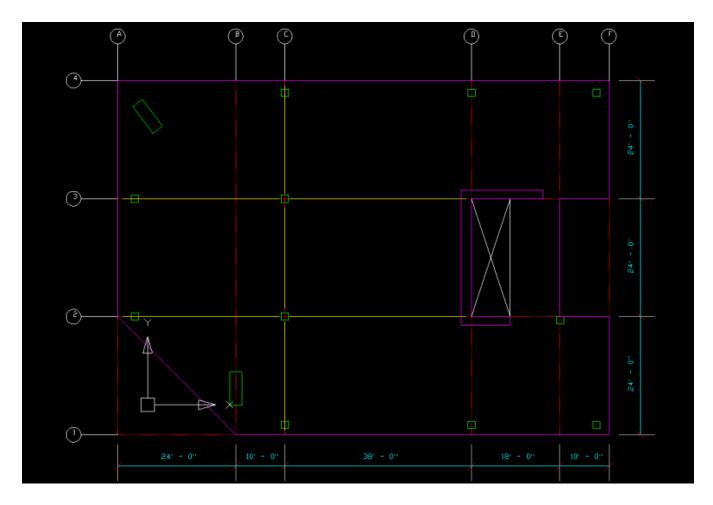
## Import Architectural DXF or DWG Floor Plans into ETABS for tracing

Refer to floor plan below from CAD program:



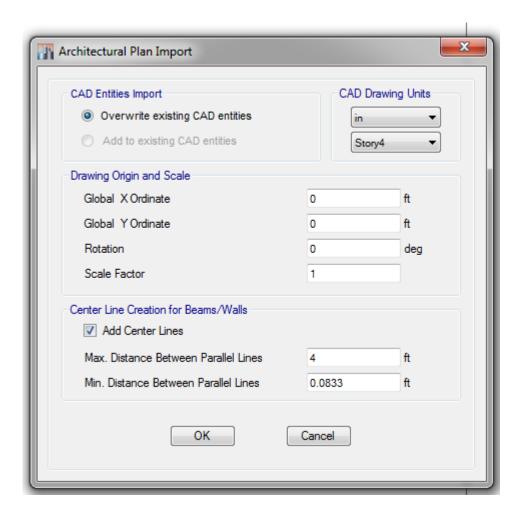
## Rules for Architectural plans in ETABS

- 1. ETABS only process arcs, lines and closed polys from DXF or DWG file.
- 2. ETABS uses closed polygons to create columns and floors. Only rectangular and circular columns can be converted to ETABS columns
- 3. For beams and walls, ETABS uses straight lines and arcs.
- 4. ETABS creates centerlines between two parallel lines, polylines or arcs if the centerlines are close to your specified value and their length difference is not more than your specified value.

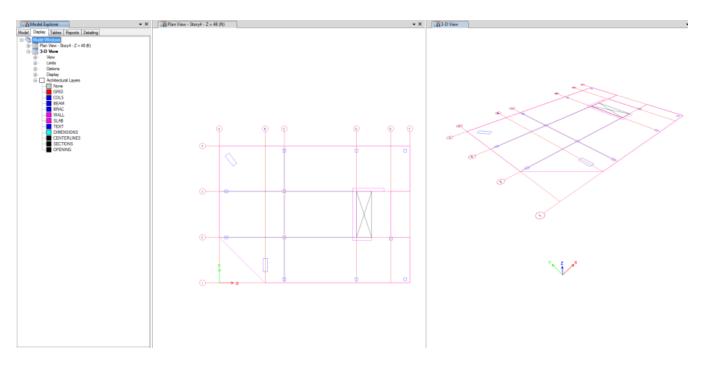
In the case of an 'E' shaped wall, ETABS will create lines for all horizontal legs. There will not be vertical centerlines as there are not two continuous parallel lines in this direction.

## Steps to import and trace

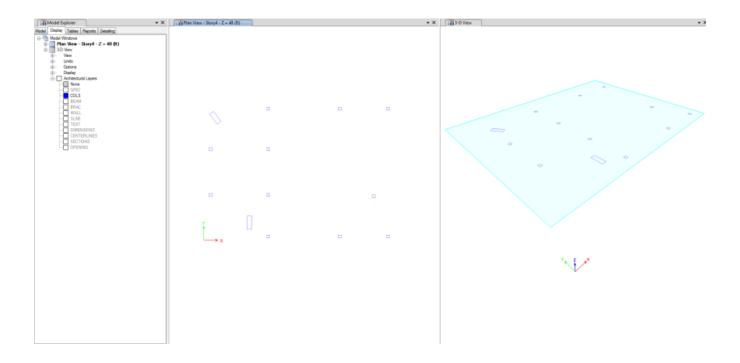
- 1. In order to import your DWG, you will need to use the full version of AutoCAD (not LT).
- 2. Make sure all elements in the CAD drawing are exploded prior to import; if the program finds Blocks it will return an error. It is also good practice to clean up the file of any unnecessary layers/elements irrelevant to structural plans
- 3. Elements in layers "0" or "Defpoints" will not be imported
- 4. The DWG cannot be open in a CAD program.
- 5. Use File > Import > DXF/DWG File of Architectural Plan
- 6. Choose coordinates, story level in the model to be imported, scale, location and options to elements to be neglected when creating center lines as explained above. Maximum distance between parallel lines is very important specially when creating walls, this value should be set to approximately the maximum wall thickness or beam width in the plan.



