**13\_Snaps**

Let's explore ETABS snaps while drawing line elements although they are applicable to other elements as well such as when drawing slabs and walls.

Like in AutoCAD ETABS also has snap options to draw elements. You can see this from draw menu or can use them from these shortcuts.

First one is snap to grid intersections. You can draw or click at grid intersections if this option is turned on.

You can still select elements at other locations by mouse and even can draw like this.

But that's not a professional and easy way to do so.

Remember that if you are drawing two lines or any other continuous element they must connect at common node or point.

For example these two lines connect at this common point. You can right click on this common point to see connectivity at this node. Notice these two lines are connected here.

Also you can select this area and see status bar for number of joints. It should be one.

If you are not using snaps chances are you might draw two elements very close to each other. They might look connected on screen but if you zoom in this area you will find two nodes.

Problems like this will prevent your model to run properly with loss of loads and load path.

Next option is for mid points. You can draw for example a line element from midpoint of this grid to midpoint of this line.

This is the node of the line we just created and not the node of already existing line.

Already existing line has just two nodes here and here.

So these two lines are not connected with each other unless you divide them although ETABS divide lines in situations like this automatically.

Similarly if two lines are crossing each other they are not connected unless divided at intersection.

We will talk about this in next lecture on how to edit structural elements.

Next snap is perpendicular snap. Let's say you want to draw a line from this point and finish here perpendicular to this grid.

Next is the edge snap. If you turn this on you can snap to any location within an element.

And finally having all the snaps turned on at one time will create difficulties in drawing elements. So keep only those snaps turned on that are required.