

CLAY PRESS to make clay sheets

NOTE ON THE WOOD SELECTION

The critical thing about the boards is that they won't bow under the pressure on the clay. That's even more important if you put rubber feet or pads under the bottom board for traction or to protect a table. I recommend hardwood, like cutting boards, at least 1" thick.

The handle MUST be hardwood for two reasons. One is so the tremendous pressure on the bolt doesn't split the handle and, secondly, so the point where the handle contacts the top board doesn't wear too much. (See comment later about grain alignment.)



LEVER END DIMENSIONS

Whatever type of boards you use, these are the guides for how much to cut back your top board (as long as it's about 1" thick) and where to drill holes and mount the hardware.

ROUNDED EDGES

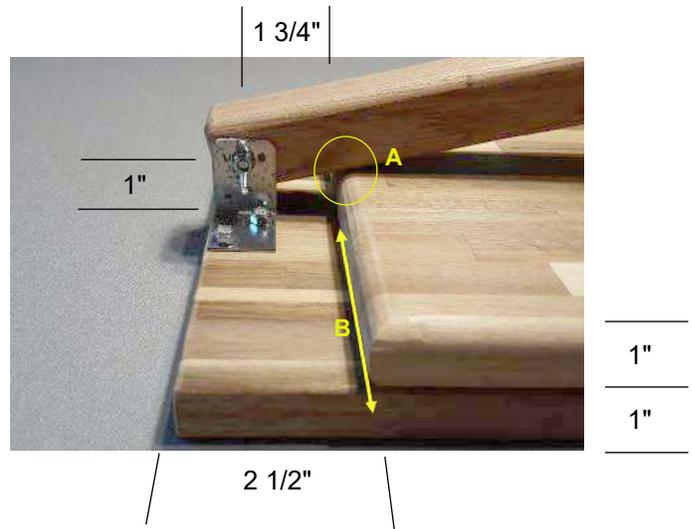
Rounding the edges of the boards is for comfort EXCEPT for two places:

Under the lever handle (A)

You should round over or bevel then sand the section of the top board directly under the lever handle so that the wood doesn't crush or deform and impede smooth movement. You can wax both surfaces as well.

Along the lower front edge of the top board (B)

This assists in gripping the top board to raise it.



Joist Angle
QTY: 2

10-32 x 1 1/4" flat head machine screw
w/ lock nut
QTY: 4



1/4-20 x 2" screw
w/ (wing)nut
QTY: 1

2x2 hardwood (oak)
QTY: 1

1 1/2" x 1 1/2" x 15"



3" narrow utility hinge
QTY: 2

Ikea
SKOGSTA
chopping block
QTY: 2

803.054.22

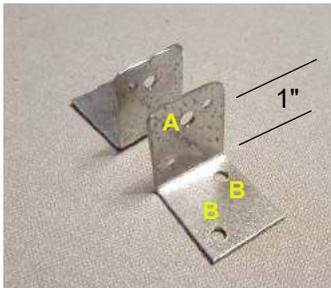
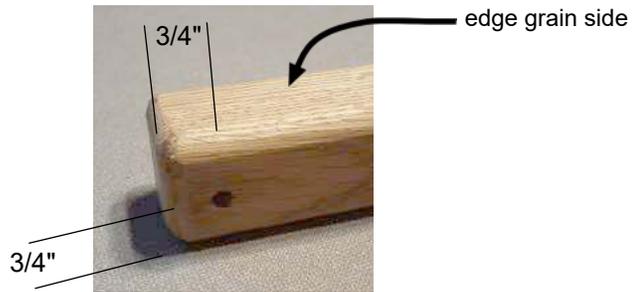
W: 11 3/4"

H: 1"

L: 19 3/4"

ASSEMBLING THE LEVER

HANDLE PREPARATION
Drill a 1/4" hole through one end of the handle so it passes through the grain layers of the wood.



Drill 1/4" hole (A) in each bracket and enlarge the mounting holes (B) to 3/16".



Assemble both brackets to the handle.



Center bracket assembly on the bottom board. Mark and drill 3/16" holes for the 10-32 x 1" machine screws.



Countersink the BOTTOM sides of the mounting holes to recess the heads of the machine screws,



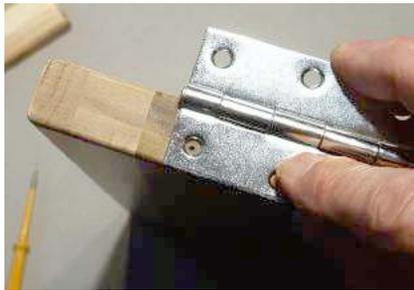
Insert the machine screws from the underside.



Install the lock nuts.
(You can use 1" round or pan head wood screws instead of machine screws, though I suggest inspecting them occasionally.)

ASSEMBLING THE HINGES

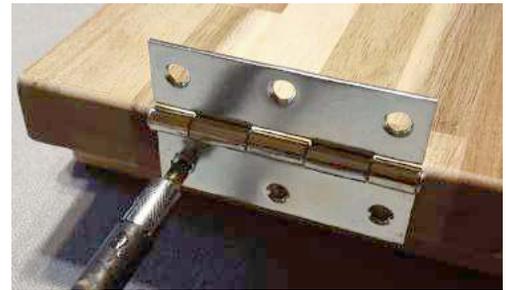
Evenly space the hinges on the bottom board and mark the location of one side of each hinge.



Place hinge against its location mark. Punch or mark one hole for each hinge.



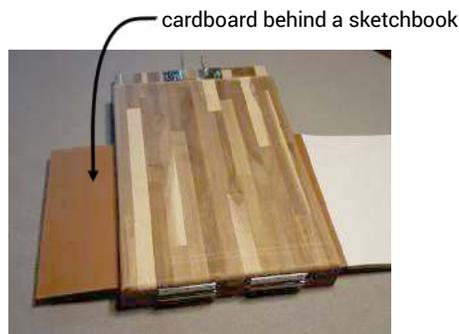
Drill small hole (5/32") for each center mark.



Snug each hinge with one screw. Align the hinge pin to be parallel with the top of the board.



Mark the centers of all the other hinge holes then drill and install the remaining screws.



Use a cardboard spacer between the boards then mark and drill the hinge holes in the top board.



Install the screws for the top board.