**28\_Defining load cases**

Before applying loads we need to define load names or load cases.

To define load cases click on load cases from define menu or directly click on this shortcut.

Here you can define different load cases and its type.

In ETABS self weight of structure is automatically calculated from the member cross sections we defined already and from the material weights we defined in material properties.

If you put a factor in self weight multiplier, that automatically calculated self weight in ETABS will be multiplied by this factor and added to this load case.

You can still use this load case to apply loads inside the model

So this load case dead for example will contain self weight of each member plus any additional load you apply inside model.

Of course self weight multiplier should be 1, not less not more, but you can change it if you wish to.

And you need to include self weight multiplier just once in just one load case otherwise self weight reaction will be replicated.

The best way and to avoid confusions is to define a load case called self weight or SW with multiplier of 1.0. And do not apply any loads in model under this load case. This way you will be sure that SW contains just self weights of the structure and not any other load.

Select dead from type for self weight case.

And click modify button.

Each time you change something you have to press modify button.

To add new case click add new.

Similarly you can define SDL or superimposed dead load and choose super dead from type with self weight multiplier zero.

Also add LL with live as its type

Similarly you can add lateral loads for example wind and choose wind from load type and then choose a building code for example ASCE 2005.

Then you can then click on modify lateral load to see more options.

Remember that you have to make many wind or seismic load cases for each direction.

For example WX for wind X and WY for wind in Y direction etc.

We will cover lateral loads in more detail in our last course in this series.