

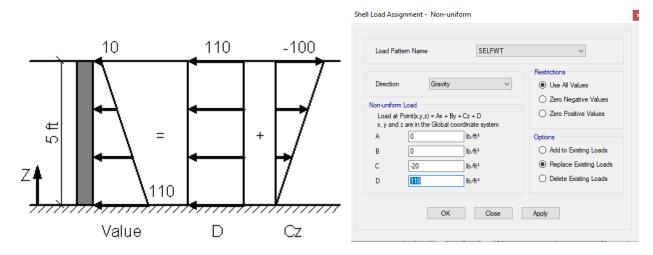
### **Webinar Questions and Answers**

### 1. Q: Is the NONE element load added to the shell element load below?

A: A NONE element is assignment to area object such that it may be excluded from analysis but used to apply area loads. This will ensure that loading transfers without the object contributing to structural stiffness. Loads applied to the NONE element will be added to the shell loads below if they are applied in the same load pattern.

### 2. Q: How do you apply earth pressure loads on a retaining wall?

A: You can use the Shell non-uniform loads options to apply earth pressure loads to retaining walls. Go to Assign>shell loads> Non-uniform to enter values. The values can vary linearly in each gradient direction. Note that the x, y, and z variables are defined in the Global coordinate system. Enter a value in the A edit box to indicate how much the magnitude of the load changes per unit of distance parallel to the X axis. Enter a value in the B edit box to indicate how much the magnitude of the load changes per unit of distance parallel to the Y axis. Enter a value in the C edit box to indicate how much the magnitude of the load changes per unit distance parallel to the Z axis. Enter the magnitude of the shell load at the global origin into the D edit box. See the example shown below:



# 3. Q: What's the difference between how ETABS handles Dead and Super Dead loads? A: ETABS treats each as a separate Dead load pattern and Dead load Case. The Dead load pattern typically contains the self-weight of the structure. Super Dead load patterns typically contain equipment loads, cladding loads etc. The load combinations will apply different scale factors to Dead loads vs. Super Dead loads based upon the design code selected.

## 4. Q: Is there a code mandated numerical limitation on Reducible live loads? Will ETABS take that limit into account when calculating Reducible live loads?

A: Yes, there are many codes to choose from under Design>Live Load Reduction Factors>Tributary Area, which will limit the reducible live load application in ETABS.

### 5. Q: Is there a difference between how shells and membranes distribute load?

A: Shell-type behavior means that both in-plane membrane stiffness and out-of-plane plate bending stiffness are provided for the section. Membrane-type behavior means that only in-plane membrane stiffness is provided for the section. Membranes will distribute load to the beams and edges without consideration of their stiffnesses.



**6. Q: Can you export Uniform Load Sets from ETABS to SAFE?**A: Yes, Uniform Load Sets can be exported from ETABS to SAFE. Go to File>Export>Save Story as SAFE v12 .f2k file. The load patterns defined the Uniform load set will be exported into SAFE.