Release Notes for RISAFloor

Version 11.0.3 & 11.0.4 Enhancements/Corrections

- Updated the program install to improve behavior for network licenses.
- Improved the subscription license functionality to make it more robust.
- Fixed a problem where the Masonry Wall tab of the Wall Design Rules spreadsheet would cause the program to shut down if selected.
- Fixed a problem with the Move command that would cause the program to shut down in a specific instance.
- Corrected an issue where the Exclude feature would not work properly in RISA-3D within a RISAFloor/RISA-3D integrated model.
- Fixed an issue where slabs would not give design results for design strips when two slabs were drawn next to one another.
- Fixed a problem with RISAFloor V15.0.2 where old file formats were not read in properly.
- Discontinued support of the 32-bit version of the program.

Version 11.0.2 Enhancements/Corrections

- General:
  - Added the ability to round-off the joint coordinates.
  - Updated Vulcraft and Verco composite deck self-weight. Previously the program was conservatively adding extra weight of the deck itself that is already accounted for in the self-weight.
  - Corrected an issue where RISA-3D models created members that referred back to RISAFloor for the unbraced length value.
  - Using the Copy to Clipboard command from spreadsheets no longer copies blank cells to the clipboard.
  - Corrected an issue with a DXF import that gave a merge tolerance error.
- Hot Rolled Steel:
  - Added a new steel shape database for Paco Steel & Engineering.
  - Major improvements to the automatic model backup functionality.
  - Added lower bound moment of inertia to composite beam calculations.
  - Added a multiplier to allow the reduction of the effective moment of inertia for composite beams.
  - Added a composite beam option to assume "strong" vs "weak" position of studs for AISC design.
  - Added a composite beam option to assume "off-center" vs "centered" position of studs for CSA design.
  - Corrected a problem with the calculation of stud capacity of composite beams in the Canadian design code.
  - Corrected an error in the ‘a’ calculation for 100% composite beams when shear transfer was limited by concrete.
- Concrete/Elevated Slabs:
  - Fixed a metric units problem where punching shear on columns with shear caps produced incorrect geometry for the punching shear checks.
  - Updated the punching shear unbalanced moment stress signage. Previously the unbalanced moment stress signage was reversed.
  - Fixed a unit conversion problem where thickened portions of slabs did not convert units properly between imperial and metric.
  - Fixed a semi-rigid diaphragm meshing error in RISAFloor.
  - Corrected an error in the semi-rigid diaphragm mesh that created bad plates in RISA-3D.
  - Corrected an issue with design strip detail reports where advancing between strips could cause the program to hang.
  - Fixed a problem with reinforcement design for slabs where if 4/3*As required > As min flex, the program will then only use As required.
- Loading:
  - Fixed a problem with diaphragm surface loads that was causing a model corruption.
• Corrected a problem that caused double load on a tapered area load for a steel joist.
• Improved the member area load mesh accuracy.
• Wood:
  • Fixed a problem in the NDS 2012 and 2015 codes where equation 3.9-4 was implemented but the text in the detail report would report Eqn 3.9-3.
  • Updated the program to automatically switch the wood database if it is determined that all materials in the model are using a different database than the default.
• Wall Panels:
  • Updated the Wall Panel Editor to add a check for the presence of a diaphragm before drawing the diaphragm in the graphics. Previously the program would draw all levels from the Floors spreadsheet, even if a level did not intersect a given wall panel.
  • Removed the check for lateral wall panels supported by gravity columns. Wall panels already require a beam or wall to support them so removing this check eliminated superfluous messaging for columns.
• RISAConnection Integration:
  • Added the ability to apply a column Base Plate Connection Rule to column members. Now column Base Plate connections may be exported to RISAConnection for design.
  • Added the interface to allow column splices to be applied through the Columns spreadsheet or the Column Stack Editor for column splice connection design integration with RISAConnection.
  • Corrected an error where invalid connection rule application crashed the program during connection export.

