NEMETSCHEK Vectorworks

JONATHAN PICKUP

VECTORWORKS ARCHITECT

SAMPLE

7TH EDITION TUTORIAL MANUAL | WRITTEN WITH VERSION 2015

VECTORWORKS ARCHITECT
TUTORIAL MANUAL

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Jonathan Pickup | seventh edition

written with version 2015

Archoncad

Architecture on CAD, Ltd.
10 Laws Place
Napier, New Zealand
T +64 217 43470
jon@archoncad.com
twitter: twitter.com/archoncad

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There are several people I would like to thank: Mike Moore, Steve Scaysbrook, Roger Williams, and Bill Vincent. Without them, none of my manuals would be as good as they are.

A big thank you to my wife, Marie, and my kids. I need your support and understanding to spend the hours required to create these manuals.

Jonathan, January 2015

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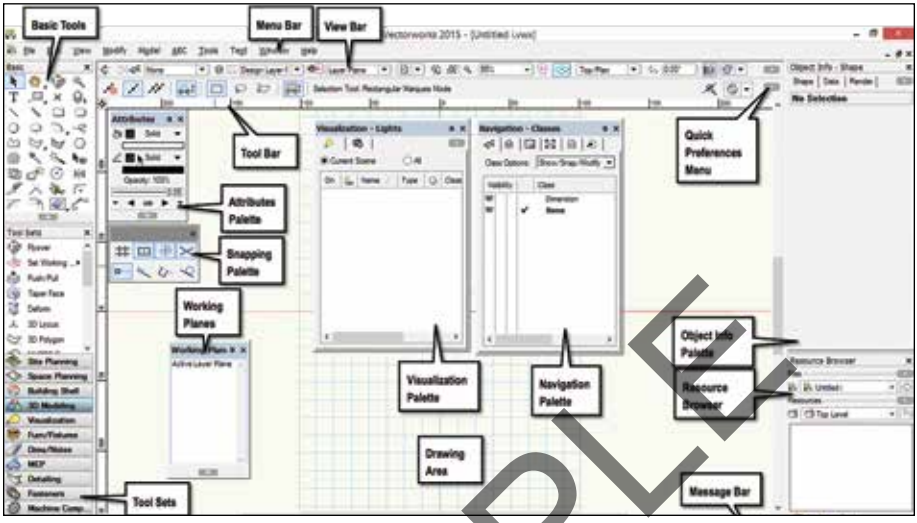
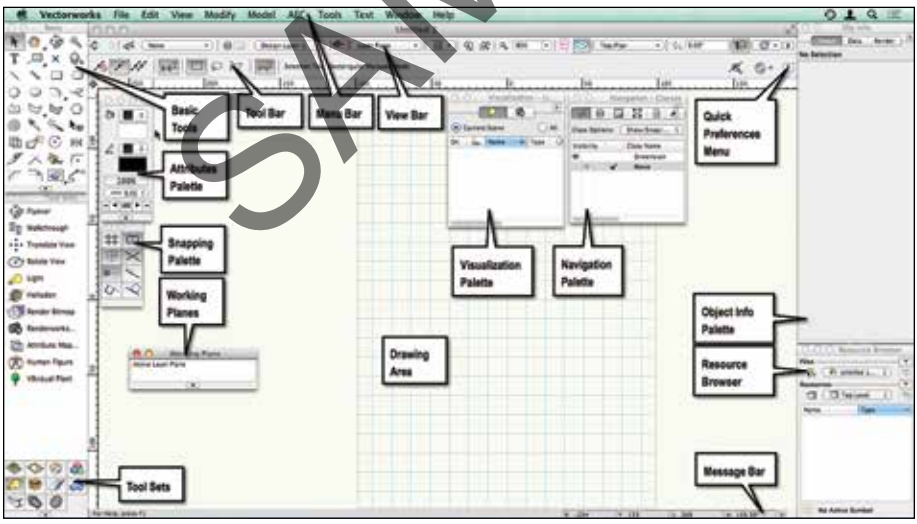
When you start Vectorworks Architect, it looks like this on a Windows machine:



