Release Notes for RISAFloor

Version 15.0.4 Enhancements/Corrections

- Resolved an issue where the record counter did not match the number of records within the Wood Straps section of the model data file.
- Resolved an graphical display issue where the incorrect values were reported in the Beam Bending results for wood members utilizing the CSA code.
- Resolved an issue with skip loading not properly reporting the maximum uplift reactions as the governing uplift.
- Fixed an issue which reported erroneous One Way shear failures for some support lines.
- Resolved an issue where alpha for Punching Shear calculations was calculated using an exterior corner condition, resulting in overly conservative reinforcement requirements.

Version 15.0.3 Enhancements/Corrections

- General:
  - Resolved an issue where the connector spacing 'a' was not being calculated correctly for CFS double studs within CFS walls.
  - Fixed an issue causing the program to close unexpectedly in some cases when designing connections.
  - Resolved an issue that was not allowing some columns attached to cantilever beams to be lifted via the sloping tool.
  - Resolved an issue where RISAFloor will close unexpectedly when importing from REVIT.

Version 15.0.2 Enhancements/Corrections

- General:
  - Improved the meshing algorithm for wall panels by requiring a minimum wall panel length of 1.5 inches.
  - Corrected an issue preventing custom redesign lists for Canadian shapes.
  - Resolved an issue that prevented default units from converting properly when changing Design Regions.
  - Corrected an issue where stress properties were affected when strength units were changed from imperial to metric.
  - Resolved a graphical display error which reported Le/d=0 in Detail Reports.
  - Resolved a Polygon Meshing error that caused -NAN results.
  - Resolved a rare issue that was not allowing saved results to be read when the model file was saved to a cloud location.
  - Resolved an issue that occasionally prevented increasing the maximum number of Automatic Backups in the Application Settings.
- Hot Rolled Steel:
  - Fixed a unit conversion issue with deflection results for hot rolled steel beams and composite joists.
- Concrete:
  - Added the ability to consider new equations of effective moment of inertia (Ie) per Section 24.2.3.5 of ACI 318-19 code.
  - Added the ability to consider the new length requirement (5d) of the top slab rebar per Fig. 8.7.4.1.3 of ACI 318-19 code.
- Cold Formed Steel:
  - Resolved a graphical display issue that showed the incorrect wall thickness for CFS Walls.
  - Resolved an issue where the internal coldform schedule counter could become mismatched.
  - Resolved an issue where the cold formed steel wall panel stud capacity was overly conservative.
  - Corrected an issue in the CFS Wall Panel Design Rules which was preventing models exported from Revit from opening.

- Wood:
  - Corrected an issue where Cp for wood members was calculated on the basis of ASD design when LRFD design was specified.
  - Corrected an issue where the Cr (repetitive use factor) would equal 1.0 regardless if it was enabled.
  - Resolved a small discrepancy in the calculation of Emin for SCL shapes.
- Wall Panels:
  - Resolved an issue that made some wall panels difficult to double-click to open the Wall Panel Editor.
- Composite:
  - Corrected an issue where the stud count for some composite beams were not being optimized properly when using the Redesign tool.
  - Improved the Detail Reports and Material Takeoff spreadsheet for composite members by reporting the full height of the stud rather than just the height above the deck rib.
- Graphical Interface:
  - Added the ability to modify the value of 'a' for CFS members through the Modify Beams and Modify Columns dialogs.
  - Improved Column Forces spreadsheet scrolling and selection.
  - Improved the Columns spreadsheet to include CFS on the Steel/Wood tab.
  - Enhanced the Exclude feature in RISAFloor to only exclude results on the current floor.
  - Resolved an issue that prevented the option to Detach Child from Parent floor when in the Beam Floors tab of the Floors spreadsheet

Version 15.0.1 Enhancements/Corrections

- General:
  - Added composite joist design for metric units.
  - Resolved an issue which caused errors while reading the input file and caused the program to unexpectedly close when using the undo/redo function.
  - Fixed an issue where the 3.5 inch normal weight 16ga Vulcraft decks were incorrectly using a slab depth of 4 inches.
  - Resolved an issue preventing the design of CFS ZU shapes.

