archoncad support monthly

The asm newsletter is designed to work as an on-line user group, based on the successful New Zealand VectorWorks User Group format where each monthly we cover a main topic in a workshop for 60 minutes then have 30 minutes of general questions and answers. In this news letter you will find a link to the workshop topic, a link to the questions and answers and links to extended podcasts (tips and trick movies).

Workshop Topic
Layers and Classes

Layers and classes are the first way to organize information in VectorWorks. In this workshop we discover what layers and classes are and when to use them.

It's important to understand what layers and classes are and how they work together.

First, you can think of layers as a filter, filtering your project into a manageable chunks. It's not a fine filter, think of layers as a coarse filter. I often use layers as the stories of my buildings. Classes can be thought of as a fine filter.

Read on to find out more...

Q & A

Questions from users and the answers from Jonathan.

In this issue I answer questions about archoncad support monthly, how much it will cost will the New Zealand VectorWorks User Group still hold meetings and how can you join this support monthly.

Extended Podcast 001

In this podcast I show you how to compress and email your drawings. If your drawings are large then it's not possible to email them. Compressing your drawings can make them small enough to emial.

Extended Podcast 002

In this podcast I show you how to use my manuals. In particular I show how to make sure that the movies will open and play correctly.

News

archoncad realease new manual on 3D Modelling.

Nemetschek North America releases Spanish version of 12.5

Layers and Classes

One way of creating drawings in view is to create one file for each drawing that you want. You can copy & paste the information from one file to the next. While some people might be happy to use this method; I am not; and it is not the recommended method. The recommended way is to have as many drawings as practical in one file and use VectorWorks organizing concepts to create the drawings that you want.

VectorWorks uses the following organizing concepts to create drawings:

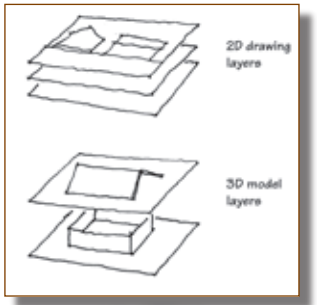
- Classes
- Design layers
- Layer Linking
- Sheet Layers and
- Viewports

5.1 Design Layers

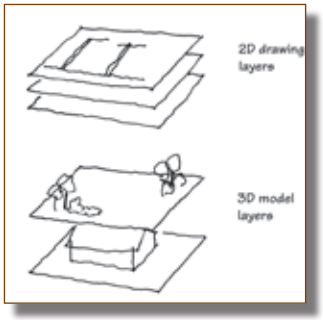
We use Design Layers as an organizational tool to break up the design into useable chunks. Layers are used to control the visibility of parts of the drawing so that we can hide or show information for different purposes.

Design Layers are a horizontal organizing method where you can divide your file up into horizontal chunks. Theses horizontal chunks also have a height and if you set the heights up correctly you can easily generate 3D views of the model.

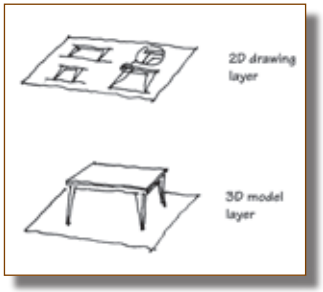
If you were an architect you would tend to break up the design into building elements or stories of the building. You would also have several layers that contained 2D drawings and details that made up the document set.



If you were a landscape architect then you would tend to break up the design into elements based on the type of construction. You may have the building on one layer, the planting on another layer and the ground works on another layer. You would also have several layers that contained 2D drawings and details that completed the document set.



If you were an engineer then you would tend to break up the design into a 3d model and a series of 2D drawings that showed in detail how the model was constructed.

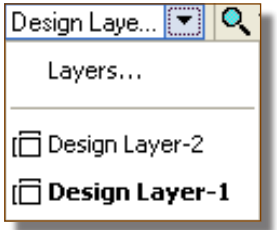


Active layer

- Open the file **Layers1.sta** from the exercise folder.

