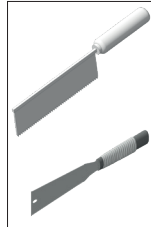


127.577

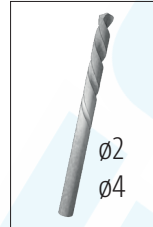
Articulated lamp with LED panel



Tools required:



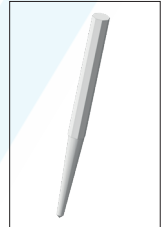
Fine-toothed saw or Japanese saw



Drill



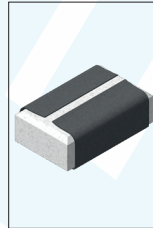
Wood glue



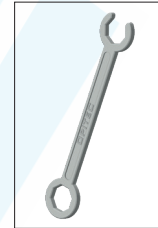
Punch



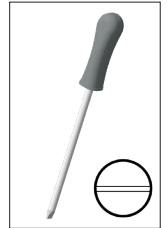
Cabinet file



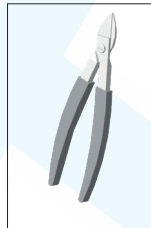
Sandpaper



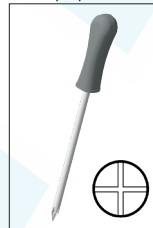
Spanner



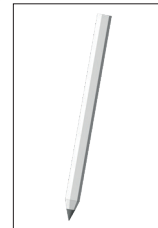
Screwdriver



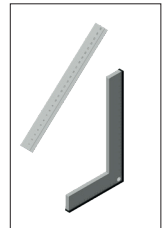
Tin snips



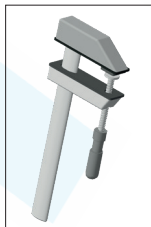
Screwdriver



Pencil



& -angle ruler



Clamp



Countersink



Scissors

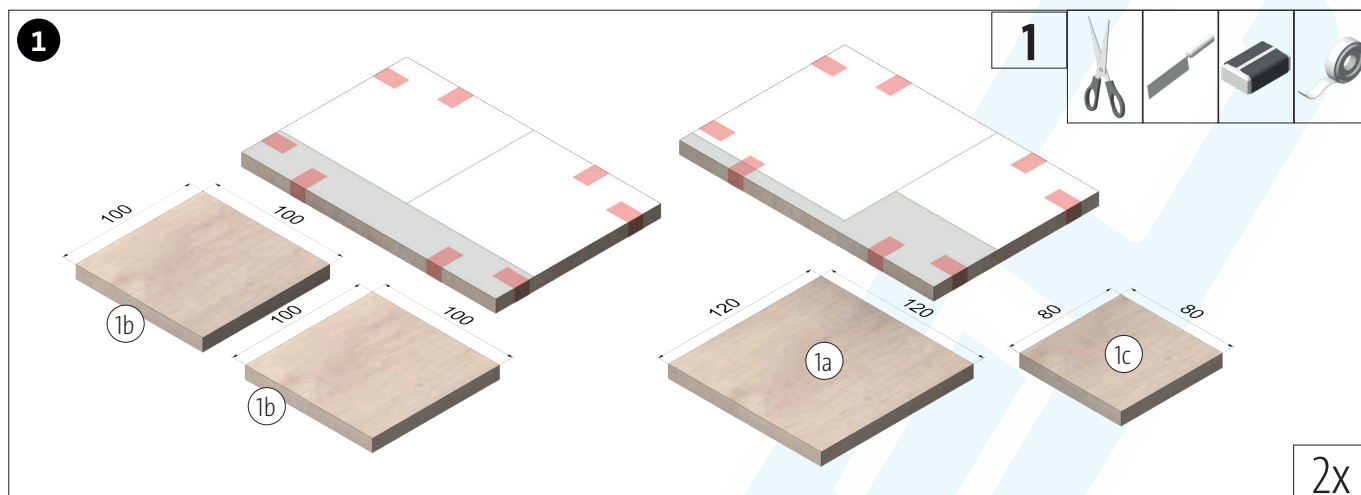


Pricker

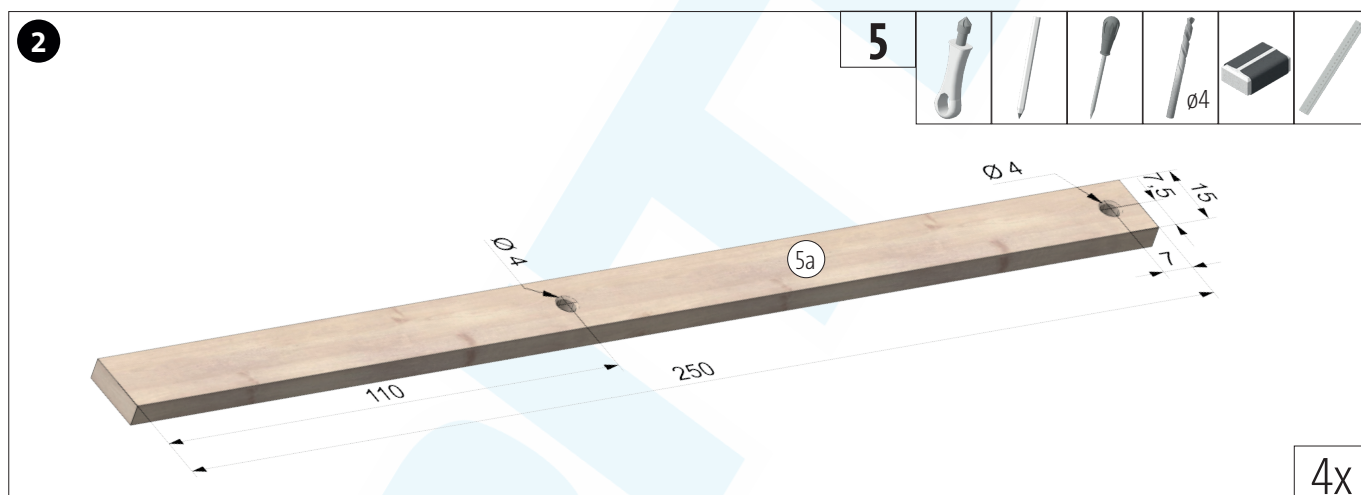
NOTE:

The OPITEC range of projects is not intended as play toys for young children. They are teaching aids for young people learning the skills of Craft, Design and Technology. These projects should only be undertaken and tested with the guidance of a fully qualified adult. The finished projects are not suitable to give to children under 3 years old. Some parts can be swallowed. Danger of suffocation! Not suitable for children under 36 months. Choking hazard!

