

Design & Manufacture

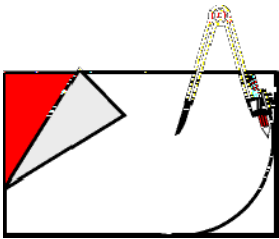
Homework 31

Marking Out in Plastic

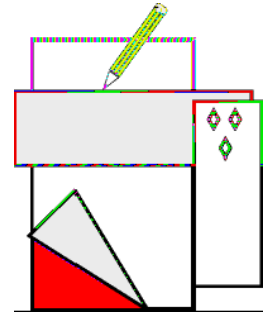
Plastic in schools is normally in sheet or rod form. The sheet plastic is often protected on both sides by a layer of paper or clear polyethylene. These layers protect against accidental scratching and therefore need to be kept on as long as possible.

Marking out needs to be done on the protective layer if possible. Normal pencils can be used on the paper layer. The polyethylene layer will need a chinagraph pencil or a spirit based pen such as an overhead projector (OHP) pen. (use a non-permanent pen)

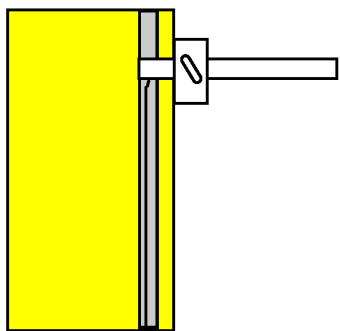
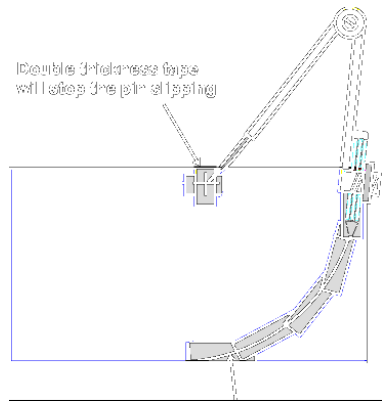
Marking out a line on the protecting layer over a sheet of Acrylic



Marking out a curve using a pencil compass.

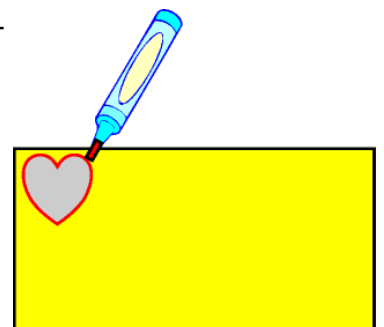


If the protective layer has been removed then masking tape can be used to cover the area to be marked out.



Using a marking gauge to scratch a line along the masking tape. The scratched line can be made clear with a pencil afterwards.

Using a non-permanent spirit marker to draw directly upon the plastic, around a template



Remember:

Always mark out in the corner of a sheet of plastic to reduce the amount of waste and to make it easier to cut out.

Note:

If the plastic is to be cut out on a scroll saw or band saw, the masking tape will also help in keeping the temperature of the plastic below its melting point, so that the cut does not weld itself back together again.

Questions

1. Why are sheets of plastic often covered with a layer of paper?

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2. What markers can be used on the surface of Acrylic?

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3. How can the point of a compass be stopped from sliding over the smooth surface of a sheet of plastic?

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4. Give two good reasons for using masking tape on unprotected sheet plastic.

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5. Illustrate the reasons why shapes should be marked out in the corner of a sheet of plastic and not in the middle.