When you start Vectorworks Architect, it looks like this on a Macintosh:



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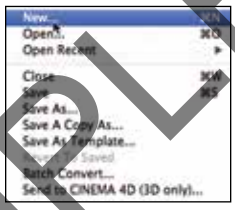
Step 1 File Setup

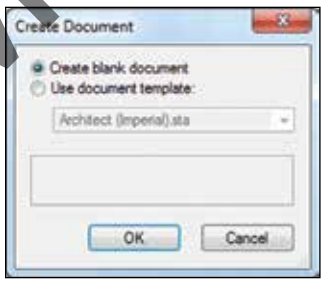
Document Setup

We will set up the file from the beginning, from a blank document. Vectorworks has set up commands to make it easier to set up the file. When you have set up the file, it can become a template file that you can use to start every new job, saving you a lot of setup time.

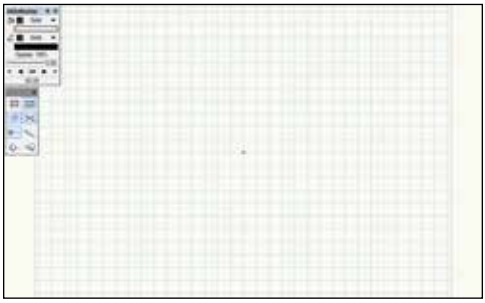
- Go to the Menu bar.
- Choose **File > New...**



- This opens a dialog box for you to choose **Create blank document**.



- A blank file opens with a layer scale of 1:1 and a letter-size page.
- We should set up our page first.



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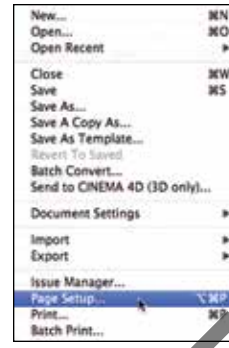
- Go to the **Menu bar**.
- Choose **File > Page Setup...**

This opens a dialog box for you to set up the page size.



This dialog box allows you to set up the printer that you are using.

- Click on the **Printer Setup...** button.

This dialog box will vary depending on your printer.

- On a Macintosh, the dialog box will look similar to this picture. Set the printer, page size, and page orientation.
- Click on the **OK** button.

- On a Windows machine, the dialog box will look similar to this picture. Set the printer, page size, and page orientation.
- Click on the **OK** button.

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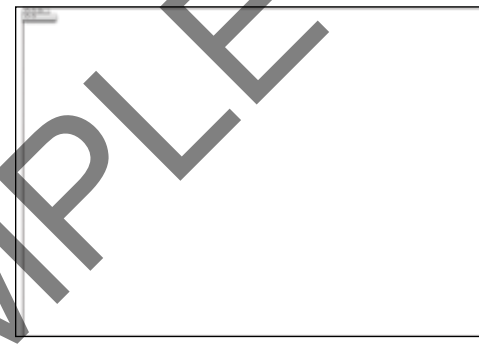
This takes you back to the Page Setup dialog box.

Our drawings are going to be set up using Viewports, so the page boundary won't be meaningful on our design layers.

- Turn off **Show Page Boundary.**
- Turn off **Show Page Breaks.**
- Click on the **OK** button.

Vectorworks shows the new drawing area.



The reference grid may not appear on the screen due to the density of the grid at a particular scale and page size.

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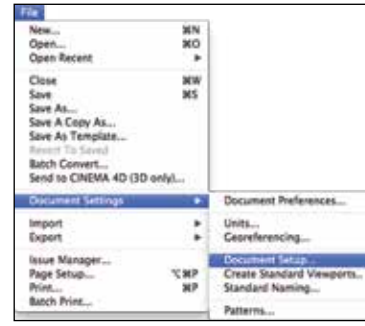
- Go to the **Menu** bar.
- Choose **File > Document Settings > Document Setup...**



Document Setup is a quick way to set up the drawing when you are starting a new project.

