



Alexander Schleicher

ASK13

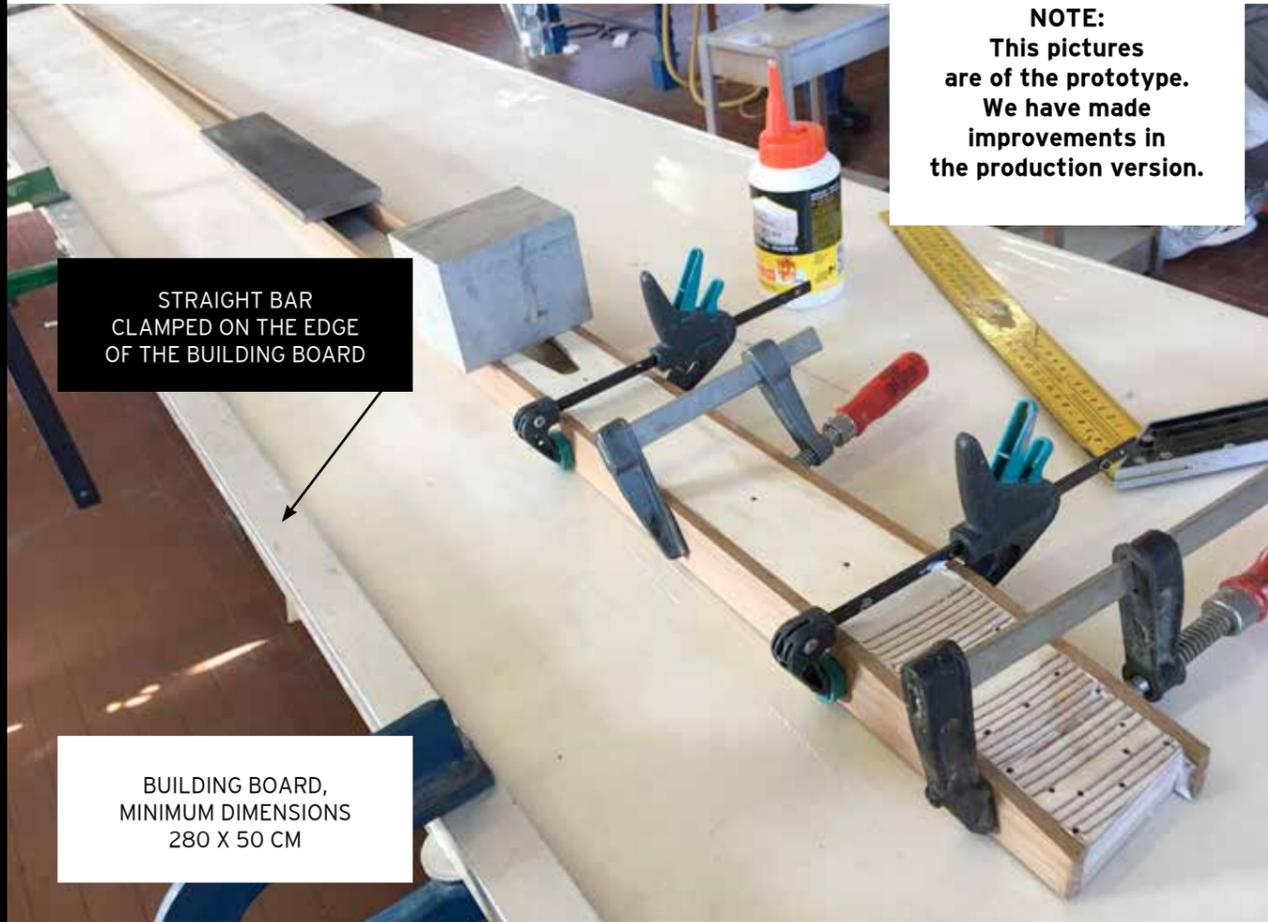
1/2.8 (35.7%) scale RC

1 S t . B A T C H

WING

P H O T O B U I L D I N G M A N U A L





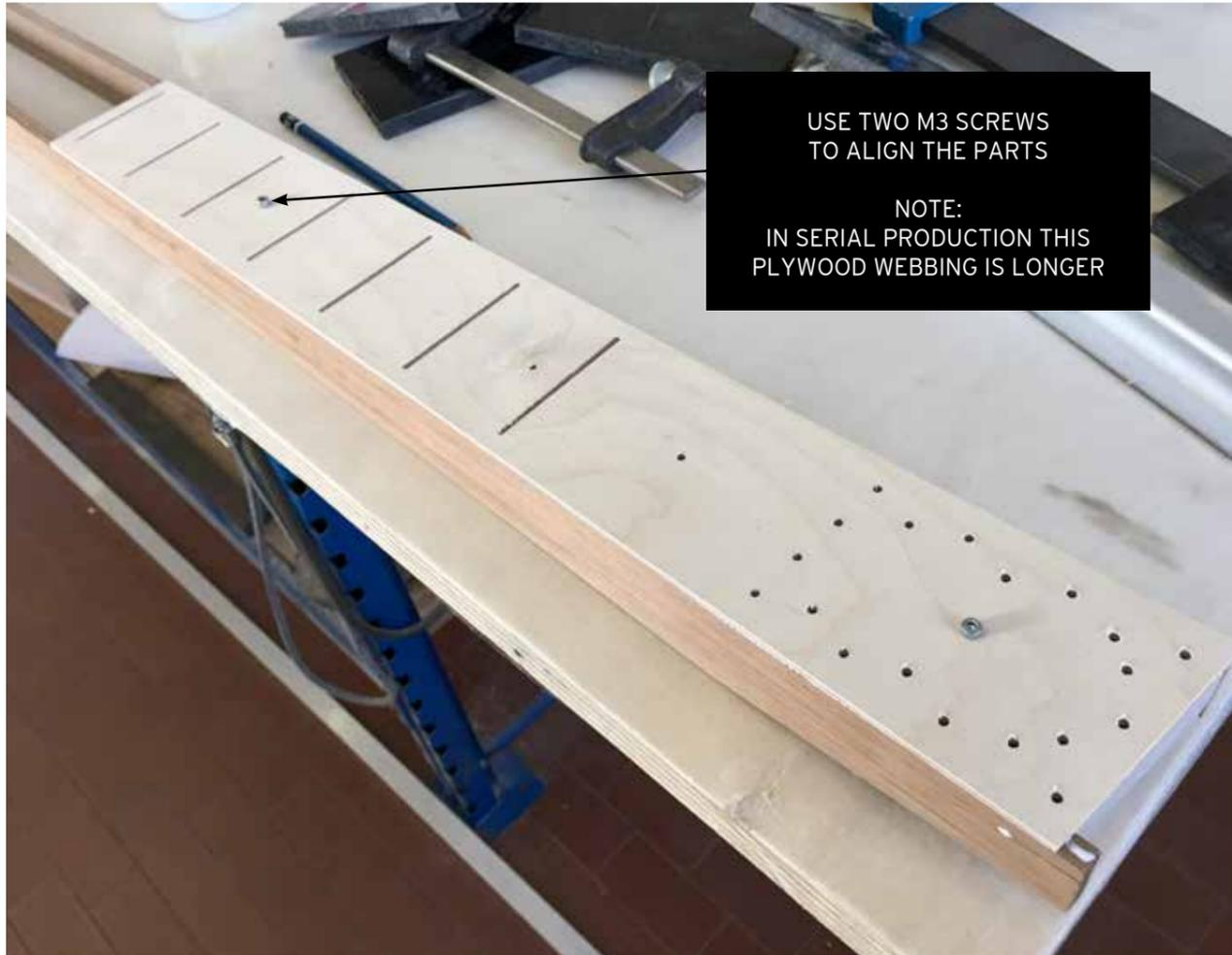
NOTE:
This pictures
are of the prototype.
We have made
improvements in
the production version.

STRAIGHT BAR
CLAMPED ON THE EDGE
OF THE BUILDING BOARD

BUILDING BOARD,
MINIMUM DIMENSIONS
280 X 50 CM



USE HIGH STRENGTH
WHITE GLUE OR EPOXY



USE TWO M3 SCREWS
TO ALIGN THE PARTS

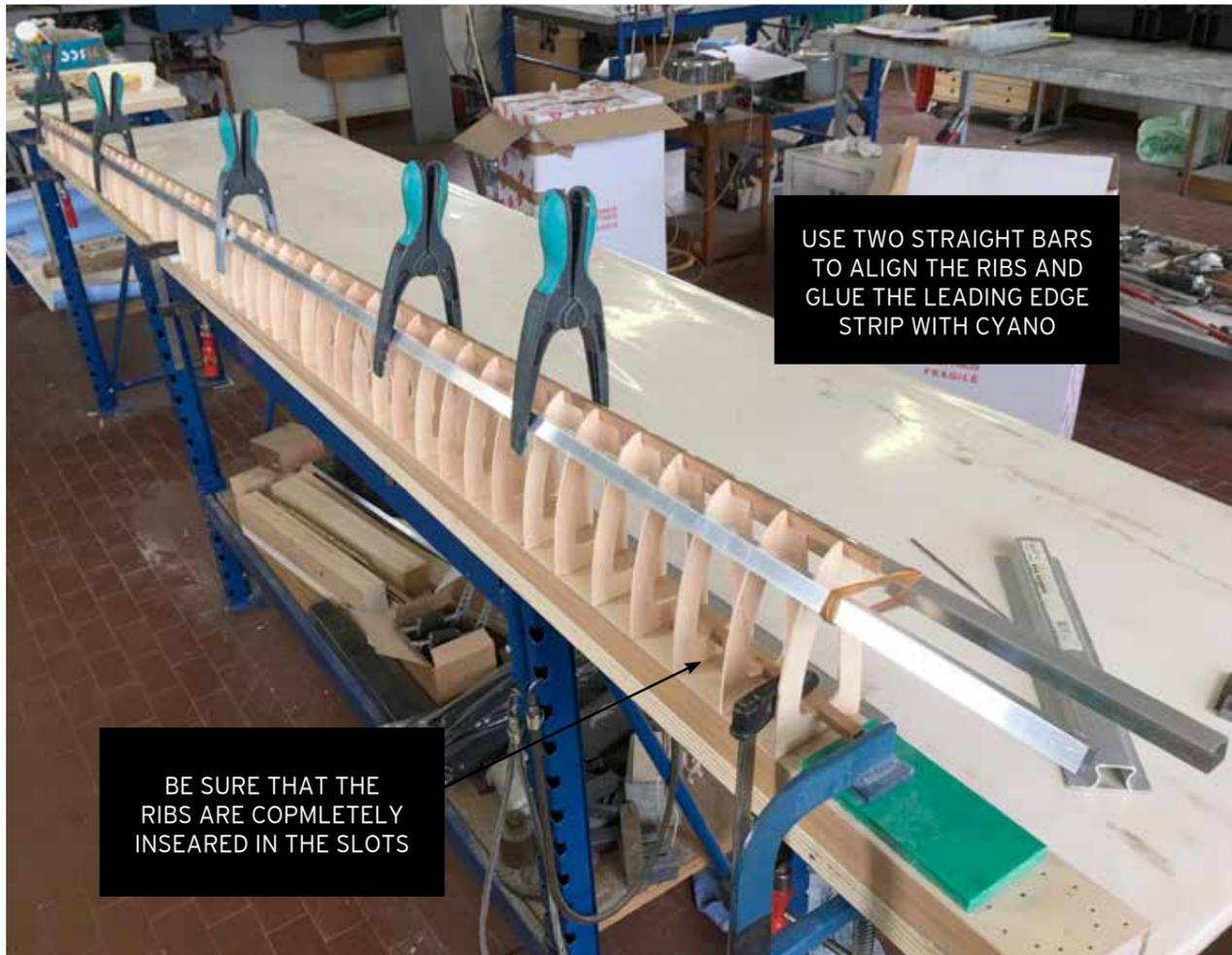
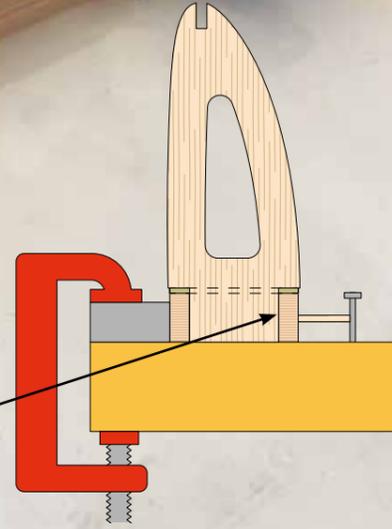
NOTE:
IN SERIAL PRODUCTION THIS
PLYWOOD WEBBING IS LONGER



USE SOME RIB TO SPACE
CORRECTLY THE SPARS.



