



Flight Board

# PROJECT PLANS

**Finished Dimensions:** 14-1/2" W x 3/4" H x 3-1/2" D

**Skill Level:** Beginner

### Materials

Item	Qty
1" x 4"x 8' Board*	1
Forstner Bits: 2-1/2" & 1-1/4"	
Quick Setting Epoxy (Clear)	2
Glue Sticks	1
Sandpaper** : 150g, 220g & 320g	
Pennies	28

\* Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

\*\* Starting grit will depend on board surface condition, a rough surface will require starting with a coarse grit first.

Grit is measured in the coarseness of the particles on the sandpaper. The lower the grit number, the coarser the paper. Heavy sanding would require 60 to 80 grit, medium sanding would require 120 to 220 grit, and finish sanding would require 320 to 400 grit. Super fine sanding would be 600 grit and higher.

A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires less time to sand and finish.

### Tools Used



7-1/4" Sliding Compound Miter Saw



Drill Press



Router



5" Random Orbit Sander



Glue Gun



Tape Measure



Roundover Router Bit Set



2-1/2" Forstner Bit



1-1/4" Forstner Bit



5" Orbit Sandpaper

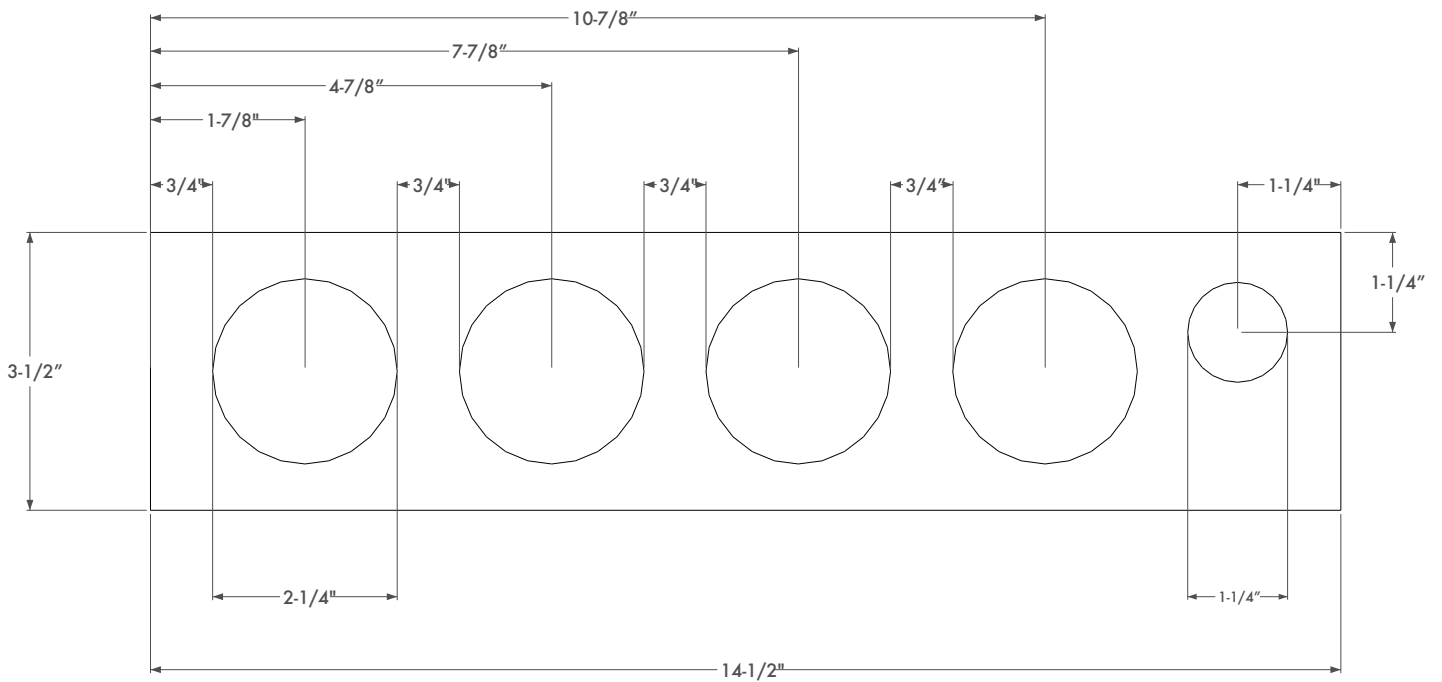
Also Needed: Safety Glasses, Speed Square and Clamps