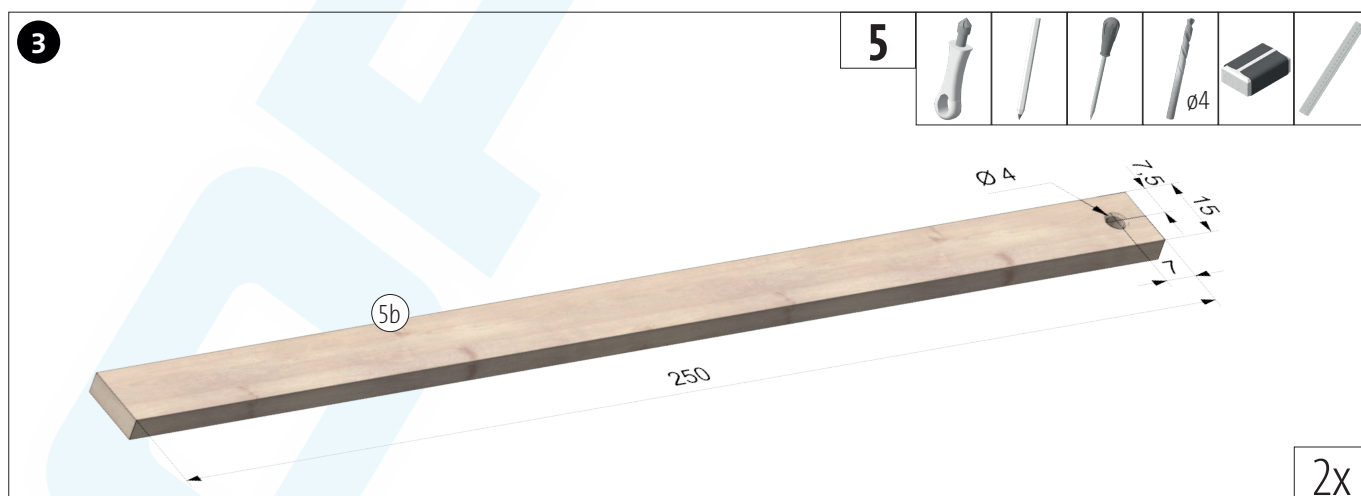
Part List	Quantity	Dimensions (mm)	Description	Part no.
Plywood	4	130 × 200 × 10	Lamp base/weights	1
Plywood	1	70x70x6	Lamp head	2
Tinplate	1	100 × 100 × 0.3	Heat sink LED panel	3
Self-tapping countersunk screws	5	ø2x6	Mounting the cooling fin	4
Wooden strip	8	250 × 15 × 5	Lamp design	5
LED panel, 12 LEDs/5V, with micro-USB socket	1	52x30	Lighting	6
Cylinder head screw	6	M4x20	Fastening	7
Washer	12	4,3/9	Fastening	8
Nut (used as a spacer)	6	M5	Fastening	9
Lock nut	6	M4	Fastening	10
USB connection cable with switch: USB A to Micro-USB B	1		Connection cable	11
Key ring	2	ø 20	Cable Routing	12



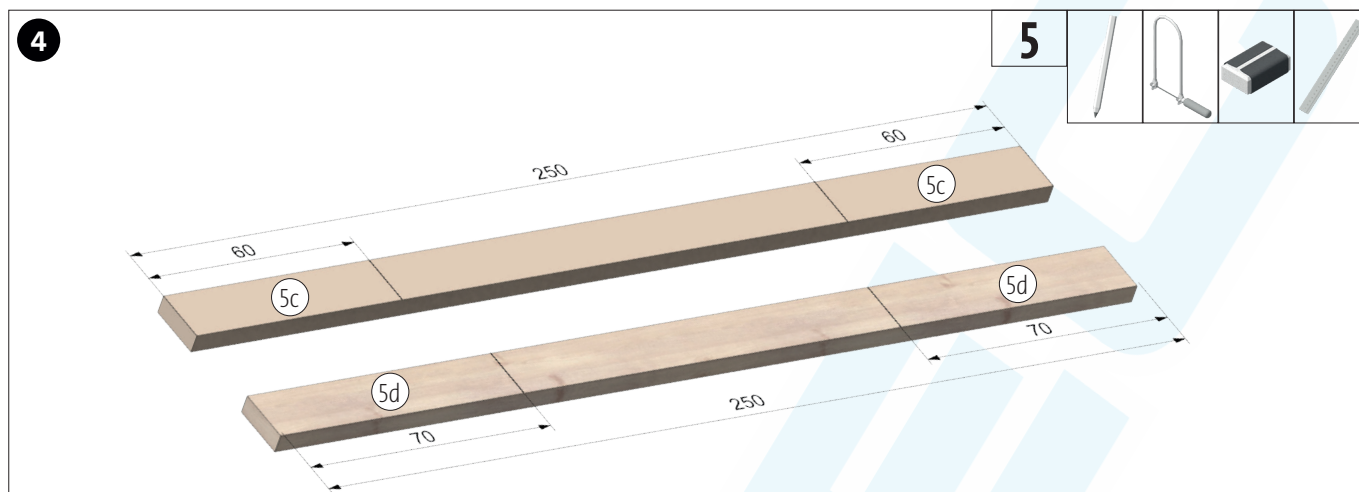
Cut out the 2xA and 2xB templates and trace them onto 2 plywood sheets (1) each. Next, saw out the wooden parts 1a–1c and clean up the saw cuts.
Note: If the parts end up being slightly smaller than the templates as a result of the sawing and sanding, this is not a problem.



