

KeyCreator Lesson KC7305 Template Files

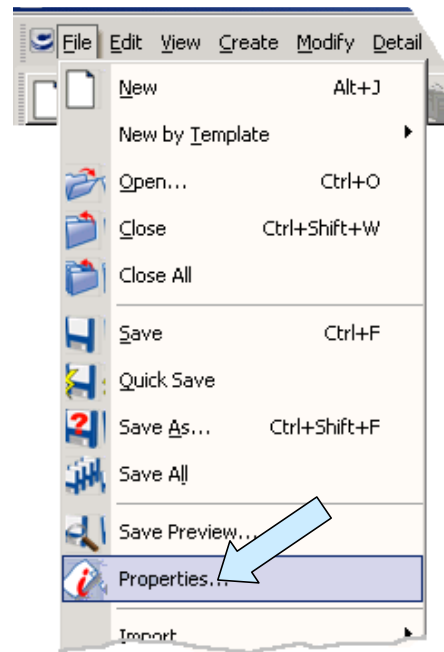
Custom workspaces and the slick, organized selection of Icons in the Customize Dialog Box provide a welcome change from previous CADKEY19 customizing procedures.

These types of modifications affect the appearance and function of your overall KEYCREATOR application and are not tied to any one file. Template files represent another aspect of customizing that will provide you with additional options that can add to your productivity.



Let's click on the FILE Pulldown Menu and then on the NEW Option.

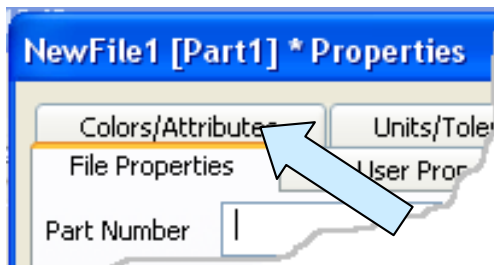
(Alternatively, you can click on the FILE NEW Icon on the top toolbar.)



Next, click on the FILE Pulldown Menu and then on the PROPERTIES Option.

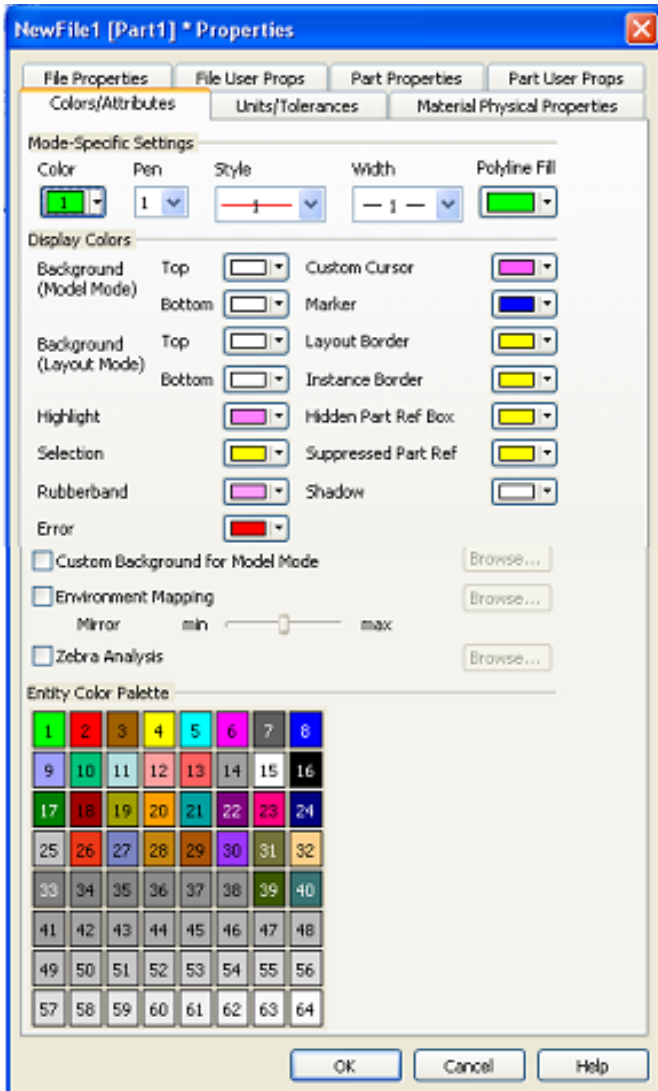
A Dialog Box appears. The default first sheet in this box is labeled FILE PROPERTIES and is an improved version of our old friend the Part File Descriptor that we used in previous CADKEY releases.

