Release Notes for RISACalc

Version 4.0 - April 20, 2023

- General:
  - Added compliance with the 2021 International Building Code.
  - Added Load Combinations compatible with IBC 2021.
- Detail Report:
  - Added a summary table of results in the Calculations section for Spread Footings.
  - Updated the description for S and Z as the Elastic Section Modulus and Plastic Section Modulus.
  - Fixed an issue where the deflection results were not showing in the Detail Report for rotated beams.
  - Fixed a units issue where the retaining wall and wall footing components were multiplying the reported weights by 12.
  - Resolved a units issue where steel joist UTL and capacity were in units of plf despite being reported as klf.
  - Resolved various graphical display issues within the Detail Report across multiple materials that were inconsequential to the final results.
- Aluminum:
  - Resolved a graphical issue for the calculation of Bc in the Axial Compression check for aluminum members that referenced incorrect equations from Table B4.2 when the value used equations from Table B4.1.
- Cold Formed Steel:
  - Resolved an issue where the P-Delta amplification factor was not included for theAISI S100-16 ASD solution.
- Concrete:
  - Added a warning message when no strength Load Combinations are solved for concrete members.
  - Enhanced the calculation of the moment gradient factor to include value limits in compliance with the CSA code.
  - Fixed an issue with the wall shear capacity calculation for strip footings and retaining walls using the ACI 318-19 code.
  - Corrected the governing concrete shear strength calculation for concrete beams, columns, and drilled piers.
  - Resolved a graphical error for the PCA Notes equation reference in the Detail Report for multiple ACI 318 building codes.
  - Fixed a graphical issue with the equation for the minimum development length.
- Hot Rolled Steel:
  - Added more information to variables that are used within the detail report for hot rolled steel members.
  - Added the L-torque design parameter for hot rolled steel beams, columns, and composite beams designed with CSA S16-14.
  - Corrected the calculation of the elastic critical buckling stress (Fe) when calculating critical buckling stress.
  - Resolved an issue with the properties of certain HSS shapes in the Canadian Hot Rolled Steel database.
- Masonry:
  - Implemented larger reinforcement spacing options for masonry wall design.
- Wood:
  - Resolved an issue displaying detail reports for wood members solved with CSA O86-09: Ultimate design code.