

OPITEC

Hobbyfix

113.691

Metal-Bird feeder



Please 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!

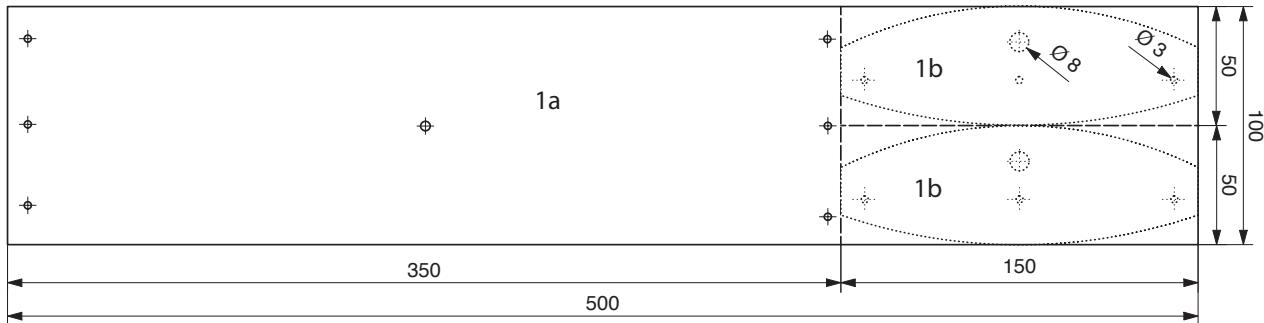
Necessary tools:

Pencil, ruler
Fretsaw machine, hand Fretsaw
Saw blade for metal
Drills ø 3 + ø 4 + ø 8 mm
Emery cloth, workshop file
Metal shears
Crosshead screwdriver
Centre punch
Bradawl

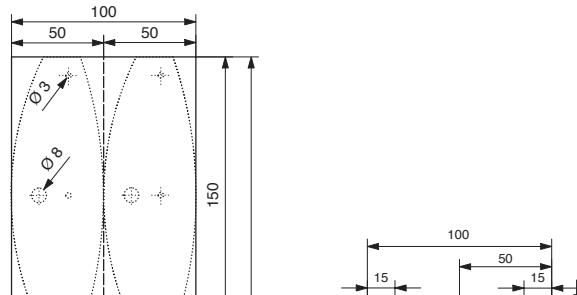
PARTS LIST				
	Part	Size (mm)	Description	-Nr.Part
Wood	1	150x100x15	Base	1
Aluminium sheet	1	500x100x0,8	Roof, sides	2
Dowel	1	250x8	Perch	3
Threaded eye	1	20x4	Hanger	4
Screw hook	1	15	Food hanger	5
Screws	12		Fixing	6
Nuts	2	M4	Fixing hanger	7

INSTRUCTIONS

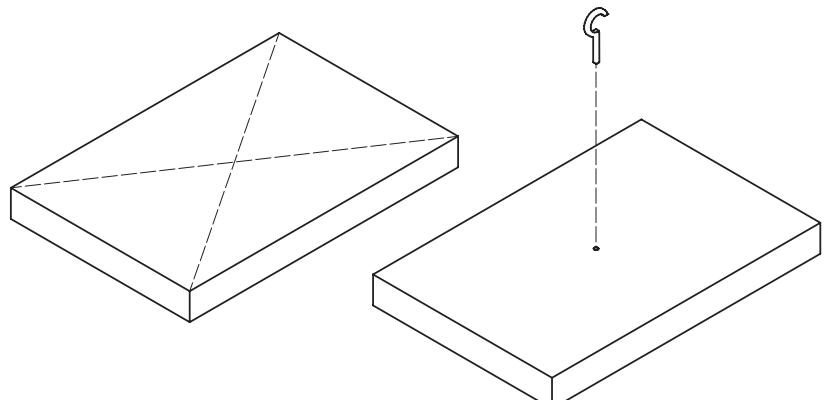
1. Trace the pattern (on page 4) on to the Aluminium sheet (2) draw the drill holes and mark them with a centre punch. Drill the $\varnothing 3$ mm holes as shown in the diagram. As shown in the plan (pattern page 4) cut the aluminium sheet 350mm with metal shears. Cut the remaining pieces of metal in two parts (1b) (each part is 150x50mm). Clean up the sharp edges.