Version 11.0.1 Enhancements/Corrections

• Corrected a problem where area loads applied to slab floors were considered additive even if the "Additive" checkbox is not checked.
• Corrected an issue with wall panel self-weight transferring from RISAFloor to RISA-3D incorrectly.
• Corrected a problem that occurred during load attribution for unusual framing layouts that would cause the program to shut down.
• Corrected a problem where a very short wall height would cause the program to shut down. A check has been added requiring a wall to be at least 6 inches tall.
• Corrected a problem when generating design strips in both orthogonal directions at the same time that could cause the program to shut down.

Version 11.0 Enhancements/Corrections

• General:
  • Added compatibility with IBC 2015.
  • Added the ability to move elements linearly.
  • Added double-click information dialogs for beams and points.
  • Added a new & improved Project Grid system that supports skewed and arc grid lines.
  • Added the live display of coordinates and deflection values to the mouse cursor.
  • Added the ability to sort the Code Checks spreadsheet.
  • Added parapet wind loading for main wind force resisting systems in integrated RISAFloor/RISA-3D models.
  • Added parapets for walls.
  • Added a No Wind/Drift checkbox to the Floors spreadsheet to allow mezzanine floor levels to be ignored for wind and drift calculations in integrated RISAFloor/RISA-3D models.
  • Added an Area Load Query dialog to help users verify / validate the loading applied to their floors.
  • Flexible diaphragms on sloped roofs can now attribute loads to the sloped members instead of just the members at the ceiling in integrated RISAFloor/RISA-3D models.
  • Updated optimization messaging to clearly state which members are having convergence problems, rather than giving only the floor level.
  • Removed the In-Plane reinforcement from the Wall Panel Editor.
- Fixed a problem with refreshing toolbars and the Floors drop-down menu when different windows are selected (slab floors vs non-slab floors for example).
- Added the ability to display and flip the wall local axis.
- Corrected an issue with the solver stalling on load attribution.
- Corrected a metric unit conversion error which caused erroneous warnings about composite deck stud heights.
- Corrected an issue where inactive walls in RISA-3D could affect RISAFloor behavior.
- Re-added ability to automatically relabel 3D-only elements under a RISAFloor model. This had been removed in RISAFloor v10.0.1.
- Hot Rolled Steel:
  - Added the CSA S16-14 Canadian steel design code.
- Concrete/Elevated Slabs:
  - Added the CSA A23.3-14 Canadian concrete design code.
  - Added the ability to manually control the width of the Column Strips.
  - Added a check for when columns on an Elevated Slab floor are too close to each other.
  - Added specific error messaging for when punching shear checks cannot be performed on columns near re-entrant corners.
  - Improved the concrete reinforcement optimization to fix a problem where reinforcement design could produce a code check of 1.02 instead of 1.00.
  - Corrected the display of the T-beam effective flange widths in the rebar design portion of the member detail report for concrete beams in RISAFloor ES.
  - Corrected an error with thickened slabs and drop panels overlapping.
  - Fixed display of the one-way slab direction arrow.
- Aluminum:
  - Added the AA ADM1-2015 aluminum design code.
- Wood:
  - Added wood member design per the Canadian CSA O86-2014 design code.
  - Added a plywood default Deck Definition.
  - Updated wood members to be drawn as Lateral elements by default.
- Cold-Formed Steel:
  - Fixed an initialization issue for cold-formed members when no design code is assigned.
- Analysis:
  - Added semi-rigid diaphragms for Beam Supported floors.
  - Improved speed / efficiency of column skip loading calculations.
  - Corrected the way the moment was reported when calculating the column moment with skip loading specified but with no column stiffness specified.
  - Fixed a mesher issue in a combined RISAFloor/RISA-3D model, where semi-rigid diaphragms were having a problem with joints located near but not on the diaphragm.
  - Fixed a problem with the mesher with thickened slab regions.
  - Fixed a mesher issue for very intricate openings imported via a DXF file.