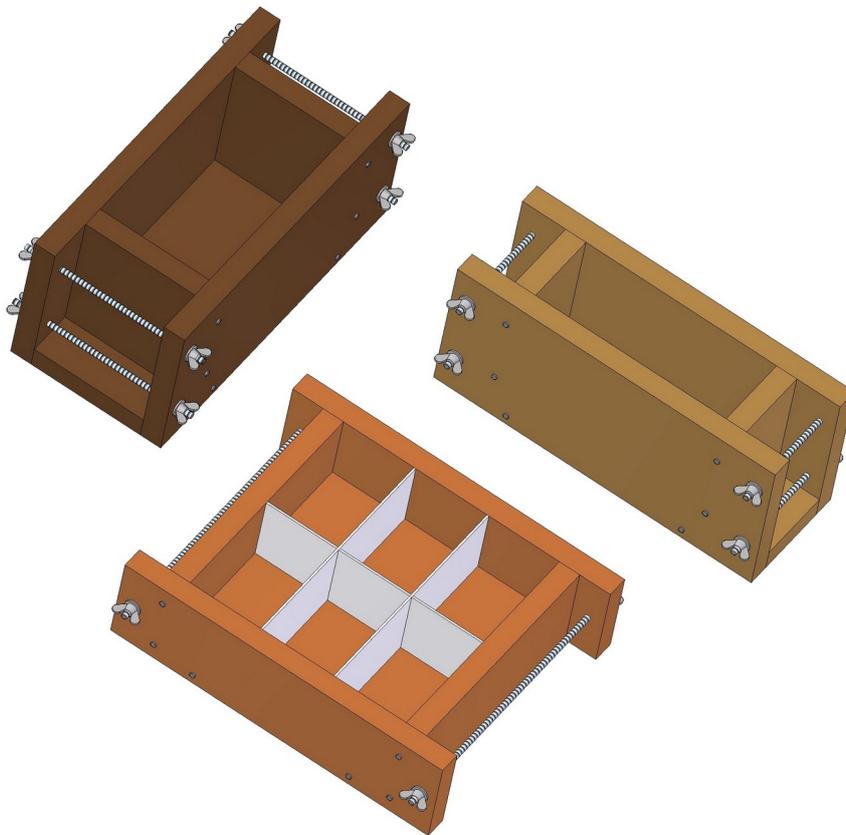


## Wooden soapmaking mold plans

The soap mold is one of the basic tools used by every soap maker. A variety of plastic or cardboard boxes, food containers, even cut milk packaging can serve as soap molds. Most soap makers initially use improvised soap molds, and later they buy or make a special-purpose soap mold. The most commonly used are silicone and wooden molds. Each of these has both advantages and disadvantages, but experienced soap makers can easily turn their cons into pros. This is confirmed by the fact that with professional soap makers both silicone and wooden soap molds are represented equally. However, these two types (log mold and slab mold) of molds vary widely in their characteristics.



The main advantage of wooden soap molds is their sturdiness and durability. They are ideal for cold process soaping when it is necessary for the soap to go through the gel phase since wood perfectly retains heat and slows the cooling process in the mold. They are also ideal for CPOP (Cold Process Oven Process) because wood endures heating to temperatures that are used in CPOP (50-75 degree celsius). On the other hand, if some of ingredients used in soap making tends to raise the temperature to the extent that there is a risk of overheating (like honey, sugar, milk, etc.), it is necessary to maintain the temperature of the soap in the mold as low as possible, so in this case silicone molds are better choice.

Before use, the wooden soap mold must be lined with freezer paper, or a silicone liner should be inserted, so that soap does not stick to wood.

In this project, you are presented with three soap mold plans:

