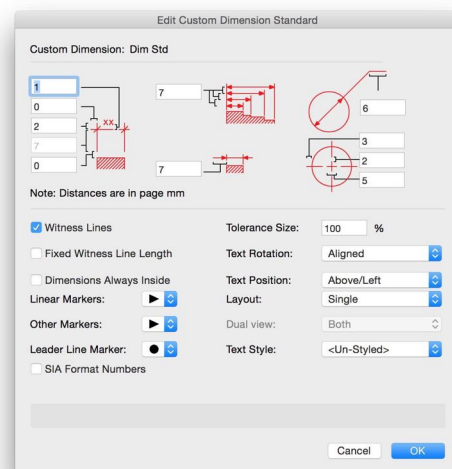
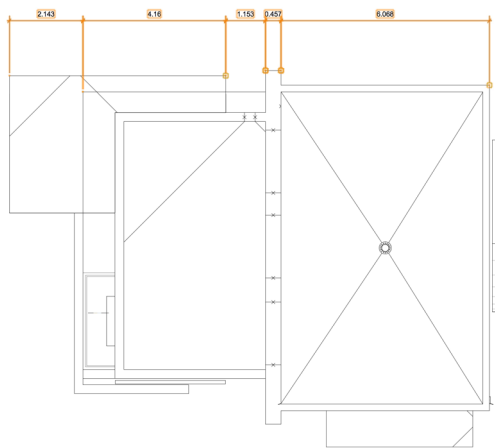


