Release Notes for RISAFloor

Version 12.0.5 Enhancements/Corrections

- For models integrating with RISA-3D, corrected an error in the iteration of member design which caused an increase in solution time.

Version 12.0.4 Enhancements/Corrections

- Resolved an issue introduced in the Windows 10 Semi-Annual Update (KB 4103721) which prevented Standalone Licensing functions from operating as expected.
- Resolved an issue in which subscription licenses would become non-responsive during the upgrade process.
- Corrected an issue where the new 43rd and 44th SJI joist design added a suffix to the size label when selecting an explicit member size.
- Corrected an issue where outriggers on "Child" floors were not connected properly and created unsupported member errors.

Version 12.0.3 Enhancements/Corrections

- Corrected the Redesign tool functionality for iterative member optimization.

Version 12.0.2 Enhancements/Corrections

- Improved the Member Label for Composite beams to show yes/no as shown in the Beam spreadsheet.
- Improved snapping to grid intersections.
- Updated RISAFloor Demo to allow you to open a Revit Exchange file, rather than closing out as soon as you try to open it.
- Fixed a problem where the new SJI Joist 43rd and 44th edition shape names added an odd suffix in the input and output.
- Fixed a problem where the program used 0.0018*b*d rather than 0.0018*b*h for slabs. The code refers to Ag which should be b*h instead of b*d.
- Corrected an issue where RISAFloor ES models using the 'User Defined' rebar design method would crash when erroneously looking for members which were modeled in RISA-3D rather than RISAFloor ES.
- Fixed a problem where reinforcement governed by the maximum spacing was over-conservative on spacing.
- Corrected a metric units error for the minimum flexural steel reported in a design cut detail report.
- Corrected an issue where KCS joist capacities were being incorrectly calculated.
- Fixed a problem where KCS joist optimization would not work properly.
- Fixed a problem with flat slabs in the *CSA S16-14* code that erroneously caused a warning about rib height for composite steel design.
- Fixed a plate mesher error that occurred only on thickened regions in slabs.
- Misaligned columns no longer display 'nan' in the detail report.
- Fixed a problem in viewing an Elevation View if there were miscellaneous RISA-3D members in that view.
- Corrected an issue where copying walls from floor to floor caused the openings to flip about the wall's vertical axis.
- RISAConnection integration now considers positive and negative shear sign convention when exporting connections for design.
- Added RISAConnection integration for double-sided Column/Beam and Girder/Beam shear connections.

Version 12.0.1 Enhancements/Corrections

- Corrected an error where cantilever deflection ratios were being incorrectly calculated as half their actual value.
- Fixed a problem where using the undo command and saving would modify Custom Rebar Layouts in your model.
- Updated Subscription licensing behavior to prevent an erroneous failed log-in.
- Added an option to export a welded web plate on a Direct Weld Moment connection to RISAConnection.

Version 12.0 Enhancements/Corrections

- General:
  - Modified deflection design/optimization to automatically account for Live Load Reduction.
  - Added interactive force and deflection diagrams for beam detail reports.
  - Added a new 'Framing Elevation View'.
  - Project Grid Improvements:
    - Added the ability to move the columns and walls with the Project Grid location change.
    - Added the ability to draw snap points between radial and straight grids.
    - Corrected the Project Grid screen refresh so that changes to the text are immediately visible.
    - Corrected the coordinate order of the DXF import of Project Grids.
    - Corrected the Project Grid generator for the X & Z project grid labels.
  - Revised the reporting for cantilevers to indicate that no end reactions are provided for the cantilevered end.
  - Corrected a graphical display issue which prevented wall panel openings from displaying in the Full Model view.
  - Corrected an error where the Seismic Load Generation approximate Period (Ta) was being calculated at the parapet height, rather than the floor height.
  - Updated the Copy/Paste functionality so that the column headers would not erroneously paste into the program. They now will only paste if you're in an external program.
  - Corrected an issue where program could display incorrect deflection results (when in intermediate solution state only) for members changed using the Re-Design dialog.
  - Corrected an issue with the beam end reactions when a column point has the same orient point node.
  - Fixed a problem with the Framing command for unbraced lengths. Previously, if the Framing command was used for Lbyy, Lbzz, Lcomp-bot or L-torque, the program would use the LAST framing segment in the member as the unbraced length instead of the controlling unbraced length.
- Analysis:
  - Added skip loading for continuous beams.
  - Corrected an issue where vibration calculations were erroneously performed when composite properties were not known.
- Hot-Rolled Steel:
  - Added the 2014 EuroCode for steel member design (*EN 1993-1-1:2014*).
  - Added the British Annex 2014 to into the 2014 EuroCode (*EN 1993-1-1:2014*).
  - Added consideration of the L-Torqueunbraced length for EuroCode member design (*EN 1993-1-1:2014*).
  - Corrected an error where EuroCode Pipe and HSS shapes were using a Buckling Curve Imperfection factor of 0.34 instead of 0.49.
  - The program now correctly disqualifies composite steel design for steel decks with rib height greater than 3'.
  - Changed the buckling curve for EuroCode (*EN1993-1-1:2014*) HSS members to be based on imperfection factor for cold formed (0.49) instead of hot finished (0.21 or 0.13) which was used previously.
- Steel Joists:
  - Updated the Steel Joist database to include the 43rd and 44th Edition SJI joist tables.
  - Corrected an erroneous load value for a single LH series joist in the Steel Joist database.
  - Corrected an issue with KCS joists where the joist self weight was not considered in the code check.
- Floor ES:
  - Added User Defined Rebar for Concrete floor slabs.
  - Added Long Term Deflection including creep & shrinkage.

