

How to Use the Model Editor to create a Model

1) Let's create a new project. Let's also create a separate directory for all the project files to be stored.

Here's how you will use the Model Editor to create Templates, Components, Points and Lines to create a wireframe model.



Figure 1

2) Click the Template tab (see Figure 2)



Figure 2

3) Click the Green “+” button (see Figure 3). Clicking the “+” creates new Template.

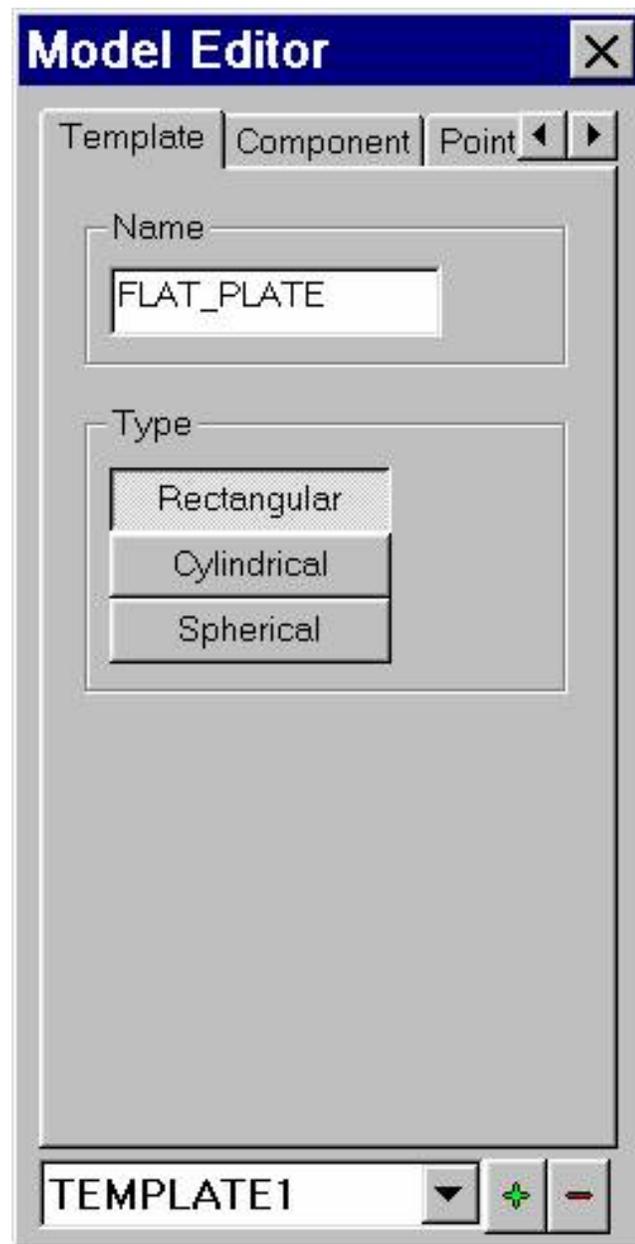


Figure 3

- 4) Edit the Template Name (I changed TEMPLATE to FLAT_PLATE)
- 5) Choose the Coordinate system Type
- 6) Click the Component tab (see Figure 4)