You can type information in here that documents the creation and use of the file.



You establish key properties of the file such as colors and units in this section.

Click on the tab at the top of this Dialog Box that is labeled Colors/Attributes.



You'll notice that an extremely colorful Dialog Box appears.

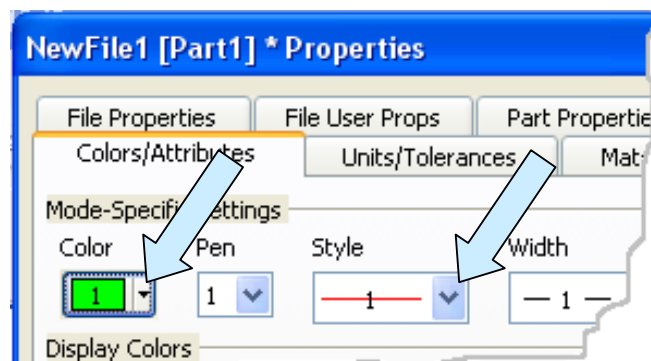
Just below the tabs, you will see a section labeled Mode-Specific Settings.

You can click on the pulldown next to each of these items to select the properties for the particular template file that you are creating.

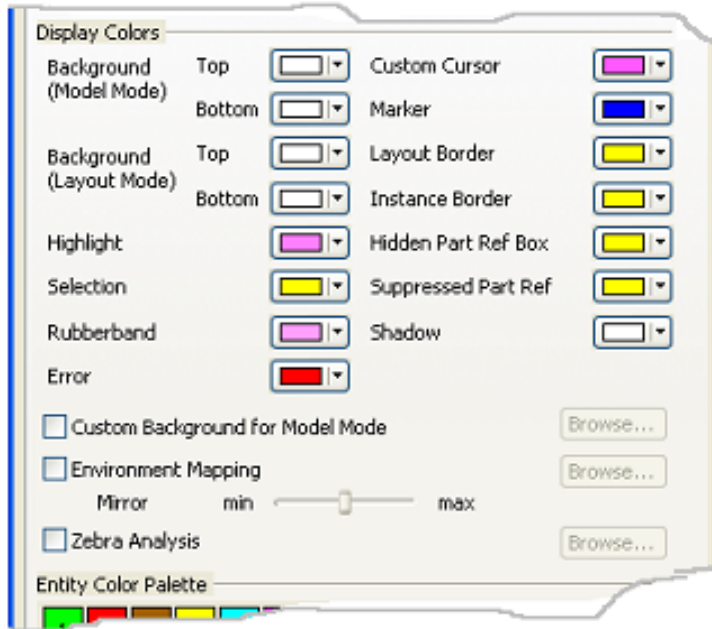
For example, let's say that you want the default construction color at startup to be red instead of green and you want the line style to be dashed.

Just click on the Pulldown arrow to the right of the color swatch and select the RED Option.

Next, click on the pulldown arrow next to the Style swatch and select the DASHED Option. These will now be the default construction properties for color and line style in this file.



In the center of the Dialog box you will see a large selection of options labeled Display Colors.



Here, you can designate specific colors to be used for things like the background, highlight, rubberband, etc.

For our example, let's make the color of the background different.

Click on the pulldown arrow next to the Background Top Option.

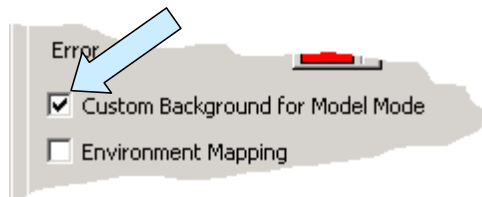
A small palette of colors appears. Click on a selection.

If you want to create a custom color, click on the Other Button and use the Windows Standard color palette box to create a color of your choice.