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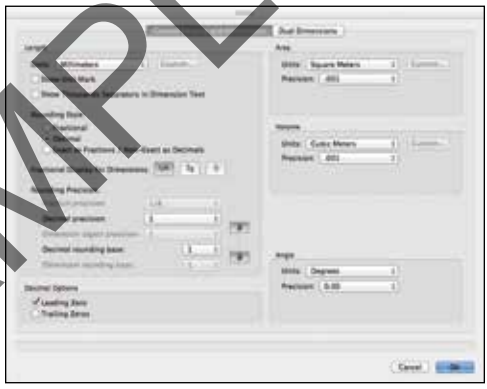
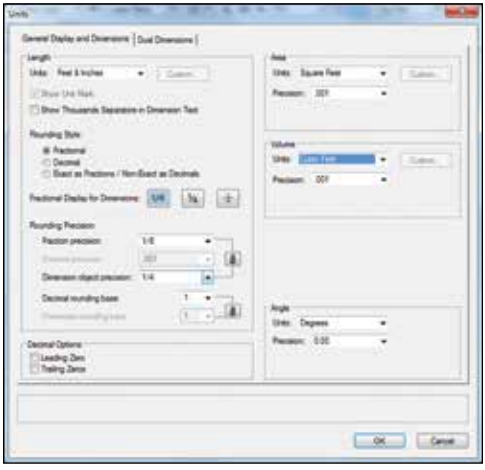
In this dialog box we get the opportunity to check the setup of the project as a whole: the units, layer scale, drawing area, grid setting,
and the title block size.

- Click on the **Drawing Units: Change...** button. This will open the Units dialog box for us to set up the drawing units, primary dimensioning, secondary dimensioning, and area and volume units.

- Set your **General Display and Dimension** units to the settings that you want.



The settings might be in feet and inches.



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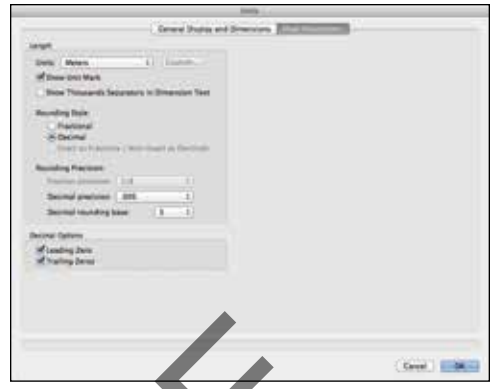
- Set the **Dual Dimensions** (secondary units**)** to the settings that you want.



- You can mix the dimensions types with the Dual Dimensions.
- Click on the **OK** button.

- Click on the **Layer Scale: Change...** button. This will open the Layer Scale dialog box for us to set the scale of the current layer.

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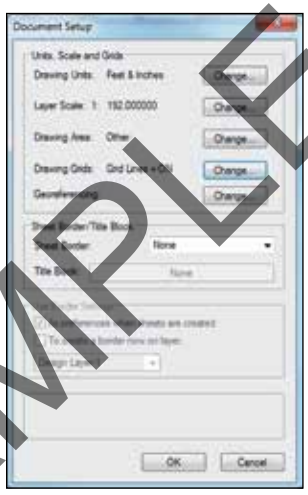
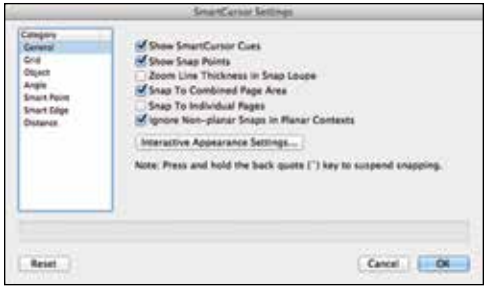
- Set your Layer Scale to **1:200** for metric drawings or **1/16 (1:192)** for imperial drawings. We will start by drawing the site plan, so this scale should be suitable.
- Click on the **OK** button.