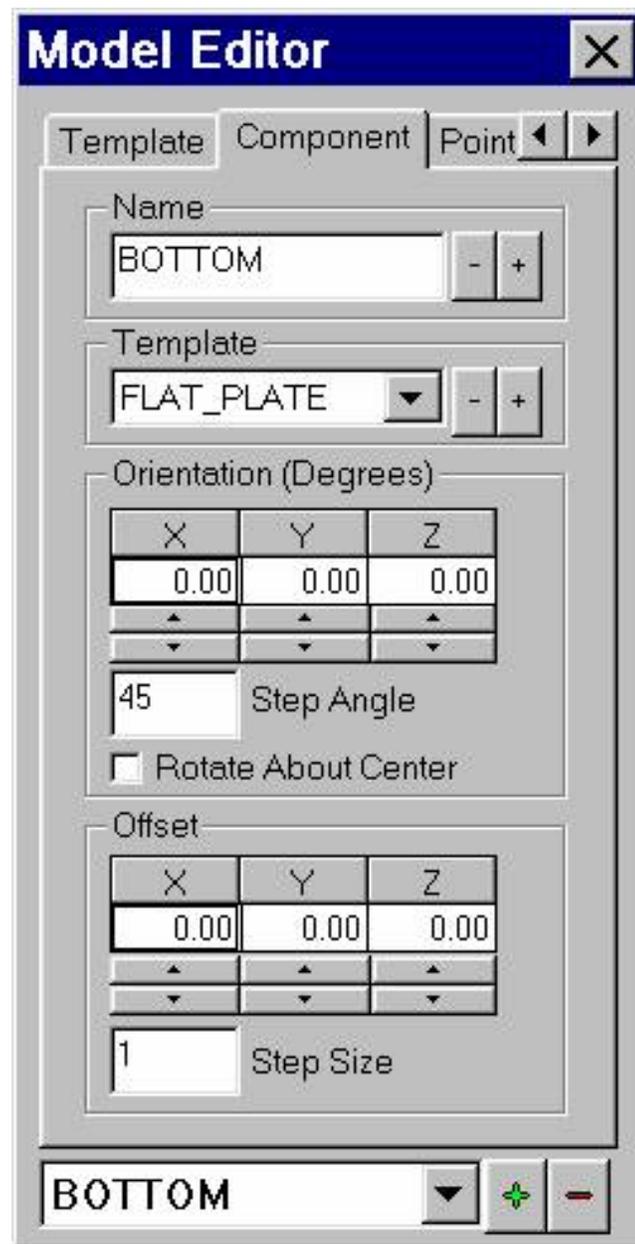


Figure 4

- 7) Select the appropriate Template to associated with this Component (FLAT_PLATE)
- 8) Edit the Component Name (I changed it to BOTTOM)
- 9) Orientation is used to set up Local axis, about the Global axis
 - a. Rotational values are in Degree
 - b. To create Local Axis: Highlight the value (X, Y, or Z) and enter a new values or just use the Up/Down arrows for increments of the Step Angle. In the above example each click up/down will increment/decrement by 45 degrees. To change he Step Angle increment/decrement, highlight the

Step Angle value and enter a new value.

10) Rotate About the Center: If checked the Component will rotate about its center. Otherwise, the rotation will be about the Global axis.

11) Offset is used to specify a physical offset for the Component relative to the Global axis.

a. **To change:** Highlight the value and enter a new value or use the Up/Down arrows. In the above example each click up/down will increment by 1. To change the Step Size increment, highlight the Step Size value and enter a new value

12) Click the Points tab (see Figure 5)

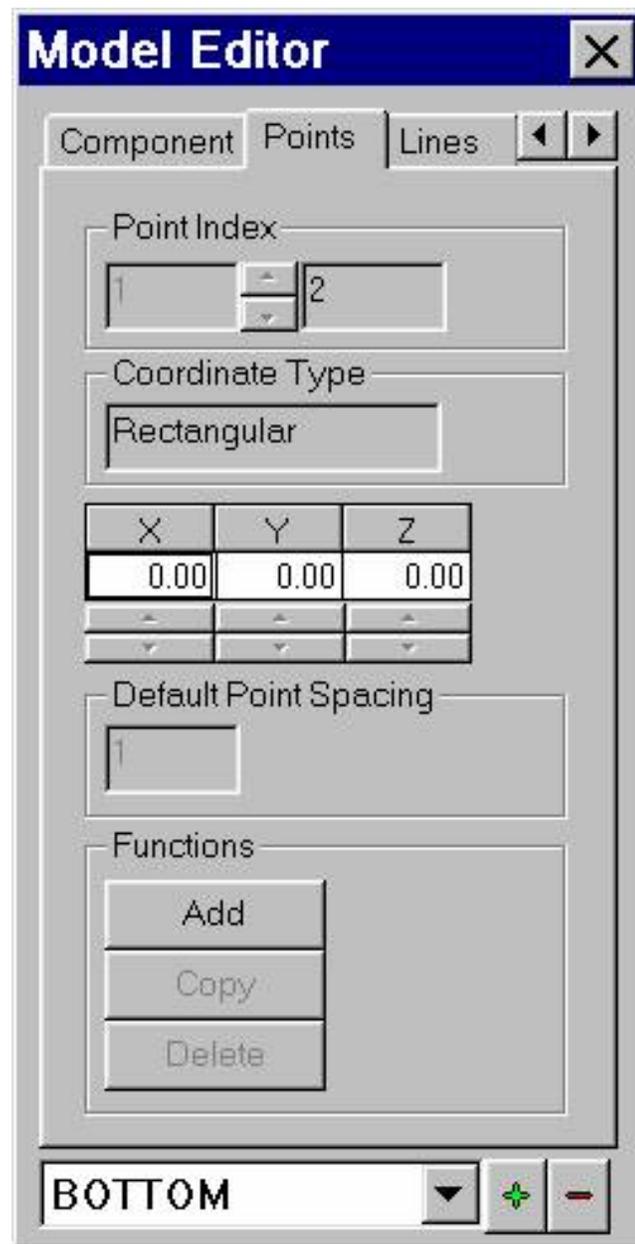


Figure 5

13) Click the Add button (see Figure 6)