- Updated the effective flange thickness calculations for concrete T-Beams per the *ACI 318-14* code to account for the span limit changing due to overhang distance.
- Fixed a problem in the detail report for individual design cuts where the distance 'd' reported was a very large or very small number.
- Added all LL categories to the LL deflection checks for slab floors.
- Fixed a metric unit bug when reporting the design cut results.
- Fixed a problem where building an elevated slab floor could cause the program to shut down.
- Updated our design strip reinforcement design to prevent reporting of more reinforcement than necessary.
- Concrete:
  - Added the 2014 European concrete code (*EN 1992-1-1:2014*).
  - Enhancements to the Custom Rebar Layout dialog:
    - Added spreadsheet functions for easier data input (TAB and ENTER keys).
    - Added the option to highlight and copy data from several cells at once.
    - Added access from the Concrete Members spreadsheet directly to the Custom Rebar Layout dialog through a new Set Layout dialog.
- Masonry:
  - Added the *TMS 402-16* masonry code.
  - Fixed the camera tool for Masonry Summary reports to be saved to the report.
- Wood:
  - Added design of Structural Composite Lumber materials per the Canadian *CSA O86-14* code.
  - Corrected an error in the CF factor calculation for Custom Wood Species. Now the program will always default to CF = 1.0 unless the user manually enters a value.
  - Corrected an error in the design of wood members using the Custom Wood Species. Previously custom wood species were always designed per the Sawn Lumber chapter of the code, now the program designs them per the appropriate chapter depending on the input 'Type'.
  - Corrected the graphical display of wood wall panel top plates on walls with sloping tops or parapets.
  - Corrected erroneous capacity equation references for wood members designed per the *CSA O86-14* code.
  - Corrected the graphics so that the straps and hold-downs are only visible in RISA-3D because they are designed in RISA-3D.
  - Corrected wood wall stud design to not consider live load reduction as specified by the design code.
- Cold-Formed Steel:
  - Added Cold Formed Steel design codes:
    - *AISI S100-16*
    - *CANACERO-2016*
    - *CSA S136-16*
  - The Distortional Buckling factor Beta from *AISI S100 Eqn C3.1.4-7* is now taken as 1.0 for all unbraced lengths except those left blank or using the segment command.
  - Corrected a calculation that affected the lateral-torsional buckling for face-to-face Cee shapes.
- Integration:
  - RISAFloor & RISA-3D:
    - Fixed an issue with semi-rigid wind loads, where a wind code update would cause loads to double. Also, changing the wind code to None would not cause the semi-rigid wind loads to delete.
    - Fixed an error in RISAFloor that caused a line load applied along a wall, that extends past the wall, to show up as two loads in RISA-3D.
    - Corrected an issue for certain models where RISAFloor beams were transferred to RISA-3D as sloped.
    - Corrected an error where the seismic weight of floors with manually applied dynamic area loads was not calculating correctly in RISAFloor to RISA-3D integrated models.
  - RISAFloor, RISA-3D & RISAConnection:
    - Added the option to save custom shapes to the local database when exporting a connection with a custom shape from RISA-3D or RISAFloor to RISAConnection.
    - Fixed an issue in a combined RISAFloor, RISA-3D and RISAConnection model where base plates would not be transferred if Connection Rules were only applied in RISA-3D.

- Corrected an error where custom Connection Rule labels caused the connections to be ignored during the RISAConnection design export.
- Corrected an error where Connection Rules with a quotation mark in the label did not properly export to RISAConnection for design.
- Corrected an error where a beam to girder shear Connection Rule in RISAFloor would not properly recognize shape type for integration with RISAConnection.