

Release Notes for RISAConnection

Version 15.0.2 Enhancements / Corrections

- Updated the license manager to use a new identity provider for cloud licenses and allow single sign-on.
- Added detailed calculations for Rotational Ductility checks to improve transparency and understanding of the analysis process.
- Added erection stability sub-check calculations for seismic connections.
- Improved tmax-bolts check logic to differentiate between Conventional and Extended configurations, addressing previous overly-conservative checks.
- Enhanced the plate rupture strength check by directly comparing rupture and yield strengths, instead of using thickness-based checks.
- Improved the calculation of the T dimension in the Rotational Ductility / Erection Stability limit state check by using k_{det} instead of k_{des} for better alignment with code intent.
- Corrected an issue where the base plate with brace did not transfer correctly when the column was slanted.
- Fixed an error in the rotational ductility check for shear tabs with tmax bolts.
- Resolved an issue in rare cases where the vertical brace diagonal extended shear tab with gusset connection was not integrating from RISA-3D to RISAConnection.
- Corrected an issue in the panel zone shear calculation that used incorrect signage for the story shear.
- Fixed an issue where the updated member shape in RISA-3D was not reflected in RISAConnection after round tripping, affecting extended shear tab with gusset plate connections.
- Corrected an issue with the calculation of A_{gv} , A_{nv} , and Lc-edge parameters for various limit states for beam splice connections under shear loads.
- Fixed an issue where design checks for Column Block Shear, Plate Block Shear, and Bolt Bearing did not account for negative shear loads in non-centered bolt groups for column splice connections.
- Fixed incorrect vertical edge distance calculation for SSLH slotted holes in RISAConnection by adjusting the increment per AISC Table J3.5.
- Resolved an issue where RISAConnection closed unexpectedly when solving projects after integration.

Version 15.0.1 Enhancements / Corrections

- Added the option to display loads in the 2D view, enhancing visual understanding of load direction and magnitude on connections.
- Added the ability to change workpoints for chevron and diagonal braces in integrated models, allowing for eccentric or concentric connections.
- Enhanced the export functionality to include dimensions for connections when exporting to DXF.
- Revised the Concrete Bearing Check to ensure accurate calculation of parameter A2 of ACI Table 22.8.3.2, aligning with current design specifications and addressing discrepancies between different design methods.
- Fixed an issue where bolt tension checks were not performed when the combined effect of tension and shear was not necessary.
- Corrected the calculation of Max Edge Distance for bolts by ensuring it is based on the thickness of the connected part under consideration, rather than the web thickness of the girder or beam, in accordance with AISC Section J3.5.
- Fixed a rare issue where the program would open off-screen when previously positioned in a second monitor that is no longer connected.
- Corrected the equation to determine the moment due to eccentricity for specific checks.
- Fixed the breakout concrete factor application for cracked concrete cases per ACI 318-19 Section 17.7.2.5.1 to ensure proper use of factors when anchors are reinforced with specified amounts of bar and anchorage.
- Corrected an issue that caused the program to incorrectly change the analysis from a conventional to extended configuration.

- Fixed an issue where the column weld strength check for clip angles in tension incorrectly showed a 'Pass' status when the unity check was greater than 1.
- Resolved an issue where RISACONNECTION closes unexpectedly during integration with certain model files when the subscription license is less than 30 days from expiration.
- Removed incorrect installation type labels, 'Standalone Install' and 'Network Client Install', from the 'About This Program' dialog for Subscription and Demonstration licenses respectively.

Version 15.0.0 Enhancements / Corrections

- Added anchorage design capability per ACI 318-19 & ACI 318-19(22) to the Column Base Plate connection module.
- Added support for Heavy Hex Bolts to the Base Plate connection module.
- Added step-by-step calculations for r_0 and r_u factors in weld calculations to give full transparency into the calculations.
- Added bolt diameter checks for base plate connections that stops solution when exceeding material specifications.
- Improved Continuous Beam over Column connection web weld analysis for more accurate weld sizing by refining web contribution calculations.
- Enhanced Girder/Beam Shear Tab Shear connection checks to include bolt placement relative to horizontal welds, addressing rotational ductility concerns.
- Updated the Coped Beam Local Web Buckling and Flexural Rupture checks to align with AISC 360-16 15th edition.
- Revised the calculation for the base plate weld section modulus according to 'Design of Welded Structures' by Omar Blodgett.
- Updated lateral stability and stabilizer plate calculations according to AISC 15th edition.
- Corrected login functionality to HILTI PROFIS by updating default browser to Microsoft Edge.
- Updated the graphical detail report to clarify the alpha parameter for prying bolt checks, without affecting the end result values.
- Fixed an issue where unnecessary bolt prying calculations triggered failures in Continuous Beam over Column connections.
- Corrected the equation used for the Lateral Torsional Buckling check of coped beams when AISC 360-16 15th edition is used.
- Fixed an issue to accurately list multiple filler material options per AWS D1.1, considering weld processes and material compatibility.
- Corrected the calculation to account for the eccentricity between the tension axial force and the center of gravity of weld for Case 4 vertical brace connections.
- Fixed an integration issue where RISACONNECTION was unable to read very large RISA-3D solution files.
- Corrected inaccuracies in the direction of loads for base plate reactions in models imported from RISA.
- Fixed a rare issue where no warning messages were shown during a failed integration consisting of Diagonal Braces with Gusset Plates.
- Fixed an issue where the HSS column's orientation was incorrectly rotated by 90 degrees when integrated from RISA-3D for a Continuous Beam over Column connection.
- Resolved an issue where selecting 'Beam' under Connection Default for Knee Brace connection caused the program to close unexpectedly.
- Fixed an issue causing the program to close unexpectedly when solving connections involving diagonal braces.