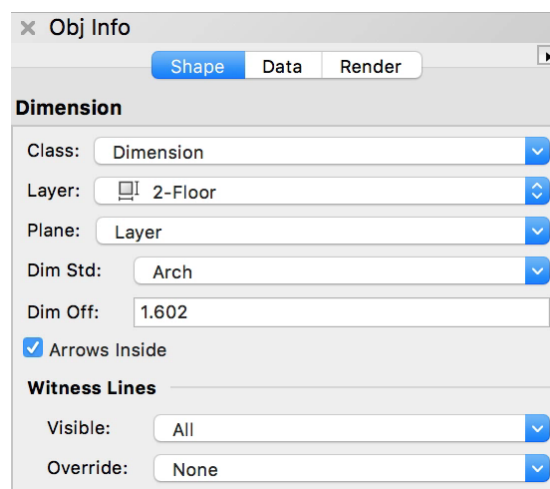
BIM – ARCHITECTURAL DIMENSION STANDARDS

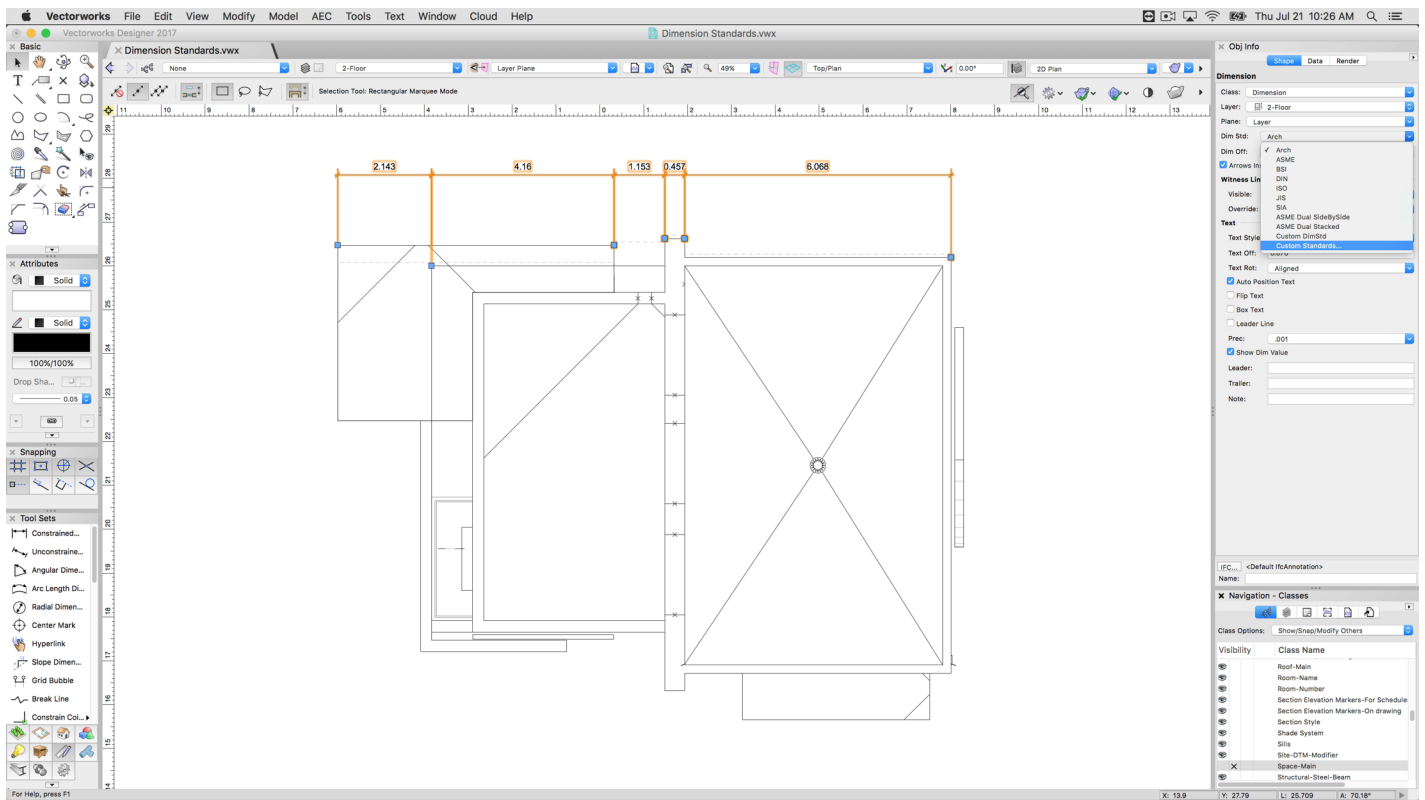
INTRODUCTION

In this section, we will review Dimension standards. Dimension standards in Vectorworks software are what show and control the appearance of dimension objects.



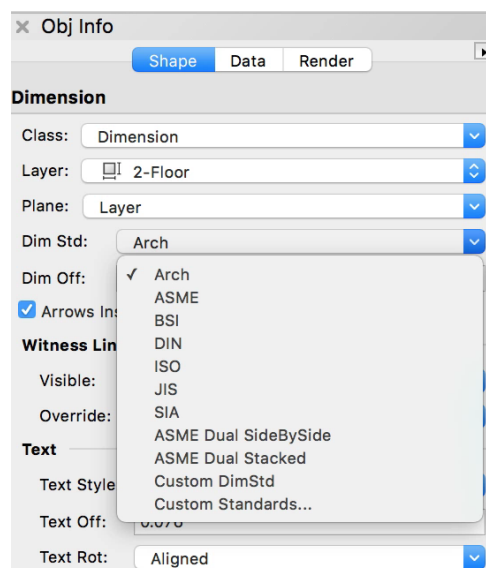
By default, all dimensions will have a dimension standard. With a dimension selected, if you look in the Object Info palette under the Shape pane, you see the Dim Std field. This dimension is using the arch standard. If we change it to ISO, you will see the appearance of the dimension change to reflect the ISO standard settings.



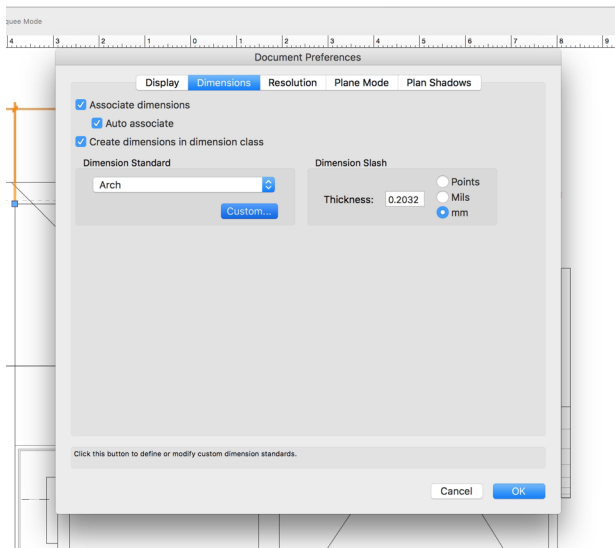


Through the dimension standard, you can control what the labeling looks like from the offsets to the witness lines and markers. There are few default standards, include both single and dual dimension standards. We will talk about dual dimensions later.

