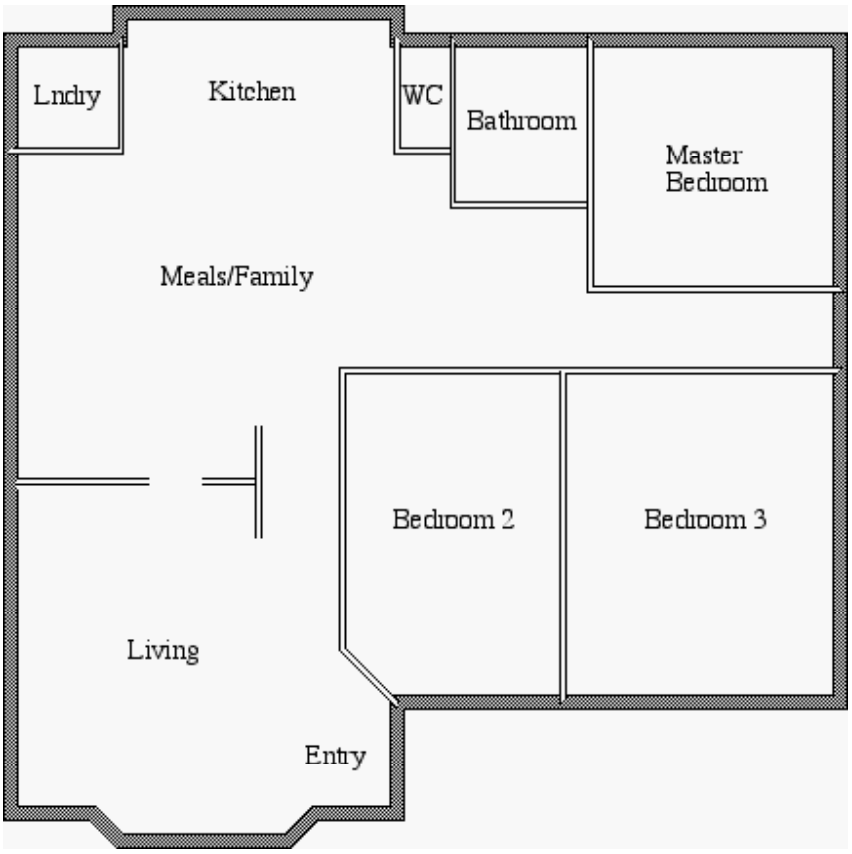
Learning VectorWorks Chapter 4

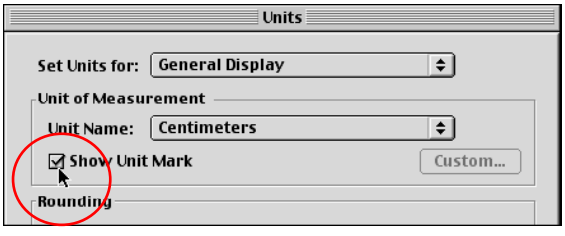
The Wall Tool and Floorplans

One on the main uses of a CAD program involves the creation of building plans. VectorWorks offers a wide range of tools to allow the accurate construction of those plans. In this chapter you will use the WALL tool to create the following floorplan for a house. It will be roughly 14 metres down and 16 metres across.



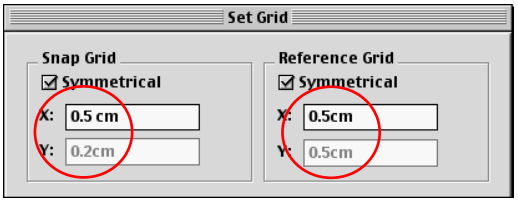
1 Load VectorWorks, or close the current file then select NEW from the FILE menu and select CREATE BLANK DOCUMENT followed by OK.

2 Set the units to CENTIMETRES using UNITS from the PAGE menu and turn on SHOW UNIT MARK so that the centimetre symbol is displayed in the Ruler.



3 Display the PAGE menu and select SET GRID.

4 In the SNAP GRID section enter 0.5 in the X box. In the REFERENCE GRID section enter 0.5 in the X box. By doing this the cursor will snap to grid points.