MAKE SURE THAT THE SPARS ARE PRESSED ON THE RIBS AND THAT THE RIBS ARE COMPLETELY INSERTED IN THE SLOTS

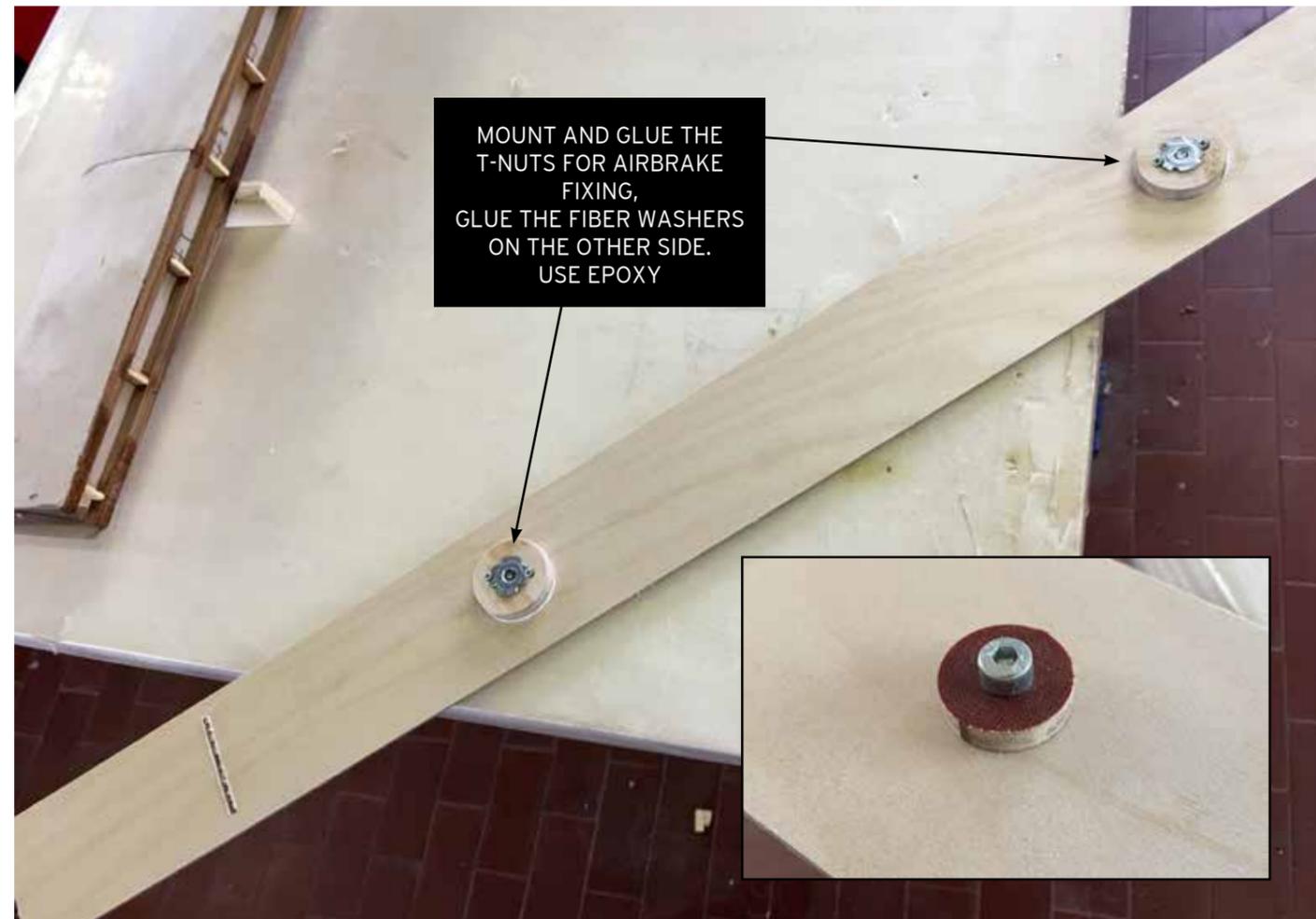


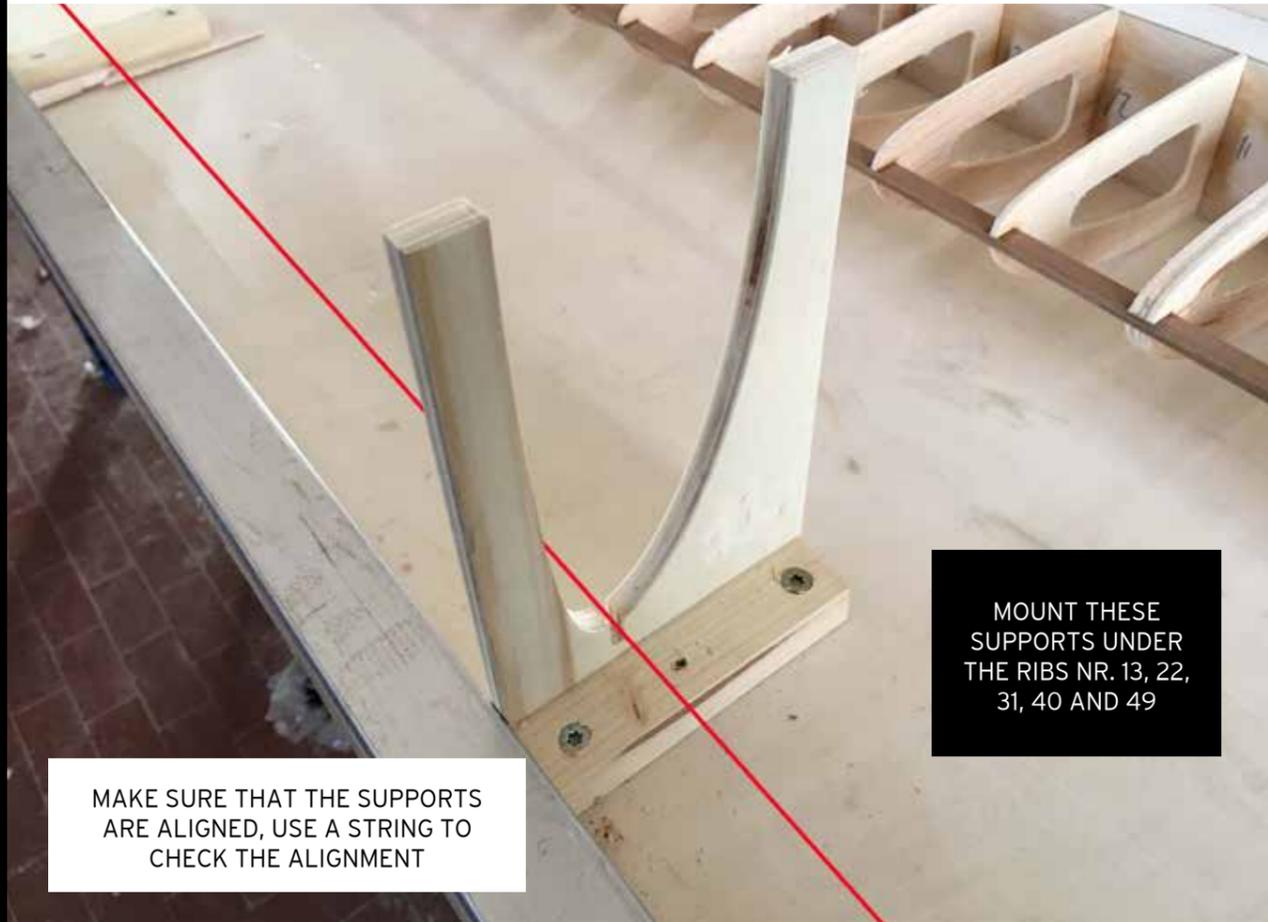
USE TWO STRAIGHT BARS TO ALIGN THE RIBS AND GLUE THE LEADING EDGE STRIP WITH CYANO

BE SURE THAT THE RIBS ARE COMPLETELY INSERTED IN THE SLOTS



FOLLOW THE DRAWING FOR CORRECT POSITIONING OF THE RIB REINFORCING (IN SERIES PRODUCTION THE RIBS HAVE BEEN RENUMBERED, THIS IS RIB NO. 12) THE REINFORCED RIBS ARE NR. 12, 21, 30, 39 AND 48





MAKE SURE THAT THE SUPPORTS ARE ALIGNED, USE A STRING TO CHECK THE ALIGNMENT

MOUNT THESE SUPPORTS UNDER THE RIBS NR. 13, 22, 31, 40 AND 49



IT IS BETTER TO GLUE THIS PLYWOOD WEBBING NOW, IT IS EASIER TO CLAMP ON THE SPAR. USE TWO M3 SCREWS TO ALIGN.

NOTE:
THE WEBBING IS LONGER IN SERIES PRODUCTION AND IS INCLUDING THE HOLES FOR THE AIRBRAKE.



NOTE: BEFORE COVERING INSERT THE AILERON ELECTRIC WIRE

APPLY THE FIRST PLYWOOD WING SHEETING, USING THE ALUMINIUM ANGLE SECTION



CHECK THE COVERING SHEET:
THE SHEET EDGE MUST BE ON
THE MIDDLE OF THE TRIPLE RIB



SPREAD THE WITHE GLUE ON
THE RIBS AND ON THE SPAR



LOCK THE LEADING EDGE WITH
SOME DROP OF CYANO



FIX TEMPORARILY WITH
RUBBER BANDS

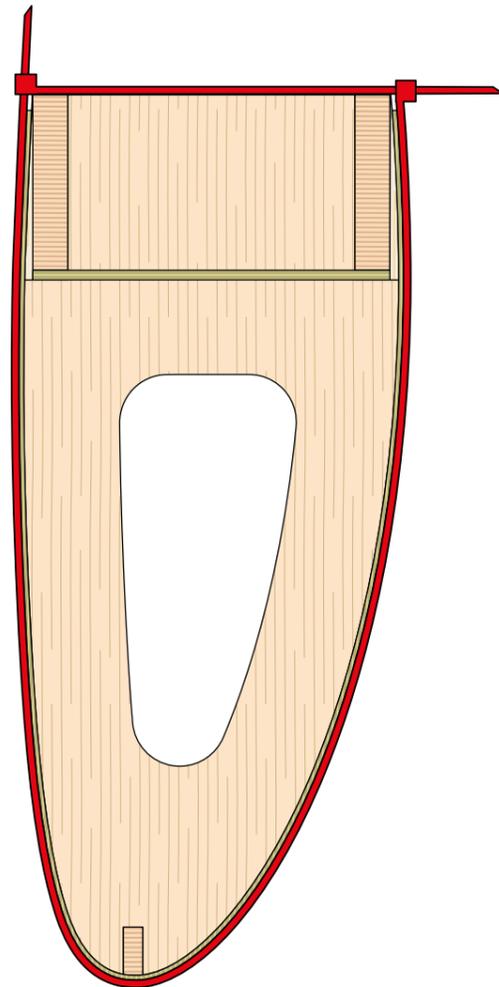


LOCK DEFINIVELY WITH TIE-
WRAPS AND CLAMPS.
PLACE A TIE-WRAP ON EACH RIB,
DON'T PLACE TIE-WRAP BETWEEN
THE RIBS!



DISMANTLE THE SUPPORT
NEAR THE SHEET JUST
GLUED

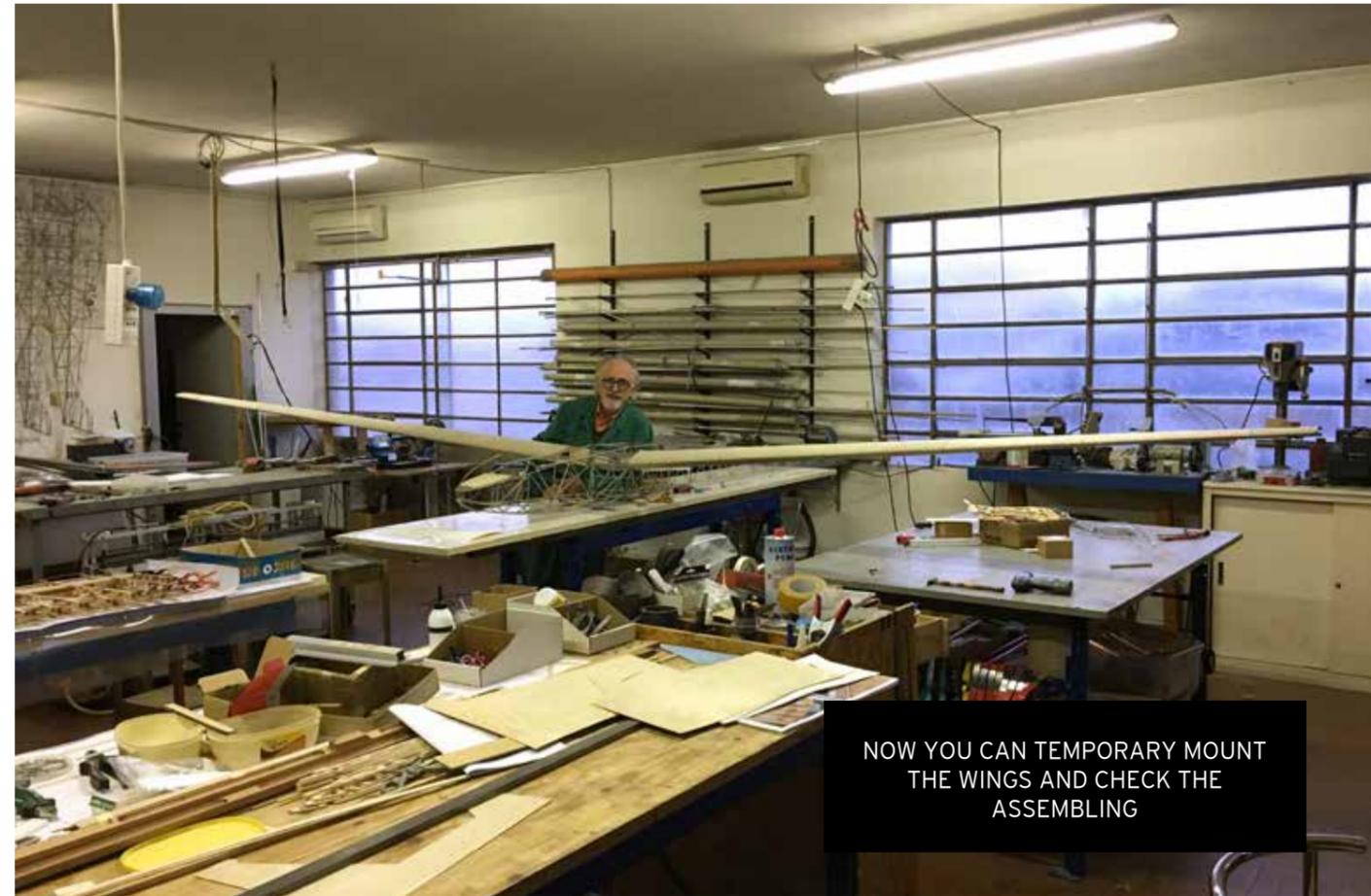
USE TWO TIE-WRAP
ON EACH RIBS
AS IN THE DRAWING,
PLACE THE JOINT ON THE CORNERS
TO NOT DAMAGE THE SPARS,
IF POSSIBLE USE SPECIFIC TOOL TO
TIGHTEN THE TIE-WRAP.