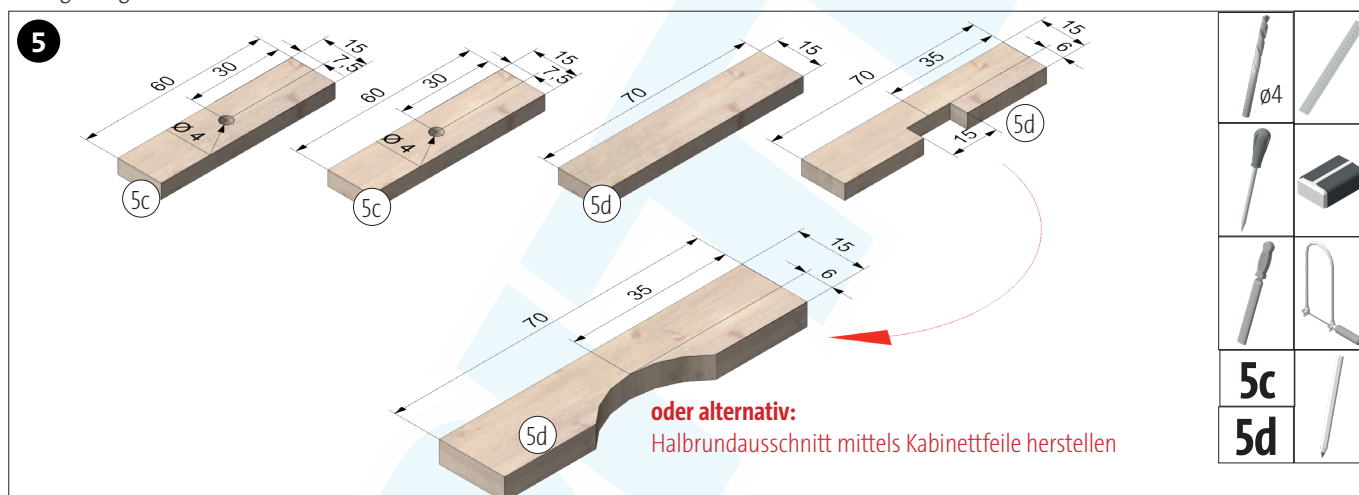
On 4 wooden strips (5), measure out the positions of the 4 mm diameter holes, mark them and pre-drill them. Drill through the holes and countersink them slightly on both sides. If necessary, smooth the two ends of the wooden strips with sandpaper.



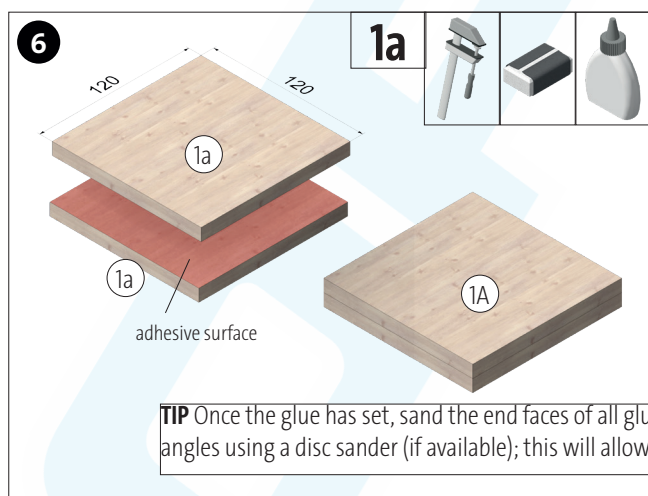
On 2 wooden strips (5), measure out the positions of the 4 mm diameter holes, mark them and pre-drill them. Drill through the holes and countersink them slightly on both sides. If necessary, smooth the two ends of the wooden strips with sandpaper.



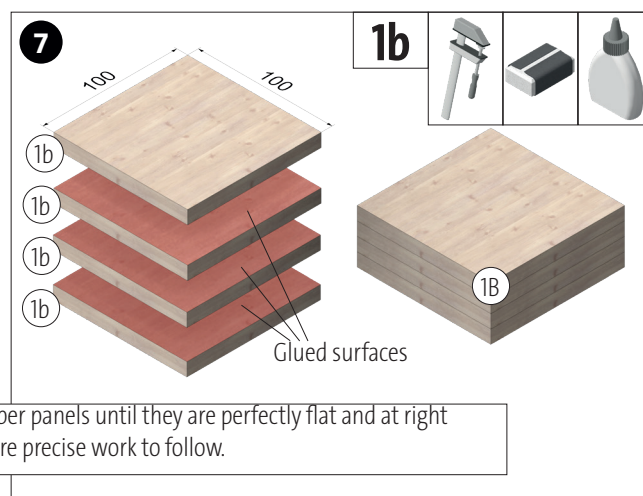
On the remaining two wooden strips (5), measure out and mark 2 x 70 mm and 2 x 60 mm. Then cut to length and clean up the saw cuts
TIP It is better to saw the pieces 8 mm longer first and then, preferably using a disc sander (if available), sand them down to the exact required length at a right angle.



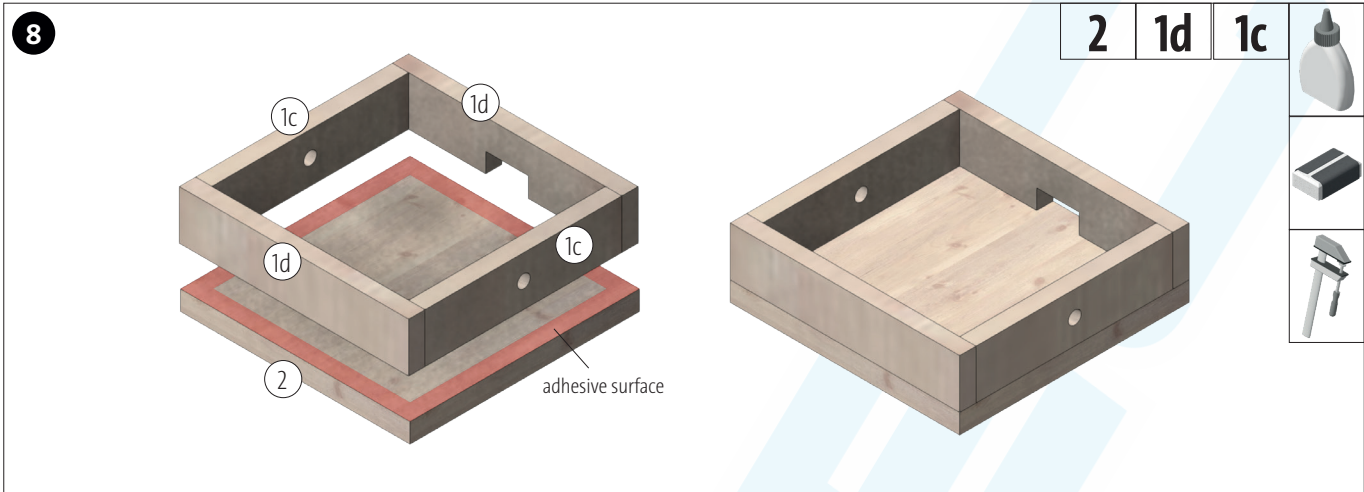
Measure out the positions of the holes through the two wooden strips (5c), mark them out and pre-drill them. Then drill a hole with a diameter of 4 mm and countersink it slightly on both sides. Mark out, saw out or file out the recess for the cable connection on one of the wooden strips (5d). Clean the saw cuts.



