

Release Notes for RISAConnection

Version 4.0.2 Enhancements / Corrections

- Added compatibility for the RISA-Tekla Link V4
- Updated INI file behavior to explicitly add the database directory default location at the creation of the INI file.
- Corrected an issue with the bolt prying calculations for the CSA code and single angle shear connectors.
- Corrected a display issue where shapes that did not have a root / k value defined could cause odd images in the 3D view.

Version 4.0.1 Enhancements / Corrections

- Improved integration with RISA-3D v12.0 and RISAFloor 8.0.
- Added connection design for symmetric tapered wide flange member ends.
- Enhanced the web yielding, buckling, and crippling calculations to include increased capacity when doubler plates are included.
- Improved the behavior of the program when the RISAConnection.INI file is not present or has missing data.
- Improved the Block Shear capacity calculation for uncoped beams. Previous versions were using a capacity which ignored the presence of the beam flange.
- Corrected an issue where the Canadian Steel Design Code was erroneously reporting code checks for HSS connections.
- Corrected an issue where the program was over conservatively using the $0.85 \cdot A_g$ maximum net area limit for cases that were not similar to bolted splice plates.
- Fixed the ability to directly type in a member shape within the Project Properties rather than choosing it from the Shape Selection dialog.

Version 4.0 Enhancements / Corrections

- Added HSS connections:
 - o Slotted brace connections for HSS Tube and Pipe braces
 - o Knife Plate brace connection for HSS Tube and Pipe braces
 - o End Tee connections for HSS Tube and Pipe braces
 - o HSS Tube and Pipe columns for Shear Tab connections
 - o HSS Tube columns for Clip Angle and End Plate shear connections
- Added connections for the Canadian (S16-09) steel code:
 - o Shear Tab connections to column or girder
 - o Clip Angle connections to column or girder
 - o Direct Weld Moment connection
 - o Flange Plate Moment connection
 - o Added metric bolt materials (A325M and A490M) as well as metric bolt sizes
 - o Added Canadian materials for members and welds
- Added WT Braces for Diagonal and Chevron braces.
- Enhanced Bolt Prying calculations so that prying forces are included with Bolt Tension code checks.
- Improved the calculation of the Shear Lag Factor (U) for angle braces to be less conservative based on the larger value of Case 2 or 8 from AISC Table D3.1.
- Improved the bolt bearing calculations per user note in AISC 14th edition section J3.10.
- Added the ability to save defaults in the Global Parameters dialog.
- Added the ability to save defaults in the Units dialog.
- Improved the formatting of printed output.
- Changed the Panel Zone Shear limit state check to be based on panel zone shear demand rather than moment.

- Moved registry information from HKey Local Machine to HKey Current User to better comply with Windows best practices.
- Removed the Column Flange Bending limit state from the Column/Beam Shear Tab connection as it doesn't apply.
- Corrected the Stiffener Compression checks for moment connections which were previously considering the capacity of just one of the two stiffeners.
- Corrected the value used for Block Shear Reduction Coefficient (U_{bs}) for braces with multiple rows of bolts.
- Corrected an issue where the 8 Bolt End Plate Moment connections were not correctly reporting a failure in the Bolt Prying assumptions.
- Corrected a reporting issue with Stiffener Weld Limitations on column transverse stiffeners where a failure was erroneously reported.
- Corrected a report printing issue where results from a load combination that did not govern may have been printed erroneously.
- Corrected a problem with the bolt edge distance calculation for the Minimum Edge Distance check.
- Corrected an issue in AISC where conventional shear tab connections were designed as if they were extended.