

HOW TO MAKE AN ORIGINAL WINDOW

A list of materials required is in the article entitled “how to make silicone rubber molds”

You can use this method to make any window of any size of any style. Your imagination can be your guide. I will just show you the steps involved.

You can then make a silicone rubber mold and reproduce the window as many times as you like saving a lot of money and being able to be original in your design.

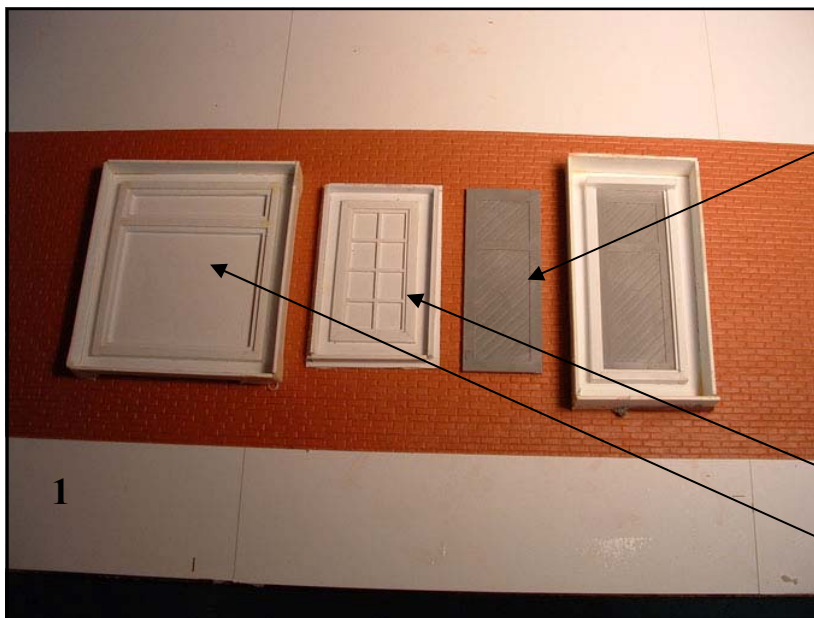
It would be advisable to read all the instructions before you begin.

The following photos give you a small idea of what can be done.

Using the different widths and heights of the Styrene Strips one can make wonderful windows and be able to duplicate them several times.

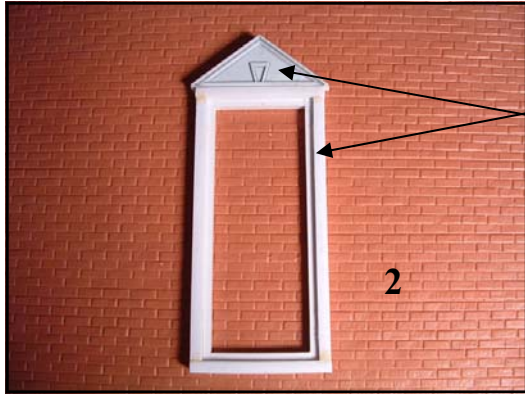
Not only are windows expensive to buy but you are limited in style. Not so, using this method.

Just make sure to take your time when making an original window . It will be well worth your time and effort.



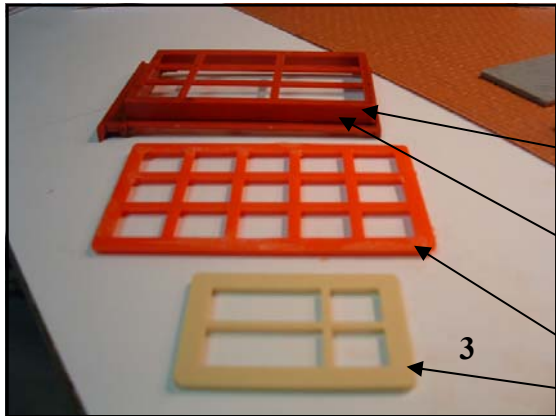
This is a door taken from a kit and inserted in a door frame to make a factory door. **Once you have cast the door in resin**, drill a tiny hole for the doorknob and use the cut off head of a nail as the knob. Works really well.

These are just other windows I made which can be used in any application.



Make this window frame

By adding a peak taken from a house kit you now have a custom window and by making a mold you will be able to duplicate it several times



On photo 3 you are looking at the back of the windows

You can also use prefab windows as long as the back of the window is flat and has no flange like this one

This one cannot be used, it has a raised part on the back.

