

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 C_b 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.