Instructions for Compression Post Schecule Spreadsheet:

Go to Compression Post Calcs sheet.

1. Enter Project Name, Project Number, Date

Note: All cells that need values are marked in gray. Change other cells at your own risk.

- 2. Enter Run Names per the Structural drawings.
- 3. Enter Level Numbers per the Structural drawings.

Floor level 1 in first run fills in all the level names of the first run sequentially.

Then all the level names in the first run feed into all the other runs.

Hide the Columns of all unused Runs and Levels.

4. Enter Loads for Runs per the Structural drawings.

If Compression Loads are not available use the Tension Loads for those levels.

5. Input Floor Heights & Component Thicknesses in Inches per Structural Dwgs or Load Justification Table. These feed into same Levels in all other Runs.

6A. Enter Cfrd (Fire Retardant Factor)

If Posts are treated with Fire Retardant: Enter Fire Retardant Treatment Factor, CFRT, per NDS 2.3.4 Get this number from the supplier of the FT wood [a typical value is 0.85 aka 15%] 6. Enter Wood Species.

This table will pull material specifications from the loookup tables below. If Grade must change we will need to add more tables below. If we need to calculate different species for Posts than for Plates, we can separate it out with some work.

7 Determine Wall Thicknesses and Enter them into Inner Post DEPTH.

The Inner Post Depth here feeds into the Outer Post Depth and all Post Depths to the Right.

Each Inner Post Quantity feeds into its matching Outer Post Quantity.

Downstream Post sizes and quantities can be changed later as needed.

If the wall thickness is not known use 4" here and complete the process through saving and printing the Compression Post Schedule.

Then save this file with a new name. Change the walls to 6" or 8" etc. and repeat the sizing process from here forward starting with 2x widths. Save and print new file.

8. Increase WIDTH of Inner Posts one size at a time until SF is >= 1.00

This also changes Outer Post Widths to match.

9. Decrease Outer Post WIDTH one size at a time to determine the $\,$ minimum post size combinations with SF >= 1.00

Optional: If SF is between 0.90 & 0.99 call the structural engineer for approval or guidance.

Go to Compression Post Schedule and continue.

- 10. Hide columns for all unused runs.
- 11. Hide rows for all unused levels.
- 12. Set text color to white for all unused locations still showing.
- 13. Copy image of building elevation with the correct number of floors to the space to the left of the table and align it with the table.
- 14. Print Compression Post Schedule