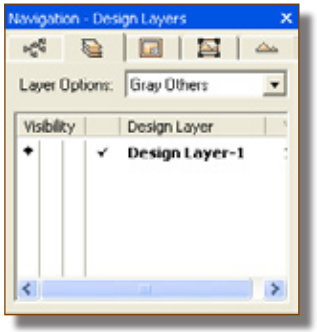
The layer that you are currently working on is called the Active Layer. The active layer is shown on the layer button, located on the data display bar.

- To change the current or active layer, click on the layer button.
- The active layer is shown with a tick on a Macintosh or it is shown in bold if you are on a Windows machine.



- To change layers click on the layer that you want to change to.

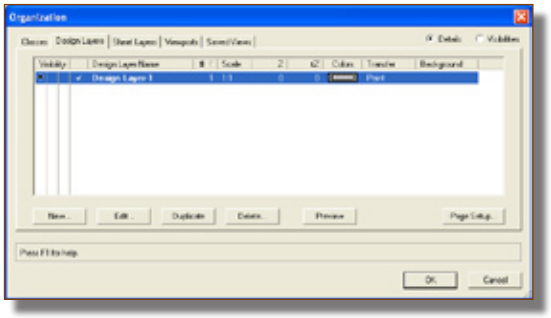
On the Navigation Palette the Active layer is shown with the tick. The Navigation Palette is not available in the base version of VectorWorks, you have to have one of the additions like Architect, Landmark etc.



- To change the current or active layer, double click on the layer.
- The active layer is shown with a tick on and it is shown in bold.

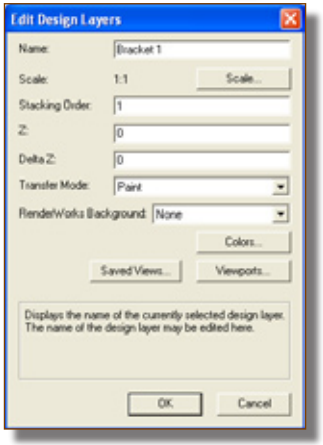
Controlling Layers

- From the Menu Bar choose **Tool > Organization...** (or you can choose Layers... from the layer button)

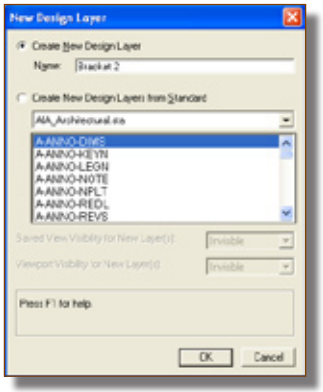


- This opens the Organization dialog box where you control and organise layers, classes etc.
- Click on the **Design Layer** tab.
- At present you have a design layer called Design Layer-1.

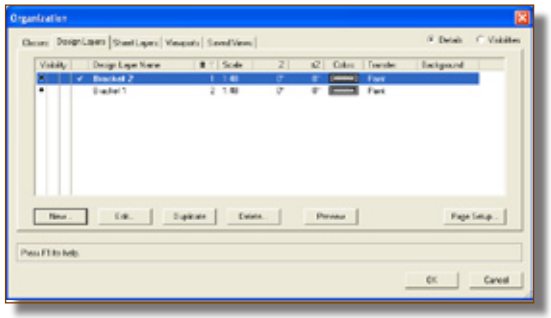
- To change the name of a layer you can: Double click on it's name in the list or click on it once in the list and click on the Edit Button
- Change the name of Design Layer-1 to **Bracket-1** by typing it into the dialog box where it says Name:.



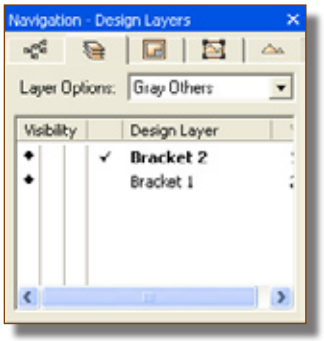
- Click on the **New** button to create a new layer.
- Type in the name **Bracket-2** in the dialog box where it says Name:.
- Click on the **OK** button.



- The Layers have the new names.
- Click on the **OK** button to close the Organization dialog box.