From the Dim Std menu in the Object Info palette, you can choose from a preconfigured dimension standard or edit a custom standard.

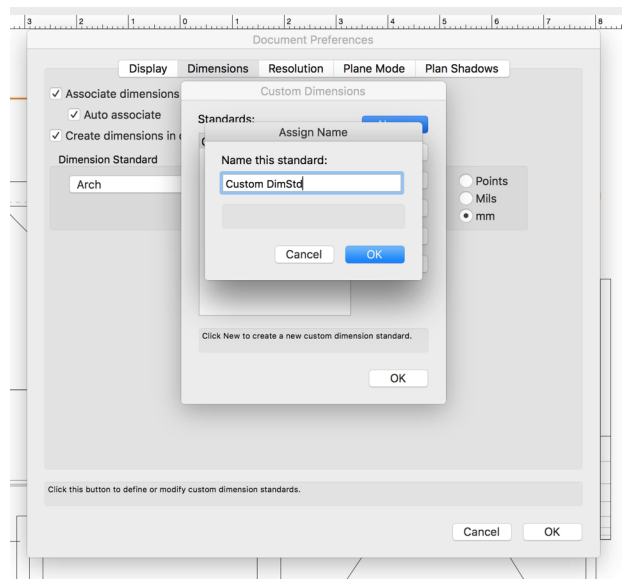
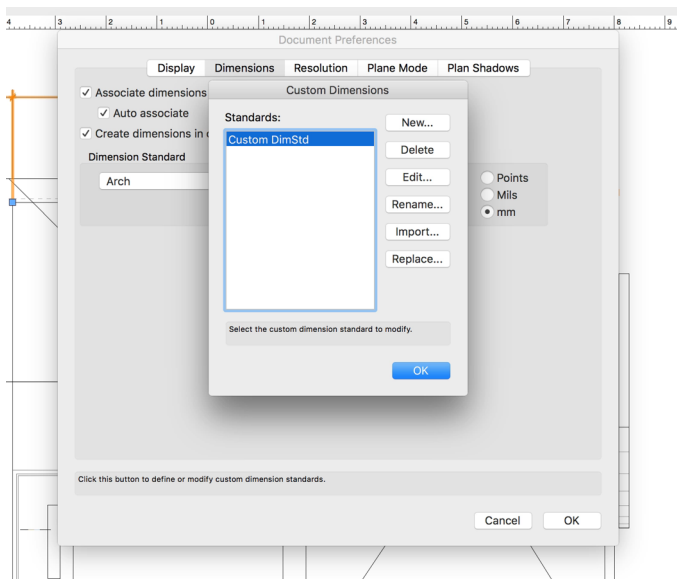


You can also edit dimension standards by going to File > Document Settings > Document Preferences and then under Dimensions choose Custom.



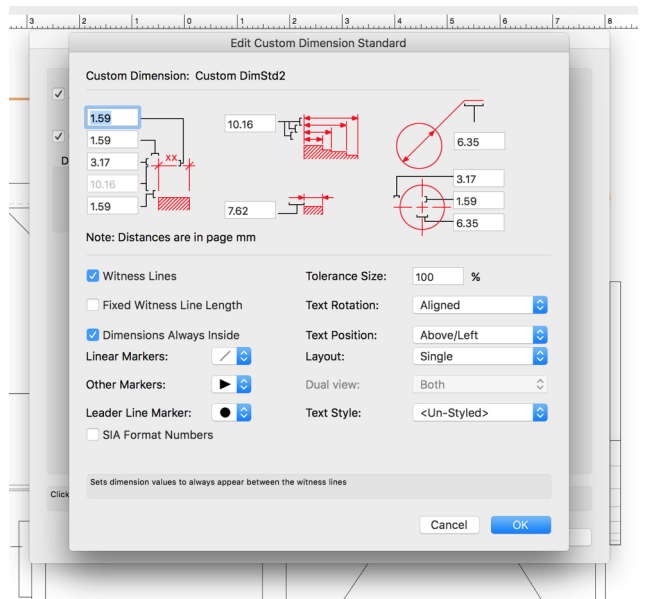
In the Custom Dimensions dialog, you can create and manage your custom dimension standards. You can create, delete, edit, rename, import, and replace standards.

Dimension standards are saved in the document. You can configure and save your standards in a template file for use in future projects. If we click New, we can create a new standard.