If you repeat the process and use the same color setting for the bottom setting, your background will be uniform. Using a different color gives you a gradient background.

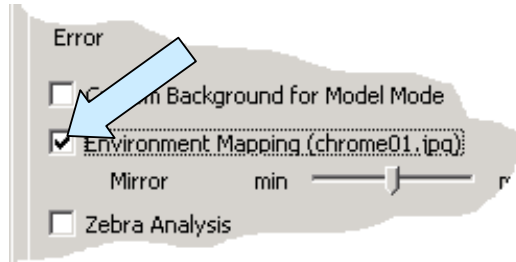
For my example, I've created a steel blue gradient for the background. When you are done, click on the OK Button. You now have a new background.

Click once again on the FILE Pulldown Menu and then on the PROPERTIES Option. Click on the Colors/Attributes Tab.



About midway down on the left side there is an option to select a Custom Background for Model Mode. Click on this option and then on the Browse Button. Let's click on the sunset01 Option and then on the OK Button.

Notice that you get a pretty wild background that you can work on! Now, you might not want to model on a background like this, but since these backgrounds are just jpeg images, you could create your own image to use for unique captures for customer presentations! When you are done playing around with this, deselect the Custom Background Option to return to our more mundane environment.

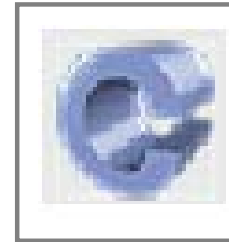


Let's return to the same area of the Properties Dialog Box. Notice that just below the Custom Background Option is an Option for Environment Mapping.

Click to place a check on this Option.

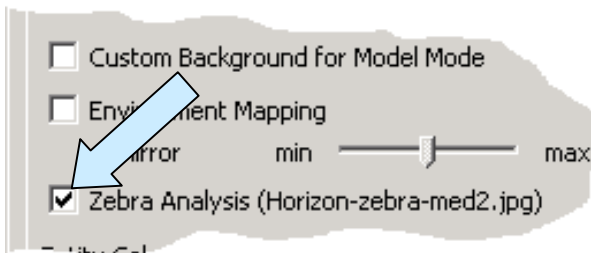
A list of environment images appears. Let's select the chrome01 Option. Then, click on the OK Button.

Now if you had a solid model in this file and clicked on the RENDER SMOOTH WITHOUT EDGES Icon, your part would appear with a brilliant chrome finish on the screen. Alternatively, you could start to build a solid model now and when you rendered it, it would have a chrome finish.



Or, you could click on the FILES IMPORT Option and import any solid part into this file and see it with a chrome finish.

You can play with this feature and then deselect it when you are done experimenting.



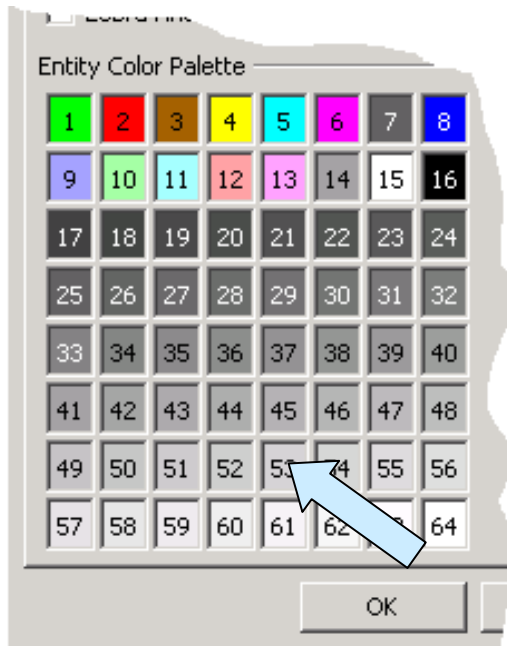
The next Option below the Environment Mapping is Zebra Analysis.

Click to place a check on this Option. A list of image files appears. Click on one of the zebra files and then on the OPEN Button.

Then, click on the OK Button.

Any solids or surfaces in your file will be rendered with zebra stripes constructed according to the properties in the particular image file that you selected. Zebra stripes are sometimes useful when trying to visualize the curvature on a complex surface. You would not normally use this for simple objects with analytical surfaces. (Such as a pipe tee, bearing block, etc.) This is a relatively simple implementation of this diagnostic tool, limited to the images provided at this time. Ultimately, this will be improved into a full-fledged analytical tool with user controlled zebra mapping.