This drawing has 2 Design Layers in it. The layers can be made invisible, gray or visible. You can move the design layers up or down in the layer list and this will affect the way the drawing appears on the screen (and prints).



As well as using the Organization dialog box to create and control layers we can also use the Navigation Palette to create and control layers. The Navigation Palette is not available in the base version of VectorWorks, you have to have one of the additions like Architect, Landmark etc.

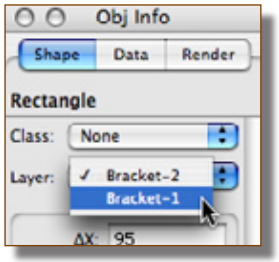
If your computer screen is big enough and you are working on complex drawings you should keep the Navigation Palette open all the time. It will save you time and make it easy to change the way you are looking at the drawing.

Tip:
Layers can also be removed using the layer setup Dialog box. But when you remove a layer all the information on the layer is deleted from the file.

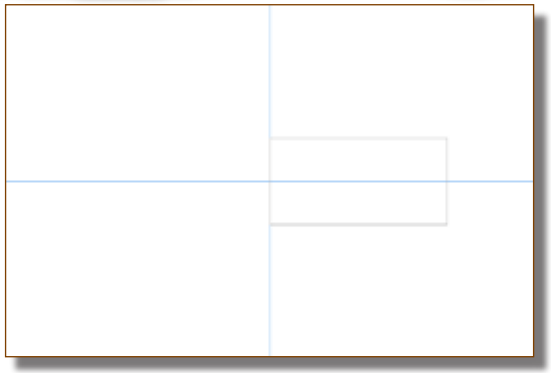
Changing the Layer of an Object

To change the layer of an object:

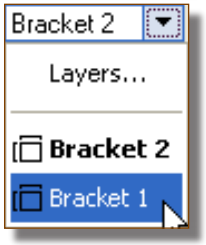
- Select the object that you want to change the layer of.
- On the Object Info Palette select the layer that you want the object to be on.



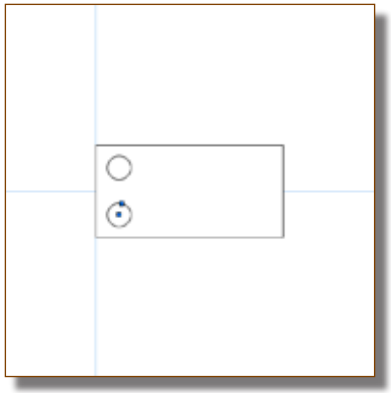
- The object will be sent to the layer that you have chosen. The view you get will depend on the layer options that you have chosen.



- From the Layer Button choose the layer **Bracket-1**.



- You should see the rectangle again.



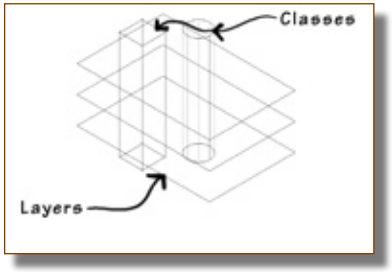
Now that we have some of the things drawn that we want, we will want to separate the holes from the bracket for some drawings. We need a filter to hide some of the information that we've drawn. This filtering concept is called classes.

VectorWorks Classes are similar to AutoCAD layers. In practice you should use both layers and classes to create your drawings.

Some people get confused about when to use layers and when to use classes. Generally, put as much as you can on each layer and use classes to separate information that you want to view separately (to filter your view).

Classes

movie048.mov

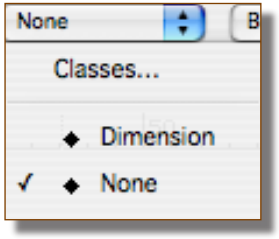


Classes do not work horizontally as layers do. When a class is switched to invisible every element that is assigned to that class is made invisible, regardless of the design layer that it is on or its height in the layer structure, so you could say that the classes are a vertical way of controlling information. By using this technique you can easily see complex designs in individual parts and create many different views of the same design.

