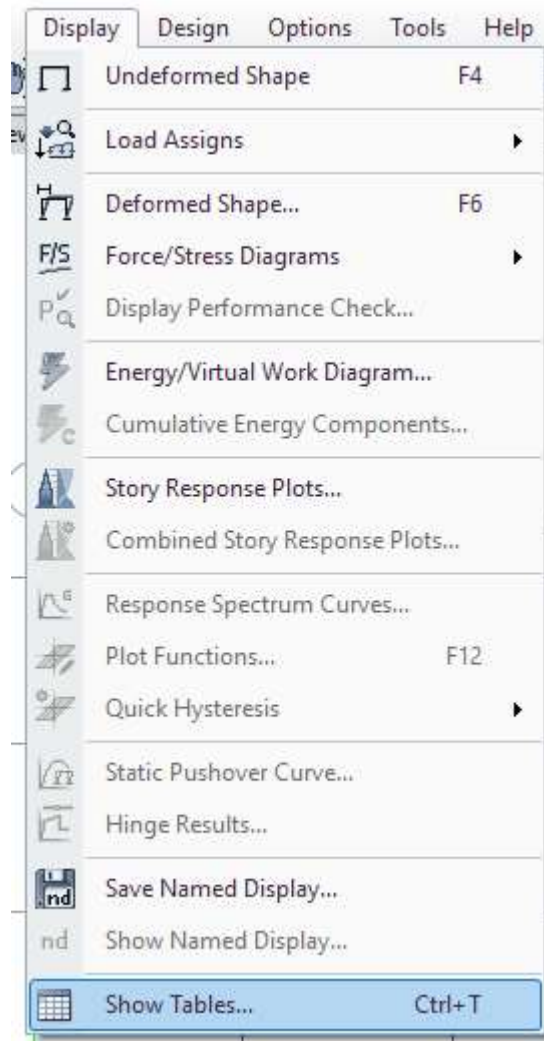
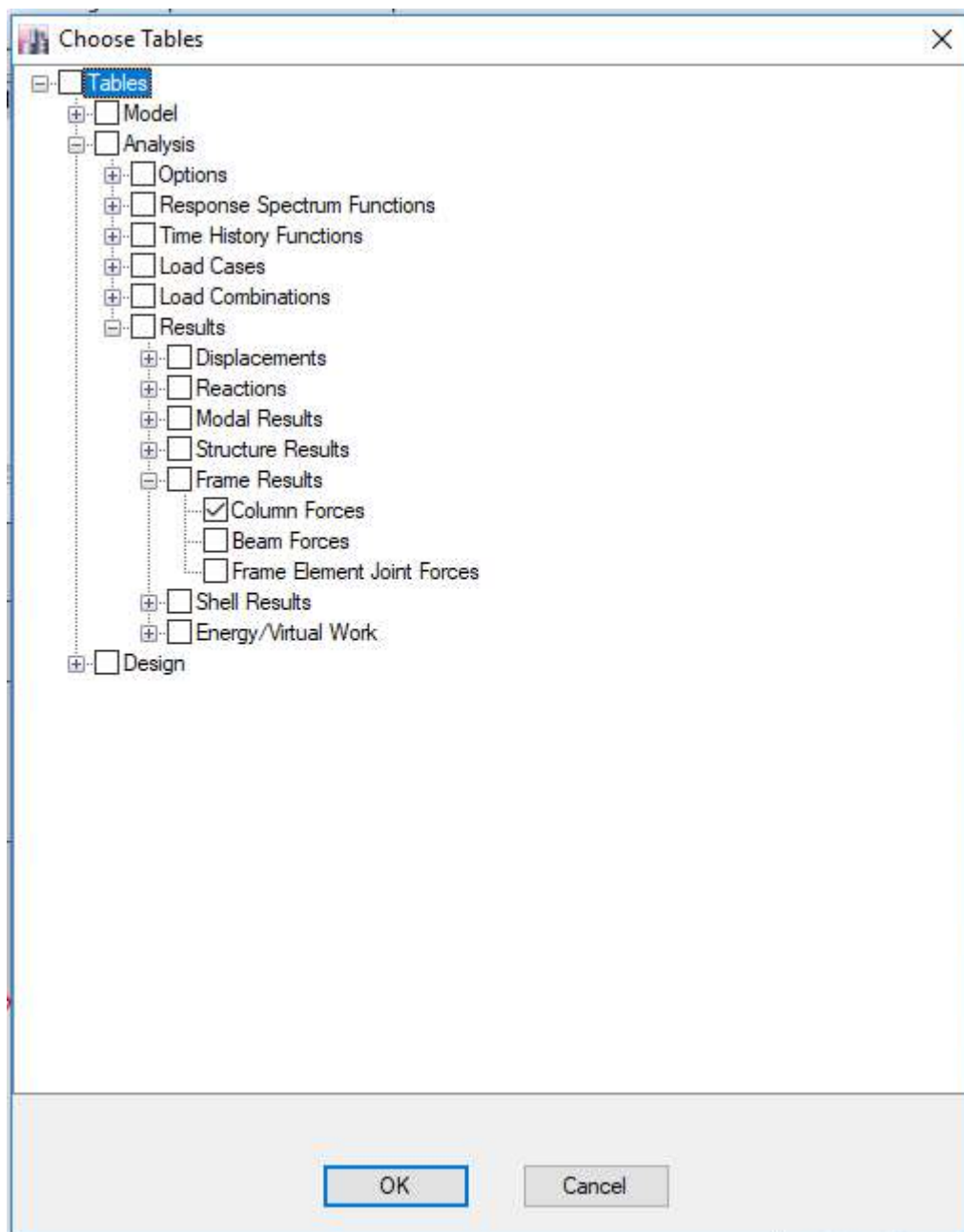