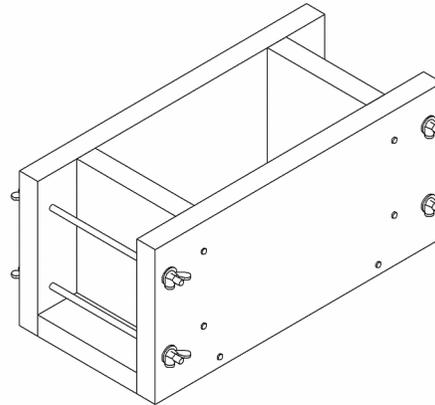
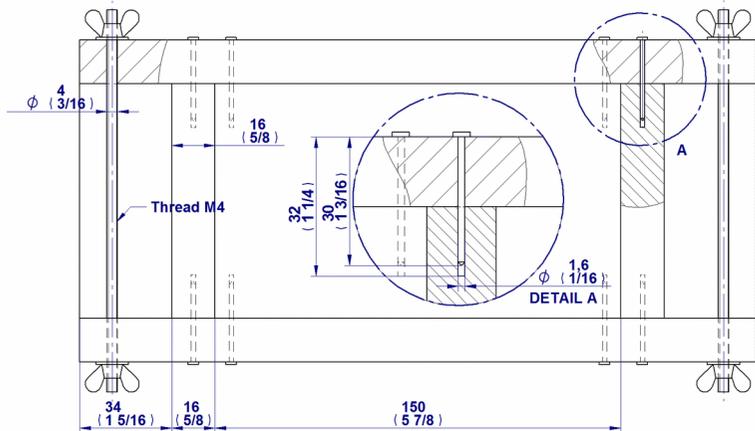
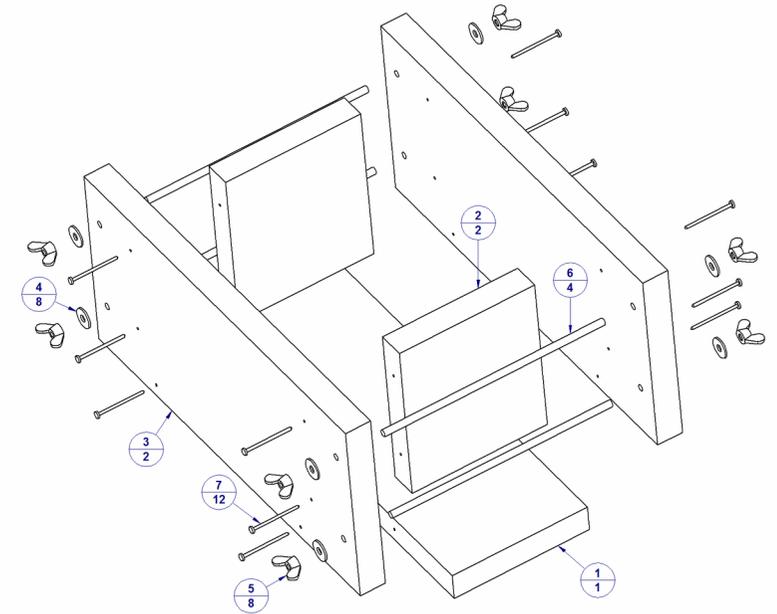
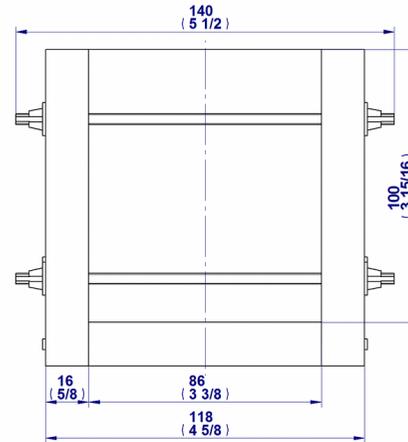
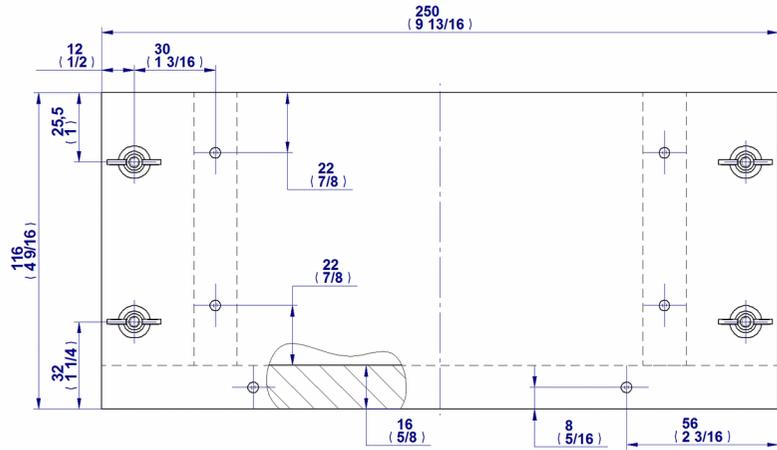
- 2 log mold plans (loaf mold and tall skinny log mold) &
- 1 slab mold plan



The molds are designed in such a way that they are fully and easily demountable, and different sizes can be assembled by combining of parts. Depending on the desired soap dimensions and how many bars of soap you want to get from one batch, you can calculate the needed mold dimensions. Our plan can be easily adjusted to your needs.