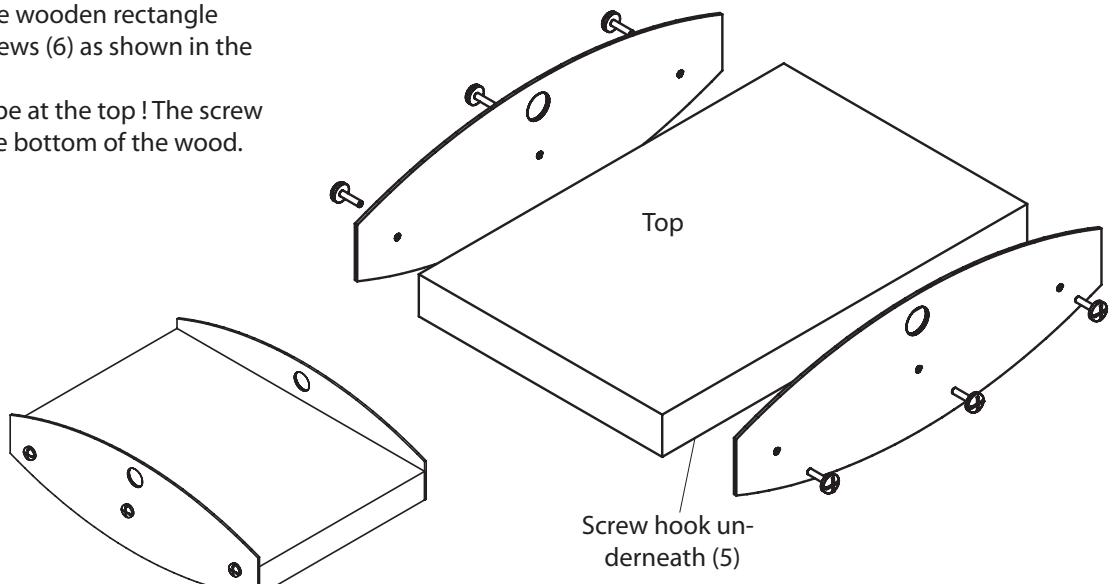
2. Lay the two sheet metal parts 1b (150x50mm) on top of each other and fix them together with sellotape so that they cannot slip. Mark out the holes and centre punch them. Drill the $\varnothing 3$ mm and $\varnothing 8$ mm through both sheets. (see pattern on page 3). Finally cut the outline of the curved shapes with a metal shears. Mark out centre punch and drill the ($\varnothing 4 + \varnothing 3$ mm) the holes in the long piece of metal, clean them up!



2. Take the wooden rectangle (1) and draw a cross find the middle point. Insert the screw hook (5) on the middle point. Use a bradawl to make a pilot hole.

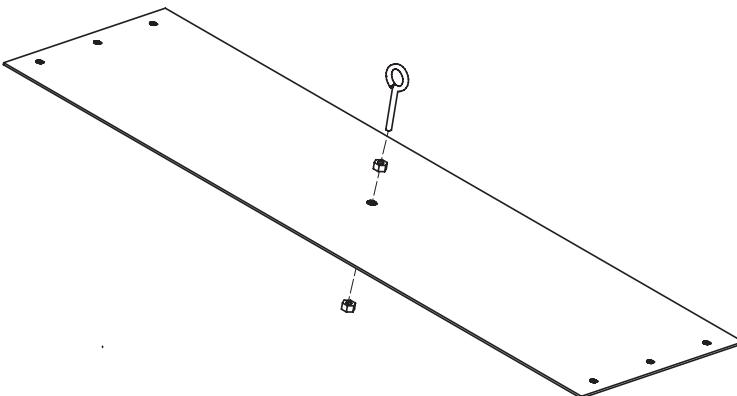


3. Mount the two finished sheet metal parts (1b) on the sides of the wooden rectangle (1) as shown. Use 3 screws (6) as shown in the diagram. Note the 8mm hole should be at the top! The screw hook is mounted in the bottom of the wood.