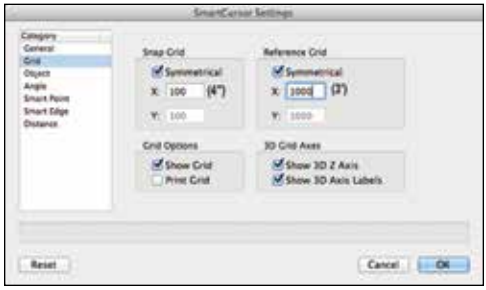
- Click on the **Drawing Grids: Change...** button. This will open the Set Grid dialog box for us to set the snap and reference grids for our file.



- Choose **General** on the left-hand side.
- Set the option as shown on the image.



- Choose **Grid** on the left-hand side.
- For metric drawings, set the snap grid to **100mm** and the reference grid to **1000mm**.
- For for imperial drawings, set the snap grid to **4”** and the reference grid to **3’**.
- Click on the **OK** button.



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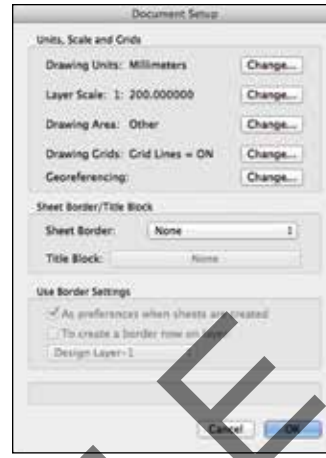
The reference grid may not appear on the screen due to the density of the grid at a particular scale and page size.

The Document Setup dialog box now shows you your setup.

- Click on the **OK** button.



Text Styles

Text styles allow you to create settings for the text you want to use, like paragraph styles in a word processor. This will allow you to define the text settings for a particular style of text and save it. Then you can apply the same style to other text that you want to look the same. When you edit the text style, all the objects with the same text style will update.

- Go to the **Menu** bar.
- Choose **Text > Format Text...**

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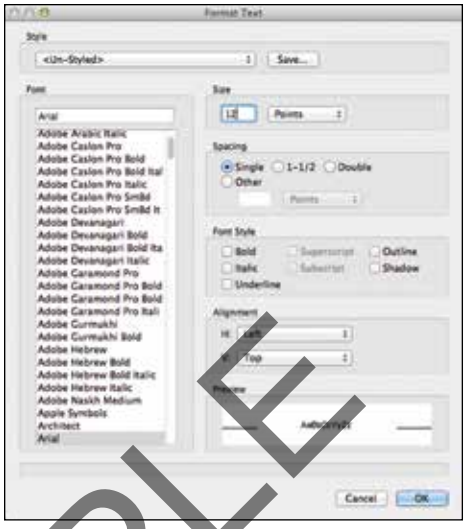
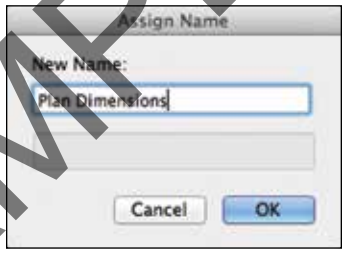
- Chose the font, size, and other text settings you want for a dimension. Text styles allow us to assign these settings to our dimensions.

It is easier if you create the text style first.

- Click on the **Save...** button.



- Name the text style to make it easy to find.
- Click on the **OK** button.



You can see the name of the text style at the top of the dialog box. If you make a mistake, do not worry: I'll show you how to edit the style later.