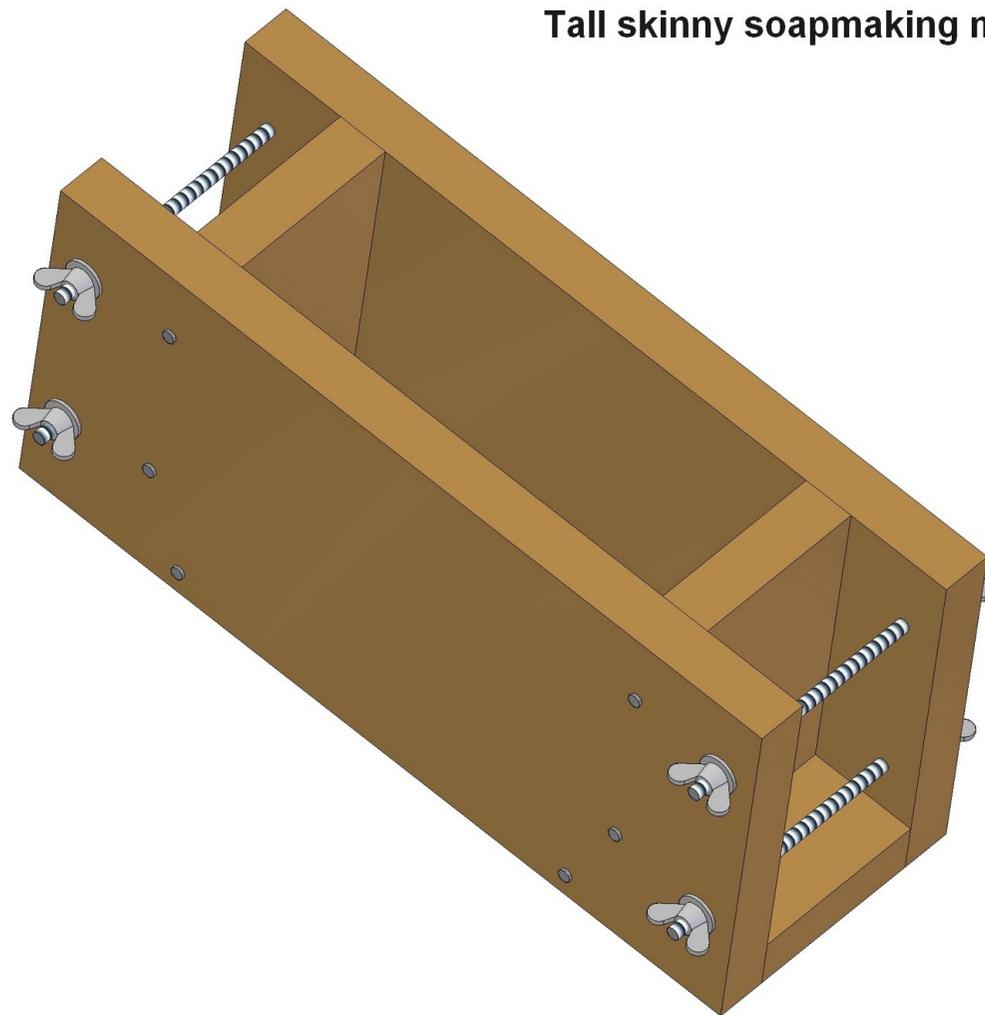
### Loaf soapmaking mold

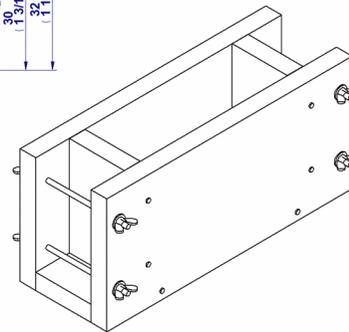
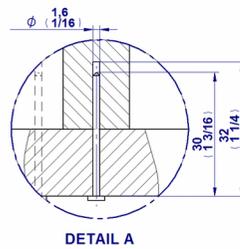
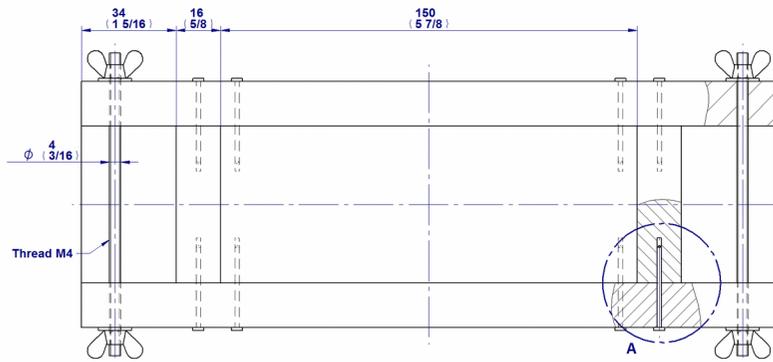
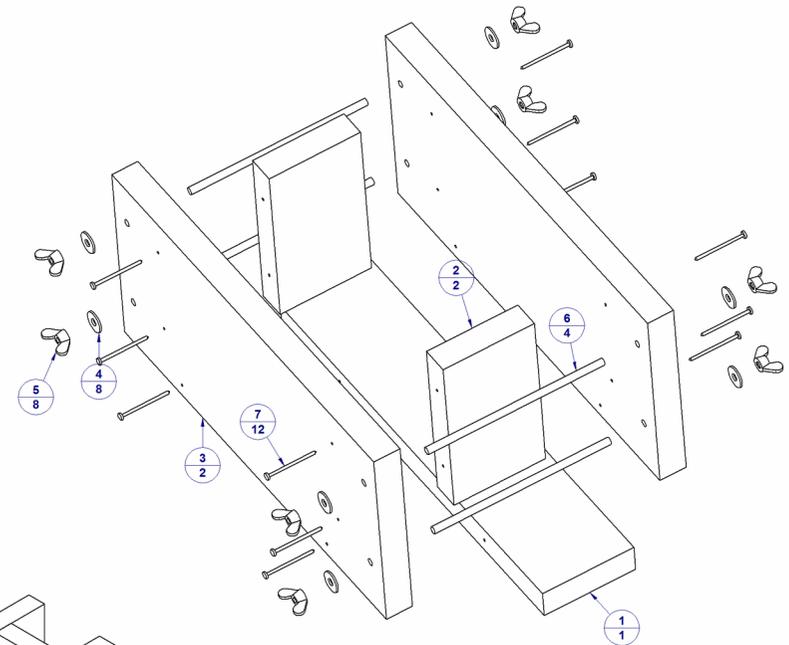
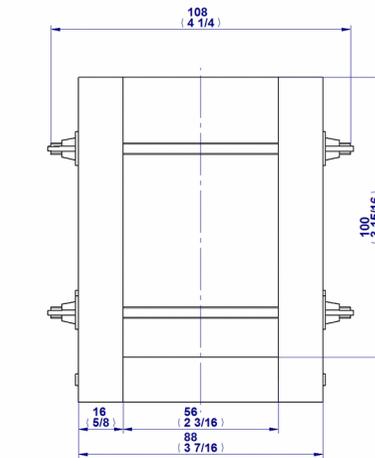
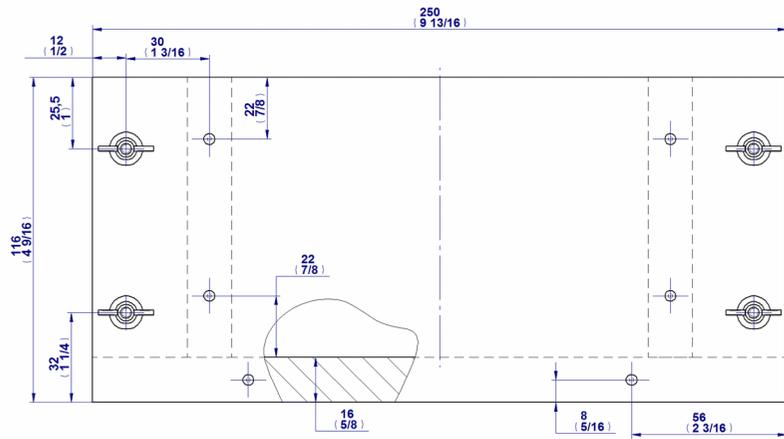




Item Number	Title	Overall dimensions	Quantity	Material
1	Bottom	250mm x 86mm x 16mm (9 13/16' x 3 3/8' x 5/8')	1	Wood
2	End	100mm x 86mm x 16mm (3 15/16' x 3 3/8' x 5/8')	2	Wood
3	Side	250mm x 116mm x 16mm (9 13/16' x 4 9/16' x 5/8')	2	Wood
4	Washer		8	Steel
5	Wing nut M4		8	Steel
6	Threaded axle	M4 x 140mm (5 1/2')	4	Steel
7	Nail D1.6 x 30mm		12	Steel