Here we are adding the coordinates that describe your model in X, Y and Z space.

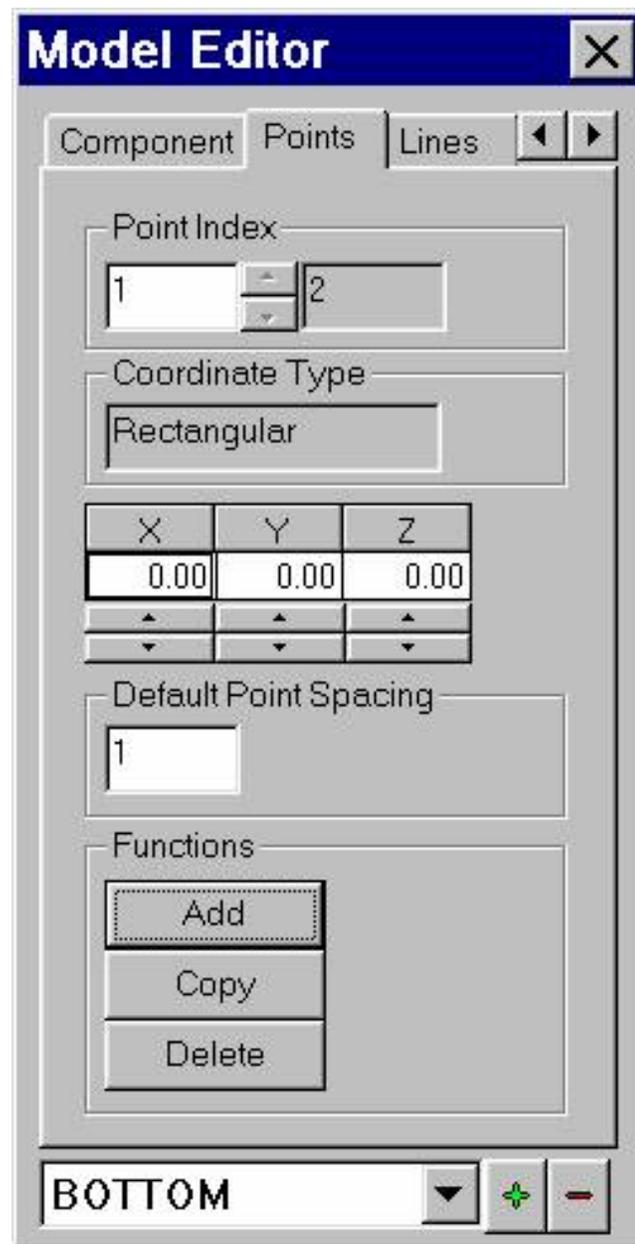


Figure 6

- 14) Click in the X value field, enter the X value (in the English system values are in inches and in the Metric system values are in meters) or use the Up/Down arrows, the values will increment by the Default Point Spacing. In this case +1/-1.
- 15) Hit the Tab key (this moves you to the Y value field)
- 16) Enter the Y value
- 17) Hit the Tab key (this moves you to the Z value field)
- 18) Enter the Z value
- 19) Click Add to enter the values for the next Point (repeat 14 through 9)

Use the Point Index to scroll through the Point numbers and view/edit the current values.

Use the Delete button to delete the currently display point number.

Once, you have entered in a series of Points:

Click Model menu

Click Setup

Click Points tab, here you can view your entries in spreadsheet
Format

Click Measurement Points tab

Click the Assign Default button

Click OK

In the Model windows, Click in the Perspective view and then Click Single (lower left). You should see a blank Model View.

Right click in the Model View window and a menu will appear:

Move your cursor to highlight Hide/Show

Highlight Highlight/Selection

Click Component Instance

Right click in the Model View window and a menu will appear:

Move your cursor to highlight Display Point Info

Click Number

(The above steps will show us the point numbers at the coordinate location identified in the Points tab. See Figure 7.)

