



## CREATING ELEVATIONS IN THEOLT

### CREATING AN ELEVATION DRAWING FROM SCRATCH

1 Start AutoCAD and TheoLt as normal and create an Orientation:

The key for easy elevations is to use the align option within default orientation to create a known position and orientation for the instrument.

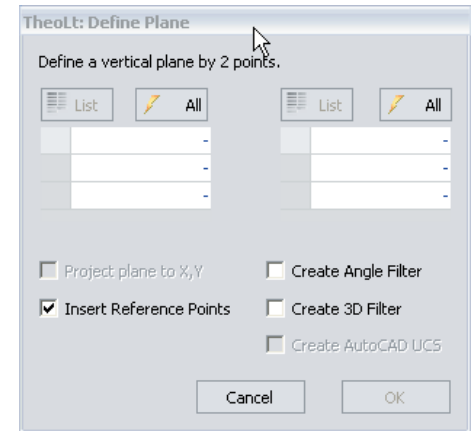
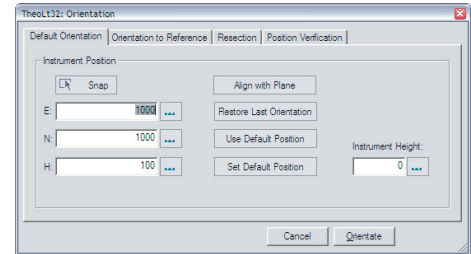


Select the **[Control]** tab. Click the **[Orientation]** icon.

From the **Orientation Panel**, select the **[Default Orientation]** tab.

Location: The E N H fields correspond to the X Y Z co-ordinates in AutoCAD. Enter the values you wish to use. TheoLt defaults to 1000,1000,100 to ensure that the coordinates of data always remains positive. Enter the Instrument Height.

Select the **[Align with Plane]** option. Make two observations on the main face of the elevation (the main wall line





The first shot should be to the left of the second (the direction of the observations control the orientation of the wall. Left to Right = front of plane, Right to Left = rear of plane.)

If using Release 6, enable the option to insert control points. (This enables the alignment to be restored or referred to more easily).

[OK] To close the Define Plane window.

[Orientate] To orientation the instrument.

[Close] The Orientation Panel.

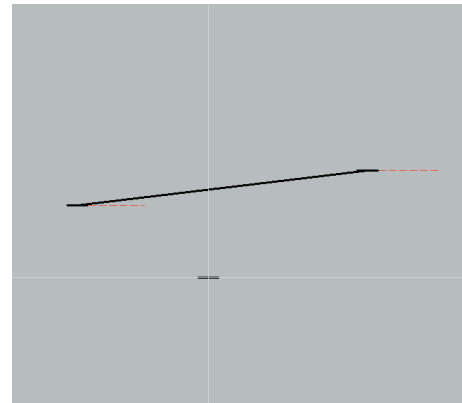
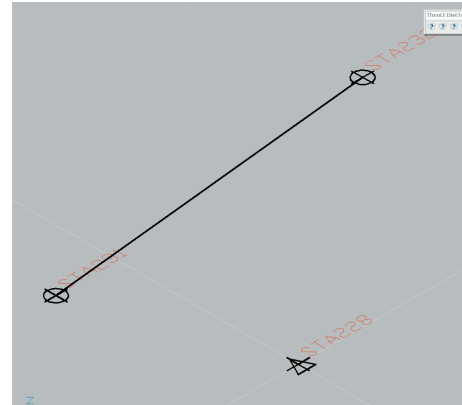
## 2. Draw the base line.

Draw a base line for the elevation using the AutoCAD Line command. The diagram to the upper right shows this drawn between the 2 reference points inserted as part of the Create Plane command.

## 3. Select the Front View.

From the AutoCAD **View** menu, select **Front** from **3D Views**. The elevation will now be viewed correctly in AutoCAD. The elevation may now be captured.

*Note: The usual method for capturing elevations is by use of the AutoCAD "Line" command in 3D. The drawing may then be "Flattened" back in the office to 2D for delivery to the client.*





## EXPORTING THE ELEVATION TO A 2D DRAWING

The method detailed uses the wblock command to write a new drawing. As the drawing is created, the current UCS becomes the world UCS of the new drawing.

### 1. Create a UCS.

This may be done at the time of creating the view previously. Ensure the front view is selected. From the AutoCAD **Tools** menu select **View** from the **New UCS** menu.

### 2. Write the Block

Select the WBlock command. Enter a filename and path for the elevation drawing. Select the objects for the elevation. OK to create the drawing.

### 3. Open the new drawing.

Open the new drawing. Enter the command "Plan". "W" for world option. The elevation is now in the X-Y axis in plan.