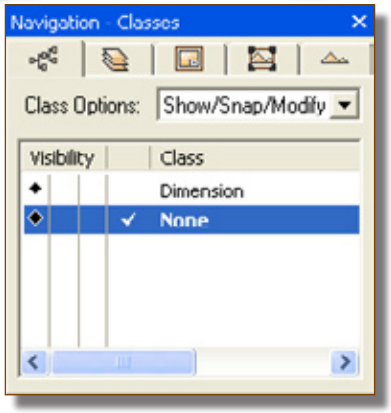
Active Class

The class that you are currently working in is called the Active Class. The active class is shown on the class button, located on the Data Display Bar.

- To change the active class, click on the Class button. The class with the tick is the active class.
- To change the active class just click on the class that you want to change to. I recommend that you leave the active class on **None**.



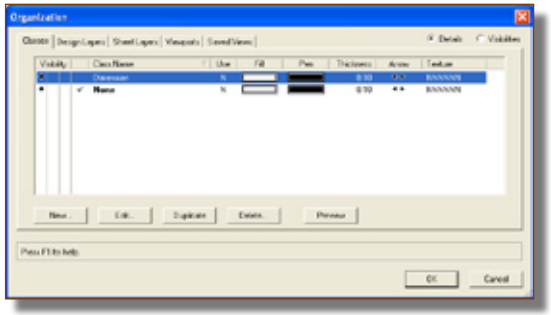
On the Navigation Palette the Active Class is shown with the tick. The Navigation Palette is not available in the base version of VectorWorks.



- To see the Classes, click on the class tab.
- To change the current or active class, double click on the class name.
- The active class is shown with a tick on and it is shown in bold.

Tip:
Leave the Active Class on **None** *and it will save you losing objects later on.*

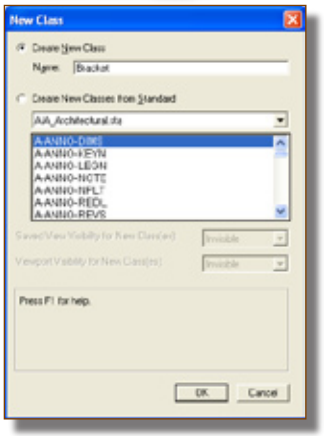
Creating Classes



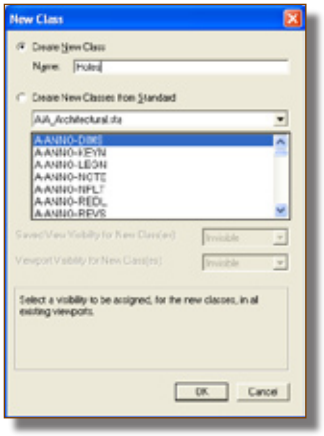
- From the Menu Bar choose **Tool > Organization...** (or you can choose **Classes...** from the class button)
- Click on the **Class** tab
- Click on the **New** button to create a new class.
- The Class Options dialog box opens.

- At the top where it says Name, type in **Bracket**.

- Click on the **OK** button.

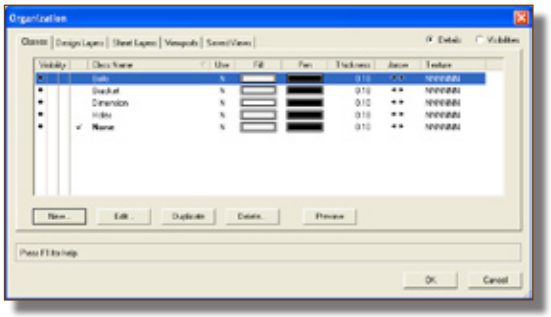


- Click on the **New** button to create a new class.
- The Class Options dialog box opens.
- At the top where it says Name, type in **Holes**.
- Click on the **OK** button.



- Create another new class and name it **Bolts**.
- Click on the **OK** button.

- We have all the classes in the **Organization** dialog box



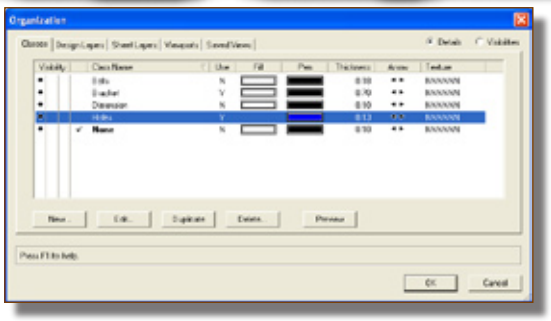
Tip:
Do not delete nor rename the None and Dimension classes.

