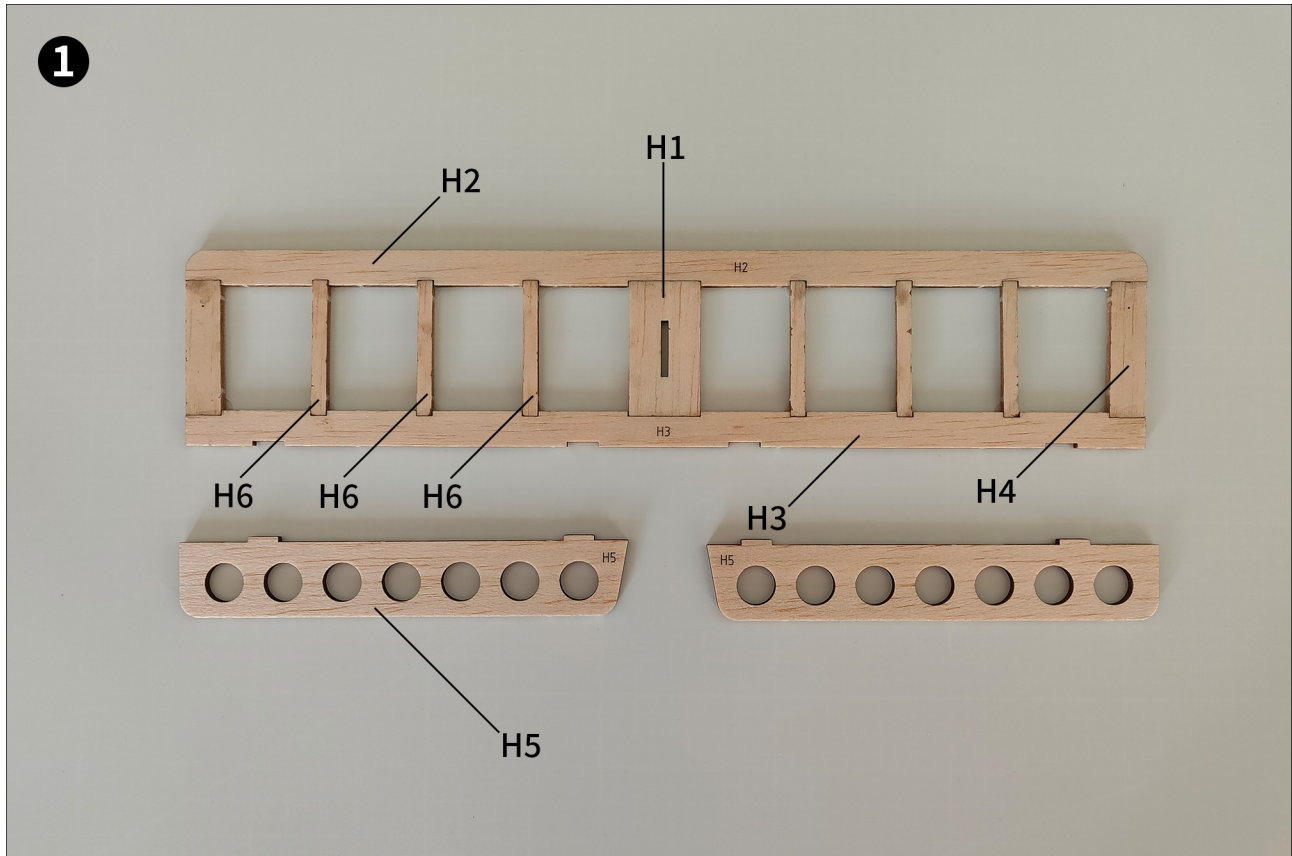


15





### 3. HORIZONTAL STABILIZER ASSEMBLY





#### 4. VERTICAL STABILIZER ASSEMBLY