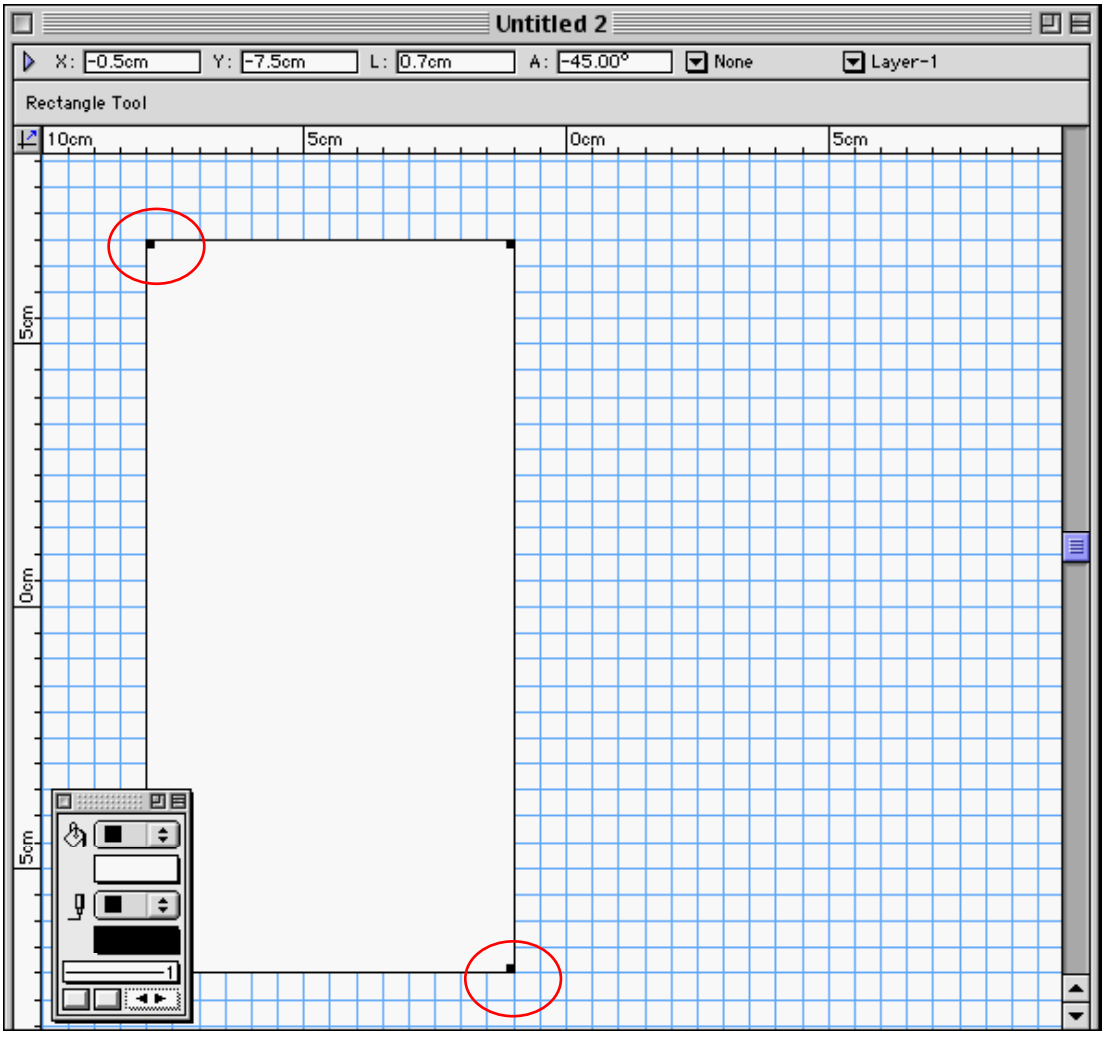
5 Select OK and the grid should now be at 0.5 cm intervals.

Entering the Outside Walls

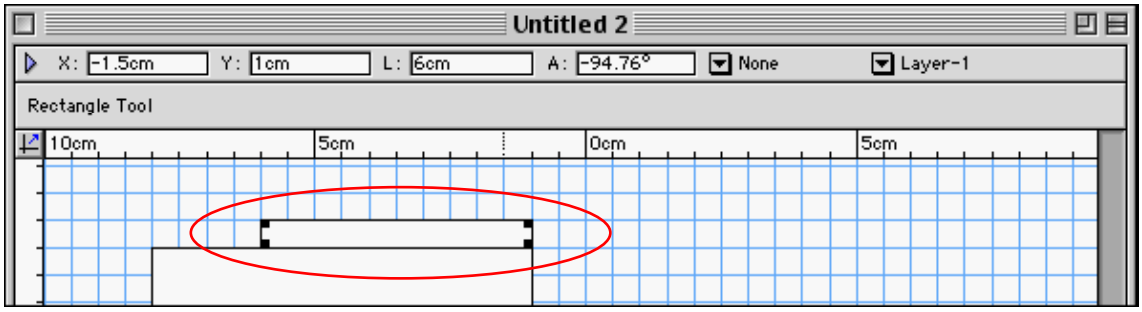
The first place to start with the creation of a floorplan is the outside frame of the house. The rectangle tool will be used to create a series of polygons which will then be converted to walls. The scale to be used is 1 cm = 1 m.