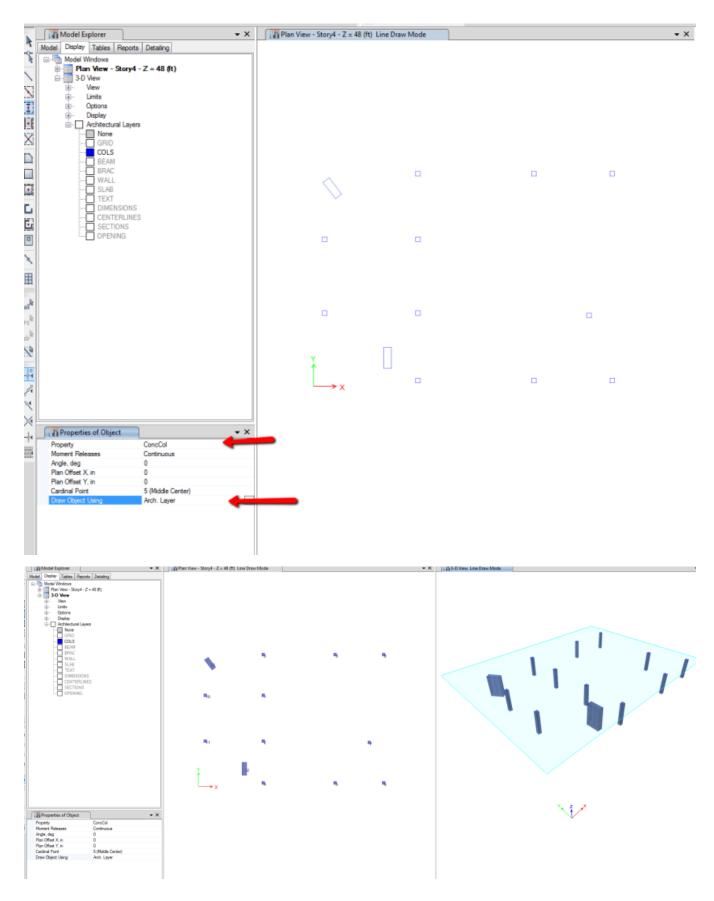
6. The plan and all layers will be imported in ETABS.



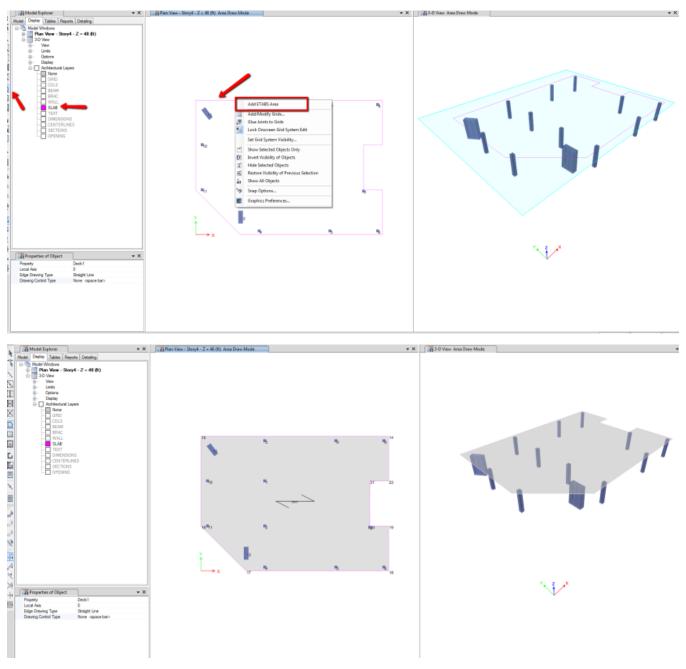
7. Layers can be turned on and off in order to facilitate tracing of elements.