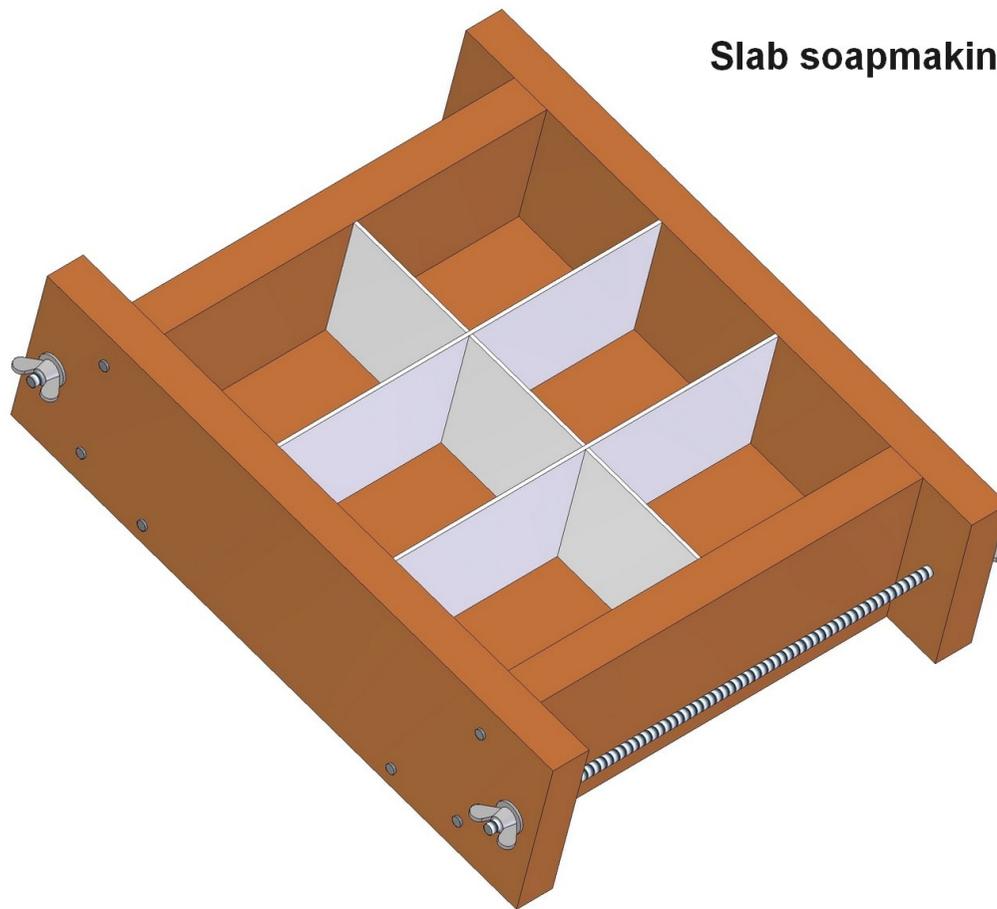
### Tall skinny soapmaking mold

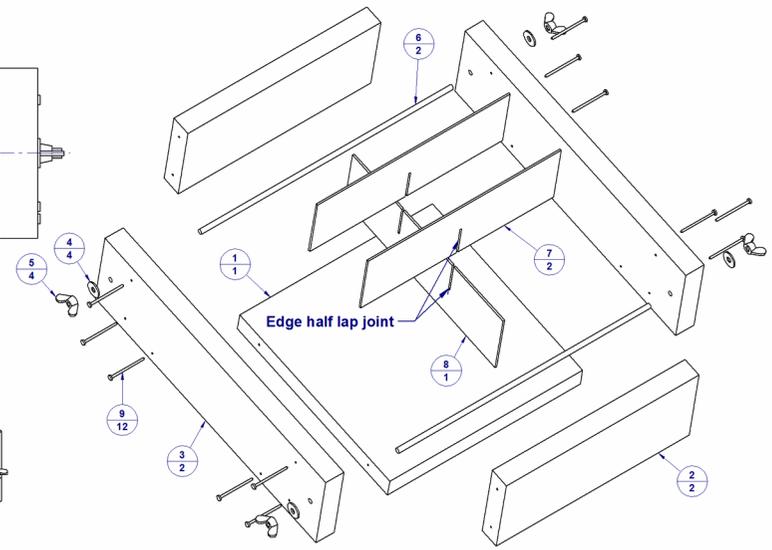
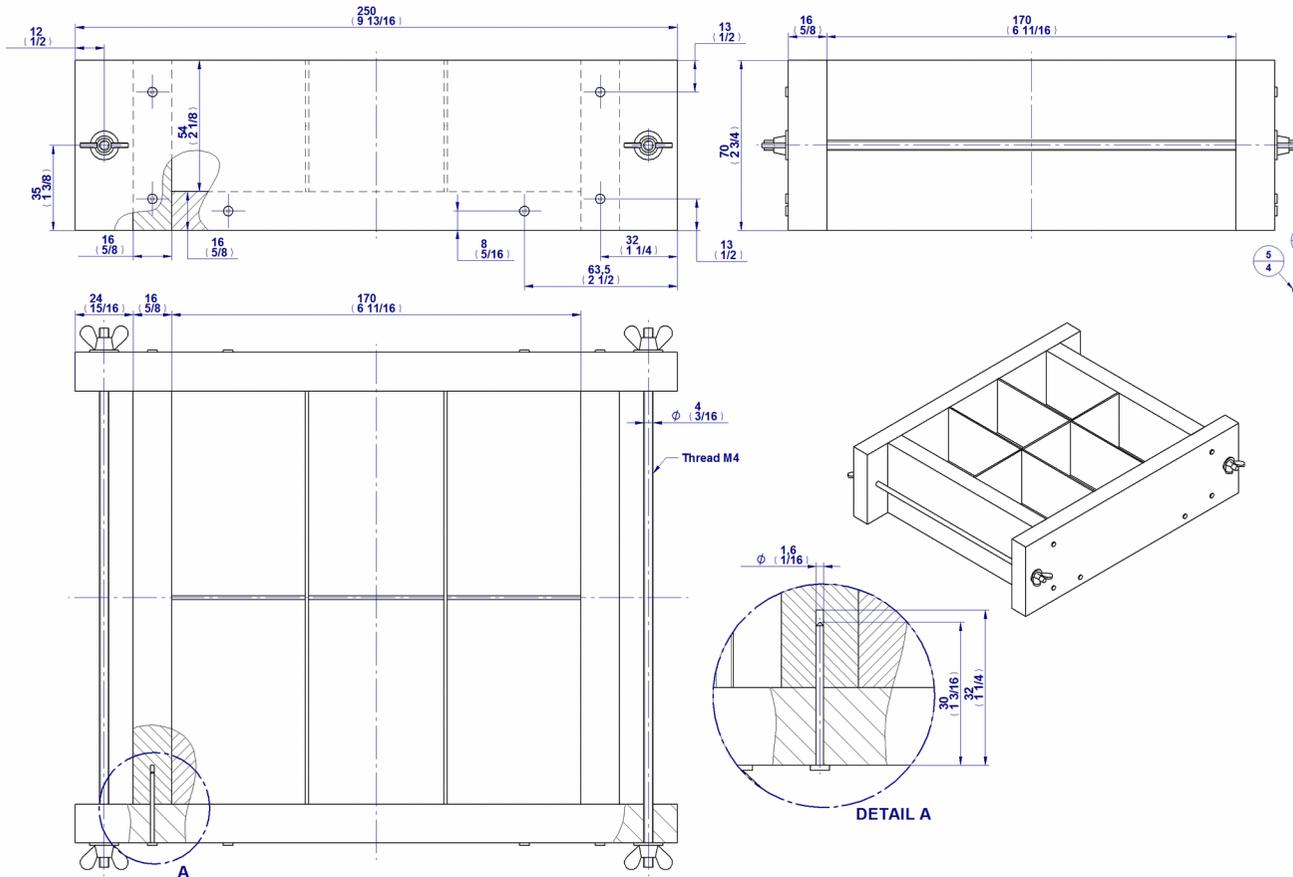




Item Number	Title	Overall dimensions	Quantity	Material
1	Bottom	250mm x 56mm x 16mm (9 13/16' x 2 3/16' x 5/8')	1	Wood
2	End	100mm x 56mm x 16mm (3 15/16' x 2 3/16' x 5/8')	2	Wood
3	Side	250mm x 116mm x 16mm (9 13/16' x 4 9/16' x 5/8')	2	Wood
4	Washer		8	Steel
5	Wing nut M4		8	Steel
6	Threaded axle	M4 x 108mm (4 1/4')	4	Steel
7	Nail D1.6 x 30mm		12	Steel