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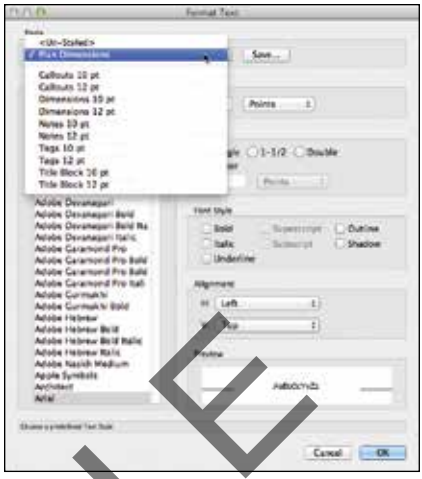
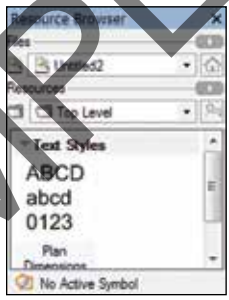
- Click on the **Style** drop-down menu.

The text styles above the gray line are in the current file, and the text styles below it are default text styles that come with Vectorworks.

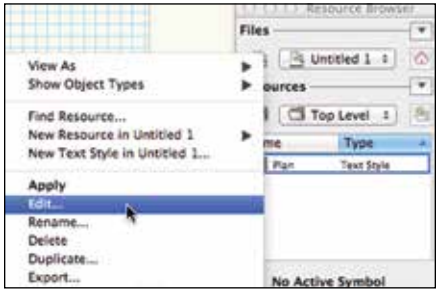
- Click on the **OK** button to finish.



Text styles appear in the Resource Browser.



- Right-click (Control + click) on the text style in the Resource Browser to modify a text style.
- Choose **Edit...**



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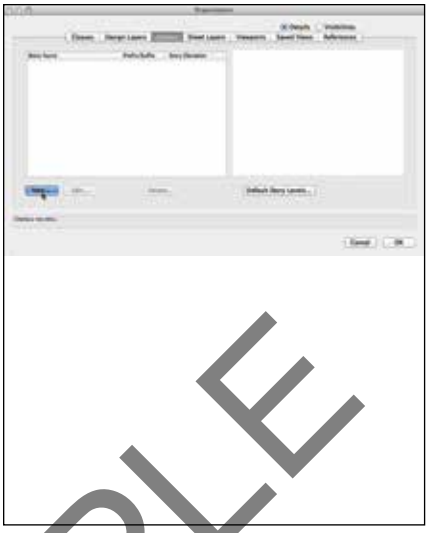
- Make any changes you want.
- Click on the **OK** button to confirm the changes. Every object that uses this text style will update.



Custom Dimension Standard

Vectorworks comes with several typical dimension standards. That is fine if you like the standard settings, but if you want something custom, you can make it.

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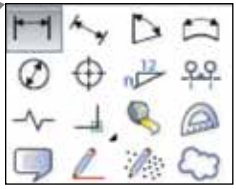
- Go to the **Dims/Notes** tool set.
- Click on the **Constrained Linear Dimension** tool.

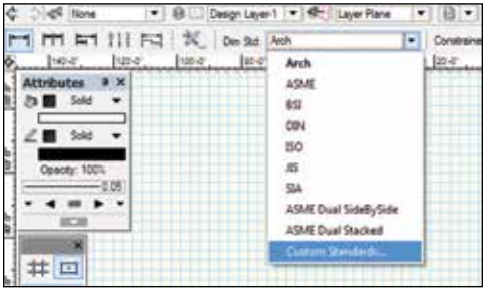


movie
movie004.mov

- Go to the **Tool** bar.

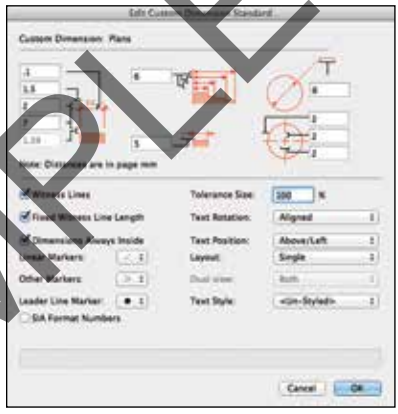
The current dimension standard is shown on the **Dim Std:** drop-down menu.