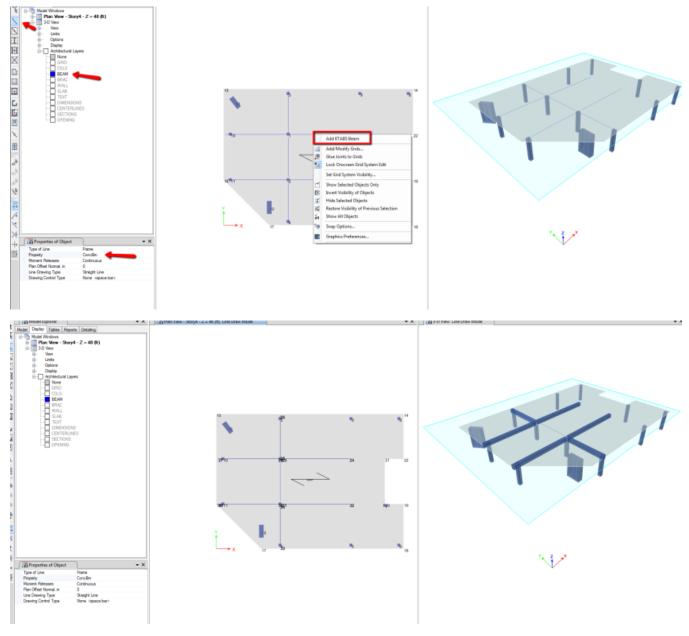
8. Columns can be created all at once by using the Quick Draw column option, and choosing a column section. If concrete column is used, sizes will be automatically detected and new sections will be created based on columns architectural dimensions. Make sure the Draw Object Using option is set to Arch. Layer.



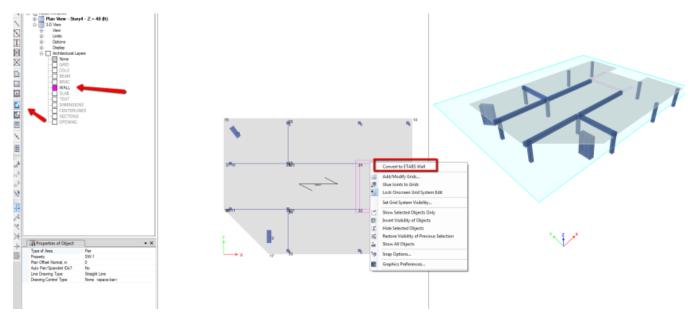
9. To create slab object, right click at the edge of the area element and choose Add ETABS Area.



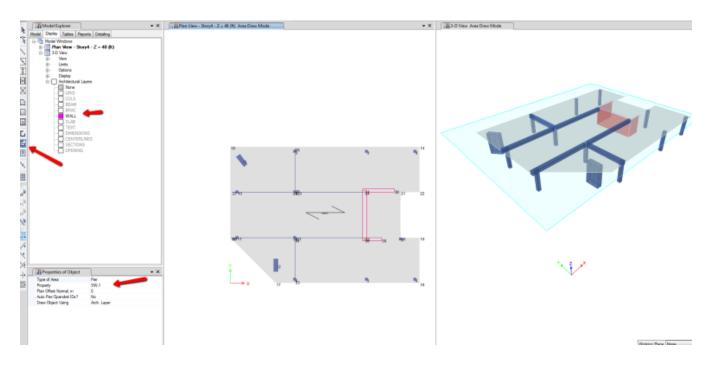
10. To create beams, right click on beam elements and choose Add ETABS Beam.



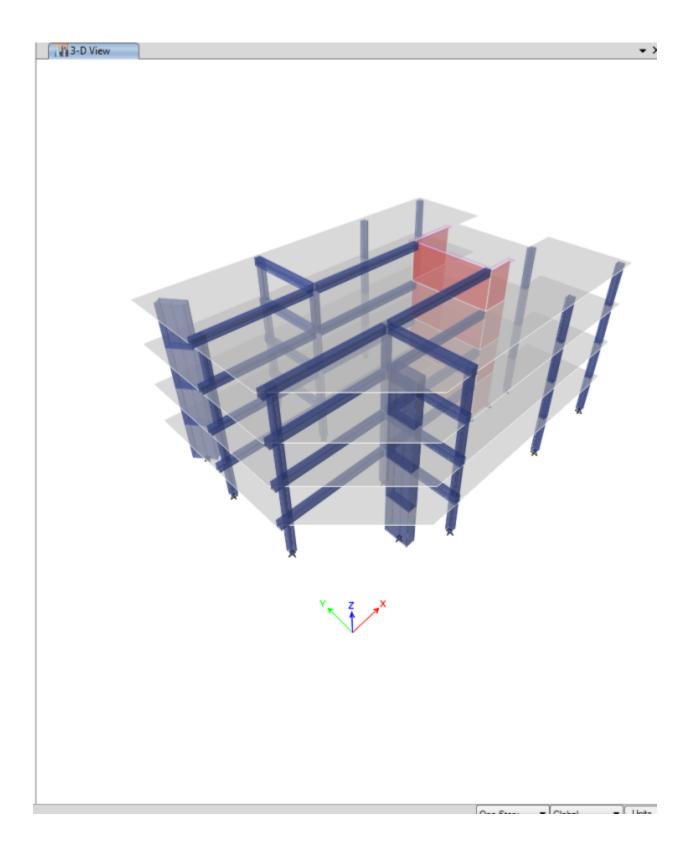
11. Walls can be created either by using the Draw Walls command, right clicking on centerline of the wall, and choosing Add Wall



12. or by using the Quick Draw Walls option, choosing to draw objects based on Arch Layer, and then selecting all walls using the rubber band.



13. Finally, the floor plan can be replicated to all other floors by selecting All Elements and using the Edit > Replicate > Stories option.



## Downloads:

Test floor plan: test.dxf