When you are done playing with this, deselect the Zebra Analysis Option.



Next, let's look at the bottom area of the Dialog Box.

Notice that there are 64 color slots available in the Entity Color Palette but that only the first 16 by default are now being used.

In CADKEY 19, only 16 colors were available. Now, you can add up to 48 additional colors and modify these original 16 colors as well.

Let's click on the color slot labeled 53.

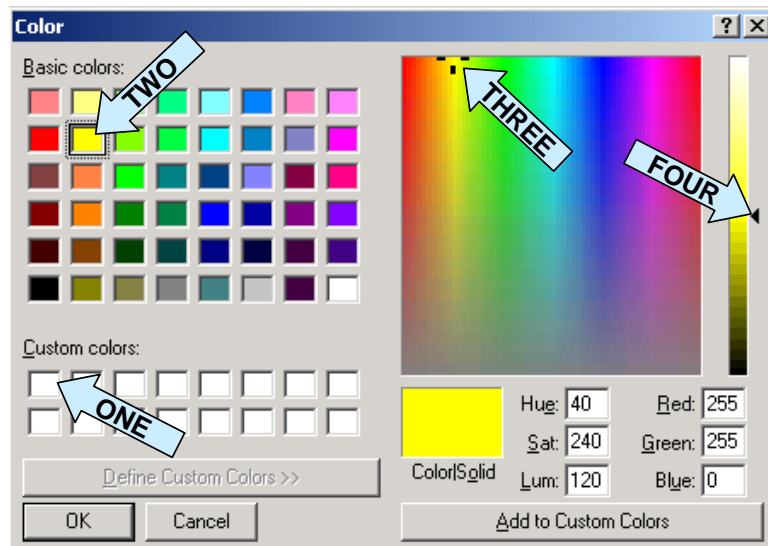
A large Color Dialog Box appears.

We're going to create a beige color for slot 53.

We'll also want to add it to the set of custom colors at the bottom of this Dialog Box.

Start by first clicking on the first color well in the Custom Colors Array.

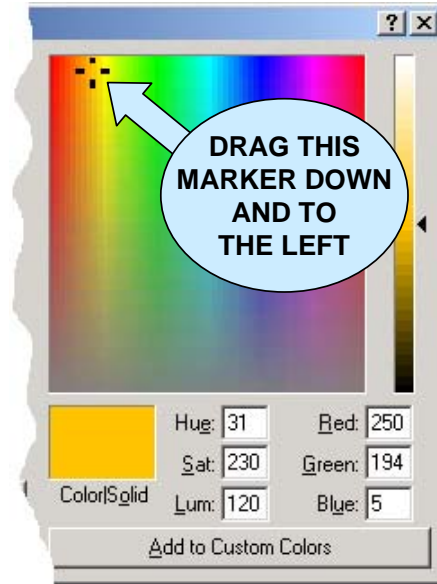
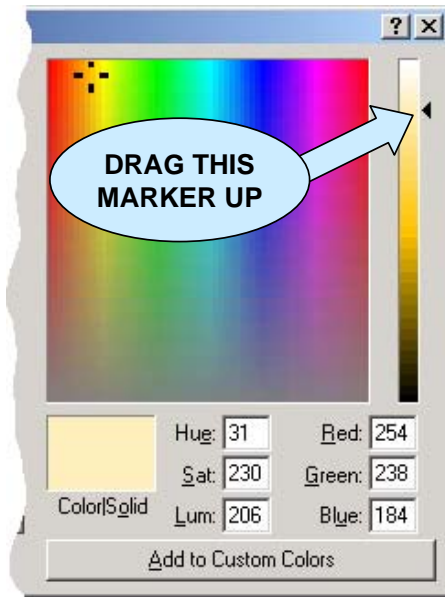
Next, click on the yellow swatch that is in the second row of basic colors.



You will notice that a graphic marker appears in the main color field (labeled THREE in the illustration above) and a marker appears next to the vertical saturation bar (labeled FOUR.)