### Slab soapmaking mold





Item Number	Title	Dimensions	Quantity	Material
1	Bottom	170mm x 170mm x 16mm (6 1/16' x 6 1/16' x 5/8')	1	Wood
2	End	170mm x 70mm x 16mm (6 1/16' x 2 3/4' x 5/8')	2	Wood
3	Side	250mm x 70mm x 16mm (9 13/16' x 2 3/4' x 5/8')	2	Wood
4	Washer		4	Steel
5	Wing nut M4		4	Steel
6	Threaded axle	M4 x 222mm (8 3/4')	2	Steel
7	Divider 1	170mm x 54mm x 1mm (6 11/16' x 2 1/8' x 1/16')	2	Plastic
8	Divider 2	170mm x 54mm x 1mm (6 11/16' x 2 1/8' x 1/16')	1	Plastic
9	Nail D1.6 x 30mm		12	Steel

## Log mold plans

We believe that the optimal soap dimensions are 5.5 x 8.5cm (2.16 x 3.35"), with a thickness of 2.5cm (1"). Log mold length, therefore, depends on how many bars of soap you wish to make per batch. For example, for six bars of soap the length of the mold inside needs to be  $6 \times 2.5 = 15\text{cm}$ , and for 10 soaps – 25cm. If you want to cut off the loaf ends, increase mold length by 1 – 2cm (0.5-1").

### Tall skinny log mold plan



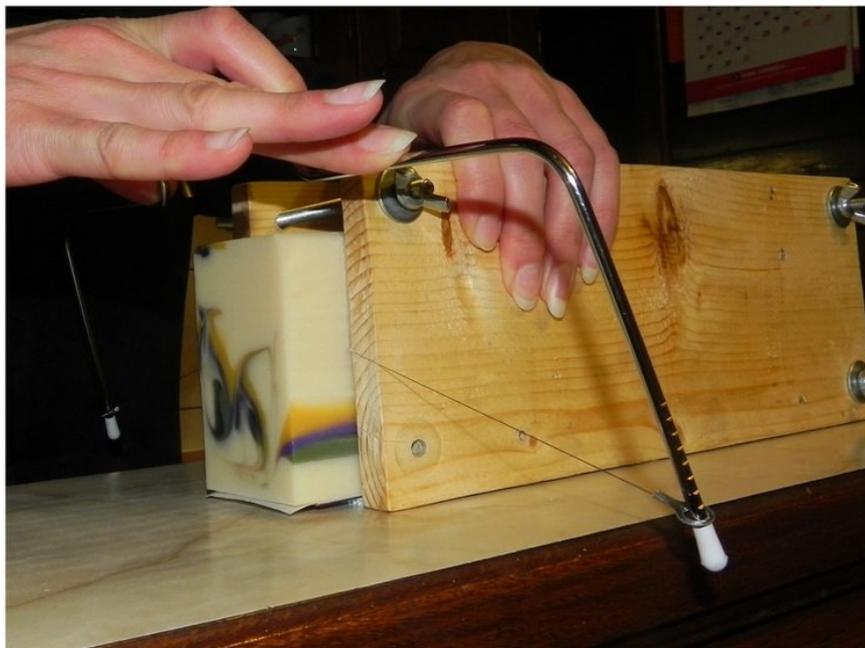
The tall skinny log mold in our plan has a length of 25cm (inside length 15cm / 6" - enough for 6 bars of soap or a batch made from 540g /19oz of oil); you can additionally make a mold with a side length of 35cm (inside length 25cm /10" - 10 bars of soap – 900g /app 2 pound of oil), i.e. by changing the length of side and bottom parts, mold length can be adjusted to your needs. With the width of the end and bottom parts you specify the soap width (in our case - 5.5cm). Mold inside cavity is 10cm /4" deep. This allows pouring to the height desired, filling the mold not completely, so that it can be covered for insulation with the lid not touching the top of the soap (this is very important with sculptured tops and swirled tops).

### Loaf mold plan



This loaf mold is similar to tall skinny log molds, the only difference is the width of the finished soap. In the following picture you can see how the soaps look like in each of the molds.

The log mold can simultaneously serve as an improvised soap cutter.



For this purpose it is necessary to remove the bottom part, one side part and a set of lower fasteners, and slightly loosen the remaining three fasteners so that the soap block could be moved in the mold. Once the end of soap loaf is taken out of the mold, the thickness of the cut pieces is defined (we suggest 2.5cm / 1''), and the edges of the mold sides then serve as a slot for guided cutting.