We can use classes to control the graphic quality of the elements on that class. For example you might want all the demolished walls in the drawing to have thin lines that are dashed. If you set up a class to control this, all the demolished walls will have the same thin line and the same dash style. This makes it very easy to control the graphic style of the drawings in your office.

- To set up the graphic quality of **Bracket**, double click on the class **Bracket**.
- This opens the Edit Class dialog box.
- Click the **Use at Creation** tick box. This tick box tells VectorWorks to use the graphic attributes that you choose.
- Set the attributes to be:
  - a solid fill with a White colour.
  - solid line with a black colour and a heavy line.
- Click on the **OK** button.

- To set up the graphic quality of **Holes**, double click on the class **Holes**.
- This opens the Edit Class dialog box.
- Click the **Use at Creation** tick box. This tick box tells VectorWorks to use the graphic attributes that you choose.
- Set the attributes to be:
  - no fill.
  - solid line with a blue colour and a thin line.
- Click on the **OK** button.

- Do not do anything to the Bolts class. We will leave this class so that it doesn't control the graphic qualities of the bolts.
- You can see the classes listed with their attributes.

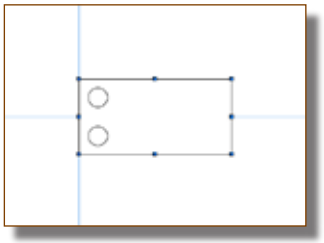


- Click on the **OK** button to save and close the dialog box. The Cancel button will delete all the changes that you have made.

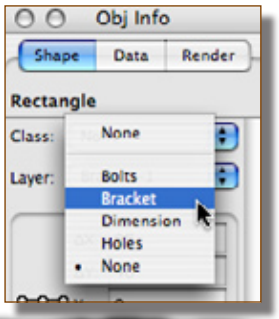
You can use the Organization dialog box to add classes, modify classes or delete classes. When you remove a class in VectorWorks all the information that is assigned to that class is not deleted, it is reassigned to the None Class.

Changing the Class of an Object

- Select the bracket (the rectangle) on the **Bracket-1 Layer**.



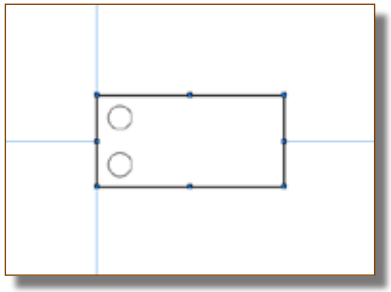
- On the Object Info Palette select the Pop Up Menu, where it says Class.
- Choose the class **Bracket**.



- The object has now been assigned to the new class.

- If the class has graphic attributes assigned then you will get an alert Dialog box asking you if you want the object to have the graphic attributes that you set up in the classes dialog box.

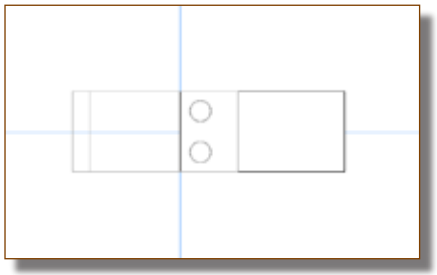
- Click on the **Yes** Button
- The object changes to the new graphic style of the class.



