Release Notes for RISACalc

Version 2.2 Enhancements/Corrections

- Added print settings to customize the Detail Report by selecting which sections to include.
- Enhanced the Reactions section of the joist Detail Report with a graphic reporting the joist span.

Version 2.1 Enhancements/Corrections

- Added the Deflection Check into the graphical interface and calculations section for Beams.
- Improved the reporting of the Deflection Check section for Composite Beams.
- Added the batch printing ability to print Detail Reports for multiple components at once.

Version 2.0 Enhancements/Corrections

- General:
  - Added the ability to copy existing components within the same project.
- Hot Rolled Steel:
  - Improved the compactness class determination for single angles with the consideration of Clause 11.1.2 and 11.1.3 according to CSA S16-14 and CSA S16-09.
  - Updated Material Defaults to Include ASTM A500 Grade C for Round and Rectangular HSS sections.
  - Corrected the capacity calculation for members with only tension loads to follow chapter D of AISC 360 instead of chapter H.
  - Corrected a graphic display issue in Detail Reports where 'Lcomp, top' was reported as the variable label when the controlling value of the unbraced length was 'Lcomp, bot'.
- Aluminum:
  - Enhanced the Bending and Axial Interaction Check section of aluminum Detail Reports for clarity.
- Wood:
  - Corrected bending capacity of wood members due to Cm factor being applied twice during member capacity calculations.
  - Corrected an issue with Cm value in E'min calculation under the combined bending and axial compression check under NDS codes.
  - Resolved an issue where compression analysis according to CSA 086-14 was reporting incorrect values for Fc and Kzc.
- Concrete:
  - Added the ACI 318-19 concrete code for beams, columns and wall panels.
  - Resolved an issue that was only preventing shear design of concrete beams when members met Deep Beam criteria.
  - Resolved an issue which was providing erroneous Deep Beam warnings.
- Detail Reports:
  - Modified the Detail Report for wood members when the beam stability factor is 1 due to the member being fully braced.
  - Corrected the display of values reported in the concrete member Detail Report for the depth to the equivalent rectangular stress block and for the depth to the neutral axis.
  - Updated the metric unit of stress to read as MPa.

Version 1.3 Enhancements/Corrections

- Composite Steel Beam:
• Added camber design for composite steel beams.
• Added the ability to specify shored or unshored for composite steel beam design.
• Added the ability to specify the direction of the metal deck as parallel or perpendicular.
• Added tooltip descriptions to the loads for the Composite Steel Beam component.
• Added percent composite to the main view header.
• Added deflection ratio results and deflection diagram graphics for all deflection load combinations.
• Fixed a graphical units issue in the Detail Report where the moments used to calculate Cb were reported in in-ft.
• Hot Rolled Steel:
  • Resolved an issue when using the Fully Braced unbraced length option.
• Wood:
  • Added factored compression resistance into the Combined Bending + Axial section for glulam Detail Reports per Clause 7.5.12 (CSA 086).
• Columns:
  • Added the option to include P-Delta for column components.

### Version 1.2 Enhancements/Corrections

**Composite Steel Beam:**
- Added composite steel beam design for the following codes:
  - AISC 360-16 (15th Edition) ASD & LRFD
  - AISC 360-10 (14th Edition) ASD & LRFD
  - AISC 360-05 (13th Edition) ASD & LRFD
  - AISC LRFD (2nd and 3rd Editions)
  - AISC ASD (9th Edition)
  - CSA S16-14
  - CSA S16-09
  - CSA S16-05
  - CSA S16-01

**Wood:**
- Modified the Detail Report for wood members when the beam stability factor is 1 due to the member being fully braced.
- Added customizable load duration factors for wood load combinations.
- Added factored compression resistance into the Combined Bending + Axial section for glulam Detail Reports per Clause 7.5.12 (CSA 086).
- Resolved an issue to correct the governing location for wood members designed with CSA 086.
- Resolved an issue where the moment component was not being considered in the Bending and Axial Compression Analysis for wood members designed with CSA 086.
- Corrected an issue where the incorrect value for unbraced length was used in the calculation for the slenderness ratio of wood members.
- Resolved an issue where negative bending allowable stress was used for glulam members when positive bending allowable stress should be used.

### Version 1.1 Enhancements/Corrections

**Joists:**
- Added design for steel joists per SJI 42nd and 43rd/44th Edition.
**Hot-Rolled Steel:**
- Corrected the display of the slenderness ratio in compression in the Detail Report.
**Wood:**
- Added LRFD wood design for NDS 2018 and NDS 2015 codes.
• Resolved a graphical error for wood members using CSA 086-14 where the shear capacity was reported incorrectly in the Calculations.
• Resolved an issue where the wood bending capacities using CSA 086 were reported in the wrong units in the Member Detail Report.
• Display:
  • Added notifications.
• Report:
  • Enhanced the Detail Report force diagrams to report all peak magnitudes and locations.

Version 1.0

• This is the initial release of the program. See the Accessing Projects topic and also the Application Interface topic for more information on getting started.