Working with Corian - for freedom Pen Program

After trying other methods of cutting Corian, that I want to use for Freedom Pens, I came up with this using my table saw:

The first batch of Corian came in planks about 1/2" thick and 2" by 6".

Step one is to cut them into 5/8" wide strips.

Step two is to turn the strips on their side and split them in two. This gives me two pieces 3/16" X 5/8" X 2".

Step three is to take one each of the Red, White, and Blue and glue them together.

That makes a sandwich 9/16" X 5/8" X 2"

Step four is to cut the strips into 5/8" squares.

To make sure that the cutting is done safely, I did the following:

Used the Fence to get consistent cuts.

Use a Zero clearance Plate.

Use a sacrificial backer board attached to the miter gauge to keep the small Pieces from kicking back.

Use a push block from the side to hold the piece steady against the fence.

Use a push block on the top to keep the piece from riding up the saw blade.

Step five is to glue the sandwich to one end of a pen blank.

Step six is to cut the blank to length. Make sure you cut the first piece with the Corian riding up next to the fence. Since I am making Slimline pens, The blank size is 2-1/16". Use the same method as above.

Step seven is to drill the blank. Make sure the Corian is at the top and drilled first.

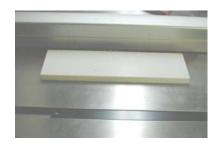
Step eight is to glue the tubes and ream the ends square.

Step nine is to turn the pens. Be careful where the Corian and wood meet. The difference in hardness can cause a dip in the wood at that point.

Here are some pictures of the process.



Uncut Corian



Corian used to set blade Height



Showing 5/8" gap



Backboard and top hold down



5/8" slices



Backboard & Sideboard



Backboard, Top and Side Board



3/16" strips



Strips ready to glue up



Strips glued & Clamped



Glued up Sandwich



Sandwich set to cut to 5/8x5/8



Strips cut into 5/8x5/8 squares



Gluing up pen blanks



Clamping up blank



Setup for first cut



First cut made



Second cut made



Setup for drilling



Drilled & ready for tubes.