## Slab mold plan

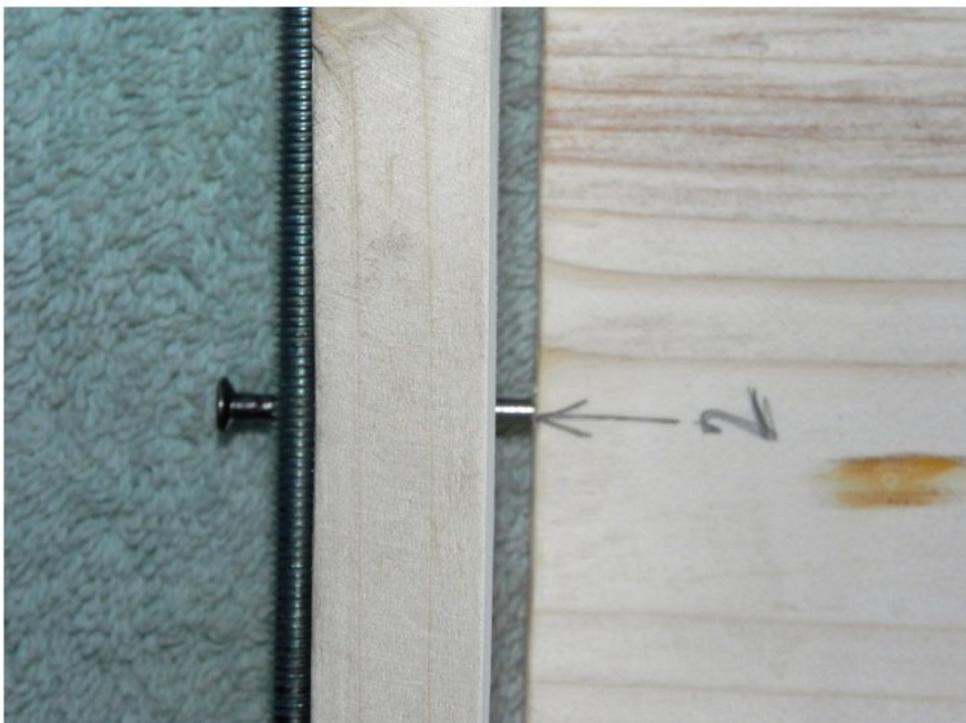


The slab mold plan presented here has internal dimensions of 17 x 17cm (6.7 x 6.7"), which is enough for 6 soaps of size 8.5cm x ca. 5.6cm (3.3 x 2.2"). Mold cavity depth is 5.4cm. For a soap thickness of 2.5cm (1") in this mold you need a batch made from 550g (19.4oz) of oil. If you want to use dividers, make them of solid but thin plastic. If you use thicker plastic, increase internal size of mold by as many mm as are taken by the dividers (e.g. 18 x 18cm).



In order to assemble the mold, neither woodworking joints nor glue are used due to the necessity that the mold is completely demountable, and that its demounting can be done easily, quickly and in just a few moves. The mold is mounted with fasteners (Threaded rod M4, Wing nut M4 and Washer). By turning the wing nut, the mold becomes compact enough for use. For proper placement of holes, both side parts need to be drilled in one session.

After pouring of soap batter into the mold, it is usually necessary to tap the mold on the tabletop to prevent air pockets. Therefore, it is useful to additionally join the parts together. This can be easily solved by drilling holes in which nails can be smoothly inserted and removed by hand.



The holes should be drilled when the mold is properly assembled and tight.



For easier assembly of the mold after use, mark the position of parts with a pencil so that you can always put them back to the position in which the nail holes overlap.



It is important that all the sides of the parts are flat, well-sanded, and fit well with one another as this minimizes the risk of leaking liquid soap batter after pouring.

We recommend that you make your molds of a light wood because mold parts do not suffer higher loads and a light mold will be much easier to handle. When choosing wood, it is desirable that:

- it can be sanded well in order to avoid injury due to splinters
- it is soft enough to allow pins to be used for fixing freezer paper



- it is well dried to eventually prevent deformation of parts.

Our recommendation is non-treated pine.

Finishing should not be done at all, either do oil or wax coating. You must not use paints and varnishes because they can react with lye to produce toxic compounds.

The soap batches obtained from recommended oil amounts and for the mold dimension that you are given here have been proven in practice. Since each soap maker has their own style of work (differing in amounts of additives, water discount, recipes that require different amounts of lye), not every time the same volume of soap is obtained from the same oil mass. Therefore, it is necessary that the soap maker has the possibility to change the mold length to be able to control the soap dimensions. With our log mold, this is made possible by moving its end parts.

Here are some examples of soaps made with the help of our molds:

- Handmade naturally colored soap made in wooden tall skinny soap mold



- Handmade soap made in tall skinny wooden soap mold



- Handmade soap with piped flowers made in wooden slab soap mold



- Handmade swirled soap made in wooden slab soap mold



- Handmade swirled soap made in wooden tall skinny soap mold



- Artisan swirled soap made in wooden tall skinny soap mold