A The Kitchen and Living Rooms

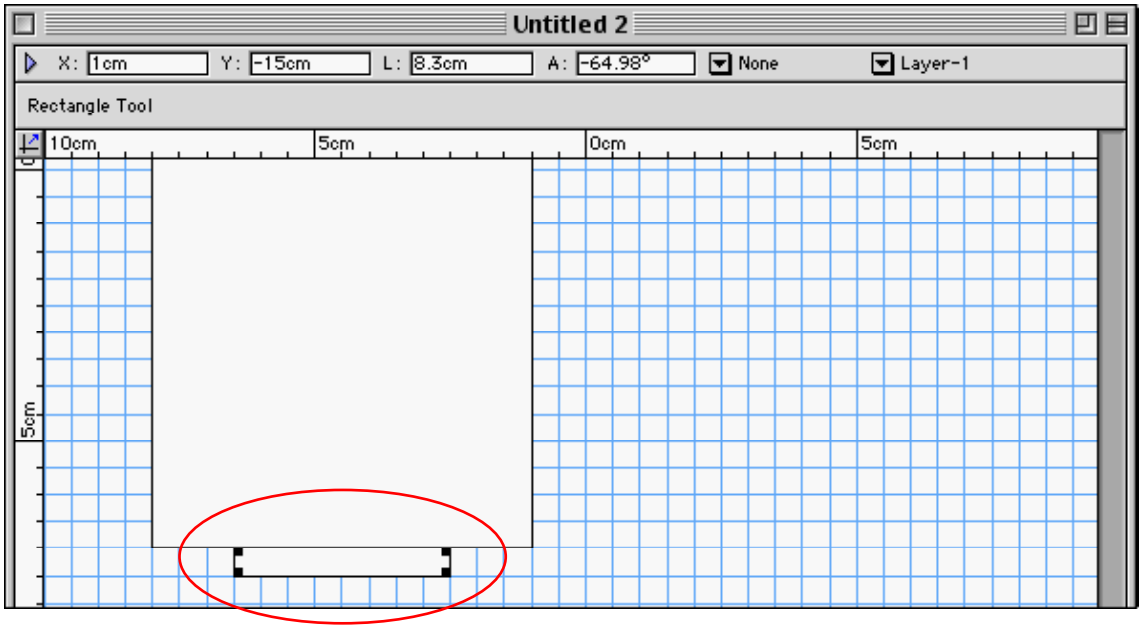
1 Select the RECTANGLE tool and draw a rectangle from (-8,7) to (1,-7).



2 Two additional rectangles will be used to add an alcove at the top of the building for the kitchen fixtures (sink, etc.) and bay windows at the bottom of the living room. Draw a rectangle from (-6,8) to (1,7.5).



3 Press the DOWN ARROW key once to pan down the screen and draw another rectangle from (-6.5,3) to (-2.5,2.5).



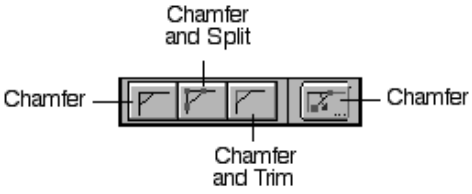
B Using the Chamfer Tool

The CHAMFER tool allows diagonal lines to be cut from polygons. In this case the last rectangle can be set to have diagonal lines at either end.

1 Select the CHAMFER tool  from the DRAWING TOOLS.

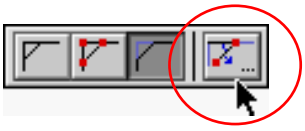
2 The modes have the following meaning:

MODE		DESCRIPTIO
	Chamfer	Places a chamfer (diagonal line) without affecting other objects in the drawing, leaving the chamfered objects exactly as they were.
	Chamfer and Split	Places a chamfer (diagonal line) and splits the chamfered objects into multiple pieces, leaving the unchamfered pieces as a part of the drawing. If chamfering the corner of a polygon, the chamfer takes the place of the
	Chamfer and Trim	Places a chamfer (diagonal line) and trims the chamfered objects and removes the unchamfered pieces from the drawing. If chamfering the corner of a polygon, the chamfer takes the place of the corner.



3 Select the third CHAMFER mode (CHAMFER AND TRIM) which will create the diagonal line and remove the corner of the rectangle.

4 Click on the CHAMFER PREFERENCES button (fourth mode button) to display the CHAMFER SETTINGS.



5 Enter 0.5 in the FIRST LINE and SECOND LINE boxes.

6 Select OK to return to the workpage and drag a small diagonal line across the left bottom corner of the lower rectangle as shown in the diagram at the top of the next page.