Glue the two wooden panels (1a) on top of each other so that they are perfectly aligned, as shown. Allow glue to dry well. Next, sand down all the outer edges of the finished base (1A) using sandpaper.

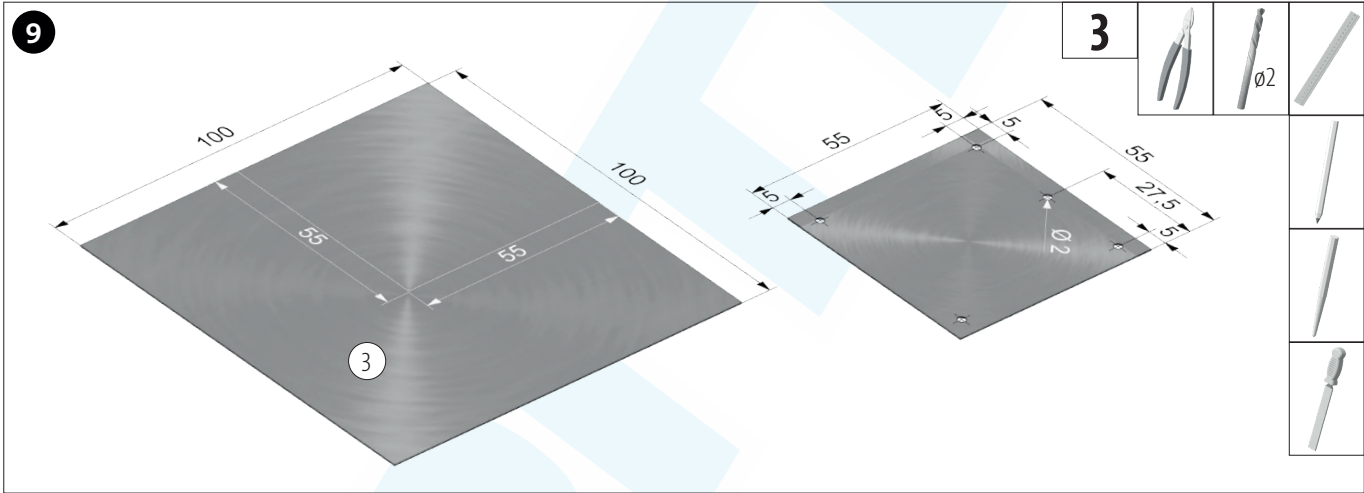


Similarly, glue all 4 wooden panels (1b) on top of one another so that they are flush. Allow glue to dry well. Then sand down all the outer edges of Level 1 (1B) using sandpaper.

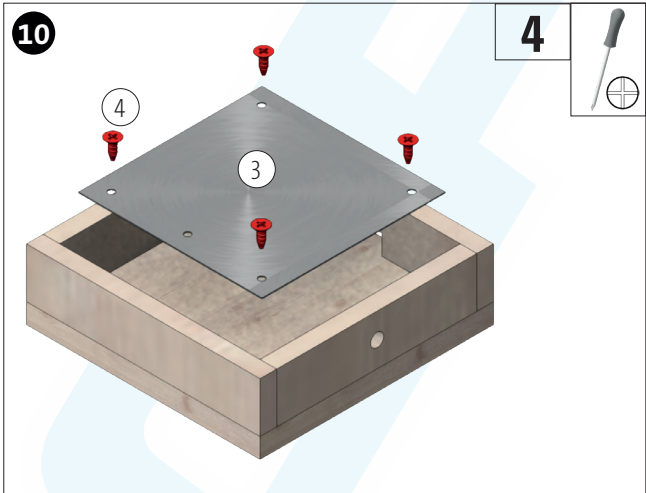


For the lamp head, glue the strips (1c) and (1d) to the wooden base (2) as shown. Allow glue to dry well. Then sand down the outer edges of all four sides with sandpaper

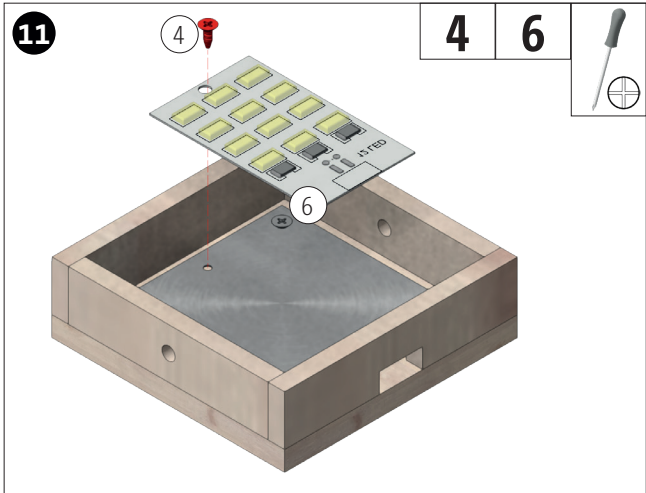
TIP Here, too, the end faces can be ground to a precise flat finish using a disc grinder (if available).