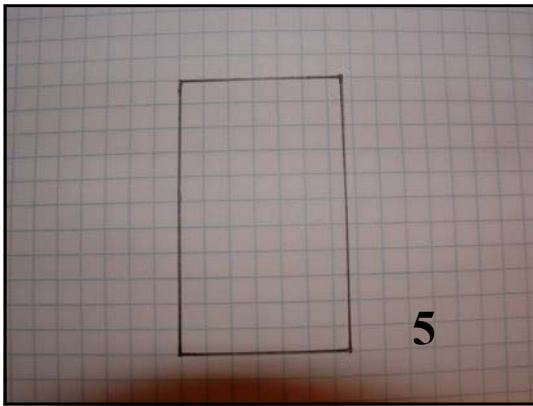
These two could be used because they have a flat back to them.

NOTE: You will be building your window on a piece of styrene. **All pieces will be glued right side up!** Every piece used to make the window will be glued down. All the relief (raised part) will be on the good side. The back should not have any raised part at all.



As photo 4 shows you can make any type of window you want. Just make sure the scale is right 1/2" to the foot for GScale.

Let's begin...



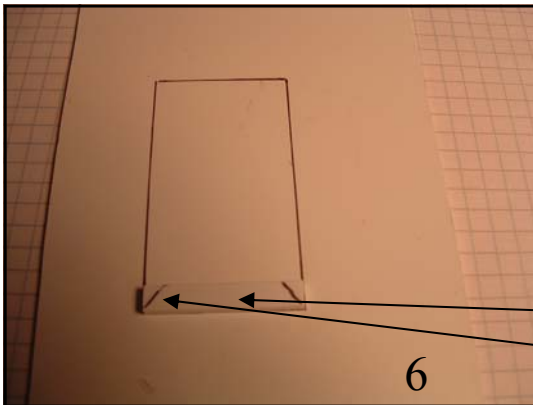
On a piece of graph paper determine the outside dimensions of the window you wish to make

This will give you an idea of the size of the window (remember scale!)

Using a hobby square :

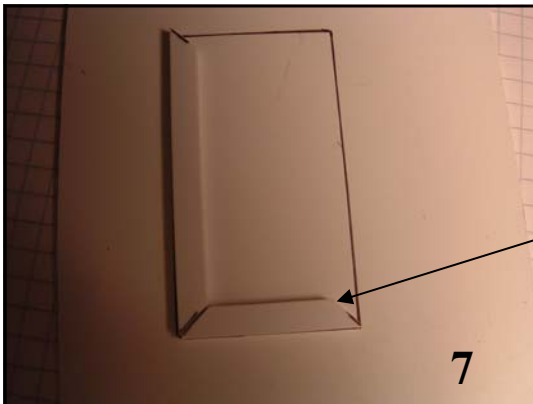
Duplicate the size of the window on a piece of styrene, the piece should be big enough to be able to put a box around it leaving at least 1/2" all around the window.

I used styrene strips # 90789 for the outer frame
And 90760 for the inside frame and mullions



Measure your first piece as shown in photo 6 and mark your angles this will save you a lot of mistakes when cutting....

Using a miter box and a hobby saw or better still the "Chopper II" cut your angles



Continue measuring and cutting as explained above until all pieces have been cut

Check that your window is square!

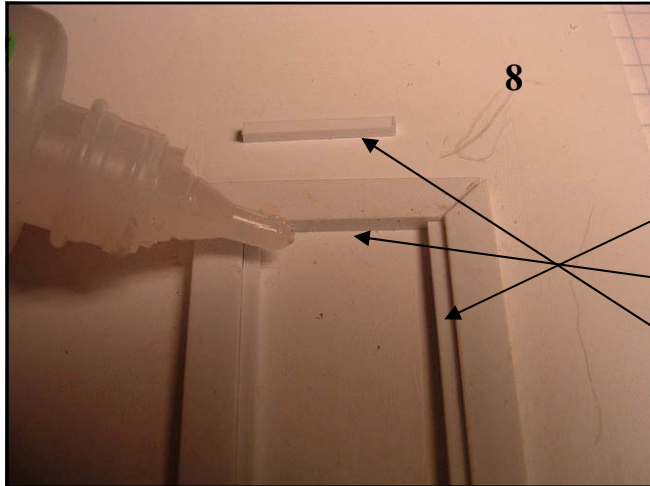
Check to make sure all pieces fit together tightly with no gaps at the corners Or very little!
You will fill those gaps in later....

