

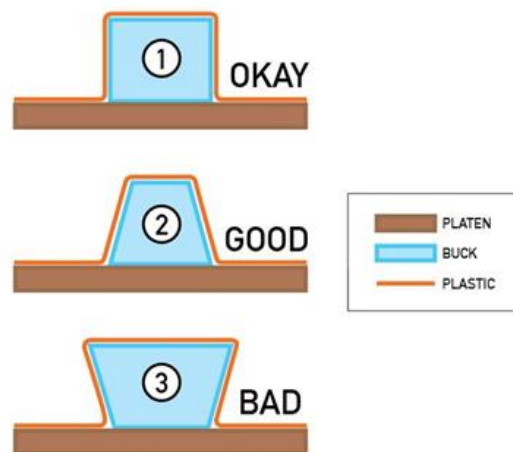
Vacuum Forming Materials Prep List

Prior to vacuum forming, you will need to consider and prepare the following items in your designing phase.

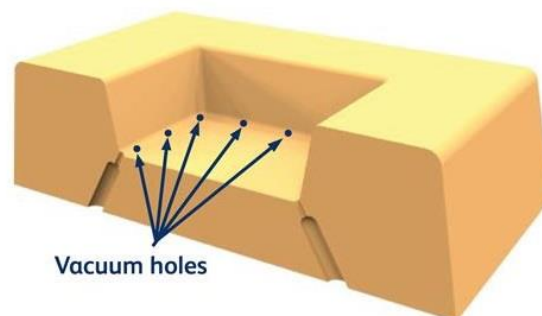
Vacuum Forming Buck:

The “buck” is the object to form the thermoplastic sheet around, and its material properties and shape should be taken into consideration during the initial design process.

- The object should be solid enough to not buckle underneath the pressure and heat of the thermoplastic
 - Wood, plaster, 3D printed, and specialty foam forms work best
 - Raw pink foam bucks do not retain surface detail well during forming and will partially collapse
- Avoid undercuts in the design to allow for the buck to be easily removed after forming



- Bucks must be smaller than 18 x 18” in both directions
- Large bucks may benefit from paperclip-width holes in the crevices/valleys of the form to allow a channel for air to escape during the forming process



Thermoplastic Sheet:

Not all plastic sheeting is adequate or safe for thermoforming. The Digital Fabrication Lab vacuum former is calibrated to work best with PETG plastic.

- Recommended PETG plastic thickness is 0.04 – 0.08” thick
- Sheets must be cut to exactly 24 x 24” to adequately fit within the frame
- CoACM students will be provided plastic for class projects
 - o For specialty CoACM projects that require additional or different plastic, please consult with staff for assistance prior to purchasing materials
- The protective coating must be removed from both sides of the sheet prior to forming

Mold Release:

All objects/bucks benefit from the use of a mold release agent prior to forming to assist with the removal of the buck from the formed plastic.

- CoACM students will be provided spray-on mold release for class projects
- Most spray-on mold release agents are adequate for vacuum forming, however please consult staff if you have any questions regarding mold release and your object/buck’s material-type
- Brush-on or hand-application mold release agents, such as Vaseline or Crisco, are also adequate options, however their application is thicker and brushstrokes from their application will likely show in the formed plastic