Click on the marker labeled “THREE” and drag it down slightly and very slightly to the left.

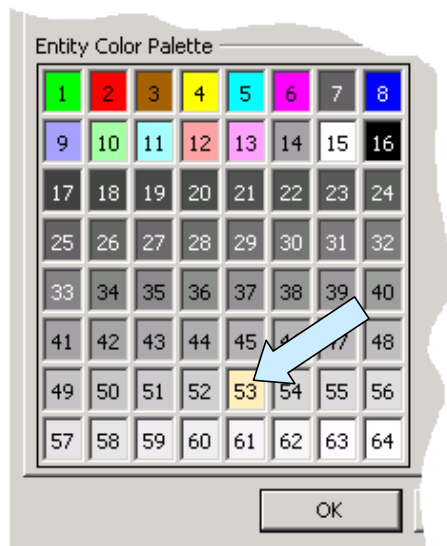
Notice that the color in the preview window labeled “ColorSolid” changes as you drag the marker. Stop when you get an orange-gold color.



Next, click on the marker labeled “FOUR” and drag it upward slightly to reduce the intensity of the color.

When you get a color that you like, click on the Add to Custom Colors Button below the preview window.

Notice that the first custom color well now contains your new color. Now, click on the OK Button.



You are returned to the main Dialog Box. You will now see the new color inserted in Color Slot Number 53.

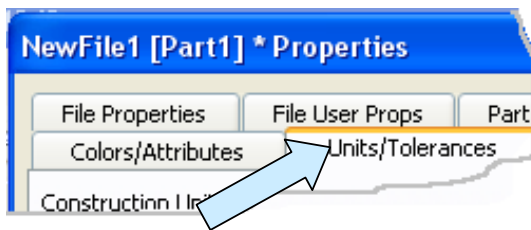
You could continue to create colors for as many of the additional 48 color slots as desired.

You can also modify the colors in any of the first sixteen slots. When you are done, click on the OK Button.

Now if the foregoing seems like a reasonable amount of work, it is. Bear in mind, however, that once you get the hang of it, it progresses very quickly.

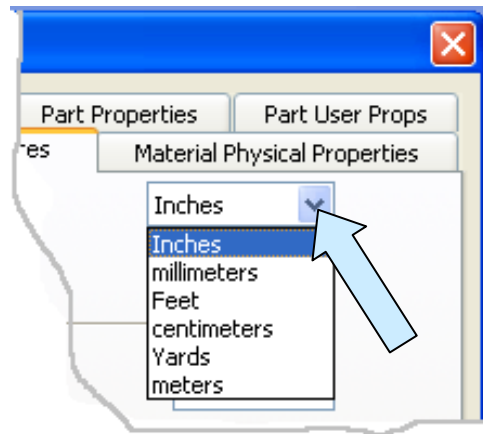
More importantly, because we are going to save this file as a Template File, we can just load the file in the future instead of using the FILE NEW Option and all of our custom settings will be part of our new file!

Before we look at saving this file as a Template File, let's look at some of the other configuration settings that you can change in the Properties Dialog Box.

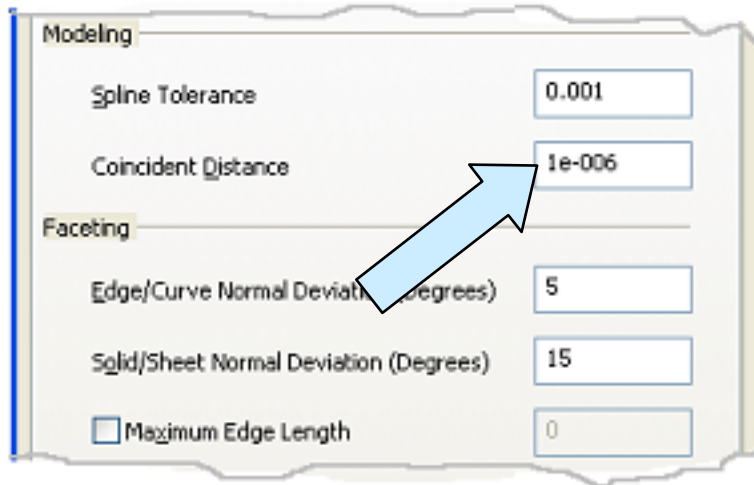


Click on the Units/Tolerance Tab at the top of the box. You'll see a Settings Window labeled Construction Units.