Version 15.0 Enhancements/Corrections

- General:
  - Added compatibility to integrate with RISA-3D v19.
  - Added the ability to exclude results based on selection.
  - Added the ability to specify a Design Rule when drawing columns.
  - Resolved an issue causing the program to close when attempting to view long term deflection graphically.
  - Resolved an issue where the color coded contour diagram for the Unity Check values displayed incorrectly when User Defined Rebar was specified.
  - Corrected a typo in the Verco PLW2-W2 Formlok deck database file where deck thickness was listed twice.
  - Corrected the unbraced length for columns which were affected by column splices at floor levels.
  - Resolved an issue causing a duplicate node for a plate generated by semi-rigid diaphragms.
  - Resolved an issue where the 'Detail Report for Current Item' feature opened up the wrong Detail Report when the spreadsheet was sorted.
  - Resolved rare issue of program crash during solution of model.
- Concrete:
  - Added the ACI 318-19 concrete code for beams, columns, slabs and wall panels.
  - Corrected a units issue with long term deflection which caused Ie/Ig to be incorrectly calculated.
  - Resolved an issue causing an erroneous 'Slab Failing Thickness Requirements' warning message when the CSA code was selected.
  - Corrected description of axis directions in the slab internal force summation dialog.

- Cold Formed Steel:
  - Added code checks for back-to-back cold formed steel members.
- Wall Panels:
  - Added Cold Formed Steel Wall Panels
    - AISI S400-15 w/S1-16 & AISI S240-15.
  - Corrected an issue where wall panels with a large number of narrow regions would cause the program to close.
  - Improved the wall panel meshing algorithm and the snapping tolerance to handle walls with very small offsets (e.g. less than 1in).
- Wood:
  - Fixed an issue where the flat use factor, Cfu, was incorrectly applied to members which were not loaded on the wide face.
- Hot Rolled Steel:
  - Updated Material Defaults to Include ASTM A500 Grade C for Round and Rectangular HSS sections.
- Composite:
  - Added Composite Joist design per SJI specification 200-2015.
  - Resolved an issue causing an erroneous 'shear resistance provided by studs is inadequate' warning.
  - Enhanced the composite beam Detail Report to clarify the total shear force and corresponding stud capacity.
- Joists:
  - Updated the SJI 42nd edition joist capacities for LH-, DLH-, and SLH-series.
  - Updated the SJI 43rd/44th edition Safe Load capacities for the LH- and DLH_series.
  - Added Detail Report warning messages to provide more information about why a steel joist was not designed.
  - Resolved an issue preventing the optimization of Joist Girders.
  - Modified the design length for joist and joist girder analysis to consider a 2" bearing seat length on either side of the member.
  - Fixed an issue where self-weight of joist girders were incorrectly reported.
- Interaction:
  - Added the ability to recover a file if the model file closes unexpectedly in an integrated program.
  - Resolved an issue where some models under RISAFloor would unexpectedly close during solution if the floor elevation was the same as the seismic base elevation.
  - Corrected an issue where saved results were incidentally deleted after integrating between RISAFloor and RISA-3D.
  - Resolved an issue preventing the camber design rule for % DL from being retained when transferring between RISAFloor and RISA-3D.
  - Resolved an issue where certain models with semi-rigid diaphragms integrating to RISA-3D were reporting a non-planar plate mesh error.
  - Resolved an issue where RISA-3D would close unexpectedly while 'reading wall results' after integrating from RISAFloor with saved results.
  - Resolved a rare issue where Concrete Wall Panel Regions in RISAFloor caused the program to close in RISA-3D.
  - Resolved an issue where wind loads were conservatively generated for internal bays on some semi-rigid diaphragms.
  - Corrected an issue where nodes from non-rigid diaphragms in RISAFloor were included in the Drift Definitions spreadsheet, which only supports rigid diaphragms.
  - Fixed an issue where RISAFloor member design rule camber information was not properly retained after integration to RISA-3D.
  - Resolved an issue causing an erroneous Invalid Connection error for columns assigned with a single column base plate connection.
  - Resolved an issue where custom report templates were not retained in the original program after using the Director tool to integrate between multiple programs.