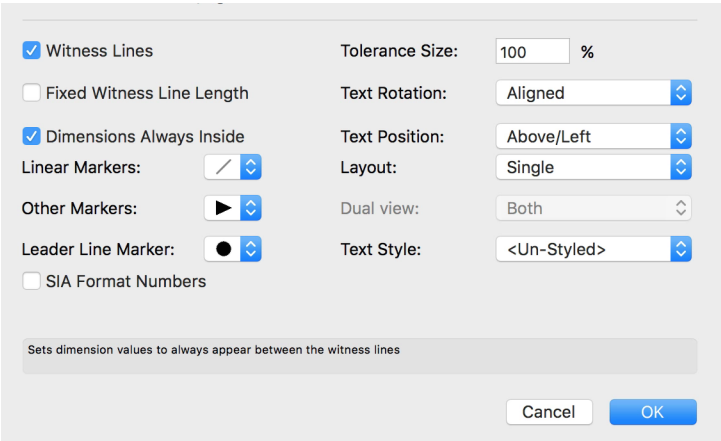


After naming the standard, the Edit Custom Dimension Standard dialog will appear. At the top of this dialog, offsets and lengths of the various parts of a dimension can be set.

Each value is displayed with a visual example of what it controls. From the offset of the dimension text to the length of the witness lines.



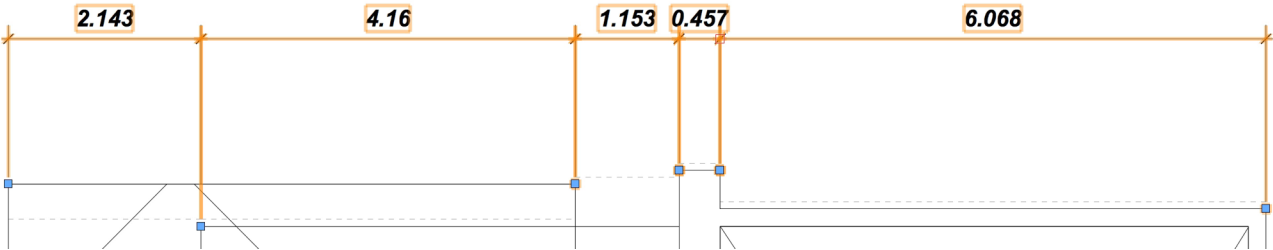
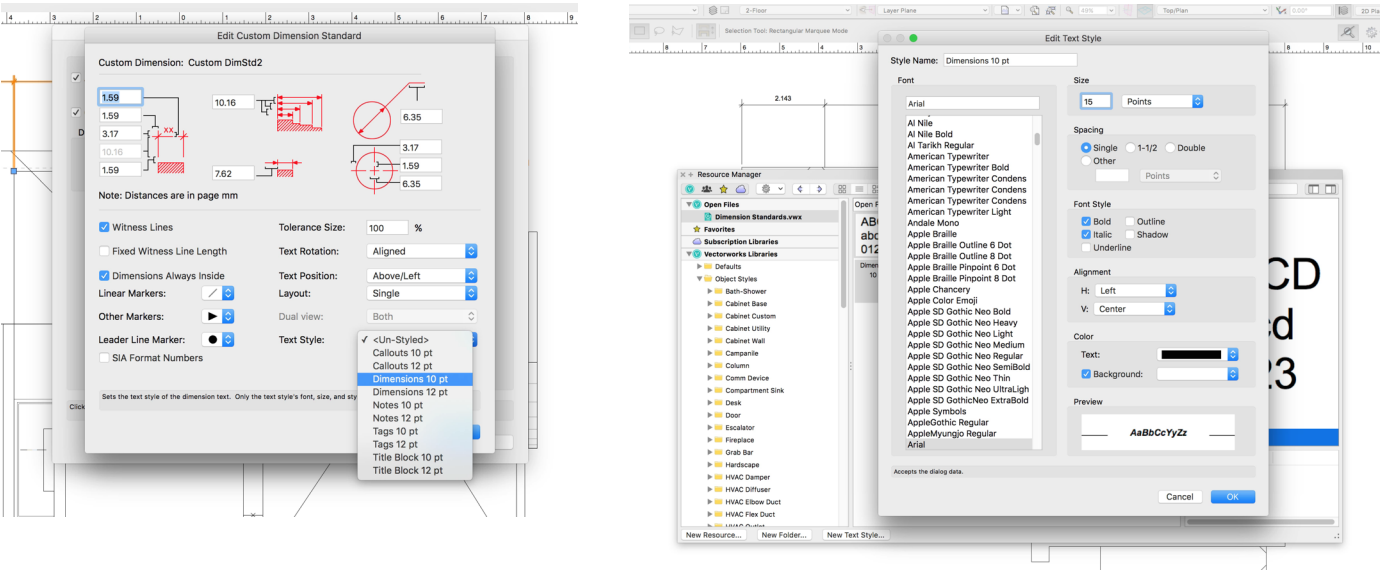
Below these values, you can set various options for the standard. You can choose to show or not show witness lines or set a fixed witness line length.