A note on gluing styrene to styrene

Use Zap-A-Gap glue and it's accelerator

When making windows you will always put the glue down first where the piece will eventually go. You have very little time to put the piece down before the glue starts to set. Once it is in place hold for a few seconds to make sure adhesion has taken place. if you see an excess of glue anywhere, wipe it off immediately with a paper towel. You may use glue accelerator but make sure you wipe any excess off also. The idea is to have a very "clean" window when you are

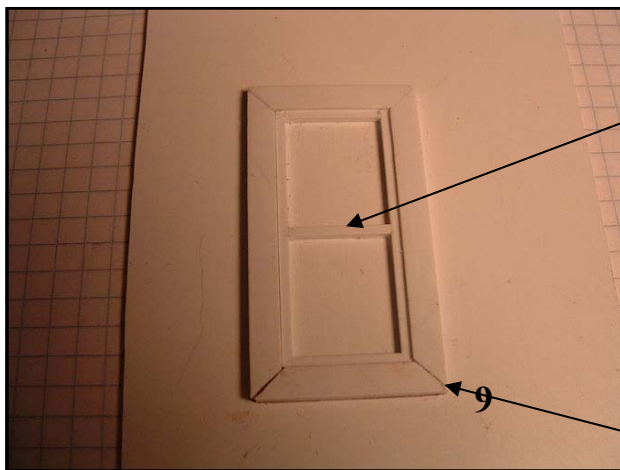
finished. The RTV Rubber will pick up any imperfections!
If you make a mistake in gluing you must use an exacto knife and carefully remove the piece.
Scrape off any glue residue before continuing.



Next step : the inside frame can be any height you want as long as it is not as high as the outside frame.

There is no need to cut 45degree angles either.

Here I am putting glue down ready to accept the upper part of the inside frame.



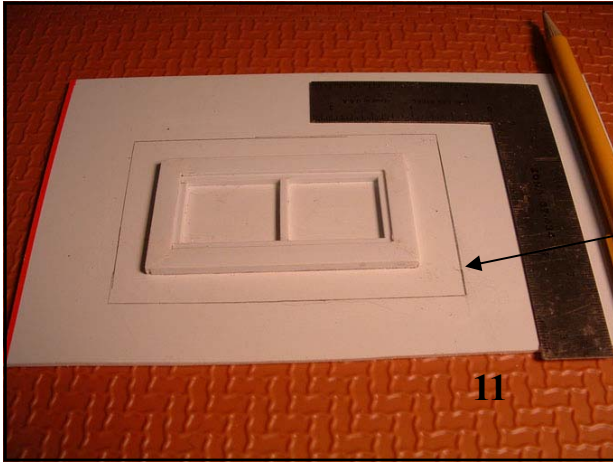
Cut the mullion the correct size to fit inside the frame as shown

Glue the mullion in place

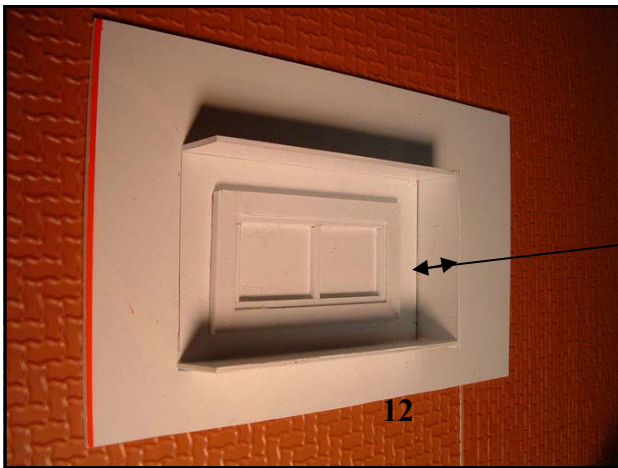
You have now completed your window. Make sure the pieces are glued down securely, you don't want to have any RTV Rubber leaking under your pieces .