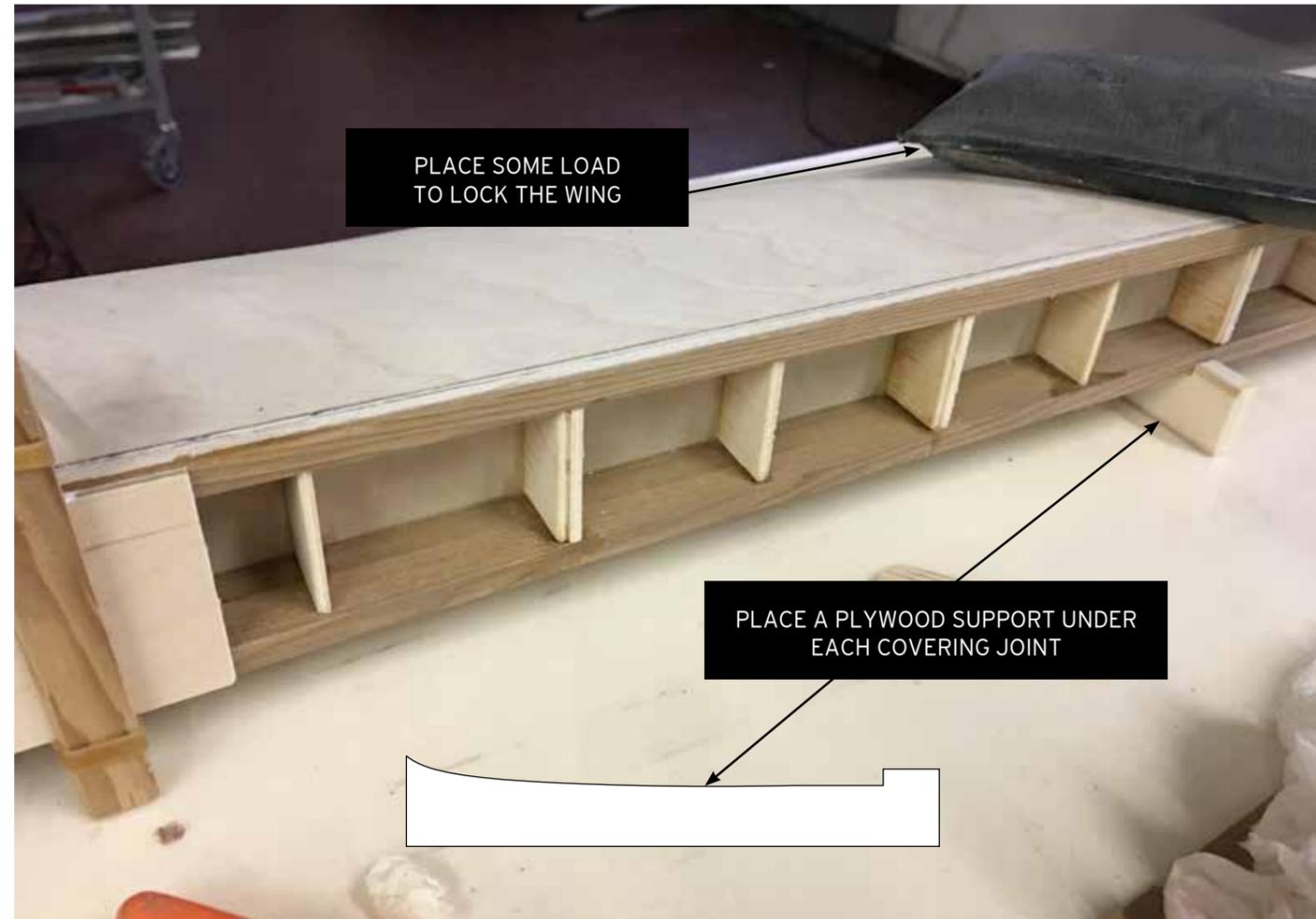
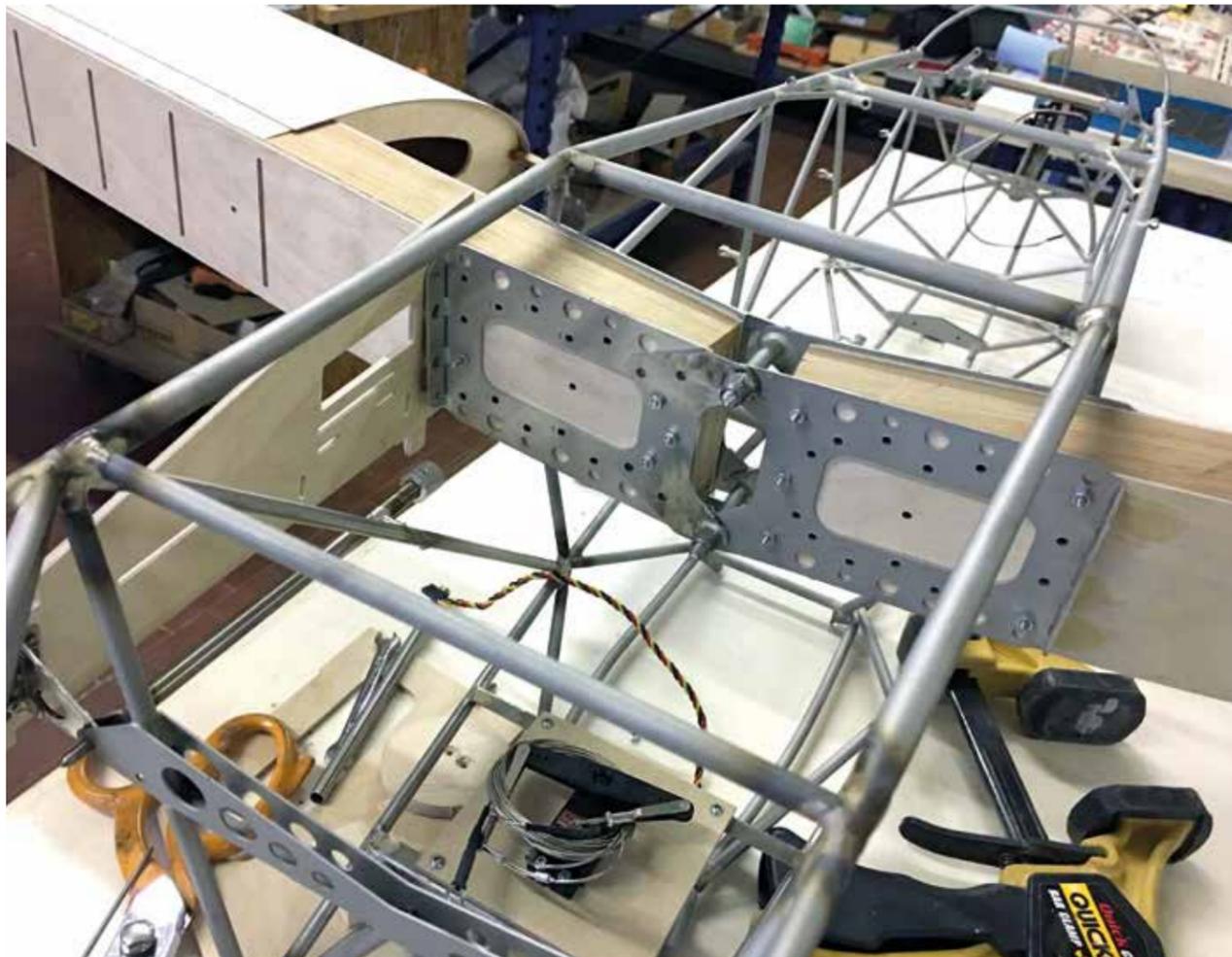
PLACE A NOG UNDER THE NOSE



PLACE THE OTHER PLYWOOD SHEETS AS DESCRIBED FROM PAGE 9 TO PAGE 13, NOW THE D-BOX IS LOCKED, THE SPAR IS UNDEFORMABLE.



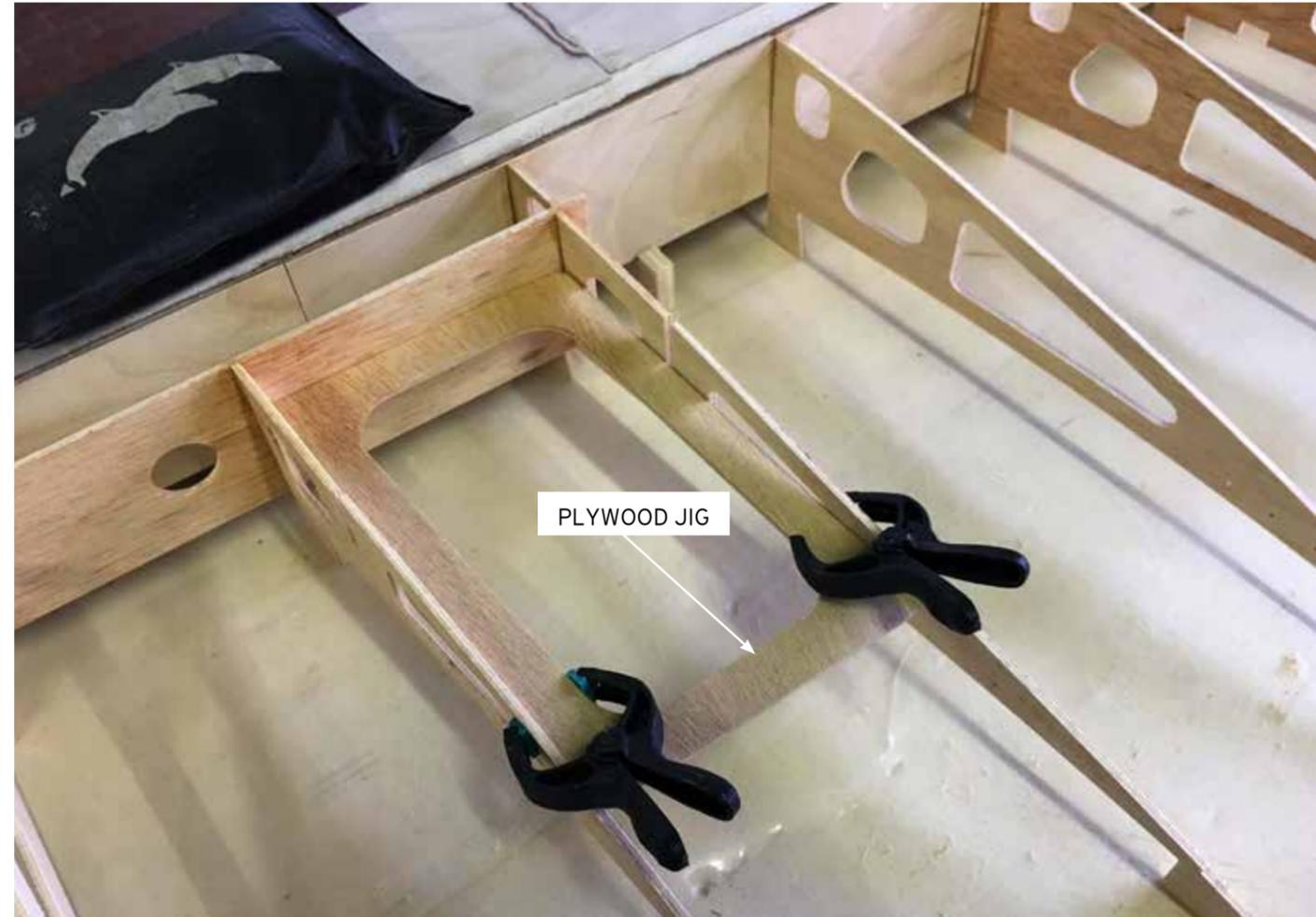
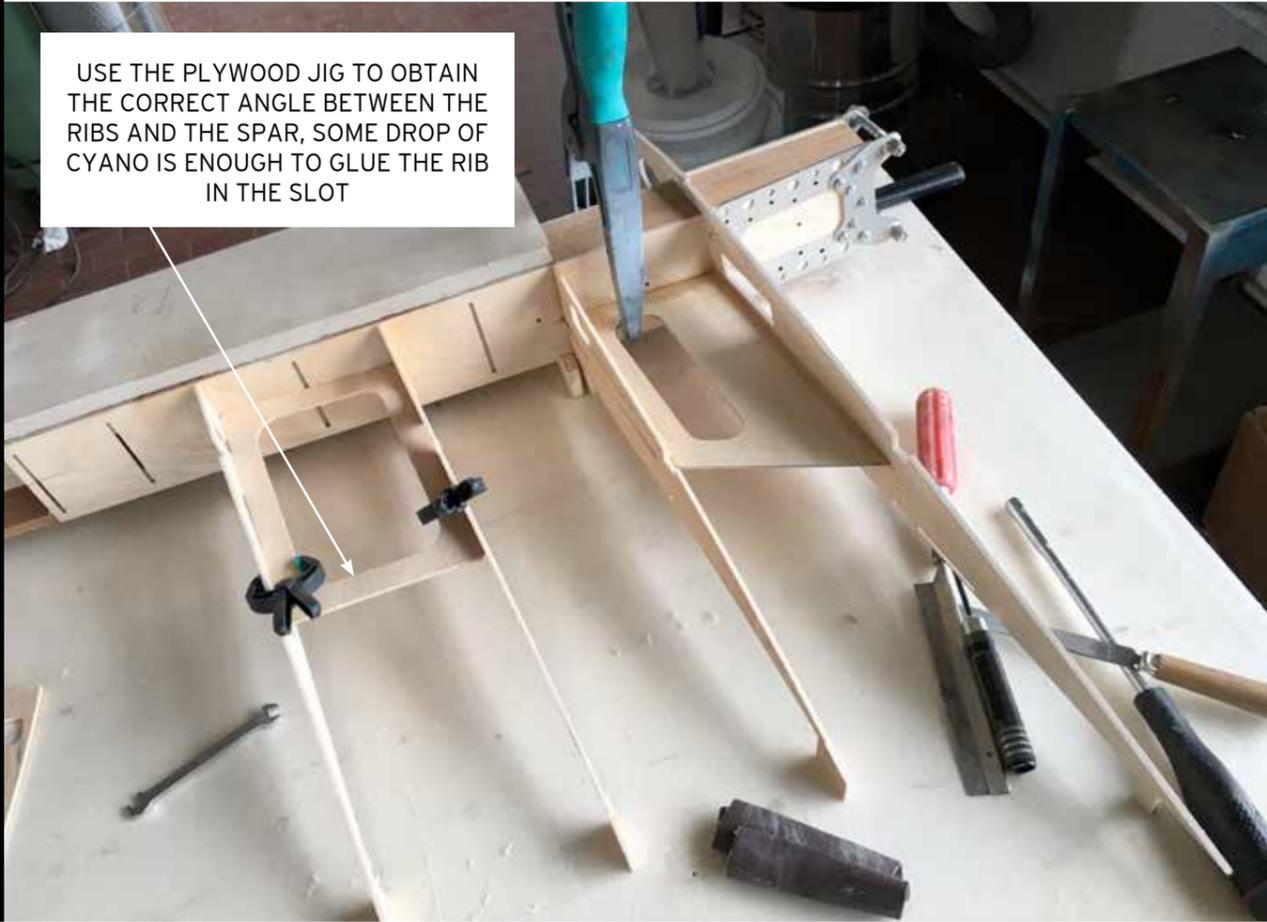
NOW YOU CAN TEMPORARY MOUNT THE WINGS AND CHECK THE ASSEMBLING