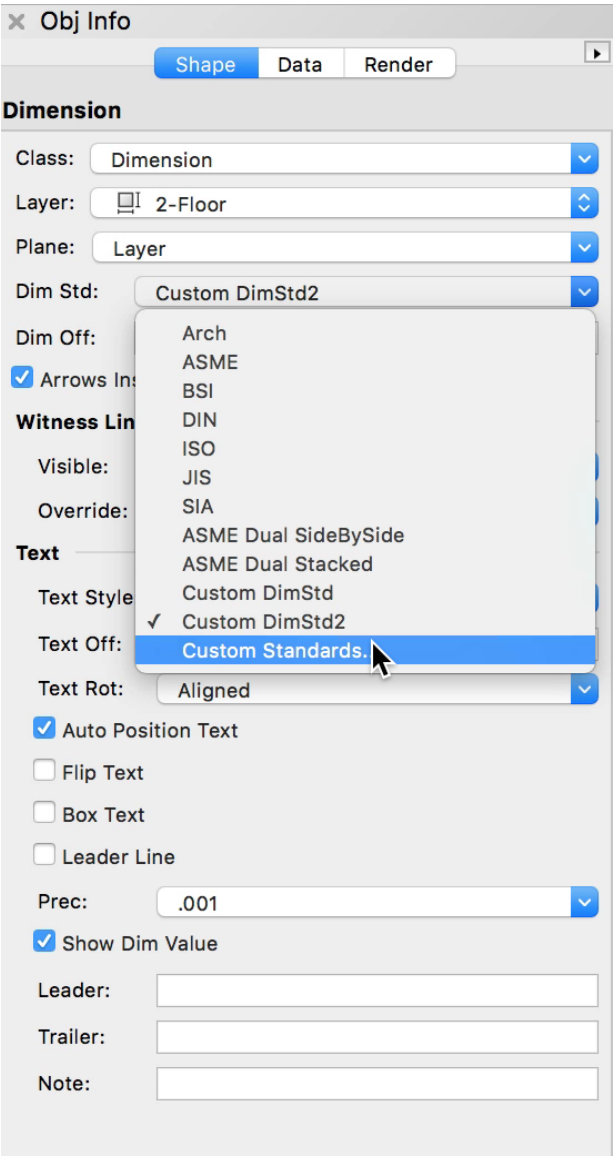
In addition, you can choose the markers used with this standard, as well as the text rotation, position, and even set a text style for the standard.

This allows you to control the dimension text through a text style directly. The font, size, color, and other options can be edited by navigating to the chosen text style in the Resource Manager.

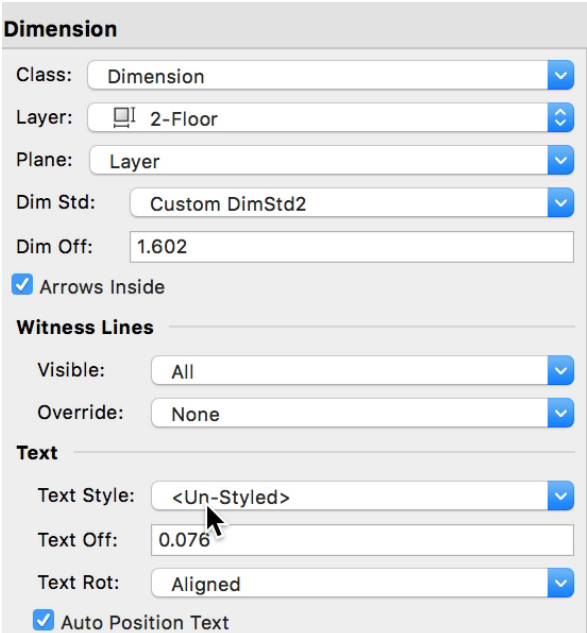
For example, if we set the style to bold and italic and increase the size to 15 points, we can see that the dimension updates to show these changes.