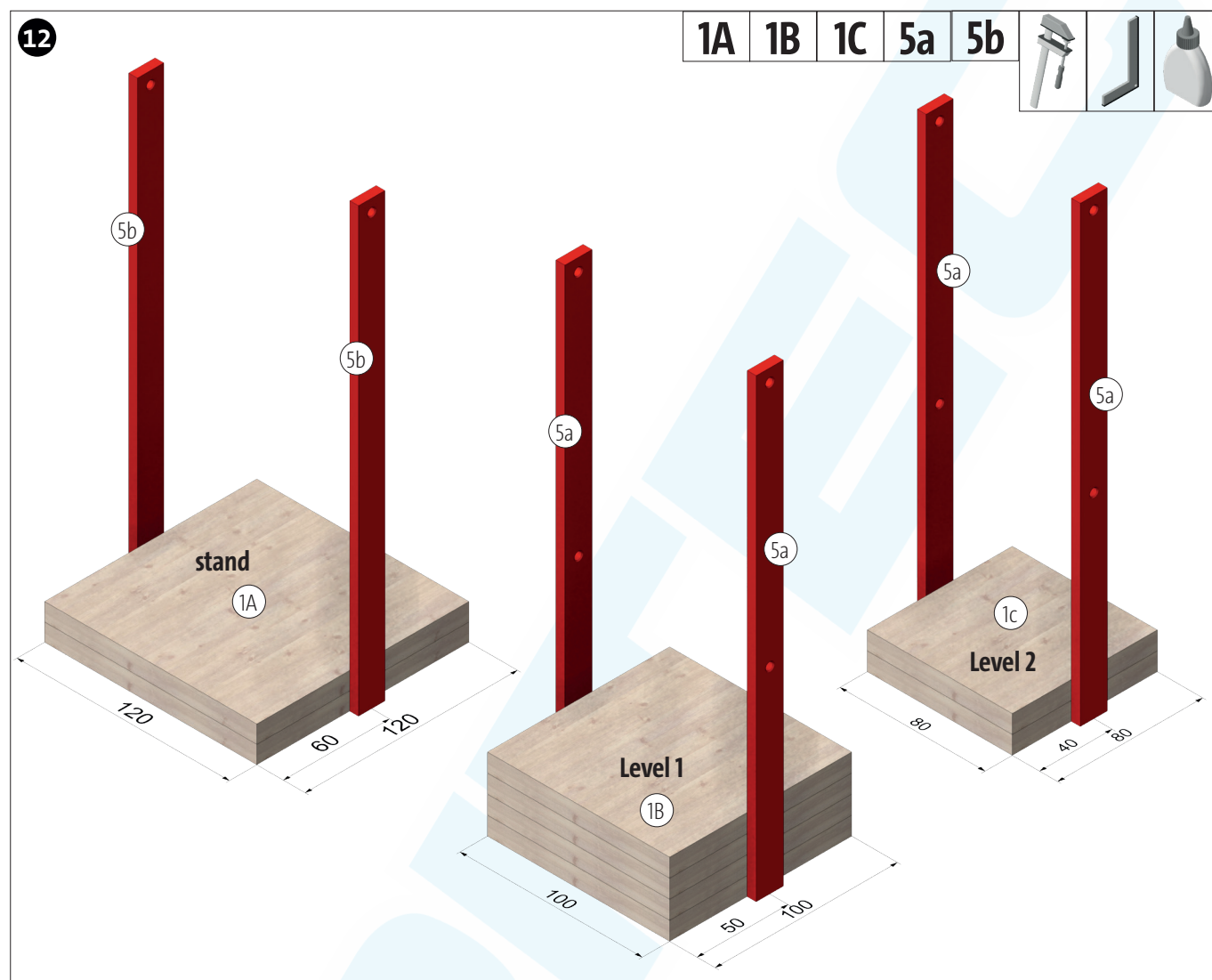
Cut the tinplate (3) to the dimensions 55 x 55 mm using tin snips. Next, measure out the positions of the required drill holes ($\varnothing$) and mark them with a centre punch. Drill through all the holes and deburr the tinplate thoroughly.



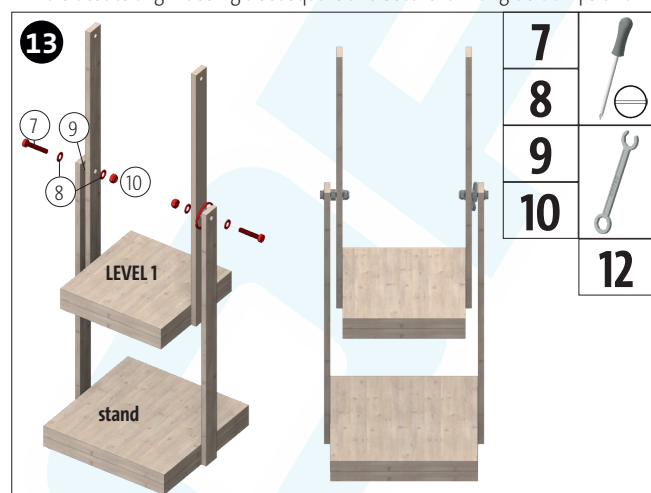
Secure the tinplate (3) to the centre of the lamp head using 4 screws (4). **Note: In this case, the centre hole faces the wooden strip (1d) without a recess!**



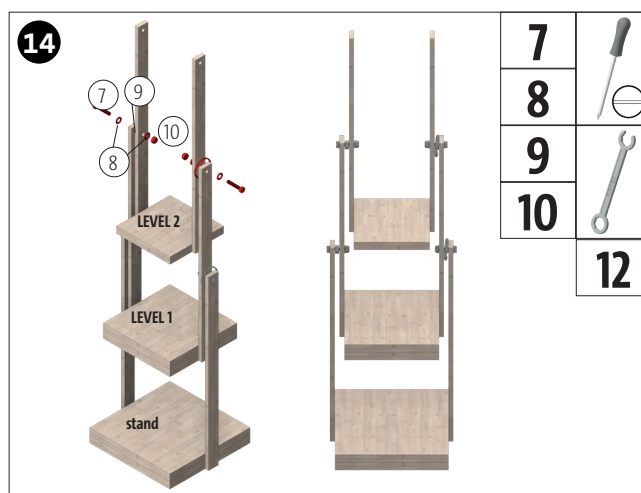
Position the LED panel (6) using the remaining screw (4), as shown.