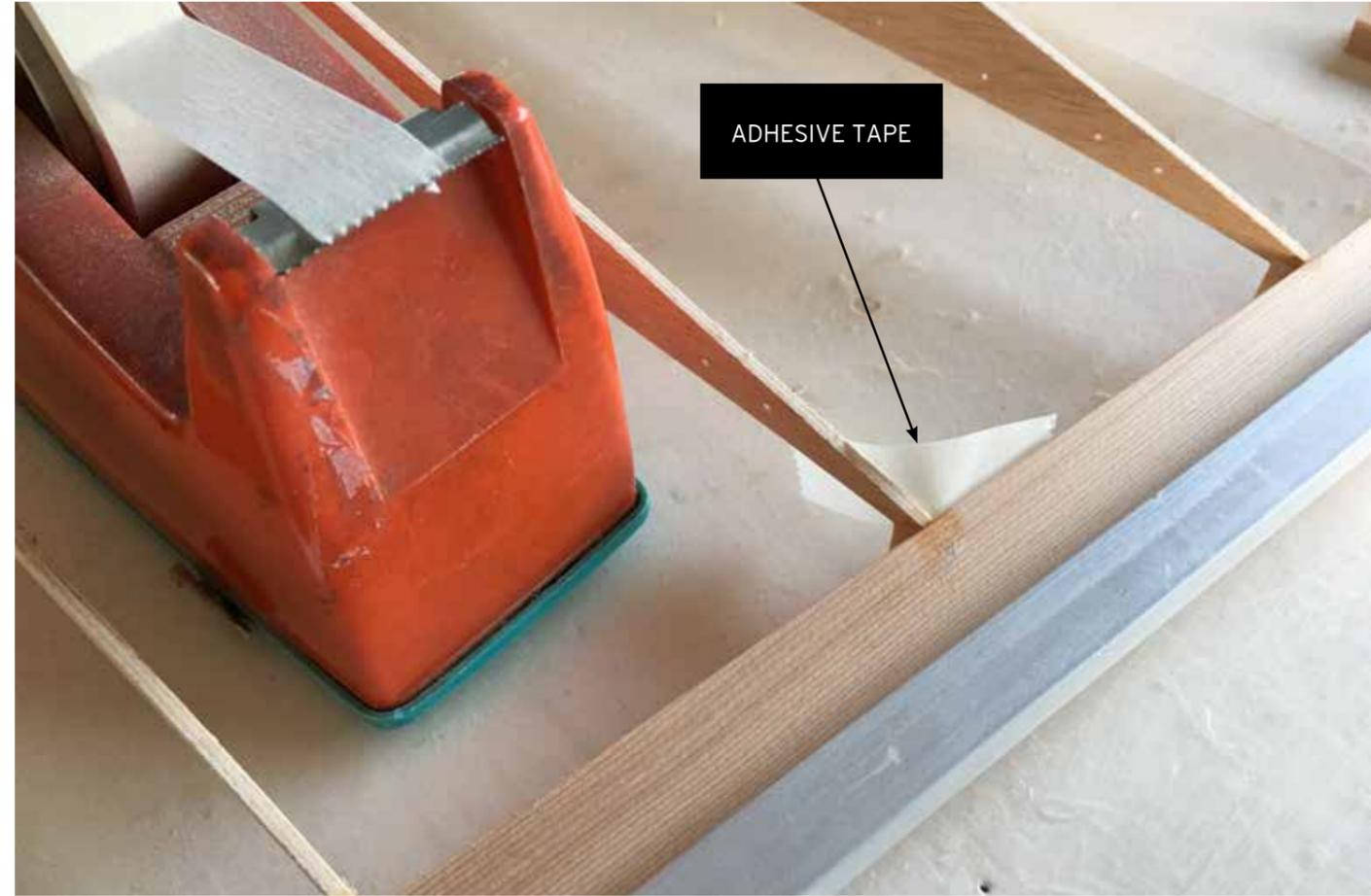


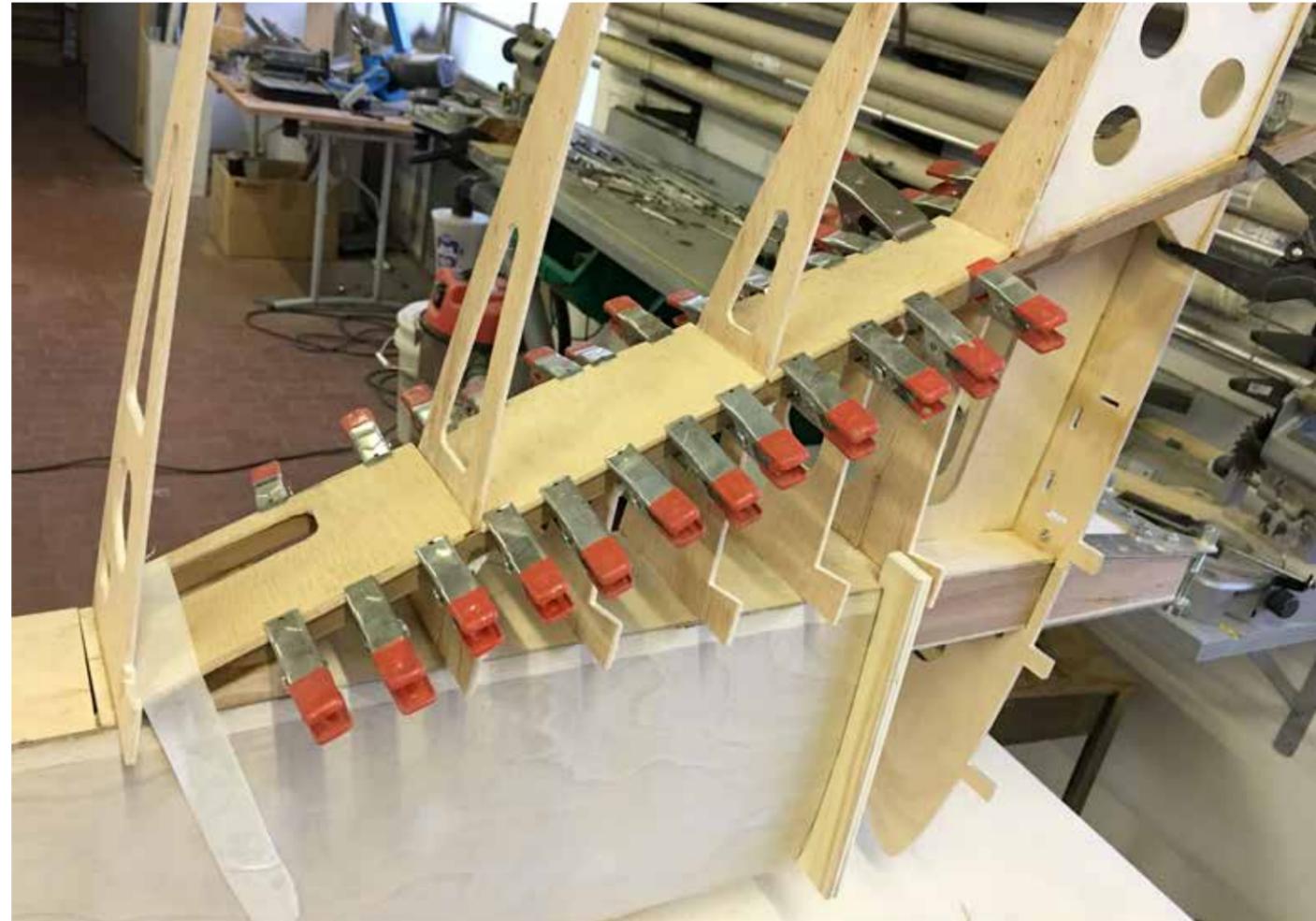
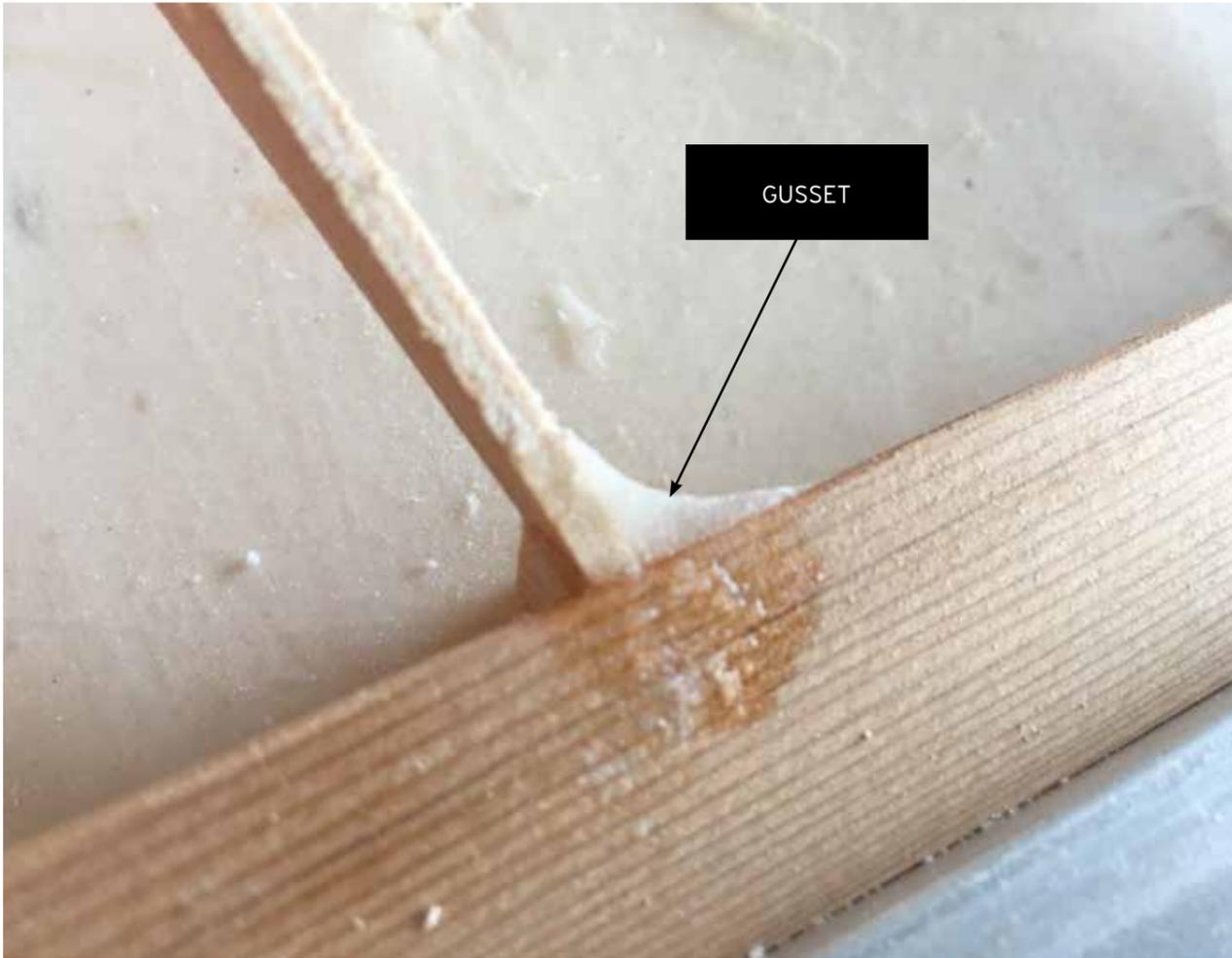
PLACE SOME LOAD TO LOCK THE WING

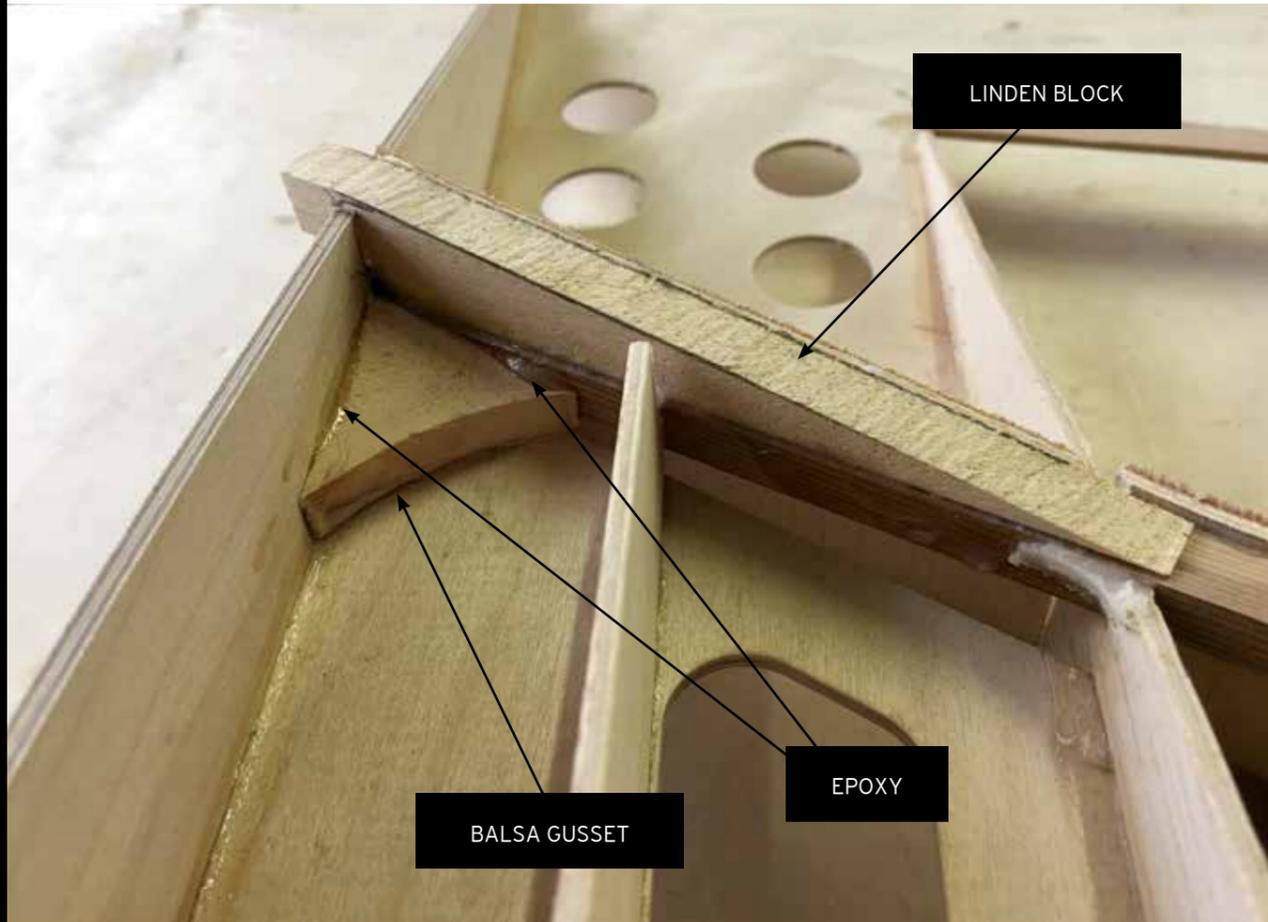
PLACE A PLYWOOD SUPPORT UNDER EACH COVERING JOINT

USE THE PLYWOOD JIG TO OBTAIN THE CORRECT ANGLE BETWEEN THE RIBS AND THE SPAR, SOME DROP OF CYANO IS ENOUGH TO GLUE THE RIB IN THE SLOT