The text style for a selected dimension can be overridden by chosen a different text style in the Object Info palette.

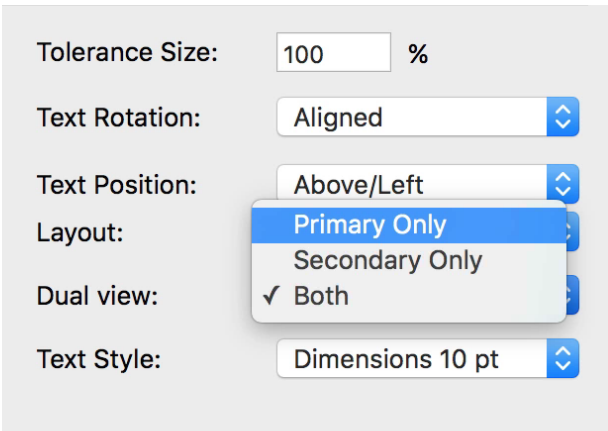
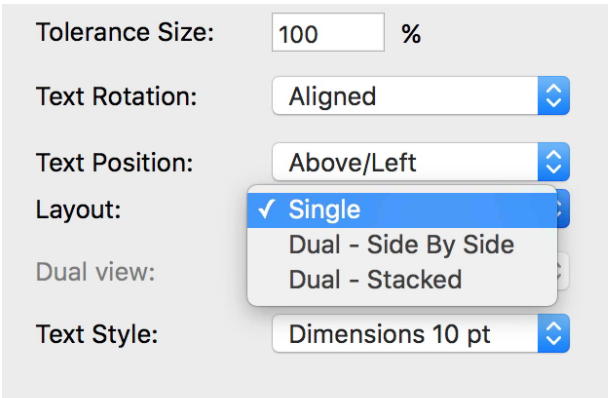


If we set it to Dual - Stacked, this standard will show two dimensions using different unit settings. This configuration will show the dimension text, one stacked above the other. Under Dual View, you can choose the default visibility for the dual dimensions. You can choose to show only the primary dimension, only the secondary dimension, or both.



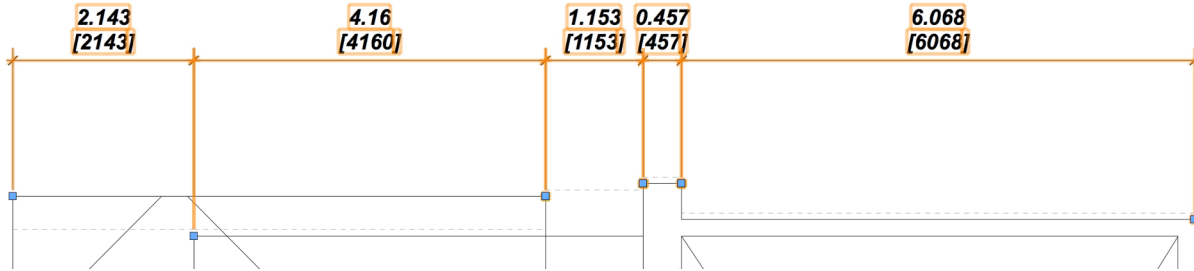
Next, let us look at dual dimensions. If we click on the Dim Std menu in the Object Info palette and choose Custom Standards, we can edit the standard.

By default, the layout for a new standard is set to Single. In addition to Single, there are Dual - Side by Side and Dual - Stacked.



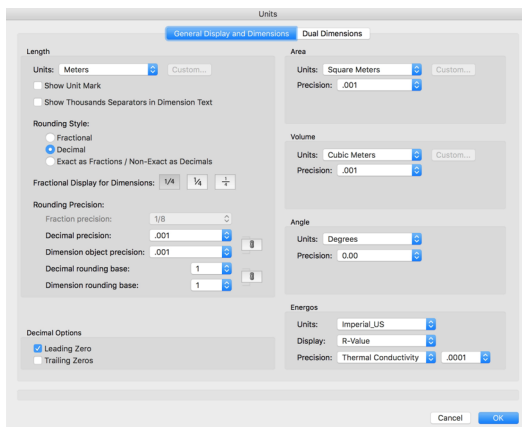
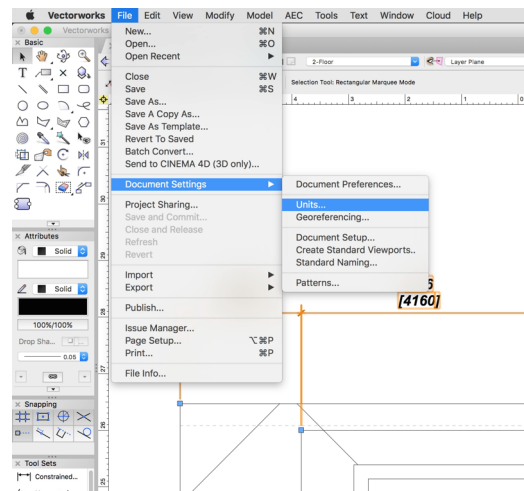
If we choose Both and click OK, the secondary dimension text now shows below the primary dimension text.