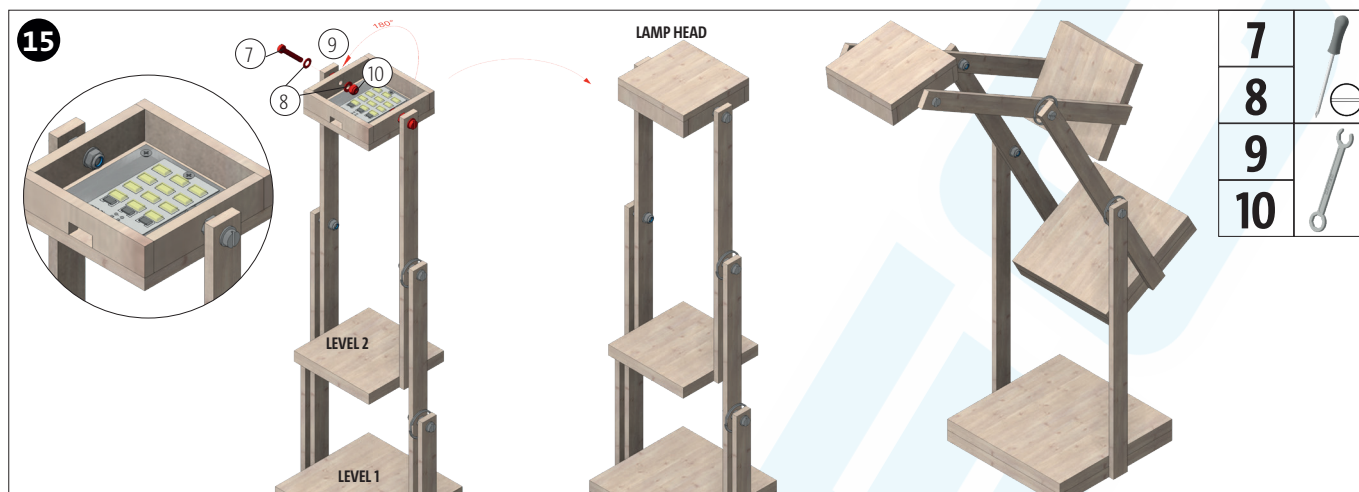
Glue the wooden strips (5b) – with the holes facing upwards and centred – to two opposite end faces of the base (1A). Glue 2 wooden strips (5a) in the same way to two opposite end faces of plane 1 (1B). Glue the remaining wooden strips (5a) to the ends of level 2 (1c) in the same way.
Note: Before the glue dries, make sure that the strips are positioned exactly opposite each other and that the holes are aligned.
TIP It is best to align it using a set square and secure it with glue clamps until it is dry.



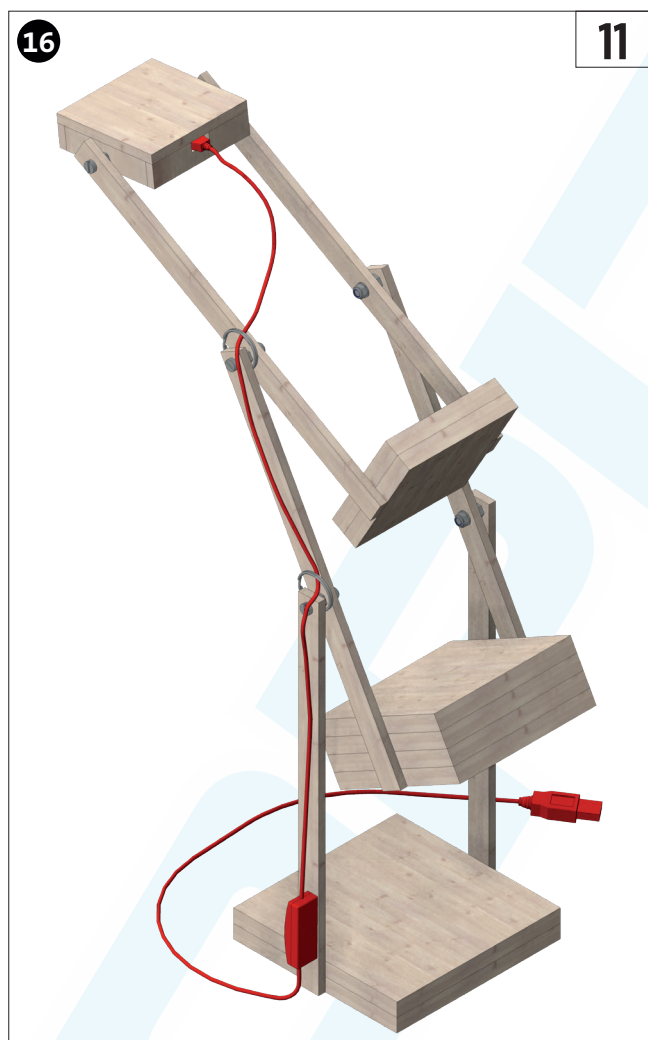
Insert level 1 between the slats of the base and secure it on both sides using 1 screw (7), 2 washers (8), 1 nut (9) and a lock nut (10). On one side, a key ring (12) is also fitted into the hinge



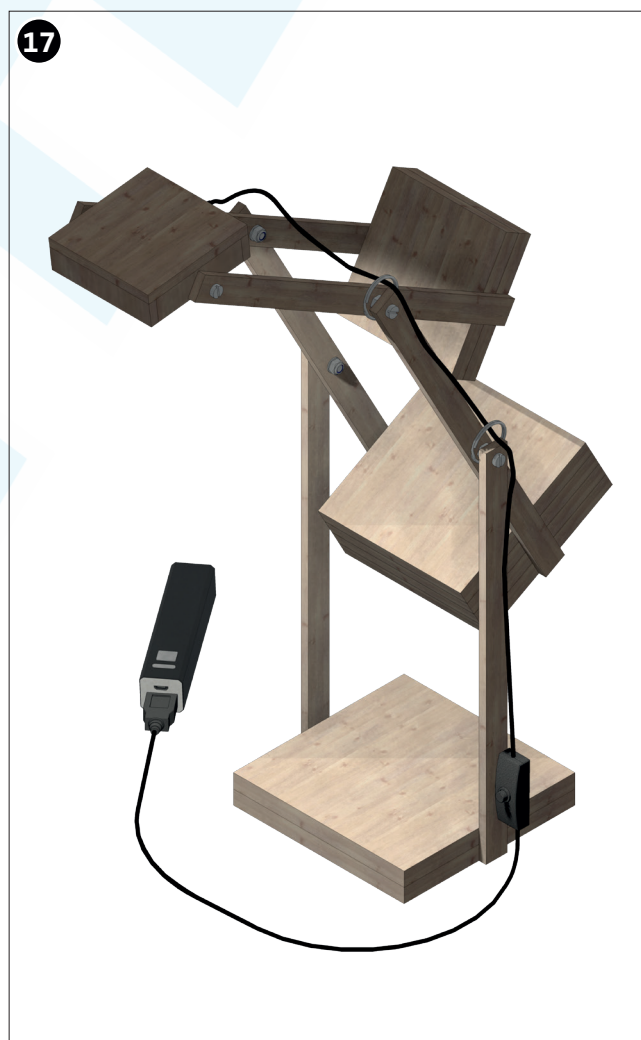
Insert level 2 between the strips of level 1 and secure it on both sides using 1 bolt (7), 2 washers (8), 1 nut (9) and a cap nut (10). On the selected side, another key ring (12) is now fitted into the hinge.