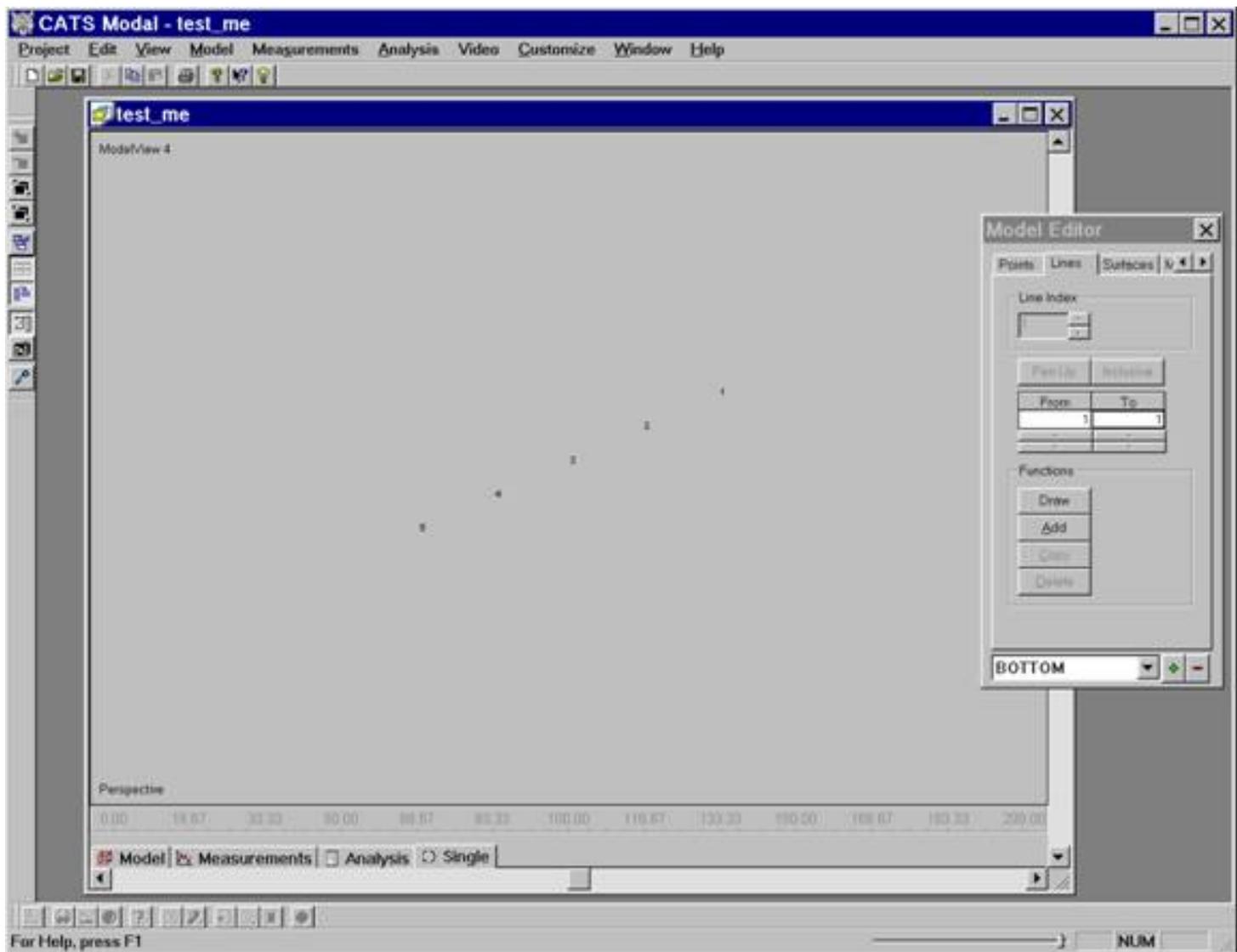


Figure 7

Now back to the Model Editor.

