

Webinar Questions and Answers

1. Q: How important is floor meshing in regard to distribution of beam forces and moments?

A: It is very important; it is recommended that a slab have 4-8 mesh points to ensure the beam is being loaded correctly. For concrete structures, it is recommended that a tee beam be used to ensure the correct stiffness.

2. Q: How does meshing effect vertical load distribution in a one-way slab?

A: Vertical loads are transferred in a one-way slab in the direction of slab stiffness. The slab would need to be meshed for loads to transfer in the direction of the slab.

3. Q: Does auto-meshing effect load distribution on shear walls where horizontal non-uniform?

A: Yes, it is recommended that the floor meshing be finer than the wall meshing to ensure proper loading distribution.

4. Q: Is there a way to edit the actual internal mesh nodes?

A: Users can save the mesh, export it to different formats (DXF), edit the mesh and re-import back into ETABS. In the near future, users will be able to update the mesh graphically without having to export/import the mesh.

5. Q: Can one mesh the plate/shell thickness itself?

A: Users can define layered shell properties and can assign a mesh. Extruding the shell object shows the thickness of the shell as meshed.

6. Q: What type of mesh is better for ramps?

A: It is recommended that for ramps, users assign the following floor auto mesh options. Under Assign>Shell>Floor Auto mesh options, select Auto Cookie Cut Object into Structural Elements. Alternatively, in the same dialogue box, select Mesh Object into X by X elements.

