

Webinar Questions and Answers

- 1. Q: If I use a semi rigid diaphragm, will I get different drifts than if I use a rigid one?**
A: It should have very little difference in drift results, but it depends on the flexibility of your diaphragm.
- 2. Q: Does ETABS calculate Gust factor? Or does it consider only the value input by us manually?**
A: ETABS does not calculate the Gust effect factor, the user must input the value manually.
- 3. Q: If we consider only one Load pattern for Wind and select case as "create all sets" does it automatically consider both in X and Y directions? Or do we need to create two separate load patterns by changing Directional angle.**
A: ETABS will automatically generate all 12 wind load patterns automatically if you select "Create all sets". This includes load patterns in both the X and Y direction.
- 4. Q: Are there any significant changes between applying Auto Lateral Wind Loading in ETABS 2016 version to 2018 version? if there is, what are those? aside from the Local Codes specifications.**
A: No, there are no significant changes between applying Auto Lateral Wind Loading in ETABS 2016 version to 2018 version.
- 5. Q: Do we define one diaphragm to all levels knowing that the slab thickness, hence stiffness, will be different from one level to another?**
A: You can assign one diaphragm label to all floors. ETABS will automatically create separate diaphragms at each level.
- 6. Q: While assigning wind loads in cladding, can we select all the cladding at once and apply leeward & windward loads respectively?**
A: No, once users select all cladding elements, they need to apply windward and leeward loads separately.
- 7. Q: What is the difference in assigning diaphragm to shell objects and joints?**
A: Assigning diaphragms to shell objects is preferable as it will also constrain automatically created internal joints.
- 8. Q: At any given Floor, if floor is divided into 4 parts, shall different Rigid Diaphragm be applied like D1, D2 etc. or at any floor they should be defined as same Diaphragm D1?**
A: Yes, if a floor is divided into 4 parts, they should be assigned different diaphragm names.
- 9. Q: Auto-cladding elements does modify stiffness structure?**

A: Cladding elements consist of shell objects with a "None" section property and have no weight or structural properties associated with them.

10. Q: Can we see graphically the center of rigidity of each floor?

A: No, Center of Rigidity cannot be viewed graphically. In the View Menu, select Set View Options and under the Other Special Items box, select Diaphragm Extent. This will graphically show the center of mass with a red dot.

11. Q: Does the leeward coefficient take into account the direction or do we have to use the + positive sign for windward and -negative sign for leeward?

A: Positive and negative signs are important. You must enter correct signs (+/-) for both windward and leeward loads assignments. You can view the loads on the structure by clicking on Display>Load Assigns>Shell> Wind Pressure.

12. Q: Does the "Depth" parameter in the wind load pattern definition correspond to the story height, or is it the width of the floor in plan?

A: The depth parameter is not the story height, it is the plan dimension of the story along the wind load direction.

13. Q: How to apply roof wind load if roof is sloped?

A: You need to apply wind pressure coefficients to the sloped shell elements just as you do with cladding elements.