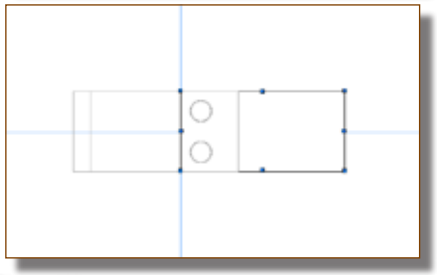
Assign Objects to Their Layers and Classes

Movie
movie049.mov

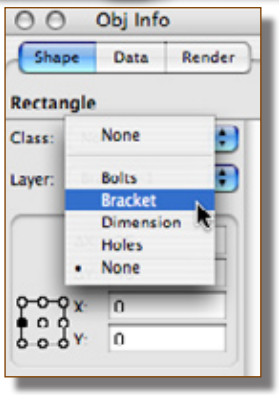
- Open the file called **Layers2.sta** from the exercise folder.
- This file is similar to the last file we used in the last chapter on layers and classes, and all the layers and classes have been made. A bracket has been drawn on each layer.



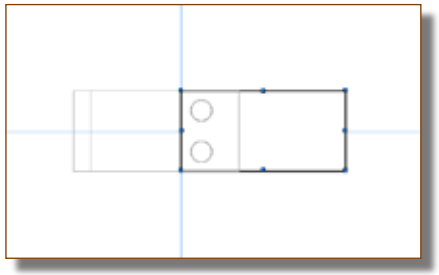
- Make sure that **Bracket-1** is the Active Layer.
- Use the **2D Selection** tool to select the bracket.



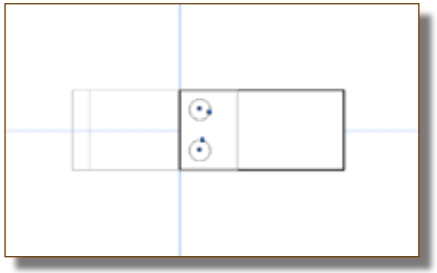
- On the Object Info Palette click on the Pop Up Menu where it says **Class**.
- Choose **Bracket**.
- The object has now been assigned to the new class. If the class has graphic attributes assigned to it you will get an alert Dialog box asking you if you want the object to have the graphic attributes that you set up in the classes dialog box.
- On the Alert Box that appears click on the **Yes** button.



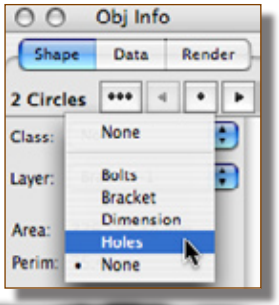
- Notice that the square changes colour & line weight.



- Select the holes that you want to change.

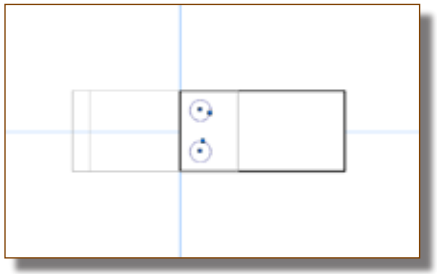


- On the Object Info Palette click on the Pop Up Menu where it says **Class**.
- Choose **Holes**.
- The object has now been assigned to the new class. If the class has graphic attributes assigned to it you will get an alert Dialog box asking you if you want the object to have the graphic attributes that you set up in the classes dialog box.

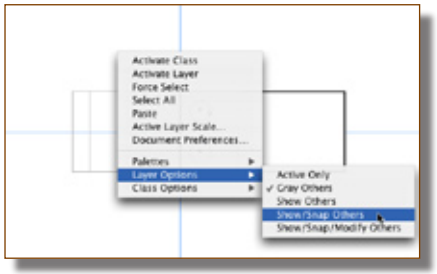


- On the Alert Box that appears click on the **Yes** button.

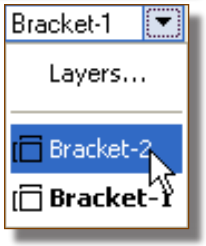
- Notice that the holes change colour.
- At this point the layer options are set to 'grey others' so the other bracket is shown in grey. We want a different option so that we can see the other bracket better.