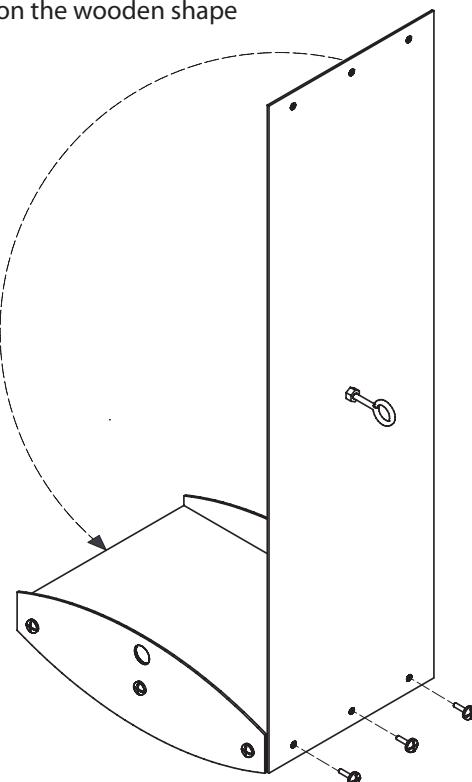


INSTRUCTIONS

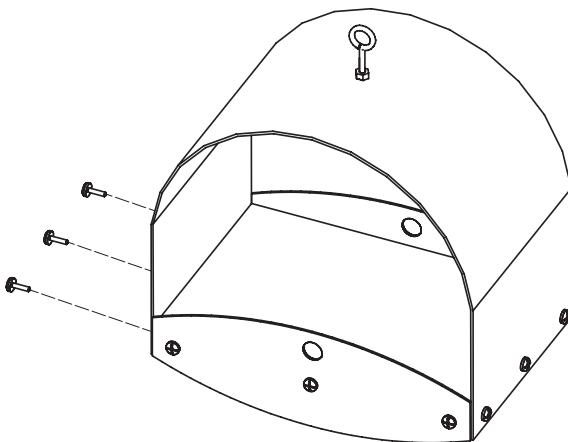
4. Take the long piece of metal 1a (350x100mm) Mount the screw eye (4) with two nuts (7) in the middle 4mm dia. hole. To do this make sure one nut (7) is above the metal and one underneath, trapping the metal between the two nuts, tighten them in position



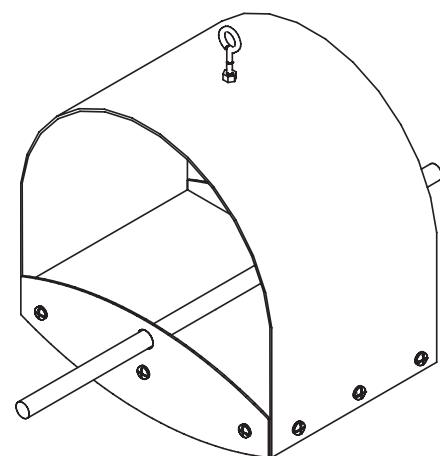
5. Mount the metal sheet as shown using 3 screws (6) on the wooden shape



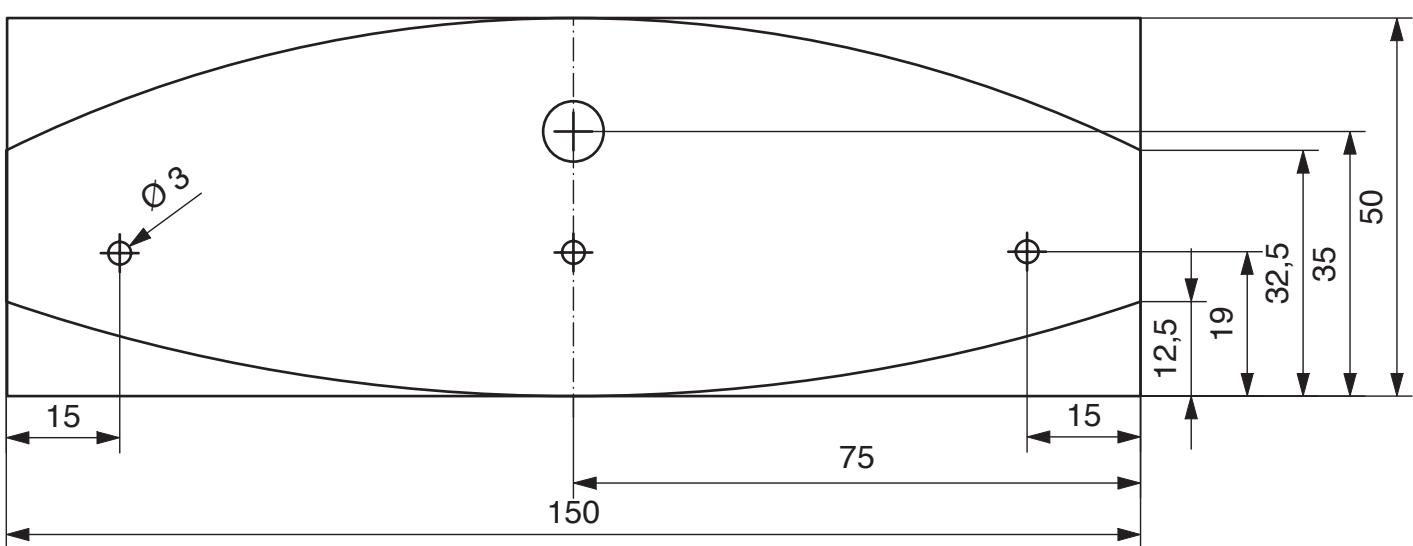
6. Bend the metal piece as shown and hold it in place with 3 screws (6)



7. The dowel (3) is inserted through the 8mm hole as shown. Finished!



Pattern-side parts
Scale 1:1



INSTRUCTIONS

Pattern for metal parts (1)

Scale 1:2