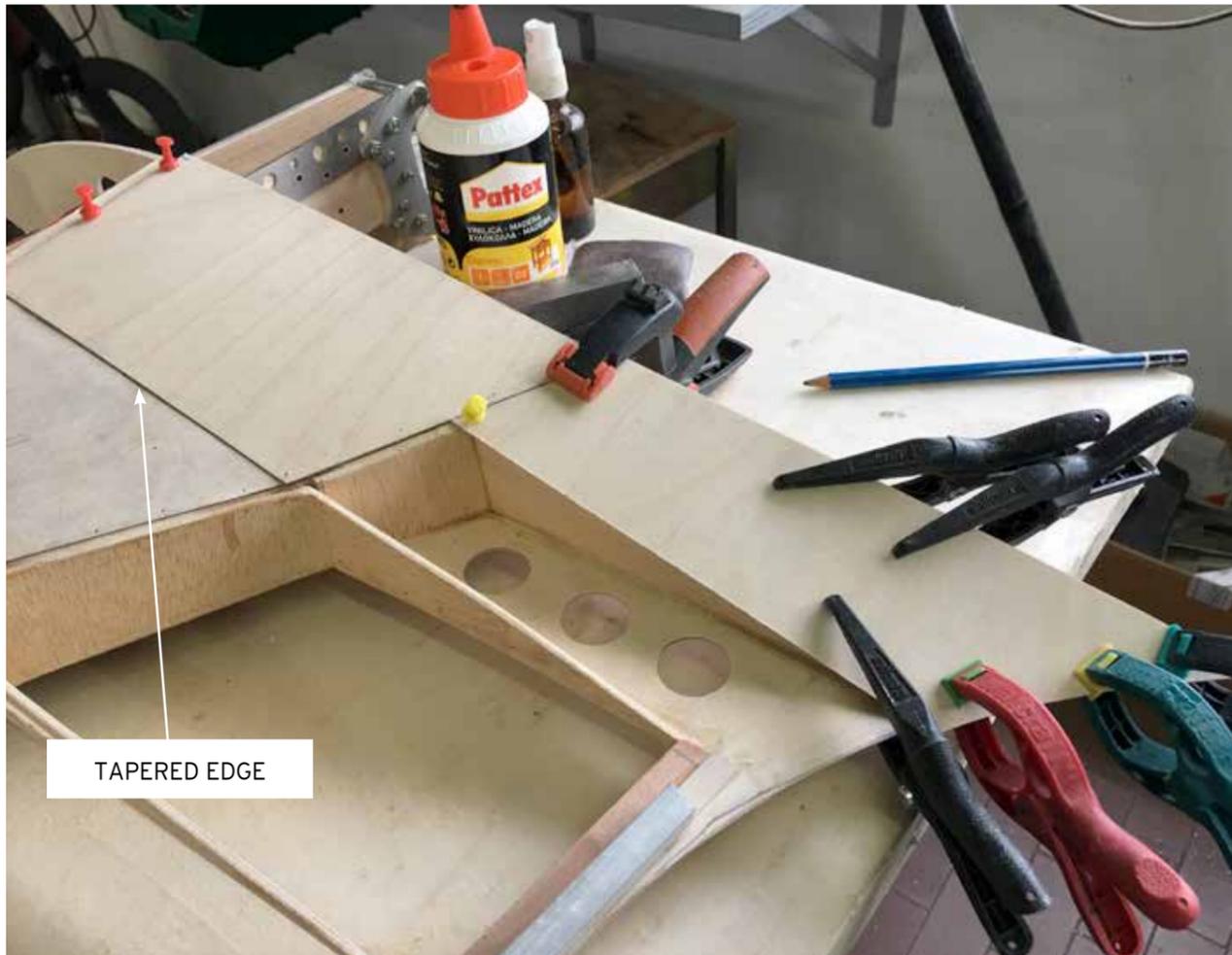






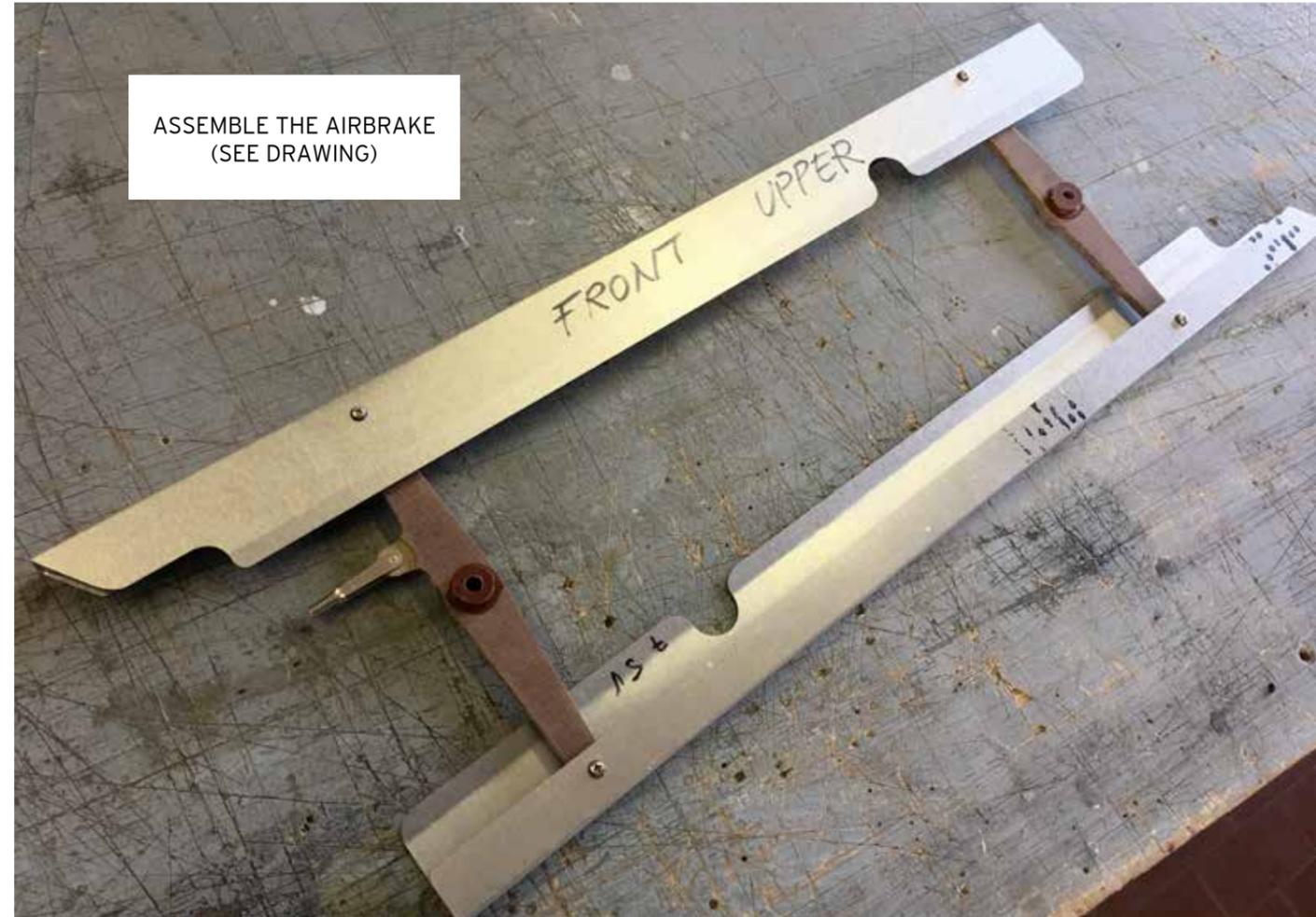
APPLY THE FIRST
PLYWOOD CAPSTRIPS
AND PLYWOOD TRAILING EDGE

NOTE:
CLAMP WITH A STRIGHT BAR WHEN
GLUING PLYWOOD STRIPS OF THE
TRAILIG EDGE



TAPERED EDGE

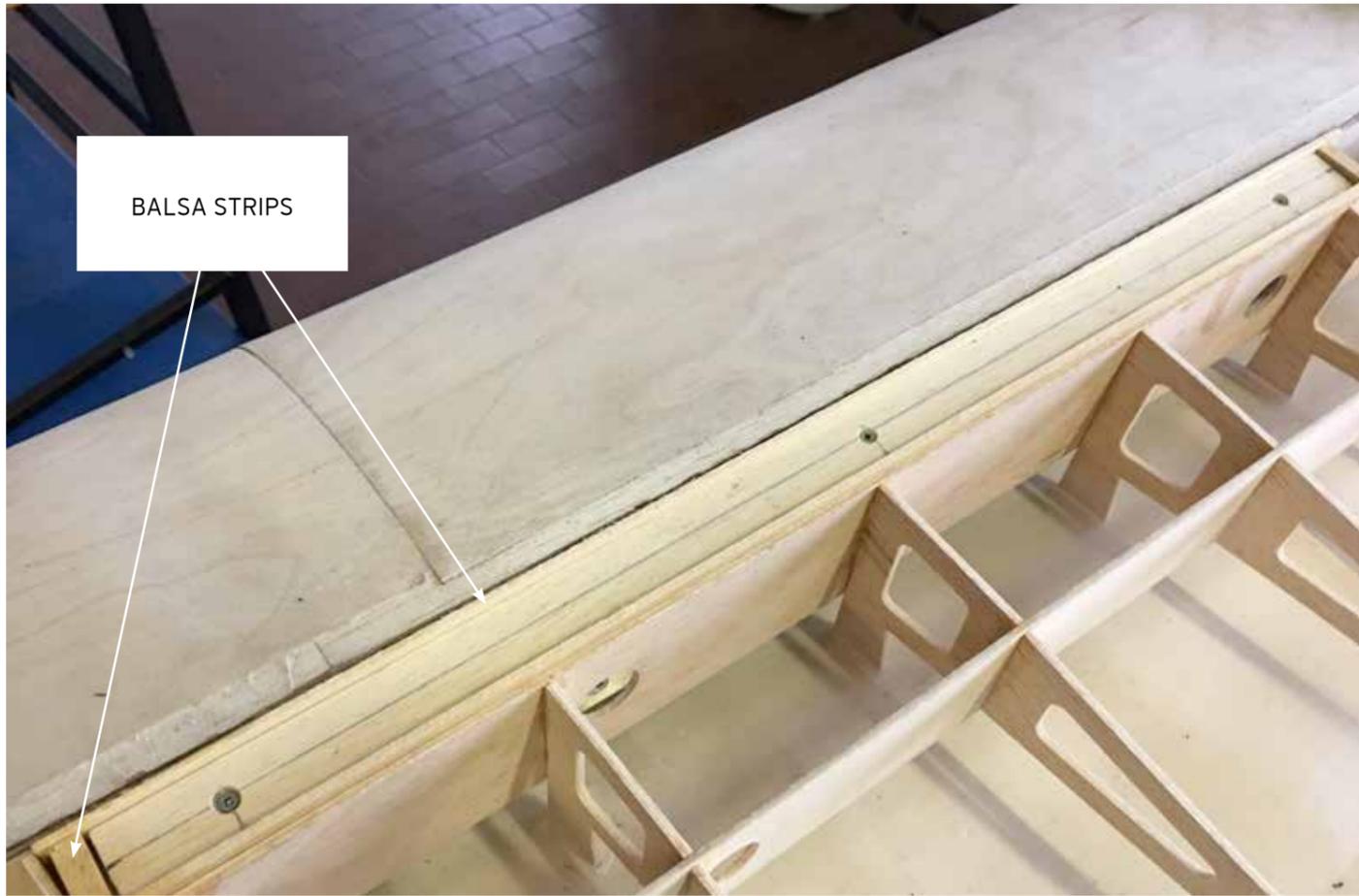
CUT THE PEGS, SAND DOWN AND
COVER AS ON TOP SIDE



NOTE:
THE UPPER AIRBRAKE
IS IDENTIFIED WITH ONE
HOLE IN THE CENTER,
THE LOWER ONE WITH
TWO HOLES



BALSA STRIPS



FIX WITH
COUNTERSUNK
TAPPING SCREWS
+ EPOXY





0,5 MM APPROX.
DON'T GLUE!