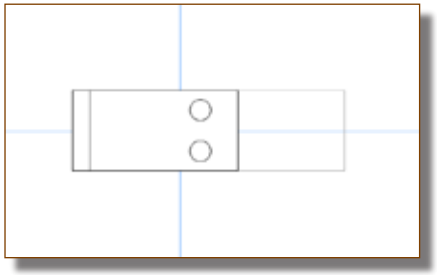
- Right mouse click in the drawing area away from any objects choose **Layer Options > Show/Snap Others.**



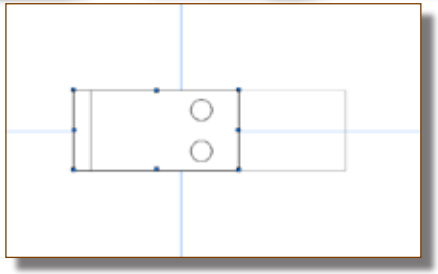
- Use the Layer button to change the active layer to **Bracket-2**.



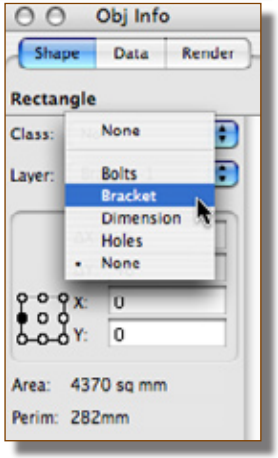
- Bracket 2 becomes visible.



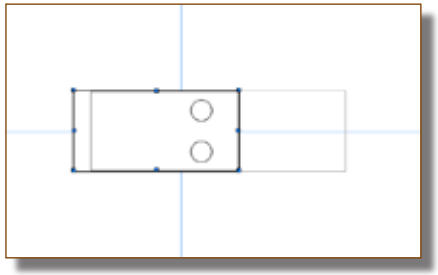
- Use the **2d Selection Tool** to select the bracket.



- On the Object Info Palette click on the Pop Up Menu where it says **Class**.
- Choose **Bracket**.
- The object has now been assigned to the new class. If the class has graphic attributes assigned to it you will get an alert Dialog box asking you if you want the object to have the graphic attributes that you set up in the classes dialog box.

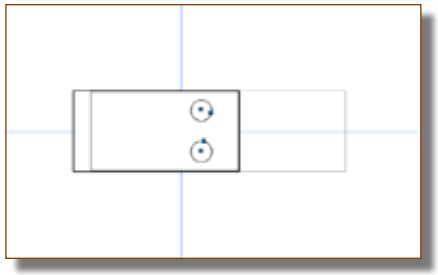


- On the Alert Box that appears click on the **Yes** button.

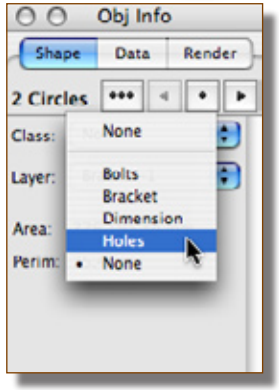


- Notice that the square changes colour & line weight.

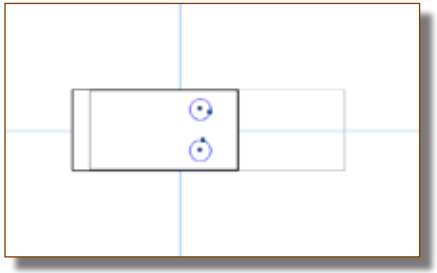
- Select the holes that you want to change.



- On the Object Info Palette click on the Pop Up Menu where it says **Class**.
- Select **Holes**.
- The object has now been assigned to the new class. If the class has graphic attributes assigned to it you will get an alert Dialog box asking you if you want the object to have the graphic attributes that you set up in the classes dialog box.

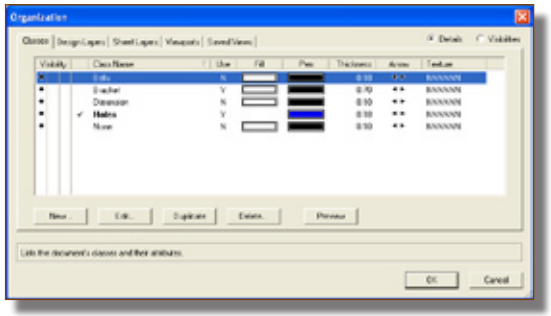


- On the Alert Box that appears click on the **Yes** button.