- Click on the drop-down menu.
- Choose **Custom Standards...**

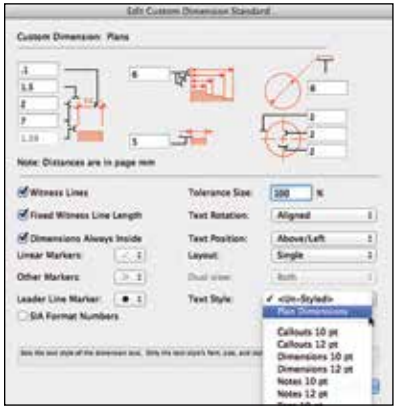


- Click on the **New...** button to create a custom dimension standard.
- Name the custom dimension standard.
- Click on the **Edit...** button to edit the standard.

- Change the dimension settings to suit your drawing style.



- Click on the **Text Style** drop-down menu.
- Choose the text style we created for dimensions.



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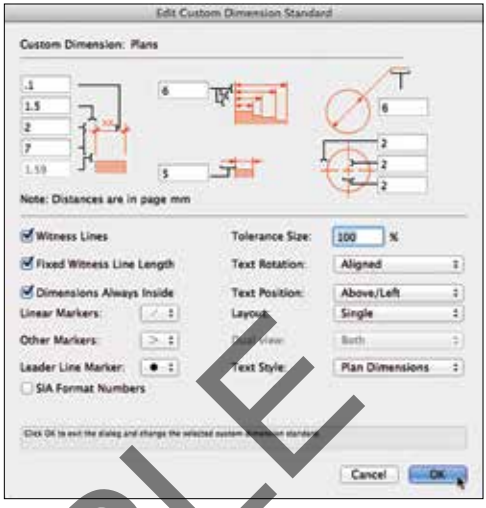
- Click on the **OK** button to return to the Custom Dimensions dialog box.



- Click on the **OK** button.

- Go to the **Tool** bar.
- Choose your new dimension standard from the drop-down menu. From now on, every time you place a dimension, you will be using your text style and dimension standard.
- To save your file as a template, go to the Menu bar and choose **File > Save as Template...**

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Jonathan Pickup | seventh edition

VECTORWORKS ARCHITECT Tutorial Manual

written with version 2015

ABOUT THE AUTHOR

Jonathan Pickup is an architect trained in New Zealand and in the United Kingdom with more than 25 years of experience. He received his Bachelor of Architecture (BArch) degree from the University of Auckland in New Zealand. He later spent more than eight years in England where he learned to use several CAD packages, including MiniCad, and began teaching this forerunner of Vectorworks. Upon returning to New Zealand in 1997, he established archoncad, a Vectorworks training and consulting company. He has written several Vectorworks training manuals for architects, landscape architects, educators, and design students. He organizes the New Zealand Vectorworks User Group and provides its main direction.

VECTORWORKS ARCHITECT is a powerful addition to the Vectorworks family of design software. This tutorial manual is based on Jonathan Pickup's successful Vectorworks Architect course taught in New Zealand. The feedback from this course has been very positive and has helped many clients to use Vectorworks Architect and, just as importantly, to develop an office drawing system based on Vectorworks organizing concepts.

This exercise-based tutorial manual covers

- basic concepts of layers and classes and how they relate to developing your office layer and class standard.
- creating an office library.
- using the Property Line tool.
- creating and manipulating site models and using them for height-to-boundary analysis.
- walls and the wall type library.
- stairs and vertical transport.
- how to make a quick model of a project using spaces for bulk and location analysis.
- using annotation tools, title blocks, and the note database to quickly annotate your plans.

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$75.00
ISBN 978-1-940194-06-6
57500>
9 781940 194066

NVM.ARC-2015 v1.0
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