Insert the lamp head between the slats on level 2 and secure it on both sides using 1 screw (7), 2 washers (8), 1 nut (9) and a lock nut (10). Adjust all joints using the screw and lock nut so that the joint can be adjusted as smoothly as possible.

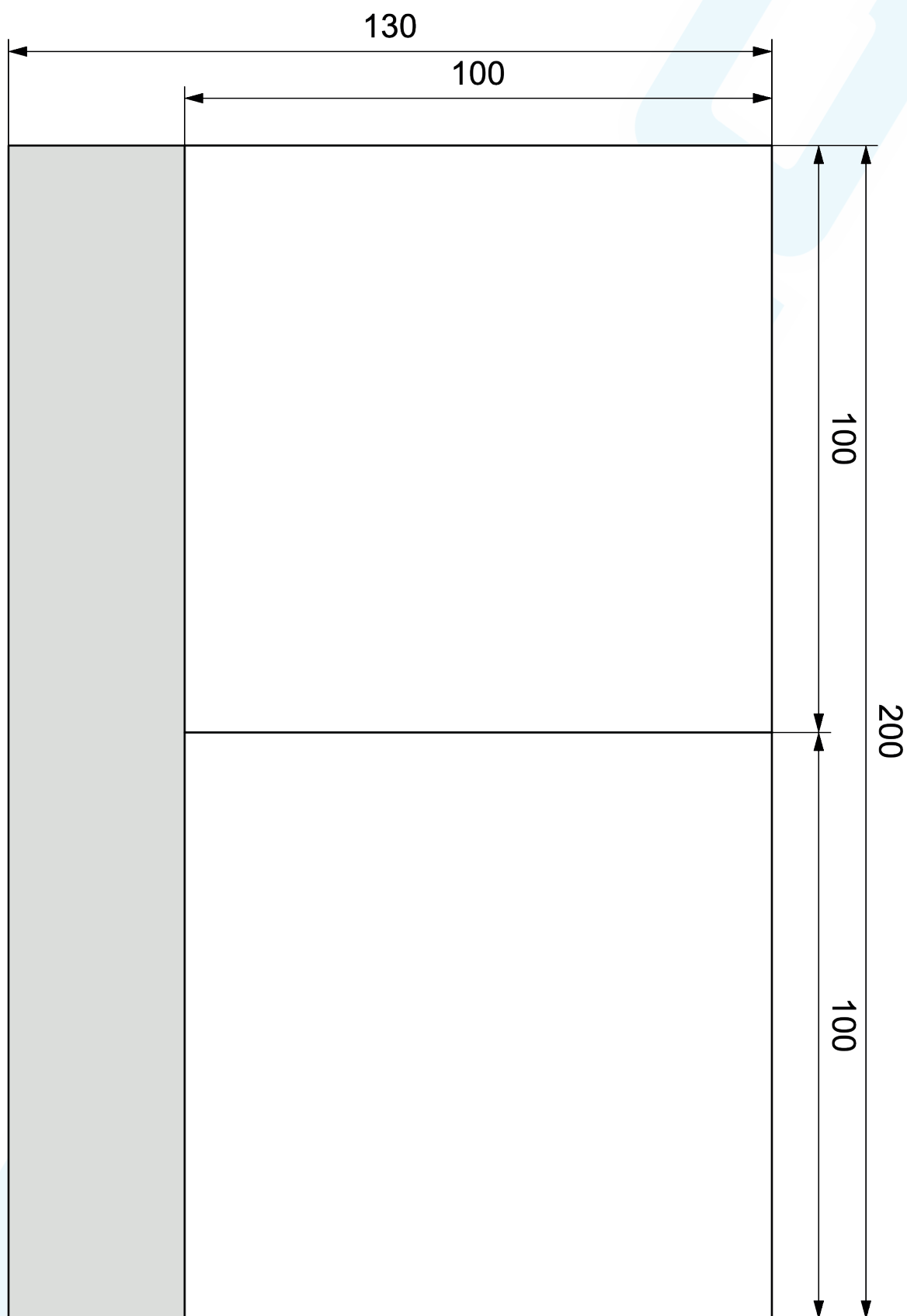


Thread the Micro-USB B connector of the supplied cable with switch (11) through the two key rings at the top, then guide it through the recess in the lamp head and plug it into the LED panel (6).



Plug the lamp into a USB-A port (on a computer, mains adaptor, etc.) or a power bank, and switch it on. Thanks to its ingenious design, the lamp can be adjusted perfectly and smoothly to suit your lighting needs.

