Proper Core Thicknesses and Profile

In general, a snowboard varies across three thicknesses:

- The tip/tail
- The binding area
- The center

The tip and tail are thinnest, the binding area is thickest, and the center of the board is very slightly thinner. Between each of these areas, the profile should smoothly change thickness.

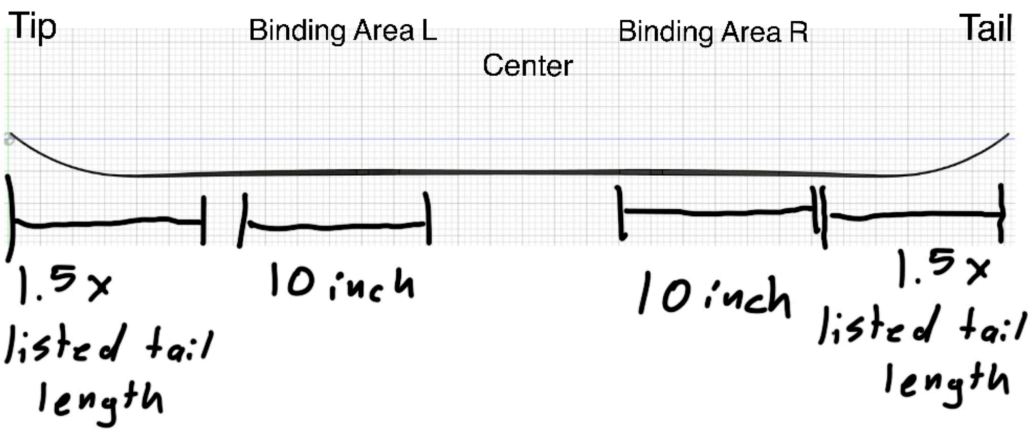
Here are my suggested thicknesses for your core:

Tip and Tail: 1.5-2 mm

Binding Area: 6-8 mm

Center: Binding Area minus 0.5 or 1 mm (5-7.5 mm)

The profile should, therefore, look like this:



The taper from the tip/tail to the binding area should be roughly 1.5x the listed tip/tail length of the board you are building.

The binding area should end up roughly 10 inches long and include all of the binding inserts.

The very center of the board will be thinner and taper up to the edge of the binding area.

Shape of a Mold

The shape of the mold is obviously vital to how the board comes out, so this is what you need to know about the final profile of your board and how it relates to the mold:

A board can be rocker, camber, or “camrock”

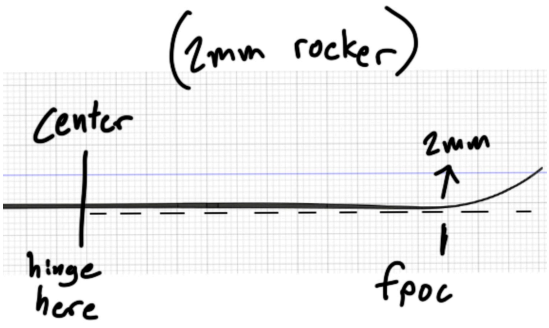
- Rocker: the ends of the board are hinged a certain distance up, off of the ground
- Camber: the center of the board is lifted up a certain distance off of the ground
- “Camrock”: the board goes from lifted rocker tip to lifted camber middle to lifted rocker tail, making two primary points of contact

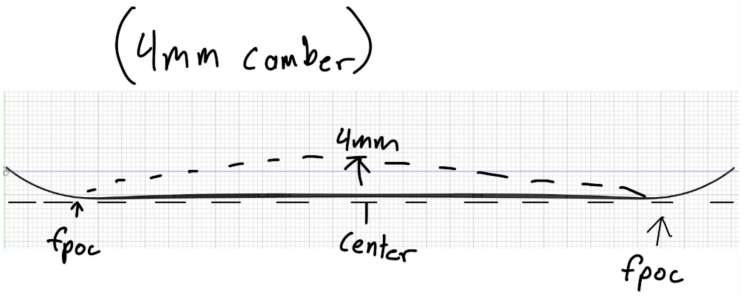
If your board has these features, you must add them to your mold template

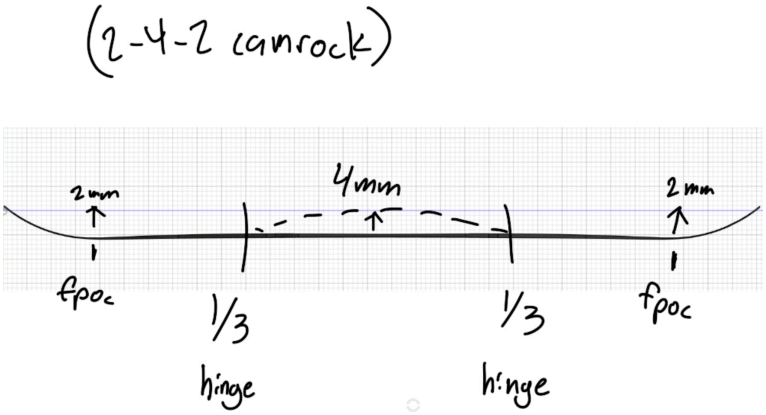
For rocker, design the board flat, then hinge each tip or tail up as though it is attached at the center, measuring the amount of rocker at the furthest point of contact (fpoc in image).

For camber, arch the center of the board the desired amount in a wide arch starting at each “fpoc”.

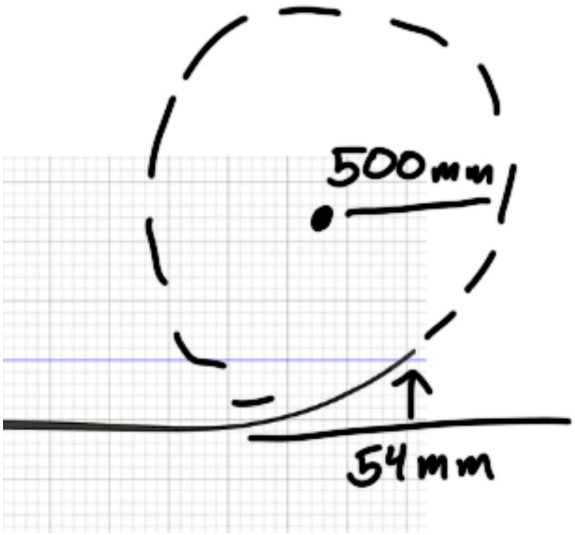
For “camrock”, divide the board into three sections and use the lines between them as your points of contact, hinging up from them for rocker and arching between them for camber.







It can also be difficult to find the radius and how tall the tip and tail curve of a general board should be. For this, I recommend lifting the nose about 54 mm and curving with a radius of 450 to 500 mm.



You should make the bottom of the mold first and make it follow the exact camber or rocker you want in the board. When making the top of the mold, however, you do not want to follow that same shape. First, make or use a template of the same shape. Then, go around to various points and measure above that curve what the thickness of your board is. At the tips, draw a line 2mm or so above the template. At the binding areas, 7, and so forth. After connecting those lines smoothly you have a new template shape. BUT, that is not yet correct either. You will be putting foam on top of the board, so do the same as before, adding the thickness of your foam on top of the new line.

I did this, but then added about ⅛ inch of cardboard on top of the foam to make up for how it would be thinner than ½ inch when squeezed.