## Check of Axial Stress in Etabs as per IS:13920- (Clause 7.1)

### 1. Creating Excel file Axial.xlsx of Column Forces:

Display → Show Tables





Apply Filter to Load Case/ Combinations to select only Earthquake Cases/ Combinations

Column Forces

1 of 25800 | Reload Apply

|   | Story  | Column | Unique Name | Load Case/Combo | Station<br>m | P<br>tonf | V2<br>tonf | V3<br>tonf | T<br>tonf-m | M2<br>tonf-m |       |
|---|--------|--------|-------------|-----------------|--------------|-----------|------------|------------|-------------|--------------|-------|
| ▶ | Story5 | C1     | 137         | DL              |              |           |            | 1.3654     | -0.0001     | 2.1383       | -1.53 |
|   | Story5 | C1     | 137         | DL              |              |           |            | 1.3654     | -0.0001     | 0.3974       | -0.29 |
|   | Story5 | C1     | 137         | DL              |              |           |            | 1.3654     | -0.0001     | -1.3436      | 0.947 |
|   | Story5 | C1     | 137         | LL              |              |           |            | 0.381      | 0.0007      | 0.5127       | -0.10 |
|   | Story5 | C1     | 137         | LL              |              |           |            | 0.381      | 0.0007      | 0.027        | -0.00 |
|   | Story5 | C1     | 137         | LL              |              |           |            | 0.381      | 0.0007      | -0.4587      | 0.085 |
|   | Story5 | C1     | 137         | LL for EQ       |              |           |            | 0.0491     | 3.243E-06   | 0.0944       | -0.02 |
|   | Story5 | C1     | 137         | LL for EQ       |              |           |            | 0.0491     | 3.243E-06   | 0.0318       | 0.001 |
|   | Story5 | C1     | 137         | LL for EQ       |              |           |            | 0.0491     | 3.243E-06   | -0.0308      | 0.028 |
|   | Story5 | C1     | 137         | Live Load Roof  |              |           |            | 0.2103     | 0.0006      | 0.174        | -0.03 |
|   | Story5 | C1     | 137         | Live Load Roof  | 1.275        | -1.3118   | -0.0153    | 0.2103     | 0.0006      | -0.0941      | -0.01 |
|   | Story5 | C1     | 137         | Live Load Roof  | 2.55         | -1.3118   | -0.0153    | 0.2103     | 0.0006      | -0.3622      | 0.003 |
|   | Story5 | C1     | 137         | EQX 1           | 0            | 0.8468    | 1.0891     | 0.0005     | -0.0008     | -0.002       | 0.960 |
|   | Story5 | C1     | 137         | EQX 1           | 1.275        | 0.8468    | 1.0891     | 0.0005     | -0.0008     | -0.0026      | -0.42 |
|   | Story5 | C1     | 137         | EQX 1           | 2.55         | 0.8468    | 1.0891     | 0.0005     | -0.0008     | -0.0032      | -1.81 |

Filter: 0.9DL+1.5EQX Max  
0.9DL+1.5EQX Min  
0.9DL+1.5EQY Max  
0.9DL+1.5EQY Min  
0.9DL-1.5EQX Max  
0.9DL-1.5EQX Min

Clear Filter  
Clear All Filters

Sort Ascending  
Sort Descending  
Clear Sort

Copy

Export to Excel & Rename Excel File to Axial.xlsx.