If you click on the pull-down arrow to the right of the field, a list of options will appear. You can use this to designate a template file, for example, as an inch basis or a millimeter basis file.

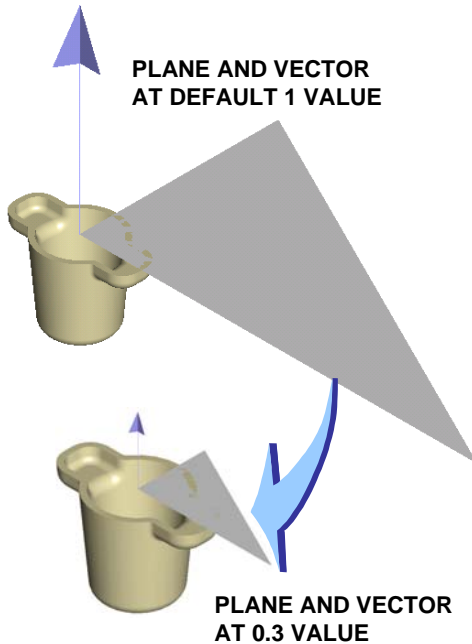


You will also see settings for modeling and faceting tolerances that you will sometimes want to adjust for specific modeling situations.



A typical example is the Coincident Distance Tolerance that is set at default in KEYCREATOR at $1e-006$. If you are working with imported geometry that was created in a CAD system that used a $1e-004$ modeling tolerance, you could run into problems because entities that should be connected might appear to be disjoint to KEYCREATOR.

By adjusting the system setting to $1e-004$, this problem could be eliminated.



Two additional useful settings are the Default Plane and Vector Scale values at the very bottom of the Properties Dialog Box.

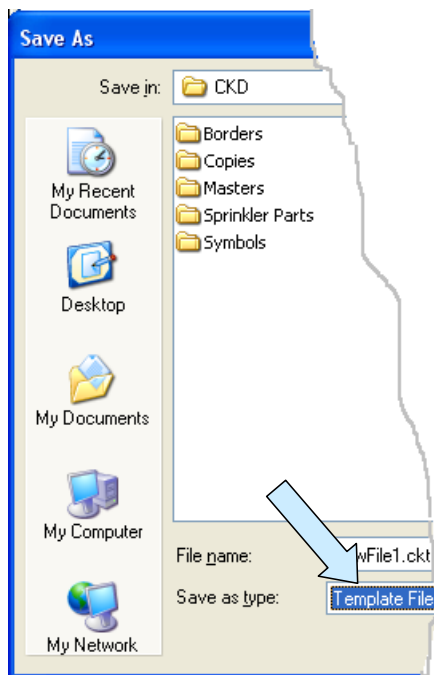
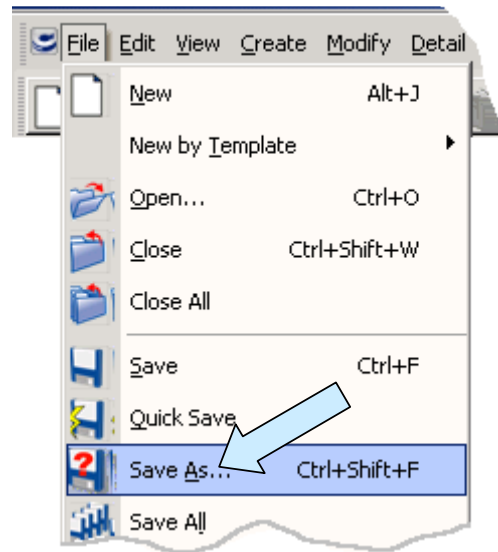
If you are working on very minute models, you might want to set these values at a number much smaller than 1.

Conversely, if you are designing an extremely large part, you might make the values much larger than 1.

I've illustrated a small part (About 0.3 inches high) to the left with the default plane and vector and a much more useful smaller plane and vector (0.3 Scale.)

Click on the OK Button at the bottom of the large Properties Dialog Box to complete your work.