20) Click the Lines tab

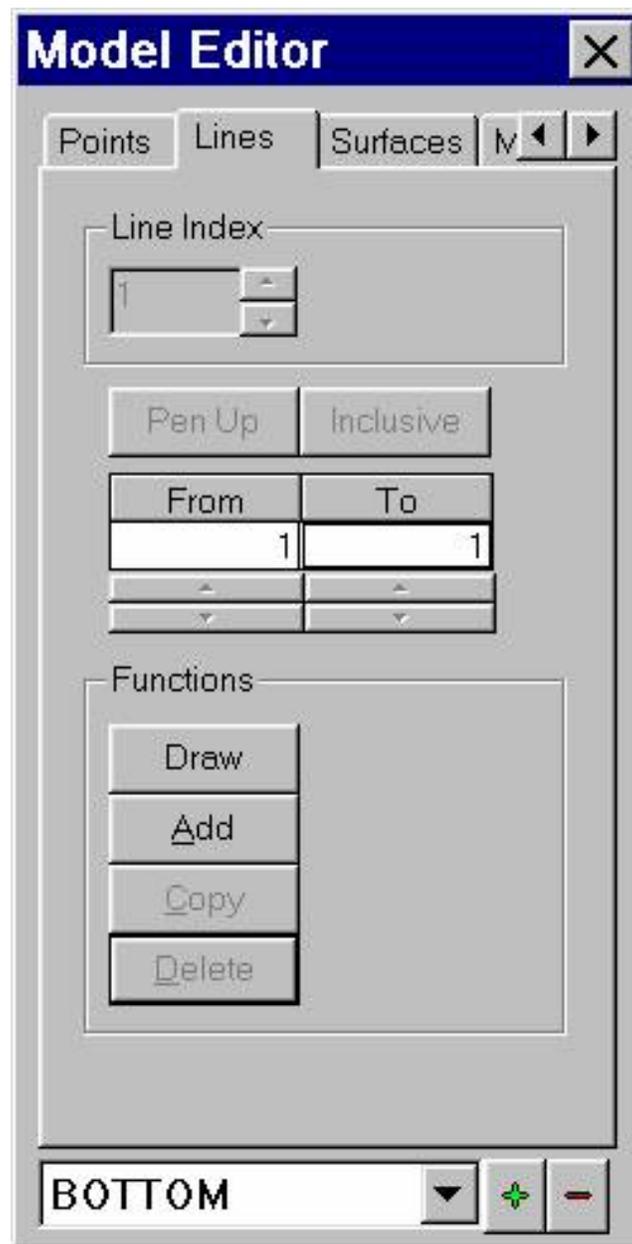


Figure 8

21) Click the Draw button

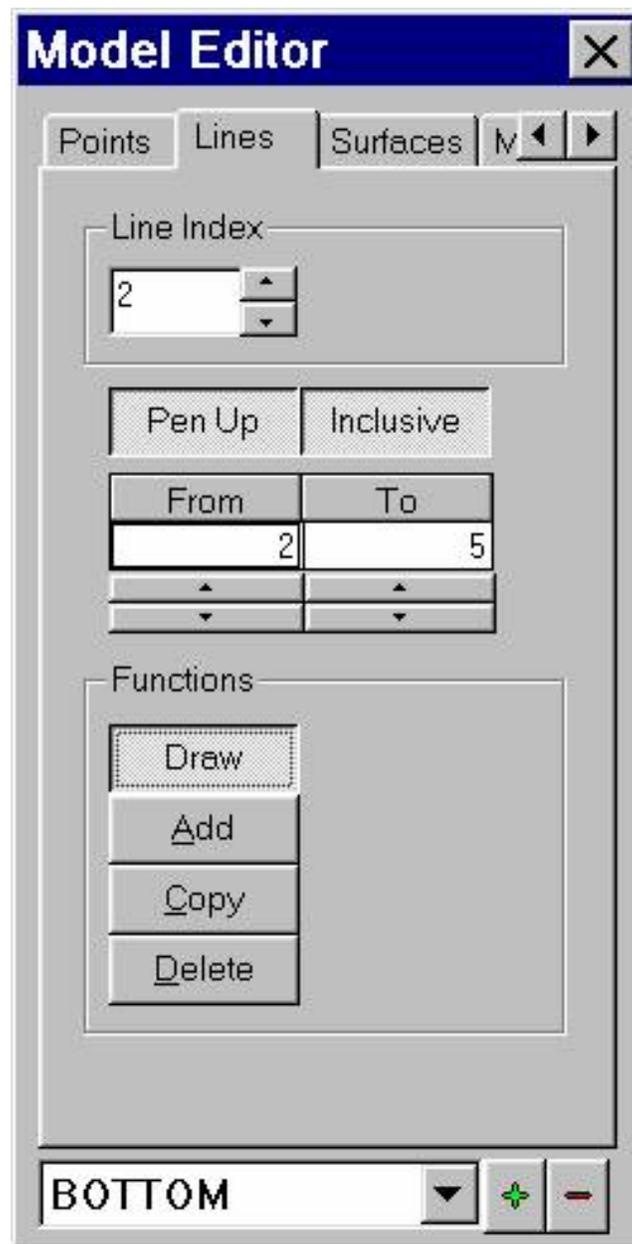


Figure 9

22) (Refer to Figure 7) Left click on Point number 1 and then left click Point number 2. (This will draw and line from point 1 to 2) Also, the second left click terminates the end of the line drawing. The next left click will increment the Line Index automatically.

23) Left Click Point number 2, Left click Point number 5 and then click Inclusive. (This will draw and line from point 2 to 5 and connects every point in between. USE THIS ONLY WHEN THE POINTS ARE SEQUENTIAL.)

See Figure 10, for the results of our line drawing.

Also, refer to Figure 11 to view entries in the line drawing spreadsheet.

