



**Andhra Pradesh State Skill
Development Corporation**



Extended Three-Dimensional Analysis of Building System ETABS Modeling of Staircase

MODELLING OF STAIRCASE

Objective

This chapter describes the step by step process of Modelling of Staircase in ETABS.

Here, Staircase is created in the same example which is analyzed in the previous video.

Procedure:

1. First Unlock the model if it analyzed by clicking on **Lock/Unlock Model** button.
2. Keep the Story Settings in All Stories. If the slab exists in the staircase area of the model then select and delete it in all the stories.
3. Create the Mid Landing beam either by newly assigning or by moving the existing beam to downwards (along neg Z-direction).
4. Creation of Mid Landing Slab by using **Draw Rectangular Floor/Wall** option.
5. Go to **Draw menu > Snap Options**, select **Line Ends and Midpoints** snap then click on **Apply** followed by **Close**
6. Make sure that the **Story Settings** is in **All Stories** and draw the waist slab by Using **Draw Floor/Wall** Option.
7. Assign the Fixed Support at bottom of Staircase at base story.
8. To create a head room, Add Story by going through **Edit Story and Grid System** option
9. Assign the Beams, Columns & Slab to the Head Room.
10. Assign the Loads on Waist Slab and Landing Slab of the Staircase
11. Perform Model **Check** and **Run Analysis**.