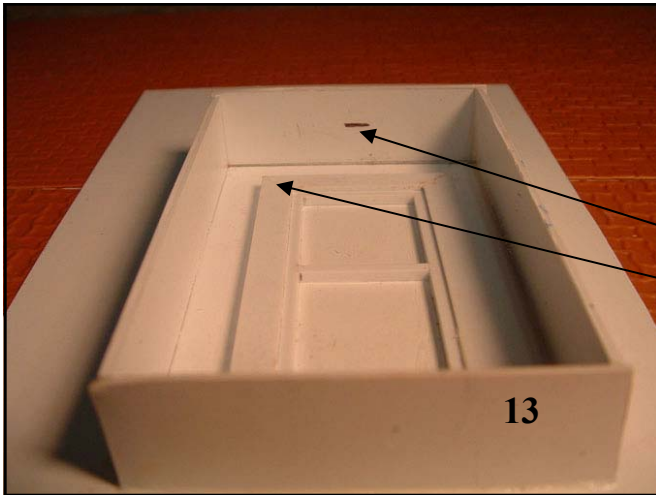
Put Polly Filla fill in the cracks and let it dry for 1/2 hour, then sand with fine sandpaper.



Using a square make a line around your window indicating where the outside box (which will accept the RTV Rubber) should go.



Cut your pieces the right length. The height should be 1/2" higher than the highest point of your window.

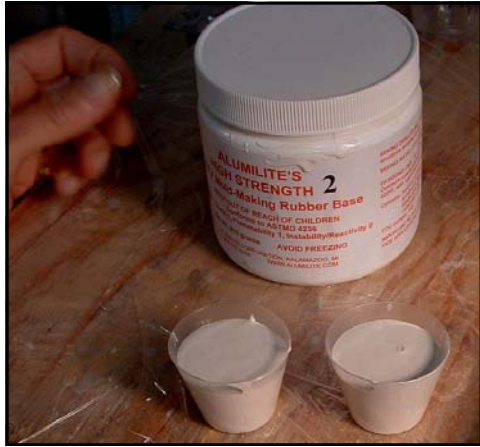


You have now completed your box and it is ready to accept the RTV Rubber

If your box is a little too high, don't worry, better to be too high than not high enough!

Simply make a mark 1/2" higher than the highest part of your outside frame. You will pour the RTV Rubber to that level.

You are now ready to mix the RTV.....



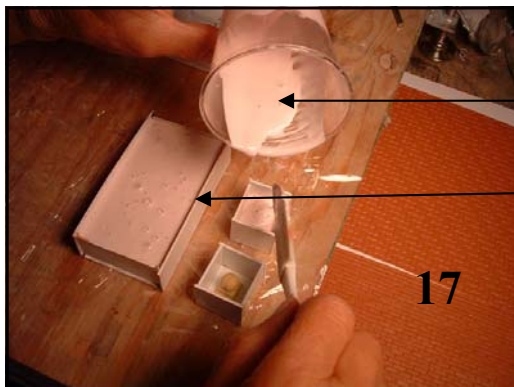
Using the 2 (1oz) measuring cups provided in the RTV Rubber kit fill them to the 1oz mark with the RTV rubber base.



Pour the two (1 oz) cups into a clear plastic drinking cup and mark as indicated. Determine if you have enough rubber to fill your window mold



If you have enough RTV in your drinking cup, add the 1 scoop of catalyst to it. As you can see it is pink in color. The reason is: When you mix the catalyst in the RTV Rubber you will mix until the mixture is a light pink throughout! You have plenty of time to do this so don't rush. **When you mix, mix slowly trying not to incorporate too much air in the mixture. The air will cause bubbles and you want as few bubbles as possible. They will show up when your mold is filled. The bubbles will rise to the top**



As you can see the mixture is now a solid pink color with no striations so you are ready to pour in your mold. Pour mix in your window mold, slowly, again not to incorporate too much air. **If there are any bubbles that rise to the top burst them with a toothpick. This may occur for 15 min. after you have finished pouring. Take the time, and watch for 15 minutes. Pour any extra rubber in your "extra molds"**