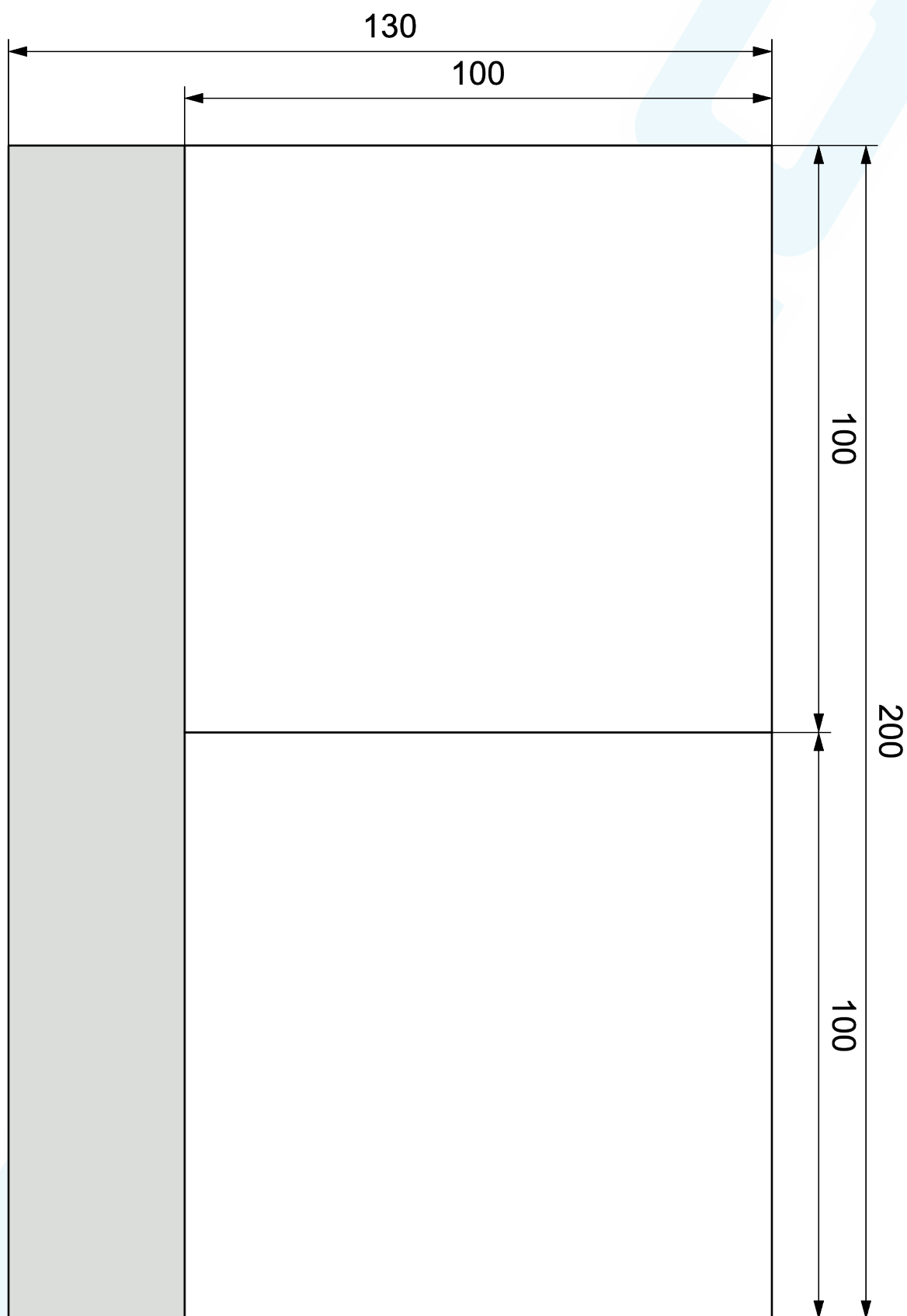
The lamp can now be painted if required. To do this, all the joints should be taken apart again and the wooden parts should be given two thin coats of, for example, acrylic paint or varnish. Once dry, simply reassemble the lamp as shown from step 13 onwards.



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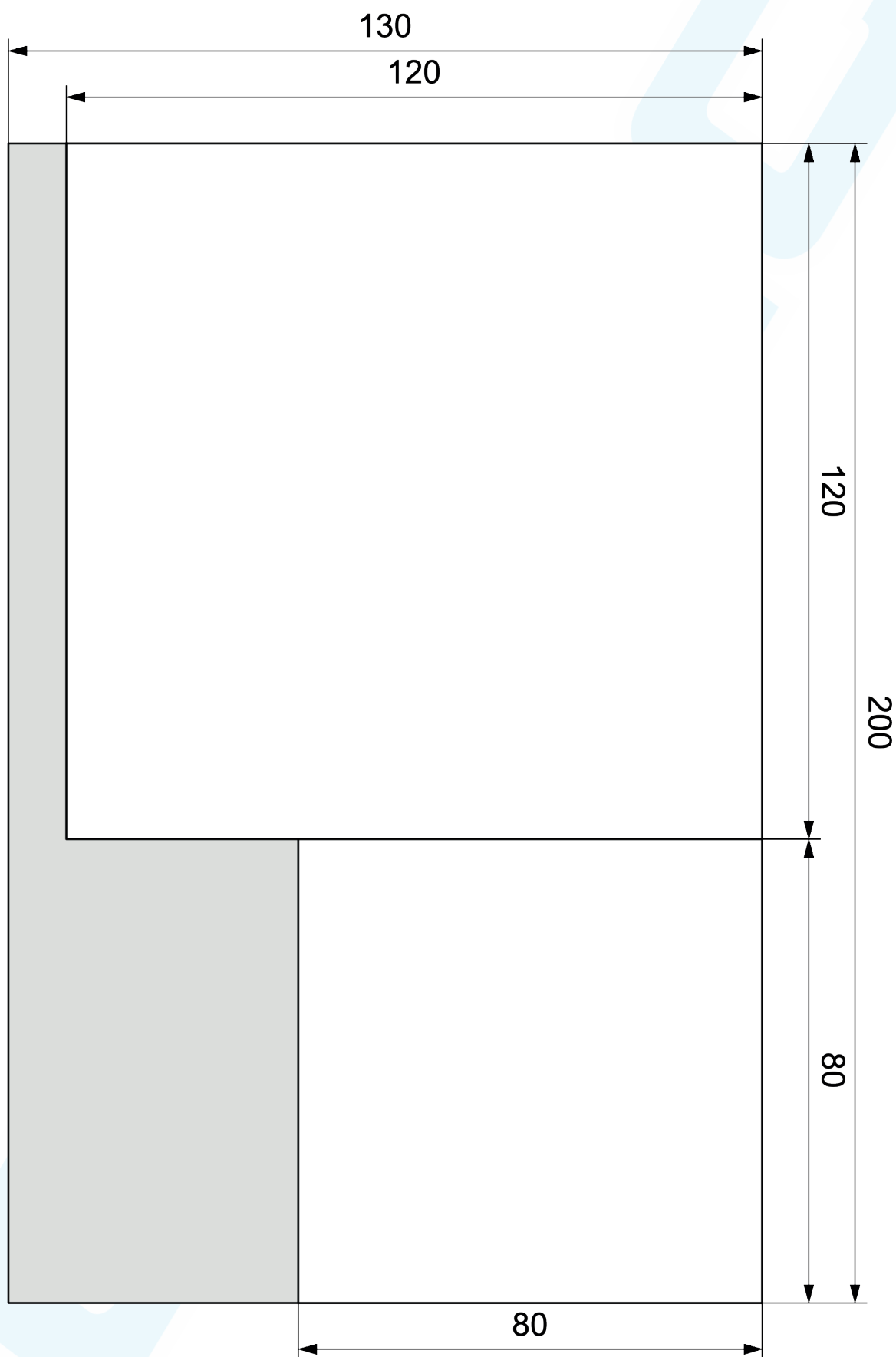
Assembly instructions 127577
Articulated lamp with LED panel

Template A
M1: 1



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