Now, let's click on the FILE Pulldown Menu. Then, click on the SAVE AS Option.

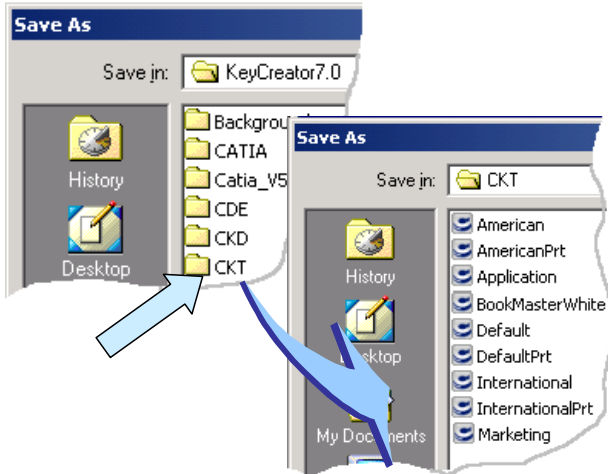


A large Dialog Box appears.

When the SAVE AS Dialog Box appears, click on the pulldown arrow next to the Save As Type Field.

You can save your file as a Design File or as a Template File.

Click on the Template Files Option.



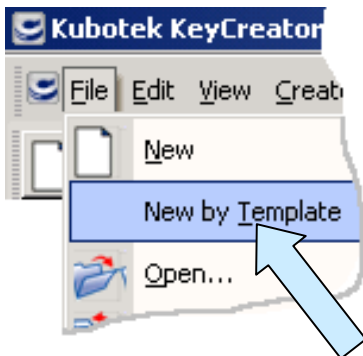
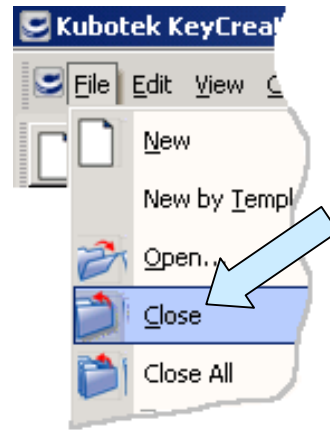
Also navigate at the top of the box over to the CKT folder.

Yes, there are no Part Files in KEYCREATOR. Pattern files are also history! This is not a problem, though, since the new Design File format covers all of the options that part and pattern files provided plus much more.

Type a name for the template file in the File Name Field. Let's use "SteelBlue1." Then, click on the SAVE Button.

Now, click on the FILE Pulldown Menu and then on the CLOSE Option.

Now, once again, click on the FILE Pulldown Menu.



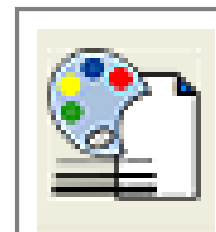
This time, click on the NEW BY TEMPLATE Option.

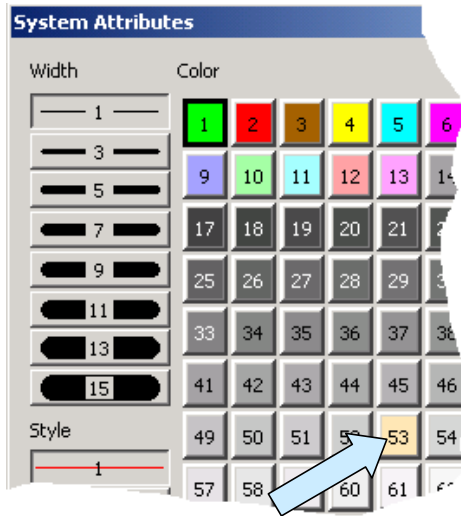
A small Flyout will appear to the right of the NEW BY TEMPLATE Option.

Click on the CHOOSE TEMPLATE Option.
A Dialog Box appears with the list of template files available.

Click on the "SteelBlue1" file and then on the OPEN Button.
Notice that you now have a new file to start working in. The file has the blue background that you created.

Click on the FORMAT ENTITY SET Icon.





Notice that you also have your custom designed beige color in Color Slot 53.

You can now create a model or drawing in this file and then save it as a Design File.