Photo 22 shows bubbles

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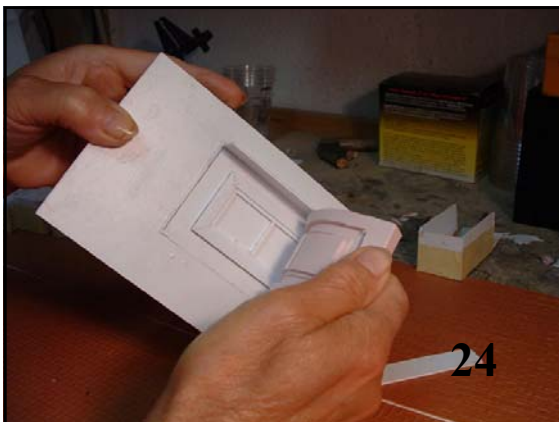


You can use an exacto knife or a toothpick to burst the bubbles that come up for about 10 min after you have poured your RTV in the box

Once you are satisfied no more bubbles are coming up, let it sit for a 14 hours or more.....

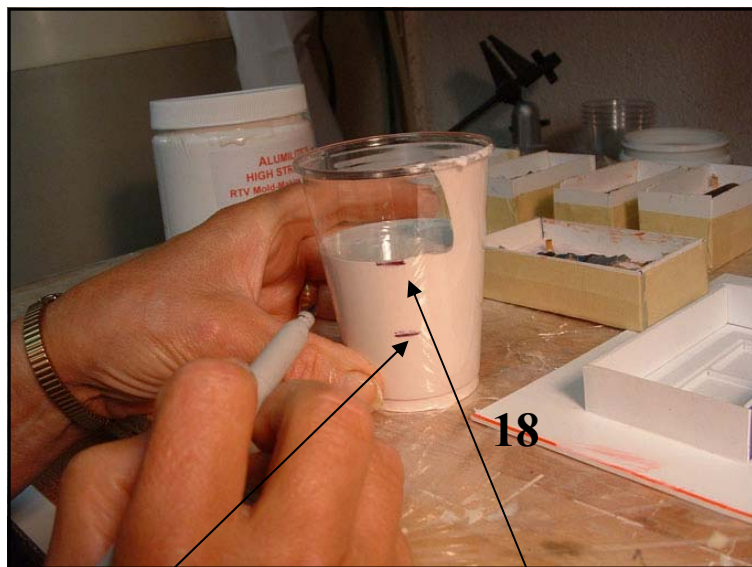


Remove one or two sides of the box to facilitate getting the rubber mold out.



Remove rubber mold

Move on to the next step which is again crucial to your being able to cast a clean window!



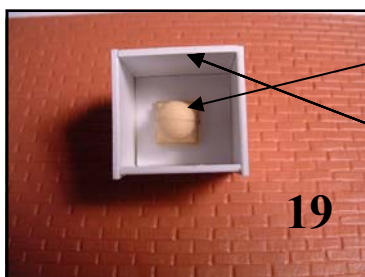
2 oz
mark

4 oz
mark

NOTE

If you are pouring several molds at once, you can double up on the Rubber but **put the correct amount of catalyst for doubling the batch**.

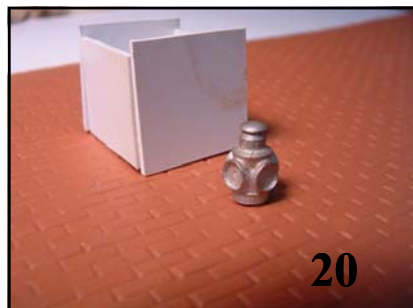
Make sure you remember the quantities you are measuring. The proportions have to be right! **2 oz rubber to 1 scoop of catalyst.**



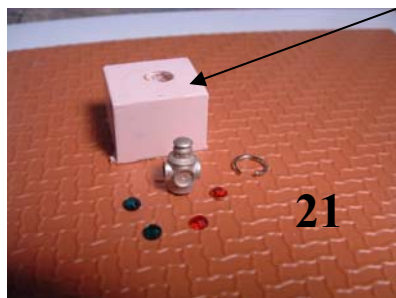
This is a post cap, can be used as decoration on a house. Always make sure the scale is right.

Just make a box to encompass the item with enough space around it as shown. Put a small dab of glue and press it down in the middle of the box.