Column Forces

1 of 25800 | Reload | Apply

|  | Story  | Column | Unique Name | Load Case/Combo | Station m | P tonf  | V2 tonf | V3 tonf | T tonf-m  | M2 tonf-m | M3 tonf-m |
|--|--------|--------|-------------|-----------------|-----------|---------|---------|---------|-----------|-----------|-----------|
|  |        |        | 137         | DL              | 0         | -6.6527 | -0.9744 | 1.3654  | -0.0001   | 2.1383    | -1.5375   |
|  |        |        | 137         | DL              | 1.275     | -6.2627 | -0.9744 | 1.3654  | -0.0001   | 0.3974    | -0.2952   |
|  |        |        | 137         | DL              | 2.55      | -5.8728 | -0.9744 | 1.3654  | -0.0001   | -1.3436   | 0.9472    |
|  |        |        | 137         | LL              | 0         | -1.4322 | -0.074  | 0.381   | 0.0007    | 0.5127    | -0.1029   |
|  |        |        | 137         | LL              | 1.275     | -1.4322 | -0.074  | 0.381   | 0.0007    | 0.027     | -0.0086   |
|  | Story5 | C1     | 137         | LL              | 2.55      | -1.4322 | -0.074  | 0.381   | 0.0007    | -0.4587   | 0.0857    |
|  | Story5 | C1     | 137         | LL for EQ       | 0         | -0.039  | -0.0211 | 0.0491  | 3.243E-06 | 0.0944    | -0.0258   |
|  | Story5 | C1     | 137         | LL for EQ       | 1.275     | -0.039  | -0.0211 | 0.0491  | 3.243E-06 | 0.0318    | 0.0011    |
|  | Story5 | C1     | 137         | LL for EQ       | 2.55      | -0.039  | -0.0211 | 0.0491  | 3.243E-06 | -0.0308   | 0.0281    |
|  | Story5 | C1     | 137         | Live Load Roof  | 0         | -1.3118 | -0.0153 | 0.2103  | 0.0006    | 0.174     | -0.0353   |
|  | Story5 | C1     | 137         | Live Load Roof  | 1.275     | -1.3118 | -0.0153 | 0.2103  | 0.0006    | -0.0941   | -0.0158   |
|  | Story5 | C1     | 137         | Live Load Roof  | 2.55      | -1.3118 | -0.0153 | 0.2103  | 0.0006    | -0.3622   | 0.0038    |
|  | Story5 | C1     | 137         | EQX 1           | 0         | 0.8468  | 1.0891  | 0.0005  | -0.0008   | -0.002    | 0.9601    |
|  | Story5 | C1     | 137         | EQX 1           | 1.275     | 0.8468  | 1.0891  | 0.0005  | -0.0008   | -0.0026   | -0.4286   |
|  | Story5 | C1     | 137         | EQX 1           | 2.55      | 0.8468  | 1.0891  | 0.0005  | -0.0008   | -0.0032   | -1.8172   |
|  | Story5 | C1     | 137         | EQX 2           | 0         | 0.8468  | 1.0891  | 0.0005  | -0.0008   | -0.002    | 0.9601    |
|  | Story5 | C1     | 137         | EQX 2           | 1.275     | 0.8468  | 1.0891  | 0.0005  | -0.0008   | -0.0026   | -0.4286   |
|  | Story5 | C1     | 137         | EQX 2           | 2.55      | 0.8468  | 1.0891  | 0.0005  | -0.0008   | -0.0032   | -1.8172   |
|  | Story5 | C1     | 137         | EQX 3           | 0         | 0.8468  | 1.0891  | 0.0005  | -0.0008   | -0.002    | 0.9601    |

- Copy Axial.xlsx file to C:\DecaPlot\Projects
- Run C:\DecaPlot\Combo\Etabs-Excel-to-Axial.exe
- Results are available in Excel files  
C:\DecaPlot\Combo\Axial-Report.xlsx &  
C:\DecaPlot\Combo\Axial-Report-Fail.xlsx