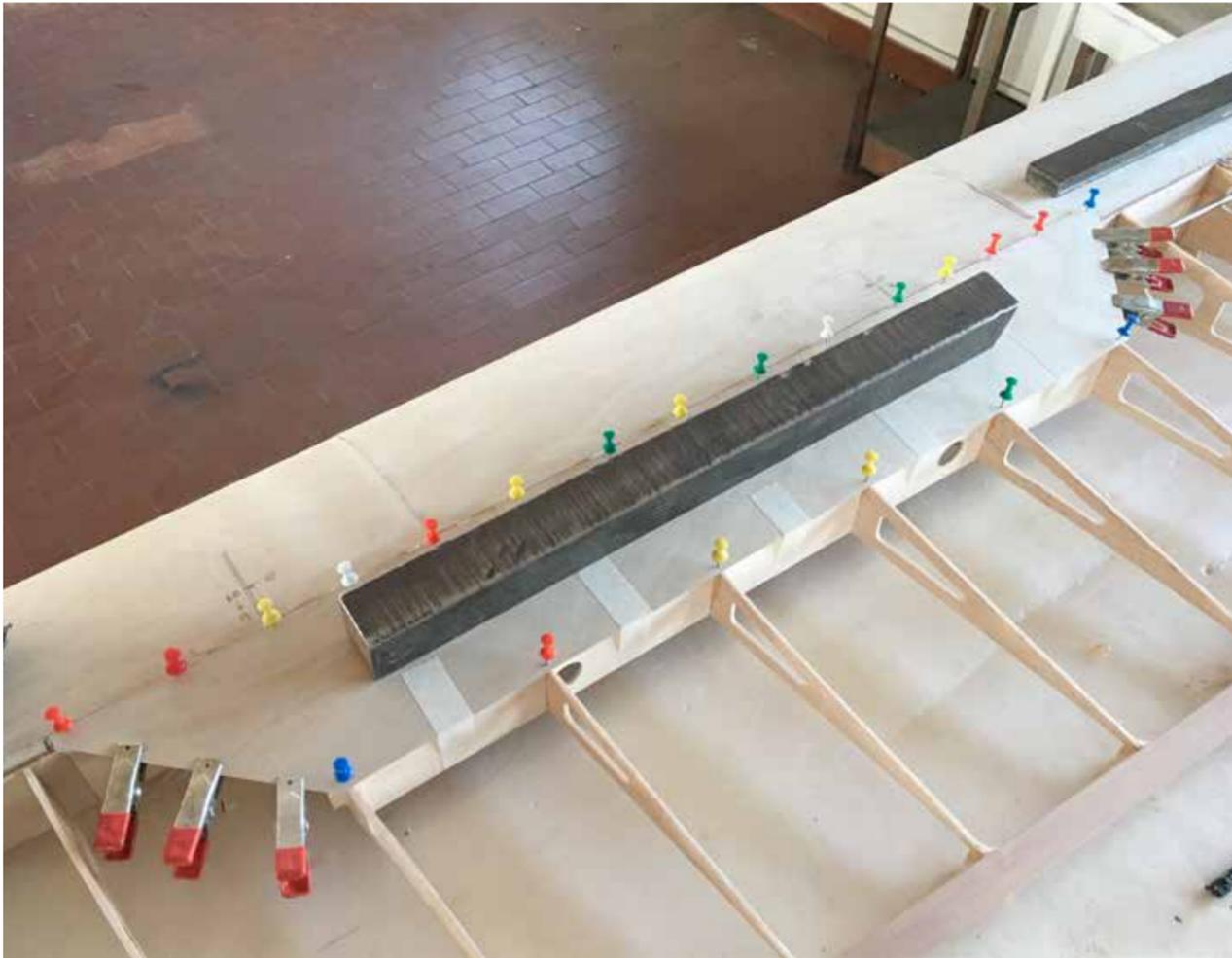


SAND WITH CARE,
CONNECT THE SERVO AND
CHECK THE TRAVEL OF
THE AIRBRAKE;
IT MUST MOVE FREELY
WITHOUT ANY PLAY

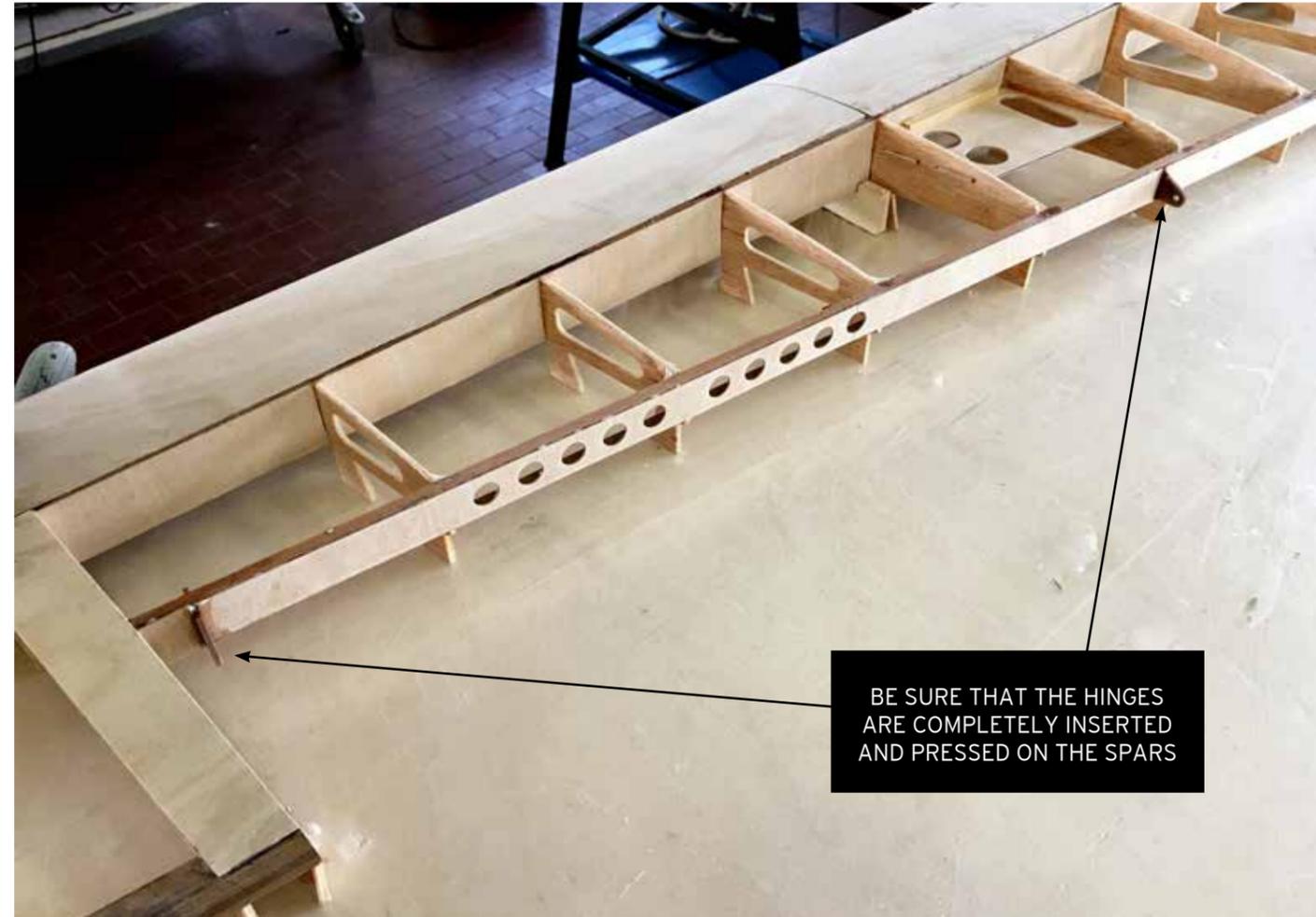


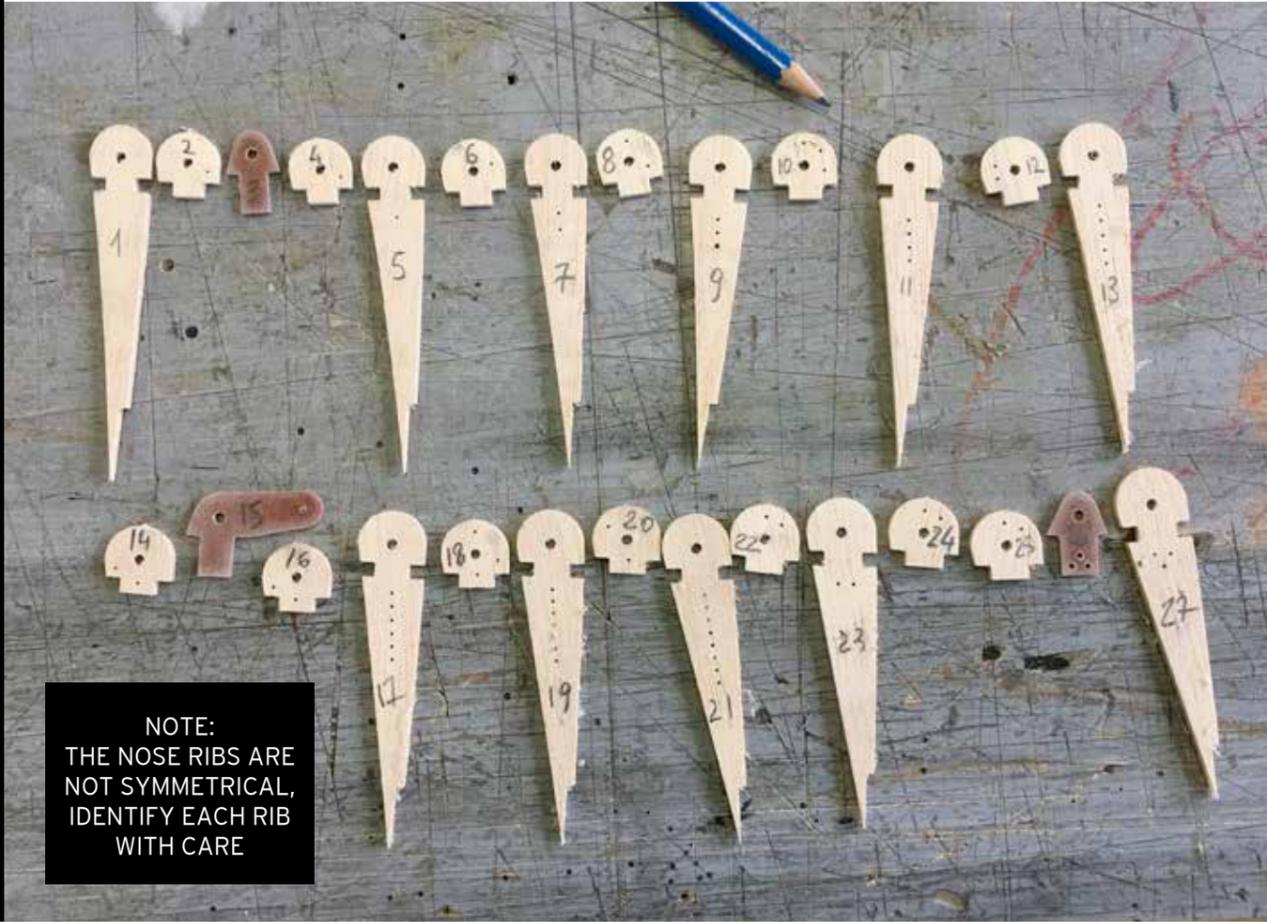
MARK POSITION
AND DIMENSIONS
OF THE AIRBRAKE STRIP
ON THE PLYWOOD COVERING

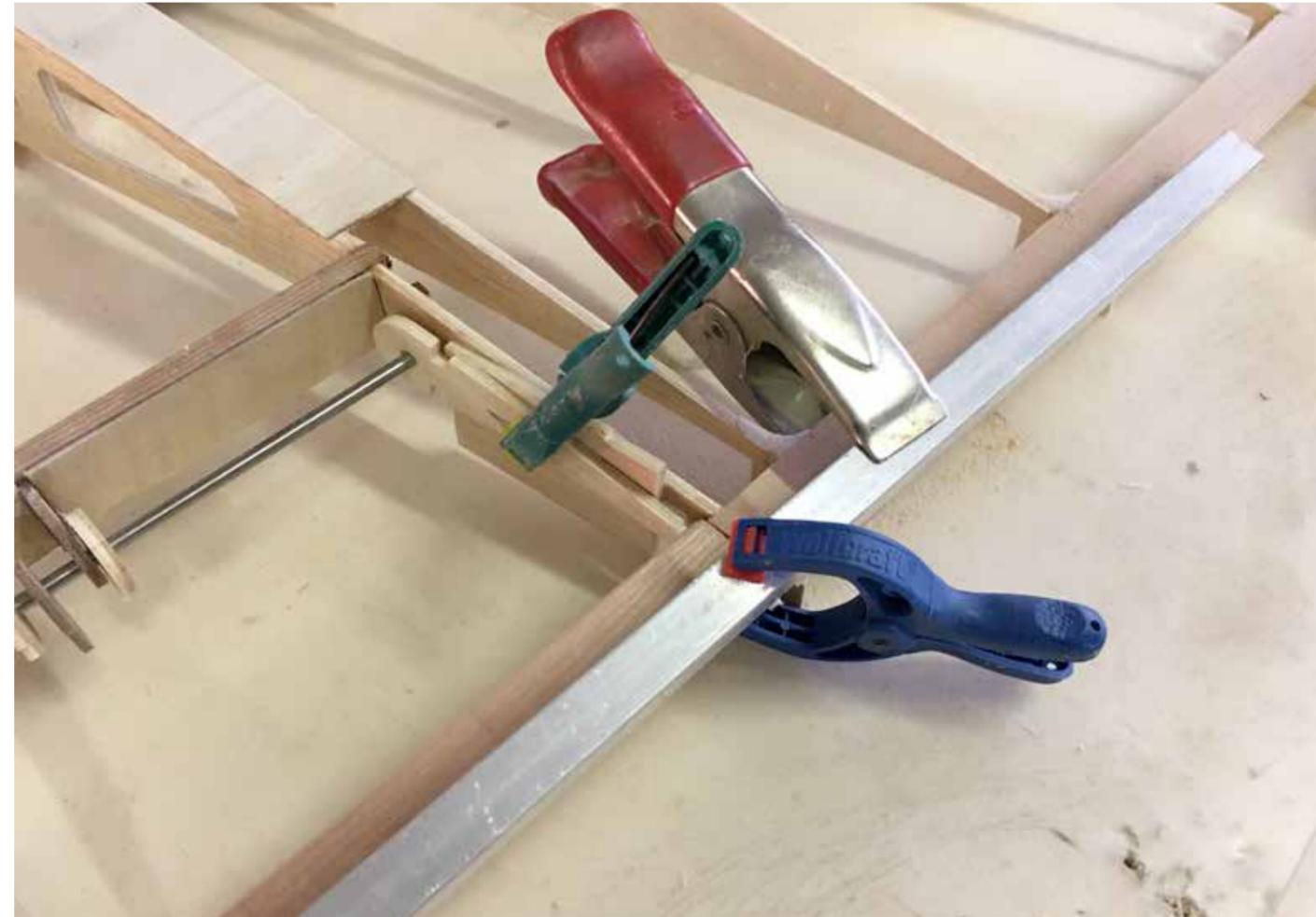




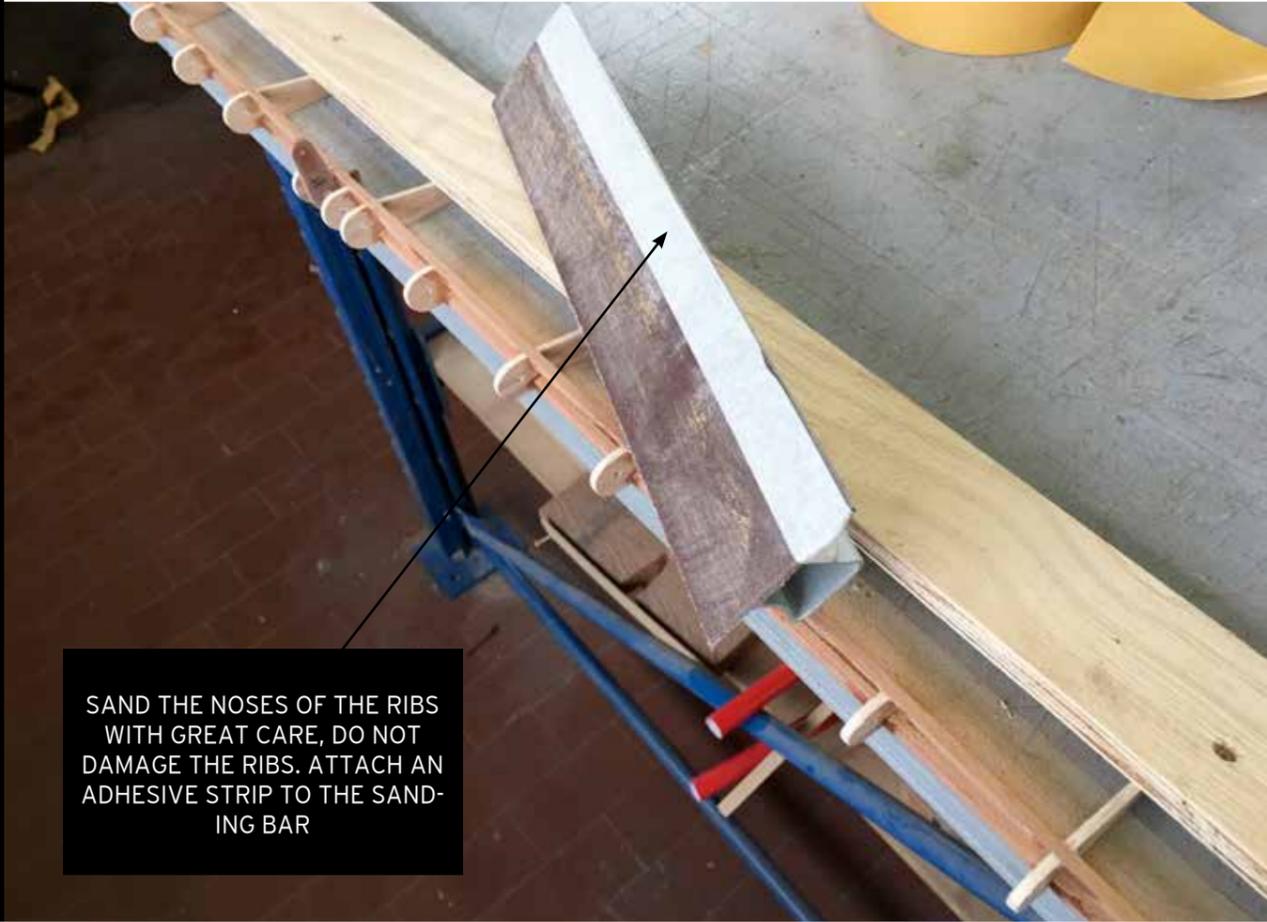
REPEAT ON THE BOTTOM SIDE INCLUDING THE ALUMINIUM HANDHOLES











SAND THE NOSES OF THE RIBS WITH GREAT CARE, DO NOT DAMAGE THE RIBS. ATTACH AN ADHESIVE STRIP TO THE SANDING BAR





REVERSE AND FIX THE AILERON, THEN APPLY THE GLUE ON THE RIBS AND ON THE OTHER SPAR

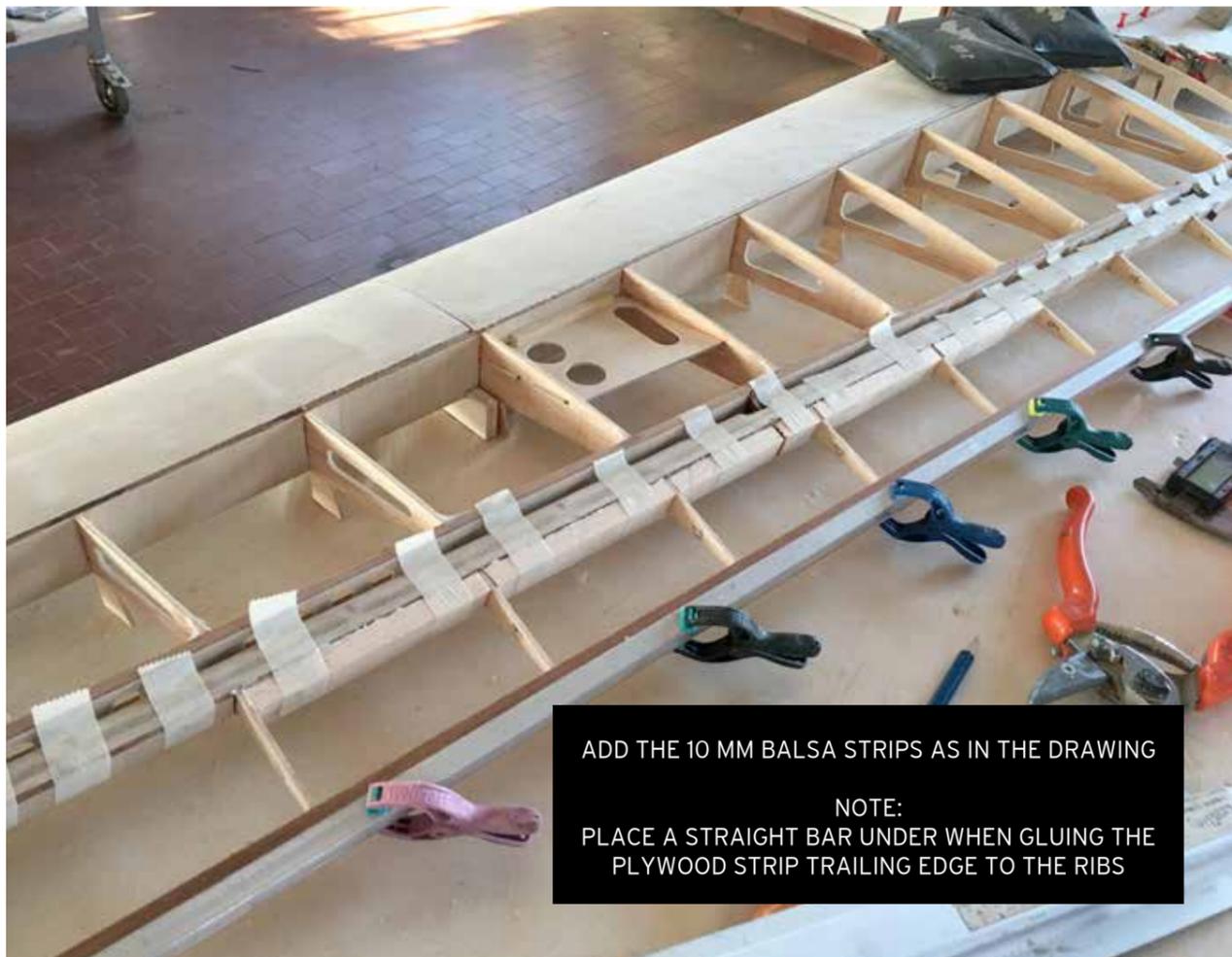