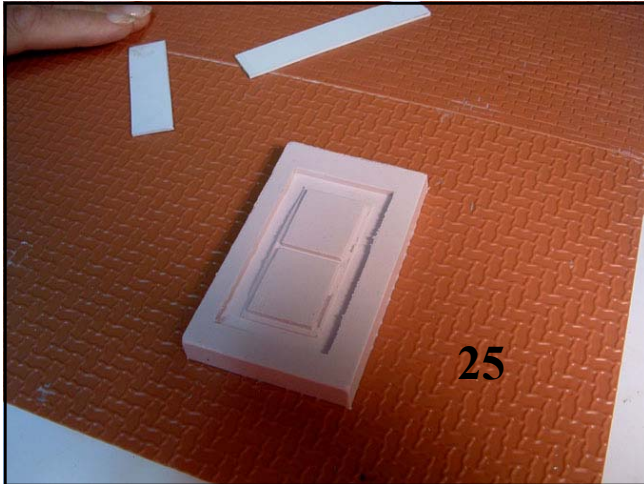
RTV Rubber is expensive so you must always have some extra molds ready just in case you mix more than is required for the mold you are working on..... That is the reason why you make one piece molds



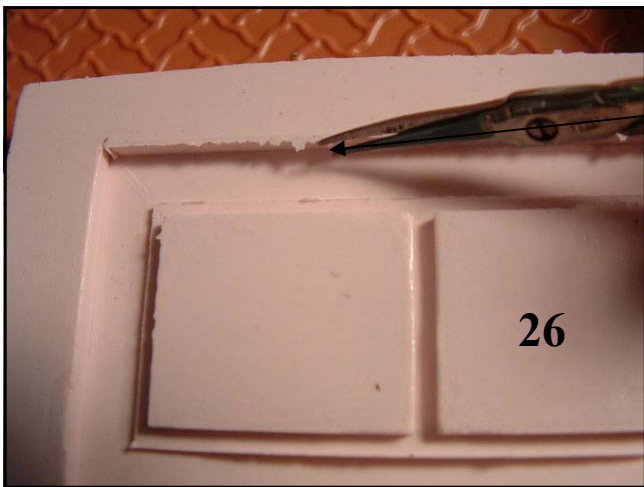
You can buy a lantern (right scale) and duplicate it several times with a mold After casting one our of resin,



Paint the lantern black.... You can then go to Michaels and buy flat glass beads red and green (the appropriate size and glue them on. **2** Then at Michaels again get a pkg of jump rings 7mm , drill a small hole at the top to put the ring in (do this with a "Dremel" tool) Voila ! you can put a lantern in someone's hand!

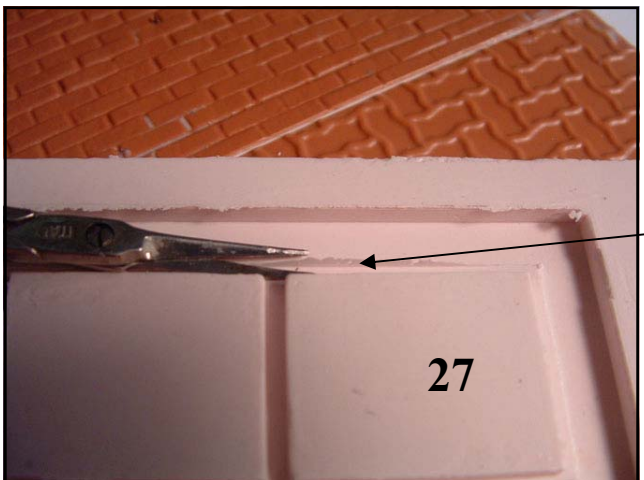


Mold of your window now ready to be trimmed



Remove any excess rubber around the outside perimeter with a pair of cuticle scissors. Be very careful doing this, you cannot afford to cut in where you don't want to, if you do, you have ruined your mold!

\Take your time and be exact!