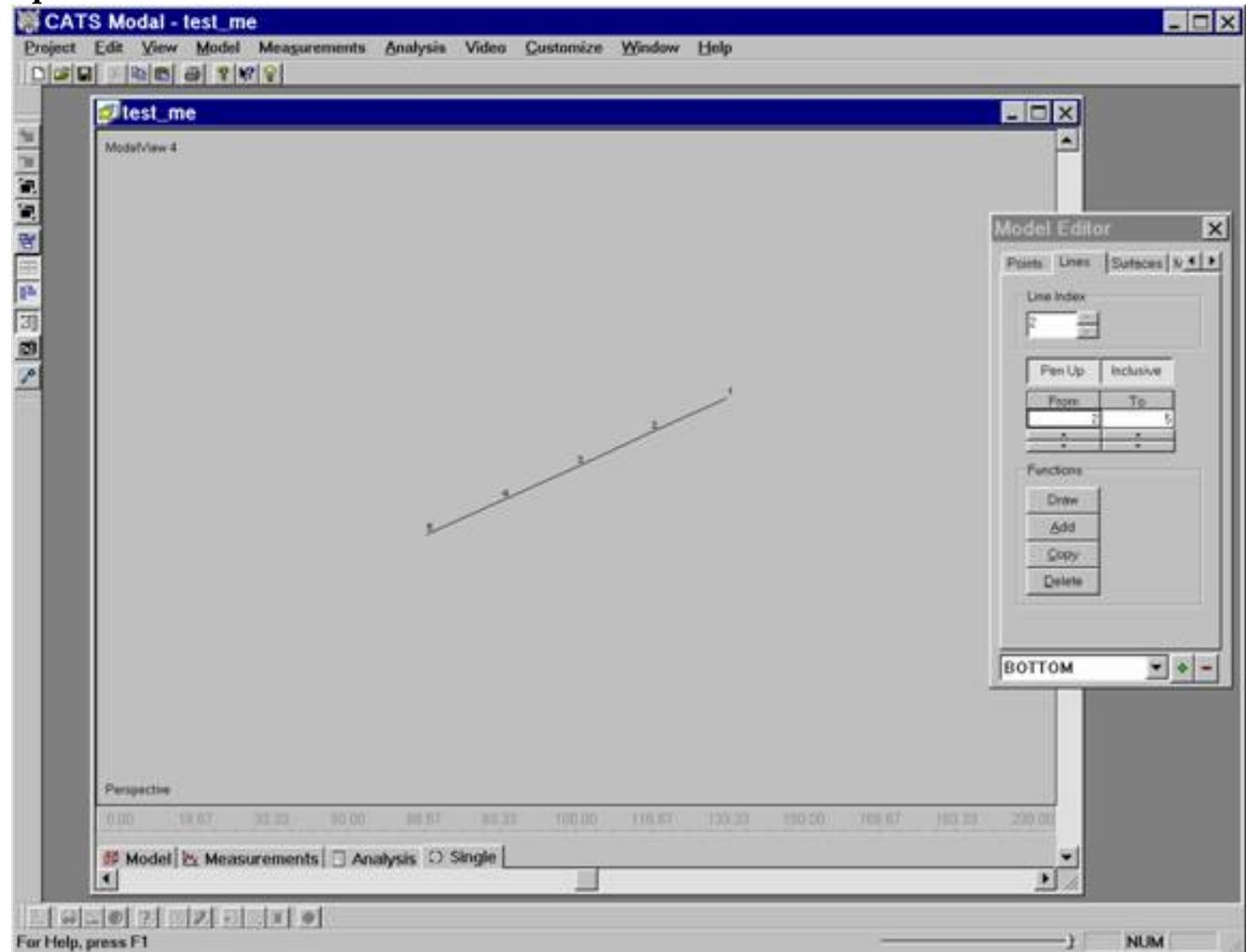


Figure 10

