



CONSTRUCTING AN ADJUSTABLE & REUSABLE MOLD BOX

SCULPTURE SUPPLY CANADA

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The purpose of a mold box is to contain liquid rubber after it is poured over and around a model until the liquid turns to a solid. A mold box does not have to be a complex structure depending on the size and configuration of your model, often a coffee can, cake pan or plastic bucket will suffice. If you make molds of flat – two dimensional models on a regular basis, constructing your own mold box will help you use less rubber to make great molds.

Materials Needed:

Original Model - (15" x 10.5" x 1" is used in this scenario)

Melamine Board - x1 - Dimensions: 20" x 16" x ½" thick

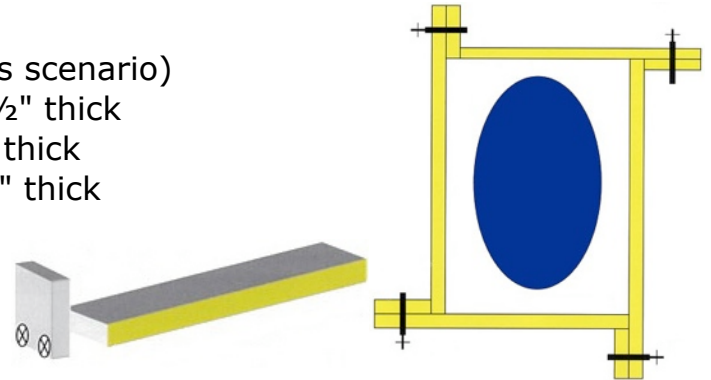
Melamine Board - x4 - Dimensions: 2" x 3" x ½" thick

Melamine Board - x4 - Dimensions: 2" x 22" x ½" thick

1" Wood Screws - x8

Push-on clamps - x4

Hot melt glue gun



STEP 1: Cut and Assemble Retaining Walls

To accommodate our model, we have constructed retaining walls out of ½" thick melamine board strips. We selected melamine board because most mold rubbers release easily from melamine. Four pieces measuring 2" x 3" were cut for the shorter side of the retaining wall and four 2" x 22" pieces were cut for the longer side of the retaining wall. These pieces were then assembled together in an "L" shape with push-on clamps.

STEP 2: Secure Model To Baseboard - The baseboard should be at least twice the size of the original model to allow enough "working space". Secure the model to the backboard by applying a bead of hot melt glue around the perimeter of the reverse side of the model. Press model firmly onto baseboard and create a tight seal where the model meets the baseboard. This will prevent liquid rubber from leaking underneath the model.

STEP 3: Assemble Retaining Walls Around Model - Place retaining pieces around the model, making certain there is at least a ½" clearance between the original and the retaining wall. This ½" gap will equal the wall thickness of the cured rubber mold.

STEP 4: Clamp Retaining Walls Together - Fasten the retaining walls together with push-on clamps and apply hot melt glue to any seams where the liquid rubber may leak out. This includes seams where the retaining walls meet the baseboard and also where retaining walls meet one another. The smallest gap between the retaining walls could result in the liquid rubber leaking out of the mold box.

STEP 5: Pour Mold Rubber - Mix and pour mold rubber onto model and let cure. Be certain that the liquid rubber levels off at least ½" above the highest point on the model. Let rubber cure overnight. It is very important that an appropriate sealer and release is applied to the original and the mold box..

STEP 6: Removal of Retaining Walls and original. - After the rubber has cured, remove the retaining walls away from the cured mold and flex rubber mold to remove original model.