# Lumber Cut List

Board*	Description	Cut to	Qty
1" x 4"	Flight Board	14-1/2"	1

\*Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

# Hole & Recess Layout Guide



## Assembly Instructions

### Step 1



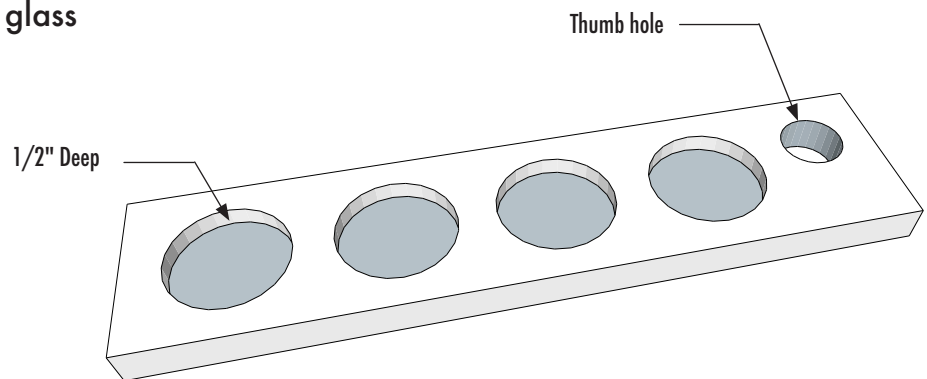
Cut out all material using the Lumber & Sheet Cut Layout Guide.

Some initial sanding can be done after cutting the boards and panels. Refer to last page for sanding information.

### Step 2



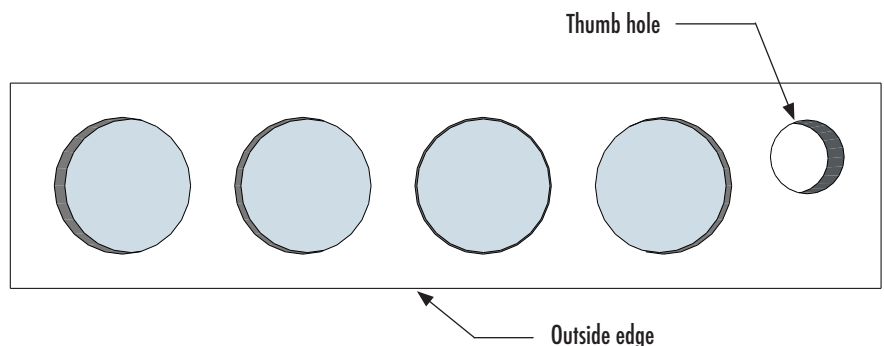
Follow the Hole & Recess Layout Guide on Page 3 to mark where the (5) holes will be drilled. Use the drill press to create holes where the glasses will sit. The (4) glass recesses are to be 1/2" deep.



### Step 3



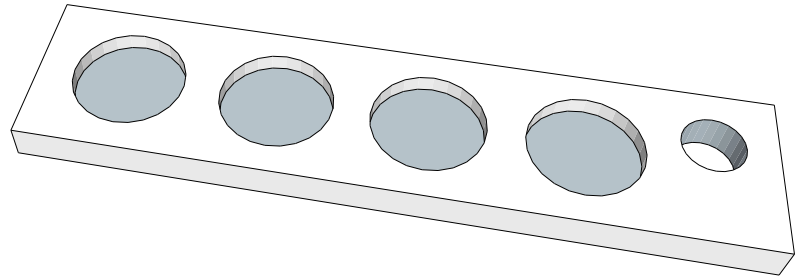
Using a router and 1/4" roundover bit, radius the outside edges and the thumb hole. Do this on the top and bottom of the board.



## Step 4



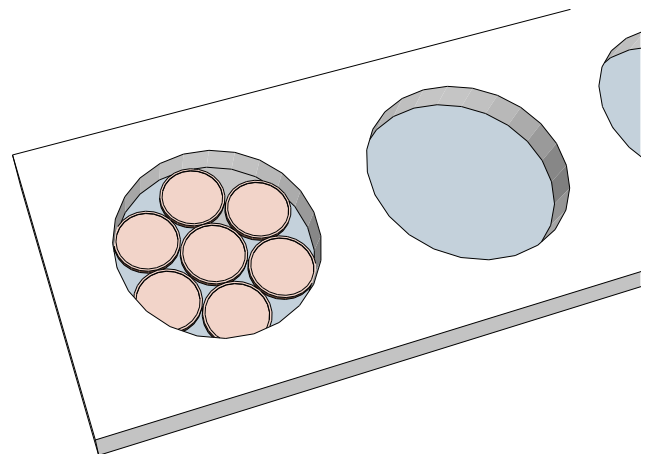
Sand and finish to your desire.



