

MAIN INTERFACE ELEMENTS

Palettes

Drawing and editing tools are arranged into two main palettes: **Basic** and **Tool Sets**, which are opened from **Window | Palettes**. These palettes can be rearranged by dragging them within the drawing window and closed by clicking on the button at the top left of the palette (Mac) or the top right (Windows). Click on a tool to make it active. For many tools, double-clicking opens a dialog box that allows the creation of an object by entering values for size and position.

Some tools have additional tools beneath them, indicated by the small arrow in the lower right corner. Simply press on the tool to reveal more choices, then move the mouse over to make a different selection.

Tool Sets

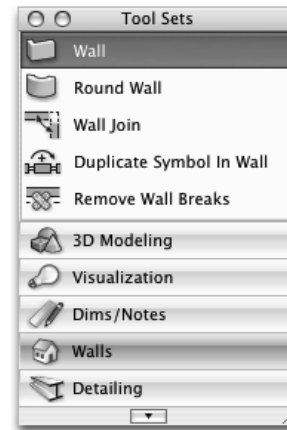
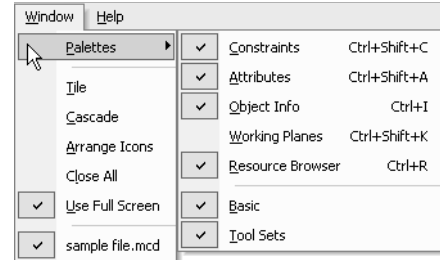
The **Tool Sets** palette contains additional tools for working in 3D, placing dimensions, and making notes, drawing walls, and detailing. To access a tool set, simply click on its title bar at the bottom of the palette and select a tool. Any tool set can become a tear-off palette by grabbing its title bar and dragging the tool palette onto the drawing. Clicking on the small arrow at the bottom of a tool palette opens pop-up menus with options for viewing and sorting tools.

Tool Bar

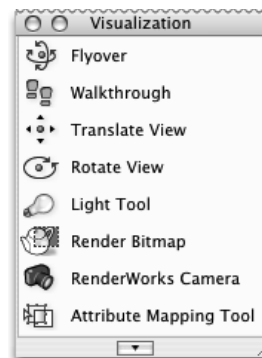
Most tools have more than one mode, or way of being used. Modes are selected in the **Tool Bar**, the horizontal strip immediately above the drawing window. The tool name and the currently active mode are displayed beside the icons of the tool's different modes. Notice that the **Tool Bar** is context-sensitive since it changes according to the tool chosen.

Data Bar

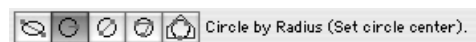
The **Data Bar** is also context-sensitive and displays information about the size and position of objects as they are drawn. The floating **Data Bar** follows the cursor and can be activated by pressing **Tab**. The fixed **Data Bar** can be found either on the **Tool Bar** or its own bar. Press the **Tab** key in the middle of drawing an object to switch the keyboard's focus to the **Data Bar**.



Walls Tool Set highlighted



A tear-off palette



Tool Bar

X: -3'3 1/2" Y: 11'11 1/2" L: 0" A: 0.00°

Floating Data Bar

Then type in precise figures for the size, position, angle, etc., of the object currently being drawn. Continue tabbing to lock in a number and advance to the next field.

Constraints

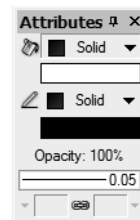
The **Constraints** palette controls how reference points on existing objects are used to help draw a new object or move an existing one. VectorWorks' constraints (also called snaps or snap constraints) work by **SmartCursor cues**. When you get close to a point on an object, a word appears, indicating a reference point has been reached. Double-click on some constraints to choose additional settings, such as grid options and angle snaps.



Constraints palette

Attributes

The **Attributes** palette contains settings such as an object's pen and fill colors, line thickness and style, opacity, and the style and position of arrowheads. Making changes with no objects selected alters the default settings, affecting the way that future objects are drawn. With one or more objects selected, changes affect their attributes, but not the default settings. VectorWorks' text settings also work in the same way. The **Attributes** palette also contains default content for hatches, gradients, and images.



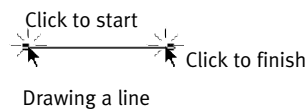
Attributes palette

Basic Principles

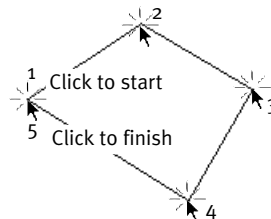
Some basic principles used when drawing in VectorWorks are described below. For your copy of VectorWorks to match the instructions shown here, make sure that in **VectorWorks Preferences**, the setting for **Click Drag Drawing** is turned off, meaning that a line is drawn with two clicks of the mouse instead of a drag and release.

To begin drawing, choose a tool from a palette, either by clicking on its icon or by selecting it with a keyboard shortcut.

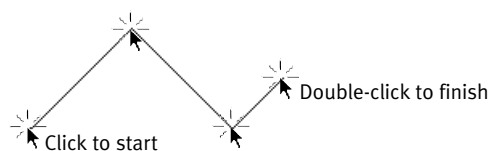
When drawing with tools such as the **Line**, **Rectangle** or **Circle Tool**, click to start and click to finish. With other tools, such as the **Polyline** or the **Polygon Tool**, click to start, then click on the starting point to finish a closed object, or double-click to finish an open object.



Drawing a line



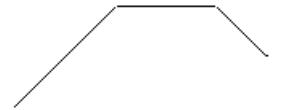
Drawing a closed polygon



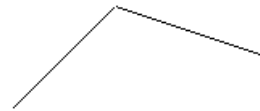
Drawing an open polygon



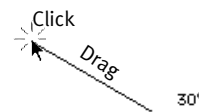
- > When drawing objects with multiple vertex points, such as polygons or polylines, press the **Delete** key (Mac) or the **Backspace** key (Windows) to remove the last vertex point drawn. Press the key repeatedly to remove multiple vertices.
- > Press the **Escape** key in the middle of a drawing action to cancel the operation. Pressing the **Escape** key when a dialog box is open is the same as clicking on the box's **Cancel** button.
- > The **Space Bar** engages the **Boomerang** mode. Press the **Space Bar** to temporarily switch to the **Pan Tool**. While in **Boomerang** mode a second tool, such as the **Zoom** or the **Flyover Tool**, can be selected and used. Release the **Space Bar** to return to the original tool. **Boomerang** mode can also be engaged while in the middle of a drawing action.
- > Choose **Edit | Undo** to undo your last action. The maximum number of undos, as well as various preferences related to the **Undo** command, can be entered in the **Session** tab of **VectorWorks Preferences**.
- > While drawing, press **Shift** to constrain objects such as lines, polygons, and walls (they can be held at horizontal, vertical, 30°, 45°, or 60°). The **Shift** key also constrains a rectangle to a square or an oval to a circle.
- > Snap constraints allow you to draw and move objects very precisely to given reference points. When you are at a snap point, the cursor's icon changes and a **SmartCursor** cue appears onscreen next to the cursor. This screen hint indicates that you will snap to that particular object. Snap constraints are discussed further in the chapter *Using Snap Constraints*.
- > Double-clicking on most drawing tools on the **Basic** palette opens tool-specific dialog boxes where settings such as size, layer, class, and position on the drawing can be entered.



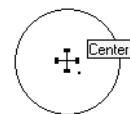
Drawing a multiple vertex object



Pressing the Delete or Backspace key removes the last vertex point



Line is constrained to 30° with the Shift key



Circle's Center snap point