PLACE A TIE-WRAP ON EACH RIB





MOUNT THE AILERON USING THE 3 MM TUBE, THEN APPLY THE 0,8 MM VERTICAL GRAIN PLYWOOD TO CLOSE THE D-BOX

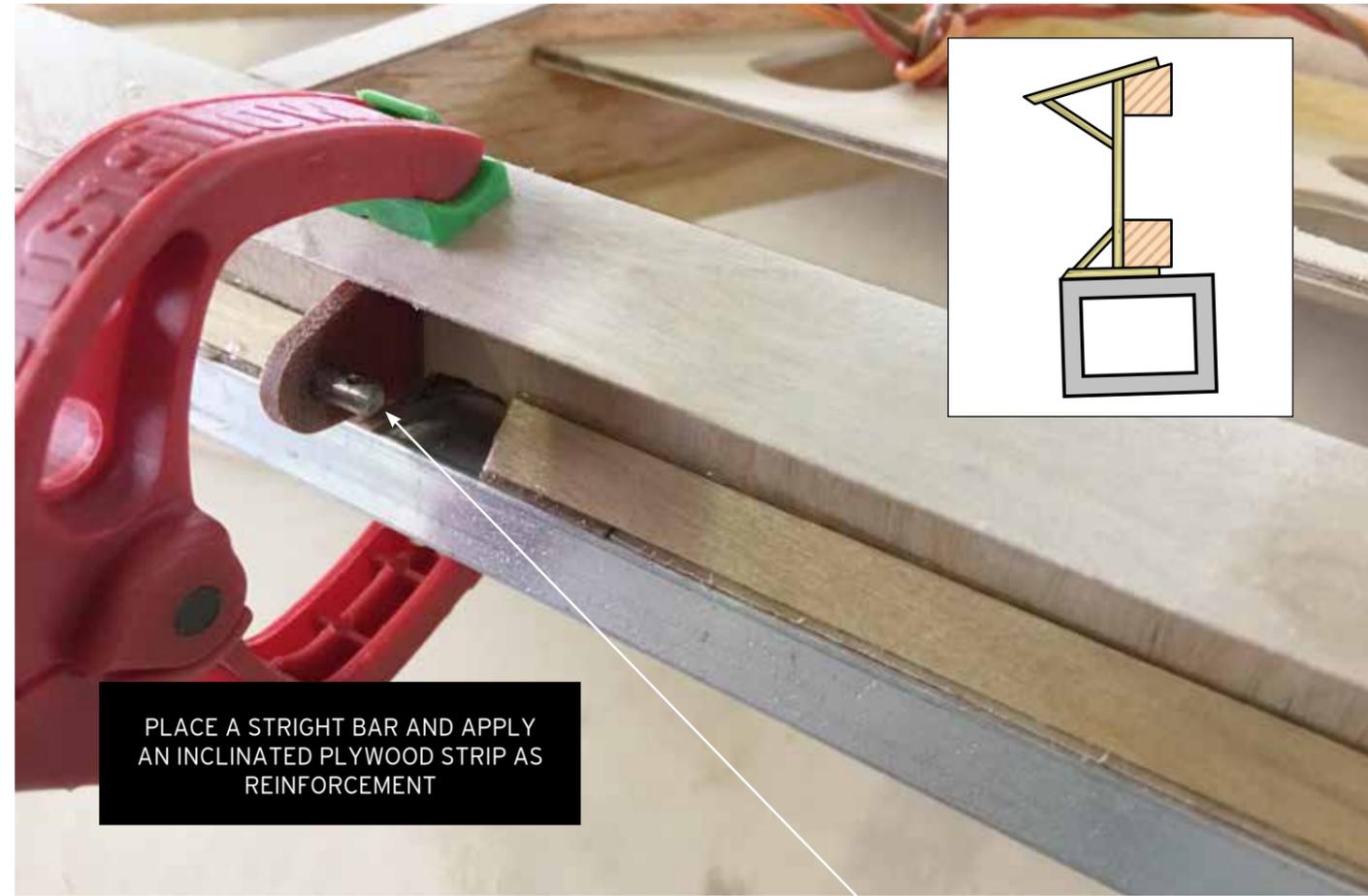


ADD THE 10 MM BALSA STRIPS AS IN THE DRAWING

NOTE:
PLACE A STRAIGHT BAR UNDER WHEN GLUING THE PLYWOOD STRIP TRAILING EDGE TO THE RIBS

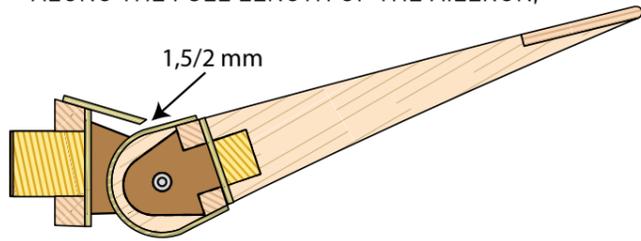


ADD THE REINFORCEMENT GUSSETS

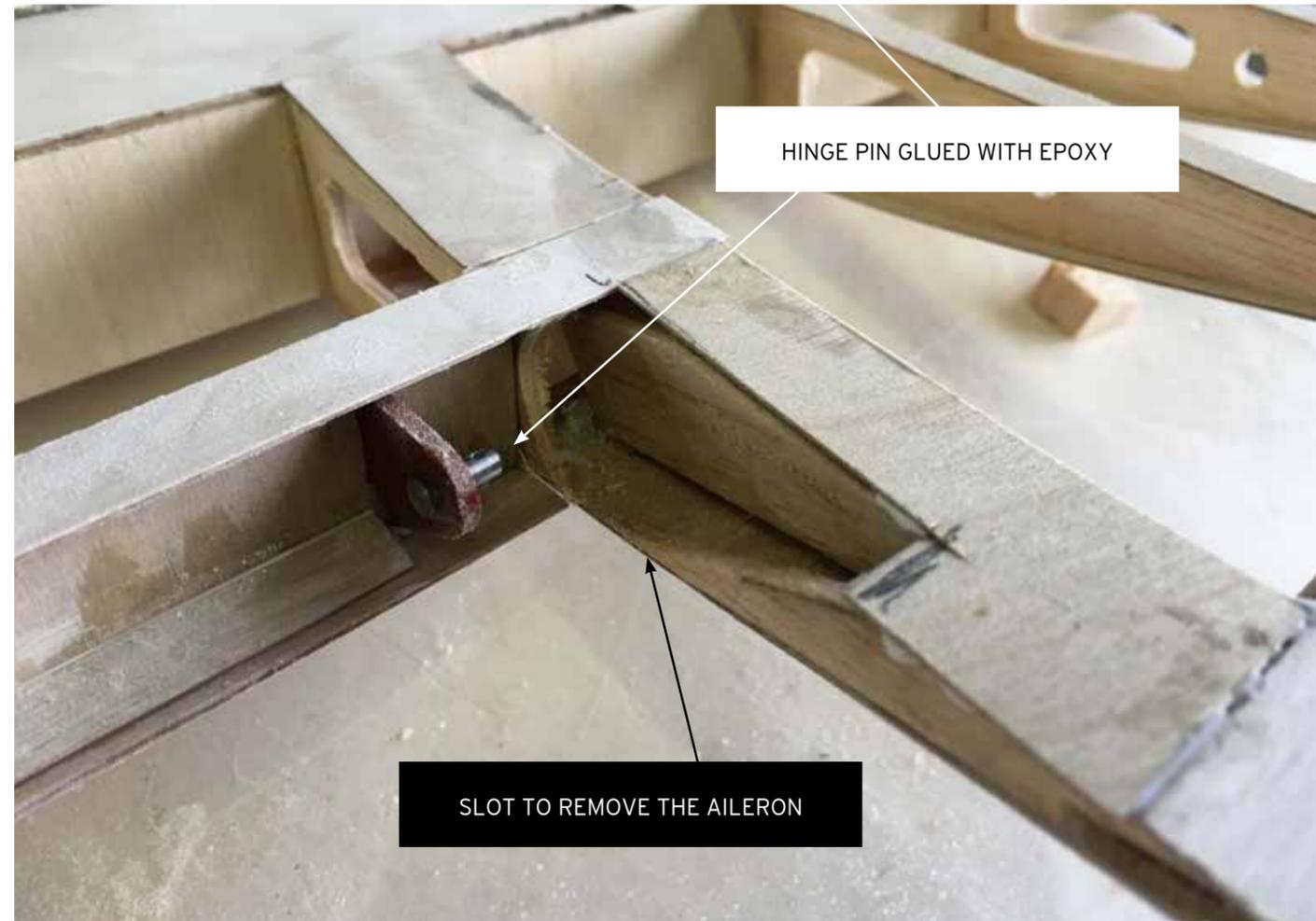
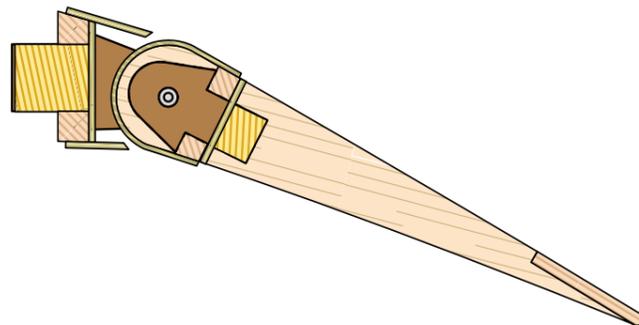


PLACE A STRIGHT BAR AND APPLY AN INCLINED PLYWOOD STRIP AS REINFORCEMENT

MOVE UP THE AILERON 30° AND PLACE THE PLYWOOD STRIP TO OBTAIN A 1.5 TO 2 MM WIDE GAP ALONG THE FULL LENGTH OF THE AILERON,