## Step 5

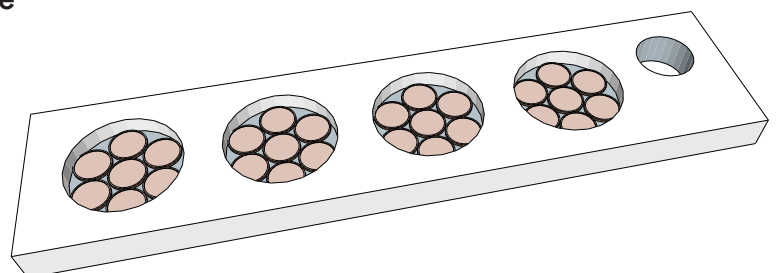


Arrange (7) pennies into each hole. Apply a small amount of glue under each penny to hold them in place.



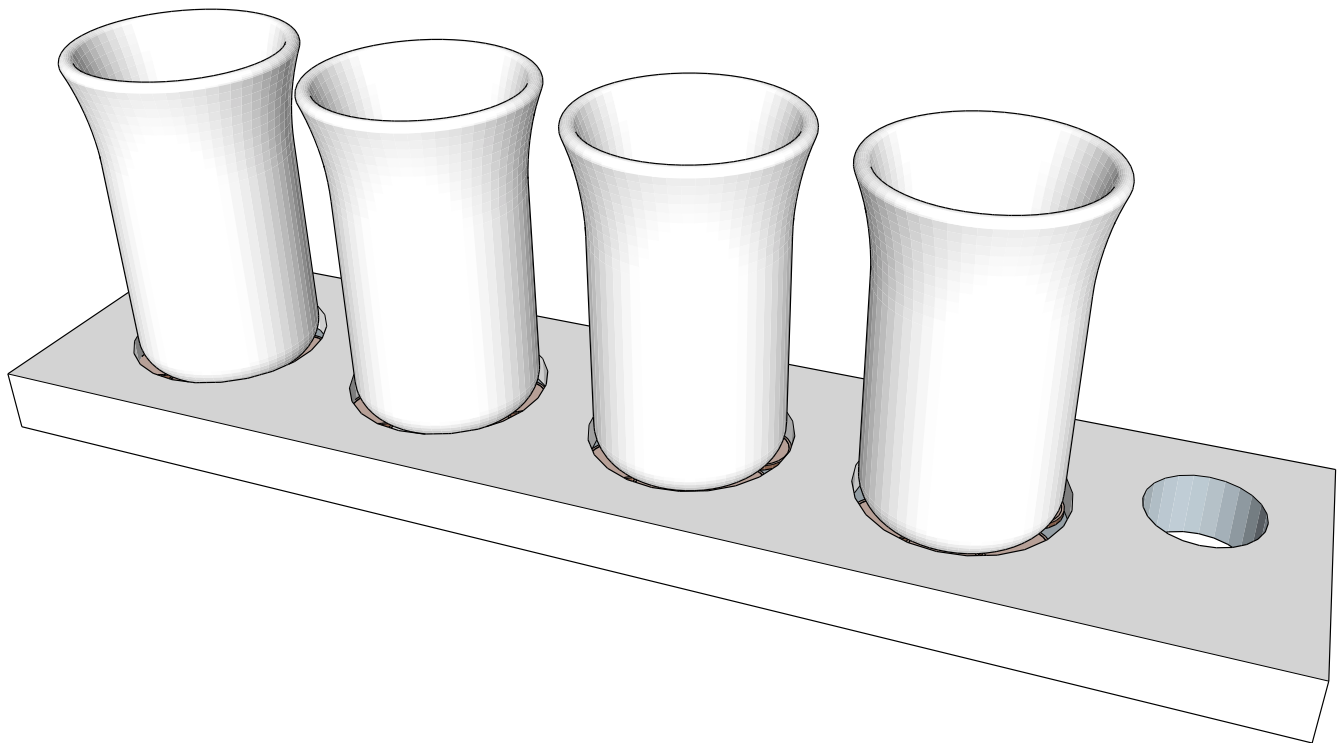
## Step 6

Mix some quick setting epoxy according to the instructions on the bottle and pour it over the pennies. Only fill the holes 1/8" deep.



## Step 7

Project complete!



**Rougher finish** – Use 60-80 grit sandpaper to hand sand with the grain of the wood.

**Smoother finish** – Use 60-80 grit sandpaper to remove scratches & imperfections. Followed by using 120-220 grit to smooth.

**Finish Sanding** – Use 320-400 grit sandpaper

**Super fine sanding** – Use 600+ grit sandpaper