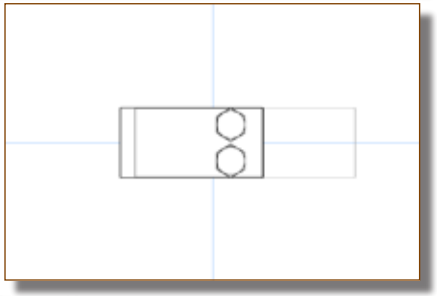
- Notice that the holes change colour.

- From the Class button choose **Classes...**



- Click on the visible Column (black diamond) next to the Bolts class to make the bolts visible.
- Click on the **OK** button.

- The bolts have already been assigned to the correct class, so now they are visible.

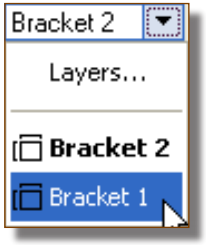


5.4 Changing Layer and Class Visibilities

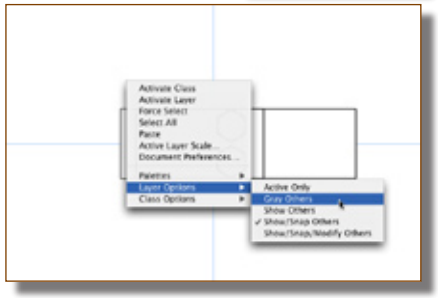
movie049.mov

Now that we have the layers and classes in the drawing we can choose to look at the file in different ways.

- Use the Layer Button to make **Bracket-1** the active layer.

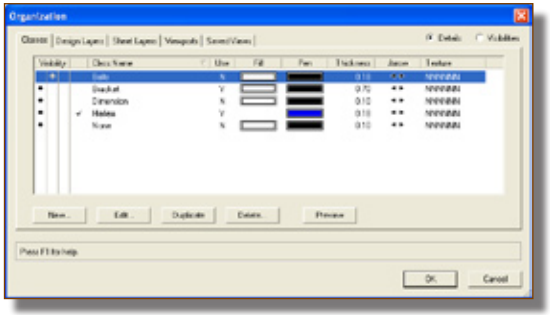


- Right mouse click away from everything, choose **Layer Options > Grey Others**

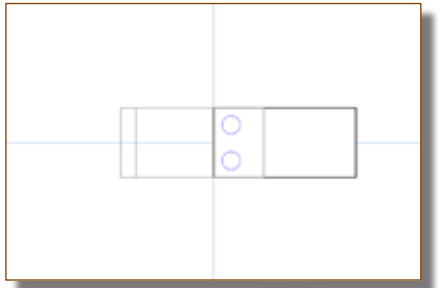


- From the Class button choose **Classes...**

- Click once in the invisible column (white diamond) next to the class **Bolts**.
- Click on the **OK** button.



- You can see the drawing in a different way.



Questions and Answers

Q. How will the archoncad support monthly work.

This PDF file with the embedded movies is a good example of how the support monthly will work. You have to subscribe to the support monthly. This will cost $NZ30/month ($US20).

Each month you will be send a pdf file like this one. It will include a workshop topic with exercises and movies, it will include a page on questions and answers, and it will include 2 extended podcasts (tips and tricks movies).

Will there still be user group meetings?

For the New Zealand subscribers, yes, there will still be some user group meetings, but they may not be every month as they have been in the past. If you are a subscriber then you won't have to pay anything to attend the user group, if you are not a subscriber then you will be asked to pay $NZ35/meeting.

The number of actual user group meetings will be determined by the level of subscription. We can see that the Auckland user group meetings will carry on, but the Wellington and Christchurch user group meetings are not so certain. The number of actual meetings will be determined by the support of the suscribers...

One issue that is not resolved is; what's the purpose of the meetings if all the information is contained in this pdf and movies?

For other subscribers the answer is we may have overseas meetings, and that will depend on the level of subscription and courses that I might be running in various countries.

How long do you have to join for?

The subscription will be monthly. If you want to stop, you can at any time, but you won't be able to access the on-line resources once you stop your subscription.

How do you pay?

Initially you will be charged each month to your mastercard or visa credit card. In the future this will be moved to an automated system.

Extended Podcasts