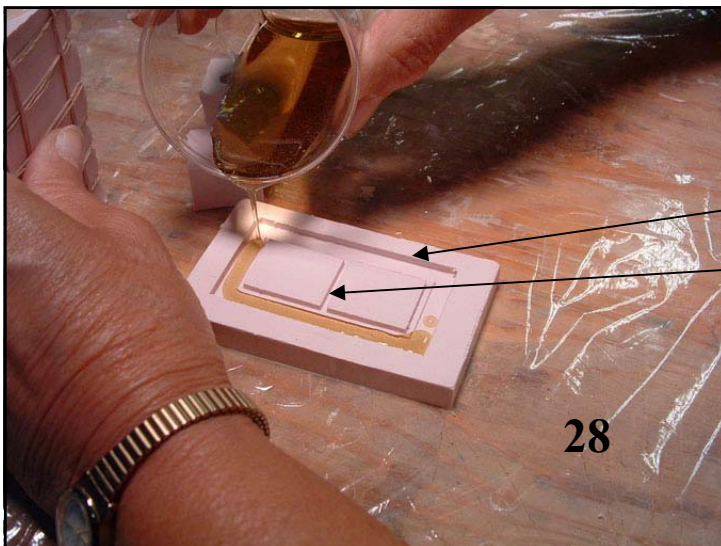
Do the same thing around the window panes!

**Congratulations! You have now completed your mold!
If it is not perfect the first time, the second one you make will be!**

Mixing & Pouring Resin

With a fairly stiff brush, powder your mold with baby powder. This step will protect your mold. Resin conducts heat and the powder helps to protect your mold when it is used many times over.

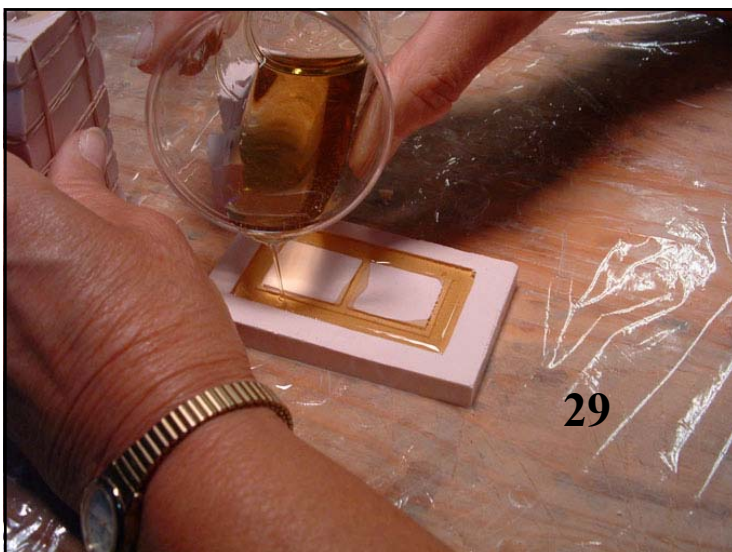
Follow directions for mixing resin on Pages 21– 22– 23– in the article “How to make a two part rubber mold and cast a figurine” (on this web site)



After mixing, immediately start pouring in a steady pour as indicated in photo 28.

Only fill to the top of the outside frame here

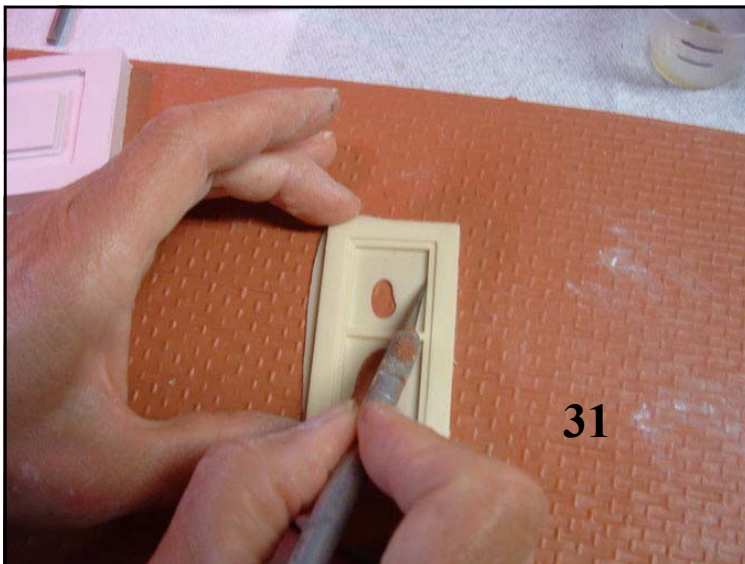
Make sure all the spaces are filled but do not overfill