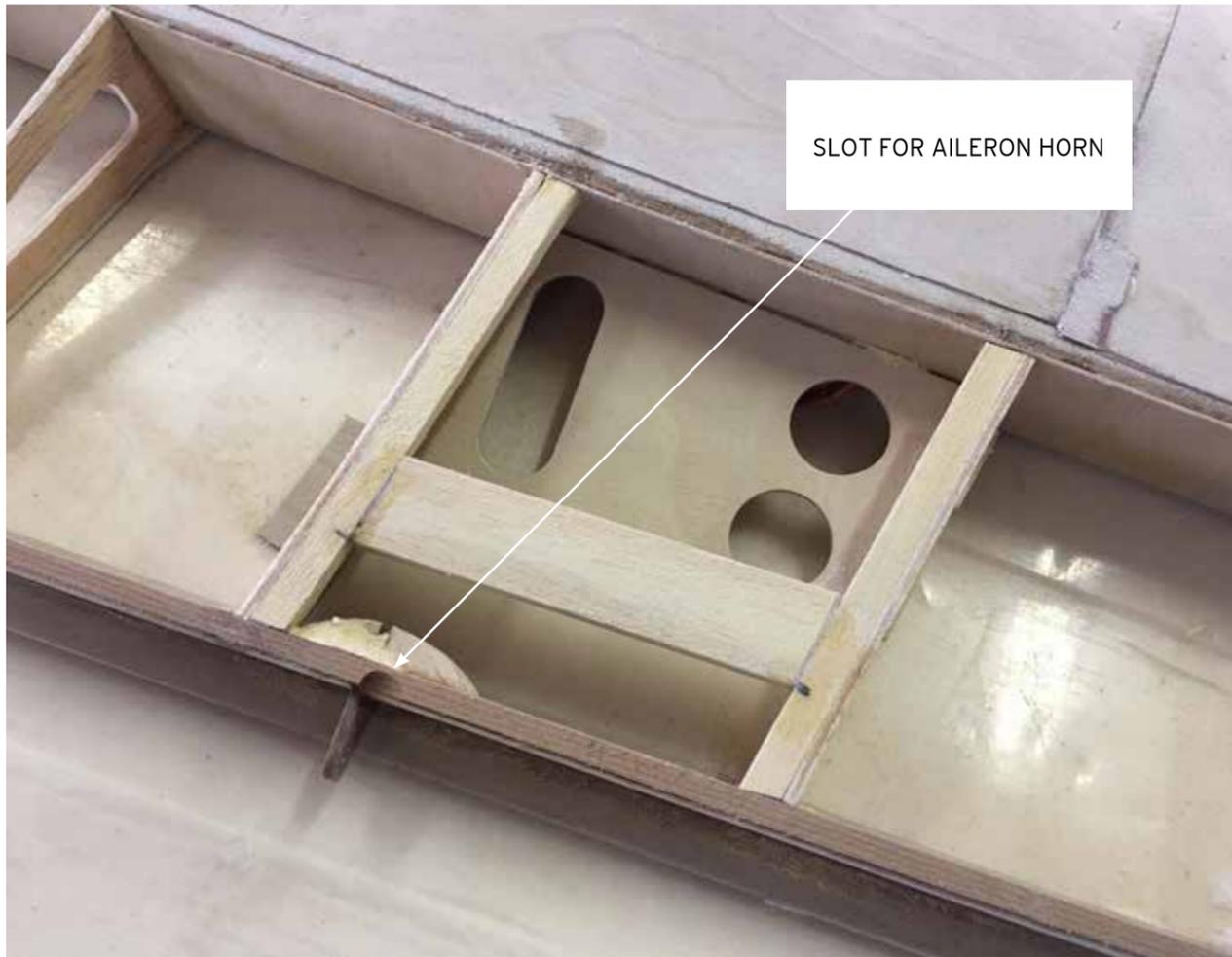


REPEAT ON BOTTOM SIDE WITH THE AILERON - 15° DOWN



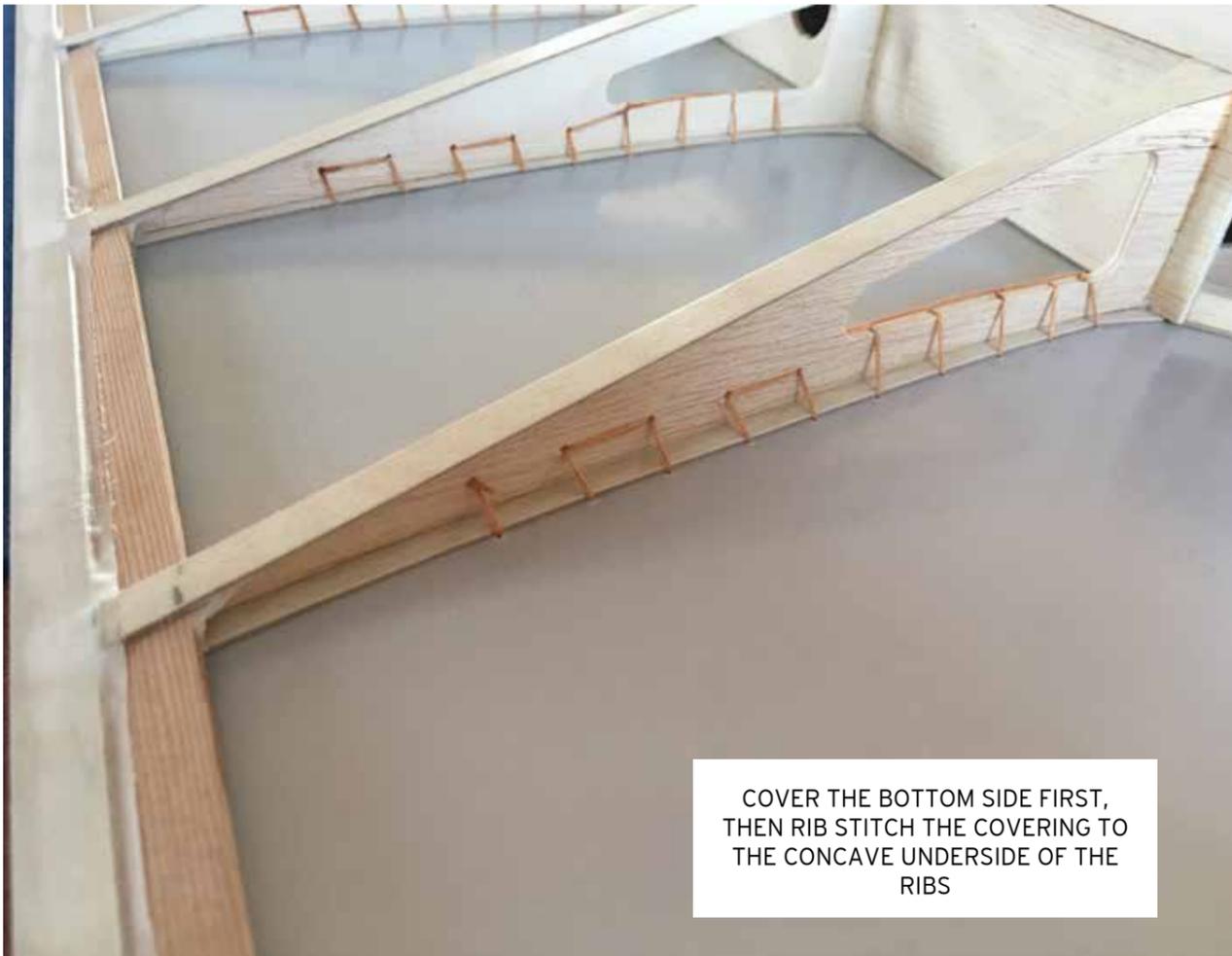
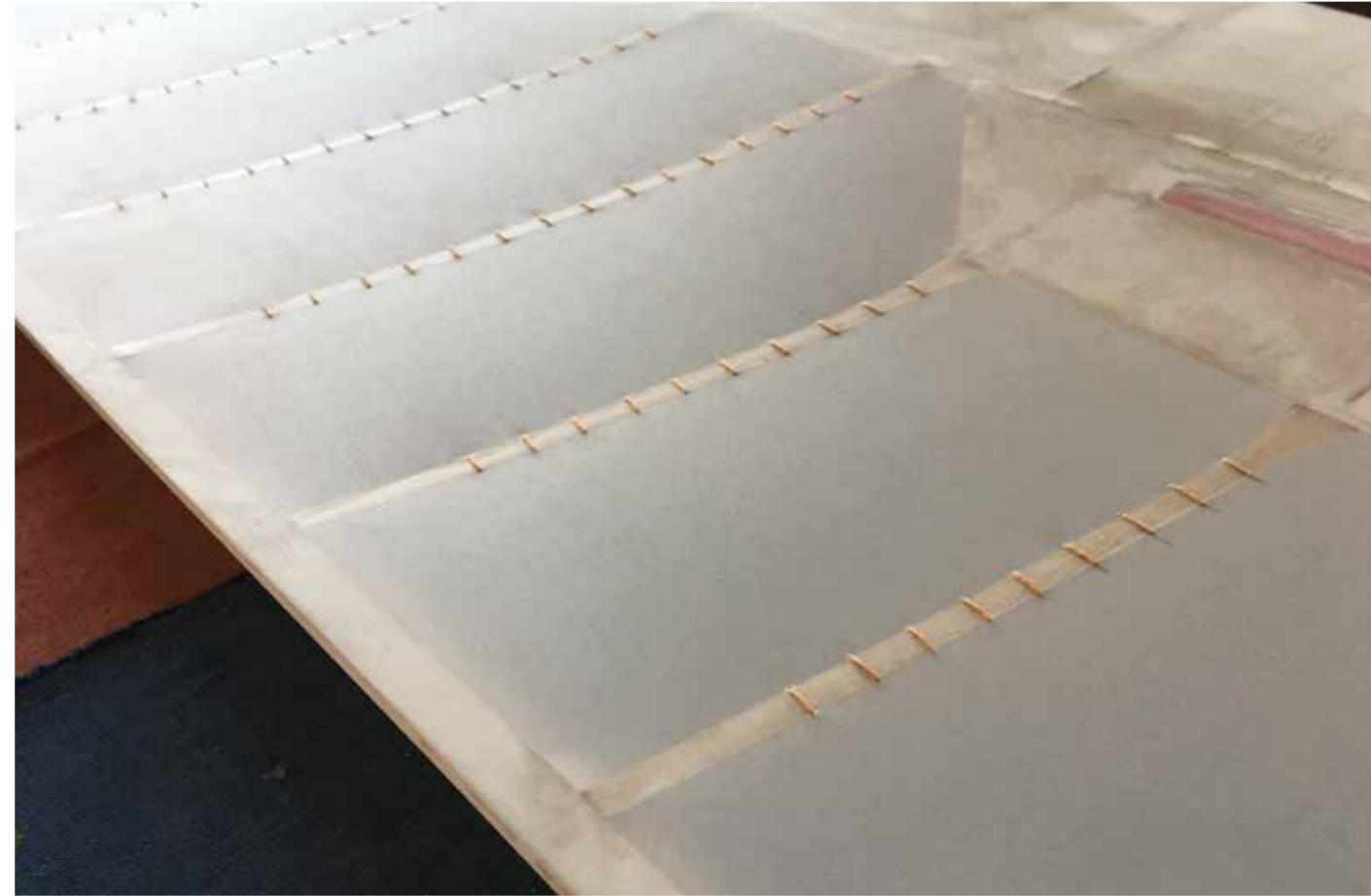
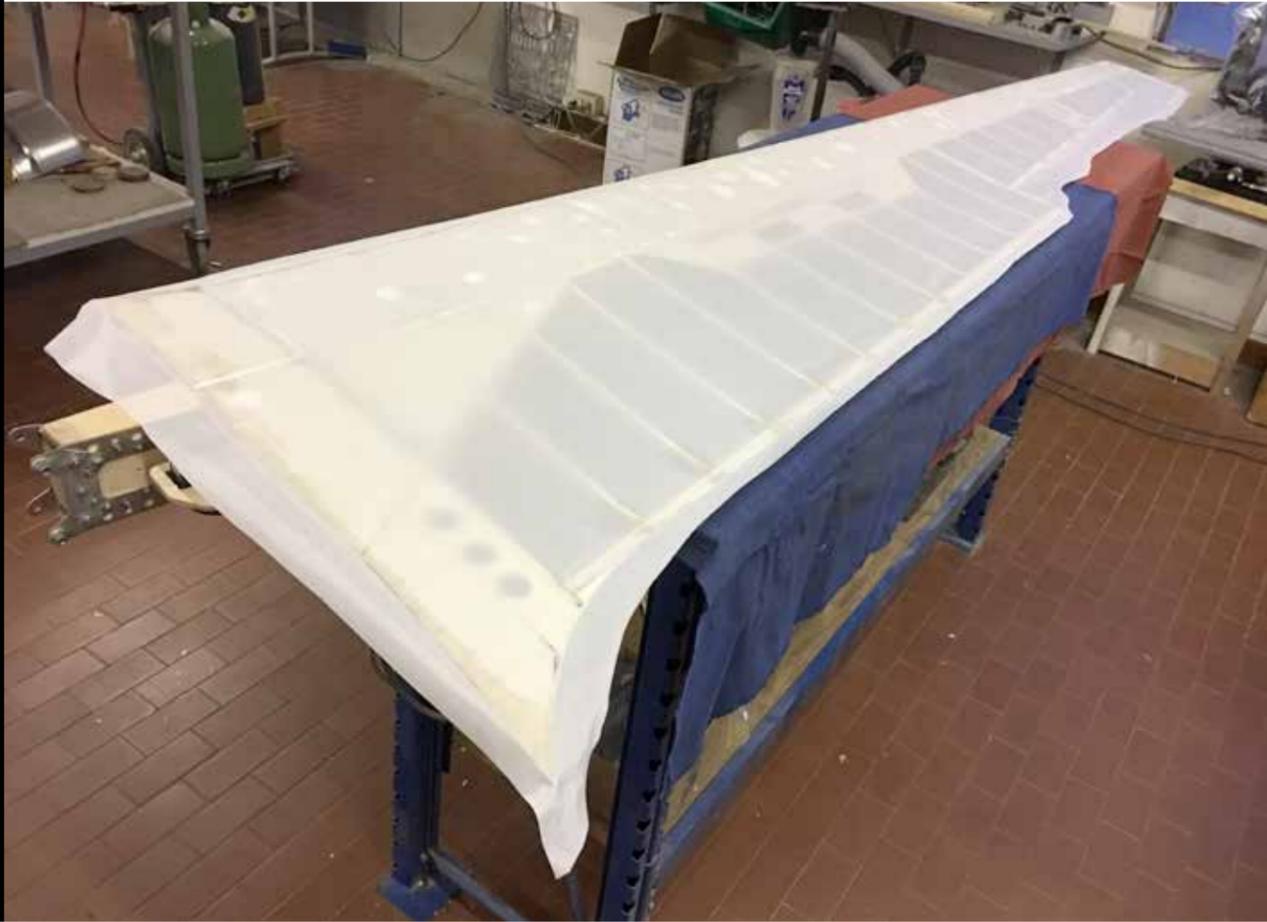
HINGE PIN GLUED WITH EPOXY

SLOT TO REMOVE THE AILERON

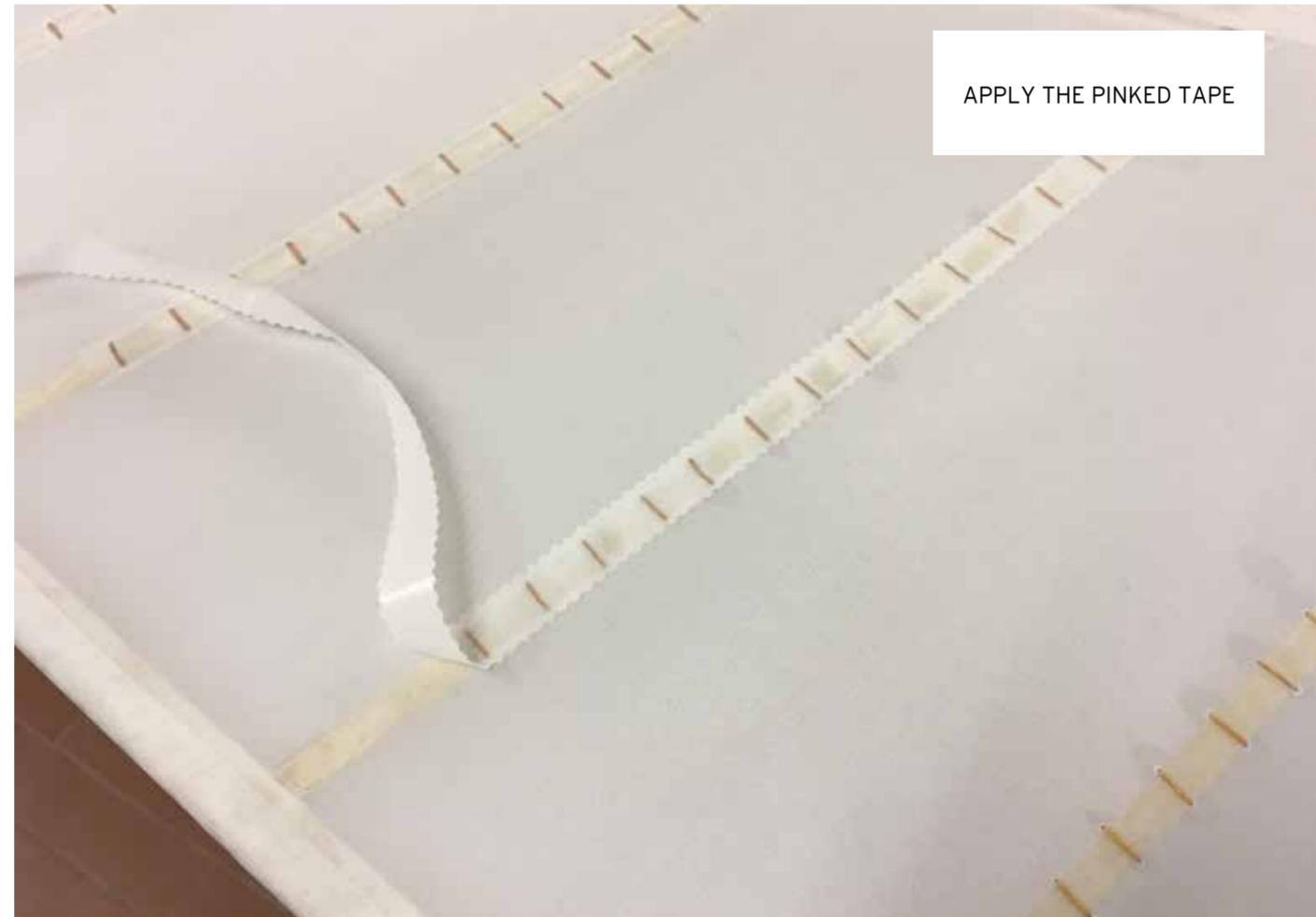


Now the wing is almost ready to cover,
 check the travel of airbrake and aileron and add some filler if needed
 but remember that the ASK 13 wing is a wood wing,
 and as in the real one it is normal to see some small "defect".
 This also helps to make the aircraft more true and faithful.

Before covering, build the fuselage and check the wing fit to the fuselage perfectly.



COVER THE BOTTOM SIDE FIRST,
THEN RIB STITCH THE COVERING TO
THE CONCAVE UNDERSIDE OF THE
RIBS



APPLY THE PINKED TAPE