Currently, the primary dimension is set to Meters and the secondary dimension is to Millimeters. To adjust the unit settings for the primary and secondary dimensions, we need to edit the document's units settings. Go to File > Document Settings > Units.

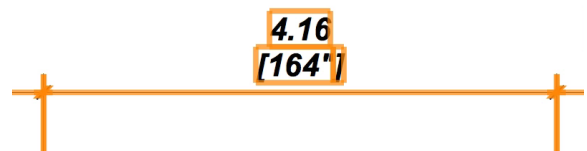
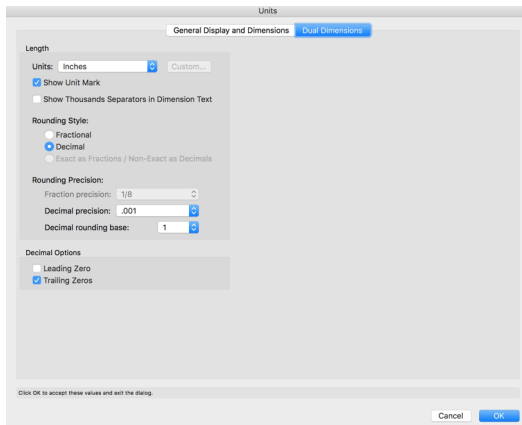


In the Units dialog, you will see two panes at the top, General Display and Dimensions and Dual Dimensions.

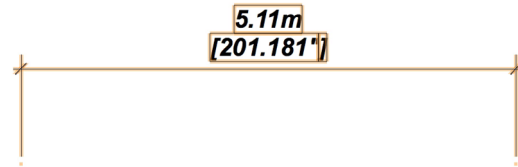
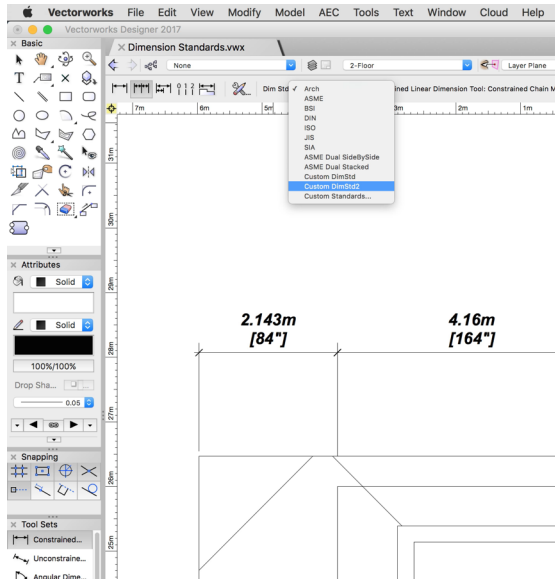
The General Display and Dimensions pane controls the primary dimension unit settings and the Dual Dimensions pane controls the secondary dimension settings.



For example, if we click on the Dual Dimensions pane, we can set the units to Inches instead of Millimeters and enable the Show Unit Mark option. After clicking OK, we can see the secondary dimension text now shows the value in inches instead of millimeters.



Now, that we have configured a dimension standard, we can use this standard for new dimensions. If we activate the Constrained Linear Dimension tool from the Dims/Notes tool set, we can click on the Dim Std menu in the Tool bar and choose a new custom standard and place a dimension.



One final note. When placing dimensions using a dual dimension standard, you can override the default dual view setting from the standard. With the dimension selected, in the Object Info palette you can toggle between Primary Only, Secondary Only, or Both. This allows you to choose which dimension text to show, per dimension object.