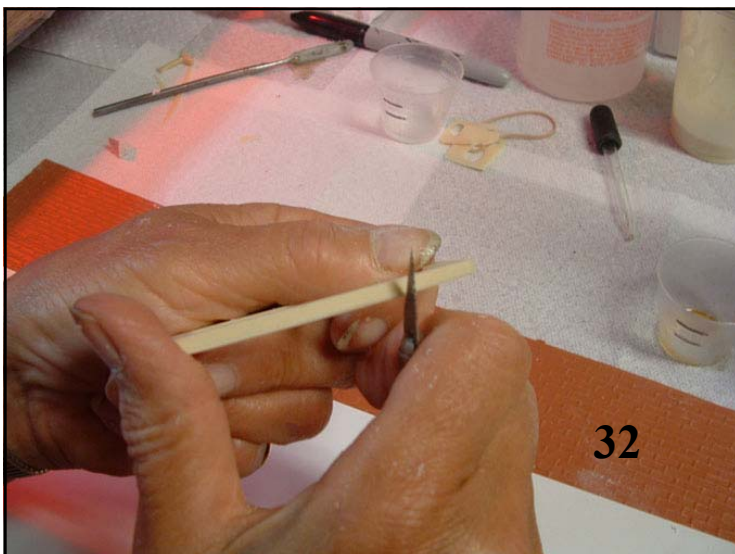
You have finished pouring your window mold



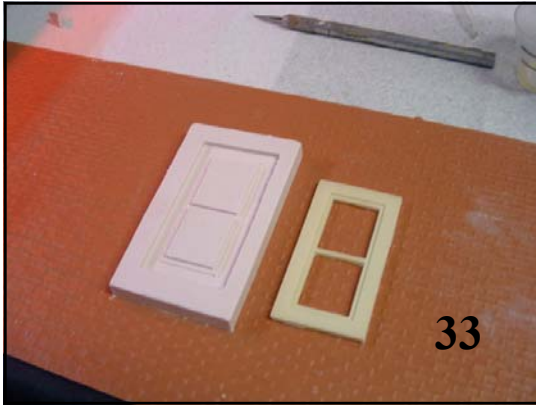
Gently remove the cast window.



Cut the window flashing with your exacto knife



Clean outer frame.
Remove any extra resin

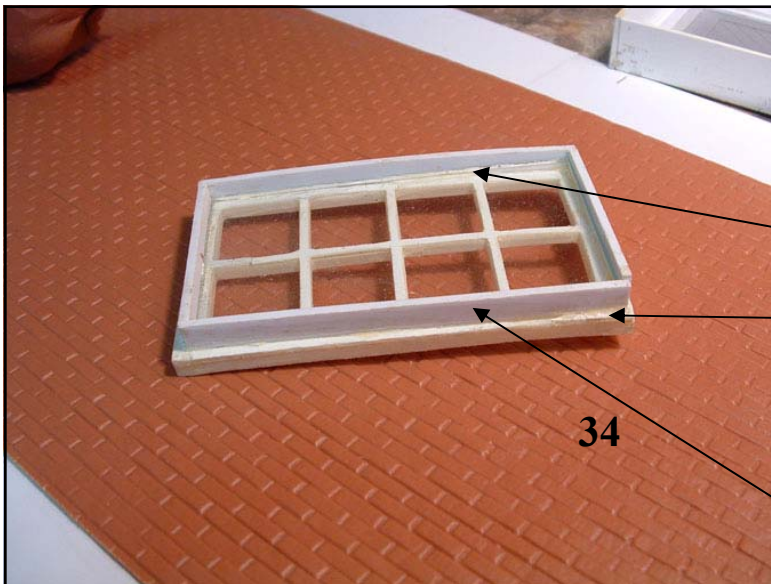


Congratulations!
You have now finished your first window mold and have cast your first original window.

Now you can make any window any size you want!

Fault Fixing

When pouring resin in a window mold, if you over pour the back of your window will be rounded. You must have a flat surface where the glass will rest see next photo. So.... Put a piece of sand paper on the table. Just take the window in your hand and rub it against the sand paper until the surface is flat again.



By making a styrene box around your window and gluing it down (that's why your frame must have a flat surface on the back) You can cut a piece of stained glass and insert it in the back frame. Remember you must have a flange here so that when you put your window in a wooden building that part sits against the wall.

When you use this type of window in a cement building, the cement will be poured in and will come up to this point. The window will be in the wall securely never to fall out I

guarantee it!

As you can see these windows are very versatile, and can be used in any application!