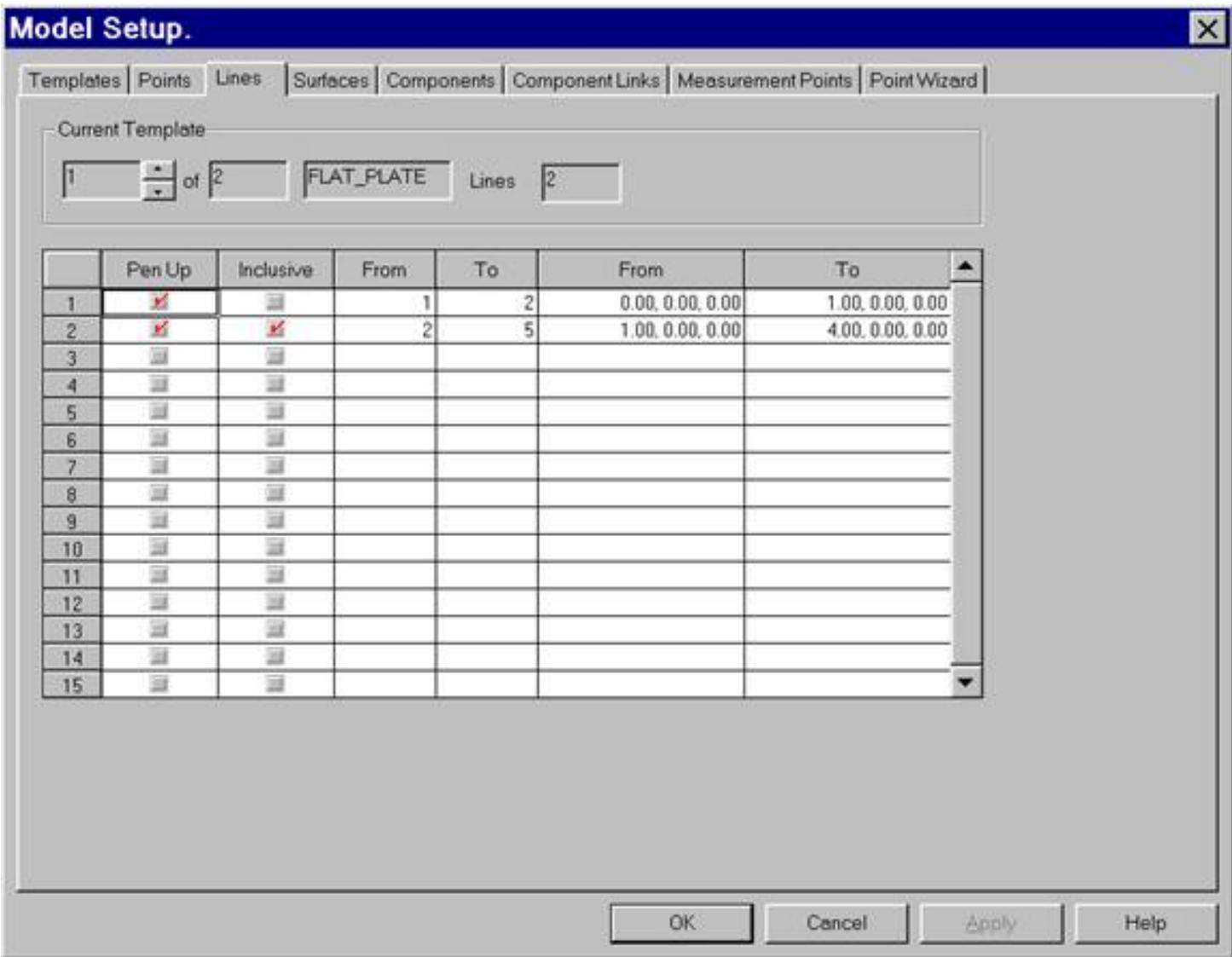


Figure 11